



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

FEB 19 2014

REPLY TO THE ATTENTION OF:
WW-16J

Rebecca J. Flood, Assistant Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Dear Ms. Flood:

The U.S. Environmental Protection Agency has conducted a complete review of the final Total Maximum Daily Load (TMDL) for Lura Lake (DNR ID 07-0079-00), including support documentation and follow up information. Lura Lake is located in south-central Minnesota in Blue Earth and Faribault Counties. The TMDL addresses an aquatic use impairment due to excessive phosphorus.

EPA has determined that the Lura Lake TMDL meets 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 phosphorus TMDL, addressing excess nutrients. 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 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,

A handwritten signature in cursive script, appearing to read "Tinka G. Hyde".

Tinka G. Hyde
Director, Water Division

Enclosure

cc: Celine Lyman, MPCA
Paul A. Davis, MPCA

wq-iw7-38g

TMDL: Lura Lake Nutrient TMDL, Blue Earth & Faribault Counties, MN

Date: February 19, 2014

DECISION DOCUMENT

FOR THE LURA LAKE NUTRIENT TMDL, BLUE EARTH & FARIBAULT COUNTIES, MN

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.

Comment:

Location Description/Spatial Extent:

Lura Lake (DNR ID 07-0079-00) is located in the Le Sueur River watershed in southern Blue Earth County and northern Faribault County in south central Minnesota. Lura Lake is located near the towns of Amboy and Mapleton, Minnesota. Lura Lake lies within the boundaries of the Western Cornbelt Plains (WCP) Ecoregion. Water from Lura Lake flows through a man-made outlet in the southwestern portion of the lake toward Bass Lake. Bass Lake lies to the southwest of Lura Lake.

The Lura Lake direct watershed has an approximate area of 1,457 acres (approximately 2.27 square miles (mi²)). Lura Lake has a surface area of 1,294 acres (2.02 mi²), a maximum depth of 9 feet (approx. 2.7 meters (m)), and an average depth of 4.7 feet (approx. 1.4 m). The Minnesota Pollution Control Agency (MPCA) classified Lura Lake as a shallow lake based upon the average depth of Lura Lake being less than 15 feet.

Land Use:

Land use in the Lura Lake watershed is comprised of the land use types described in Table 1 of this Decision Document. MPCA does not anticipate the land use within the Lura Lake watershed to be altered significantly in the future because land use in watershed is primarily agricultural and is expected to remain as agricultural land. MPCA acknowledged the possibility of shifts in crop usage within the watershed (i.e. pasture/hay land uses to row crop land uses) but the MPCA does not believe that this will have a significant impact on nutrient loading to Lura Lake.

Table 1: Land use in the Lura Lake watershed (direct watershed)

Land Use*	Acres	Percent
Open Water	1,347.6	50.7%
Corn	490.5	18.4%
Soybeans	341.7	12.9%
Developed - Open Space	102.3	3.8%
Woody Wetlands	96.9	3.6%
Herbaceous Wetlands	59.7	2.2%
Deciduous Forest	58.1	2.2%
Pasture / Hay	58.1	2.2%
Peas	43.4	1.6%
Pasture/Grass	29.4	1.1%
Herbaceous Grassland	24.8	0.9%
Shrubland	2.3	0.1%
Wetlands	1.5	0.1%
Developed - Low Intensity	1.5	0.1%
Mixed Forest	0.8	0.0%
TOTAL	2,658.6	100%

* From the 2009 National Agricultural Statistics Services (NASS)

Problem Identification:

Lura Lake was originally listed on the 2002 Minnesota 303(d) list for excessive nutrients (phosphorus). Lura Lake is currently on the draft 2014 Minnesota 303(d) list for impaired aquatic recreation due to nutrient exceedances. Water quality data collected in the early 1980's through the mid-1990's indicated that Lura Lake consistently maintained high levels of nutrients and overall, a low Secchi Disk (SD) transparency. Additional field sampling collected between 1997 and 2006 indicated average total phosphorous (TP) concentrations of 191 parts per billion (ppb or $\mu\text{g/L}$) (± 48 ppb), chlorophyll-a (chl-a) concentrations of 28.5 ppb (± 4 ppb), and SD transparency of 1.0 m (± 0.1 m). Using the Carlson Trophic Status Index, MPCA classified Lura Lake as a hyper-eutrophic lake system.

While TP is an essential nutrient for aquatic life, elevated concentrations of TP can lead to nuisance algal blooms that 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 which limits the distribution of aquatic vegetation. Aquatic vegetation stabilizes bottom sediments, and also is an important habitat for macroinvertebrates and fish. Furthermore, depletion of oxygen can cause phosphorus release from bottom sediments (i.e. internal loading).

Degradations in aquatic habitats or water quality (ex. 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 (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.

Priority Ranking:

The Lura Lake watershed was 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 and 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. Areas within the Lura Lake watershed are popular locations for aquatic recreation. Water quality degradation has led to efforts to improve the overall water quality within the Lura Lake watershed, and to the development of a TMDL.

Pollutant of Concern:

The pollutant of concern is phosphorus.

Source Identification (point and nonpoint sources):

Point Source Identification: The potential point sources to the Lura Lake watershed are:

National Pollutant Discharge Elimination Systems (NPDES) permitted facilities: NPDES permitted facilities (ex. wastewater treatment plants) may contribute phosphorus loads to surface waters through discharges of treated wastewater. Permitted facilities must discharge treated wastewater according to their NPDES permit. There are no NPDES permitted facilities within the Lura Lake watershed.

Municipal Separate Storm Sewer System (MS4) communities: Stormwater from MS4 communities can transport phosphorus to surface water bodies during or shortly after storm events. There are no MS4 communities within the Lura Lake watershed.

Stormwater from construction and industrial sites: Phosphorus input via stormwater from construction and industrial sites may contribute phosphorus loading to the Lura Lake watershed. The Lura Lake TMDL assumes that there will be phosphorus inputs from construction activities and therefore a portion of the wasteload allocation (WLA) was assigned to construction stormwater. Additionally, the TMDL assumes that there will be phosphorus inputs from industrial activities and a portion of the WLA was also assigned to industrial stormwater.

These areas within the Lura Lake watershed 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.

Permitted feedlot or animal confinement facilities: MPCA acknowledged that there are some facilities within the Lura Lake watershed which are permitted feedlot or animal confinement facilities. By rule, feedlots and animal confinement facilities are generally not allowed to discharge to waters of the State (Minnesota Rule 7020.2003). These facilities may generate manure which may be spread onto fields. Runoff from fields with spread manure from feedlot and animal confinement facilities can be exacerbated by tile drainage lines, which channelize the stormwater flows. Tile-lined fields and channelized ditches enable pollutants to move into surface waters. Runoff from manure spread onto fields in accordance with federal and state requirements is considered as a nonpoint source, and is included as a portion of the load allocation (LA) for the Lura Lake TMDL.

Nonpoint Source Identification: The potential nonpoint sources to the Lura Lake watershed are:

Internal loading: The release of phosphorus from sediment, the release of phosphorus from lake sediments via physical disturbance from benthic fish or rough fish (ex. carp), the release of phosphorus from wind mixing the water column, and the release of phosphorus from decaying pondweeds, may all contribute internal phosphorus loading to Lura Lake. Phosphorus may build up in the bottom waters of the lake and may be resuspended or mixed into the water column of the lake during changes in the thermocline of Lura Lake.

Atmospheric deposition: Phosphorus may be added via particulate deposition. Particles from the atmosphere may fall onto lake surfaces or other surfaces within the Lura Lake watershed. Phosphorus can be bound to these atmospheric particulates and this phosphorus may add to the overall phosphorus concentrations in surface waters within the Lura Lake watershed.

Forest Sources: Phosphorus may be added to surface waters via runoff from forested areas within the watershed. Runoff from forested areas may include debris from decomposing vegetation and organic soil particles.

Agricultural Sources (Pasture and Open Lands): Phosphorus may be added via surface runoff from upland areas which are being used for agricultural croplands used for growing corn, soybeans and hay, Conservation Reserve Program (CRP) lands, and grasslands. Stormwater runoff may contribute nutrients to surface waters from livestock manure, fertilizers, vegetation and erodible soils.

Urban/Residential Sources: Nutrients may be added via runoff from homes near Lura Lake. Runoff from residential properties can include phosphorus derived from fertilizers, leaf and grass litter, pet wastes, and other sources of anthropogenic derived nutrients.

Inadequate Subsurface Sewage Treatment Systems (SSTS): Phosphorus may be added to the surface waters in the Lura Lake watershed from failing septic systems. Age, construction and use of SSTS can vary throughout a watershed and influence the nutrient contribution from these systems. It is likely that those systems that are sited along the lake shore are more likely to contribute nutrients than those systems sited further away from the lake. Failing SSTS can discharge nutrients directly into surface waters by straight pipe connections (considered point sources) or by effluents leaching into groundwater or ponding at the surface where they can be washed into surface waters via stormwater runoff.

Wetland Sources: Phosphorus may be added to surface waters by stormwater flows through wetland areas in the Lura Lake watershed. Storm events may mobilize phosphorus through the transport of suspended solids and other organic debris.

Shoreline Erosion: Phosphorus may be added to Lura Lake by erosional processes impacting lake shoreline areas. Phosphorus may be attached to eroded shoreline soils and may be mobilized through the transport of sediment and suspended solids.

Wildlife: Wildlife is a known source of nutrients in water bodies as many animals spend time in or around water bodies. Deer, geese, ducks, raccoons, and other animals all create potential sources of nutrients. Wildlife contributes to the potential impact of contaminated runoff from animal habitats, such as urban park areas, forest, and rural areas.

Future Growth:

Significant development is not expected in the Lura Lake watershed. The land use within the watershed is primarily agricultural and according to the MPCA is expected to remain as agricultural for the foreseeable future. The WLA and LA for the Lura Lake TMDL 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 Lura Lake TMDL.

The EPA finds that the TMDL document submitted by the 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 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:

Minnesota Rule Chapter 7050 designates uses for waters of the state. Lura Lake is designated as Class 2B water for aquatic recreation use (boating, swimming, fishing etc.). The Class 2 aquatic recreation 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: Numeric criteria for TP, chl-*a*, and SD depth are set forth in Minnesota Rules 7050.0222. These three parameters are the eutrophication standards that must be achieved to attain the aquatic recreation designated use. The numeric eutrophication standards that are applicable to Lura Lake are those set forth for Class 2B shallow lakes in the WCP ecoregion (Table 2 of this Decision Document). In developing the lake nutrient standards for Minnesota lakes, the MPCA evaluated data from a large cross-section of lakes within each of the State’s ecoregions. Clear relationships were established between the causal factor, TP, and the response variables, chl-*a* and SD depth. Based on these relationships, TP loadings designed to meet the TP WQS of 90 µg/L were estimated. MPCA

explained that meeting the TP WQS will result in the attainment of chl-*a* and SD depth numeric standards.

Table 2: Minnesota Eutrophication Standards, Western Cornbelt Plains (WCP) Ecoregion

Parameter	Eutrophication Standard
Total Phosphorus (µg/L)	TP < 90
Chlorophyll- <i>a</i> (µg/L)	chl- <i>a</i> < 30
Secchi Depth (m)	SD > 0.7

Target: MPCA selected a TP target of 90 µg/L in its development of the Lura Lake TMDL.

MPCA selected total phosphorus as the appropriate parameter to address eutrophication problems at Lura Lake because of the interrelationships between TP and its response variables (chl-*a* and SD depth). Algal abundance is measured by chl-*a*, which is a pigment found in algal cells. As more phosphorus becomes available, algae growth can increase. Increased algae in the water column will decrease water clarity that is measured by SD depth.

The EPA finds that the TMDL document submitted by the 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 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:

The approach utilized by the MPCA to calculate the loading capacity for Lura Lake is described in Section 4.0 of the final TMDL document. MPCA first estimated hydrologic and eutrophication indicators using the Minnesota Lake Eutrophication Analysis Procedure (MINLEAP) model. MINLEAP is useful in that it requires minimal input of information and relies on general ecoregion values for stream phosphorus concentrations, precipitation, evaporation and runoff concentrations. These values are estimated based on reference lakes within the ecoregion. Due to its simplicity, MPCA considers MINLEAP as a screening tool and uses it to test for differences between the observed water quality conditions and the MINLEAP predicted water quality conditions. MINLEAP tests for Lura Lake confirmed that the lake exhibits higher in-lake TP and chl-*a* concentrations than ecoregion reference lakes. This information was employed in the Reckhow-Simpson and BATHTUB modeling efforts of this TMDL.

MPCA investigated in-lake phosphorus concentration using inputs specific to the lakeshed via the Reckhow-Simpson model and the Canfield Bachmann equation. The Reckhow-Simpson model allowed the MPCA to specify a range of phosphorus export coefficients to apply to different lakeshed land covers and allowed MPCA to adjust climate, runoff and morphometry input fields of the model. Phosphorus inputs from SSTS, livestock (based on animal population data) and internal load were also considered in the Reckhow-Simpson modeling runs. The Reckhow-Simpson modeling trials influenced the loading inputs for the BATHTUB model and encouraged MPCA to consider internal loading as a much greater fraction of existing phosphorus inputs to Lura Lake.

The BATHTUB model was used to link phosphorus loads with in-lake water quality and to calculate a loading capacity value for Lura Lake. BATHTUB has previously been used successfully in many lake studies in Minnesota. BATHTUB is a steady-state annual or seasonal model that predicts a lake's growing season (June 1 – September 30) average surface water quality. BATHTUB utilizes annual or seasonal time-scales which are appropriate because watershed TP loads are normally impacted by seasonal conditions. BATHTUB has built-in statistical calculations which account for data variability and provide a means for estimating confidence in model predictions. BATHTUB employs a mass-balance TP model that accounts for water and TP inputs from tributaries, direct watershed runoff, the atmosphere, and sources internal to the lake; and outputs through the lake outlet, water loss via evaporation, and TP sedimentation and retention in the lake sediments. BATHTUB provides flexibility to tailor model inputs to specific lake morphometry, watershed characteristics and watershed inputs. The BATHTUB model also allows MPCA to assess different impacts of changes in nutrient loading. BATHTUB allows choice among several different mass-balance TP models. For shallow lakes in Minnesota, the Canfield-Bachmann lake formulation has proven to be appropriate in most cases.

To simulate the load reductions and therefore the maximum allowable load (i.e., loading capacity) needed to achieve the eutrophication WQS a series of model simulations were performed. Each simulation reduced the total amount of TP entering Lura Lake during the summer season, computing the anticipated response within Lura Lake. The goal of the modeling was to identify the loading capacity of Lura Lake (i.e., the maximum allowable load to the system, while allowing it to meet water quality standards) during the June 1 to September 30 summer season. Consistent with recent MPCA guidance, it was assumed that if Lura Lake meets the State's TP water quality standard, chl-*a* and SD within the system will respond accordingly and eventually also reach the State-defined goals.

The Canfield Bachmann Lakes calculations were used to estimate the loading capacity for the Lura Lake TMDL. The loading capacity was the maximum phosphorus load which Lura Lake can receive over an annual period and still meet the WCP WQS. Loading capacities on the annual scale (kg/year and lbs/year) were calculated to meet the WQS during the growing season (June through September). The time period of June to September was chosen by MPCA as the growing season because it corresponds to the eutrophication criteria, contains the months that the general public typically uses Lura Lake for aquatic recreation, and is the time of the year when water quality is likely to be impaired by excessive nutrient loading. Loading capacities were divided by 365 to calculate the daily loading capacities.

The loading capacity was determined based on the Canfield Bachmann Lakes model within BATHTUB. The loading capacity was subdivided among the WLA, LA and MOS components of the TMDL. MPCA determined that the Lura Lake watershed does not contain any NPDES permitted facilities that contribute to the WLA within the boundaries of the watershed. MPCA did account for stormwater inputs from construction and industrial activities within the Lura Lake watershed (Table 3 of this Decision Document). The loading assigned to the WLA was 8.11 kg/year (approx. 0.022 kg/day) or 0.049 lbs/day. The LA for the Lura Lake TMDL was a categorical LA and accounted for a majority of the loading capacity. Nonpoint sources were combined together and assigned one LA value. The LA was calculated to be 860.92 kg/year (approx. 2.36 kg/day) or 5.20 lbs/day. The MOS was set explicitly at 10% of the loading capacity 96.03 kg/year (0.26 kg/day) or 0.58 lbs/day.

Table 3: TMDL load for Lura Lake

Source	TMDL			
	(lbs/yr)	(kg/yr)	(lbs/day) ¹	(kg/day) ¹
Wasteload Allocation				
Construction & Industrial Stormwater	17.89	8.11	0.049	0.022
Load Allocation				
Categorical LA (internal load, atmospheric deposition, watershed runoff sources, etc.)	1,898.00	860.92	5.20	2.36
Margin Of Safety (10 %)				
	211.70	96.03	0.58	0.263
Loading Capacity (TMDL)	2,127.59	965.06	5.829	2.644

¹ = Annual loads converted to daily loads by dividing by 365 days per year

Table 3 in this Decision Document displays the TMDL allocations for the Lura Lake TMDL. These calculations were based on the critical condition, the summer growing season (June through September), which is typically when the water quality in Lura Lake is degraded and phosphorus loading inputs are the greatest. TMDL allocations assigned during the summer growing season will protect Lura Lake during the worst water quality conditions of the year. The MPCA assumed that the loading capacities established by the TMDL will be protective of water quality during the remainder of the calendar year (October through May).

MPCA estimated the reductions required for Lura Lake to meet WCP WQS in the 'Necessary Reductions' section of the final TMDL document (page 32). MPCA used annual TP water quality data to calculate a 'current' annual load of TP to Lura Lake at 6,745 lbs/year. The loading capacity of

2,127.59 lbs/year (Table 3 of this Decision Document) requires Lura Lake to see a 68.5% reduction in TP in order to meet the goals of the Lura Lake TMDL. MPCA expects that these reductions will result in the attainment of the WQS for Lura Lake and the lake's water quality will return to a level where its designated use is no longer considered impaired.

EPA supports the data analysis and modeling approach utilized by MPCA in their calculation of wasteload allocations, load allocations and the margin of safety for the Lura Lake TMDL. Additionally, EPA concurs with the loading capacities calculated by the MPCA in the Lura Lake TMDL. EPA finds MPCA's approach for calculating the loading capacity for Lura Lake to be reasonable and consistent with EPA guidance.

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

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:

MPCA recognized the loadings for the Lura Lake nutrient TMDL as originating from a variety of nonpoint sources including; internal load sources within Lura Lake (ex. lake sediments, curly-leaf pondweed and other vegetative nutrient inputs), atmospheric deposition, stormwater runoff from developed land areas adjacent to Lura Lake, stormwater sources from agricultural areas within the Lura Lake watershed, forest & wetland sources, shoreline erosion and nutrient inputs from SSTS. MPCA assigned a categorical LA value instead of subdividing the LA value into individual loads.

EPA finds the MPCA's approach for calculating the LA for the Lura Lake nutrient TMDL to be reasonable and consistent with EPA guidance.

The EPA finds that the TMDL document submitted by the 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:

There are no wastewater treatment facilities, MS4 communities, Combined Sewer Overflows, or Sanitary Sewer Overflows within the Lura Lake watershed. These potential point sources did not receive an apportionment of the WLA (WLA = 0). Feedlots are generally not allowed to discharge to waters of the State (Minnesota Rule 7020.2003) and were assigned a WLA of zero (WLA = 0).

Construction and industrial stormwater inputs were assigned a portion of the WLA load in the Lura Lake TMDL calculation (Table 3 of this Decision Document). The calculation of the WLA apportioned to construction and industrial stormwater was estimated based on the percentage of land under construction within the Lura Lake watershed. This area was determined from construction and industrial permits queried from MPCA's DELTA database. The DELTA database contains permit information for construction activities which are anticipated to disturb one acre or more of soil; less than one acre of soil if that activity is part of a "larger common plan of development or sale" that is greater than one acre; or less than one acre of soil, but the MPCA determines that the activity poses a risk to water resources (page 27 of the final TMDL document).

According to the results of the DELTA database query, over the previous 10 years, only four permitted construction projects were undertaken within the Lura Lake watershed. This is a relatively small number and in order to avoid a zero allocation for construction and industrial stormwater, MPCA set the WLA for construction and industrial stormwater at 1.0 percent. MPCA explained that the choice of one percent was based on the assumption that no more than one percent (approximately 13 acres of the total watershed) would ever be permitted or under construction at one time. The WLA assigned to construction and industrial stormwater inputs was calculated at one percent (1.0 %) of the loading capacity (0.049 lbs/day).

The WLA for stormwater discharges from sites where there is construction activities reflects the number of construction sites ≥ 1 acre expected to be active in the watershed at any one time, and the BMPs and other stormwater control measures that should be implemented at the sites to limit the discharge of pollutants of concern. BMPs and other stormwater control measures which should be implemented at construction sites are defined in the State's NPDES/SDS General Stormwater Permit for Construction Activity (MNR100001). If a construction site owner/operator obtains coverage under the NPDES/SDS General Stormwater Permit and properly selects, installs and maintains all BMPs required under the permit, 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.

The WLA for stormwater discharges from sites where there is industrial activity reflects the number of sites in the watershed for which NPDES industrial stormwater permit coverage is required, and the BMPs and other stormwater control measures that should be implemented at the sites to limit the discharge of pollutants of concern. BMPs and other stormwater control measures which should be implemented at the industrial sites are defined in 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). 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.

Under MPCA's Stormwater General Permit, managers of sites under construction or industrial stormwater permits must review the adequacy of local Stormwater Pollution Prevention Plans (SWPPPs) to ensure that each plan meets WLA set by EPA approved TMDLs. If 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.

EPA finds the MPCA's approach for calculating the WLA for the Lura Lake nutrient TMDL to be reasonable and consistent with EPA guidance.

The EPA finds that the TMDL document submitted by the 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:

Sections 5 of the final TMDL submittal outlines the Margin of Safety used in the Lura Lake TMDL. The MOS accounts for the inability of MPCA to precisely describe the water quality conditions in Lura Lake. An explicit MOS of 10.0% of the loading capacity was used to account for annual variability and uncertainty in the model outputs (Table 3 of this Decision Document). MPCA believes that using a MOS of 10.0% of the loading capacity will aid to offset the environmental variability in phosphorus loading to Lura Lake and will allow the water body to meet the WCP eutrophication WQS.

MPCA also employed an implicit MOS based on a series of conservative assumptions made during the lake response modeling. Phosphorus inputs were calculated as annual loads. The BATHTUB modeled scenarios were calibrated to the observed annual growing season (June through September) lake water quality conditions. The June through September period is typically when in-lake TP concentrations and chl-*a* are highest and SD depth measurements typically lowest. Calibrating the BATHTUB model to growing season TP empirical data provides additional MOS safety and ensures that each lake should meet state water quality standards during the remainder of the calendar year (October to May). The calibration and validation processes of the BATHTUB model also functioned to reduce error from assumptions made in the modeling process.

The EPA finds that the TMDL document submitted by the 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:

Seasonal variation was considered in this TMDL as described in Section 3 of the final TMDL report. The nutrient targets employed in the Lura Lake TMDL were developed for average nutrient values collected during the growing season (June to September). The water quality targets were designed to meet the WCP eutrophication WQS during the period of the year where the frequency and severity of algal growth is the greatest. This period in the State of Minnesota has historically been during the growing season. The loading capacity for the Lura Lake TMDL was calculated to meet the water quality standards during the most critical period (late summer) of the calendar year. By calibrating the modeling efforts to protect these waterbodies during the worst water quality conditions of the year, it is assumed that the loading capacities established by the TMDLs will be protective of water quality during the remainder of the calendar year (October through May).

The EPA finds that the TMDL document submitted by the 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 Lura Lake phosphorus TMDL outlines reasonable assurance activities in Section 7 of the final TMDL document. The reasonable assurance practices discussed in the final TMDL document will be implemented over the next several years. Members of Blue Earth and Faribault county Soil and Water Conservation Districts (SWCD), members of Minnesota Department of Natural Resources (MDNR) and local lake association partners will work to ensure that phosphorus reductions in the Lura Lake watershed will move forward in the coming years. A general discussion of implementation activities was included in the final TMDL document. MPCA anticipates that a more specific Lura Lake nutrient implementation plan will be developed as part of the Le Sueur River Watershed Restoration and Protection plan (WRAP). This implementation plan will cover more specific practices, goals, and targeted areas.

The local county and lake association partners will complete water quality monitoring in the Lura Lake watershed throughout the water year to track the success or failure of BMPs designed to reduce nutrient loading into Lura Lake. Watershed managers will have the opportunity to reflect on whether watershed management strategies are effective at reducing nutrient inflows to the watershed.

Various funding mechanisms will be utilized to execute the recommendations made in the implementation section of this TMDL. Funding for implementation efforts will be a mixture of local, state and federal funding vehicles. Local funding may be through SWCD cost-share funds, Natural Resources Conservation Service (NRCS) cost-share funds, and local government cost-share funds.

Federal funding, via the Section 319 grants program, may provide money to implement voluntary nonpoint source programs within the Lura Lake watershed. State efforts may be via Clean Water Legacy Act (CWLA) grant money and the Minnesota Clean Water Partnership program.

Clean Water Legacy Act: The CWLA is a statute passed in Minnesota in 2006 for the purposes of protecting, restoring, and preserving Minnesota water and providing the funding to do so. The Act discusses how MPCA and the involved public agencies and private entities will coordinate efforts regarding land use, land management, water management, etc. Cooperation is also expected between agencies and other entities regarding planning efforts, and various local authorities and responsibilities. This would also include informal and formal agreements to jointly use technical, educational, and financial resources. The CWLA provides the process to be used in Minnesota to develop TMDL implementation plans, which detail the restoration activities needed to achieve the allocations in the TMDL. TMDL implementation plans are required by the State to obtain funding from the Clean Water Fund. MPCA expects the implementation plans to be developed within a year of TMDL approval.

The CWLA also provides details on public and stakeholder participation, and how the funding will be used. The implementation plans are required to contain ranges of cost estimates for point and nonpoint source load reductions, as well as monitoring efforts to determine effectiveness. MPCA has developed guidance on what is required in the implementation plans (Implementation Plan Review Combined Checklist and Comment, MPCA), which includes cost estimates, general timelines for implementation, and interim milestones and measures. The Minnesota Board of Soil and Water Resources 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 '11 Clean Water Fund Competitive Grants Policy; Minnesota Board of Soil and Water Resources, 2011).

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 some of the implementing programs for ensuring effluent limits are consistent with the TMDL. The NPDES program requires construction and industrial sites to create a SWPPP that summarizes how stormwater will be minimized from the site.

Under MPCA's Stormwater General Permit, 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 Lura Lake TMDL. 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 MPCA's general industrial stormwater permit (*General Permit for Construction Sand and Gravel (MNG49000)*).

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:

Section 6 of the final TMDL document outlines the planned water monitoring efforts within the Lura Lake watershed. MPCA expects that local efforts via the citizen lake monitoring program (CLMP) will continue to monitor water quality in Lura Lake. The CLMP is a cooperative program combining the technical resources of the MPCA and the volunteer efforts of citizens to collect water-quality data on their lakes. These volunteers assist in determining the condition of Minnesota lakes by expanding MPCA's water-quality monitoring network. Typically CLMP efforts measure Secchi Disk transparency and sometimes near surface measurements for TP, dissolved phosphorus and chlorophyll-a.

Local county and lake association partners will also measure the efficiency of BMP nutrient removal strategies. These will be tested by monitoring water quality throughout the Lura Lake watershed. These partners may also, from time to time, visit BMP structures to ensure that they are functioning properly. 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 nutrient loading into Lura Lake. 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.

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:

Implementation strategies are outlined in Section 6 of the final TMDL. MPCA presented a variety of possible implementation activities which could be undertaken within the Lura Lake watershed. Since the Lura Lake TMDL has a majority of the loading capacity assigned to the load allocation implementation activities will focus on reducing nonpoint source contributions. Reductions to nonpoint contributions will be related to external nonpoint and internal nonpoint sources. MPCA projects that it will take an extended amount of time to improve the water quality in Lura Lake.

Implementation efforts should be scheduled as a phased approach, which allows for corrections to implementation plans, adjustments to BMPs due to advances in technology, and modification to the implementation plan based on the changing demands on the watershed by stakeholders. MPCA expects that county partners (Blue Earth or Faribault), board of soil and water resources (BWSR) partners, SWCD partners, and members of the Lura Lake Association (LLA) will work together to solicit assistance from local stakeholders. Potential phosphorus reduction strategies involve the following efforts:

Internal Loading Reduction Strategies: Internal nutrient loads may be addressed to meet the TMDL allocations outlined in the Lura Lake TMDL. MPCA recommends that before any strategy is put into action, an intensive technical review, to evaluate the costs and feasibility of internal load reduction options be completed. Several options should be considered to manage internal load inputs from Lura Lake.

- *Alum Treatment:* The addition of aluminum sulfate to permanently bind phosphorus into the lake bottom sediments. This would decrease phosphorus releases from sediments in Lura Lake, brought on by anoxic conditions in the water column.

- *Management of fish populations:* Improved management of fisheries in the lakes which are hydrologically connected to Lura Lake (ex. Bass Lake) in order to maintain healthy game fish populations and reduce rough fish (i.e. carp, bullheads, fathead minnows) populations.
- *Vegetation management:* Improved management of in-lake vegetation in order to limit phosphorus loading and to increase water clarity. Controlling the vitality of curly-leaf pondweeds via chemical treatments (herbicide applications) will reduce one of the significant sources of internal loading, the senescence of curly-leaf plants in the summer months.
- *Hypolimnetic Aeration:* Aeration of the hypolimnion to prevent the formation of anoxic conditions within the bottom waters of Lura Lake. Aerators could be placed near the bottom of the lake to maintain oxygenated conditions within the bottom waters.
- *Redesigning boating traffic patterns:* To limit boat operation in shallow or vegetated areas which may resuspend phosphorus from lake bottom sediments.

Septic Field Maintenance: Septic systems are believed to be a source of nutrients to Lura. Failing systems in Blue Earth and Faribault Counties are expected to be identified and addressed via upgrades to SSTS not meeting septic ordinances. MPCA explained that SSTS improvement priority should be given to those failing SSTS on lakeshore properties or those SSTS adjacent to streams within the direct watershed. MPCA aims to greatly reduce the number of failing SSTS in the future via local septic management programs and educational opportunities. Educating the public on proper septic maintenance, finding and eliminating illicit discharges, and repairing failing systems could lessen the impacts of septic derived nutrients inputs into the Lura Lake watershed.

Manure management (feedlot and manure stockpile runoff controls): Manure has been identified as a potential source of nutrients. Nutrients derived from manure can be transported to surface water bodies via stormwater runoff. Nutrient laden water can also leach into groundwater resources. Improved strategies in the collection, storage and management of manure can minimize impacts of nutrients entering the surface and groundwater system. Repairing manure storage facilities or building roofs over manure storage areas may decrease the amount of nutrients in stormwater runoff.

Pasture management and agricultural reduction strategies: These strategies involve reducing nutrient transport from fields and minimizing soil loss. Specific practices would include; erosion control through conservation tillage, reduction of winter spreading of fertilizers, elimination of fertilizer spreading near open inlets and sensitive areas, installation of stream and lake shore buffer strips, streambank stabilization practices (gully stabilization and installation of fencing near streams), and nutrient management planning.

Urban/Residential Nutrient Reduction Strategies: These strategies involve reducing stormwater runoff from lakeshore homes and other residences within the Lura Lake watershed. These practices would include; rain gardens, lawn fertilizer reduction, lake shore buffer strips, vegetation management and replacement of failing septic systems. Water quality educational programs could also be utilized to inform the general public on nutrient reduction efforts and their impact on water quality.

Shoreline restoration activities: Property owners with yards extending to the shoreline should be encouraged to restore the immediate shoreline with native plants and create buffer areas to capture runoff and prevent erosion.

Increased infiltration and filtration within the direct watersheds: Reducing nutrient loading to Lura Lake can involve increasing infiltration and filtration of precipitation and precipitation derived stormwater. This can be accomplished through creating infiltration areas (rain gardens, bioretention swales, etc.), removing tile lines from agricultural fields, and incorporating lake shore buffer areas and vegetated swales.

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

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:

The public participation section of the TMDL submittal is found in Section 8 of the final TMDL document. Throughout the development of the Lura Lake TMDL the public was given various opportunities to participate in the TMDL process. The MPCA encouraged public participation through public meetings, meetings with individual landowners within the Lura Lake watershed, and other small group discussions. MPCA also indicated that it had provide project updates and other TMDL related information to the Lura Lake Association. MPCA encouraged the Lura Lake Association to share these updates with its members.

MPCA played an important role in distributing information and organizing public meetings and meeting with individual landowners to discuss the progress of the Lura Lake TMDL. MPCA created a website to communicate background information on the TMDL process, TMDL project updates, and public meeting information (dates, times and locations). The MPCA hosted a series of public notice meetings during the TMDL development process in Mapleton, MN, in order to share information, solicit input from local stakeholders and encourage public participation in the project.

The draft TMDL was posted online by the MPCA at (<http://www.pca.state.mn.us/water/tmdl>). The 30-day public comment period began on September 23, 2013 and ended on October 22, 2013. The MPCA received 1 public comment during the public comment period. This comment was from the Minnesota Department of Agriculture (MDA) and was requesting that MPCA provide further clarification on updating the Lura Lake TMDL document to include information from MDA's BMP Handbook. MPCA answered this request from MDA and explained that it will be including more detailed information from the MDA BMP Handbook within the Le Sueur Watershed Restoration and Protection Strategy (WRAPS) report. The Le Sueur WRAPS report is anticipated to be released in the near future. EPA believes that MPCA adequately addressed the request from MDA. MPCA submitted the public comment from MDA and its response within the final TMDL submittal packet received by the EPA on December 30, 2013.

The EPA finds that the TMDL document submitted by the 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 waterbody, and the pollutant(s) of concern.

Comment:

The EPA received the final Lura Lake phosphorus TMDL document, submittal letter and accompanying documentation from the MPCA on December 30, 2013. The transmittal letter explicitly stated that the final Lura Lake (DNR ID 07-0079-00) TMDL for excess nutrients was 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 Lura Lake by the MPCA satisfies the requirements of this twelfth element.

13. Conclusion

After a full and complete review, EPA finds that the TMDL for Lura Lake satisfies all of the elements of an approvable TMDL. This approval is for one TMDL, addressing one waterbody for recreational use impairments, for Lura Lake (DNR ID 07-0079-00).

EPA's approval of this TMDL extends to the water bodies which are identified as Lura Lake (DNR ID 07-0079-00), with the exception of any portions of the waterbodies 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.