



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

AUG 05 2011

REPLY TO THE ATTENTION OF:

WW-16J

RECEIVED

AUG 10 2011

DNR
OFFICE OF THE
SECRETARY

Kenneth G. Johnson, Administrator
Division of Water
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, Wisconsin 53707-7921

Dear Mr. Johnson:

As you are aware, on January 26, 2010, the U.S. Environmental Protection Agency concluded its review of Wisconsin's 2008 Section 303(d) list and supporting documentation and information. Based upon this review, EPA determined that Wisconsin's list of water quality limited segments (WQLSs) still requiring Total Maximum Daily Loads (TMDLs) may not have met the requirements of Section 303(d) of the Clean Water Act (CWA or the Act) and EPA's implementing regulations because the State had declined to list Musky Bay, in Sawyer County, Wisconsin, as impaired. Therefore, EPA partially approved and partially disapproved Wisconsin's 2008 Section 303(d) list. In April 2010, EPA requested public comment on the proposed addition of Musky Bay, 75 *Fed. Reg.* 22589 (April 29, 2010). Based on the data and other information received during the public comment period, EPA has determined that there was insufficient information to include Musky Bay on Wisconsin's 2008, 303(d) list of impaired waters. Therefore, EPA now fully approves Wisconsin's 2008 CWA 303(d) list. A copy of the approved list is enclosed with this letter.

A discussion of EPA's review of information received during the public comment period is set forth below. EPA's review of other aspects of the Wisconsin 2008 Impaired Waters List is found in the January 26, 2010 decision to partially approve and partially disapprove Wisconsin's list.

EPA's Proposal to List Musky Bay

During the development of its 2008 list, Wisconsin had received comments requesting that Musky Bay be included in the list "due to ambient concentrations of phosphorus and related 'degradation patterns.'"¹ WDNR explained the methodology it used to assess lake conditions and for listing waters, and concluded:

WDNR staff evaluated the data available for Musky Bay and determined that it did not meet the listing thresholds. Over the past eights [sic] years (including 2007 data), the bay exceeded the outlier boundary for shallow lakes in the northern region only in the

¹ Letter from WDNR to EPA, September 8, 2008, final submittal of 2008 Impaired Waters List, Attachment E, Summary of Public Comments and WDNR Responses, at 6-7.

summer of 2005 for both Secchi and summer total phosphorus. It should be clearly noted that there was only one single-summer total phosphorus that exceeded the threshold value.²

The State's response further described the data from several sampling sites around the Bay, noting that actual in-bay concentrations did not exceed the State's listing criteria: "For a shallow drainage lake in the northern ecoregion to be considered for the Impaired Waters List, the total phosphorus concentration must exceed 68 µg/L and the Secchi depth must be less than 3.3 feet. . ."³ The State explained that data for 2006-07 was comparable to previously gathered data, and "None of the data collected in 2007 exceeded 68 µg/l total phosphorus or had a Secchi depth of less than 3.3 feet." Finally, the State explained that it lacked criteria to make an impairment determination on the basis of the presence of an invasive species, in this case, Curly Leaf Pondweed (*Potamogeton crispus*).⁴

In its January 26, 2010, partial approval of Wisconsin 2008 Impaired Waters List, EPA reviewed the information that had been available to WDNR regarding Musky Bay and agreed that "additional sampling is needed to make an impairment decision with regard to phosphorus."⁵ However, after reviewing available data, including the documented impaired use of the Bay for boating, as evidenced by WDNR's acknowledgement of the need to cut navigational corridors through the heavy algal mats, EPA proposed to list the Bay as impaired based on Wisconsin's narrative standard which provides that "Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the State." Wis. Admin. Code NR § 102.04 (1)(b).⁶

Public Comments on EPA's Proposal to List Musky Bay

EPA received 176 comments on its proposal to list Musky Bay as impaired. Many commenters provided support to the proposal to list.⁷ Some commenters described plant growth in near-shore areas or different portions of the Bay.⁸ Others described or sent photos of algal mats in the Bay or algae growing in shore areas or on rocks.⁹ Many commenters referenced their diminishing ability to fish, swim, or to enjoy wildlife in the Bay.¹⁰ Others noted problems

² WDNR Response to Comments at 7.

³ WDNR Response to Comments at 7-8.

⁴ WDNR Response to Comments at 8.

⁵ Letter from Tinka Hyde, EPA, to Todd Ambs, WDNR, January 26, 2010, enclosing EPA Decision Document for the Partial Approval/Partial Disapproval of Wisconsin's 2008 List with Respect to Section 303(d) of the Clean Water Act, at 21-22. EPA notes that states have taken different approaches regarding identification of waters that may be impaired by aquatic nuisance species (ANS, also known as invasive or exotic species). EPA has not determined whether aquatic nuisance species are pollutants within the definition of CWA 502(b) and has not provided guidance to the states on how to address waters that may be impaired by ANS. In addition, many states, including Wisconsin, have not developed methodologies for assessing ANS impairments.

⁶ 75 *Fed. Reg.* 22589 (April 29, 2010).

⁷ Comments received by EPA are listed in Attachment 1.

⁸ See comments 1-2, 6, 30, 45, 53, 68, 93, 95, 99, 121, 123, 138, 146, 152-154, 156-57, 159, 162, 172-73.

⁹ See comments 58, 76, 103, and 139.

¹⁰ See comments 15, 21, 28-29, 37, 54, 57, 59, 65, 71, 75, 79, 82, 85, 90, 92, 100, 105-06, 110, 113, 117-18, 124, 127, 128, 132, 135, 140-41, 147-49, 165, 168-69, 174.

navigating the lake in boats.¹¹ Many commenters wrote expressing general concerns about the health of the Bay.¹²

Additionally, EPA received information from the Lac Courte Oreilles Lake Association (LCOLA) and individuals from the Victoria Heights Lake Association during both EPA's review of Wisconsin's 2008 list and during the public comment period for EPA's proposed listing of the Bay. LCOLA's data documented water quality in the Bay between approximately 2005 and 2008.¹³ LCOLA's data also included a discussion of "dense algal mats" with narrative references to "periodic limitation of waters for primary contact [sic] recreation, recreational boating and access for fishing" during 1999, 2003, 2004, and 2009, but without identification of location or duration. While data from LCOLA's designated sampling locations included chlorophyll, clarity (Secchi depth), dissolved oxygen, and phosphorus, neither WDNR nor EPA have developed a method for correlating the presence of these substances to the determination that plant growth is excessive.¹⁴

Finally, EPA received information purporting to demonstrate that plant growth in Musky Bay is "healthy," and "no different than many shallow, mud-bottom bays on numerous Wisconsin lakes – namely that it has a significant amount of aquatic vegetation."¹⁵ EPA is in agreement with WDNR's view that the information submitted is "qualitative at best," and does not present a

systematic assessment of the quantity or geographic extent of plant growth in the Bay.¹⁶ The commenter also brought to EPA's attention a 2008 Wisconsin Court of Appeals decision in a nuisance action brought by Wisconsin and fourteen landowners living on Musky Bay, in which the Court affirmed a lower court determination that there was insufficient information regarding the duration and extent of plant growth in Musky Bay to amount to a nuisance or to interfere with the enjoyment and recreational use of the Bay.¹⁷ The Court noted the lack of standards or

11 See comments 17, 31, 36, 44, 50, 66, 69, 77, 114, 119, 122, 130, 134, 145, 157, 162, and 173.

12 See comments 3-5, 7-14, 16, 20, 22-27, 33, 35, 38-43, 46-49, 52, 55-45, 60-64, 67, 70, 72-74, 78, 80-81, 83-84, 87-89, 91, 96-98, 102, 107-08, 111-12, 115, 125-26, 123, 136-37, 142-43, 150, 154-55, 160-61, 163-64, 166-67, 170, 175.

13 See letter from Louis Taylor, Chairman, Lac Courte Oreilles Band of Ojibwe, and Tom Burgess, LCOLA, to Tinka Hyde, Director, Water Division, EPA Region 5, May 26, 2010. Also see Letter from Alf E. Sivertson and Gary Pulford to Bob Masnado, WDNR

EPA's proposal to list and the documents the Agency relied upon are detailed in the proposal to list, 75 *Fed. Reg.* 22589 (April 29, 2010). See also letter from Tinka Hyde to Todd Ambs, WDNR, January 26, 2010, at 1 and EPA Decision Document for the Partial Approval /Partial Disapproval of Wisconsin's 2008 List with Respect to Section 303(d) of the Clean Water Act, January 26, 2010 at 21-22

14 LCOLA also submitted additional phosphorus and invasive plant species data following the close of the public comment period for the proposed listing of the Bay, but to the extent this data is outside the scope of EPA's proposed listing (which was not on the basis of either phosphorus or the presence of invasive species), it is not addressed in today's decision. LCOLA additionally submitted updated, though similar, data for 2009, during the public comment period. See letter from Louis Taylor, Chairman, Lac Courte Oreilles Band of Ojibwe, and Tom Burgess, LCOLA, to Tinka Hyde, summarizing the clarity in the bays of Lake Courte Oreilles and phosphorus levels in Musky Bay. See also e-mail from Alf Siverson to Donna Keclik April 11, 2011, with attached photos and additional phosphorus information on Musky Bay for 2009. See also Comment 176.

15 Timm P. Speerschneider, DeWitt Ross & Stevens, to Donna Keclik, June 1, 2010, at 3.

16 Email from Bob Masanado to Donna Keclik, et al., February 15, 2011.

17 The action was brought under Wisconsin's 'Right to Farm Law,' an exemption to the State's nuisance law, Wis. Stat. §823.08 (2011), and plaintiffs sought to show that phosphorus entering the bay from certain cranberry

guidance to determine a nuisance, concluding, “While the State produced abundant evidence that Musky Bay was changing – evidence the circuit court found convincing – it failed to prove the change resulted in significant interference with recreation or the bay’s ecology. We are confident that the court’s reluctance to find a nuisance was due to the inconclusive proof on the extent of the interference. . . .”¹⁸ The information considered by the Court of Appeals was very similar, and in some cases identical, to data that had been submitted both to WDNR during the development of the 2008 impaired waters list, and to EPA during its consideration of the potential impairment of Musky Bay.

Interpretation of Narrative Water Quality Standards

EPA also contacted the State to determine whether there was additional background information regarding the extent or duration of excess plant growth that the State had considered in making its 2008 decision not to list. WDNR stated that staff provided additional background, including that WDNR staff had surveyed the Bay by boat in September 2007 “to become familiar with the sampling sites and to observe conditions.” During this survey, “Algal mats were not observed,” but staff viewed “dense beds of aquatic plants: ‘the rake was very full at nearly every sample point,’” although no total rake densities were recorded.¹⁹

WDNR has not developed a specific methodology for interpreting the narrative criterion at Wis. Admin. Code NR § 102.04(1)(a)-(c) with respect to excessive plant growth, nor has the state applied the criterion to date in making an impaired waters determination based on the presence of excessive plant growth.²⁰ WDNR has developed guidance for conducting a reasonable potential analysis for purposes of analyzing whether a *point source* discharge will exceed a narrative water quality standard in Wis. Admin. Code NR § 102.04(1),²¹ however this guidance is not applicable to making decisions regarding impaired waters

EPA reviewed all of the information submitted, but ultimately was unable to determine either the geographic extent or the duration of the presence of plants in the Bay. For example, EPA could not determine the duration of the growing season in which the dense algal or vegetative growth may have impaired recreational use of the Bay. Nor could EPA determine which areas of the Bay might be subject to such excessive algal or vegetative growth that may result in the impaired recreational uses.²² In light of current WDNR guidance on the interpretation of Wis. Admin. Code NR § 102.04(1)(a)-(c), EPA is unable to determine whether there has been a “meaningful and measurable” exceedance of Wisconsin’s narrative criterion, nor does EPA have its own

operations had “fed the growth of dense, choking aquatic plants and a thick, slimy, smelly green algal mat covering much of Musky Bay,” to the extent that it created a nuisance. Wisconsin v. Zawistowski, 309 Wis.2d 233, 747 N.W.2d 527, 2008 WL 302382 (Wis. App. 2008) at ¶ 4.

¹⁸ Wisconsin v. Zawistowski at ¶ 21.

¹⁹ Email from Bob Masanado to Donna Keclik, et al., February 15, 2011.

²⁰ U.S. EPA conversation record with Robert Masanado and others at WDNR, December 16, 2010.

²¹ Memorandum from Russ Rasmussen to WPDES Permit Staff, “Determining Reasonable Potential for Narrative Standards,” December 14, 2006, at 1-2.

²² While some comments noted the duration and/or extent of plant growth in the Bay and other problems, there was no baseline data, geospatial standard, or timeframe by which the extent of growth or of problems in using the lake could be measured. See for example, comments 1-2, 6, 19, 32, 45, 51, 68, 86, 95, 101, 104, 109, 116, 144, 146, 157, 162, and 173.

methodology to assess the presence of excessive plant growth such that designated uses cannot be met.

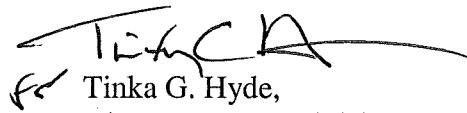
EPA has recommended that Category 3 may be used in appropriate, temporary circumstances where there is insufficient available data and/or information to make a designated use attainment determination.²³ EPA guidance supports the use of Category 3 “to provide transparency to the public that waters not on a State’s 303(d) list may not necessarily be meeting water quality standards” or to assess designated uses. Circumstances in which EPA has suggested Category 3 may be appropriate include those cases where there have been changes in nonpoint source loadings, watershed changes, or where locations of sampling stations may not reflect the character of a water body.²⁴ EPA strongly recommends that the State consider placing Musky Bay in Category 3 for the interim, and develop a plan to obtain the needed information to make an informed attainment determination.

Conclusion

Information available to EPA is insufficient to determine that Musky Bay is impaired, as defined in Wis. Admin. Code NR § 102.04 (1)(b). Based on the data and information received during the public comment period, U.S. EPA has determined that there was insufficient information to include Musky Bay in Wisconsin’s 2008, 303(d) list of impaired waters. Therefore, EPA now fully approves Wisconsin’s 2008 CWA 303(d) list. Enclosed is the fully approved 2008 CWA 303(d) list. Also enclosed is a list of comments received during EPA’s public comment of the proposed addition of Musky Bay.

Please do not hesitate to contact me if you have any questions regarding our determination.

Sincerely,


for Tinka G. Hyde,
Director, Water Division

Enclosure

cc: Robert Masnado, WDNR

23 Memorandum from Diana Regas, EPA, to Water Division Directors, “Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 306(b) and 314 of the Clean Water Act, July 29, 2005, at 53.

24 Memorandum from Suzanne Schwartz, EPA, to Water Division Directors, “Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions,” May 5, 2009, at 5-6.