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

SEP 20 2010

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 Reitz Lake, including supporting documentation and follow up information. Reitz Lake is located in east-central Minnesota, in Carver County. The TMDL addresses the Aquatic Recreation Use impairment due to phosphorus.

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 one TMDL for phosphorus for Reitz Lake. 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 Mr. Peter Swenson, Chief of the Watersheds and Wetlands Branch, at 312-886-0236.

Sincerely,

Tinka G. Hyde
Director, Water Division

Enclosure

cc: Chris Zadak, MPCA
Dave Johnson, MPCA

wq-iw7-10g

TMDL: Reitz Lake, Minnesota TMDL
Date: 09/20/10

DECISION DOCUMENT FOR REITZ LAKE, MINNESOTA PHOSPHORUS 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;
(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.

Comments:

Location Description: The Minnesota Pollution Control Agency (MPCA) developed a nutrient TMDL for Reitz Lake in Carver County, Minnesota. By identifying measures to reduce nutrient loading, the TMDL will address impairment of the aquatic recreation beneficial use in the lake. Table 1 below identifies the waterbody covered by the TMDL as it appears on the Minnesota 2008 303(d) list. The lake is listed as impaired for aquatic recreation use due to algal blooms and excess aquatic plants impacting the swimming and fishing uses. Minnesota's priority rankings for TMDL waters are reflected by the target dates for start and completion of TMDL studies.

Table 1. 2008 303(d) List Summary

Waterbody	ID number	Listing Year	Affected use	Pollutant or Stressor
Reitz Lake	10-0052	2008	Aquatic recreation	Excess nutrients

The lake is in a primarily agricultural watershed, although suburban growth has increased. Small tributaries drain to Reitz Lake, and the lake drains to the south into an unnamed ditch, and eventually to Carver Creek. The western bay of the lake is generally shallow (< 5 feet), but the eastern portion of the lake is deeper. The physical details for the lake are in Table 2 below.

Table 2. Lake Characteristics

Parameter	Reitz Lake
Surface Area (ac)	90
Littoral Area (ac)	51
Average Depth (ft)	13
Maximum Depth (ft)	36
Volume (ac-ft)	1,167
Residence Time (years)	0.3-0.5
Watershed Area (ac)	3,621

Topography and Land Use:

The watershed for the lake is evolving from agricultural to suburban (Section 3.2.1 of the TMDL). As seen in Table 3 below, the watershed is mainly agricultural/grasslands (Table 3.2 of the TMDL). Much of the shoreline is considered "natural" by MPCA, but there are significant amounts of shoreline that are mowed or contain retaining walls (Section 3.6 of the TMDL). The lake is used for fishing and swimming (limited).

Table 3 Land Use Characteristics (in acres)

Land Use	Area (acres)
Agriculture	1,942
Forest/Grassland	781
Wetland	518
Water	90
Developed	290
Total	3,621

Reitz Lake has had fishery surveys over the years (Section 3.4 of the TMDL). A survey in 1998 showed that panfish (particularly bluegill) and yellow perch dominated the lake. Some bass and northern pike were present. A survey from 2004 taken during high water conditions showed a significantly different biotic community. Bluegill and other panfish were much less abundant, and carp were more prevalent. MPCA believes the high water levels may have made it more difficult to trap the smaller panfish. The high water likely allowed the carp and other rough fish to migrate into the lake. The lake does have problems with invasive aquatic plants. MPCA noted that excessive nutrients can increase the amount of invasive plants, which in turn reduce the biodiversity in the lake. Curly leaf pond weed is abundant in the lake.

Pollutant of concern:
The pollutant of concern for the Reitz Lake TMDL is phosphorus. Levels of phosphorus are above water quality targets, limiting all types of aquatic recreation, including fishing and swimming. Excess phosphorus stimulates excessive plant growth (algae and nuisance plants/weeds). This enhanced plant growth reduces dissolved oxygen in the water when dead plant material decomposes and can cause other organisms to die. For informational purposes, the TMDL also includes water quality data and information for the nutrient indicators chlorophyll-a and Secchi depth. Chlorophyll-a is a primary pigment in aquatic algae. Chlorophyll-a levels correlate well with algal production. Secchi depth is an indicator for water clarity and quality and is measured by lowering a probe into the water until it can no longer be seen from the surface (Section 3 of the TMDL).

The lake has been sampled periodically for total phosphorus, chlorophyll-a and Secchi depth since the early 1990's (Section 3.7.1 of the TMDL). A more intensive sampling effort was done in 2004. The annual averages show that the lake is exceeding the water quality standards significantly, with the summer averages around 105 µg/L (Section 3.7.4 of the TMDL). The chlorophyll-a levels (measure of algae in the water) varied more, very low in the spring but ranging from 40 µg/L to 60 µg/L in the late summer. Water clarity, as measured by Secchi depth, was close to 1 meter most of the time until late summer, when Secchi depth was affected by algal blooms.

Pollutant sources:
Sources identified by MPCA in the TMDL as contributing to the nutrient impairment include stormwater run-off from agricultural lands and urban lands, watershed, atmospheric deposition, and internal phosphorus release (Section 4 of the TMDL). MPCA determined that much of the phosphorus load in the lake is a result of stormwater runoff from the watershed.

Internal loading of phosphorus is also a significant source of phosphorus to the lake (Section 4.5 of the TMDL). Phosphorus-rich sediments often can settle out in the lake, and when dissolved

oxygen levels are reduced (often during the summer months) the phosphorus dissolves out of the sediment and into the water column and is available for use by algae and plants.

The point sources in the watershed are the National Pollutant Discharge Elimination System (NPDES) Phase II permits held by the City of Waconia and Laketown Township. (Section 6.1 of the TMDL). No wastewater treatment facilities discharge to waterbodies in the watershed.

Future growth trends: Future growth was included in the MS4 permit allocations for Laketown Township and Waconia (Section 6.6 of the TMDL). The allocations were based upon the 2020 land use estimates.

EPA finds that the TMDL submitted by MPCA satisfies all requirements of 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.

Comments:
Section 2.0 of the TMDL describes the designated uses and numeric criteria applicable to this watershed.

Use Designation: Reitz Lake is classified as a Class 2B water (MN. R. 7050.0430). The designated use addressed by this TMDL is aquatic recreation for 2B waters. Class 2 waters include waters which "do or may support fish, other aquatic life, bathing, boating, or other recreational purposes..." (MN R. 7050.0150(3)).

Numeric Standards: Minnesota has numeric criteria for nutrients that limit the quantity of nutrients entering waters. MN R. 7050.0222(4) defines the numeric criteria, based upon ecoregions. Reitz Lake is classified by MPCA as a deep lake (>15 feet deep or > 80% littoral area) in the North Central Hardwood Forest ecoregion (Section 2.1 of the TMDL). Lakes are to

meet the phosphorus target and either the chlorophyll-a or the Secchi disk target. The applicable criteria are in Table 4 below.

Table 4. Applicable numeric criteria

	Total Phosphorus standard (µg/L)	chlorophyll-a standard (µg/L)	Secchi Disk depth (meters)
Reitz Lake	≤ 40	≤ 14	≥ 1.4

Targets:
To achieve the designated use and the applicable eutrophication criteria, MPCA is targeting the total phosphorus criterion (40 µg/L) as the primary target of the TMDL and Secchi depth (≥ 1.4 meters) as the secondary target (Section 6.3 of the TMDL).

EPA finds that the TMDL submitted by MPCA satisfies all requirements of 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 steam 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.

Comments:
Loading Capacity:
The loading capacity developed to meet the phosphorus criteria for Reitz Lake is **0.45 kg/day** (Table 5 below). The loading capacity is the combination of the wasteload allocation (WLA), load allocation (LA), and margin of safety (MOS). Thus, the loading capacity is equal to the

TMDL assigned for the waterbody. The WLA is for the stormwater permits within the lake's watershed (Section 5 below).

Table 5. TMDL for Total Phosphorus Expressed as Daily Loads

Lake	Total Phosphorus TMDL (kg/day)	Wasteload Allocation (kg/day)	Load Allocation (kg/day)	Margin of Safety
Reitz Lake	0.45	0.1104	0.34	implicit

Modeling summary: The loading capacity determination for Reitz Lake is based on two models, the Reckhow –Simpson spreadsheet and BATHTUB (including the Canfield-Bachman spreadsheet sub-model) (Section 5 and Appendix C of the TMDL). Results from the Reckhow – Simpson spreadsheet was incorporated into the BATHTUB and Canfield-Bachman spreadsheet.

Reckhow –Simpson spreadsheet: The Reckhow –Simpson spreadsheet model (Rechkow model) is a rainfall-runoff model used for simulating runoff quantity and quality using export coefficients (Section 5.2 of the TMDL). The Reckhow model uses land use-based run-off coefficients to estimate loads from the watershed. To better determine loads, MPCA divided the basin into four subbasins (Figure 3-1 of the TMDL). Modeled results were compared and adjusted to actual watershed results from a sampling site in the watershed. Results indicated that the model fairly represented the run-off rates (Section 5.3.1 of the TMDL)

BATHTUB: After the loading rates were determined, the BATHTUB model was applied by MPCA to the lake (Section 5 and Appendices B and C of the TMDL). The BATHTUB model applies a series of empirical equations derived from assessments of lake data and performs steady state water and nutrient calculations based on lake morphometry and tributary inputs. The BATHTUB model requires fairly simple inputs to predict phosphorus loading. The model accounts for pollutant transport, sedimentation, and nutrient cycling. The BATHTUB model uses the loads of phosphorus generated in the P8 and SWMM model to determine the in-lake concentrations of phosphorus. The Canfield-Bachmann submodel was used to estimate the lake response. MPCA developed the model based upon the 2004 sampling data (a normal precipitation year) and 1991 (a wet year).

The BATHTUB model was modified to account for the internal loading of phosphorus in the lakes. The internal load was calculated by adjusting the BATHTUB output to account for additional internal load until the results matched in-lake sample results (Section 5.3.5 of the TMDL). Based upon this, the current internal load is 67 kg/yr (0.18 kg/day).

Results:
The results of the BATHTUB model indicate that the watershed load is the significant factor for the lake (Table 5.5 of the TMDL). In particular, subbasin R1contibutes 39% of the load, followed by subbasin W1 and septic tanks at 20%. MPCA did calculate an atmospheric deposition load, but that load is very minor. MPCA compared the results of the model to the sampling results, and the predicted vs. monitored data shows generally good correlation (Table 5.4 of the TMDL). An overall reduction of 73% is needed in total phosphorus loads.

Critical conditions: MPCA determined the critical condition for the lake is the summer growing season for an average precipitation year (Executive Summary of the TMDL). Excessive nutrient

problems such as algal blooms and fish kills are most prevalent in Minnesota during the summer recreational season (June through September). The numeric targets developed by MPCA focused on summer season as the critical condition. MPCA noted that the relatively short residence time indicates that the lake responds to short-term spring/summer loads.

EPA finds that the TMDL submitted by MPCA satisfies all requirements of 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.

Comments:
The LA for Reitz Lake is **0.34 kg/day**. MPCA did refine the LA further. The LA was further calculated for atmospheric loads (0.002 kg/day), internal load (0.05 kg/day) and non-MS4 (0.27 kg/day). These calculations are based upon the BATHTUB model and the model calculations (Section 6.1 of the TMDL).

EPA finds that the TMDL submitted by MPCA satisfies all requirements of 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.

Comments:
The WLA for Reitz Lake is **0.1104 kg/day** (Section 6.1.3 of the TMDL). The point sources identified in the watershed are the NPDES Phase II stormwater general permits for the City of Waconia and Laketown Township. The WLA is based upon the area covered under the MS4 permits based upon the expected developed land use in 2020. MPCA did estimate the loads coming from construction stormwater and industrial stormwater in the watershed by estimating the load at 0.1% of the loading capacity (Section 6.1.3.3 of the TMDL).

Table 6 WLAs

Facility	Permit ID	WLA
City of Waconia	MNS400232	0.09 kg/day
Laketown Township	MS400142	0.02 kg/day
Construction/Industrial	various	0.0004 kg/day

EPA finds that the TMDL submitted by MPCA satisfies all requirements of 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 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.

Comments:
The TMDL for Reitz Lake uses an implicit MOS, based on conservative modeling assumptions (Section 6.5 of the TMDL). The main assumption was the use of a sedimentation rate in the Canfield-Bachman model that is lower than that expected for the lakes addressed by these TMDLs. As a result, MPCA believes that the loss of phosphorus from the water column as a result of settling is modeled at a lower rate than is found in most Minnesota lakes. This serves to remove phosphorus from the system, making it unavailable for use by algae. The model therefore overestimates the phosphorus concentration in the lake, and correspondingly overestimates the reductions needed to achieve the WQS.

EPA finds that the TMDL submitted by MPCA satisfies all requirements of 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)).

Comments:
Seasonal variation was accounted for by MPCA in the Reitz Lake TMDL by using several years of water quality data in the models and including wet and normal years (based upon precipitation records) (Section 6.4 of the TMDL). This ensures that the loadings account for the higher loads from storm events as well as the greater impacts on the lake systems during low flow events. The implementation activities discussed by MPCA include best management practices (BMPs) that will address conditions that the modeling efforts considered the most significant in adding phosphorus loads to the lake (Sections 8 and 9 of the TMDL).

EPA finds that the TMDL submitted by MPCA satisfies all requirements of 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, 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.

Comments:
Reasonable assurance is discussed in Section 8 of the TMDL. A summary is provided below:

Watershed Management: The Carver County Board of Commissioners has established the "Carver County Water Resource Management Area" which includes Reitz Lake. Designation of this area provides a framework for water resource management by a variety of means. The County Board has zoning and other land use powers to implement activities to achieve the TMDLs goals, and has established a taxing district to develop funding. Several other programs are involved in the "Management Area", including the Carver County Land and Water Services Division, the Carver County Extension, and the Carver Soil and Water Conservation District. The County has developed the "Carver County Water Management Plan" in 2001.

NPDES MS4 Permits: Much of the watershed will be covered under MS4 permits by 2020. NPDES regulations and Minnesota's general permit requires MS4s to amend their NPDES Storm Water Pollution Prevention Programs (SWPPPs) to ensure consistency with applicable TMDL WLA requirements.

EPA finds that the TMDL submitted by MPCA satisfies all requirements of this eighth element.

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.

Comments:
MPCA and Carver County will continue the regular bi-weekly monitoring in the lake. The County Board will continue to formulate the work plan, budget, and measurable goals for the next year. The watershed will be evaluated periodically regarding the implementation measures and determine if the Implementation Plan needs to be adjusted.

EPA finds that the TMDL submitted by MPCA satisfies all requirements of this ninth element.

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.

Comments:
The TMDL contains a section on implementation that includes an implementation framework and a summary of planned activities (Section 9 of the TMDL). The formal TMDL Implementation Plan will be developed and finalized by MPCA upon approval of the TMDL. Development of the implementation plan will involve meeting with stakeholders and public notice of the draft plan. Based on the phosphorus loading reduction estimates provided in Section 6 of the TMDL, the final TMDL Implementation Plan will provide detailed plans for nutrient reductions. Potential activities and estimated costs identified by MPCA for controlling nutrients in the lakes are discussed in Section 9 of the TMDL.

EPA reviews, but does not approve, implementation plans. 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.

Comments:
The Reitz Lake TMDL project was administered locally through Carver County (Section 7 of the TMDL). A County technical advisory committee (the Water, Environment & Natural Resource Committee) was utilized to assist in developing the TMDL in order to involve interested stakeholders. Several open committee meetings were held in 2005 to present data and information to the stakeholders and public and to receive input. A stakeholder meeting was held on July 12, 2005.

MPCA originally placed the draft Reitz Lake TMDL on public notice from March 8, 2010 to April 7, 2010, to provide an opportunity for public comment. After the public comment period, MPCA revised the TMDL to refine the allocations and update the model. MPCA placed the draft Reitz Lake TMDL on public notice again from July 12, 2010, to August 11, 2010, to provide an opportunity for public comment. The draft TMDL was posted at: http://www.pca.state.mn.us/water/tmdl/tmdl-draft.html, the MPCA's TMDL web site. Public comments were addressed appropriately by MPCA.

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

Comments:
On September 10, 2010, EPA received the Reitz Lake TMDL and a submittal letter dated September 2, 2010 signed by Paul Eger, Commissioner, MPCA, addressed to Tinka Hyde, U.S. EPA, Region 5, Water Division. In the submittal letter, MPCA stated "I am pleased to submit the Reitz Lake Total Maximum Daily Load (TMDL) study to the U.S. Environmental Protection Agency (EPA) for final approval." The submittal letter included the name and location of the waterbody and the pollutant of concern.

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

13. Conclusion

After a full and complete review, EPA finds that the TMDL for phosphorus for Reitz Lake satisfies all of the elements of an approvable TMDL. This decision document addresses one TMDL for Reitz Lake as identified on Minnesota's 2008 303(d) list.

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.