

DECISION DOCUMENT FOR THE APPROVAL OF WISCONSIN'S 2014 LIST WITH RESPECT TO SECTION 303(d) OF THE CLEAN WATER ACT

The U.S. Environmental Protection Agency (EPA) has conducted a complete review of Wisconsin's 2014 Clean Water Act (CWA) Section 303(d) list and supporting documentation and information. Based upon this review, EPA has determined that Wisconsin's list of water quality limited segments (WQLSs) still requiring Total Maximum Daily Loads (TMDLs) meets the requirements of Section 303(d) of the Act and EPA's implementing regulations at 40 CFR § 130.7. Therefore, EPA hereby approves Wisconsin's 2014 Section 303(d) list.

EPA concludes that Wisconsin properly assembled and evaluated existing and readily available data and information, including data and information relating to categories of waters specified at 40 CFR § 130.7(b)(5). EPA concludes that the state submitted a methodology that outlines how the state uses readily and available data and information to make assessment and impairment decisions. EPA also concludes that Wisconsin provided a rationale for not relying on particular existing and readily available water quality related data and information as a basis for listing waters on the 303(d) list, and that Wisconsin demonstrated good cause for not listing certain WQLSs on its 2014 303(d) list.

EPA's approval of Wisconsin's 2014 303(d) list extends to water bodies identified in Table 1 in the Appendix to this Decision Document, with the exception of those waters that are within Indian Country as defined in 18 U.S.C. § 1151. EPA is taking no action to approve or disapprove the state's list with respect to those waters that are within Indian Country. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under Section 303(d) for those waters.

The statutory and regulatory requirements, and EPA's review of Wisconsin's compliance with each requirement, are described below.

Table of Contents

I. Statutory and Regulatory Background	3
A. Identification of Water Quality-Limited Segments (WQLS) for Inclusion on CWA Section 303(d) List.....	3
B. Consideration of Existing and Readily Available Water Quality-Related Data and Information	3
C. Priority Ranking.....	4
II. EPA Analysis of Wisconsin's 2014 List.....	4
A. Wisconsin's 2014 303(d) List Submittal.....	4
1. Timeline of List Submittal.....	4
2. Integrating the CWA 305(b) report and CWA 303(d) list.....	5
B. Review of Wisconsin's Consideration of Existing and Readily Available Water Quality-Related Data and Information.....	7
C. Review of Wisconsin's rationale to list or not list WQLSs on the 303(d) List	8
1. Methodology used to assess waters and develop the list.....	8
2. Data and information used to develop the list	11
3. Rationale for a decision to not use existing and readily available data.....	13
4. Demonstration of good cause for not including WQLSs on the list.....	14
D. Review of Wisconsin's Priority Ranking.....	18
E. Public Participation	19
1. Public comments on Specific Water bodies not previously discussed	19
F. Waters with no known pollutant causing the impairment	20
G. EPA Tribal Consultation	21

I. Statutory and Regulatory Background

A. Identification of Water Quality-Limited Segments (WQLS) for Inclusion on CWA Section 303(d) List

Section 303(d)(1) of the Act directs states to identify those waters within their jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard,¹ and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that states do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by state or local authority, and (3) other pollution control requirements required by state, local, or federal authority.²

B. Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or identified as threatened in the state's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA.³ In addition to these minimum categories, states are required to consider any other existing and readily available data and information. EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality-related data and information that may be existing and readily available.⁴ While states are required to evaluate all such water quality-related data and information, states may decide to rely or not rely on particular data or information in determining whether to list particular waters.

¹ 40 C.F.R. § 130.7(b)(1)(iii).

² 40 C.F.R. § 130.7(b)(1).

³ 40 C.F.R. § 130.7(b)(5).

⁴ Guidance for Water Quality-Based Decisions: The TMDL Process, EPA Office of Water, 1991, Appendix C (hereafter, "U.S. EPA's 1991 Guidance").

In addition to requiring states to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 C.F.R. §130.7(b)(6) require states to include, as part of their submissions to EPA, documentation to support decisions to rely or not rely on particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the Region.⁵

C. Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that states establish a priority ranking for listed waters. The regulations at 40 C.F.R. § 130.7(b)(4) require states to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those WQLSs targeted for TMDL development in the next two years.⁶ In prioritizing and targeting waters, states must, at a minimum, take into account the severity of the pollution and the uses of such waters.⁷ As long as these factors are taken into account, the Act provides that states establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities.⁸

II. EPA Analysis of Wisconsin's 2014 List

A. Wisconsin's 2014 303(d) List Submittal

1. Timeline of List Submittal

The 2014 303(d) list “submittal” is comprised of the state’s submittals received by EPA on April 1, 2014 and other supporting information. All of this information is summarized below and was compiled in EPA’s administrative record for this decision.

On April 1, 2014, the Wisconsin Department of Natural Resources (WDNR) submitted to EPA the state’s final draft 303(d) list, plus supporting documentation.⁹ The submittal included the following:

- E-mail dated April 2, 2014 from Aaron Larson, WDNR, including the following attachments;

⁵ 40 C.F.R. § 130.7(b)(6).

⁶ 40 C.F.R. § 130.7(b)(4).

⁷ CWA Section 303(d)(1)(A).

⁸ 57 Fed. Reg. 33040, 33045 (July 24, 1992); see also EPA's 1991 Guidance.

⁹ See e-mails from Aaron Larson, WDNR to Donna Keclik, EPA, April 1, April 2, 2014, with attachments. (EPA’s e-mail system removed the attachments from the state’s April 1, 2014 message, and a new e-mail transmitting the attachments was sent on April 2, 2014.)

- Attachment A: Wisconsin's 2014 impaired waters list including Categories 5, 4a, and delisted and deleted waters;
- Attachment B: Data Documentation Short Reports for additions, deletions, delistings, and flood-affected waters;
- Attachment C: a list of waters for which assessment decisions could not be made for phosphorus-related impairment;
- Attachment D: Public Comments and Responses;
- Attachment E: Wisconsin 2014 Consolidated Assessment & Listing Methodology (WisCALM), dated September 2013;
- Wisconsin also submitted this information to EPA on a disk as requested by EPA. The disk was received by EPA on April 21, 2014.¹⁰

On July 24, 2014, EPA received a letter from Russell Rasmussen, Administrator, Division of Water, WDNR, confirming that WDNR's complete 2014 Integrated Report submittal consists of the items listed above (Attachments A-E), together with WDNR's electronic posting of its 2014 IR database to the Water Quality Exchange (WQX) on April 8, 2014, and to WDNR's website on April 25, 2014 (<http://dnr.wi.gov/topic/SurfaceWater/IR2014.html>).¹¹

2. Integrating the CWA 305(b) report and CWA 303(d) list

EPA encourages states to submit Integrated Reports to fulfill CWA §§ 305(b) and 303(d) of the CWA. Wisconsin's CWA 305(b) assessment and 303(d) list categories are listed and described in Table 1, below. The 2014 impaired waters submittal to EPA included waters in Category 4 and Category 5, and subcategories 5A, 5B, 5C, 5P and 5W. Wisconsin submitted data and information required under §305(b) of the CWA directly to EPA through the Water Quality Exchange network.¹²

¹⁰ See e-mail chain between Donna Keclik, EPA and Aaron Larson, WDNR dated April 21, 2014.

¹¹ See Letter from Russell Rasmussen, WDNR, to Tinka Hyde, EPA, dated July 22, 2014.

¹² The Water Quality Exchange (WQX) is a new framework that makes it easier for states, tribes, and others to submit and share water quality monitoring data over the Internet. For more information see <http://www.epa.gov/storet/wqx/> last accessed January 27, 2015.

Table 1. Integrated report categories in the 2014 WisCALM¹³

IR Category	Description
Category 1	<p>All designated uses are met, no use is threatened, and the anti-degradation policy is supported.</p> <p>This category requires that all designated uses have been assessed for a given water.</p>
Category 2	<p>Available information indicates one or more designated uses are met.</p> <p>This category is applied to waters that have been assessed and considered fully meeting one or more designated uses and is usually applied in Wisconsin to waters that have been restored and removed from the impaired waters list.</p>
Category 3	<p>There is insufficient available data and/or information to assess whether a specific designated use is being met or if the anti-degradation policy is supported.</p>
<p>Category 4: Waters where a Total Maximum Daily Load (TMDL) is approved by EPA or not required.</p>	
Category 4A	<p>All TMDLs needed for attainment of water quality standards have been approved or established by EPA. This does not mean that all other designated uses have been evaluated and found to be meeting their designated use.</p>
Category 4B	<p>Required control measures are expected to achieve attainment of water quality standards in a reasonable period of time.</p>
Category 4C	<p>A waterbody where the impairment is not caused by a pollutant. Pollution is defined by EPA as the human-made or human-induced alteration of the chemical, physical, biological, and radiological integrity of water (Section 502(19)).</p>
<p>Category 5: Waters where a TMDL is required.</p>	
Category 5A	<p>Available information indicates that at least one designated use is not met or is threatened and/or the anti-degradation policy is not supported, and one or more TMDLs are still needed.</p>
Category 5B	<p>Available information indicates that atmospheric deposition of mercury has caused the impairment of the water. The water is listed for a specific advisory and no in-water source is known other than atmospheric deposition.</p>
Category 5C	<p>Available information indicates that non-attainment of water quality standards may be caused by naturally occurring or irreversible human-induced conditions.</p>
Category 5P	<p>Available information indicates that the applicable total phosphorus criteria are exceeded; however, biological indicators do not exceed 'poor' indicator thresholds (either because bioassessment shows no impairment or because bioassessment data are not available).</p>
Category 5W	<p>Available information indicates that at least one designated use is not met or is threatened and/or the anti-degradation policy is not supported, water is a low priority for TMDL development because the watershed area is addressed by WI's adaptive management program codified in Wis. Admin. Code NR § 217, or a WDNR approved watershed management plan</p>

¹³ 2014 WisCALM, September 2013, p. 59.

B. Review of Wisconsin's Consideration of Existing and Readily Available Water Quality-Related Data and Information

EPA's regulations at 40 C.F.R. § 130.7(b)(5) require that states assemble and evaluate existing and readily available data and information to develop their lists of impaired waters. EPA reviewed WDNR's description of the data and information, its effort to gather available data, and other relevant information. EPA concludes that the WDNR properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 C.F.R. § 130.7(b)(5)(i) – (iv). EPA's review of Wisconsin's consideration of data for these categories of waters is summarized below.

The 2014 submittal identifies five categories of impaired water bodies which need TMDLs: water bodies which are not meeting water quality standards (Category 5A), water bodies that are impaired due to atmospheric mercury deposition (Category 5B), water bodies that are impaired due to naturally occurring causes (Category 5C), water bodies that exceed total phosphorus (TP) criteria, but available biological data either do not exist or do not exceed 'poor' indicator thresholds (Category 5P), and waters that are impaired and Adaptive Management or alternative watershed management plans are in place to address the impairments (Category 5W).

Wisconsin added the subcategories 5P and 5W to the final 2012 303(d) list and continues to use these subcategories for the 2014 list. Waters in these categories receive a lower priority to develop TMDLs. Category 5P was created to identify waters that exceeded phosphorus water quality criteria, but for which biological data, such as chlorophyll-a or biotic indicators, either do not indicate poor conditions or are unavailable. Category 5W was created to identify waters such as Badfish Creek, which are part of an existing adaptive management program, as described in Wis. Admin. Code NR § 217, that is designed to address the identified impairments. Wisconsin also identified on its 2014 list, impaired water bodies for which the state has approved TMDLs but where the waters have not yet attained water quality standards (Category 4A).

Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point source and/or nonpoint sources. EPA's long-standing interpretation is that CWA § 303(d) applies to waters impacted by point and nonpoint sources.¹⁴ EPA reviewed the list and determined that the state properly listed waters with point and nonpoint sources causing or expected to cause impairment.

Based on its review of existing and readily available data and information, and the assessments made for the 2014 303(d) list, the state is adding 323 pollutant/impairments to Category 5 and its subcategories (Table 4 in the appendix), bringing the total number of pollutant/impairments on the 303(d) list to 1187. The new pollutant/impairments added to the 2014 list are identified in

¹⁴ In *Pronsolino v. Marcus*, the District Court for the Northern District of California held that CWA Section 303(d) authorizes U.S. EPA to identify and establish TMDLs for waters impaired by nonpoint sources. *Pronsolino et al. v. Marcus*, 91 F.Supp.2d 1337, 1347 (N.D. Ca. 2000). See also U.S. EPA's National Clarifying Guidance State and Territory Clean Water Act 303(d) Listing Decisions, Aug. 17, 1997.

Table 1 in the appendix to this decision document as 'Proposed for list' (new WQLS) or 'Addition' (new pollutant/impairment) to the list.¹⁵

After full review and consideration of the information presented by the state in its 2014 submittal, EPA is approving all the waters identified in Table 1 of the Appendix to this Decision Document as impaired waters in Wisconsin needing TMDLs (i.e. waters identified in Categories 5A, 5B, 5C, 5P, and 5W).

C. Review of Wisconsin's rationale to list or not list WQLSs on the 303(d) List

EPA's regulations at 40 C.F.R. § 130.7(b)(6) require that states provide documentation to support their decisions to list or not list waters including: a description of the methodology used to develop the list (40 C.F.R. § 130.7(b)(6)(i)), a description of data and information used to determine whether to include a WQLS on the 303(d) list (40 C.F.R. § 130.7(b)(6)(ii)), a rationale for a decision to not use any data (40 C.F.R. § 130.7(b)(6)(iii)), and a demonstration of good cause for not including a water on the list (40 C.F.R. § 130.7(b)(6)(iv)).

1. Methodology used to assess waters and develop the list

Wisconsin provided to EPA the WisCALM that was used to assess waters and identify WQLSs. While WisCALM is not part of the state's approved water quality standards, integrated reporting guidance provides that EPA should consider the methodologies that are not part of state approved standards to determine whether:

[T]he state conducted an adequate review of all existing and readily available water quality-related information, whether the factors that were used to make listing and removal decisions were reasonable, whether the process for evaluating different kinds of water-quality related data and information is sufficient, and whether the process for resolving jurisdictional disagreements is sufficient. If EPA finds that the state's methodology is inconsistent with its water quality standards, and its application has resulted in an improper section 303(d) list, EPA may disapprove the list [...]¹⁶

a. Summary of WisCALM

The WisCALM describes a three-tiered monitoring strategy that WDNR uses to gather information for CWA 305(b) and 303(d) purposes, as well as other state programs. The WisCALM describes the three Tiers of monitoring as: baseline (Tier 1), targeted (Tier 2), and evaluation (Tier 3). The WisCALM also contains core indicators to assess general waterbody

¹⁵ A new cause of impairment to a water already listed for another cause is referred to as an 'Addition,' whereas a water 'Proposed for list' is an impairment in a waterbody that has no impairments on a prior list.

¹⁶ U.S. EPA, Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Section 303(d) and 305(b) of the CWA at 29-30.

condition, and thresholds to assess attainment of designated uses. The indicators include physical, chemical, and biological parameters.

Under the current strategy, Tier 1 is used to collect baseline information and to establish trends and identify problems. Tier 1 monitoring assesses the general condition of Wisconsin's waters on a broad, statewide scale. Waters that do not meet the minimum levels of core indicators in a Tier 1 assessment are prioritized for more intensive Tier 2 monitoring. WDNR considers Tier 2 to be more site-specific monitoring that is used to validate Tier 1 results or to further evaluate the conditions and aquatic life use of a water. Data collected in Tier 2 are used to determine impairment status and the cause(s) of impairment. Tier 3 monitoring is used to determine the effectiveness of management measures and permit conditions. Regulatory monitoring of permitted entities is also part of Tier 3 monitoring.¹⁷

To determine if a water should be added to the 303(d) list, WDNR first conducts a general assessment and identifies the qualitative condition of a water as either excellent, good, fair or poor. Waters are identified as either *excellent* or *good* if they are attaining designated uses that were assessed; waters are identified as *fair* if they attain their designated uses, but management actions may be needed to prevent further decline of water quality. According to WisCALM, waters identified as *poor* do not meet designated uses and may be considered *impaired*, and may warrant placement on Wisconsin's 303(d) list in accordance with Section 303(d) of the CWA. A water is considered impaired if available data, which meet minimum requirements, indicate that a designated use and/or a numeric or narrative water quality criterion is not met.¹⁸

WDNR staff use best professional judgment to assess whether data are relevant and appropriate for use in impairment decisions. The factors that are important in these determinations include: data quality, frequency and magnitude of exceedances, weather and flow conditions during sample collection, and anthropogenic or natural influences on water quality in the watershed. WDNR provides a rationale if professional judgment results in not relying on some available data in the final impairment decision.¹⁹

Once WDNR gathers existing and readily available data for assessments, those data are summarized and compared to components of the water quality standards as described in the WisCALM. Wisconsin Statutes Chapter 281 authorized WDNR to establish water quality standards that are consistent with the CWA. Wisconsin's water quality standards include designated uses, numeric/narrative criteria, and antidegradation provisions, which are contained in Wis. Admin. Code Chapters NR §§ 102, 103, 104, 105, 207, and 217.

¹⁷ 2014 WisCALM, September 2013, pp. 4-5.

¹⁸ 2014 WisCALM, September 2013, p 10.

¹⁹ *Ibid* p. 9.

i. Designated Uses

Designated uses are goals or intended uses for surface water bodies. The designated uses in Wisconsin include: recreation, public health and welfare,²⁰ wildlife, and fish and aquatic life (FAL). Wisconsin defines subcategories for the FAL use: coldwater community, warmwater sport fish community, warmwater forage fish community, limited forage fish community, and limited aquatic life community. Designated uses, including the subcategories for FAL, are codified in Wis. Admin. Code NR §§ 102 and 104. Waters that are not referenced in code are considered FAL waters by default and are assumed to support either a coldwater community or warmwater community depending on water temperature and habitat. In some cases, coldwater fish communities referenced in the 1980 Trout Book (Wisconsin Trout Streams - Publication 6-3600(80)) may be codified by reference.

The designated uses are considered in list decisions by comparing water quality data to narrative or numeric nutrient criteria that are set to protect a designated use. If data for a particular water meet minimum data requirements and quality considerations, and exceed the appropriate water quality criteria, then Wisconsin may add the water to the 303(d) list.

ii. Numeric and Narrative Criteria

Narrative criteria describe qualitative conditions to be met in a given waterbody. A narrative water quality criterion is a statement that prohibits unacceptable conditions in or upon the water, such as floating solids, scum, or nuisance algae blooms that interfere with public access. These standards protect surface waters and aquatic biota from eutrophication, algae blooms, and turbidity, among other things. Wisconsin's narrative criteria are found in Wis. Admin. Code NR § 102.04(1).

Numeric criteria are quantitative and are expressed as a particular concentration of a substance or an acceptable range for a substance. Wis. Admin. Code NR § 102 includes surface water quality criteria for conventional parameters such as pathogens, nutrients, and temperature to protect FAL and recreation designated uses. The regulations in NR § 105 include surface water quality criteria for toxic substances (including metals and organics for example) to protect public health and welfare uses, the present and prospective use of all surface waters for public and private water supplies and the propagation of fish and aquatic life and wildlife.

iii. Antidegradation

The antidegradation policy in Wisconsin is stated in Wis. Admin. Code § NR 102.05(1):

No waters of the state shall be lowered in quality unless it has been affirmatively demonstrated to the Department that such a change is justified as a result of necessary

²⁰ WDNR notes that public health and welfare may also include the water quality criteria which are specified for public water supply and non-public water supply waters. While in its 2014 WisCALM WDNR indicated that it lacked a formal "Drinking Water" use designation, EPA and WDNR subsequently agreed that Wisconsin's "Public Health and Welfare Designated Use (PWS)" at NR § 102.04(7) applies to all surface waters including those waterbodies that are used for public water supply. The 2016 WisCALM includes an assessment methodology for waters designated for "Drinking Water."

economic and social development, provided that no new or increased effluent interferes with or becomes injurious to any assigned uses made of or presently possible in such waters.

Waters that may be subject to antidegradation are identified during Tier 3 monitoring conducted by WDNR.

b. EPA's review of WisCALM

EPA reviewed and provided comments on the draft WisCALM as part of EPA's 303(d) list review process.²¹ After review of the draft WisCALM, EPA expressed concerns about whether WDNR's monitoring efforts would support routine and systematic assessments and impairment decisions. WDNR continues to work with EPA to resolve these concerns. WDNR recently worked with EPA to complete a critical elements review of WDNR's monitoring strategy in order to align the strategy more closely with CWA requirements and to be able to assess waters in a more routine and systematic way. The 2014 WisCALM was completed while the critical elements review process was underway; however, WDNR is working to implement the results of the critical elements review process in future CWA 305(b) and 303(d) submissions to EPA.

2. Data and information used to develop the list

WDNR uses two main types of data and information in developing its list. WDNR monitoring data and information are gathered in addition to data submitted by the public, other agencies, and universities. Available water quality information used in water quality assessments are summarized in impaired waters short reports for each WQLS that was assessed. These reports were available online,²² and were also provided to EPA with the 2014 submittal.²³

a. WDNR monitoring data

WDNR created and manages two databases that house WDNR monitoring data and other information to be used for assessment and impairment decisions. The Surface Water Integrated Monitoring System (SWIMS) database contains chemical (water, sediment), physical (flow), and biological (macroinvertebrate, aquatic invasive) data collected for CWA programs. Data in SWIMS are shared through the federal [Water Quality Exchange Network](#), which is an online federal repository for all states' water monitoring data.

The second WDNR database is the Water Assessment, Tracking and Electronic Reporting System (WATERS) database, which was implemented in 2004 and contains:

²¹ Letter from Tinka Hyde, EPA, to Ken Johnson, WDNR, July 31, 2013.

²² WDNR Impaired Water Search website, <http://dnr.wi.gov/water/impairedSearch.aspx>. Last accessed December 23, 2014.

²³ See Attachment B Short Reports included in the e-mail dated April 2, 2014 from Aaron Larson, WDNR, to Donna Keclik, EPA.

- Program Objectives, Goals, Performance Measures, and Success Stories;
- CWA Use Designations and Classifications (NR102, NR104);
- Outstanding and Exceptional Resource Waters Designations (NR102);
- CWA assessment data, including decisions regarding a waterbody meeting its attainable use or whether or not the waterbody is considered "impaired";
- Impaired waters tracking information, including the methodology used for listing, the status of the TMDL development, and restoration implementation work;
- Fisheries Trout Classifications (Administrative Code, NR 1.02(7)); and
- Watershed planning recommendations, decisions, and related documents.

The WATERS and SWIMS databases are closely integrated. Within WATERS, summary values and specific information behind the assessment decisions are linked directly to the monitored waters.²⁴ Data to be used in assessment and impairment decisions are pulled from the SWIMS and WATERS databases, according to the period of record and minimum data requirements that are outlined in WisCALM. Once available data have been gathered, they are summarized and compared to the appropriate thresholds and criteria outlined in WisCALM.

b. Public data

In addition to WDNR's monitoring data described above, public data are also gathered and considered for use in assessments. WDNR held a 2-month data solicitation period from January 3, 2013, to March 1, 2013, to gather data from the public, academic institutions, and other relevant agencies. WDNR notified the public of the data solicitation period through a press release dated January 3, 2013, and an e-mail message sent to approximately 600 subscribers to WDNR's GovDelivery listserv for impaired waters.

WDNR requires that data used in assessment and list decisions meet quality control requirements that are specified in WisCALM and made available on WDNR's website during the data solicitation period.²⁵ If WDNR deems that impairment is likely but the quality assurance/control procedures are not adequate, staff will consider collecting additional data to determine whether to list the waterbody in the future.

WDNR received data submittals from these six entities during the data solicitation period:

- Alliance for the Great Lakes
- Fond du Lac County Health Department
- Friends of Hika Bay (hika-bay.org)
- Clark County Land Conservation Department
- Lakeshore Natural Resource Partnership (LNRP)
- Wood County Health Department

²⁴ 2014 WisCALM, September 2013, p. 7.

²⁵ *Ibid*, pp. 8-9.

WDNR stated that it reviewed all the data submitted during the data solicitation and used the data submitted by Fond du Lac County Health Department, Clark County Land Conservation Department, and Wood County Health Department.²⁶

EPA reviewed the information described above that was submitted by the state and concluded that WDNR considered all readily available information for use in 305(b) assessment and 303(d) list decisions. Information included: (1) the public comments received and responses to comments, (2) a description and copies of the data submitted by the public, (3) impaired waters short reports which identify WDNR monitoring data and public data used in assessments, and (4) a rationale for why certain data were not used to make impairment decisions. EPA concludes that WDNR's data solicitation and work with specific agencies to gather information is consistent with what EPA considers active solicitation in its integrated reporting guidance.²⁷

3. Rationale for a decision to not use existing and readily available data

WDNR reviewed the data submitted by the public to determine if data quality requirements were met. Generally, WDNR excluded data where it had concerns about data quality. EPA's 2006 IR guidance provides that data quality considerations are important in determining which data to use in assessments.²⁸ WDNR reviewed the following data sets received during the solicitation process but did not use these data in the development of the list for the following reasons:

- Data submitted by Alliance for the Great Lakes: The group used Petrifilm, related to the Adopt-a-Beach program run by the Alliance for the Great Lakes, which WDNR does not consider comparable to analytical procedures acceptable for use in making listing decisions. Therefore, the state did not include these data in assessing against applicable E. coli criteria for Great Lakes beaches.²⁹
- Lakeshore Natural Resource Partnership (LNRP) and the Friends of Hike Bay Impaired water quality data/Citizen monitoring: The data submitted for dissolved oxygen (DO) were evaluated but did not meet minimum data requirements. The state did not use the data submitted for Total Dissolved Phosphorus (TDP) or E. coli for streams, due to the lack of a methodology to make a listing determination. TP data were not used because the laboratory performing the analysis of the data did not use an approved method.³⁰

The 2014 WisCALM guidance discusses data-representativeness to ensure that the data are collected to capture a range of conditions in a waterbody. Where data cover only a period of extreme conditions, WDNR may use best professional judgment to determine whether additional information suggests the water should be listed for impairment, or whether additional

²⁶ See-email from Aaron Larson, WDNR to Donna Keclik, EPA December 11, 2014.

²⁷ EPA 2006 IR guidance, pp. 31.

²⁸ EPA 2006 IR guidance, pp. 32-33.

²⁹ See-email from Aaron Larson, WDNR to Donna Keclik, EPA January 8, 2015.

³⁰ *Ibid.*

information should be collected to make an impairment decision.³¹ The EPA's integrated reporting guidance cautions against excluding outliers, however the data-representativeness section in WisCALM does not indicate that data would be excluded for use, but rather that where data exist only from a period of extreme conditions, additional data may be collected during non-extreme conditions before an impairment decision is made. In 2012 EPA raised concerns regarding six waterbodies that were not listed for total phosphorus. Wisconsin placed these waters in category 3 because the data were collected during extreme weather conditions, but indicated that it would collect additional data to make listing determinations. As a result of this additional monitoring, Wisconsin proposed to list those six water bodies on the 2014 303(d) list. EPA concludes that WDNR is not excluding data for consideration in these instances and that, in the six instances where data for prior listing cycles were taken solely during extreme conditions, WDNR followed up to conduct additional monitoring and was able to make listing determinations of impairment.

WDNR does not use evaluated information³² as a sole basis for identifying waters as impaired under Section 303(d). Generally, such evaluations are comprised of information about land use practices, volunteer data that does not meet the specifications of the Wisconsin Data Quality Management Plan, and visual observations and anecdotal reports from local individuals or WDNR staff. WDNR considers such information useful for screening waters and for identifying where a problem may exist, but WDNR believes that monitoring should be completed to evaluate the status of the water.

EPA reviewed instances where WDNR excluded data for use in listing decisions and confirmed that exclusion of data was due to issues related to data quality, insufficient data quantity, and the lack of a methodology. WDNR's exclusion of data based on concerns related to data quality is consistent with EPA integrated report guidance.³³ EPA has also determined that insufficient data quantity and the need for a listing methodology are sufficient rationales for not using submitted data. The remaining information submitted during the public solicitation period was used to make assessment and impairment decisions.³⁴ EPA concludes that where data were excluded for use in listing decisions, WDNR supported its decisions based on a rationale consistent with EPA guidance.

4. Demonstration of good cause for not including WQLSs on the list

A state may remove a waterbody from the 303(d) list for good cause. Good cause includes, but is not limited to, the availability of more recent or accurate data, or more sophisticated water quality monitoring, flaws in the original analysis, or changes in conditions (40 C.F.R. §

³¹ WisCALM, dated September 2013, p. 8.

³² WisCALM, dated September 2013, p. 9. WisCALM defines "evaluated" information as information that is not considered representative of current conditions or was not collected according to WDNR's Quality Management Plan.

³³ EPA 2006 IR guidance Section V, H.2, pp. 31-36.

³⁴ See e-mail message from Aaron Larson, WDNR to Donna Keckli, EPA, dated December January 8, 2015.

130.7(b)(6)(iv)). EPA's "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the CWA," elaborates on what constitutes good cause for delisting.³⁵ Additionally, according to EPA guidance, once a pollutant/impairment combination for a water has an approved TMDL, that pollutant/impairment combination can be placed in Category 4A. Category 4A includes waters that are still impaired but have an approved TMDL addressing the pollutant causing the impairment in question.

Waters removed from the 303(d) list are either "delisted" or "deleted." Waters are *delisted* where all pollutants/impairments for the waterbody have been resolved. Waters are *deleted* where a pollutant/impairment combination can be removed but the waterbody will remain on the list for other pollutant/impairment combinations. A pollutant/impairment combination refers to the pollutant causing the associated impairment, such as TP causing excess algae.³⁶

EPA has reviewed the information provided by WDNR in its 2014 submittal and agrees that the impairments that were proposed to be delisted and deleted were appropriately delisted or deleted from Wisconsin's 2012 303(d) list and not included on the Wisconsin's 2014 list. Wisconsin proposed to remove waters where additional data and/or information supported that:

- a water now meets water quality standards;
- the historical reasons for listing were inaccurate;
- a TMDL has been approved by EPA that addresses the listed cause of impairment(s).³⁷

a. Delisted WQLSs

Wisconsin proposed to delist 15 waters from its 2012 303(d) list. Four beaches were delisted for *E. coli* impairment of recreational use; seven lakes, one impoundment, and two river segments were delisted for mercury impairment of contaminated fish tissue; and one river segment for elevated water temperature. The rationale to delist these waters was supported by additional data and information submitted to EPA by WDNR. EPA's review of that information is included below and summarized in Table 3 of the Appendix to this decision.

Great Lakes and Inland Beaches: Wisconsin proposed to delist four beaches for *E. coli* impairments of Recreational Use from its 303(d) list. Beach assessment protocols were updated in the 2012 WisCALM and used to assess beach segments with available data in the 2014 list cycle.³⁸ To assess beaches, WDNR aggregates data by months in the "beach season" (defined as May 1 through September 30) over the past five years. WDNR includes a beach on its 303(d) list if one or more of the monthly aggregated geometric means exceeds the federal *E. coli* criterion of 126 cfu/100ml. If less than 5 samples are available over a given month in the 5 year period the dataset is considered to be insufficient to make a listing determination for that month.³⁹

³⁵ EPA 2006 IR guidance pp 58-59.

³⁶ WDNR, 2012 Water Quality Report to Congress, Attachment B, dated April 2014.

³⁷ 2014 WisCALM, September 2013, pp. 56-57.

³⁸ *Ibid.* pp. 36-37.

³⁹ *Ibid.* pp. 36-37.

EPA agrees that the state's approach provides a reasonable methodology for assessing beaches.

Waters delisted for contaminated Fish Tissue due to Mercury: Table 3 in the appendix of this decision document identifies the one impoundment, seven lakes and the one river reach being delisted for contaminated fish tissue due to mercury. Two of the lakes; Ike Walton Lake, and Broken Bow Lake, were removed because these waters are in Indian Country.

The remaining waters delisted due to contaminated fish tissue due to mercury are now attaining standards. WDNR states a waterbody will be proposed for removal from the 303(d) list when the most recent advisory update indicates that there is no longer a waterbody-specific advisory and only the general statewide advisory is in place. The advisory waters are defined in appendix B of the 2014 WisCalm as impaired for contaminated fish tissue for mercury for specific contaminant data for game and panfish species.⁴⁰

Waters delisted for Suspended Solids relating to elevated water temperature impairment: Argus School Branch (WBIC 896800; Waters ID 18542) has been delisted for suspended solids related to elevated water temperature. This water was assessed during the 2014 listing cycle and is recommended for delisting based on habitat survey results indicating that no further management action need be taken.⁴¹

b. Deleted WQLSs

WDNR defines 'deletion' or 'deleted WQLS' as removal of a pollutant/impairment combination for a WQLS where the waterbody will remain on the list due to other pollutants/impairments.⁴² Wisconsin also recognizes deleted segments as those that are impaired and in category 4 of the list.

Four WQLSs had pollutants/impairments deleted from the 2014 303(d) list. The decision to delete these pollutants/impairments was supported by additional data and information submitted by WDNR to EPA. EPA's review of that information is included below and summarized in Table 4 of the Appendix to this decision.

Crossman Creek (WBIC 1286700; Waters ID 13019): Crossman Creek was listed in 1998 for degraded habitat and turbidity due to suspended solid. WDNR proposed that Crossman Creek, from river mile (RM) 0 to RM 6.43, be deleted for degraded habitat and turbidity impairment due to Sediment/Total Suspended Solids (TSS) pollutant related to the fish and aquatic life use. The water was last monitored in 2013. This water was assessed during the 2014 listing cycle and based on the regional biologist's habitat assessment of biological data, WDNR concluded that this water should be delisted for TSS. While total phosphorus (TP) sampling data exceeded 2014 WisCALM listing criteria for the fish and aquatic life use, the available biological data did not

⁴⁰ See 2014 WisCalm p. 50.

⁴¹ See Appendix B 2014 303(d) Impaired Waters Short Reports of Wisconsin 2014 IR.

⁴² WDNR's 2014 Water Quality Report to Congress, Appendix B3, dated April 25, 2014.

indicate impairment (the biology of the waterbody is meeting applicable indices). As a result, this water remains on the list for TP and the state has placed this waterbody in category 5P.⁴³

Hallie Lake (WBIC 2150200; Waters ID 18837): Hallie Lake is a 79-acre oxbow lake formed by the Chippewa River, which the state has identified as a reservoir. The lake is managed for both warm and cold water fisheries.⁴⁴ The lake has been on the impaired waters list since 1998, when it was listed for sediment/TSS and TP relating to degraded habit, eutrophication, and elevated pH impairment. This water was reassessed during the 2014 listing cycle using data through 2013, which was the last monitoring event. The state determined that the lake did not exceed the thresholds for TP for either the recreation or FAL use.⁴⁵ Hallie Lake remains on the impaired waters list for sediment/TSS related to degraded habitat impairment.

Amnicon Lake (WBIC 2858100; Waters ID 296831): Amnicon Lake is a 390-acre lake classified as a deep lowland lake. The lake is managed for fishing and swimming. Amnicon Lake was first listed in 1998 and has been listed for mercury in fish tissue, TP, DO and sedimentation. In 2012 Amnicon Lake was listed for TP, and sedimentation with related impairment of DO and elevated temperature, degraded habitat. The lake was reassessed during the 2014 listing cycle using current data, and the state determined that it did not exceed TP or DO thresholds for either recreation or FAL uses.⁴⁶ Amnicon Lake remains on the list of impaired waters (category 5A) for sediment/TSS, with the related impairments of elevated water temperature and degraded habitat.

Spring Brook Creek (WBIC 1440800; Waters ID 18345): Spring Brook Creek is a 19 mile long stream, which flows southwesterly through Antigo before joining the Eau Claire River in northeast Marathon County. The stream is intermittent in the headwaters and spring-fed in the Antigo Flats area. There are no perennial feeder streams associated with Spring Brook. The state has divided Spring Brook Creek into three segments. Segment 3 is a 1.97 mile section from RM 12.7 to RM 14. 96, and is the only segment having a pollutant being deleted. This segment was originally listed in 1998 for chronic aquatic toxicity and low DO impairments related to unspecified metals and TP pollutants. The segment was assessed using the 2014 WisCALM methodology and data from 2013, and did not exceed thresholds for TP.⁴⁷ This segment remains on the list for Chronic Aquatic Toxicity impairment related to metals. WDNR has also proposed listing this segment for unknown pollutants related to biological community impairment.

EPA concludes that Wisconsin demonstrated good cause to not include the above waters on its 2014 303(d) list. EPA also concludes that the state provided a rationale for not relying on particular existing and readily available water quality-related data and information as a basis for

⁴³ See Appendix B of the IR 2014 303(d) Impaired Waters Short Reports

⁴⁴ *Ibid*; also see <http://dnr.wi.gov/water/impairedDetail.aspx?key=18837> last accessed March 27, 2015

⁴⁵ *Ibid*; also see <http://dnr.wi.gov/water/impairedDetail.aspx?key=18837> last accessed January 20, 2015.

⁴⁶ *Ibid*; also see <http://dnr.wi.gov/water/impairedDetail.aspx?key=296831> last accessed January 20, 2015.

⁴⁷ *Ibid*; also see <http://dnr.wi.gov/water/waterDetail.aspx?key=18345> last accessed January 20, 2015.

listing waters, and where necessary, the state followed up to acquire additional data in order to make impairment decisions.

D. Review of Wisconsin's Priority Ranking

Once readily available data have been gathered and assessed, the WQLSs that are included on the 303(d) list must be assigned a priority ranking for TMDL development. Wisconsin ranks WQLSs as either "high," "medium" or "low" priority. A ranking of "high" indicates a TMDL is currently being developed to address the listed impairment, "medium" indicates information is currently being collected for TMDL development, and a ranking of "low" indicates a TMDL will be completed sometime in the future. EPA IR guidance suggests that TMDLs be completed for WQLSs within 13 years from the time they are included on the list.

WDNR considered the following factors to assign priority ranking: the availability of data; other activities in the area; likelihood a waterbody will respond to management action; severity of pollution/impairment; and public health concerns.

The state re-evaluates priority ranking for TMDL development in each listing cycle and may make changes to the rankings according to the following rationale submitted to EPA in prior 303(d) list submissions:⁴⁸

1. WDNR re-evaluates its prioritization schedule for each listing cycle by making sure the proposed schedule is still appropriate considering current available resources for monitoring and modeling to support TMDL development.

2. The state considers recent monitoring data and status of implementation of best management practices. If recent data are available that indicate a possible upward trend in water quality, although not attainment of water quality standards, and if BMP implementation is underway, WDNR may delay TMDL development to allow a reasonable time period to determine whether BMPs are successful.

EPA finds that the state's rationale for changes to its prioritization order for TMDL development is reasonable. EPA considers it reasonable for the state to re-evaluate the prioritization of TMDL development for an impaired water. Additionally, EPA agrees that there are non-TMDL mechanisms which can be used to attain water quality standards. If these mechanisms are in process, yet have not been fully implemented or have not had sufficient time to impact water quality, it is reasonable for the state to change the TMDL prioritization to allow time for full implementation and evaluation of impacts of implementation.

⁴⁸ E-mail from Nicole Richmond, WDNR, to Julianne Socha, EPA, September 12, 2008.

E. Public Participation

EPA regulations require states to involve the public and other stakeholders in the development of the 303(d) list as part of their Continuing Planning Process (CPP).⁴⁹ WDNR provided notice to the public on its initial draft 2014 303(d) list from February 4, 2014 to March 6, 2014 and received comments from a total of 26 individuals and organizations, including EPA. WDNR also hosted a webinar regarding the 2014 draft list on February 12, 2014. Wisconsin provided to EPA a copy of comments received and a summary of Wisconsin's response, which are included in the administrative record to this decision.⁵⁰ EPA reviewed WDNR's response to those comments and concludes that WDNR acknowledged and responded to public comments related to the list.

1. Public comments on Specific Water bodies not previously discussed

a. Waters Added after draft public noticed list based on public comments

Decatur Lake (WIBIC 879400, Waters ID 4701075) A commenter was concerned that Decatur Lake was not listed as impaired because a 45.15 mile segment of the Sugar River (AU ID 13651, WBIC 875300), which intersects Decatur Lake near Brodhead, was listed for TP. The commenter noted that phosphorus sampling at one lake location (station ID 10039881) in 2013 showed TP levels ranging from 0.0899 ppm (August) to 0.1460 ppm (June). WDNR reviewed this information and "determined that Decatur Lake should be classified as an 'impounded flowing water' to which the phosphorus criteria of the inlet stream or river applies (citation omitted)." This is a change from the draft list that was published for public notice and comment.

b. Waters/impairment identified on the draft public notice list but not included on the final submitted impaired waters list

Robinson Hillside Beach (Geneva Lake Beaches)(WIBIC 758300, Waters ID 1491027) Robinson Hillside Beach is a beach located on Lake Geneva. This beach was listed for E. coli impairment of the Recreational Use in 2008. The commenter provided information showing that the location of the beach had been misidentified in 2010. WDNR reviewed the information, and concluded that the beach should not have been listed. This water was moved to category 2.

Goose Lake (WBIC 103600): Goose Lake was classified as a "Natural Community-Deep Seepage" and WDNR proposed to list it for TP impairment of FAL use. This was the first time Goose Lake was proposed to be placed in Category 5. The commenter provided information on phosphorus, chlorophyll, and Secchi depth. The state reviewed the data and other information used for listing, and determined that Goose Lake should have been classified as a Shallow

⁴⁹ 40 C.F.R. 130.7(a).

⁵⁰ 2014 Water Quality Report to Congress, Attachment E, dated April 25 2014. Addendum to the 2014 list, September 2013, Attachment E. E-mail message from Aaron Larson, WDNR, to Marcy Kamerath, EPA, dated February 13, 2014.

Seepage Lake, and that data showed that TP did not exceed the applicable impairment threshold. Accordingly, the lake was removed from the list.

South Turtle Lake (WBIC 2310200 Waters ID15009): This was the first time South Turtle Lake was proposed to be listed. Among other comments concerning South Turtle Lake the commenter questioned the “Two-story Fishery” classification based on a measured maximum depth of 28 feet and observations of the fishery. The commenter requested that the state review the data and consider South Turtle Lake to be a “Lowland Drainage Lake” having different applicable phosphorus levels. The state reviewed the data and determined that South Turtle Lake should be classified as a “Lowland Drainage Lake” and that available information shows that the lake does not exceed the listing threshold for this waterbody type. The state removed the listing from the final submittal of the impaired waters list and South Turtle Lake remains in Category 2.

c. Waters identified with physical changes to the list during public comment

Root River (WBIC 2900, Waters ID 425682): The commenter requested that WDNR reconsider the delineation for segment 2 of the river (AU# 425682). The commenter was concerned regarding the definition of this segment based on stream flow and its relationship to the segment length. The state reviewed its data for the stream and determined that the downstream boundary of the assessment unit should be moved upstream from the 13th Street crossing near the Racine/Milwaukee County line to the confluence with the Root River canal. The segment now begins at RM 25.8 instead of RM 20.48, with a reduction of 5.32 miles. The new segment length now extends from RM 25.8 to RM 43.9. The water remains on the list for chlorides, sediment/TSS, and TP with related impairments of acute aquatic toxicity, low DO, and degraded biological communities.

On the basis of its review of the available information, EPA finds WDNR’s public participation process to be adequate.

F. Waters with no known pollutant causing the impairment

Under Section 303(d) of the CWA, states are required to develop TMDLs for pollutants causing impairments of listed waters. Since the Section 303(d) list is a list of waters “still requiring TMDLs,” states are not required to include waters where they determine that no pollutant is causing the impairment.

WDNR has included some WQLSs on its 303(d) list beyond those that are required by federal regulations, e.g., waters where the state has shown pollution, rather than pollutants, is the cause of the impairment (e.g., WQLSs listed as impaired by Degraded Habitat). The state may consider scheduling these waters for monitoring to confirm that there continues to be no pollutant-caused impairment and to support appropriate water quality management actions to address the causes of the non-pollutant impairment. The state has the discretion under Section 303(d) of the Act, which charges states with the primary responsibility to identify WQLSs for

TMDL development, and Section 510 of the Act, which authorizes states to adopt more stringent pollution controls, to list waters for reasons beyond those required by current EPA regulations. EPA's regulations do not compel EPA to disapprove the state's list because of the inclusion of such waters. EPA guidance also recognizes that states may take a conservative, environmentally protective approach in identifying waters on their Section 303(d) lists.⁵¹

G. EPA Tribal Consultation

Under its tribal consultation process, EPA consults with federally-recognized tribes on a government-to-government basis in instances when EPA decisions may impact tribal interests. EPA contacted federally-recognized tribes within the State of Wisconsin to provide the opportunity to consult with EPA on its decision on the final Wisconsin 2014 303(d) list. On April 15, 2014, EPA sent invitations for consultation with tribes to the most senior tribal official, and copies were sent to tribal staff.⁵² EPA received no requests for consultation.

⁵¹ EPA National Clarifying Guidance for 1998 Section 303(d) Lists, August 27, 1997.

⁵² Letter from Tinka G. Hyde, EPA, to Tribal chairpersons of the 11 tribes in Wisconsin, dated April 15, 2014.