Masnado

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

SEP 29 2006

REPLY TO THE ATTENTION OF:
WW-16J

Todd Ambs, Administrator
Division of Water
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, Wisconsin 53707-7921

Re: Approval of 2006 Section 303(d) List

Dear Mr. Ambs,

The United States Environmental Protection Agency (U.S. EPA) has conducted a complete review of Wisconsin's 2006 Section 303(d) list and supporting documentation and information. Based upon this review, U.S. EPA has determined that Wisconsin's 2006 list of water quality limited segments still requiring Total Maximum Daily Load calculations meets the requirements of Section 303(d) of the Clean Water Act and U.S. EPA's implementing regulations. Therefore, U.S. EPA hereby approves Wisconsin's Section 303(d) list. The statutory and regulatory requirements, and U.S. EPA's review of Wisconsin's compliance with each requirement, are described in the enclosed decision document.

U.S. EPA's approval of Wisconsin's Section 303(d) list extends to all water bodies on the list with the exception of those waters that are within Indian Country, as defined in 18 U.S.C. Section 1151. U.S. EPA is taking no action to approve or disapprove the State's list with respect to those waters at this time. U.S. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under Section 303(d) for those waters.

We appreciate your hard work in this area and your timely submittal of the list as required. If you have any questions please contact Mr. Kevin Pierard, Chief, Watersheds and Wetlands Branch, at 312-886-4448.

Sincerely yours,

for Jo Lynn Traub, Director
Water Division

Enclosure

cc: Carolyn Betz, WDNR w/enclosure
Robert Masnado, WDNR

DECISION DOCUMENT APPROVING WISCONSIN'S 2006 LIST WITH RESPECT TO SECTION 303(d) OF THE CLEAN WATER ACT

EPA has conducted a complete review of Wisconsin's 2006 Section 303(d) list and supporting documentation and information and, based on this review, EPA has determined that Wisconsin's list of water quality limited segments (WQLSs) still requiring TMDLs meets the requirements of Section 303(d) of the Clean Water Act ("CWA" or "the Act") and EPA's implementing regulations. Therefore, EPA hereby APPROVES Wisconsin's Section 303(d) list. Specifically, EPA approves the State's decision to list the waters that are included on its 2006 Section 303(d) list, as submitted on September 27, 2006.1 The statutory and regulatory requirements, and EPA's review of Wisconsin's compliance with each requirement, are described in detail below.

Statutory and Regulatory Background

Identification of WQLSs for Inclusion on Section 303(d) List

Section 303(d)(1) of the Act directs States to identify those waters within its 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, 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]

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 existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting

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1 Wisconsin submitted its final 303(d) list to U.S. EPA on September 13, 2006. However, some errors were subsequently corrected and Warm Water Beach was added to a Revised Final 303(d) list provided to U.S. EPA on September 26, 2006, and one more typo was corrected and the list resubmitted on Sept. 27, 2006.

2 40 CFR § 130.7(b)(1)

designated uses, or 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 data and information that is existing and readily available. 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 existing and readily available 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.

In addition to requiring States to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR §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].

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 CFR §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 to be made 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,

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[3] 40 CFR § 130.7(b)(5).

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

[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)

and State or national policies and priorities[8].

II. Analysis of Wisconsin's Submission

A. Listing Methodology

On September 13, 2006 EPA received electronically Wisconsin's submittal letter and 2006 303(d) list, a summary of changes from the 2004 list, a list of waters added, a list of waters de-listed, a list of all agencies contacted for data, public notice information, copies of e-mailed public comments (letters received during the public comment period were faxed on September 14, 2006), and Wisconsin's response to comments on the draft 303(d) list. For the 2006 listing cycle Wisconsin chose to submit its CWA Section 303(d) list separate from the 305(b) report. The State is in the process of developing a new data base and assessment methodology which will allow them to submit an Integrated Report in 2008. The following discussion sets out EPA's understanding of Wisconsin's methodology used for the 2006 303(d) list based on the review of the information provided by the Wisconsin Department of Natural Resources ("WDNR") and conference calls with WDNR.

Wisconsin places waters not meeting water quality standards on the impaired waters list. A water quality standard is not met, if either of the following occurs:

1. A numeric or narrative criterion listed in Chapters NR 102, 103 and 105, Wis. Adm. Code is exceeded, or

2. The codified designated use of a lake or stream as identified in Ch. NR 102 or 104, of Wis. Adm. Code, is not being achieved.

The State reviewed available data to determine if waters were meeting narrative or numeric standards. It also reviewed the codified designated use for streams and lakes, and if a water was not meeting its codified designated use based on monitored data, the water was listed.

The codified designated use of a waterbody is a classification that is formally and legally recognized in NR 102 and NR 104, Wis. Adm. Code, and is used to determine water quality criteria and effluent limits. For the Fish & Aquatic Life designated use, Wisconsin recognizes five sub-categories: Coldwater Community, Warmwater Sport Fish Community, Warmwater Forage Fish community, Limited Forage Fish Community, and Limited Aquatic Life Community. NR 102.04(3), Wis. Adm. Code. The standards defining coldwater communities, WWSF, and WWFF meet the requirements of CWA Section 101(a)(2), 33 U.S.C. § 1251(a)(2), that waters provide for the protection and propagation of fish, shellfish, and wildlife, and for recreation in and on the water. See NR 102.04(3). A water has a codified designated use for

[8] 57 FR 33040, 33045 (July 24, 1992), and EPA's 1991 Guidance.

cold water community if, under NR 102, it is specifically identified as a coldwater fishery in the 1980 Trout Streams Book Wisconsin publication.

Where there is no codified designated use for a water, the default codified use is determined by looking at the waterbody specific temperature and habitat limitation. Wisconsin's definition of default waters is based on state guidance which, among other things, identifies three tiers for cold water use: Coldwater Class I, Coldwater Class II, and Coldwater Class III. In 2004, if a water defaulted to a Coldwater III it was considered to be equivalent to a cold water designated use. For 2006, WDNR refined its methodology concerning Class III trout streams. Class III trout streams are stocked with cold water fish each year, but the coldwater fish die off and do not reproduce in these streams. For the 2006 methodology, if the default water meets the characteristics of a Class III trout stream, then it is considered the equivalent of a warmwater sport fish water. However, coldwater Class III waters that are identified in the 1980 Trout Stream Book remain as cold water stream designated use. Wisconsin is in the process of changing their code to include a new 2002 trout stream book identified as WDNR publication FH-806-202 or web site at: http://www.dnr.state.wi.us/ rg/water/fhp/fish/pubs/troutstreams.pdf. [9] A water that is not identified in the 1980 Trout Stream Book and is now identified as a cold water III in the 2002 trout stream book is considered to be meeting the codified use if it is meeting the WWSF criteria.[10]

WDNR published a guidance in December 2004 on designating uses of a water that reflect the most current understanding of the stream/river ecology. The guidance, entitled *Guidelines for Designating Fish and Aquatic Life Uses for Wisconsin Surface Waters* (WDNR December 2004, PUBL-WT-807-04), is used by the WDNR biologists and provides a framework for recommending which fish and aquatic life category or sub-category a particular waterbody or segment best fits.

WDNR biologists conduct field studies to document the conditions of a given waterbody. These field studies include, but are not limited to the collection of community data for fish, macro-invertebrates, plants, algae, and bacteria. Data is also collected on water chemistry, flow, temperature, habitat conditions, and surrounding land use. With this data the WDNR can document whether or not a use is being met by comparing the existing use to the codified use. If the existing use is not supporting the codified use the waterbody is recommended for listing on the 303(d) list.

Threatened Waters

EPA's *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to*

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[9] See reference in state methodology.

[10] See phone memo discussion for September 21, 2006 and e-mail from Robert Masnado, WDNR to Donna Keclik USEPA September 22, 2006.

Sections 303(d) and 305(b) of the Clean Water Act explained that states should list threatened waters which are expected to exceed WQS by the next listing cycle if the analysis demonstrates a declining trend in a specific water quality criterion and the projected trend will result in a failure to meet a criterion by next listing cycle. For past 303d lists, WDNR reviewed the waters listed in the Basin Reports which indicated having a declining trend to determine whether the waters should be listed. The declining trend in the basin reports were identified because of known changes in the watershed that have the potential to increase pollutants of the water. Some of the noted changes may be temporary while others may be permanent. Since no new Basin Reports have been published since the last list cycle, for the 2006 list WDNR reviewed its available data for declining trends in waterbodies.

Wisconsin requires a minimum of two data sets of site specific data to make a determination if there is a declining trend. Waters without two data sets were not considered for listing. Waters with two monitored data sets were evaluated and reviewed including using best professional judgment of the biologist to determine if the water quality standards will be exceeded prior to the next listing cycle. For this listing cycle, WDNR did not find data showing any waters with a declining trend which indicated the water would be impaired by the next listing cycle. Therefore, in 2006 no threatened waters were added to the 303(d) list.

Waters Impaired by Atmospheric Deposition

Wisconsin includes waters on its 303(d) list with fish consumption advisories due to atmospheric deposition of mercury. To a very limited extent, Wisconsin also includes waters with advisories due to PCBs. In 1998, Wisconsin did not have a methodology for listing fish consumption waters; it listed all 241 waters from the state mercury fish consumption advisory booklet. In 2002, Wisconsin developed a new general statewide fish consumption advisory which covers all waters in the state and put the advisory on its 303(d)list; thus, in effect, incorporating all waters by reference. The statewide fish consumption advisory does not specifically identify waters. In 2004, Wisconsin added 92 waters specifically for mercury using site specific fish tissue data. Wisconsin did not include the general statewide fish consumption advisory on its 2004 list; so, in 2004, the total number of waters listed for mercury was the 241 waters carried over from 1998 list and the 92 waters added.[11] For 2006, Wisconsin collected new fish tissue data and based on that data is delisting 25 waters (See section F of this Decision Document for the list of waters).

Waters with the following fish consumption advisory ("FCA") categories for game and pan fish are to be included on the 303(d) list:

[11] In 2004 Wisconsin began placing waters impaired by mercury deposition in Category 5B. EPA considers Wisconsin's 5A and 5B categories together to be the 303(d) list.

For mercury:

A consumption advice of one meal per month or less frequent of panfish (0.22 to 1 ppm) or is "do not eat" for gamefish (>1ppm)

Mercury Concentration in Fish (ppm)

Consumptive Advice -- Sensitive Group	Unlimited	1 meal/week	1 meal/month (panfish)	Do not eat (gamefish)
Range	< 0.05	0.05 – 0.22	0.22 – 1.0	>1.0

For PCBs:

A consumption advice of one meal per month or less frequent (0.21 ppm to 2 ppm), or do not eat (>2 ppm)

Total PCB Concentration in Fish (ppm)

Consumptive Advice	Unlimited	1 meal/week	1 meal/ month	1 meal/ 2 months	Do not eat
Range	< 0.05	0.06 – 0.2	0.21 – 1.0	1.1 – 1.9	>2

For Dioxin and Furan Congeners:

A consumption advice of Do Not Eat (>10ppt)

Dioxin and Furan Congeners (ppt)

Consumptive Advice	No advisory	Do Not Eat
Range	< 10	> 10

In essence, any FCA water with site specific data was listed if the water had a more stringent eating limit than one meal per week. Some of the previously listed 241 waters from the 1998 would not meet this criterion; however, as noted above Wisconsin left all FCA waters listed in 1998 on the 2002 list, and carried these waters on to the 2004 list. For the 2006 list as new data is collected WDNR is identifying those waters that do and do not exceed this criterion.

Waters Impaired by Contaminated Sediment

Wisconsin listed waters with sediment deposits that are known to have toxic substances that exceed state water quality criteria for ambient water as specified in NR 105 Wis. Admin. Code. Wisconsin also compares the sediment concentrations of pollutants to the guidance entitled "*Consensus – Based Sediment Quality Guidelines: Recommendations for Use and Application*". These guidelines identify the concentration of pollutants that will cause "probable effect" in biological organisms that occupy the contaminated sediment area. Wisconsin did not add any additional for contaminated sediment based on no new data for this listing cycle.[12]

[12] See phone record 7-13-06 between USEPA and WDNR.

Waters Impaired by Physical Habitat

Wisconsin listed waters where codified designated uses are not being met due to a physical structure, such as a dam. For example, if a codified designated use is not being met in an upstream segment due to the presence of a dam preventing fish movement, some portion of the segment is deemed to be impaired.

Beaches impaired by Bacteria

In 2004 Wisconsin added beaches along the Great Lakes and some inland beaches which had chronic *E. coli* problems. Under the Beach Act, Wisconsin has determined the monitoring frequency for each of its beaches. This frequency ranged from 4-5 times a week in highly used beaches, 2-3 times for moderately used beaches, once a week to no monitoring at infrequently used beaches. These samples were collected over a 15 week period from Memorial Day through Labor Day weekend.

The State first developed a methodology for reviewing *E. coli* data collected under the Beach Act for the 2004 list. Wisconsin does not have a standard for *E. coli*, however *E. coli* is federally promulgated standard for the coastal waters. For the 2006 listing cycle, Wisconsin revised it's methodology for evaluating public beaches for *E. coli* from a rolling geometric mean of 126 cfu/100ml to the single sample max of 235cfu/100ml exceedance[13]. For 2006, Wisconsin compares the percentage of exceedances based on years of data to the single sample max as identified in the table below:

Years of Information Available	Beaches were listed if:
1 year of data	>35% of samples collected exceeded 235 cfu/100ml
2 year of data	>25% of samples collected exceeded 235 cfu/100ml
3 year of data	>15% of samples collected exceeded 235 cfu/100ml

Applying this methodology, Wisconsin added 22 beaches to the list and delisted three beaches: Beckman Lake Beach, Ottawa Lake Beach, and Interfalls Lake-Patterson State Park Beach. All of the delisted beaches are inland beaches and are not subject to the *E. coli* standard. However, the state only has *E. coli* data on these three waters. U.S. EPA asked Wisconsin if the change in the methodology had resulted in the three inland beaches being delisted. Wisconsin reviewed the *E. coli* data and determined that by using the 2004 methodology, two of the beaches would still be delisted. The third beach (Interfalls-Patterson State Park Beach) was borderline as to whether it would have been delisted. The state committed to monitoring and evaluating this beach for the 2008 303(d) list.

[13] See phone records of September 25 and September 26, 2006 which discusses the use of the rolling geometric mean and the maximum exceedance standard.

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

EPA reviewed Wisconsin's description of the data and information it considered, its methodology for identifying waters, and any other relevant information including information the State submitted in response to EPA's requests for additional information. EPA concludes that the State of Wisconsin 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). In addition, the State provided its rationale for not relying on particular existing and readily available water quality-related data and information as a basis for listing waters.

For past listing cycles (2002 and 2004), the State developed its 303(d) list using the State of the Basin Reports, which include comprehensive basin-specific water quality information developed over the years. However, the State has not published a new State of the Basin Report since the 2004 list. Data concerning specific basins can be found on the State's website http://www.dnr.state.wi.us/org/gmu/ . In developing the 2006 303(d) list, the State biologists reviewed new monitored data collected since the last listing cycle to determine which waters or pollutants/impairments should be added or delisted. The new data was compared to the 2004 list in making these determinations. The State lists waters based on monitored data, not evaluative data. The State of the Basin Report identified waters as monitored if there is monitored data no more than five years old when the report was prepared.[14] The State did not delist any waters based on the fact that the data used for listing was now old; the state delisted waters only if there was new data collected or received indicating the water was not impaired. In addition to WDNR generated data, the State reviewed data received from County Health Departments, USGS and the public.

EPA generally encourages States, in making listing decisions, to consider monitored data that is more than five years old, unless other information indicates that conditions have changed such that the data are no longer representative of stream conditions. WDNR uses professional judgment in determining whether monitored information is representative of current conditions. However, in Wisconsin's case, a substantial amount of the monitoring data in the Basin Reports is more than five years old, dating back in some cases to the 1970's. The data may not be representative of current water quality conditions, due to changes in land use practices, population, and pollutant management strategies.

Wisconsin does not use non-monitored information (evaluative information) as a sole basis for identifying waters as impaired under Section 303(d). Generally, non-monitored information consists of information about land use practices, volunteer data that doesn't meet the specifications of the Wisconsin Data Quality Management Plan, and professional judgment of

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[14] The actual publication date of the Basin Report may be up to two years later than the preparation date. Therefore the data used for listing purposes may be older than five years in the basin report.

WDNR staff based on visual observations and anecdotal reports from local individuals. By itself, such information is useful for screening waters and, where a problem may exist, monitoring should be completed to evaluate the status of the water.

Wisconsin's most recent monitoring strategy is entitled "*WDNR Water Division Monitoring Strategy version 2: 7-25-2006*". This strategy has a tiered approach to how waters are monitored in the state.

- Tier 1 is the statewide baseline monitoring which is used for trend establishment and problem identification. This level collects baseline information needs on a broad spatial scale.

- Tier 2 monitoring is the site specific monitoring of targeted areas. This level of monitoring is more intense. Waters which are chosen for TMDL development and more data is needed would be included in this level of monitoring. Waters for which information is received by the State from outside sources and it is unclear whether the water is meeting its designated use based on this information are also placed in this level of monitoring.[15]

- Tier 3 monitoring is the site specific monitoring of targeted areas. This monitoring provides follow-up analysis of management plans that have been implemented for problem water bodies, and evaluates permit compliance and the effectiveness of permit conditions.

Wisconsin reviews the DNR data collected under the three tiers as well as data received from other state and federal agencies, regional planning commissions and major municipal sewerage districts and universities. Wisconsin sent a letter on June 10, 2005 to interested parties requesting that they submit by July 15, 2005 any available information which may demonstrate an exceedance of WQS to identify the data sets or waterbodies.

Wisconsin will review information provided by any individual or group at any time. Data used for listing purposes must have been obtained using adequate quality assurance/control procedures. Outside agencies and individuals submitting data must show that a minimum number of samples were collected at appropriate sites and at critical periods, and that certified laboratories were used for sample analysis. If WDNR deems that the information indicates that an impairment is likely, but the quality assurance/control procedures are not adequate, staff will consider collecting additional data in order to determine whether to list the water body in the future. WDNR may also assist outside groups in the data quality procedures that it considers necessary for data to be used.

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[15] See phone memos of 9/20-21/06 discussion of Baird and Ashwaubenon Creeks.

In reviewing the data and information received from all sources, Wisconsin thought that some data indicated a possible impairment and, after further investigation, determined that 23 segments needed further monitoring to make a determination on listing. These waters were placed on the tier 2 monitoring schedule and will be monitored in 2007 for the 2008 listing cycle.[16]

Comments received on adding waters and/or pollutants and impairments to the list.

Wisconsin received comments from several groups and persons providing recommendations for adding waters and pollutants and impairments.

Lake Sinissippi, Rock River, Horicon Marsh and Dead Creek.

The Lake Sinissippi Improvement District submitted comments to WDNR to support its recommendations that pollutants and impairments be added to Lake Sinissippi, Rock River and Horicon Marsh, and that Dead Creek be added to the list for pollutants sediment, phosphorus, and nutrients with impairments of degraded habitat, dissolved oxygen ("DO") and eutrophication. In addition, the Improvement District recommended adding sedimentation, phosphorus and nutrient enrichment as pollutants for the tributaries to Rock River (East, West and South Branches of the Rock River, Irish Creek, Gill Creek and Kummel Creek). WDNR considered the information provided by the Improvement District and another commenter, Rock River Headwaters, Inc., and as a result added phosphorus as a pollutant and eutrophication as an impairment to Lake Sinissippi, phosphorus as a pollutant to Rock River, phosphorus as a pollutant and DO as an impairment for Horicon Marsh, and added Dead Creek to the 303(d) list for phosphorus and sediment as pollutants and degraded habitat as an impairment. Note that Lake Sinissippi, Rock River and Horicon Marsh were already listed for sediment as a pollutant. WDNR also added to the list the West Branch of the Rock River for phosphorus as a pollutant and the East Branch of the Rock River for phosphorus and sediment as pollutants based on the data provided; WDNR had previously decided to add the West Branch for sediment and the South Branch of the Rock River was already listed for sediment and phosphorus. Irish Creek was already on the list for sediment and degraded habitat; WDNR agreed to add phosphorus and ammonia as additional pollutants and aquatic toxicity as additional impairment. Based on the information provided, WDNR added phosphorus and ammonia as pollutants and aquatic toxicity as an impairment to Gill Creek. Finally, WDNR added pollutants and impairments to Kummel Creek based on the information provided.

WDNR did not add DO as an impairment for Lake Sinissippi because the data shows that the lake is meeting the DO criterion. WDNR also indicated that there should be limited instances when the lake is not meeting the DO criterion, because the lake is only eight feet deep and lake-water turnover should keep DO from becoming a problem. The information provided by the

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[16] See phone memo of 9/21 and 9/26. Also see e-mail from Carolyn Betz, WDNR to Donna Keclik 9/27/06, with attached list of waters which need more data to determine impairment status.

Improvement District and Rock River Headwaters, Inc. on DO and BOD problems in Rock River, Horicon Marsh, Dead Creek and the tributaries to Rock River was not adequate for listing purposes. For example, the information did not include the conditions under which the sampling was done (time of day, for ex.), nor the frequency of the sampling. In addition, for the South Branch of the Rock River, WDNR did not think the data provided showed a nitrates or ammonia problem, so it declined adding nutrients as a pollutant.

Baird Creek

The Co-director of the Lower Fox River Watershed Monitoring Program submitted information and recommended that all segments of Baird Creek be included on the 303(d) list. The upper segment of Baird Creek is an intermittent stream and is designated a limited forage fishery, while the lower segment of Baird Creek, 0 to 3.5 miles, is designated a warm water forage fishery. The WQS can be very different for these two different designated uses. WDNR had data on the lower segment and based on that data, WDNR added this segment to the 303d list for pollutants phosphorus and sediment. WDNR's biologist concluded that the upper segment of Baird Creek is meeting designated use, so WDNR didn't list this segment. In reviewing the information provided by the commenter, WDNR did not think it was clear where the data were collected (upper or lower segment). WDNR has targeted the upper segment for additional data collection as a potential 303(d) list candidate for 2008.

Ashwaubenon Creek

The Co-director of the Lower Fox River Watershed Monitoring Program submitted information on Ashwaubenon Creek and asked that the water be added to the 303(d) list. WDNR's review of the data and information it has on this water shows that it is meeting its designated use. The data provided by the commenter was either not specific enough or didn't show that the water was not meeting its designated use. However, based on this comment, WDNR targeted Ashwaubenon Creek for additional data collection for the next listing cycle. In addition, the ongoing development of the Lower Fox River TMDL should provide additional data on both Ashwaubenon and Baird Creek.

Warm Water Beach

Two commenters asked about the deterioration of Warm Water Beach. WDNR had put Warm Water Beach[17] on its proposed 2006 303(d) list based on *E. coli* data from 2003 and 2004 showing impairment. However, WDNR learned that a fence had been erected to prevent access because the City of Manitowoc is expanding the power plant and the beach is no longer considered safe for swimming. So, WDNR decided not to keep the beach on the 303(d) list. EPA disagreed with this. Warm Water Beach has been used by the public as a beach in the past

[17] Warm Water Beach is along the Lake Michigan shore line and is subject to the *E.* coli standard promulgated by U.S. EPA.

and Wisconsin cannot eliminate a recreational use of a water because a fence has been erected preventing access. To eliminate a use, Wisconsin must do a Use Assessment Analysis, which must be approved by U.S. EPA. Here, because Wisconsin has data showing that Warm Water Beach is impaired for bacteria, Wisconsin needs to include this water on its 303(d) list. WDNR added Warm Water Beach to the 2006 list.

C. Waters where no known pollutant is causing the impairment

Under Section 303(d) of the Clean Water Act, States are required to develop TMDLs for pollutants causing impairments of listed waters. Since the Section 303(d) list is, under current regulations, a list of waters "still requiring TMDLs," States are not required to include waters where they determine no pollutant is causing the impairment.

Wisconsin has included some WQLSs on its 303(d) list that are beyond those that are required by federal regulations, e.g., waters where there is no pollutant associated with the impairment. (See listing for waters impaired by Physical Habitat.) While EPA is not taking any action to approve or disapprove the list due to the inclusion of such waters, neither the State nor EPA has an obligation under current federal regulations to develop TMDLs for such waters because the waters are not impaired by a pollutant. 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 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 include waters on their Section 303(d) lists that may not be required to be included by current EPA regulations, and EPA's regulations do not compel the Agency 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.[18]

D. State's listing of waters impaired by nonpoint sources.

The State properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In *Pronsolino v. Marcus*, the District Court for the Northern District of California held that section 303(d) of the Clean Water Act (CWA) authorizes EPA to identify and establish total maximum daily loads (TMDLs) for waters impaired by nonpoint sources. Pronsolino et al. v. Marcus et al., 91 F.Supp.2d 1337, 1347

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[18] See National Clarifying Guidance for 1998 Section 303(d) Lists, August 27, 1997.

(N.D.Ca. 2000). See also EPA's Guidance and National Clarifying Guidance for 1998 Section 303(d) Lists, Aug. 27, 1997.

E. Waters included on the list which may be in Indian country.

EPA's approval of Wisconsin's Section 303(d) list extends to all waterbodies on the list with the exception of those waters that are within Indian Country, as defined in 18 U.S.C. Section 1151. EPA is taking no action to approve or disapprove the State's list with respect to those waters at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under Section 303(d) for those waters.

F. Waters Being Delisted

A state can remove a water from the 303(d) list for good cause. Title 40 CFR §130.7(b)(6)(iv) sets out that good cause includes, but is not limited to, more recent or accurate data, more sophisticated water quality monitoring, flaws in the original analysis, or changes in conditions. EPA's Guidance for 2006 Assessment, listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act elaborates on what constitutes good cause for delisting.[19]

As previously noted, Wisconsin delisted three inland beaches based on evaluation of the *E. coli* data under the revised methodology for beaches (Beckman Beach, Ottawa Beach, and Interfalls-Patterson Beach). Wisconsin is de-listing six additional waters from the 303(d) list.[20] For two of the waters, Henry Creek and Syftestead Creek, the WQS are being met and these two waters also had TMDLs developed for them. One water, Perennial Stream B(TA4), had new data collected and is no longer meeting the listing criteria. Three waters, Lake Waubesa, Milwaukee River-Lime Kiln Dam upstream and Rock River-Indianford Dam to Illinois border, are being delisted due to new fish tissue data and no longer have a site specific FCA.

Finally, Wisconsin is delisting the following waters for Hg based on new fish tissue data collected showing that the waters do not meet the criteria for listing:

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[19] See Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Section 303(d) and 305(b) of the Clean Water Act, Section V H.2 at page 58-59.

20 Wisconsin divided its list into Category 5A, 5B, and 5C. Category 5A is the list of waters still requiring TMDLs and is not impaired solely due to Hg from atmospheric deposition. Category 5B, are waters still needing TMDLs and are impaired due to Hg from atmospheric deposition. Category 5C is the list of waters which are impaired but have TMDLs developed. U.S.EPA does not include category 5C as part of the 303(d) list.

Unique ID	Water body	County	WBIC
8	Anderson Lake	Bayfield	2754200
37	Big Eau Pleine Flowage (3)	Marathon	1427400
36	Big Arbor Vitae	Vilas	1545600
56	Boulder Lake	Vilas	2338300
75	Chippewa Flowage	Sawyer	2399700
76	Chippew River Flowage Holcombe Flowage	Chippewa	2050000
119	Dutch Hollow Lake	Sauk	1286500
122	Eagle Lake t40 r10e s22	Vilas	1600200
130	Emily Lake	Florence	651600
144	Forest Lake	Vilas	2762200
200	Island Lake	Vilas	2334400
247	Long Lake T41N R12E S07 NW SE	Vilas	1602300
256	Lost Land Lake	Sawyer	2418600
278	Medicine Lake	Oneida	1611700
332	Oxbow Lake	Vilas	2954800
334	Papoose Lake	Vilas	2328700
356	Pike Lake Chain	Price	2267600
362	Pine Lake	Forest	406900
366	Planting Ground Lake	Oneida	1609100
376	Rainbow Flowage	Oneida	1595300
582	Red Cedar River	Barron	2063500
384	Rest Lake	Vilas	2327500
460	Squaw Lake	Oneida, Vilas	2271600
463	Squirrel Lake	Oneida	1536300
520	Wilson Flowage	Price	2246500
532	Wisconsin River - Rainbow Flowage	Oneida	1595300
548	Yellow Lake	Burnett	2675200
533	Wisconsin River Boom Lake	Oneida	1580200

Additionally, one water, Red Cedar River (ID 582), was delisted based on errors in the original listing; this waterbody was never on any of the State's mercury FCAs. Two waters were de-listed based on duplicate listings, Wisconsin River-Rainbow Flowage (ID 532) and Yellow Lake (ID 548). No new waters were added to the list based on FCA information.[21]

[21] See table entitled "Delistings-Category 5B Atmospheric Deposition of Mercury"

Wisconsin also delisted 30 waters based on development of an approved TMDL. Wisconsin tracks these waters in what it calls "Category 5C." Since these waters are not yet meeting standards, it is important that Wisconsin track the improvement. U.S.EPA does not approve the 5C category waters and does not consider 5C waters as part of the 303(d) list. Water pollutant/impairment combinations, which have had a TMDL developed since the approval of the 2004 list, are considered, by U.S.EPA, to be de-listed. Below is the table of waters delisted based on TMDL development:

Unique ID	Waterbody	County	WBIC	Description	Impairment	Year TMDL Approved
10	Apple Br	Lafayette	899800	Mile 4 - 6.8	Dhab; temp	2005
14	Argus School Branch	Green	896800	Mile 0-2	Dhab; temp	2005
650	Becky Creek	Rusk	2369600	Mile 0-1	Temp	2005
57	Braezels Branch	Green	900700	Mile 0-4	Dhab	2005
59	Buckskin School Creek	Green	897300	Mile 0-6	Dhab	2005
60	Buell Valley Creek	Buffalo	1813100	Mile 0-2	Dhab	2005
708	Burgy Creek	Green	880500	Mile 0-10	dhab; temp	2005
651	Carpenter Creek	Waushara	248800	Mile 0-6	Dhab	2004
74	Cherry Branch	Lafayette	898500	Mile 0-5.8	Dhab	2005
88	Cochrane Ditch (Rose Valley)	Buffalo	1813600	Mile 0-9	Dhab	2005
111	Dodge Branch	Iowa	910800	Mile 0-14.1	Dhab	2005
112	Dodge Branch	Iowa	910800	Mile 21.3-22	Dhab	2005
113	Dodge Branch	Iowa	910800	Mile 14.1-21.3	Dhab	2005
115	Dougherty Creek	Green	901000	Mile 14.6-16	Dhab	2005
134	Fennimore Fork	Grant	1211300	Mile 15.5-26	Dhab	2004
162	German Valley Branch	Dane	909200	Mile 0-7	Dhab	2005
607	Gunderson Valley Cr.	Grant	1212600	Mile 0-4	DO; sed	2004
176	Half Moon Lake	Eau Claire	2125400	Lake	pH; eutr	2004
196	Irish Valley Creek	Buffalo	1811400	Mile 0-8	Dhab	2005
204	Jahns Valley Creek	Buffalo	1810800	Mile 0-8	Dhab	2005
206	Jockey Hollow Crel	Green	899500	Mile 0-2.4	Dhab	2005
232	Legler School Branch	Green	882900	Mile 0-9	Dhab	2005
365	Pioneer Valley Creek	Green	883100	Mile 0-5	Dhab	2005
367	Pleasant Valley Branch	Dane	908500	Mile 0-5	Dhab	2005
709	Prairie Creek	Green	901500	Mile 0-2	dhab	2005
421	Searles Creek	Green	879500	Mile 0-9	Dhab	2005
435	Silver School Branch	Green	107900	Mile 0-3	Dhab	2005
436	Silver Spring Creel	Lafayette	880400	Mile 0-5	Dhab	2005
453	Spring Brook, North Branch	Walworth	9	0-2.1	Dhab	2003
457	Spring Creek	Green	877000	Mile 0-10	Dhab	2005

493	Twin Grove Branch	Green	891300	Mile 0-6	Dhab	2005
701	Weiland Valley Creek	Buffalo	1813000	Mile 0-2	dhab; temp	2005

G. Priority Ranking and Targeting

EPA also reviewed the State's priority ranking of listed waters for TMDL development, and concludes that the State properly took into account the severity of pollution and the uses to be made of such waters, as well as other relevant factors such as likelihood to respond, availability of information, opportunities provided by other activities, and time to develop TMDL. Wisconsin ranked its waters in terms of "high", "medium" and "low" priority. A ranking of "high" indicated a TMDL to be submitted to EPA within the next two year (two year schedule). A ranking of "medium" indicates likely completion of a TMDL in the next two to five years. A ranking of "low" indicates likely completion of a TMDL for in the next five to 13 years. The ranking is not an indication of the starting point for TMDL development.

EPA reviewed the State's identification of WQLSs targeted for TMDL development in the next two years, and concludes that the targeted waters are appropriate for TMDL development in this time frame. In developing the priority rank the following was considered by WDNR: the availability of data; other actives in the area; likelihood of the waterbody to repond to management actions; severity of the impairment; and public health concerns. The high and medium waters will also take advantage of the tier I and tier II monitoring taking place throughout the state.

EPA has received Wisconsin's long-term schedule for TMDL development for all waters on the State's 2004 Section 303(d) list. As a policy matter, EPA has requested that States provide such schedules. See Memorandum from Robert Perciasepe, Assistant Administrator for Water, to Regional Administrators and Regional Water Division Directors, "New Policies for Developing and Implementing TMDLs", August 8, 1997. EPA is not taking any action to approve or disapprove this schedule pursuant to Section 303(d). The long term schedule included with the list are those waters which the State has ranked as medium or low priority.

Wisconsin plans to do Environmental Accountability Projects (EAPs) for certain waters, listed below in Tables 1 and 2, as an alternative to TMDLs. According to WDNR, EAPs are planned actions that will result in a significant reduction or elimination of a pollutant loading.

Below in Table 1 are waters which the State had identified for TMDL development to be completed in 2004, but which have not had TMDLs completed to date.

Waters from State TMDL update to be completed in 2004

Table 1

Water body	County	WBIC	Stream Miles	Pollutant	Impairment	New Priority
Grandma Creek[1]	Sheboygan	62400	0-4.5	Sed, phos	deg. hab. DO	Medium
Otter Creek[2]	Sheboygan	56400	0-15.3	bacteria	deg. hab.	EAP
Stilwell Creek[3]	Monroe		1.9-4.7	Sediment	Temperature	Draft TMDL
Unnamed Creek 23-12 (north)[1]	Monroe	1665600	0-0.7	Sediment	Temperature	High

1 water priority changed to medium should have TMDL completed in 2 to 5 years
2 water changed to an EAP water
3 the State has requested TMDLs to be developed by USEPA, Draft TMDL

Table 2 below lists waters that Wisconsin identified on the 2004 list to be completed by 2005. These now have been identified as high or low priority projects or EAP projects in 2006. The high priority projects should be competed with in two years of listing.

Table 2

Water body	County	ID Number	WBIC	Stream Miles	Pollutant	Impairment	New Ranking
Grubers Grove Bay	Sauk	605	1260600		Hg	Aqua. Tox. FCA	EAP
Hog Island Inlet AOC	Douglas	187			PAH, metals, petro.	Aqua. Tox.	EAP
Jordan Creek	Calumet	210	80200	0-1.2	PCB	FCA	EAP
Little Menomonee	Milwaukee	240	17600	0-5.9	Cresole	Aqua. Tox.	EAP
Newton Creek AOC	Douglas	312	2843650		PAH, metals, petro.	aqua. tox.	EAP
Peppermill Creek	Adams	336	178400	0-2	Sed.	deg. hab., temp.	Low
Pine Creek	Calumet	358	79900	4-9	PCB	FCA	EPA

line to Hawthorne Creek	Green					
Horicon Marsh	Dodge	190	861200		Sed; phos	Deg hab, DO
Irish Creek	Dodge	195	861600	0-3	Sed, phos NH3	Deg hab, atox
Johnson Creek	Jefferson		846700	0-17.5	sed	Deg hab
Kohlsville River	Washington	224	865400	0-9	sed	Deg hab
Kummel Creek	Dodge	226	863500	11.54-18	sed	Deg hab
Kummel Creek	Fond du Lac, Dodge	225	863500	0-11.54	Sed, phos NH3	Deg hab, atox
Lac La Belle	Waukesha	228	848800		PCB	FCA
Lake Koshikonong	Jefferson, Rock, Dane	610	808700		Sed; phos	Deg hab, DO, eutro, sed
Lake Mallalieu	St. Croix	702	2607100		Phos	eutro, pH
Lau Creek	Dodge		831600	0-6	sed	Deg hab
Limestone Creek	Dodge	236	866800	0-1.2	sed	Deg hab
Little Willow Creek	Richland	243	1221300	0-7.5	sed	Deg hab,
Markham Creek	Rock	267	796400	0-5	sed	Deg hab temp,
Mason Creek	Dodge, Waukesha	270	851100	0-5.2	Phos; sed	Deg hab, DO; Temp
Maunesha River (above Marshall)	Dane	553	837500	13.5-32	Phos; sed	Deg hab, DO
Maunesha River (Crawford to Waterloo)	Jefferson	271	837500	0-5.4	Phos; sed	Deg hab, DO
Maunesha River (Waterloo to Marshall)	Dane	272	837500	5.4-13.5	Phos; sed	Deg hab, DO
Melancthon Creek	Richland	279	1232200	6.4-9	Sed	Deg hab
Mud Creek	Dodge	302	840800	0-10	Sed	Deg hab
Mud Creek	Outagamie	301	129500	0-8	Sed	Deg hab
Nine Springs Creek	Dane	704	80420	0-6	Phos; sed	DO; temp
North Branch Wayne Creek	Washington	305	865500	3-4	Sed	Deg hab
Otter Creek	Iowa	330	1237100	0-15.3	Sed	Deg hab
Otter Creek	Iowa	331	1237100	15.3-23.3	Sed	Deg hab
Park Creek	Dodge	335	834400	0-3	Sed	Deg hab
Pine Lake	Waukesha	363	799200		TBD	atox

Rock Creek at Hoopers Millpond	Jefferson	390	830300	0-12	PCB	FCA
Rock River (above Sinissippi L.)	Dodge	395	788800		Sed; phos	Deg hab
Rock River (Ashippun R to Sinissippi L.)	Dodge	396	788800		Sed; phos	Deg hab
Rock R. Watertown to confl. w/ Ashippun R.)	Jefferson	397	788800		Sed; phos	Deg hab
Rock R (above Hwy 14)	Rock	399	788800	184.4-190.6	PCB; phos, sed	DO; FCA; sed
Rock R. (Janesville to Hwy 14)	Rock	400	788800	176.4-184.4	PCB; phos, sed	DO; FCA; sed
Rock R. (State line to Janesville)	Rock	401	788800	164.4-176.4	PCB; phos, sed	DO; FCA; sed
Rock R. (Watertown L. to Koshkonong)	Jefferson	609	788800	191-238	Phos	DO; eutr
Schultz Creek	Dodge	418	833800	0-5	Sed	Deg hab
Scuppernong River	Waukesha	658	817600	19.5-20	TBD	Temp
Sheboygan R below Franklin dns to Sheboygan Falls	Sheboygan	427	50700	15-30	PCB	FCA
Sinissippi Lake-Neider Park Landing	Dodge		788800		Bact	Bact
Sinnissippi Lake	Dodge	402	788800		Sed; phos	eutr
Snowden Branch	Grant	441	944600	0-5	Sed	Deg hab
South Branch Rock R.	Dodge	398	869800	0-3	Phos; sed	Deg hab, DO
South Branch Rock R.	Fond du Lac	394	869800	3-20	Phos; sed	Deg hab, DO
Spring (Dorn) Creek	Dane	660	805600	1-6	Bact; sed	Bact, deg hab, sed
Spring Brook	Marathon, Langlade	452	1440800	11-15.5	Metals, sed	Atox, DO
Spring Creek	Jefferson	455	819100	0-5	Phos; sed	Deg hab; temp
St. Croix River-St. Croix Falls to Mississippi R.	St. Croix, Polk, Pierce	618	2601400		PCB	FCA
Starkweather Creek	Dane	467	805100	0-3	BOD. Sed, metals	Atox; deg hab, DO,

						FCA
Steel Brook	Jefferson	468	817800	1.7-2.7	Phos, sed	temp
Stevens Creek	Rock	469	796300	0-8	Sed	Deg hab
Stony Brook	Dane, Dodge, Jefferson		837600	0-15	Sed	Deg hab
Turtle Creek (Comus to City. Line)	Walworth	492	790300	24.5-32.5	Phos	DO
Unnamed trib (Osman trib) to Meeme River	Manitowoc	653	63000	0-1.3	Phos; sed	Deg hab; DO
Unnamed trib to Onion R in Waldo Impoundment	Sheboygan	652	52600	0-2.7	Sed	Deg hab
Vermont Creek	Dane	710	1249200	0-4	Sed	Deg hab, temp
Wayne Creek	Washington	508	865500	3.1-4.5	Sed	Deg hab
Wendt Creek	Dane	510	1248900	3-6	Sed	Deg hab
Wendt Creek	Dane	511	1248900	0-3	Sed	Deg hab
West Branch Rock River	Dodge, Fond du Lac		861300	0-39	Sed; phos	Deg hab
W Br Root R Canal	Racine	407	4500	0-4.5	Phos; sed	DO
West Twin River	Kewaunee, Manitowoc	513	87000	0-19	Phos	DO
Wingra Creek	Dane	522		0-1.2	TBD	atox
Wurchs Creek	Green, Lake	543		0-6	Sed	Deg hab
Yaraha R (Bad Fish Creek to Rock River)	Rock	544	798300	0-8.7	Phos, sed	Deg hab, DO
Yaraha R (Bad Fish Creek to Stoughton)	Dane	545	798300	8.7-18.7	Phos, sed	Deg hab, DO
Yaraha R (Stoughton to L. Kegonsa)	Dane	546	798300	18.7-27.7	Phos, sed	Deg hab, DO

H. Public Participation

Wisconsin public noticed the draft 303(d) list beginning May 30, 2006 for a 30 day comment period, until June 30, 2006. Wisconsin issued a press release on May 30th which was sent on its electronic distribution list (about 900 people), and faxed to every daily and weekly newspaper in the State, all radio and television stations in the State, and to special interest

groups. The press release stated that the list of impaired waters was available on the State's website, and provided the web address. Wisconsin posted the 303(d) list, its methodology, and the list of additions and delistings on its website, as well as an address for comments to be submitted in writing or electronically. Wisconsin received many comments on list and responded to those comments. Based on the comments and information received, Wisconsin revised the 303(d) list.

Comment Received on Public Participation

One commenter stated that WDNR did not make a good faith effort at advertising the comment period and asked for an extension of the comment period. In addition, the commenter thought there was far too much information to analyze for a period of only one month. WDNR responded by setting out the steps it took to notify the public about the availability of the list and the 30 day comment period, and declined to extend the comment period. In addition to the actions noted above, WDNR pointed out that its staff was interviewed throughout the state by print media, radio stations and TV stations, and that there were follow up stories to these interviews printed in many newspapers and broadcast over radio and TV stations. U.S. EPA's policy is that there should be full and meaningful public participation in the listing process. Wisconsin's continuing planning process procedures do not provide public participation procedures for the Section 303(d) list. In such case, the state should provide at least the basic minimum of notice of the proposed list and an opportunity to comment. Wisconsin provided notice and a 30 day opportunity to comment. EPA concludes that Wisconsin did provide for adequate public participation in its listing process.