

Haller, Macaulay G - DNR

From: Cheryl Nenn <cheryl_nenn@milwaukeekeeper.org>
Sent: Friday, November 22, 2019 4:53 PM
To: DNR Impaired Waters
Subject: Comments on 303d List

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Some comments/questions on the proposed 2020 303d List. Thank you for your consideration of these comments.

I understand that Wisconsin is creating a new list or subset of the 303d list to specify a “restoration waters list,” which denotes the listed waters that have TMDLs that have been approved. Most of our impaired rivers in the Milwaukee River Basin have now been moved to that list given our 2018 EPA approved TMDLs for TSS, phosphorus, and bacteria. I find it kind of confusing and maybe misleading, as just having an approved TMDL does not mean that the waterways are “restored”, but rather have another tool to help them get closer to achieving standards. This seems largely “semantics” versus substance, but I guess it does give DNR a sense of how many more TMDLs have to be created. I just think it could benefit by a more clear designation.

Pike Lake in Washington County (WBIC of 858300) and Long Lake of Fond du Lac/Sheboygan County are being proposed to be delisted for mercury contaminated fish tissue. I noted in the fact sheet that most of the 84 delistings this year are based on cleanup of mercury or because the waterways are covered by fish consumption advisories for mercury. I’m not clear about whether Pike and Long Lakes are being delisted due to the mercury being removed or because there is now an advisory. I’m presuming the latter. How is posting a fish consumption advisory sufficient for delisting or addressing the root problem? Is there more information about this? I couldn’t find any information on the list itself (via footnote) or the supplemental materials. I appreciate that the mercury is from aerial deposition. Is it EPA policy to not list these mercury impaired waters anymore because they are covered by other programs?

The Little Menomonee River (WBIC of 17600) from river mile 0 to 9 is being proposed to be delisted for creosote/contaminated sediment. I’ve followed this cleanup for several decades (the Moss American Superfund site aka Kerr McGee aka Tronox). The waterway is listed as Ozaukee County but if the creosote contaminated section is in Milwaukee County. In addition, even though the Superfund site has been formally closed, the polluter went bankrupt before the last section was cleaned up. We are told that we can’t restore that last section of the river or move any dirt in the floodplain throughout the entire former Superfund site area of the Little Menomonee, due to concern that there is still significant creosote/PAH contamination in the river and its floodplains. I realize that there is subsequent follow up monitoring associated with the Superfund program, and that the EPA considers the clean-up functionally complete. Although I had also heard that EPA was in litigation with Tronox, and am not sure of the status of that litigation. Given the remaining contamination closer to the confluence and the lack of a plan to deal with this remaining contamination, which we have witnessed during woody debris and trash removal activities in the last few years, I think it may be premature to delist this stream.

I also question the delisting of Beaver Creek (WBIC of 20000 from river mile 0 to 2.65). Why is this waterway being delisted? Because of vagueness of the listing? Some concrete has been removed from this creek but not in these river miles. It is listed as impaired for an unknown pollutant and because of chronic aquatic toxicity. Given the existing water quality and condition of most of this waterway, I would not think this has changed. I realize that the creek is listed for phosphorus and is being proposed for chloride (which we support), so assuming this is being removed due to a questionable listing or because more specific listings are going to supersede it? Please advise.

We support the proposed listings in the Milwaukee River Basin for phosphorus and chloride.

I'm confused by the Healthy Waters List and couldn't find any description of this on the fact sheet or other materials. I assume these are assessed waters that did not merit listing based on WisCALM? While some to me seem very high quality, others (like Quaas Creek and Silver Creek in Washington County) I'm surprised to see on a list of healthy waters given the stark degradation in water quality over the last decade or so, although they could be not "bad enough" yet to warrant listing. I haven't reviewed this list in detail but many I wouldn't call "healthy", others yes.

Thanks for considering these comments. If it's easier to discuss via the phone, please feel free to call me at the number below or on my cell phone at 414.378.3043.

Best,

Cheryl

Cheryl Nenn

Riverkeeper

Milwaukee Riverkeeper

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Haller, Macaulay G - DNR

From: Eric and Vicki Wheeler <wheels2359@gmail.com>
Sent: Monday, October 21, 2019 8:52 PM
To: Minahan, Kristi L - DNR; DNR Impaired Waters
Subject: NR 102 revision-establishment of site specific phosphorus criterion for Lac Court Oreilles

Dear Ms. Minahan,

My folks built a small cabin on the west end of Lac Court Oreilles in 1949 and my family and I have been swimming, fishing, sailing, canoeing and otherwise enjoying the lake every year since. Over those 70 years I have observed first hand the deterioration of water quality and the dramatic increase in aquatic vegetation in the lake, especially in the west end in and near Musky Bay. Phosphorus levels have increased steadily and substantially, exceeding 40ppb in Musky Bay in 2011-2012. The reasons for this tragic environmental degradation are both obvious and well documented. In 2014, LCO's largest bay was designated by the EPA and the WDNR as an impaired water body because of the high phosphorus concentrations. In 2018, all of LCO was listed as an impaired water body because of low dissolved oxygen, a result directly attributable to the high phosphorus concentrations. The current limit of 15 ppb of phosphorus is not adequate to protect LCO. The lake has already experienced extensive whitefish and cisco die-offs, and there is ample evidence to indicate that the high levels of phosphorus led to oxygen depletion in the critical habitat layer occupied by these species. These conditions, if allowed to persist, will surely result in the continued loss of fish habitat and lead to drastic and regrettable change in the ecology of LCO.

I fully support the NR 102 revision for LCO by the WDNR, specifying a phosphorus limit of 10 ppb. LCO is a rare Outstanding Resource Water, one of only five lakes in the state with a two-story fishery supporting both cisco and whitefish. Both are a primary food source of Muskies, a species once plentiful in the lake, now rare, and for which LCO was previously famous. Option B (no change from the current 15ppb) is simply not an option when it is obvious that the lake is facing a real crisis as a result of high phosphorus levels. The status quo is not acceptable. The 600 plus home owners around the lake are counting on the WDNR to do the right thing.

Sincerely,

Eric Wheeler
wheels2359@gmail.com

Haller, Macaulay G - DNR

From: Gary Pulford <garylindapulford@charter.net>
Sent: Tuesday, November 19, 2019 12:29 PM
To: DNR Impaired Waters
Subject: Proposed draft 2020 Wisconsin impaired waters and delisting lists
Attachments: 2020-COLA Tribe impaired water comment letter1.docx

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Ms Beranek

Attached please find the Courte Oreilles Lakes Association and the Lac Courte Oreilles Conservation Department comments regarding the proposed draft 2020 Wisconsin impaired waters and delisting lists.

If there are any questions please do not hesitate to contact COLA or the LCO Tribe.

Gary Pulford
Vice President
COLA



November 19, 2019

Ms. Ashley Beranek
DNR Bureau of Water Quality
101 South Webster St. WQ/3
Madison, WI 53707

SUBMITTED VIA EMAIL TO: dnrimpairedwaters@wisconsin.gov

RE: Courte Oreilles Lakes Association and Lac Courte Oreilles Tribal Conservation Department comments regarding the Wisconsin Department of Natural Resources proposed draft 2020 impaired waters list.

Dear Ms. Beranek

The Courte Oreilles Lakes Association (COLA) and the Lac Courte Oreilles Tribal Conservation Department (LCOCD) are providing the following comments regarding the proposed draft Wisconsin 2020 impaired waters list. Specifically, these comments pertain to the proposed delisting of Musky Bay (AUID 1850472) of Lac Courte Oreilles (LCO), and the erroneous “unknown” pollutant” category relating to the dissolved oxygen (DO) impairment of Lac Courte Oreilles (AUID 15368, WBIC 2390800).

Musky Bay

WDNR is proposing to delist Musky Bay of LCO. COLA and the LCOCD are opposed to the proposed delisting because the proposed action is contrary to WDNR delisting protocol specified in the Wisconsin 2020 Consolidated Assessment and Listing Methodology (WisCALM) and because the applicable Water Quality Standards (WQS) and designated uses have not been attained. Much remains to be done to “restore” Musky Bay.

Impairment or Water Use Restrictions

High Phosphorus Levels

While Musky Bay total phosphorus concentrations no longer exceed the 40 µg/L threshold that WDNR has applied to Musky Bay individually as a shallow drainage lake, the current total phosphorus (TP) concentrations in Musky Bay continue to impair the designated uses of Musky Bay for recreational use and aquatic life use and contribute to the impaired (low dissolved oxygen) water quality conditions of LCO.

TP concentration have been slowly decreasing in recent years due to reductions in phosphorus inputs from agricultural and residential sources within the Musky Bay direct drainage area. Even though TP concentrations are now below the WDNR applied threshold there has not been a corresponding improvement in the designated uses that apply to Musky Bay. The 40 ug/L TP threshold that WDNR has applied to Musky Bay is not sufficiently stringent to restore the recreational and aquatic life uses of Musky Bay.

In addition, the oxythermal habitat in LCO is impaired, the restoration of the oxythermal habitat in LCO should be considered holistically and will benefit from further reductions in Musky Bay TP concentrations.

Therefore, COLA and the LCOCD **request** that Musky Bay remain on the draft Wisconsin 2020 impaired water list as impaired for total phosphorus and WDNR set a different more stringent TP threshold that, when achieved, will result in attainment of the WQS and designated uses that apply to Musky Bay.

Recreational Use

Recreational use of Musky Bay is impaired and has not been restored.

A review of the Citizen Lake Monitoring Network and SWIMS databases for Musky Bay (MB-1) (station I.D. 10033577) for the last five (5) years shows that the “recreational” perception is consistently described as either #3 –“Swimming and aesthetic enjoyment of lake (bay) slightly impaired because of high algae levels” or #4--“Desire to swim & level of enjoyment lake (bay) substantially reduced because of algae; would not swim, but boating is OK”.

In addition, algal mat formation on Musky Bay in mid-summer continues to impair recreational use. The photos below are representative of the algal mat formation that has occurred in the historical past and most recently in each of the last five (5) years (2014-2019) in Musky Bay.



Algal mat southwest corner of Musky Bay July 10, 2014



Algal mat southwest corner of Musky Bay August 2, 2019



Algal mat north shore of Musky Bay August 2, 2019

Non-Native Aquatic Plants

Musky Bay was listed as impaired in 2012 due in part to the presence of Curly-leaf Pondweed (CLP), a non-native plant, at levels that interfered with navigation, fishing and other recreational activities. Chemical management of the CLP has had mixed results in reducing the total acreage of CLP in Musky Bay over the last five years. The Lac Courte Oreilles & Little Lac Court Oreilles 2019 Aquatic Plant Survey <file:///C:/Users/Owner/Documents/AIS-%20Post%20treatment%20report%20July%202019%20.pdf> shows that CLP currently occupies 51+ acres in Musky Bay. While the total acreage of CLP in Musky Bay has been reduced from the high of 90+ acres in 2010, CLP continues to impair the recreational use of Musky Bay.

Aquatic life use

The aquatic life use of Musky Bay is impaired and has not been restored.

The historical muskellunge spawning area along the northeastern shoreline of Musky Bay once supported natural reproduction of muskellunge in LCO. Decades of phosphorus driven excess algal and aquatic plant production has resulted in an accumulation of soft organic matter that covers much of the spawning area to a depth of 2+feet, negatively impacting survival of muskellunge eggs and larvae. Therefore, the aquatic life use of Musky Bay remains impaired.

The above provides ample evidence to show the designate uses for Musky Bay are not currently being attained and provides justification that Musky Bay should not be delisted from the Wisconsin impaired water list until these designated uses are fully restored in accordance applicable Statutes, Rules and protocols specified in WisCALM.

Therefore, COLA and the LCOCD **request** that Musky Bay remain on the draft Wisconsin 2020 impaired water list as impaired for total phosphorus until the WQS and designated uses that apply to Musky Bay are attained.

Lac Courte Oreilles -Low Dissolved Oxygen (DO) impairment

The proposed draft 2020 Wisconsin impaired water list lists LCO as impaired for “Low DO” and includes “Unknown Pollutant” as the pollutant of concern. The linkage between total phosphorus and dissolved oxygen levels in lakes is well known and documented. Increases in total phosphorus levels contribute to increases in algae growth in a phosphorus limited lake such as LCO. Algae die and decay. The decomposition of algae consumes oxygen, whether it occurs in the water column or in the sediment.

Therefore, total phosphorus is clearly contributing to the Low DO impairment. Reducing phosphorus levels in LCO is the best and possibly only feasible way to improve dissolved oxygen conditions in the lake. Total phosphorus should be listed as a pollutant of concern.

If DNR believes other pollutants, in addition to total phosphorus, are contributing to the DO impairment, DNR can choose to list Unknown Pollutants in addition to total phosphorus and conduct investigations to identify those unknown pollutants.

COLA and the LCOCD **request** that “total phosphorus” be listed as a pollutant of concern for the Low DO impairment of Lac Courte Oreilles.

Thank you for this opportunity to comment on the draft 2020 Wisconsin impaired waters lists.

Sincerely

LAC COURTE OREILLES LAKES ASSOCIATION

LAC COURTE OREILLES CONSERVATION
DEPARTMENT

/s/ Kevin Horrocks

/s/ Brian Bisonette

By: Kevin Horrocks

By: Brian Bisonette

It's President

It's Director

Haller, Macaulay G - DNR

From: Timm P. Speerschneider <tps@dewittllp.com>
Sent: Friday, November 22, 2019 11:11 AM
To: DNR Impaired Waters
Cc: Beranek, Ashley E - DNR
Subject: 303(d) comments
Attachments: WSCGA Comments on Delisting of Musky Bay - 11-22-19 (02141724x9CDD3).pdf

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See attached comments—if you have any questions, feel free to give me a call—thank you for your attention to this matter

Timm P. Speerschneider

Attorney

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November 22, 2019

VIA EMAIL

Ashley Beranek
Water Resource Management Specialist – Bureau of Water Quality
Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707-7921
Email: DNRImpairedWaters@wisconsin.gov; ashley.beranek@wisconsin.gov

RE: Comments on Proposed Delisting of Musky Bay

Dear Ms. Beranek:

We are providing the following written comments on behalf of the Wisconsin State Cranberry Growers Association (“WSCGA”) regarding the proposed delisting of Musky Bay.

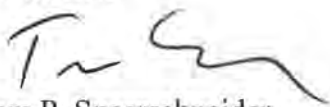
WSCGA represents approximately 160 of Wisconsin’s cranberry growers who grow more than 85% of the state’s cranberry crop. Cranberries are Wisconsin’s largest fruit crop and Wisconsin leads the nation in cranberry production. It is estimated that the state’s cranberry industry provides more than 3,400 jobs for Wisconsin residents and has a \$1 billion impact on the state’s economy.

WSCGA agrees with WDNR’s recommendation that Musky Bay be delisted. WSCGA agrees with WDNR’s conclusions that: 1) the total phosphorous water quality criterion is being met; 2) curly-leaf pondweed has been reduced; and 3) Musky Bay is in good condition. These conclusions are supported by the analysis in WDNR’s 2018 Site Specific Criteria Technical Support Document (see attached Section 7 addressing Musky Bay.)

If you have any questions regarding these comments, please contact me directly at 608-252-9319 or tps@dewittllp.com.

Very truly yours,

DeWitt LLP



Timm P. Speerschneider
TPS:rl

Lac Courte Oreilles, Sawyer County Phosphorus Site-Specific Criteria Analysis

WDNR Technical Support Document



Final 2-23-2018

Wisconsin Department of Natural Resources
101 S. Webster St.
Madison, WI 53703

Table of Contents

1. Summary of Findings & Recommendations	4
2. Background	11
2.1 Court settlement on Lac Courte Oreilles site-specific criteria for phosphorus	12
3. Basis for Site-Specific Criteria	13
3.1 Regulatory authority	13
3.2 Applicable designated uses	14
3.3. Water quality criteria applicable to designated uses	15
4. Evaluation of data and analyses previously submitted	17
5. Main Basins (West, Central, East)	21
5.1 Phosphorus	21
5.2 Chlorophyll <i>a</i>	23
5.3 Aquatic plants	25
5.4 Two-Story Fishery Habitat	26
Fish kills	27
Oxythermal Habitat Layer Thickness (OLT)	27
5.5 Potential Causes of Two-Story Fishery Impacts	30
5.6 Aerobic Decomposition of Organic Matter	33
Understanding Hypolimnetic Oxygen Demand (HOD)	33
Hypolimnetic Oxygen Demand: Estimated Values, Temporal Trends and Phosphorus Relationship	34
5.7 Aerobic Decomposition of Sediment Organic Matter	42
Sediment Organic Matter Content and Internal Phosphorus Loading	42
Sediment Oxygen Demand – Laboratory Study	43
Future Study	44
5.8 Oxidation of Reduced Substances in the Sediment	44
5.9 Surface Water Temperature Trends	46
Observed Temperature Trends	46
Modeled Temperature Simulations	50
5.10 SSC Recommendation for Main Basins	50
6. Small Bays	51
6.1 Phosphorus	51
6.2 Chlorophyll <i>a</i>	52
6.3 Aquatic plants	54
6.4 SSC Recommendation for small bays	55

7. Musky Bay.....55
7.1 Phosphorus56
7.2 Chlorophyll *a*.....57
7.3 Aquatic plants.....59
7.4 Paleolimnology.....64
7.5 SSC Recommendation for Musky Bay.....65
8. Work in Progress.....65
9. References66

6.4 SSC Recommendation for small bays

There is no technical basis to assign a separate criterion for the small bays of Lac Courte Oreilles. We do not recommend that a phosphorus criterion be applied to the small bays that is different from the overall lake, for two main reasons:

- Standardized methods for assessing health of small bays independent from the overall lake are not yet available, and methods for developing appropriate criteria for small bays are also unavailable.
- Each of the four small bays with data exhibit very low chlorophyll levels, attaining even the most stringent thresholds, and a healthy aquatic plant community. There is no justification for treating these bays differently from bays on other lakes in the state.

As a general matter, the criterion applied to the main basins in a lake should be considered inclusive of the small bays, whether that be the statewide criterion or an SSC. Assessment of that criterion should follow standard protocols for all lakes, using measurements only at the deep hole(s), not samples within the small bays. In this case, the statewide phosphorus criterion for Lac Courte Oreilles is protective of the designated uses of the lake, and therefore also protective of the small bays.

7. MUSKY BAY

In Musky Bay, residents are concerned about both aquatic life habitat issues (low dissolved oxygen affecting musky spawning) and recreation issues (inhibition of navigation due to abundance of curly-leaf pondweed and algal mats). These specific concerns, however, are difficult to assess using existing information and methods available to the department. In order to establish a phosphorus SSC, we must demonstrate 1) that there is an impairment of uses, 2) a clear link between the impairments and phosphorus concentrations, and 3) that a more-stringent phosphorus concentration is needed to attain those uses. While we cannot directly measure or assess the residents' specific concerns with the data and methods available to us, we evaluated whether phosphorus concentrations are having a general impact on aquatic life and recreation by using standard protocols for evaluating chlorophyll *a* concentrations and aquatic plant condition, consistent with the proposed rule. Both metrics indicated healthy conditions and did not warrant a site-specific phosphorus criterion for Musky Bay. However, these conclusions do not preclude future studies that may directly the condition of musky spawning habitat, curly-leaf pondweed and algal mat abundance and establish their relationships to pollutants and nutrients, including phosphorus.

A summary of the attainment status for Musky Bay for each of the recreation and aquatic life use thresholds contained in the proposed revisions to ch. NR 102 is shown in Table 17. These are described in detail in this section.

Table 17. Summary of attainment status for Musky Bay (2012-2016). The metrics in this table are proposed in ch. NR 102 revisions.

Designated Use	Metric (proposed in revisions to ch. NR 102)	Assessment Status
Recreation	Chlorophyll <i>a</i> (% summer days with moderate algae levels)	Attains
Aquatic Life	Chlorophyll <i>a</i> concentration	Attains
	Macrophytes – General condition	Attains
	Macrophytes – Phosphorus response	Attains (did not attain in 2011 and 2012)

7.1 Phosphorus

Main findings:

- Musky Bay’s summer mean phosphorus concentration is 29.53 µg/L, which attains the currently applicable TP criterion of 40 µg/L.
- Musky Bay’s annual average TP does not exhibit a significant trend over time when looking at the entire data record from 2000 to 2017. However, prior to 2010 TP was more variable and exceeded the criterion in some years. After 2012, TP was less variable and declined through 2017.

Total phosphorus data were provided by WDNR staff and the Lac Courte Oreilles Tribe. Data collected on Lac Courte Oreilles from 2012-2016 were used in the 2018 assessments. Calculations and data selection methods are outlined in the 2018 Wisconsin Consolidated Assessment and Listing Guidance (WisCALM) document.

In Musky Bay the total phosphorus data were clearly below the criterion for recreation and aquatic life uses (Table 18).

Table 18. Total phosphorus (TP) assessment data for Musky Bay (2018).

WBIC	WATERS ID	Station Name	Natural Community	Total Phosphorus (µg/L)		
				TP Crit. (Rec. & Aqu. Life)	Mean (80% confidence interval)	Recreation & Aquatic Life Status
2390800	1850472	Musky Bay (MB-1)	Shallow Lowland	40	29.53 (27.10-32.19)	Clearly Attains

To analyze trends over time, we calculated the annual average TP concentrations from samples taken at < 2 m deep between June 1 and September 15. We used the same methods as we did for the Main Basins to calculate annual averages. Musky Bay data were available from 2000 to 2017. Simple linear regressions were performed predicting TP based on year for station MB-1. TP has not significantly changed over time at the Musky Bay station (Figure 26). TP varied greatly from 2001 – 2009 with average TP ranging from 25.5 to 49.6 in consecutive years. Since 2012, TP has gradually declined from 41.6 to 23.9 in 2017.

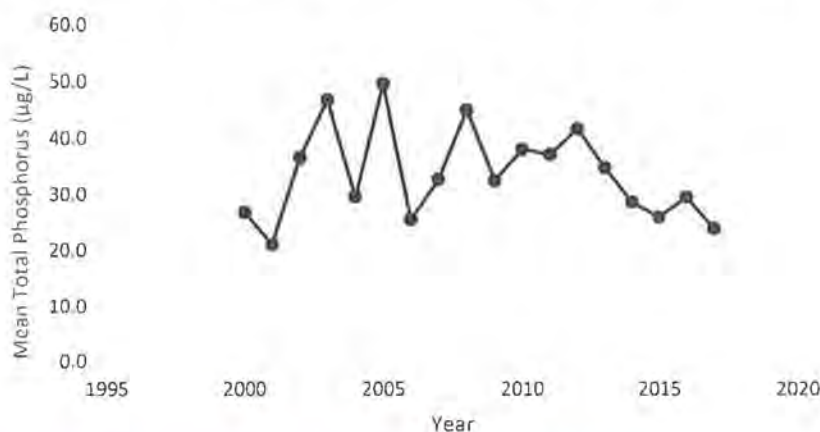


Figure 26. Trend over time of mean annual total phosphorus in Musky Bay.

7.2 Chlorophyll *a*

Main findings:

- Musky Bay attains the chlorophyll *a* thresholds for recreation and aquatic life for unstratified drainage lakes. Musky Bay’s mean chlorophyll *a* concentration is 5.75 µg/L (attained if <27 µg/L). It has ~6% of summer days with moderate algae levels (attained if <25% of summer days have moderate algae levels).
- Chlorophyll *a* was still well below the threshold in years when TP exceeded the current criterion applied to Musky Bay of 40 µg/L.
- Therefore, 40 µg/L TP is protective of both the recreation and aquatic life chlorophyll *a* metrics.
- Chlorophyll *a* in Musky Bay did not exhibit a significant trend over time, though it did fluctuate over time with changing TP concentrations.
- Chlorophyll *a* is higher in Musky Bay than elsewhere in Lac Courte Oreilles.

Chlorophyll *a* data were provided by WDNR staff and the Lac Courte Oreilles Tribe. Data collected in Musky Bay from 2012-2016 were used in the 2018 assessments. Calculations and data selection methods are outlined in the 2018 Wisconsin Consolidated Assessment and Listing Guidance (WisCALM) document.

Musky Bay “Clearly Attains” the chlorophyll *a* thresholds for both recreation use (Table 19) and aquatic life use (Table 20). The recreation use threshold for shallow lowland drainage lakes is attained if less than 25% of summer days have moderate algae levels, defined as >20 µg/L chl *a*. Musky Bay has moderate algae levels on 2% of summer days (Table 19). The mean chlorophyll *a* concentration in Musky Bay is 6 µg/L, which is well below the aquatic life threshold of 27 µg/L (Table 20).

Table 19. Musky Bay recreation use assessment data (2018) for frequency of moderate algae levels. Chlorophyll *a* thresholds in this table are proposed in ch. NR 102 revisions.

WBIC	WATERS ID	Station Name	Natural Community	Chlorophyll <i>a</i> (% summer days with moderate algae levels)		Recreation Status
				Chl- <i>a</i> Thresh. (Rec.)	Mean (80% confidence interval)	
2390800	1850472	Musky Bay (MB-1)	Shallow Lowland	25%	1.9 (0.2-9.4)	Clearly Attains

Table 20. Musky Bay aquatic life use assessment data (2018) for chlorophyll *a* concentrations. Chlorophyll *a* thresholds in this table are proposed in ch. NR 102 revisions.

WBIC	WATERS ID	Station Name	Natural Community	Chlorophyll <i>a</i> (µg/L)		Aquatic Life Status
				Chl- <i>a</i> Thresh. (Aqu. Life)	Mean (80% confidence interval)	
2390800	1850472	Musky Bay (MB-1)	Shallow Lowland	27	5.75 (4.50-7.34)	Clearly Attains

As expected, chlorophyll *a* is higher in years with high TP (Figure 27). There were four years in which the mean annual TP was greater than the current criterion of 40 µg/L (2003, 2005, 2008, and 2012). Despite high

phosphorus, mean annual chlorophyll *a* was still well below the aquatic life criterion of 27 $\mu\text{g/L}$ and even below the definition of moderate algae levels at 20 $\mu\text{g/L}$ chl *a*. In general, chlorophyll *a* for a given phosphorus concentration is lower than expected given the statewide relationship between phosphorus and chlorophyll *a* (Figure 27). Thus, the standard statewide TP criterion for shallow lowland lakes is protective of the chlorophyll *a* aquatic life and recreation uses.

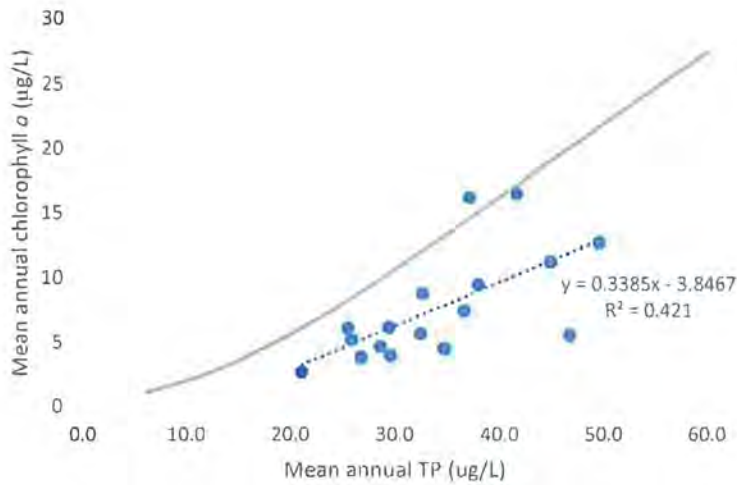


Figure 27. Relationship between annual mean TP and chlorophyll *a* in Musky Bay (station MB-1, blue points and blue dashed regression line) compared to the statewide relationship (gray line).

To analyze trends over time, we calculated annual average chlorophyll *a* concentrations from samples taken at < 2 m deep between July 1 and September 15. Simple linear regressions were performed predicting chlorophyll *a* based on year for each station. Chlorophyll *a* in Musky Bay did not exhibit a significant trend over time, though it did fluctuate over time with fluctuating TP concentrations (Figure 28). Chlorophyll *a* is higher in Musky Bay than in the main basins or other bays.

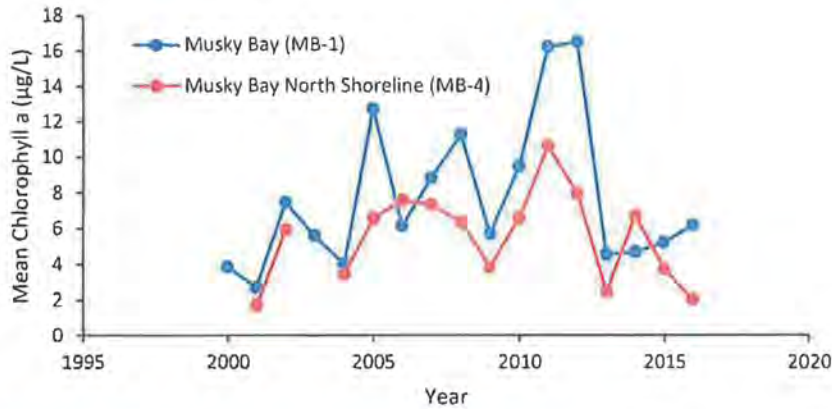


Figure 28. Annual mean chlorophyll *a* over time in Musky Bay.

Algal mats

In conjunction with dense plant growth, periodic algal mats in Musky Bay reportedly impede navigation (recreation). The department's standard assessment methods do not quantify the presence or extent of algal mats. Chlorophyll *a* is measured within the top 2 meters of the water column to quantify the abundance of phytoplankton, and algal mats are specifically avoided. To develop a site-specific phosphorus criterion based on algal mats, two pieces of information are needed: 1) a quantitative measure of algal mat abundance and 2) a demonstrated phosphorus concentration that would limit the extent of algal mats. Neither of these are available at this time.

7.3 Aquatic plants

Main findings:

- Plant data collected with high spatial resolution in Musky Bay in 2007 and in all years 2010 – 2016 revealed that Musky Bay attained the general condition threshold in all years (attained if tolerant species $\leq 73\%$). In 2011 and 2012, it failed to attain the plant phosphorus response threshold (attained if phosphorus-sensitive species $>51\%$), indicating there may have been a short-term impairment that could be related to nutrient levels. Since then (2013-2016), plants consistently attained the phosphorus response thresholds.
- The available data suggest that 40 $\mu\text{g/L}$ is protective of aquatic plants in Musky Bay. Three aquatic plant surveys attained the phosphorus response indicator when phosphorus was 32.7 – 38.0 and two aquatic plant surveys did not when phosphorus was 37.1 - 41.6 $\mu\text{g/L}$.
- Musky Bay was listed as impaired for high densities of curly-leaf pondweed, an invasive aquatic plant, in 2012. The number of acres treated with herbicide has declined in recent years, suggesting that curly-leaf pondweed is not as pervasive as it was in 2010-2012. The curly-leaf pondweed population likely responds to the combined influence of a large number of environmental variables, and we currently lack sufficient understanding of the relationship between curly-leaf pondweed biomass and water column nutrient concentration to use curly-leaf pondweed density as an indicator of nutrient impairment. In addition, the active management of curly-leaf pondweed may hamper our ability to discern the specific relationship between environmental factors and the present population.
- The density and biomass of aquatic plants and their relationship with phosphorus could not be evaluated with available data or methods.

Aquatic plant survey methods are described in section 5.3. Musky Bay was assessed as part of the 2010 whole-lake assessment, using a subset of sampling points from the overall assessment (Figure 6). Using this analysis Musky Bay attained both the assessment for general condition (MAC) and the assessment for phosphorus response (MAC-P). Musky Bay, like the whole lake, falls into the Northern Drainage category for this assessment. Results are shown in Table 21.

Table 21. Draft macrophyte condition assessment decision for Musky Bay based on aquatic plant data collected in 2010. The aquatic plant metrics in this table are proposed in ch. NR 102 revisions.

	General Condition Assessment (MAC)			Phosphorus Response Assessment (MAC-P)		
	Threshold (attains if...)	% Tolerant	MAC Status	Threshold (attains if...)	% Phosphorus sensitive	MAC-P Status
Musky Bay	Tolerant species $\leq 73\%$	67%	Attains	Phosphorus-sensitive species $>51\%$	68%	Attains

Following the analysis of the 2010 whole-lake survey, WDNR obtained data from external partners on Musky Bay collected in 2007 and all years from 2010 to 2016. The surveyors applied the baseline monitoring protocol, using a sampling grid of 394 points, which is more than recommended by the baseline protocol (Figure 29). Surveyors collected data on aquatic plant presence/absence at all points of this grid.

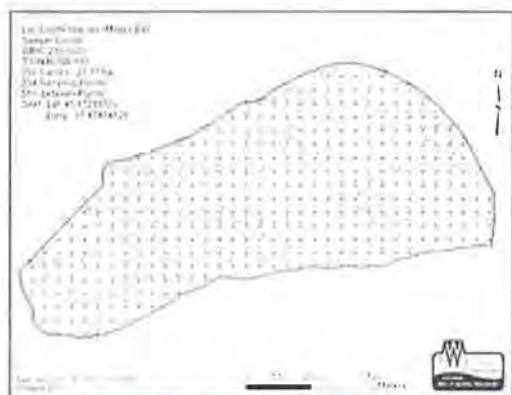


Figure 29. Musky Bay with aquatic plant sampling grid (394 Sampling points).

MAC and MAC-P assessments were calculated on Musky Bay following Mikulyuk et al. (2017). Echoing patterns found lakewide, the assessments most often met established thresholds (Table 22). However, in 2011 and 2012, the population of phosphorus-sensitive species declined slightly below the threshold, providing some evidence that the aquatic plant community was impacted during those two years. Since that time both plant thresholds have been attained.

Table 22. Draft macrophyte condition assessment decisions for Musky Bay using data collected on a sampling grid specific to Musky Bay. For reference, mean annual TP concentrations in Musky Bay are also listed here.

Musky Bay Year	General Condition Assessment (MAC)			Phosphorus Response Assessment (MAC-P)			Mean Annual TP (µg/L)
	Threshold (attains if...)	% Tolerant	MAC Status	Threshold (attains if...)	% Phosph.- Sensitive	MAC-P Status	
2007	Tolerant species ≤73%	48%	Attains	Phosphorus-sensitive species >51%	97%	Attains	32.7
2010		67%	Attains		68%	Attains	38.0
2011		60%	Attains		42%	Does not attain	37.1
2012		25%	Attains		42%	Does not attain	41.6
2013		60%	Attains		63%	Attains	34.7
2014		53%	Attains		60%	Attains	28.6
2015		45%	Attains		66%	Attains	25.9
2016		42%	Attains		84%	Attains	29.4

In 2011 and 2012, the biodiversity of the plant community was lower relative to other years. This means that in 2011 and 2012, there were fewer species recorded, and abundance patterns were skewed toward a dominant few species. In addition, the fern-leaf pondweed (*Potamogeton robbinsii*) population decreased substantially in 2010 and did not recover. This species tends to have lax stems and, though caulescent and

capable of extending up into the water column, is often found lying horizontally on the substrate. Compared to other wide-leafed submergent plants, fern-leaf pondweed is relatively sensitive to shading and changes in water clarity. Natural, anthropogenic, stochastic or observer differences are all candidate drivers for the observed community shift in 2011 and 2012. It does coincide with the years when large areas of Musky Bay were treated with herbicide to control invasive curly-leaf pondweed (Table 24). Although the decrease in fern-leaf pondweed was sustained, biodiversity and phosphorus-sensitive plant species recovered after 2012 (Table 23, Figure 30).

Table 23. Information on biodiversity by year. Number of species is the simple count of species observed, evenness describes how similar each species is in terms of relative abundance, and Shannon's H index combines number of species and evenness into a single index of biodiversity. Note that Shannon's H index is lowest for years 2011 and 2012.

Musky Bay Year	Number of species	Evenness	Shannon's H index
2007	26	0.68	2.2
2010	19	0.73	2.2
2011	26	0.59	1.9
2012	22	0.56	1.7
2013	25	0.66	2.1
2014	25	0.66	2.1
2015	27	0.70	2.3
2016	30	0.73	2.5

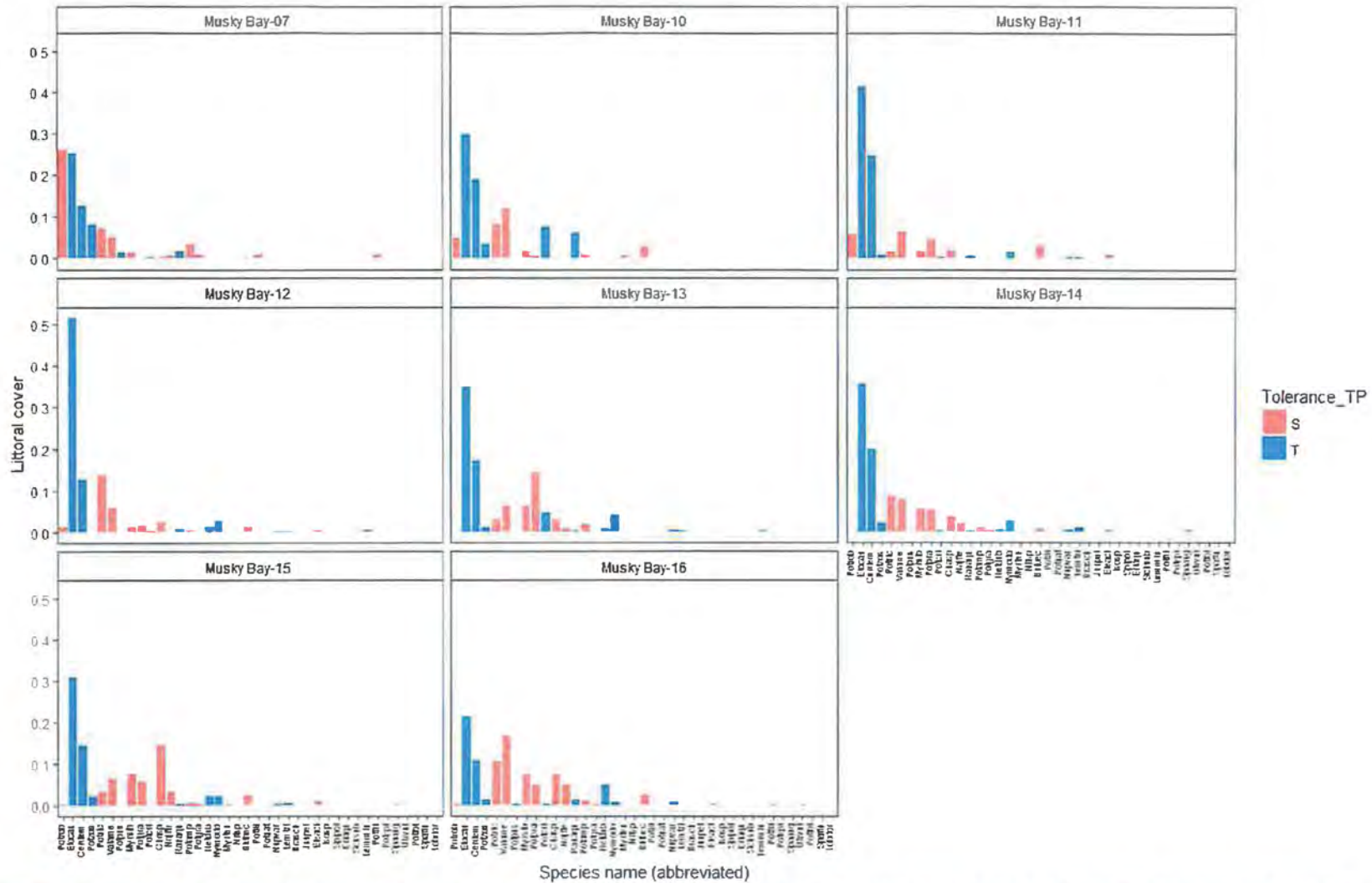


Figure 30. Littoral cover by species and across years (2007 in upper left). General shape of the abundance distribution is consistent across most years, with some notable changes in individual species abundance patterns (e.g. fern-leaf pondweed; *Potamogeton robbinsii*).

Plant abundance and curly-leaf pondweed

Although the composition of the aquatic plant community in Musky Bay is generally healthy and includes species that are not indicative of degradation, lake users have expressed significant concern over the amount (or abundance) of aquatic plants in the bay. Curly-leaf pondweed (*Potamogeton crispus*), an invasive plant that reaches peak abundance early relative to other Wisconsin plant species, reportedly interferes with navigation and recreational activities.

Musky Bay was listed as impaired for recreation due to curly-leaf pondweed in 2012 with phosphorus listed as the pollutant. Phosphorus was indeed high in 2012, but we do not have enough data on curly-leaf pondweed abundance over time to establish a relationship with phosphorus. Curly-leaf pondweed is a cosmopolitan species that tends to do well in lakes with high nutrients, but the presence of curly-leaf pondweed alone does not indicate nutrient impacts. The curly-leaf pondweed population likely responds to the combined influence of a large number of environmental variables, and we currently lack sufficient understanding of the relationship between curly-leaf pondweed biomass and water column nutrient concentration to use curly-leaf pondweed density as an indicator of nutrient impacts. A study of Minnesota lakes indicated that factors other than phosphorus can also influence curly-leaf pondweed abundance, such as water temperature and snow cover (Heiskary and Valley 2012).

Our mid-summer aquatic plant surveys occur after peak curly-leaf pondweed abundance in spring, but we do have a record of the number of acres that were treated with herbicide to reduce curly-leaf pondweed abundance in Musky Bay (Table 24). We assume that the number of acres treated approximates the extent of this invasive species each year. If this is the case, curly-leaf pondweed was extensive in 2010-2012, the years contributing to the 2012 curly-leaf pondweed impairment listing. Since then, the number of acres treated is much lower, suggesting that curly-leaf pondweed is still present, but less extensive.

Table 24. Acres of curly-leaf pondweed treated with herbicide in Musky Bay over time.

Year	Acres
2009	7.0
2010	79.9
2011	96.0
2012	65.0
2013	29.0
2014	3.0
2015	25.0
2016	25.0
2017	9.0

Currently, the department does not have procedures available for assessing 1) abundance of plants, 2) what constitutes a healthy level of abundance for aquatic life, 3) what level of abundance impairs recreation, or 4) how much phosphorus influences curly-leaf pondweed abundance compared to other factors. Therefore, we were not able to assess and report on plant abundance in the bay. While the department recognizes that recreational issues are a major concern for residents, neither of our available indicators of phosphorus impairment, chlorophyll *a* and aquatic plants, indicate a phosphorus impairment.

7.4 Paleolimnology

Main findings:

- Prior sediment core studies indicate nutrient enrichment has been occurring since the 1930s. Periods in the 1960s, 1970s, and late 1990s also contributed to nutrient enrichment in the lake.
- Natural background concentrations of TP are estimated at 19 and 29 $\mu\text{g/L}$ TP, based on two sediment core analyses, but these estimates are approximate. The natural background concentration represents the lowest level at which an SSC might be set.

The sediment can impart information about the lake's long-term history by examining changes in the species composition of diatoms that settled in the sediment over time. In 1999, two sediment cores were collected in Musky Bay. The results of this study can be reviewed in detail (Fitzpatrick et al. 2003, Garrison and Fitzgerald 2005), but some of the most relevant findings are summarized here.

Musky Bay has become more eutrophic since approximately 1930. There are several lines of evidence of eutrophication:

1. Increased aluminum indicates that soil erosion began ca. 1930.
2. Nutrient levels started to increase soon after 1930 as signaled by:
 - a. Increasing biogenic silica (indicating higher abundance of diatoms),
 - b. Increasing abundance of some benthic diatom taxa (ex. *Staurosira* sp.),
 - c. Decreasing abundance of planktonic diatom taxa (ex. *Achnanthydium minutissima*, *Navicula pseudoventralis*, *Aulacoseira ambigua*).
3. Further nutrient enrichment occurred later in the record:
 - a. Starting in 1960, *Staurosira construens* va. *Binodis* increased,
 - b. Starting in 1970, *Aulacoseira ambigua* decreased.
4. Indicators of fertilizers started ca. 1996:
 - a. Calcium:Aluminum abruptly increases,
 - b. Potassium:Aluminum abruptly increases,
 - c. A diatom indicative of algal mats increases (*Fragilaria capucina*).

Paleolimnology can sometimes be used to estimate natural background phosphorus concentrations prior to significant impacts from Euro-American settlement (circa mid-1800s). However, the diatom community in the Musky Bay cores was dominated by taxa that are phosphorus generalists, making it difficult to accurately estimate the natural background phosphorus concentration of Musky Bay. Natural background estimates of total phosphorus based on diatom taxa from 2 cores in Musky Bay were 19 $\mu\text{g/L}$ and 29 $\mu\text{g/L}$, but these estimates have a high degree of uncertainty (Garrison 2014).

7.5 SSC Recommendation for Musky Bay

- We do not recommend setting a site-specific phosphorus criterion lower than the applicable statewide criterion of 40 µg/L for Musky Bay. Available data include a range of phosphorus concentrations in Musky Bay that allows us to directly observe how it responds to high phosphorus concentrations. Our existing assessment methods showed that when phosphorus was greater than 40 µg/L, chlorophyll *a* still indicated healthy conditions. The available data, suggest that 40 µg/L is protective of aquatic plants as well. Three aquatic plant surveys attained the phosphorus response indicator when phosphorus was 32.7 – 38.0 and two aquatic plant surveys did not when phosphorus was 37.1 and 41.6 µg/L.
- Therefore, we cannot currently demonstrate any of the following: 1) the designated uses are not protected by the statewide phosphorus criterion, 2) a clear link between phosphorus concentrations and protection of these designated uses, and 3) that scientific evidence demonstrates that a more-stringent phosphorus concentration is necessary to protect the designated uses.
- We recommend delisting Musky Bay from the impaired waters list. In 2012, when Musky Bay was listed for high curly-leaf pondweed abundance with phosphorus as the pollutant, both TP and the plant metrics indicated that the lake was impaired. Now, at 29.53 µg/L, TP clearly attains the criterion of 40 µg/L. Treatment for curly-leaf pondweed has been effective in reducing its presence. Chlorophyll *a* attains both the recreation and aquatic life thresholds, and aquatic plants indicate that Musky Bay is in good condition.
- If observation or additional information indicate that spawning habitat for muskies, algal mats, and aquatic plant biomass are still problematic in Musky Bay, we recommend developing a monitoring program that quantifies these stress signals. In addition, phosphorus and other potential factors should be monitored at the same time to determine if there is a link between phosphorus and each of these variables. A cross-lake comparison and review of the literature may also help to establish expectations for each of these variables and their relationship to phosphorus.

8. WORK IN PROGRESS

We recognize that concerns remain for the health of Lac Courte Oreilles and its fishery, and DNR staff expect to continue working with stakeholders to determine the main causes of coldwater fishery impacts and improve the quality of the lake. Meanwhile, DNR has several related efforts underway:

- DNR is currently undertaking three different rulemakings, all of which would apply to Lac Courte Oreilles if they are promulgated as currently proposed.
 - Rule package WT-25-13 contains a provision to establish a statewide oxythermal habitat standard for two-story fishery lakes.
 - Rule package WT-23-13 proposes establishing biocriteria and phosphorus response indicators. These include chlorophyll *a* criteria for recreation and aquatic life uses, and aquatic plant biocriteria for the aquatic life use.
 - Rule package WT-17-12 proposes establishing standard protocols for development of SSC.
- DNR has proposed in their 2018 draft Section 303(d) impaired waters list that the main basins of Lac Courte Oreille be listed as impaired in 2018 for not meeting the designated cold water use due to low dissolved oxygen. The draft list will be submitted to U.S. EPA in April 2018.
- DNR is in discussion with COLA and the Tribe regarding a habitat improvement project using dredging of sediments to improve musky spawning in Musky Bay.
- There are various avenues of potential future study which could help to investigate root causes, which may be eligible for state or federal grant funding.

Haller, Macaulay G - DNR

From: Jim Smith <jjsmith@ati-ae.com>
Sent: Tuesday, December 3, 2019 6:41 PM
To: Beranek, Ashley E - DNR
Cc: Leo Kucek; Prochacka, Donna - Other; DNR Impaired Waters; Prochacka, Donna - Other; Julian Velazquez
Subject: RE: White River 303d Delisting and Phosphorus Data

Ashley:

Thank you for getting back to me and clarifying the listing segment for the White River. I understand why the delisting proposal has been removed and we will monitor any future status change.

I was wondering if you have any timetable for the Fox River-IL TMDL, as this would include the White River? Who at the DNR would be heading up this effort? We have a number of clients, including Lyons, that formed an Illinois Fox River Group (iFRG) back in 2016 in anticipation of a future TMDL. The group has not been that active recently, but I am sure they would be interested in participating as a stakeholder in the TMDL preparation.

Thank you, again, for your assistance.

Jim

James J. Smith, P.E.

Office Direct: (262) 785-7334

Mobile: (262) 844-2601



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13400 Bishop's Lane, Suite 270 | Brookfield, WI 53005 | (262) 784-7690 | <http://www.ati-ae.com/>



From: Beranek, Ashley E - DNR <Ashley.Beranek@wisconsin.gov>
Sent: Tuesday, December 3, 2019 3:51 PM
To: Jim Smith <jjsmith@ati-ae.com>
Cc: Leo Kucek <lakucek@ati-ae.com>; Prochacka, Donna - Other <lyonsdt2@execpc.com>; DNR Impaired Waters <DNRImpairedWaters@wisconsin.gov>
Subject: RE: White River 303d Delisting and Phosphorus Data

Hi Jim,

Thank you for contacting us! When I started looking into your question I found a mapping error for the segments of the White River. When the listing was originally made in 2012 I believe our map had the mouth and headwaters locations switched. Between 2012 and 2018 this was fixed, but the listed segment was then spatially flip-flopped with the unimpaired segment. This impacts the current evaluation of impairment because the station with low phosphorus values

(Center Street station) was not originally on the listed segment – with this being the case it is not representative of that segment and can't be used for a delisting determination.

I have updated the maps and the listed segment is from the mouth (Fox River in Burlington) to Bloomfield Creek (near Lake Geneva). The original listing was based on phosphorus data at station ID 653111 (White River at Sth 36 (Bi Sur)) and there is no current data from that station. There were two stations upstream that showed phosphorus exceedances with data from 2016 – 2017 (White River at STH 11, White River at Milwaukee Ave), which are now on the impaired segment as they should have been.

For this assessment cycle the delisting proposal has been removed and the phosphorus listing will remain until we have more data available. New sampling is slated for next year at station 653111 (White River at Sth 36 (Bi Sur)) and several other stations along the river in preparation for the Fox River-IL TMDL.

Please let me know if you would like any additional clarification or have any additional questions.

Thank you!
~Ashley

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Ashley Beranek

Integrated Report Coordinator
Water Quality Bureau/Environmental Management Division
Wisconsin Department of Natural Resources
Phone: (608) 267-9603
ashley.beranek@wisconsin.gov



dnr.wi.gov

From: Jim Smith <jjsmith@ati-ae.com>
Sent: Wednesday, November 20, 2019 5:00 PM
To: Beranek, Ashley E - DNR <Ashley.Beranek@wisconsin.gov>
Cc: Leo Kucek <lakucek@ati-ae.com>; Prochacka, Donna - Other <lyonsdt2@execpc.com>
Subject: White River 303d Delisting and Phosphorus Data

Hello Ashley:

We are the Lyons Sanitary District Engineer and we are working on a phosphorus compliance alternatives plan for the District. The treatment plant discharges to the White River which was listed on the State's 303d list. We understand the River could be delisted for the 2020 cycle according to the following information on your website. I was looking for data on the phosphorus levels in the River and could not find any for 2019, except for the monitoring station just below Geneva Lake (Center St 055451345) and some data for a chloride study at STH 50. Do you have any recent phosphorus sampling data upstream or downstream of the treatment plant's discharge, which is just south of Mill Street in Lyons, or at any other locations that were used for the proposed delisting.

Thank you for your help.

Jim

General Condition

The White River was evaluated for phosphorus and biology in 2020. Phosphorus values were clearly below criteria, indicating this water can be delisted in the 2020 cycle.

Date 2019

Author Ashley Beranek

James J. Smith, P.E.

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Mobile: (262) 844-2601



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Haller, Macaulay G - DNR

From: john theisen <jtheisen@gmail.com>
Sent: Tuesday, October 15, 2019 1:56 PM
To: DNR Impaired Waters
Subject: Lake. Beulah. Walworth county

Ashley

The canal behind the. Dockside

Restaurant is polluted it is totally green for 3/4 of a mile

Can you have somebody look into this weather it's an impaired leak when it rains the LG drains out of the canal over to the damn on the smaller lake and into the Mukwonago River Mm

Sent from my iPhone

Haller, Macaulay G - DNR

From: Beranek, Ashley E - DNR
Sent: Wednesday, October 16, 2019 6:07 PM
To: Bunk, Heidi J - DNR
Cc: DNR Impaired Waters
Subject: FW: lake Beulah

Here is some follow up information he sent.

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Ashley Beranek

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From: john theisen <jtheisen@gmail.com>
Sent: Wednesday, October 16, 2019 6:05 PM
To: Beranek, Ashley E - DNR <Ashley.Beranek@wisconsin.gov>
Subject: lake Beulah

There were two canals dug in the 1920 by speculators from chicago thinking they ould sell lake access lots

It failed this is one of the channels the other is goat island on the opposite end of the lake

The channels get narrower each year as they are not maintained people used to swim in the channels now muck and mud

What is the solution

Haller, Macaulay G - DNR

From: Oldenborg, Kimberly A - DNR
Sent: Thursday, November 7, 2019 3:09 PM
To: Beranek, Ashley E - DNR
Subject: 2020 list comments/questions

Follow Up Flag: Follow up
Flag Status: Completed

Hi Ashley,

I was looking at the proposed changes for impairments in the NE Lakeshore and have a few comments/questions.

First, thanks for removing the TP impairment for the Black River, earlier this year we had found that it was actually a LAL stream, so thanks for helping to fix that!

On the LAL topic, not sure if you have gotten this comment yet, but I think there is a proposed TP listing on a LAL reach. Let me know what you think.

Proposed listing: Mud Creek (Reedsville) T19n, R21e, S34

Impairment: Total Phosphorus

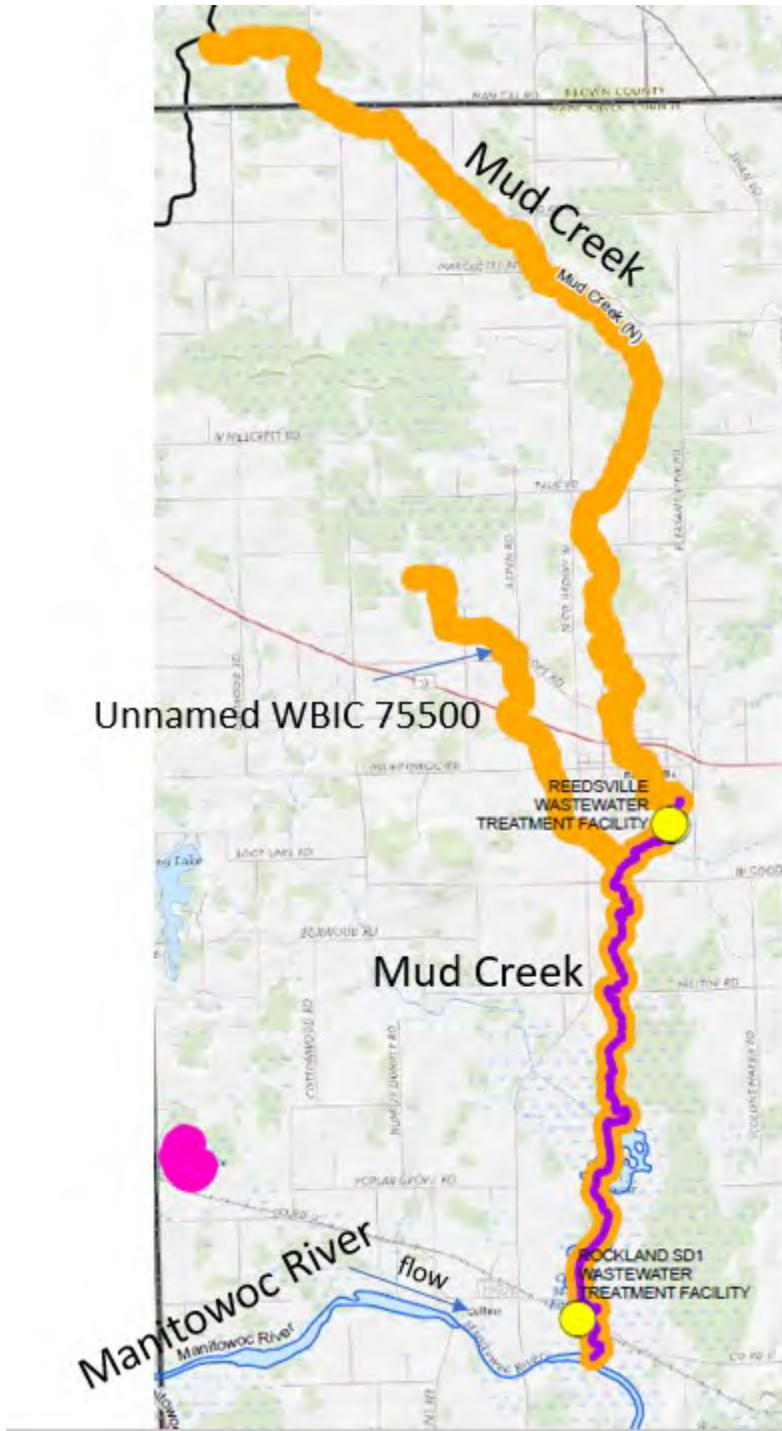
WBIC: 75000

Assessment Unit: 9866

Action: Proposed for List

Orange = proposed for listing

Purple = Digitized LAL streams from a Database made by Aaron and others.

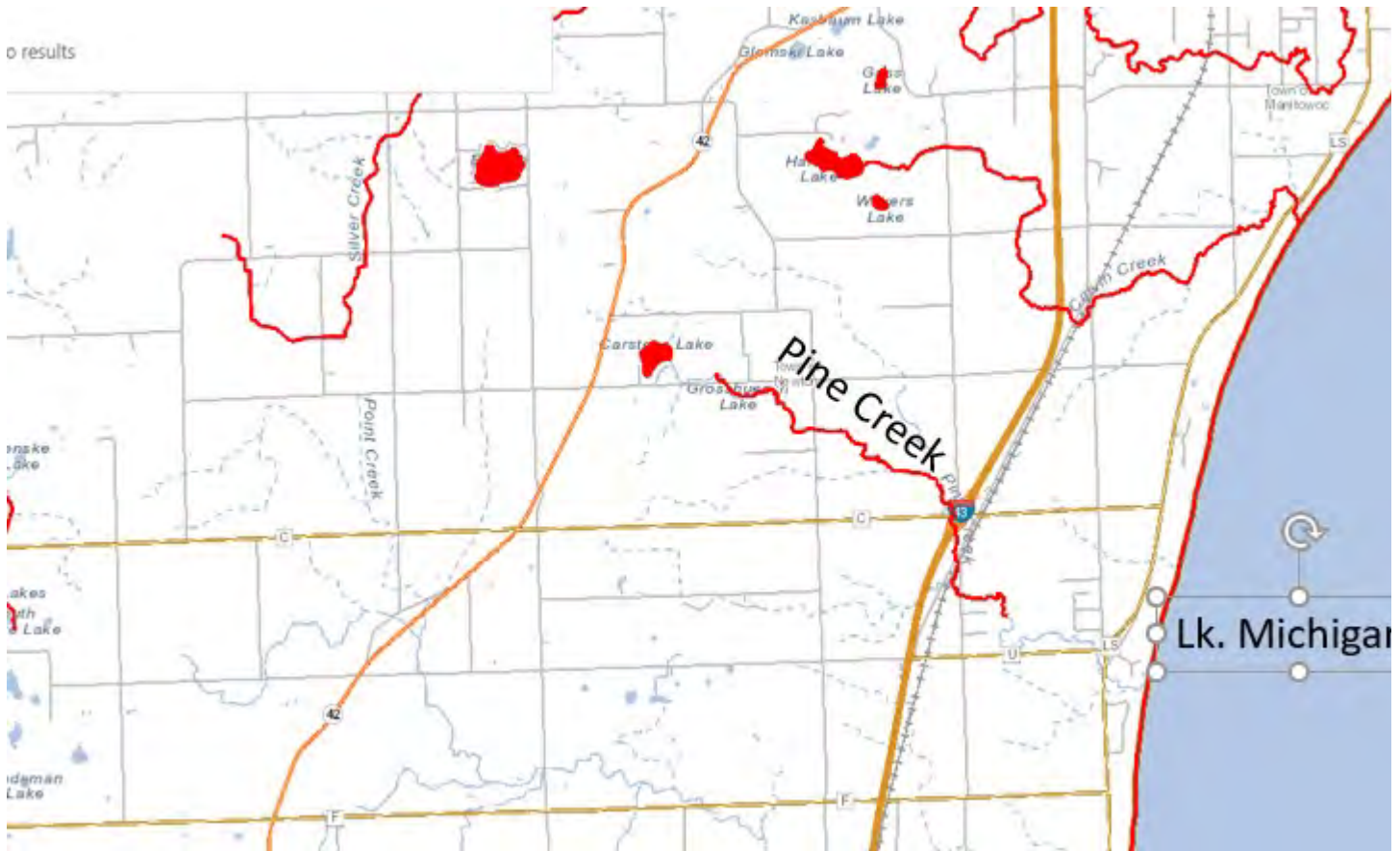


Here is the LAL information in NR 104

- | | | |
|-----|---|--|
| 41. | Mud Creek – Manitowoc River (Reedsville) | From the Reedsville STP downstream to the Manitowoc River |
|-----|---|--|

The second question I have is about the proposed delisting of TP impairment in Pine Creek.

Proposed delisting: Pine Creek
 Impairment: Total Phosphorus
 WBIC: 66300



Just looking at the TP data in SWIMS, the water samples usually exceeded the criteria, so I'm wondering what else was factored into the delisting of Pine Creek (I have not read Wisclam as you may notice...)

All phosphorus samples available for Pine Creek (WIBIC 66300) from 2010 through current				
Description	result	unit	date	sample location
PHOSPHORUS TOTAL	0.258	MG/L	7/30/2013	PINE CREEK AT CENTER RD
PHOSPHORUS TOTAL	0.0448	MG/L	5/15/2016	PINE CREEK - ABOVE AND UNDER LS BRIDGE
PHOSPHORUS TOTAL	0.122	MG/L	6/13/2016	PINE CREEK - ABOVE AND UNDER LS BRIDGE
PHOSPHORUS TOTAL	0.0687	MG/L	7/20/2016	PINE CREEK - ABOVE AND UNDER LS BRIDGE
PHOSPHORUS TOTAL	0.0873	MG/L	8/23/2016	PINE CREEK - ABOVE AND UNDER LS BRIDGE
PHOSPHORUS TOTAL	0.1	MG/L	9/20/2016	PINE CREEK - ABOVE AND UNDER LS BRIDGE
PHOSPHORUS TOTAL	0.0922	MG/L	10/19/2016	PINE CREEK - ABOVE AND UNDER LS BRIDGE
PHOSPHORUS TOTAL	6.26	MG/L	8/8/2017	PINE CREEK 25 METERS US GASS LAKE ROAD
PHOSPHORUS TOTAL	0.225	MG/L	8/8/2017	PINE CREEK AT CENTER RD

Thank you,
Kim

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Kim Oldenborg

NE Lakeshore TMDL Coordinator – Bureau of Water Quality

Wisconsin Department of Natural Resources

101 S. Webster Street, Madison, WI 53707-7921

Phone: (608) 266-7037

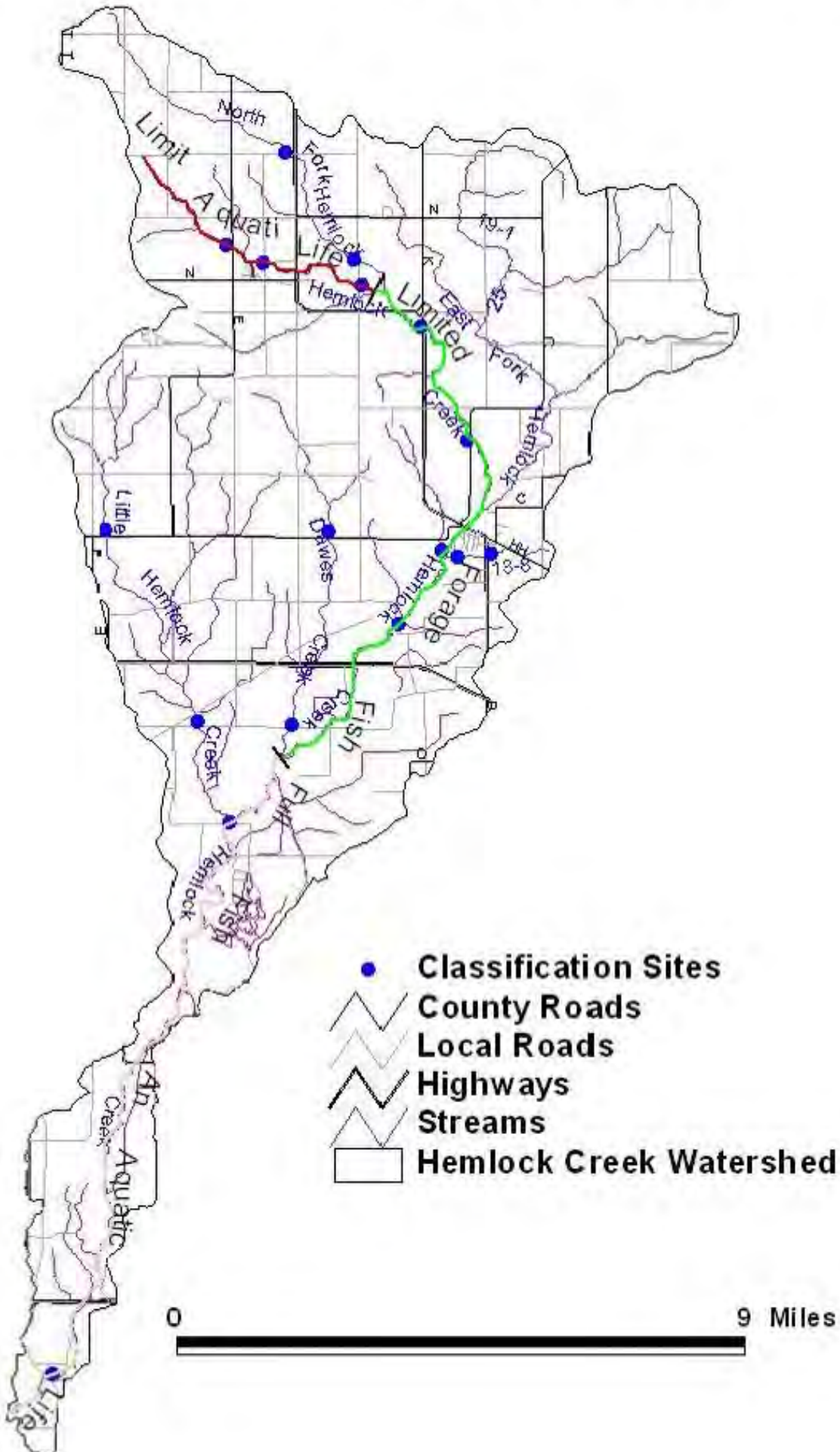
Kimberly.Oldenborg@wisconsin.gov



dnr.wi.gov



Hemlock Creek Current Classifications



Haller, Macaulay G - DNR

From: Oldenburg, Patrick S - DNR
Sent: Wednesday, October 16, 2019 4:08 PM
To: Beranek, Ashley E - DNR
Subject: RE: 2020 Water Quality List Comment Period
Attachments: current nr104.jpg; current classification.jpg

Follow Up Flag: Follow up
Flag Status: Flagged

Ashley, I took a look at the new list and I have a couple of comments –

2020NewListings tab

- New listings for Flick Creek (AU# 3999292 and 12272) – AU 3999292 is classified as limited aquatic life in NR 104 so phosphorus criteria do not apply, so it shouldn't be listed. Also, the phosphorus criteria only apply to about the lower mile and a half of AU 12272 (Limited forage fish portion).
- Similarly, the Hemlock Creek new listing (AU#18327) is contains both limited aquatic life and limited forage fish classifications in NR 104.

I've attached maps of both streams showing the classifications per NR 104.

DRAFT2020RestorationWatersList tab

- There are a number of segments (AU# 6897810, 424132, 888023, 12432, 13026, 885667, 885864) covered by the Wisconsin River TMDL that are listed as for phosphorus but still have a waterbody condition category of 5A, I'm assuming this is just a typo. If not, let's discuss.
- Lake Wisconsin (AU# 13500) is also listed on that tab, but it should remain category 5A at this time. The TMDL currently in effect doesn't address Lake Wisconsin impairments and won't until after the proposed sire-specific criteria for Petenwell, Castle Rock and Lake Wisconsin are approved by EPA.

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Pat Oldenburg

Phone: 715 831-3262

patrick.oldenburg@wisconsin.gov

From: Beranek, Ashley E - DNR <Ashley.Beranek@wisconsin.gov>
Sent: Tuesday, October 15, 2019 12:59 PM
To: DNR DL WD ALL WATER RESOURCES STAFF <DNRDLWDALLWATERRESOURCESSTAFF@wisconsin.gov>
Subject: 2020 Water Quality List Comment Period

Hi Water Quality Folks,

Starting this afternoon we're having our public comment period on our updated water quality lists. The comment period goes from October 15th to November 22nd. An internal talking points document is attached to this email. The list and supporting materials are on this webpage's right-hand side, in a red box: <https://dnr.wi.gov/topic/ImpairedWaters/>

Please feel free to send folks my way if they have questions!

Thanks!
~Ashley

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Ashley Beranek

Integrated Report Coordinator

Water Quality Bureau/Environmental Management Division

Wisconsin Department of Natural Resources

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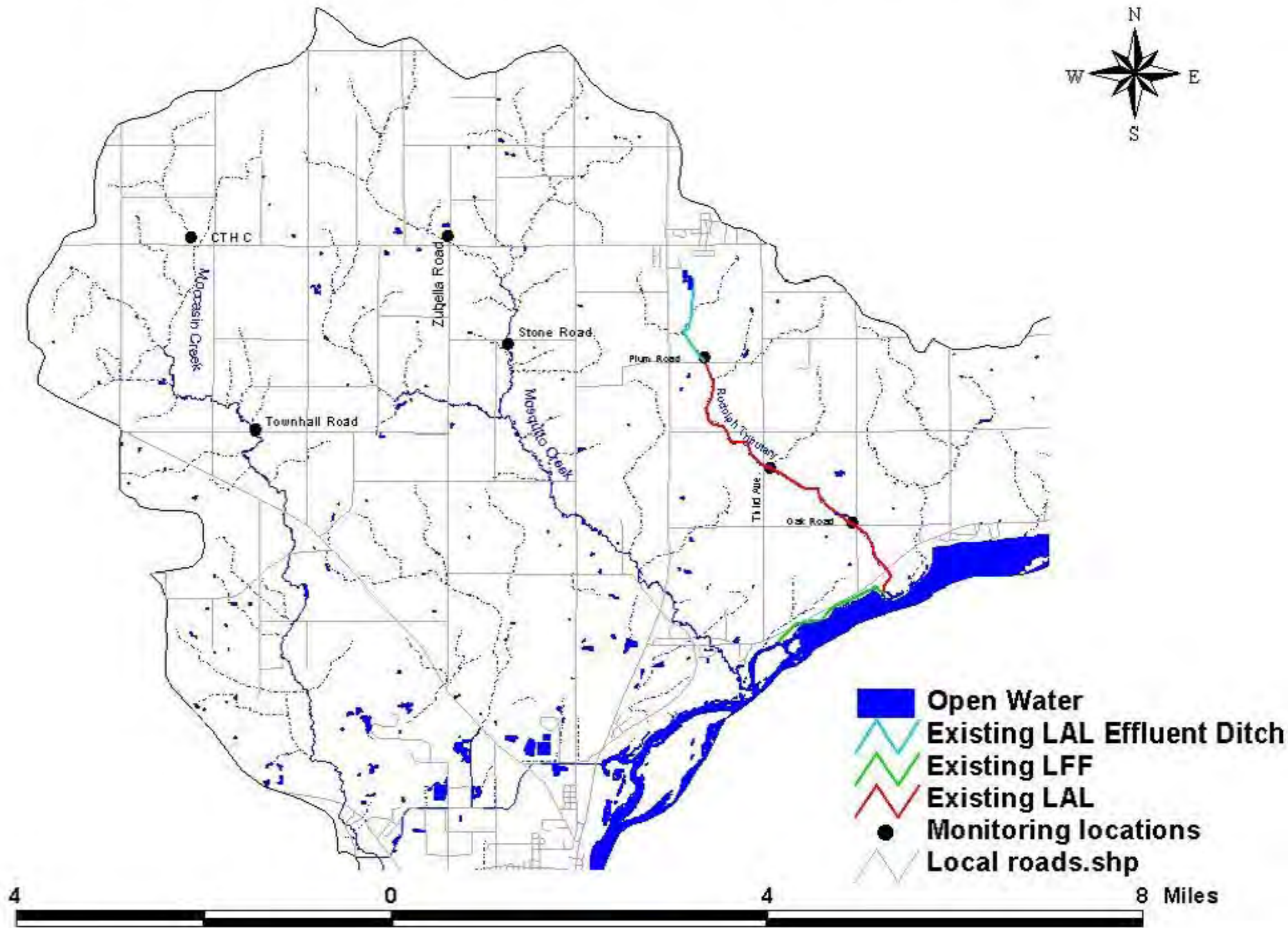
ashley.beranek@wisconsin.gov



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Figure 2. Rudolph Tributary Current NR 104 Classifications



Haller, Macaulay G - DNR

From: Timm P. Speerschneider <tps@dewittllp.com>
Sent: Friday, November 22, 2019 11:09 AM
To: DNR Impaired Waters
Cc: Beranek, Ashley E - DNR
Subject: 303(d) comments
Attachments: FMC Comments on Proposed Deletion of Zinc as Impairment in Stream C - 11-22-19 (02141727x9CDD3).pdf

Follow Up Flag: Follow up
Flag Status: Flagged

See attached comments—if you have any questions, feel free to contact me—thank you for your attention to this matter

Timm P. Speerschneider

Attorney

Ph: 608.252.9319

F: 608.252.9243

tps@dewittllp.com

2 E. Mifflin Street, Suite 600

Madison, Wisconsin 53703



www.dewittllp.com

November 22, 2019

VIA EMAIL

Ashley Beranek
Water Resource Management Specialist – Bureau of Water Quality
Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707-7921
Email: DNRImpairedWaters@wisconsin.gov; ashley.beranek@wisconsin.gov

RE: Comments on Proposed Deletion of Zinc as an Impairment in Stream C
Rusk County, Wisconsin

Dear Ms. Beranek:

We are providing the following brief written comments on behalf of Flambeau Mining Company (“FMC”) regarding WDNR’s proposed deletion of zinc as an impairment in Stream C, Rusk County, Wisconsin. As you may know, Stream C lies entirely within FMC property. FMC has undertaken several efforts to address water quality in Stream C. FMC agrees with the WDNR’s analysis of the monitoring data that FMC has provided:

Data collected from 2016 – 2018 was assessed during the 2020 assessment cycle. There were no exceedances (0/15) of acute aquatic toxicity criteria. This zinc listing is recommended for removal in the 2020 cycle.

If you have any questions regarding these comments, please contact me directly at 608-252-9319 or tps@dewittllp.com.

Very truly yours,

DeWitt LLP



Timm P. Speerschneider
TPS:rl

Haller, Macaulay G - DNR

From: Keclik, Donna <keclik.donna@epa.gov>
Sent: Tuesday, November 26, 2019 2:51 PM
To: Beranek, Ashley E - DNR
Subject: EPA comments on Wisconsin 2020 Public Notice list

Follow Up Flag: Follow up
Flag Status: Flagged

Ashley, EPA has several comments on the list of impaired waters that the state public noticed in October 2019. After you have reviewed if you have any questions please let me know.

1. There were several waters/impairments that were on the 2018 which do not appear on the 2020 list. Also I did not find these water/impairments on the delisting tab or the restoration tab in the table provided during public notice. Please confirm that these waters/impairments should be removed from the impaired category 5 list. Also please provide the rationale for the removal. If the waters were removed and remain impaired please add them back to the category 5 list of waters.

Official Waterbody Name	Local Waterbody Name	WATERS ID (AU)	EPA_ID 305B	WBIC	Counties	Seg.	Start Mile	End Mile	Size	Units	DNR Category	Im W
Campground Creek	Byron Creek	1452243	10023506	137400	Fond du Lac	3	0	1.66	1.66	MILES	Category 5A	80
East Branch Fond Du Lac River	East Branch Fond Du Lac River	3990279	10035880	135900	Fond du Lac	2	14.5	22.81	8.31	MILES	Category 5A	20 04
Hay Creek	Hay Creek (T25N R6W)	16110	10024669	2131900	Eau Claire	1	0	7.07	7.07	MILES	Category 5A	20 00
Little La Crosse River	Little La Crosse River	14008	10030063	1655900	Monroe	1	0	10.25	10.25	MILES	Category 5P	20

Silver Spring Creek	Silver Spring Creek	13777	10026289	917700	Lafayette	1	0	5.9	5.9	MILES	Category 5A	20
Keenans Creek	Unnamed Stream	5513171	10032924	803500	Dane	2	2	4.1	2.1	MILES	Category 5A	2007

2. WDNR is encouraged to make assessment determinations for surface waters with the Public Water Supply Use. If WDNR is not able to, WDNR should indicate the reasons why determinations can't be made at this time (e.g., lack of standards, monitoring data, etc.).
3. Since WDNR has processed the public notice outside of ATTAINS, it would be helpful if WDNR included the Designated Uses that are not met in their impaired waters list.
4. Since WDNR has processed the public notice outside of ATTAINS please provide the action IDs for all 4A and 4B waters.

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