Appendix Q: Public Comments

Appendix Q provides copies of the comments received during the August 20 through September 19, 2018 comment period. These comments are summarized in Appendix R along with responses grouped by category.



"Total Maximum Daily Loads for Total Phosphorus in the Wisconsin River Basin"

Public Hearing Draft August 20, 2018 Wisconsin's Green Fire

About Wisconsin's Green Fire: Wisconsin's Green Fire-Voices for Conservation (WGF) supports the conservation legacy of Wisconsin by promoting science-based management of its natural resources. Our members represent extensive experience in natural resource management, environmental law and policy, scientific research, and education. Our members have backgrounds in government, non-governmental organizations, universities and colleges and the private sector.

Comments: In general, the August 20, 2018 hearing draft of the "Total Maximum Daily Loads for Total Phosphorus in the Wisconsin River Basin" represents a robust modeling effort that far exceeds efforts in previous TMDL modeling efforts. At the same time, it seems to omit basic information, sometimes lacks clarity and is not presented in a manner that is easy for the general public to use and understand. **WGF believes that the missing information will make it harder to launch an implementation effort.**

The following is a section-by-section set of comments.

Section 1. Introduction

No comments. Rather straight forward.

Section 2. Watershed Characterization

Descriptive material. Use of the ecological landscapes seems appropriate.

Section 3. Monitoring

Descriptive and brief

Section 4. Source Assessment

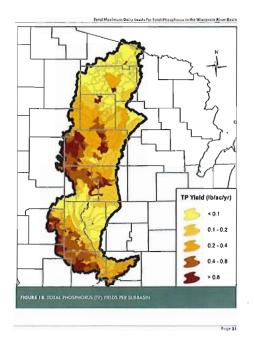
1. This section does not describe how data on the current agricultural nonpoint sources were incorporated into the SWAT model. In contrast, subsections 3.2 through 3.5 of Appendix K include a very clear description of the information sources and data compilation to arrive at a five-year set of input data.

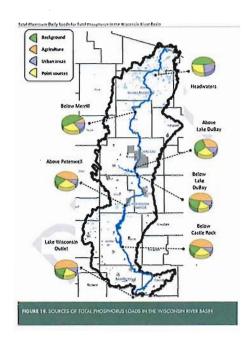
Comment: Include in the text of the TMDL report a description of how the current or existing agricultural nonpoint sources were accounted for in the data input to the SWAT model. At a minimum, the text should refer the reader to subsections 3.2 through 3.5 of Appendix D.

2. This section goes into a lengthy discussion of the concerns with use of the SWAT model: estimates exported loads from fields rather than ultimate delivery of loads downstream; calibration not able to capture some seasonal fluctuations; and calibration has residual bias. It also discusses the need and use of a separate model needed downstream of Merrill. The outcome associated with all of this discussion seems to be the need to adjust the SWAT loads. The rather confusing Table 12 appears to indicate that for phosphorus, loads needed to be adjusted by as much as 30% at Mill Creek at CTH PP. In the context of modeling, adjustments as large as 30% are not surprising or unexpected, but it should be taken into account in the TMDL's margin of safety.

Comment: The TMDL report needs to explain how the magnitude of the bias in the SWAT model results is accounted for in the margin of safety.

3. The two figures below were very informative. In particular, the yields (mass load per acre) on Figure 18 seem very consistent with published historic yields based on monitoring (e.g. Fact sheet-195-97, USGS, Panuska DNR). Past TMDLs seemed to predict yields that were not consistent.





4. It is unlikely that the SWAT modeling took into account phosphorus in runoff from animal lots or contributions from streambanks.

Comment: The TMDL report should state how phosphorus in runoff from these sources is taken into account in the source assessment, if at all. If the phosphorus contribution is presumed to be small, there should be a discussion supporting that presumption.

5. While CAFOs are briefly described, there is no discussion on CAFO loads in the source assessment. Presumably the load from production areas is zero, but it is not stated.

Comment: State in the TMDL report that for CAFOs a zero phosphorus load, if used, was assumed for the source assessment of the existing loads.

6. There is no discussion on <u>existing</u> loads from municipal and industrial wastewater point sources in the source assessment. It is unclear whether no loads, existing loads or "baseline" loads described in section 4.4.2.1 were used. Presumably, the point source loads would influence the calibration process.

In contrast, subsection 3.7 of Appendix D clearly explains how the existing point source load information was complied and how it was important to the SWAT calibration process.

Comment: The TMDL report should specifically state how existing phosphorus loads from municipal and industrial wastewater treatment facility point sources were used in the source assessment and the model calibration process. At a minimum, the text of this section should refer the reader to subsection 3.7 of Appendix D where there is a clear description of the use of existing point source load information in the SWAT calibration process.

Section 5. Pollutant Load Capacity

7. Often in past TMDL analyses, the growing season phosphorus mean concentration was assumed to the equal to the flow weighted mean concentration. It is good to see an analysis of this correlation. However the flow weighted mean to growing season mean ratio of 1.5:1 or even 2:1 shown on Table 15 warrants some explanation. For example, the data collected on Mill Creek at CTH PP, near the mouth of Mill Creek, undoubtedly in influenced by the discharge of phosphorus from Marshfield's wastewater treatment facility. Is the point source discharge a factor?

Comment: The high ratios of flow weighted mean concentrations to growing season mean concentrations for phosphorus shown on Table 15 should be assessed and explained.

Section 6. Pollutant Load Allocations

8. Under load allocations, how the "baseline" conditions for agricultural nonpoint source were determined is not described. The text states that the baseline agricultural nonpoint source load is based on the land cover used in the SWAT modeling, but doesn't state that the same information (rotations, tillage, etc.) used in the SWAT modeling is used as the baseline condition.

Comment: The text of the TMDL report should be clear as to how the agricultural nonpoint source baseline conditions were determined. If they are the same as used in the SWAT modeling of existing conditions, the text should refer the reader to subsections 3.2 through 3.5 of Appendix D. It they are different, the text should describe how they are different and why they are different.

9. Appendix N is a valuable addition to the document and a step toward NPS implementation. It is evident that the phosphorus yield estimates in Appendix N do not agree with the baseline yield numbers from SWAT. However they are important additions to the science of NPS management. They would be even more valuable if the sub-basin yield values from SWAT were listed in table 1.2 in Appendix N along with the PI values using the trade

report method. Future implementation efforts will need to understand the difference between these yield estimation techniques. Also, future efforts to bring the SWAT and Snap plus models closer to the same yield estimates would benefit from listing both model outputs for each sub-basin in this evaluation.

Comment: Include SWAT sub-basin phosphorus yield estimates alongside trade report PI yield estimated in table 1.2 of Appendix N. Also the TMDL should recommend that the Snap Plus model be modified to automatically provide farm-wide weighted mean values for trade report phosphorus index and soil loss. This recommendation is an important part of reasonable assurance of nonpoint implementation.

10. The point source wasteload allocation section describes a process where the baseline condition is based on permit limits, primarily 1 mg/L TP, and an assumption of the design capacity. This is not the existing condition as some wastewater treatment plants have been discharging are higher concentrations than 1 mg/L and other at lower concentrations. Few, if any, have been discharging at design capacity.

WGF independent review of a summary of basin point source data from 2011-2013 is attached. It illustrates the very large differences in the expected phosphorus reductions for the point sources. The decision to use design flow for wasteload allocation has a huge effect on the relative distribution of allocations among dischargers. While the average difference between actual and design flow is 127%, individual differences can be over 300%, including some large dischargers (eg Mauston). The extent of adjustments to recognize design flow should disclosed in the TMDL and justification provided especially for the largest differences between actual and design flow for large dischargers. It also helps put into perspective the relationship between the point source wasteload allocation and nonpoint source load allocation. This is important information and should be part of any TMDL.

Comment: The TMDL report should include a summary table or chart comparing the existing loads to the baseline loads and the wasteload allocation and justification provided for significant differences between the design flow used in wasteload allocation and actual flow.

11. This section describes an "implicit" margin of safety achieved through use of conservative assumptions.

Comment: Given the relatively large adjustments to the nonpoint source loads used in the SWAT modeling, a specific margin of safety should be considered.

12. This section mentions using a 5% reserve capacity without any explanation as to how the reserve capacity was determined. Use of any reserve capacity likely results in a greater control of agricultural nonpoint sources (lower load allocation) than if there was no reserve capacity. The report provides several examples of how reserve capacity might be used. These examples do not mention the very important need for municipalities to correct groundwater contamination problems through extension of service to unsewered areas or conversion of municipalities discharging to groundwater to new surface water dischargers.

Comment: The text of the TMDL report should discuss the need for a 5% reserve capacity, especially how it impacts the agricultural nonpoint source load allocation. The examples of uses of reserve capacity should include municipalities taking action to correct groundwater contamination problems.

Section 7. TMDL Implementation

13. Despite the lengthy list of nonpoint source implementation programs, the historic trend has been chronic underfunding of programs needed to implement TMDLs. Add to that, the level of nonpoint source management necessary to achieve the load allocations requires a far greater level of management than what will be achieved through meeting the existing performance standards, such as a phosphorus index of 6.

Comment: The TMDL should point out the need for increased funding in the listed programs to implement the set of TMDLs in a timely manner, such as 10 to 15 years. Also, the Department of Natural Resources should consider adopting targeted performance standards for the Wisconsin River Basin consistent with the load allocations in this TMDL report. These recommendation are an important part of reasonable assurance of nonpoint implementation.

14. The TMDL does not mention the fate of surrendered wasteload allocation when a facility ceases to operate. It is our understanding that the process that will be used is explained in the DNR TMDL implementation guidance. https://dnr.wi.gov/topic/tmdls/implementation.html.

Comment: The existence of a procedure for handling surrendered wasteload allocations and its web location should be referenced either in section 6.6 or 7.6

Thank you for the opportunity to comment on this Draft Document. Please do not hesitate to contact us to discuss further.

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715-379-7048

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Rib Lake (0029017)	Loganville (0029114)	Wonewac (0029688)	Vesper (0030309)	Hillsboro (0020583)	Nasonville Dairy 006 (0040312)	Pittsville (0020494)	Stratford (0025569)	Milan (0031500)	Auburndale (0022411)	Athens (0022365)	Abbyland Foods - Abbotsford 002 (0057436)	Elroy (0023931)	Adams (UUZSIDS)	cagie river (0022004)	סוווכום סטי	Mullins Cheese - Marshfield 007 (0053694)	Colby (0023655)	Poynette (0021091)	Spencer (0021521)	Marathon (0020273)	Foreitost Farms - Ageasouig (0000033)	December Engine (Occopy)	Abbordord (0023141)	Whiting (0021636)	Oehmcke SFH (0058271)	New Lisbon (0020699)	Edgar (0021784)	FOIL EDWARDS (DOZDADZ)	Dark Edwards (NOTONES)	1950 and (0022837)	Lodi (0022918)	Mullins Cheese 004 (0054127)	Nekoosa (0020613)	Kerry Biofunctional Ingredients 001 (0003875)	CONTRACTOR (CONTRACTOR)	Tomahanik (0031046)	Extended - Clover (0003850) #	Mauston (0024535)	Lignotech (0003450)	Rhinelander (0020044)		Merrill (0020150)	Antigo (0022144)	Tomah (0021318)	riover (OUZ/393)	Plous (00204z)	Domina (00000)	Baraboo (0020605)	McCain Foods - Plover 003 (0054518)	Wisconsin Delis (0031402)	Readburg (0020371)	WPS Weston 3 002 (0042765)	Neenah Paper Whiting 004 (0003611)	Rib Mountain (0035581)	Stevens Point (0029572)	Verso Minnesota 011 (0003468) (former Consol/SE WRC)	Wisconsin Rapids (0025844)	Marshield (0021024) du2	vedisal (VCZ)33	Manage (0075730)	PCA Tomahawk 003 (0002810) process discharge only	ERCO Worldwide - Port Edwards (fmr Vulcan Chemicals) (0003565)	Expera Specialty Solutions - Rhinelander 011 (0003026) (fmr Rhinelander Paper)	Domtar Paper LLC (fmr Weyerhaeuser Co.) 010 (0026042)	Expera Specialty Solutions @ Mosinee (fmr Mosinee Paper and Wausau Paper) (0003671)	Domtar 002 (0003620)	NewPage Wisconsin WCC out (0037991) (tmr consol/or WCC)	NavePara Missonsia MOC 001 (0037001) (for Consol/SE MOC)	facility				Wisconsin River Basin WPDES Permits		
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Phelps Sanitary District #1 PO BOX 227 Phelps, WI 54554

September 16, 2018

WI DNR Kevin Kirsch 101 S Webster St PO BOX 7921 Madison, WI 53707

Subject:

Wisconsin River TMDL

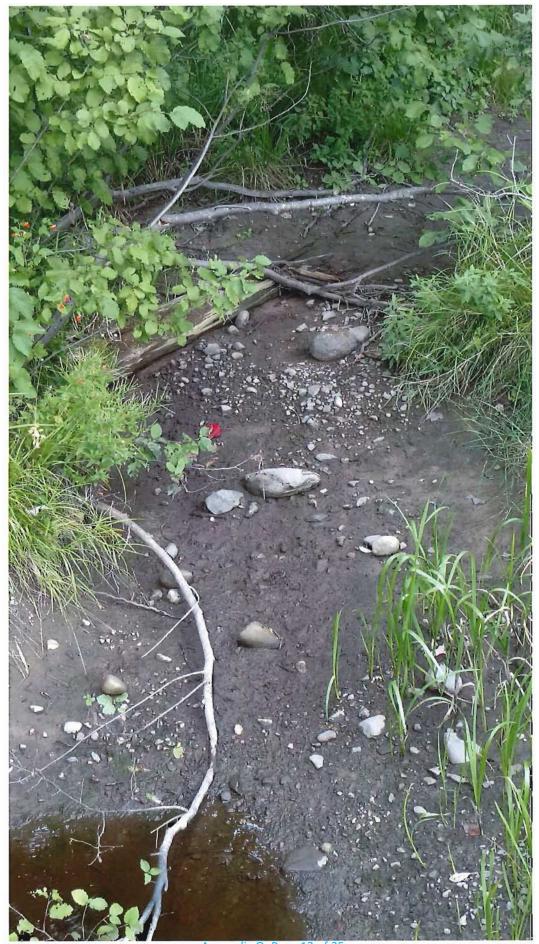
How often does the effluent from the Phelps Sanitary reach the Wisconsin River or if it ever does.

The Phelps Sanitary district continuously discharges its effluent from our lagoon to a wetland. It drains to a unnamed tributary that flows to the Deerskin River that eventually makes its way to the Wisconsin River. Several years ago, when our Sanitary Engineer Steve Ohm and I were going through a routine inspection, we decided to visually check out the flow as it leaves the Sanitary effluent pipe, then check the flow as it crosses several roads, Hwy 17, COOP Road, Strong Road, and then finally St. Louis Road. What we found was that it appeared that the flow became smaller the farther we went from the Sanitary lagoon and when we came to St. Louis Road the flow had totally dried up to nothing. That started to make us wonder on how often does our effluent really make it to the Deerskin River let alone the Wisconsin River. I started visually checking the flow at the St. Louis Road crossing once a month and found that there was flow during 3 out of the 12 months and 9 of the months the creek bed was dry. It appears that there is flow at the St. Louis crossing only during the spring runoff season and during heavy rain events.

It is assumed that the amount of phosphorus that leaves the Phelps Sanitary lagoon makes it all the way to the Wisconsin River. We do not believe that this is a valid statement. I've included a picture of the dry creek bed at the St. Louis crossing from less than a month ago and this summer has been a wet year. Hence we believe that the phosphorus in the effluent that leaves the Phelps Sanitary lagoon does not impact the phosphorus levels of the Wisconsin River. Therefore the Phelps Sanitary should not be given mandatory phosphorus limits because there is obvious times when the effluent doesn't reach the Deerskin River, and then that raises the question if the effluent ever really reaches the Wisconsin River.

Sincerely,

Rob Andersen Phelps Sanitary Operator



Appendix Q: Page 12 of 35



Member of Geneva Group International The Leading Global Alliance of Independent Professional Firms Paul G. Kent 222 West Washington Avenue, Suite 900 P.O. Box 1784 Madison, WI 53701-1784 vwishart@staffordlaw.com 608.259.2665

Vanessa D. Wishart 222 West Washington Avenue, Suite 900 P.O. Box 1784 Madison, WI 53701-1784 vwishart@staffordlaw.com 608.210.6307

September 19, 2018

VIA EMAIL DNRWisconsinRiverTMDL@Wisconsin.gov

Mr. Kevin Kirsch Wisconsin Department of Natural Resources P.O. Box 7921 Madison, WI 53703-7921

RE: Comments on the Wisconsin River TMDL Draft Report

Dear Mr. Kirsch:

We are submitting these comments on the Wisconsin Department of Natural Resources' (DNR) Total Maximum Daily Load (TMDL) Report for Total Phosphorus in the Wisconsin River on behalf of the Municipal Environmental Group—Wastewater Division (MEG). MEG is an organization of almost 100 municipalities statewide who own and operate wastewater treatment plants. MEG has a long history of supporting efforts to remove phosphorus from our state's waters. We greatly appreciate the opportunity to submit comments on the draft TMDL report.

I. Nonpoint Source Pollution

Wisconsin was a leader in establishing technology-based effluent limits on phosphorus back in 1992 at 1.0 mg/L. As a result, Wisconsin municipal treatment plants have already removed approximately 90% of the phosphorus in their discharges, and many have removed upwards of 97%. It is thus not surprising that most of the phosphorus impairments in Wisconsin's waters do not come from municipal treatment plants, but from nonpoint sources.

The TMDL seeks to impose extremely restrictive limits on point source dischargers, despite the fact that baseline phosphorus loadings in the Wisconsin River TMDL area are dominated by nonpoint sources. Because point sources have already removed a substantial amount of

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414.982.2850 888.655.4752 Fax 414.982.2889 www.staffordlaw.com phosphorus from their discharges, reducing phosphorus discharges from point sources to the level proposed in the TMDL will not result in significant water quality improvement.

In response to prior comments, DNR created Appendix N, which provides the agricultural load allocation as an edge of field number expressed in the same manner as the implementation model SnapPlus. The goal is to "help aid nonpoint implementation and better inform point source compliance options." MEG appreciates DNR's effort to aid implementation of nonpoint source pollution reductions. However, the creation of this Appendix does not provide reasonable assurances that nonpoint source pollution reductions will occur. Efforts at nonpoint source pollution reduction have been historically ineffective, and this TMDL Report does not provide sufficient explanation for how TMDL implementation will achieve proposed reductions in nonpoint source phosphorus pollution.

The TMDL should not proceed unless and until nonpoint source phosphorus pollution can more effectively be addressed. Imposing restrictive TMDL-based limits on point source dischargers without improvement on the nonpoint front will require substantial public expenditures with likely insignificant water quality improvement.

II. Phased TMDL Implementation

MEG requests that DNR strongly consider and provide additional information on a phased TMDL implementation. This is particularly necessary for this TMDL area, where there is such significant uncertainty that the water quality criterion is appropriate and attainable. A phased TMDL would provide additional time to study and revise the criteria if appropriate, without locking permittees into stringent wasteload allocations that could be subject to antibacksliding restrictions.

A phased TMDL would also allow for achievement of interim milestones and waste load allocations while allowing time for achieving important nonpoint source reductions. A phased implementation process could include initial load reductions followed by monitoring and modeling and resulting modifications to the TMDL allocations. Without a phased approach, point sources will be forced to meet final allocations over a short timeframe as compared to nonpoint sources. And, as discussed above, such allocations will not result significant water quality improvements.

The authority to implement a phased TMDL approach exists under the Clean Water Act. The U.S. EPA has issued several guidance documents that discuss the permissible use of phased or staged TMDLs. See Guidance for Water Quality-Based Decisions: The TMDL Process, Environmental Protection Agency (1994); Memorandum: Clarification Regarding "Phased" Total Maximum Daily Loads, Environmental Protection Agency (2006). MEG requests that DNR provide further evaluation of a phased approach to the Wisconsin River TMDL.

III. Site Specific Criteria

MEG supports DNR's decision to pursue site-specific criteria (SSC) for lakes Petenwell, Castle Rock, and Wisconsin. MEG strongly objects to proceeding with finalizing the TMDL prior to successful completion of the SSC process.

As DNR is aware, an SSC must be adopted by rule in Wisconsin. This process can take a number of years. If DNR moves forward on the TMDL without first securing SSC, point sources may face implementation of extremely stringent TMDL allocations. There are a number of permittees who are facing reissuance of permits including TMDL limits in the upcoming years. If these permittees receive TMDL limits that become effective prior to completion of the SSC, they could be stuck with these limits due to antidegradation/antibacksliding restrictions. It makes little sense and could result in significant expense to point source dischargers if the TMDL were to proceed prior to finalization of SSC. The TMDL should **not** move forward unless and until completion of the SSC.

IV. Reserve Capacity

MEG requests that reserve capacity allocations should be specifically noted in the TMDL for use by point sources and not for nonpoint sources. In order to achieve water quality improvements, nonpoint source reductions from the baseline conditions must be met. Changes to point source allocations, on the other hand, would have an insignificant impact on water quality. Thus, the reserve capacity should be limited to use by point sources.

V. Compliance Options

MEG appreciates DNR's creation of Appendix O regarding adaptive management options in the TMDL area. However, the issue remains that with municipal dischargers potentially facing extremely stringent TMDL based limits, the limited availability of practical compliance options is a significant challenge. One major hurdle for trading under the Wisconsin River TMDL is that it appears that point sources would not be able to obtain credits from nonpoint source reductions unless such reductions are below a PI of 1 (in most areas) rather than the NR 151 standard of a PI of 6. This significantly reduces the credits available for trading in the TMDL area and will result in trading being an unrealistic compliance option for most municipal permittees.

Simultaneously with this TMDL process, DNR should reevaluate restrictions on trading and adaptive management in order to provide more flexible compliance options for point sources.

September 19, 2018 Page 4

Without such flexibility, municipal dischargers are likely to face substantial costs for facility upgrades well into the future that will not result in significant water quality improvement.

Sincerely,

STAFFORD ROSENBAUM LLP

anem Want

Paul G. Kent

Vanessa D. Wishart

PGK/VDW:mai



September 18, 2018

Mr. Kevin Kirsch Wisconsin Department of Natural Resources 101 South Webster Street P.O. Box 7921 Madison, WI 53707-7921

Re: Comments on the Wisconsin River Basin Total Maximum Daily Load Study

Expera Specialty Solutions, LLC

515 Davenport Street Rhinelander, WI 54501

Dear Mr. Kirsch:

Thank you for the opportunity to comment on the Wisconsin River TMDL. Expera operates a specialty paper mill in Oneida County at the headwaters of the Wisconsin River. The mill discharges treated wastewaters to the Wisconsin River under WPDES permit 3026-09. Expera recognizes the tremendous amount of effort the Department of Natural Resources has invested in the study and the challenges of addressing such as complex issue. Expera would like to offer the following comments regarding the study.

The TMDL should not move forward until the alternate site specific criteria are promulgated. The separate track for the alternate site specific criteria is problematic since, depending upon where a permittee may be in their permit cycle, permit limits could be established using the current criteria and may not be revised using the site specific criteria when it's promulgated because of antibacksliding or antidegradation rules.

Allocations were applied to the entire watershed. However, portions of the watershed meet the water quality criteria for the Petenwell and Castlerock impoundments. Since these reaches of the Wisconsin River meet the water quality criteria for Petenwell and Castlerock they should not be allocated.

Only the point sources are being allocated yet the predominant loading to the Petenwell and Castle Rock impoundments are from non-point sources. It is doubtful the water quality criteria will be met without significant reductions in non-point source contributions.



The facility has voluntarily reduced its phosphorous discharge to the Wisconsin River by greater than 50% in the last seven years through source reduction (influent loading) efforts. Yet because secondary treatment is by the waste activated sludge process a certain amount of phosphorous is necessary to maintain settling and effective biological oxygen demand removal. The facility has reached its practical operating minimum for residual phosphorous. Further reductions necessary to meet the proposed allocations will be achieved only by high cost options such as adding tertiary treatment, reducing biological oxygen demand to the treatment plant (curtailing operations), etc.

Please contact me if you have any questions. My phone number is 715-369-4480.

Sincerely,

Jeff Verdoorn

VP and Mill Manager

jeff.verdoorn@expera.com

cc: Tom Emond/Expera



President: Rich Boden P.O. Box 37, Plover, WI 54467 Phone: (715) 345-5259

E-Mail: rboden@ploverwi.gov

September 19, 2018

Mr. Kevin Kirsch Wisconsin Department of Natural Resources P.O. Box 7921 Madison, WI 53707-7921

Re: Comments on the Wisconsin River Total Maximum Daily Load (TMDL) August 2018 Draft Report

Dear Mr. Kirsch,

The WRDG represents communities in the Wisconsin River Basin that are impacted by water quality issues. The group has 20 member communities with a total population over 180,000. The WRDG supports a scientifically sound, equitable, and implementable TMDL that will improve surface water quality without placing undue financial burden on lesser sources of phosphorus, like municipalities and their ratepayers.

The Wisconsin River Dischargers Group (WRDG) submits the following comments on the Wisconsin Department of Natural Resources' (WDNR) *Total Maximum Daily Load for Total Phosphorus in the Wisconsin River Basin* draft report dated August 21, 2018.

<u>Draft Report Comments</u>

1. Reserve Capacity.

We believe reserve capacity (RC) should not be used for existing Non-Contact Cooling Water (NCCW) discharges or Concentrated Animal Feeding Operations (CAFO) discharges. (See references on page 81, Section 6.4.2 last sentence: using reserve capacity for NCCW; and page 86, Section 6.6 using reserve capacity for CAFOs treatment systems.)

Existing NCCW discharges should pursue other reductions for total P at the facility and resort to RC use only if no other feasible options are available and substantial economic hardship to reduce the TP load in the NCCW can be demonstrated.

CAFOs production areas are not assigned an allocation by the TMDL report, and thus, should not have access to RC reserved for allocated sources. CAFOs have many options to reduce TP loading elsewhere in their operations, such as install BMPs, trade with other agricultural (non-point) producers, etc. Agricultural sources account for the majority of TP loading in the watershed and these operations have more load reduction options available to them in their operations than other types of dischargers.

The RC should be held for municipalities and industries that need to expand to serve their communities and that are being forced to reduce their TP loads through permits with compliance schedules.

The RC discussion is silent on reduced or eliminated discharges. The TMDL report should state the process for reduced or eliminated discharges. Capacity that becomes available in this manner from point sources should be solely reserved for point source use.

2. Definition of controllable vs uncontrollable load.

The TMDL report defines loads from forest and wetlands as uncontrollable loads for purposes of setting load and wasteload allocations. The loads from forest and wetland may be controllable, and may turn out to be less costly to control, compared to trading options restricted by widespread interim water quality trading limitations. The WDNR should assure that this TMDL does not prevent point sources from trading with these "uncontrollable" sources.

We suggest the WDNR add a subsection in the implementation section stating that these sources are defined as uncontrollable for purposes of setting load and wasteload allocations, but, this definition is not intended to prohibit trading with these sources. WDNR should also provide a credit threshold for these sources as a part of this report

3. Lake DuBay.

On Page 11, Table 3, footnote 1 indicates Lake DuBay is projected to have a TP concentration of 45 ug/L under the SSC allocations and implies this is sufficient to address the impairment of excessive algal growth, and presumably to meet the recreational use standard.

No information is included to support this conclusion. What is the chlorophyll-a (CHL) concentration corresponding to the 45 ug/L TP concentrations listed? Does Lake DuBay require a Site Specific Criterion? How does this data compare to Lake Wisconsin?

On Table 16, Page 74, why does Lake DuBay have a TP retention percentage shown but Lake Wisconsin does not?

4. Allocation approach and SSC approval schedule.

The draft TMDL report includes two different allocation approaches and WDNR has stated that the SSC-based allocations are the preferred allocation approach that will be recommended to USEPA for approval.

We generally support the SSC for the Petenwell and Castle Rock reservoirs. However, our understanding is that the SSC cannot be implemented until rules are formally promulgated for SSC which DNR estimates could occur by October 2019 under the best scenario. This leaves a lot of uncertainty for point sources as to what their actual final load allocation (and WPDES discharge limit) will be.

While point sources above Petenwell and Castle Rock reservoirs must meet significant reductions with either option, the final approved water quality target changes the WPDES permit limits and impacts feasible compliance scenarios. WPDES permits for affected dischargers should not be reissued with final total phosphorus limits until the SSC rules are in place, thus avoiding application of anti-backsliding rules.

5. Lake Wisconsin SSC.

The proposed SSC is very stringent and may be difficult to achieve considering Lake Wisconsin is highly influenced by the river. Our group recommends and supports an approach that implements the SSC for Petenwell and Castle Rock Reservoirs, and local reductions in the watersheds below Castle Rock dam, followed by a re-evaluation to determine if these reductions have the desired effect on Lake Wisconsin.

It appears that this approach was used to address the water quality impairment on Lake DuBay (see comment 3). Footnote 1 to Table 3 seems to indicate that although the Lake DuBay will not meet water quality goals at the promulgated criteria, WDNR deems it likely that reduction of TP loading resulting from attainment of criteria above Lake DuBay, will result in removing the impairment, without further action to revise the water quality criteria for Lake DuBay.

Our calculations, based on information from the TMDL report, indicate that the TP in Lake Wisconsin will be reduced to 56 ug/L, if the proposed SSC for Petenwell and Castle rock are implemented and achieved, and all the local reductions are also achieved. Approximately 82% of the criteria reduction anticipated by the proposed Lake Wisconsin SSC will be achieved without implementing the Lake Wisconsin SSC.

Modeling could be used to assess and support this approach. The Minnesota study referenced in Appendix C as the basis for the 40 ug/L criteria for Petenwell and Castle Rock Reservoirs includes a table (page viii) showing TP criteria for lakes by region in that state. Lakes in the southern half of the state (3 regions) list TP criteria ranging from 60 to 90 ug/L, with CHL ranging from 20 to 30 ug/L. This reference suggests the proposed Lake Wisconsin SSC may be low when compared to other lakes in the region.

The recreational use target of 20 ug/L CHL, 70 percent of summer days is described in Wisconsin 2018 Consolidated Assessment and Listing Methodology (WisCALM) is based on user perception surveys conducted in Minnesota. This recreational use target was not developed in Wisconsin, nor is it codified. The TMDL should explain why the use of this target is justified for reservoirs in Wisconsin.

6. Nonpoint source implementation and staged implementation.

We acknowledge the responses to comments regarding these topics and the information provided in Section 7. Our previously stated concerns remain. The nonpoint source load reduction strategy outlined in Section 7 lacks meaningful enforcement tools and has been historically ineffective.

New options like water quality trading are unlikely to benefit nonpoint sources or point sources. We believe that trading will not be a viable option for most point sources due to the low credit thresholds and other restrictions. Without a new or revised approach to controlling nonpoint sources, the WRDG believes the TMDL will fail.

Increased, meaningful, enforcement authority, program revisions, staffing, and equitable funding mechanisms to address nonpoint sources must be implemented by the state agencies and the state legislature so effective nonpoint reductions can be made within the same timeframe that coincides with reductions that are being imposed on point source dischargers.

Draft Report Corrections/Edits

- 7. Pages 12 to 18, Figures 3A to 3D: the impaired waters shown on these figures do not match those shown in Appendix A, i.e., for the Big Rib River watershed.
- 8. Page 28 to 30, Figures 9 to 11: The "upper" and "lower" segment labels for Lake Wisconsin are reversed.
- 9. Page 31, Section 4.1.1, second sentence, change "Points" to "Point".
- 10. Page 31, Section 4.1.1.1 last sentence: clarify that the levels present in the discharge must meet the WPDES permit limits.
- 11. Page 31, Section 4.1.1.2 last sentence: clarify that the levels present in the discharge meet surface water criteria or WPDES permit limits.

- 12. Page 34, first sentence: delete "than".
- 13. Page 50, Figure 17: show county boundaries similar to other figures.
- 14. Page 52, Figure 19: The "Below Merrill" pie location is incorrect or the label should say "Below Tomahawk"; both Lake DuBay locations (above and below) are not correct.
- 15. Page 54: Reference to Figure 20A should be Figure 20A to 20D.
- 16. Page 59: Reference to Figure 21A should be Figure 21A to 21C.
- 17. Page 66: In the last sentence, Section "50" should be Section "5.0".
- 18. The average TP concentration for Lake DuBay is 90 ug/L on Table 16 and is 89 ug/L on Table 3, footnote 1.
- 19. Page 81, Section 6.4.2, paragraph 3, line 5: change "not" to "no".

Sincerely,

Ruh Boden

Rich Boden, President Wisconsin River Dischargers Group

Enclosure

c/enc: WRDG Board

Tina Sebold, P.E., P.H., Strand Associates, Inc. Mary Ann Lippert, WDOA, Director, Northern Region Senator Thomas Tiffany, Senate District 12-Hazelhurst Senator Jerry Petrowski, Senate District 29-Marathon Senator Terry Moulton, Senate District 23-Chippewa Falls Senator Patrick Testin, Senate District 24-Stevens Point Senator Jon Erpenbach, Senate District 27-Middleton Senator Howard L. Marklein, Senate District 17-Spring Green Senator Luther Olson, Senate District 14-Ripon Representative Mary Felzkowski, Assembly District 35-Irma Representative Patrick Snyder, Assembly District 85-Schofield Representative John Spiros, Assembly District 86-Marshfield Representative Bob Kulp, Assembly District 69-Stratford Representative Katrina Shankland, Assembly District 71-Stevens Point Representative Scott Krug, Assembly District72-Nekoosa Representative Dave Considine, Assembly District 81-Baraboo Representative Edward Brooks, Assembly District 50-Reedsburg Representative Joan Ballweg, Assembly District 41-Markesan Representative Nancy VanderMeer, Assembly District 70-Tomah Representative James Edming, Assembly District 87-Glen Flora Representative Rob Swearingen, Assembly District 34-Rhinelander

ATTACHMENT

WRDG Member Communities:

Baraboo

Elroy

Lakeland Sanitary District

Marathon City

Marshfield

Mauston

Necedah

Nekoosa

inekoosa

New Lisbon

Plover

Port Edwards

Portage

Rhinelander

Rib Mountain Metropolitan Sewerage District

Stevens Point

Tomah

Tomahawk

Wausau

Whiting

Wisconsin Dells

Lake Delton



September 19, 2018

Mr. Kevin Kirsch Wisconsin Department of Natural Resources PO Box 7921 Madison, WI 53703-7921

RE: Written Comments on Wisconsin River TMDL Draft Report

Kevin,

As a follow-up to my comments given at the Public Hearing held in Stevens Point, WI on the Draft TMDL, I am submitting written comments. Based on the phosphorus compliance efforts the Village of Marathon City has been engaged in over the last 5 years and our NR 217 compliance date rapidly approaching, we have selected our compliance strategy. We request DNR to consider and implement the recommendations below to enable our community to address phosphorous compliance in the most cost effect manner possible.

Reductions in non-point contribution will have the largest impacts on overall water quality and attainment of TMDL goals. However, current regulatory structure has not achieved desired phosphorus reductions from non-point contribution.

A recommended path to achieve the goals of significant non-point phosphorus reductions in the TMDL would be to leverage and streamline the MDV Watershed Projects and Water Quality Trading (WQT) initiatives of point sources. Through these efforts DNR can achieve significant non-point reductions in phosphorus at a much lower cost to point sources while providing benefits all parties (i.e. point source, non-point, and environmental groups). This approach would have a higher chance of success in achieving the goals of the TMDL without additional regulatory action.

To fully leverage WQT, DNR must recognize the opportunity and value of reductions below the performance standard and above the TMDL allocation threshold. These credits would be identified as Below Performance Standard Credits or BPS Credits and could be simply defined by DNR. The BPS Credits would carry a trade ratio of 2:1. Additionally, BPS Credits would remain valid as long as a contract is in place between the point and non-point participants and BMP's remain in practice. This approach would replace the current interim credits which survive only one permit cycle and generate disincentive for point sources. Establishing BPS Credits would eliminate uncertainty around credit availability for trading pre and post TMDL approval, negate concerns with interim credit expiration, remove point source need to continually find new trading partners every permit cycle, secure long-term phosphorus reduction via contract and enable non-point producers to quickly monetize their reductions. The certainty afforded by the new BPS Credits would kick-start MDV Watershed and WQT projects resulting in attainment of TMDL non-point reductions along a much faster timeline than current regulatory structure. Additionally, the creation of BPS Credits would sustain phosphorus reductions by eliminating the opportunity for non-point producers to enter contracts for reductions on portions of their operation and when the contract expires return to previous practices that push back toward the performance standard. The goal is continual reduction of phosphorus loads from entire operations versus segments of an operation.

DNR must also expand criteria for non-point reductions below TMDL allocations and recognize these reductions will not exist in the same quantity as BPS credits, are harder to achieve by a non-point source and will cost more to generate. As a result, DNR must afford these credits a 1.2:1 trade ratio. Point sources will likely pay a premium for these credits recognizing the factors above, but also to reduce the total credit purchase requirements to the point source. Non-point sources will be motivated to attain the premium price for the Below Allocation Credits (BA Credits) and will implement BMP's required to generate the BA Credits resulting in significant phosphorus reductions as required by the TMDL.

Non-point phosphorus reduction is generally far more cost effective than point source reduction and offers a much larger reduction opportunity. For example, Marathon City has an annual phosphorus contribution of 609 lbs to the Big Rib River and represents less than 1% of the total load in the river. Based on draft TMDL allocations, Marathon City must reduce P load by 580 lbs to 220 lbs annually or 407 lbs to 393 under the site specific criteria.

A review of the total cost per pound of the phosphorus reduction options shows the physical plant approach results in a capital cost greater than \$9,300 per pound of phosphorus. The MDV watershed project cost per pound is projected at approximately \$50.20 per pound. Additionally, the 20 year total cost of the MDV solution would be about \$514,000 which is over \$304,000 more than the first 2 years of debt payments on the 20 year loan required for a physical inside the fence plant solution. It should be noted that the EPA approved MDV is only approved for 10 years and over 1 year of that time has elapsed since EPA approval. DNR must allow full conversion of credits generated under an MDV Watershed Project to credits under Water Quality Trading for this to be a feasible compliance option. Additionally, point sources with approved MDV Watershed Projects should have those projects automatically converted to Watershed Trading Plans when the MDV period expires.

DNR should work to eliminate barriers to implementation of significant non-point phosphorus reduction via MDV Watershed Projects and Water Quality Trading. Leveraging of these opportunities avoids the barrier of cost sharing required under traditional regulatory framework and the historic lack of funding of cost share programs, and allows for faster implementation. To be feasible, the implementation timeframes must be within the same time requirements of point source compliance schedules. Endorsement of this approach by DNR would achieve exponentially greater phosphorus reduction through non-point engagement at a faction of the cost when compared to projections of point source facilities with physical inside the fence solutions. Adoption of these recommendations would provide more surety for point sources considering trading, advance the phosphorus reduction timeline through adoption in-field BMP's and create revenue opportunities for non-point producers to offset BMP costs.

One additional question, would be based on the draft TMDL and the allocation approach and implementation plan outlined, how long will it take for water quality improvement to be observed in the impacted waters? I didn't see a timeframe for improvement noted in the report.

Sincerely,

Andrew R Kurtz Administrator



Wisconsin Department of Natural Resources Attn: Mr. Kevin Kirsch 101 S. Webster St. PO Box 7921 Madison, WI 53707-7921

September 18, 2018

Dear Mr. Kirsch,

Thank you for the opportunity to provide comments on the Wisconsin River Total Maximum Daily Load (TMDL).

The Lake Wisconsin Alliance (LWA) mission is to balance the diverse interests of the Lake Wisconsin community while improving water quality, recreational opportunities, and sustaining a healthy ecosystem within the Lake Wisconsin watershed. LWA has been following the Wisconsin River TMDL process since the LWA was formed in 2014.

LWA supports the site-specific criteria approach that includes Lake Wisconsin. This approach is anticipated to result in substantial reductions in phosphorus that should reduce algal blooms. This approach also appears to represent a solution that shares the load reductions throughout the basin rather than primarily affecting the section of the basin upstream of Castle Rock reservoir dam.

We recognize that many of the discharge permit holders in the Wisconsin River TMDL area have already made significant reductions in the phosphorus load they send to the river. Such commitment has not been observed from the nonpoint sources, where efforts to improve water quality have been much slower to develop, perhaps because of lack of regulation. While Appendix N demonstrates the technical potential of achieving reductions from agricultural nonpoint sources, and provides some of the edge-of-field reduction goals that could guide agricultural practices, we are concerned that there is no defined plan or enforcement for implementation of these reductions. Appendix O contains some guidance for nutrient trading, adaptive management, and multi-discharger variances, however, we do have concerns regarding the practical implementation of these strategies. Adequate implementation of these nonpoint source reduction goals is essential to meeting the water quality goals identified in the TMDL.

LWA supports continued Department resources being allocated toward implementation of the TMDL. We currently do not see a clear path for implementation of the load reductions needed to meet the water quality goals identified in the report and we encourage the Department and other agencies to work diligently to develop practical implentation methods. It appears a new or at least revised approach from that which has been used in the past is needed, as historically the current system for nonpoint sources has not reduced phosphorus loads to Lake Wisconsin or the watershed. We hope that, going forward, the Department will continue to display the innovation and transparency they have shown to date in the TMDL process.

We look forward to working with Department staff and other stakeholders in finalizing and implementing the Wisconsin River TMDL.

Thank you for your time, and consideration of these comments.

Sincerely,

Kirk Boehm LWA President

Kirk Doelun



Wisconsin Department of Natural Resources Attn: Kevin Kirsch 101 S. Webster St. PO Box 7921 Madison, WI 53707-7921

September 13, 2018

Dear Mr. Kirsch,

Thank you for the opportunity to provide comments on the Wisconsin River Total Maximum Daily Load (TMDL).

The River Alliance of Wisconsin, which represents 2,000 members statewide, has been involved in this TMDL process since its inception. Having invested substantial resources in ensuring that our citizen advocacy group partners understand and are engaged in the TMDL process, we have been impressed with the work done by the Wisconsin Department of Natural Resources. The Wisconsin River TMDL is the largest project of its kind in Wisconsin, and the Department staff have demonstrated innovation, commitment, and transparency throughout the process.

To start, we want to offer our support for the site-specific criteria. This approach is based on sound science, and will result in substantial reductions in phosphorus that should reduce noxious blooms of blue-green algae. This approach also represents a more equitable solution, sharing the burden of compliance rather than disproportionally affecting the upper section of the basin.

While we appreciate the explanation provided by the Department staff to our comments concerning the reserve capacity in the prior draft TMDL, the process for determining where this reserve is allocated is still unclear. Clarity on the priorities and decision-making process would strengthen this section, and ensure that permit holders could better understand how new or increased discharges will be addressed.

We recognize that many of the permit holders that discharge to the Wisconsin River and its tributaries have already made vast improvements in reducing the pollution they send to the river. Such commitment has not yet been reciprocated among some of the nonpoint sources, where efforts to improve water quality have been traditionally underfunded and under-utilized. In past opportunities for public comment, we have encouraged the Department to think creatively in utilizing and adapting existing phosphorus compliance tools to make compliance with these TMDL-derived permit limits manageable. We commend the Department staff for going beyond the requirements of the TMDL, to provide some of this guidance for implementation. Appendix N demonstrates the technical potential of achieving reductions from agricultural non-point sources, and provides some of the edge-of-field reduction goals that could guide agricultural practices. While Appendix O contains some guidance for nutrient trading, adaptive management, and multi-discharged variances, we do

have concerns regarding the implementation of these strategies. Adequate implementation of these non-point source reduction goals is essential to meeting water quality goals.

First, and most importantly, we support continued Department resources being allocated toward implementation of the TMDL. Despite the admirable work that has gone into providing guidance, we still see a disconnect between the recommended reductions and the implementation plan. Though some of the decision-making process is out of the hands of agency staff (I.e. cost-share funding), there are more resources and partnerships that could be explicitly leveraged to achieve the desired water quality goals. This TMDL could be an opportunity for the Department staff to not only collaborate but display strong leadership and direction. We hope that, going forward, the Department will continue to display the innovation and transparency they have shown up till now in the TMDL process.

Still, we believe that this TMDL represents sound science and a significant commitment on the part of the Department staff. This is a plan that they should be proud to have developed. Again, we thank the Department staff for the years of effort it has taken to develop this plan. We look forward to working with Department staff and other stakeholders in finalizing this TMDL, adopting site-specific criteria, and implementing the Wisconsin River TMDL.

Thank you for your time, and consideration of these comments.

Sincerely,

Falon French

Clear Water Program Director River Alliance of Wisconsin 147 South Butler Street

Madison, WI

NORTH CENTRAL WISCONSIN STORMWATER COALITION

Clean water starts with you!

September 18, 2018

Mr. Kevin Kirsch Wisconsin Department of Natural Resources PO Box 7921 Madison, WI 53707-7921

RE: Comments on the Wisconsin River Total Maximum Daily Load (TMDL) Draft Report

Dear Mr. Kirsch:

The North Central Wisconsin Stormwater Coalition (NCWSC) is writing to submit comments on the Wisconsin Department of Natural Resources' (WDNR) August 20, 2018, TMDL for Total Phosphorus (TP) in the Wisconsin River Basin draft report. NCWSC previously provided comments dated April 4, 2018, regarding the February 21, 2018, draft report. NCWSC is a coalition of 13 municipalities that have Wisconsin Pollutant Discharge Elimination (WPDES) stormwater permits that cover their Municipal Separate Storm Sewer Systems (MS4s). These WPDES stormwater permits require compliance the Wisconsin River Basin TMDL. NCWSC is thus interested in a TMDL with equitable wasteload (point source) and load (non-point source) allocations, feasible implementation plan, cost-effective compliance options, and sustainable funding sources. Our comments are included below.

- 1. Table 9 in TMDL Document—The City of Wausau is missing from this list of MS4s.
- 2. Section 7, Table 28 and 17-Please provide narrative for these tables in the report including specific reference to the tables
- 3. Please provide commentary on the feasibility of MS4s meeting the Site Specific Criteria (57.5 percent to 81.4 percent TP reduction from an MS4 No Controls condition) solely within the MS4 boundary considering the capability and scalability of current stormwater treatment technologies. Given likely obstacles to doing so, NCWSC requests that TP reductions from streambank restoration projects within an MS4 boundary be given credit toward meeting the TMDL wasteload allocations. The WDNR's MS4/TMDL Modeling Guidance document currently does not allow credit for streambank restoration within an MS4 boundary.
- 4. Reserve Capacity (RC)- NCWSC recommends that RC not be available to new or expanding permitted CAFOs unless nonpoint (agricultural) load allocations are met in the subbasin in which the CAFO is located.
- 5. Non-Point Source Wasteload Allocations/Reductions—NCWSC acknowledges the implementation framework described in Section 7 but concerns remain regarding effectiveness and enforceability of existing non-point programs/tools and inadequate staffing and funding sources. NCWSC supports seeking increased enforcement authority, staffing, and funding through the state legislature.

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- 6. Phased or Staged TMDL-NCWSC acknowledges the WDNR's TMDL compliance flexibility through extended MS4 compliance timelines, watershed adaptive management, and the multi-discharge variance (MDV). However, concerns remain regarding the disparity in nonpoint pollutant loadings compared to MS4 pollutant loadings and MS4s' ability to achieve wasteload allocations in a technically feasible and cost-effective manner.
- 7. Multi-Discharger Variance (MDV) for Total Phosphorus—NCWSC believes there is merit in modifying the existing MDV program or creating an MDV-like program that would allow MS4s to buy into a County-led program to implement cost-effective agricultural BMPs. In either case, the program would be set up to be a permanent option. The MDV-like program would be free of credit thresholds, trade ratios, and monitoring requirements and would generate additional funding for the nonpoint source program.

Sincerely,

Jeff Pritchard, Chairperson

North Central Wisconsin Stormwater Coalition

c: Jon H. Lindert, P.E., LEED AP, Strand Associates, Inc. Senator Jerry Petrowski, Senate District 29–Marathon
Representative Patrick Snyder, Assembly District 85–Schofield
Representative John Spiros, Assembly District 86–Marshfield

Dear Mr. Kirsch,

The Stewards of the Dells of the Wisconsin River has looked to the River Alliance for expertise, support, and guidance since our beginnings in 2006. We are committed to protecting and preserving the scenic beauty of the Dells of the Wisconsin River. Water quality is critical to the quality of our residents' and visitors' experience in the Dells river corridor. We support the River Alliance comments in response to the Wisconsin River Total Maximum Daily Load:

To start, we want to offer our support for the site-specific criteria. This approach is based on sound science, and will result in substantial reductions in phosphorus that should reduce noxious blooms of blue-green algae. This approach also represents a more equitable solution, sharing the burden of compliance rather than disproportionately affecting the upper section of the basin.

While we appreciate the explanation provided by the Department staff to the River Alliance comments concerning the reserve capacity in the prior draft TMDL, the process for determining where this reserve is allocated is still unclear. Clarity on the priorities and decision-making process would strengthen this section, and ensure that permit holders could better understand how new or increased discharges will be addressed.

We recognize that many of the permit holders that discharge to the Wisconsin River and its tributaries have already made vast improvements in reducing the pollution they send to the river. Such commitment has not yet been reciprocated among some of the non-point sources, where efforts to improve water quality have been traditionally underfunded and under-utilized. In past opportunities for public comment, River Alliance has encouraged the Department to think creatively in utilizing and adapting existing phosphorus compliance tools to make compliance with these TMDL-derived permit limits manageable.

We commend the Department staff for going beyond the requirements of the TMDL, to provide some of this guidance for implementation. Appendix N demonstrates the technical potential of achieving reductions from agricultural non-point sources, and provides some of the edge-of-field reduction goals that could guide agricultural practices. While Appendix O contains some guidance for nutrient trading, adaptive management, and multi-discharged variances, we support the River Alliance concerns regarding the implementation of these strategies. Adequate implementation of these non-point source reduction goals is essential to meeting water quality goals.

First, and most importantly, we support continued Department resources being allocated toward implementation of the TMDL. Despite the admirable work that has gone into providing guidance, we agree with River Alliance which still sees a disconnect between the recommended reductions and the implementation plan. Though some of the decision-making process is out of the hands of agency staff (i.e. cost-share funding), there are more resources and partnerships that could be explicitly leveraged to achieve the desired water quality goals. This TMDL could be an opportunity for the Department staff to not only collaborate but display strong leadership and direction. We hope that, going forward, the Department will continue to display the innovation and transparency they have shown up till now in the TMDL process.

Still, we believe that this TMDL represents sound science and a significant commitment on the part of the Department staff. This is a plan that they should be proud to have developed. Again, we thank the

Department staff for the years of effort it has taken to develop this plan. We look forward to working with Department staff and other stakeholders in finalizing this TMDL, adopting site-specific criteria, and implementing the Wisconsin River TMDL.

Thank you for your time, and consideration of these comments.

Sincerely,

Debbie Kinder President of Stewards of the Dells of the WI River Please note the link to Appendix O is not active on the website. Can/will this get corrected soon?

Thank you,



Tina Sebold, P.E., P.H. | Senior Associate Strand Associates, Inc.* 608.251.4843 ext. 1077 tina.sebold@strand.com | www.strand.com

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