17 JUL 2003

WW-16J

Christopher Jones, Director
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Re: Approval/Disapproval of 2002 Section 303(d) List

Dear Mr. Jones:

The United States Environmental Protection Agency (U.S. EPA) has conducted a complete review of Ohio's 2002 Section 303(d) list and supporting documentation and information and, based on this review, U.S. EPA has determined that Ohio's 2002 list of water quality limited segments still requiring Total Maximum Daily Load calculations partially meets the requirements of Section 303(d) of the Clean Water Act and U.S. EPA's implementing regulations. Therefore, U.S. EPA hereby partially approves and partially disapproves approves Ohio's Section 303(d) list. Specifically, EPA approves the State's decision to list the waters and associated pollutants identified on Ohio's 303(d) list along with the State's priority rankings for these waters and pollutants. However, EPA disapproves the State's decision not to list 17 additional water bodies (attachment 1), because EPA finds that these waters and pollutants meet the federal requirements for listing under Section 303(d). The statutory and regulatory requirements, and U.S. EPA's review of Ohio's compliance with each requirement, are described in the enclosed decision document.

We appreciate your hard work in this area and the 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,

/s/ KEVIN M. PIERARD

Jo Lynn Traub, Director
Water Division

Enclosure

cc: Lisa Morris, OEPA
Trinka Mount, OEPA

Ohio 2002 303(d) List Integrated Report
USEPA Approval/Disapproval
Date:7-17-03

Attachment 1

Fish consumption waters not listed in Category 5 from Appendix C of Integrated report and Table 1

AU (HUC 11)	Description of water body	FCA	Listed Category	Pollutant
04100003-020	W. Branch St. Joseph River	one meal per week all species	2	PCB's
04100004-030	St. Mary's River	one meal per week (fresh water Drum, Norther Pike, Saugeye)	3	Mercury
04100010-050	Portage River	one meal per 2 months carp	3	PCB's
04100012-050	Vermillion River (headwaters to upstream East Branch)	One meal per month Small Mouth Bass	3	Mercury
04100012-060	Vermillion River (upstream East Branch to mouth)	One meal per month Small Mouth Bass	3	Mercury
04110001-030	E. Br. Black River (headwaters to downstream Coon Creek)	One meal per month Rock Bass, Smallmouth Bass, Yellow Bullhead	4B	Mercury
05040001-040	Sandy Creek (headwaters to downstream Still Fork)	One meal per month Carp	3	PCB's
05090103-040	Little Scioto River (upstream Rocky Fork to mouth); Ohio River tribs (downstream 8-digit divide)	One meal per month Rock Bass, Spotted Bass	3	Mercury
05090202-010	Little Miami River[1] (headwaters to upstream Massies Creek)	One meal per month for Sauger	4A	Mercury
		one meal per week of Channel Catfish, Smallmouth Bass		PCB's
05090101-100	Symmes Creek (downstream Buffalo Creek to mouth); Ohio River Tribs (Symmes Cr, to Big Sandy R.)	One meal per month Freshwater Drum, Sauger (area under the advisor is from St. Rt. 41 to Waterloo to the Ohio River)	3	Mercury
05090202-020	Little Miami River [2] (upstream Massies Creek to downstream Beaver Creek)	One meal per month entire length Sauger,	4A	Mercury
		one meal per week for Channel Catfish, Smallmouth Bass		Lead
05090202-030	Little Miami River [3] (downstream Beaver Creek to upstream Caesar Creek)	One meal per month entire length Sauger, one meal per week for Channel Catfish, Smallmouth Bass	4A	Mercury Lead

	Grand River Mainstem (downstream Mill Creek to mouth)	One meal per Month Carp 22" and larger, Freshwater Drum,	4B	PCB's
		Largemouth Bass, Smallmouth Bass, Yellow Bull head , Silver Redhorse and Walleye form Tote St. near Austinburg		Mercury
	Hocking River Mainstem (downstream Scott Creek to Mouth)	One meal per month Carp	3	PCB's
	Walhonding River Mainstem (entire Length)	One meal per month Channel Catfish, One meal per week Saugeye, Smallmouth Bass	2	PCB's
	Paint Creek (downstream Rocky Fork to mouth)	One meal per Month Largemouth Bass	2	Mercury
	Stillwater River Mainstem (downstream Greenville Creek to mouth)	One meal per Month Channel Catfish, Smallmouth Bass	4C	Mercury

1 In appendix C of the Integrated Report Ohio identifies cause of impairment to be metals, Unionized Ammonia, Nutrients, Organic Enrichment/DO, Flow Alteration, Other Habitat Alterations, Pathogens. Appendix C also indicates that there is a FCA for this section of the Little Miami. Although a TMDL was developed for this section it did not cover the FCA or Pathogens and therefore should remain on the list in Category 5.

2 In appendix C of the Integrated Report Ohio identifies cause of impairment to be metals, Unionized Ammonia, Nutrients, Other Habitat Alterations, Pathogens, Siltation, unknown Toxicity. Appendix C also indicates that there is a FCA for this section of the Little Miami. Although a TMDL was developed for this section it did not cover the FCA or Pathogens and therefore should remain on the list in Category 5.

3 In appendix C of the Integrated Report Ohio identifies cause of impairment to be Unionized Ammonia, Nutrients, Chlorine, Nutrients, Organic Enrichment/DO, Flow Alterations, Suspended Solids. Appendix C also indicates that there is a FCA for this section of the Little Miami. Although a TMDL was developed for this section it did not cover the FCA and therefore should remain on the list in Category 5.

DECISION DOCUMENT FOR THE PARTIAL APPROVAL AND PARTIAL DISAPPROVAL OF OHIO'S SUBMISSION OF THE STATE'S INTEGRATED REPORT WITH RESPECT TO SECTION 303(d) OF THE CLEAN WATER ACT (CATEGORY 5 WATERS)

U.S. EPA has conducted a complete review of Ohio's 2002 Section 303(d) list and supporting documentation and information, and based upon this review U.S. EPA has determined that Ohio's list of assessment units (AU's) still requiring total maximum daily loads (TMDLs) meets in part, and fails to meet in part, the requirements of Section 303(d) of the Clean Water Act (CWA or Act), and U.S. EPA's implementing regulations. Therefore, U.S. EPA hereby partially approves and partially disapproves Ohio's 2002 Section 303(d) list. Based upon its partial disapproval, U.S. EPA is adding to Ohio's list 17 AUs that are impaired for sport fish consumption advisories. Ohio's list of AUs still requiring TMDLs appears in Category 5 of the Ohio 2002 Integrated Water Quality Monitoring and Assessment Report (Integrated Report), and U.S. EPA's approval extends only to the AUs in Category 5 of the Integrated Report. The statutory and regulatory requirements, and U.S. EPA's review of Ohio's compliance with each requirement, are described in detail below.

I. Statutory and Regulatory Background

Identification of Waters 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 standards, and to establish a priority ranking for such water, 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 U.S. EPA's long-standing interpretation of Section 303(d).

U.S. 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 requirement required by state, local, or federal authority.[1]

[1] 40 C.F.R. §130.7(b)(1)

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 water: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive models indicate nonattainment of applicable standards; (3) waters for which quality problems have been reported by government agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in a nonpoint assessment submitted to U.S. EPA. under section 319 of the Act.[2] In addition to these minimum categories, States are required to consider any other data and information that is existing and readily available. U.S. 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.[3] 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, U.S. EPA regulations require states to include as part of their submissions to U.S. 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 required by the Region.[4]

Priority Ranking

U.S. EPA regulations also codify and interpret the requirements in Section 303(d)(1)(A) of the Act that states establish a priority ranking for listed waters. The regulations require states to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those

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[2] 40 C.F.R. §130.7(b)(5)

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

[4] 40 C.F.R. §130.7(b)(6)

AUs targeted for TMDL development in the next two years.[5] 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. 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 asaquatic habitats, recreational, economic and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities.[6]

II. Analysis of Ohio's Submission

Listing Methodology and Reporting

In November 2001, EPA issued guidance for integrating the development and submission of 2002 Section 305(b) water quality reports and Section 303(d) lists of impaired waters.[7] This guidance recommends that states develop an integrated report of the quality of their waters by placing all waters into one of five assessment categories. Ohio followed the approach set out in the integrated report guidance and put waterbodies still requiring TMDLs in Category 5 of its integrated report. The waterbodies in Category 5 constitute the State's Section 303(d) list. Region 5 is only taking action on Category 5 of Ohio's Integrated Report.

Ohio EPA's water quality reporting and listing methodology focuses on watersheds. In developing its 2002 list, Ohio changed the way it assesses water quality to focus on watersheds. Ohio has gone from listing individual stream segments to listing assessment units (AUs), which include multiple segments. This has led to changes in how waters are identified and listed between the 1998 and 2002 303(d) lists.

As part of its ongoing monitoring and assessment program the State developed a five-year rotating basin plan that divides the State into 25 areas each comprised of a group of subbasins. Monitoring takes place within five of the 25 areas each year, so that monitoring is completed throughout the State every five years. After the State completes the monitoring in one of the assessment areas, it collects the data and assesses the biological, chemical, and physical condition of the AU. The State uses an 11-digit hydrologic unit code (HUC) as part of its assessment methodology. The principal AUs within the State are divided into the following units: 331 HUCs with a median size of 130 mi2; 23 large river units each with a drainage of at

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[5] 40 C.F.R. §130.7(b)(4)

[6] See 57 Fed. Reg. 334040, 33045 (July 24, 1992); see also U.S. EPA's 1991 Guidance

[7] U.S. EPA's 2002 Integrated Water Quality Monitoring and Assessment Report Guidance, November 19, 2001 (2001 Guidance)

least 500 mi2; 16 AUs on the mainstem of the Ohio River; and three AUs that incorporate the near shore of Lake Erie.

After an AU is defined, the data are collected and analyzed to determine whether the AU is supporting, partially supporting, or not supporting the designated uses within the AU. Each AU is then placed in one of the five assessment categories described in the 2001 Guidance. Biological sampling is conducted extensively throughout the State to determine each AU's status for aquatic life use. Chemical and physical sampling is also conducted as part of the assessment process. Ohio has an extensive data base on aquatic life use. The State has been collecting data for aquatic life use for over 20 years.

As part of the assessment process, Ohio has a Stream Regionalization Project to select reference, or least impacted sites, in each of Ohio's five ecoregions. Based on the results of this effort ecoregion-specific biocriteria were developed. For a sampling site to be classified as being in full attainment it must meet the relevant criteria of all three indices (Index of Biotic Integrity (IBI), the Modified Index of Well-Being (MIWB), and the Invertebrate Community Index (ICI)).[8] An AU is determined to be in partial attainment if only one criterion is not achieved, while non-attainment results when all biological scores are less than the criteria or if very poor scores are attributed to either fish or macroinvertebrate communities. These biocriteria are codified in Ohio's water quality standards.[9]

The status and reporting category for each of the 331 HUCs are listed in Appendix C to the Integrated Report, and the status and reporting category for the 23 large river units are listed on Table 1 of the Integrated Report. For the near shore of Lake Erie (i.e., within 100 meters of the shoreline), the Integrated Report includes three AUs (i.e., Western Basin, Islands, and Central Basin) that are listed on Table 7 of the Integrated Report based on the associated HUC along the shore. Ohio EPA has submitted additional information identifying the HUCs corresponding to each of the three AUs for the near shore of Lake Erie.[10]

Ohio River Listing

The 16 AUs associated with the main stem of the Ohio River are assessed by the Ohio River Sanitation Commission (ORSANCO), which reports its findings in a Section 305(b) report. ORSANCO is an interstate agency charged with abating existing pollution in the Ohio River Basin and preventing future degradation of its waters. ORSANCO was established in 1948

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[8] Water Quality standards home page discussion of Biological Criteria

[9] OAC 3746-1-07, Table 7-16

[10] See Ohio EPA response to U.S. EPA comments dated February 27, 2003

through the signing of the Ohio River Valley Water Sanitation Compact by representatives of the eight member states. Through this Compact ORSANCO has been given authority to develop the Section 305(b) report for the Ohio River.[11] Ohio EPA has narratively incorporated ORSANCO's listing of impaired waters into its Integrated Report for those portions of the Ohio River located within the State of Ohio.[12] Table 1 below identifies those segments of the Ohio River identified by ORSANCO as impaired in the State of Ohio. These segments are included by reference on Ohio's 303(d) list of impaired waters, listed in Category 5 of the Integrated Report. The ORSANCO is looking into developing TMDLs on the Ohio River for many of the impaired segments.[13] Based on the findings of ORSANCO's TMDL workgroup, ORSANCO's technical committee has recommend the following priorities for development of TMDLs on the Ohio River: 1) river-wide TMDLs for PCBs and dioxin utilizing existing data; 2) collection of bacteria data in unmonitored locations of the Ohio River; 3) Ohio River bacteria TMDLs around 7 large, monitored CSO communities; 4) additional Ohio River bacterial TMDLs using data collected under priority 2; and 5) river-wide TMDLs for mercury.[14]

The ORSANCO identified the following segments of the Ohio River as impaired within the State of Ohio:[15]

Table 1

Waterbody ID	River Miles	Miles partially or not supporting	Cause of Impairment or Pollutant
OVWB 17	341.0-356.5	2.5(MP354-356.6)	Biological
OVWB 18	356.5-436.2	4.5 (MP 356.5-361.0)	Biological
OVWB 10	161.7-172.2	10.5	Phenol

[11]See "Biennial Assessment of Ohio River Water Quality Conditions for Water Year 2000 and 2001", July 2002, The Ohio River Valley Water Sanitation Commission.

[12] See 2002 Integrated Report, Section 5.4, page 9

[13]See Integrated Report page 12 and ORSANCO's Report of the TMDL workgroup Technical Committee Meeting February 4-5, 2003.

[14]See e-mail from Jason Health dated February 3, 2003, Agenda Item 7 Technical Committee Meeting, Covington, Kentucky February 4-5, 2003, Report of the TMDL Workgroup.

[15]See Table12, page 26, Table 13 page 32, and Table 16 page 38, of "ORSANCO, July 2002, Biennial Assessment of the Ohio River Water Quality Conditions for water Years 2000 and 2001".

OVWB 19	436.2-464.1	1.5 (MP462.6-464.1)	Pathogen
OVWB 20	464.1-470.2	6.1	Pathogen
OVWB 21	470.2-491.1	7.3(MP470.2-477.5)	Pathogen
OVWB 06	40.2-54.4	14.2	PCBs, Hg, Dioxin
OVWB 07	54.5-84.2	29.8	PCBs, Hg, Dioxin
OVWB 08	84.2-126.4	42.2	PCBs, Hg, Dioxin
OVWB 09	125.4-161.7	35.3	PCBs, Hg, Dioxin
OVWB 10	161.7-172.2	10.5	PCBs, Hg, Dioxin
OVWB 11	172.2-203.9	31.7	PCBs, Dioxin
OVWB 12	203.9-237.5	33.6	PCBs, Dioxin
OVWB 13	237.5-265.7	28.2	PCBs, Hg, Dioxin
OVWB 14	265.7-279.2	13.5	PCBs, Hg, Dioxin
OVWB 15	279.2-317.1	37.9	PCBs, Hg, Dioxin
OVWB 16	317.1-341.0	23.9	PCBs, Hg, Dioxin
OVWB 17	341.0-356.5	15.5	PCBs, Hg
OVWB 18	356.5-436.2	79.7	PCBs, Hg, Dioxin
OVWB 19	436.2-464.1	27.9	PCBs, Hg, Dioxin
OVWB 20	464.1-470.2	6.1	PCBs

Lake Erie Listings

The Integrated Report assesses and lists impaired AUs for the nearshore and lacustuaries of Lake Erie. The "nearshore" is defined as being within 100 meters of the shoreline. The term "lacustuary" is used in the Integrated Report to specify the zone where Lake Erie water levels have intruded into tributary river channels, and includes Maumee and Sandusky Bays. The Integrated Report divides the nearshore of Lake Erie into three AUs: the Western Basin, Islands, and Central Basin. Ohio used narrative standards to determine aquatic life use impairments for the nearshore and lacustuary zones. In 1997, Ohio completed *Development of Biological Indicies Using Macroinvertebrates in Ohio Nearshore Waters, Harbors, and Lacustuaries of Lake Erie in Order to Evaluate Water Quality*. In 1999, Ohio produced *Biological Monitoring and an Index*

of Biotic Integrity for Lake Erie's Nearshore Waters. The data in these documents provide a foundation to establish numeric biocriteria for aquatic life in the Lake Erie AUs. Fish community data, which best represent current conditions along the Lake Erie nearshore zones, were evaluated against the numeric biocriteria for aquatic life use established in those studies. It has been determined that there is 17% attainment in the western basin, 46% around the islands and 32% in the central basin for aquatic life use. The Integrated Report uses the attainmentstatus of the adjacent HUCs to determine the status of the nearshore zones.[16] Below is a table of the impairments for the adjacent HUCs that correspond to the nearshore AUs.[17]

Table 2

Western Basin[18]

AU (HUC)	Segment Identification	Cause/Impairments	Schedule[19] TMDL/Monitoring
04100010-010	Lake Erie Tribs (East of Maumee River to West of Toussiant River	Unknown toxicity, Nutrients, Siltation, Flow alteration, Other Habitat Alterations, Oil and Grease	2010 TMDL 2008 monitoring
04100010-020	Toussaint Creek	Other habitat alterations	2005 TMDL 2003 monitoring
04100010-070	Portage River (downstream Sugar Creek to mouth); Lake Erie Tribs west of Marblehead	Siltation, Organic Enrichment/DO	2010 TMDL 2008monitoring

[16]See Ohio's Integrated Report at page10.

[17]See e-mail from Trinka Mount to Donna Keclik, February 27, 2003.

[18]See e-mail dated 2/27/03 from Trinka Mount to Donna Keclik response to comments including a map. Also see e-mails from Trinka Mount to Donna Keclik dated 4/23/03, and 4/30/03 including website of Agiculture site with map. Map of Ohio with HUC identified.

[19] The schedule for TMDL development does not indicate all pollutants will have a TMDL developed at this time. Ohio develops watershed TMDLs and they develop them for the limiting pollutant. In some cases developing a TMDL for one pollutant will address impairments caused by the remaining pollutants.

04100011-010	Muddy Creek; Lake Erie trib (Muddy Creek to Marblehead)	Category 3	2009 monitoring
04100011-110	Green Creek	Category 3	2009 monitoring
04100011-120	Sandusky River (downstream Wolf Creek to mouth);excluding Green Creek and Sandusky R mainstem	Category 3	2009 monitoring
04100011-130	Lake Erie Tribs (East of Green Creek to west of Mills Creek	Organic Enrichment/DO, Other Habitat alterations	2011 TMDL 2009 monitoring
04100011-140	Lake Erie Tribs (West of Mills Creek to East Sawmill Creek)	Organic Enrichment/DO, Other Habitat alterations	2011 TMDL 2009 monitoring

Central Basin

AU (HUC)	Segment Identification	Causes/Impairments	Schedule TMDL/Monitoring
04100012-030	Huron River, E Br Huron River, Lake Erie tribs (E of Sawmill to W of Huron R)	Nutrients, Siltation, Other Habitat alterations, unknown	2004 TMDL 2012 monitoring
04100012-040	Lake Erie Tribs (E of Huron R to W of Vermillion R)	Nutrients, Siltation, Other Habitat Alterations	2004 TMDL 2011 monitoring
04100012-060	Vermillion River (upstream E Br to mouth)	Category 3	2011 monitoring
04110001-010	Lake Erie Tribs (E. of Vermillion R to W of Black R)	Category 3	2006 monitoring

04110001-060 (in the Ohio 11-digit Watershed from the Dept of Ag this should be -050)	West Branch Rocky River	Unknown Toxicity, Unionized Ammonia, Nutrients, Siltation, Organic Enrichment/DO, Other Habitat alterations	2001 TMDL 2006 monitoring if 050 2005 TMDL 2011 monitoring
04110001-070	Rocky River; Ebr Rocky R; Lake Erie Tribs (W of Porter Cr to W of Cuyahoga R.)	Unionized Ammonia, Chlorine, Nutrients, Siltation, Organic Enrichment/DO, Flow Alteration, Other Habitat Alterations	2001 TMDL 2006 monitoring
04110002-060	Cuyahoga River (ds Tinkers Cr to m); excluding Cuyahoga R. mainstem	Metals, Organic Enrichment/DO, Flow Alterations, Other habitat Alterations	2002 TMDL 2010 monitoring
04110003-010	Lake Erie tribs(E of Cuyahoga R to W of Grand R) excluding Chagrin R	Organic Enrichment/ DO, Flow Alteration	2004 TMDL 2010 monitoring
04110003-030	Chagrin River (ds Aurora Br to mouth)	Cause unknown, Organic Enrichment/ DO, Flow Alteration, Other Habitat Alterations	2006 TMDL 2004 monitoring
04110003-040	Lake Erie trib (E of Grand R to W of Ashtabula R)	Cause Unknown, Nutrients, Organic Enrichment/DO, Flow Alteration, Other Habitat Alterations	2011 TMDL 2009 monitoring
04110004-010	Grand River (hw to ds Swine Creek	Category 3	2009 monitoring
04110004-060	Grand River (ds Mill Cr to mouth); excluding Grant R. Mainstem	Cause Unknown, Organic Enrichment/DO	2006 TMDL 2004 monitoring

04120101-010	Conneaut Creek; Lake Erie Tribs (E. of Ashtabula R to W of Conneaut Cr)	Cause Unknown, Priority Organics, Metals, Other Habitat Alterations	2011 TMDL 2009 monitoring

Islands

AU (HUC)	Segment Identification	Causes/Impairment	Schedule TMDL/Monitoring
04120200-010	Lake Erie Islands	Category 3	2009 monitoring

Water Quality Standards

Ohio water quality standards have two distinct elements: designated uses; and numerical, or narrative criteria designed to protect and measure attainment of the uses.[20] Each water body in the State is assigned an aquatic life habitat use designation, and may be assigned one or more water supply use designation and/or one recreational use designation.[21] Ohio has seven tiers in its aquatic life use designation system.[22] In addition, the Ohio Administrative Code contains statewide chemical-specific criteria for the support of use designations.[23] Ohio's standards also contain numeric biological criteria that describe the expected biological performance of Ohio's wadeable and boatable rivers and streams. Ohio EPA uses the numeric biological criteria to interpret the data generated when a biological assessment of a stream is conducted.[24] Through a use attainability analysis, a given stream reach may be assigned an appropriate aquatic life use. Biological sampling is conducted to establish attainment status. Although chemical and physical data are also collected as part of Ohio EPA's comprehensive watershed evaluations, the performance of the fish and macroinvertebrate communities against three indices is used to determine attainment status.

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[20] Ohio Administrative Code (OAC) 3745-1-07(A)

[21] OAC 3745-1-07(A)(1)

[22] OAC 3745-1-07(B)(1)

[23] OAC 3745-1-07(A)(2)

[24] OAC 3745-1-07(A)(6)

Ohio's water quality standards state that Ohio may also designate a water body for water supply use.[25] Ohio has three water supply uses: public, agricultural, and industrial.[26] A public water supply is a water that with conventional treatment will be suitable for human intake and meet federal regulations for drinking water. [27] The Integrated Report recognizes that including drinking water assessments in the 305(b) report may help identify potential impairments to drinking water sources. Ohio EPA has initiated activities to develop an appropriate methodology for assessing drinking water sources as part of its 305(b)/303(d) water quality assessment and reporting process. Ohio EPA anticipates that drinking water assessments will be included in its next Integrated Report.

Ohio water quality standards state that Ohio may also designate a water body for recreational use.[28] Ohio has developed three recreational uses: bathing waters, primary contact, and secondary contact. Under the Ohio Administrative Code, recreational designations are in effect from May to mid-October.[29] Stream reaches are assigned an appropriate use designation and bacteriological data are collected as part of a comprehensive watershed evaluation. Under Ohio water quality standards, water samples that exceed 5,000/100ml for fecal coliform or 576/100ml E. coli in two or more samples if less than five samples are collected, or more than 20% of the samples when more than five samples are taken in a thirty day period, are determined to be not meeting standards.[30] Ohio generally does not monitor these waters more than once in the thirty day time frame. Any of the 23 river AUs, or any of the 331 HUC AUs, are classified as impaired in the Integrated Report where at least five exceedances of the secondary contact criterion are recorded in the last five year period.[31] Ohio also has a standard which utilizes bacteriological data to establish public health nuisances.[32] Ohio EPA listed as impaired any part of any AU for which the Ohio Department of Health or a county health board issued a dermal contact advisory. Ohio EPA listed six AUs based upon dermal contact advisories. Ohio anticipates implementing a more comprehensive recreational use attainment analysis in the future. Recreational and

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[25] OAC 3745-1-07(A)(1)

[26] OAC 3745-1-07(B)(3)(a)

[27] Id.

[28] OAC 3745-1-07(A)(1)

[29] OAC 3745-1-07(B)(4)

[30] OAC 3755-1-04 (F) (a) and (b)

[31] See Integrated Report, pgs. 6-7.

[32] OAC 3745-1-04

dermal contact use impairments are listed on Table 6 (Category 5), identifying the impaired waters. U.S. EPA considers these impaired waters listed for pathogens for 303(d) purposes.

In 1998, Ohio established wetland water quality standards. Narrative criteria have been codified which protect the functional and recreational aspects of designated wetlands. Ohio expects to establish numeric biological criteria in the future. Ohio has assessed 121 wetlands, however, attainment status has not been determined. The Integrated Report states that Ohio EPA will determine the status of these wetlands after further advances in wetland water quality standards have been made.

Partial Disapproval and Listing For Sport Fish Consumption Advisories

Ohio does not have a codified beneficial use specific to human consumption of fish, and did not use fish consumption advisories in placing waters on its 303(d) list of impaired waters at Table 6 (Category 5) of the Integrated Report. Ohio EPA recognizes that there are health risks associated with the consumption of fish from certain waters in the State. These risks are identified and communicated to the public through sport fish consumption advisories that are issued by the Ohio Department of Health based on data provided by Ohio EPA. Ohio EPA did not, however, include on its 303(d) list at Table 6 of the Integrated Report, those waters where a sport fish consumption advisory exists if there was no other impairment. In order to address this issue, the Integrated Report states that Ohio EPA will give those AUs that are on Table 6, for non-attainment of another beneficial use, a higher priority for TMDL development if there is also a sport fish consumption advisory.

The CWA establishes the national goal of protecting and propagating fish, shellfish, and wildlife, and protecting recreation on the nation's waters.[33] This is often referred to as the "fishable and swimable" goal of the CWA. While not specifically listing fish consumption as a beneficial use, the Ohio water quality standards include a narrative criteria that surface waters of the State shall be free from substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life.[34] The Ohio standards also include numeric criteria for specific pollutants that are intended to protect humans from exposure to toxic pollutants through consumption of contaminated fish.[35] While Ohio EPA has not established

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[33] 33 U.S.C. §1251(a)(2)

[34] OAC 3745-1-04(D)

[35] See numeric criteria for protection of human health in the Lake Erie and Ohio River drainage basins, OAC 3745-1-33 and 34. See also methodology for developing numeric criteria for protection of human health for fish consumption in the Lake Erie drainage basin, OAC 3745-38(A)(1).

fish tissue-based criteria for evaluating the suitability of fish for human consumption, Ohio does have ambient criteria for specific pollutants that are intended to prevent the pollutants from accumulating in fish tissue in concentrations that are detrimental to humans who consume the fish. U.S. EPA finds that the water bodies for which the Ohio Department of Health has issued a sport fish consumption advisory are water quality limited segments requiring TMDLs. This interpretation is consistent with Ohio's water quality standards. Therefore, to the extent that Ohio's 303(d) list of impaired waters, at Table 6 of the Integrated Report, does not include waters for which sport fish consumption advisories have been issued, and which do not otherwise appear on Table 6 of the Integrated Report for non-attainment of another beneficial use, U.S. EPA is disapproving Ohio's 303(d) list at Table 6 of the Integrated Report. As a result of this partial disapproval, U.S. EPA is adding 17 additional waters for inclusion on Ohio's 303(d) list at Table 6 of the Integrated Report. This listing is based on the sport fish consumption advisories and applies to those water bodies that are not otherwise listed on Table 6 of the Integrated Report for non-attainment of another beneficial use.

U.S. EPA has determined that those waters that are listed on Table 6 as impaired, and which also have a sport fish consumption advisory, are also impaired for sport fish consumption. U.S. EPA's partial disapproval and listing based on the sport fish consumption advisories are for those waters that are not otherwise identified on Ohio' s 303(d) list at Table 6 of the Integrated Report. The waters on Attachment A to this Decision Document that are being added to Ohio's 303(d) list based on a sport fish consumption advisory. This action is being taken pursuant to Section 303(d) of the CWA and 40 C.F.R. §130.7(d)(2). U.S. EPA will commence a 30 day public notice seeking comments on the partial disapproval of Ohio's 303(d) list, and the addition of the waters listed on Appendix A as water quality limited segments requiring TMDLs. U.S. EPA will consider any comments received during the comment period.

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

Except with regard to not listing waters based on sport fish consumption advisories as discussed in the previous section, U.S. EPA has reviewed Ohio's submission and concludes that the State developed its Section 303(d) list at Table 6 of the Integrated Report, in compliance with Section 303(d) of the Act and 40 C.F.R. § 130.7. U.S. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

U.S. EPA has reviewed Ohio's description of the data and information it considered, its methodology for identifying waters, and considered any other relevant information including information the State submitted in response to requests for additional information. With the exception of the partial disapproval and listing of those impaired waters listed in Appendix A, U.S. EPA concludes that the State of Ohio 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.

U.S. EPA has also determined that the State properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) of the Act and U.S. 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. U.S. 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 Ninth Circuit Court of Appeals held that Section 303(d) of the CWA authorizes U.S. EPA to identify and establish total maximum daily loads for waters impaired by nonpoint sources.[36]

From August 21, 2002, to September 20, 2002, Ohio made available to the public its draft report "Ohio 2002 Integrated Water Quality Monitoring and Assessment Report."[37] The Integrated Report describes the State's assessment process and the methodology used to identify WQLSs. Ohio EPA primarily uses data collected for Sections 305(b) and 303(d) purposes. Additional data used was provided by the Ohio Department of Natural Resources, Northeast Ohio Regional Sewer district, Miami University, and Ohio Northern University. Ohio also considers aquatic life use attainment data collected by volunteers who attend appropriate training, such as the Voluntary Action Program training provided by Ohio EPA, or are competent in Ohio EPA biological sampling protocols.

Removal of Waters from the 303(d) List

The State has also demonstrated good cause for not including certain waters that were previously listed on Ohio's 1998 303(d) list. These previously listed waters are on Table 3 of the Integrated Report. As provided in 40 C.F.R. § 130.7(b)(6)(iv), U.S. EPA requested that the State demonstrate good cause for not including these waters on its 2002 303(d) list.

The Integrated Report states that 91 segments in 56 hydrologic unit codes (HUCs) were incorrectly included on the 1998 303(d) list. The State identified two flaws in its previous listing

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[36] Pronsolino et al. v. Nastri et. al., 291 F. 3d 1123 (9th Cir, 2002); see also U.S. EPA's 1991 Guidance; and National Clarifying Guidance for 1998 Section 303(d) Lists, August 27, 1997.

[37] See cover letter to Jo Lynn Traub, Director, Water Division, U.S. EPA Region V, from Christopher Jones, Director, Ohio EPA, submitting the final Ohio 2002 Integrated Water Quality Monitoring and Assessment Report.

methodology which lead to the inclusion of these 91 segments: 1) some waters were listed based on old data (i.e., older than 10 years at the time of the original listing); and 2) some waters were listed using insufficient data.[38]

Table 3 of the Integrated Report lists 31 HUCs that were included on the 1998 list in error based on data in 60 segments that were more than 10 years old at the time of original listing (i.e., the data were more than 10 years old in 1998). Ohio's five-year basin approach for monitoring water quality considers data up to 10 years old as valid for use in assessing AUs. Following Ohio's listing methodology, the waters on Table 3 of the Integrated Report were excluded from the State's 2002 303(d) list. Those waters were included on the1998 list in error due to the fact that some data in Ohio EPA's computer database used to assess waters were from the early 1980s. For this reason, the Integrated Report excludes those waters that were listed using the older data. If waters were listed based on data that were less than 10 years old, and no additional data have been collected, the water will remain on Ohio's 303(d) list. Ohio did not de-list due to the age of the data after listing. If the data were 10 years old or less at the time the water was originally listed, the water remains on Ohio's 303(d) list at Table 6 of the Integrated Report. There are a few waters remaining on the list where the data used to list were older than 10 years. These waters remained on the list with the belief that the conditions have not changed and the data represent the current condition of the water. The second flaw in Ohio's 1998 listing methodology was reliance on insufficient data in listing decisions. For purposes of reporting on trends in its Section 305(b) reports, Ohio EPA would use data from a single site to infer the water quality of a larger reach. The 1998 303(d) list included 25 HUCs based on limited data from 31 segments. The insufficiency of the data was not previously identified because the number of sites within a segment is not available in the State's 305(b) database. Now that Ohio EPA has identified the limited amount of data for some of the previous listings, it has decided to exclude those HUCs and associated segments from the 2002 303(d) list.

Waters Meeting Water Quality Standards

The State removed waterbodies from the Section 303(d) list if new and reliable data or information demonstrated that a waterbody was meeting water quality standards and therefore was no longer impaired. The State's decision not to include these waters on its 2002 Section 303(d) list is consistent with U.S. EPA regulations at 40 C.F.R. § 130.7(b)(1). Although a segment that appeared on Ohio's 1998 list may now be achieving the applicable water quality standard, other segments within the AU may still be impaired and remain in Category 5 (i.e., the 2002 303(d) list).

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[38] Integrated Report, Section 6.2, page 13

Waters listed on section 4C of the Integrated Report; Pollution not Pollutant

Since Ohio followed the 2001 Guidance in developing the Integrated Report, waters that were identified as being impaired due to non-pollutant stressors are listed in Category 4C of the Integrated Report. Ohio has only listed one AU in this category, the AU identification number 05030103 040 for the Mahoning River (downstream West Branch to upstream Duck Creek). This segment is listed for violation due to organic enrichment/DO, other habitat alterations, and natural limits (wetlands). The flow of the stream has been modified due to channelization and dam construction. A TMDL is currently being developed for bacteria by the U.S. EPA.

Waters Subject to Other Pollution Control Requirements Stringent Enough to Implement any Water Quality Standards, 40 CFR 130.7(b)(1)(iii)

Under 40 C.F.R. 130.7(b)(1), States are not required to list WQLSs still requiring TMDLs where effluent limitations required by the CWA, more stringent effluent limitations required by State or local authority, or other pollution control requirements required by State, local, or federal authority, are stringent enough to implement applicable water quality standards. The regulation does not specify the time frame in which these various requirements must implement applicable water quality standards to support a State's decision not to list particular waters.

The State has demonstrated that there are other pollution control requirements required by State, local, or federal authority that will result in attainment of water quality standards for three AUs within a reasonable time. The State demonstrated good cause for not listing the following three AUs on this basis:

04110001-030 East Branch Black River. This was listed for siltation, after further review the State has determined that this listing was in error. The only currently documented impairment in this assessment unit following a 1997 evaluation was attributed to the Grafton WWTP. This facility has been upgraded to address the source of pollution and improve compliance with their NPDES permit. This is being delisted for the siltation problem and not included due to the upgrade of the Grafton WWTP.

05040006-040 South Fork Licking River. This was listed for priority organics and is meeting standards due to remedial actions taking place. The Ohio EPA Division of Emergency and Remedial Response is actively working with litigants following the settlement of a lawsuit which set forth the necessary series of corrective actions to resolve the known biocritea departure. See http://www.epa.state.oh.us/cdo/ramp_creek.htm for more information.

05090202-080 Todd Fork. This was listed for nutrients and is expected to be meeting standards within a reasonable time. The Wilmington WWTP was identified as the source of the nutrient load which caused the only instance of departure in this assessment unit in 1998. Further

explanation of this situation is at: http://www.epa.state.oh.us/dsw/documents/LMR_Tsd.pdf. Ohio EPA anticipates that compliance with a renewed NPDES permit will adequately reduce the nutrient load.

Monitoring should be scheduled for these waters to verify that the water quality standard is attained as expected in a reasonable time frame. Where standards will not be attained through implementation of the requirements listed in 40 C.F.R. 130.7(b)(1) in a reasonable time, it is appropriate for the water to be placed on the Section 303(d) list to ensure that implementation of the required controls and progress towards compliance with applicable standards is tracked. If it is determined that the water is, in fact, meeting applicable standards when the next Section 303(d) list is developed, it would be appropriate for the State to remove the water from the list at that time.

Public Comments on Listing Decisions

During the public comment period the State received comments, including comments that expressed concern that all data were not assessed and that certain waterbodies should be included or removed from the 303(d) list. The State responded to all of the public comments and addressed its decisions to not consider certain data, or list certain waterbodies on its 2002 Section 303(d) list. Comments and Ohio EPA's responses were included in the Integrated Report at Appendix D. The State has demonstrated, to U.S. EPA's satisfaction, good cause for its listing decisions in the 2002 Section 303(d) list at Table 6.

Priority Ranking and Targeting

U.S. 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 status of recreation use, and the status of aquatic life. For inland lakes and near shore of Lake Erie (including Maumee Bay) the waterbodies were assigned the same priority as the surrounding, or contiguous 11 digit HUC. Ohio gave the open waters of Lake Erie and the Ohio River a low priority.

For the remaining waters on Category 5 of the Integrated Report the State used a point system to determine the priority ranking of the AUs. Ohio EPA developed a point system totaling a maximum of 13 possible points (1 being the lowest priority and 13 being the highest). The maximum points distributed was 12. The points were distributed as follows:

7 points given to any AU where a Recreation Use was identified;
3 points given to any AU that had a 40 to 79 score in the determination for the Aquatic Life Use;
2 points given to any AU that had a 80 to 90 score in the determination for the Aquatic Life Use;
1 point given to any AU that had a 0 to 39 score in the determination for the Aquatic Life Use;

1 point given to any AU where over half of the Aquatic Life Use"non-attainment" is "partial" ;
1 point given to any AU with a fish consumption advisory; and
1 point given to any AU where recent data, sufficient to proceed with a TMDL, are available.[39]

In addition, U.S. 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. Ohio considered various factors in developing both the long term and short term schedule. Ohio is currently working on TMDLs in twenty project areas, encompassing approximately sixty AUs. These AUs include TMDLs that have already been approved.

Ohio builds on programmatic strengths in monitoring, modeling, permitting, and nonpoint source incentives to develop an integrated approach to TMDLs that aligns program goals and resources efficiently. Ohio also has an active stakeholder process for developing TMDLs. Ohio works on collecting data through the five year rotating basin plans. It takes 5 years to complete monitoring in the State. Each AU is assigned to one of the next two monitoring cycles using the following criteria: Ohio EPA's five-year Basin Monitoring Strategy; time since most recent assessment; distribution of work effort among Ohio EPA district offices; and TMDL schedule. Ohio has generated its long-term TMDL schedule based on the following criteria: existing commitments; priority ranking; presence of a funded watershed coordinator who can assist with TMDL activities; and distribution of work effort among Ohio EPA districts.[40]

The following tables identify Ohio's short term schedule for TMDL development:[41]

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[39] See Ohio's Integrated Report pages 11 and 12

[40] See Ohio's 2002 Integrated Report pages 15 and 16

[41] See Ohio's 2002 Integrated Report table 16

TABLE 3

TMDLs to be developed in 2002

HUC	Description	Cause/Pollutants Listed for Impairment[42]	Miles	Priority Rank	recreational use
04110002-010	Cuyahoga River (Hdw to d/s Black Brook)	Siltation, DO, Flow and Habitat alterations, Natural Limits (wetlands) pathogens	148.9	9	y
04101002-040	Cuyahoga River (d/s Little Cuyahoga R to d/s Brandywine Ck)	Unknown Toxicity, Nutrients, DO, Flow and Habitat Alterations pathogens	153.9	9	y
04110002-050	Cuyahoga River (d/s Brandywine Ck to d/s Tinker Cr); ex Cuyahoga R	Unknown, Nutrients, DO, Flow and Habitat Alterations, Oil and Grease, Natural Limits (welands) pathogens	97.3	8	y
0411002-060	Cuyahoga River (d/s Tinkers Ck to mouth)ex. Cuyahoga R. main stem	Metals, DO, Flow and Habitat Alterations pathogens	115.6	8	y
05030201-110	E. Fork Duck Creek	Unknown, Metals, Siltation, DO, Flow and Habitat Alterations, Suspended Solids, Total Toxics	136.2	3	I
05030201-120	Duck Creek; W. Fork Duck Cr	Unknown Toxicity, Siltation, DO, Flow Alterations	149.6	2	y
05040001-100	Sugar Creek (Hdw to u/s Middle Fk)	Nutrients, Siltation, DO, Habitat Alterations, pathogens, Natural Limits (wetlands)	97.3	8	y
05040001-110	S. Fork Sugar Creek	Unknown, iron, Nutrients, Siltation, DO, Flow, pH, Unionized Ammonia, habitat alterations, natural limits (wetlands)	137.7	8	y
05040001-120	Sugar Creek (u/s Middle Fork to mouth) ex. South Fork	Unknown Toxicity, metals, pH, Siltation, Habitat Alterations, Natural Limits (wetlands) pathogens	121.3	8	y
05060001-001	Cuyahoga River mainstem (d/s Brandywine Ck to mouth inc. old river channel)	DO, Unknown Toxicity, habitat alteration, Total Toxics, Unionized Ammonia pathogens	809.0	10	y

[42] Not all the pollutants may be addressed in the development of the TMDLs scheduled. Ohio does TMDL development on a watershed basis. They may only calculate a load for one parameter but this may also address other related pollutants. For example, resolving a nutrient issue may result in meeting the DO standard. If not all of the pollutants are addressed the AU should remain in Category 5 of the list until a TMDL is completed for the remaining pollutants.

05060001-060	Scioto River (u/s Bokes Ck to u/s Mill Ck) ex. Scioto R main stem	Unknown Toxicity, Nutrients, Siltation, DO, Habitat Alterations, Unionized Ammonia, Salinity/TDS/Chlorides, pathogens	107.7	9	y
05080001-090	Stillwater River (Hdw to u/s Swamp Ck)	Nutrients, DO, Habitat Alterations	115.0	4	I
05080001-110	Greenvillle Creek (hdw to d/s W. Br.)	DO, Habitat Alterations	70.1	3	I
05080001-120	Greenville Creek (d/s W Br to mouth)	DO	97.6	5	I
05080001-130	Stillwater River (d/s Greenville Ck to u/s Ludlow) Ex. Stillwater R. mouth.	DO, Habitat alteration	9.28	1	I
05080001-140	Stillwater River (w/s Ludlow Ck to mouth) ex. Stillingwater mainstem	Nutrients,DO, Habitat Alterations, Unionized Ammonia pathogens	148.0	10	Y
05090101-020	Raccoon Creek (hdw to u/s Hewett Fk)	Metals, Siltation, Zinc. Iron, Aluminum, other metals, pH, Habitat alterations	135.5	1	U
05090101-030	Raccoon Creek (u/s Hewett Fk d/s Elk Fk)	Unknown, metals, Nutrients, Siltation, Zinc. Iron, other metals, pH, Salinity/TDS/Chlorides, Oil and Grease	155.0	4	U
05090101-040	Raccoon Creek (d/s Elk Fk to u/s Little Raccoon Ck)	Metals, Siltation, Zinc. Iron, other metals, pH, Flow Alterations, Natural Limits (wetlands)	95.0	2	
05090202-110	Mill Creek	Unknown, Unknown Toxicity, Unionized Ammonia, Nutrients, DO, Flow and habitat alteration, Oil and Grease	164.6	2	

TMDLs to be developed in 2003

HUC	Description	Cause/Pollutants Listed for Impairment	Miles	Priority Rank	recreational use
04100006-050	Lick Creek	Nutrients, Siltation, DO, Habitat Alterations, pathogens	105.9	9	Y
04100007-010	Auglaize River (Hdw to d/s Pusheta Ck)	Unknown, Unknown Toxicity, Nutrients, Siltation, DO, Habitat Alterations pathogens	148.2	11	Y
04100007-020	Auglaize River (Pusheta Ck to u/s Jennings Ck); ex Auglaize R mainstem	Unknown, unknown Toxicity, Nutrients, Siltation, DO, Flow and Habitat Alterations pathogens	99.9	11	Y
04100007-060	Auglaize River (u/s Jennings Ck to u/s Little Auglaize R) ex Auglaize R mainstem	Nutrients, Siltation, Zinc, DO, Flow and Habitat Alterations, Unionized Ammonia, pathogens	143.0	9	Y

04100011-001	Sandusky River Main stem (d/s Tymochtee Ck to mouth)	causes pending 2001 field sample	1420.0	5	U
04100011-020	Sandusky River (Hdw to u/s Broken Sword Ck)	causes pending 2001 field sample	137.3	2	I
04100011-050	Tymochtee Creek (Hdw to d/s Warpole Ck)	Nutrients, Siltation, DO, Flow Alterations	171.6	1	I
04100011-060	Tymochtee Creek (d/s Warpole Ck to mouth)	Nutrients, Siltation, Flow Alterations,	130.1	1	U
05030103-001	Mahoning River (d/s Eagle Ck to Pennsylvania Boarder)	Metals, Siltation, pH, Flow Alterations,	1705.0	9	
05030204-060	Monday Creek	Metals, Siltation, pH, Flow Alterations,	116.0	1	U
05060001-120	Olentangy River(d/s Delaware Run to mouth)	unknown, Unknown Toxcity, Pesticides, Priority Organics, Metals, Other Inorganics , Nutrients, DO, flow and Habitat Alterations pathogens	113.0	8	Y
05060001-130	Big Walnut Creek (Hdw to Hoover Dam)	Unknown, Nutrients, Siltation, DO, Flow and Habitat Alterations, Suspended Solids, Pathogens, Unionized Ammonia	189.6	10	Y
05060001-140	Big Walnut Creek (d/s Hoover Dam to u/s Alum Ck)Blacklick Creek	Unknown, Unknown Toxcity, Priority Organics, Metals, Copper, Thermal Modification, Nutrients, Siltation, DO, Flow and Habitat Alterations, Unionized Ammonia, Pathogens, Total toxics	145.7	10	Y
05060001-150	Alum Creek(Hdw to Alum Creek Dam)	unknown, Nutrients, Flow and Habitat Alterations pathogens	121.8	11	Y
05060001-160	Big Walnut Creek (Alum Ck to mouth); Alum Creek (d/s Alum Ck dam to mouth)	Unknown, Siltation, DO, Flow and Habitat alterations pathogens	99.7	11	Y
05080001-150	Mad River (Hdw to d/s Kings Ck)	Flow and habitat Alterations	134.7	1	U
05080001-160	Mad River (d/s Kings Ck to d/s Chapman Ck)	DO, Habitat	153.3	2	U
05080001-170	Buck Creek	Habitat alterations pathogens	140.6	3	U
05080001-180	Mad River (d/s Chapman Ck to u/s Mud Ck) ex. Buck Ck and Mad R main stem	Siltation, DO, Flow and Habitat Alterations	128.2	2	I
05120101-010	Sandusky River (Hdw to u/s Beaver Ck)	Habitat Alterations pathogens	115.9	8	Y

TMDLs to be Developed in 2004

HUC	Description	Cause/Pollutants Listed for Impairment	Miles	Priority Rank	recreational use
04100012-010	W Br Huron River (Hdw to u/s Slate Run)	Nutrients, DO, Flow and habitat alterations, Oil and Grease	132.1	3	U
04100012-020	W. Br. Huron R (u/s Slate Run to mouth)	Nutrients, Habitat alterations, Natural Limits (wetlands)	150.6	3	U
04100012-030	Huron River, E. Br Huron R, Lake Erier Tribs (E of Sawmill Ck to west of Huron R)	Unknown, Nutrients, Habitat Alterations, Siltation	129.8	2	I
04100012-040	Lake Erie Tribs, (E of Huron R to W of Vermillion R)	Nutrients, Habitat alterations, siltation	83.2	2	U
04100012-050	Vermillion River (Hdw to above E Br.)		140.3	-------	I
04100012-060	Vermillion River (above E Br. to Lk Erie)		127.7	-----	I
04110001-020	West Br. Black River (Hdw to Black R)	Unknown, Nutrients, Siltation, DO	174.0	1	I
04110001-040	E. Br.Black River (d/s Coom Ck to mouth)	Nutrients, Siltation, DO, Habitat alteration	125.8	5	I
04110001-050	Black River; Lake Erie Trib (E of Black R to w of Porter Ck)	Unknown Toxicity, Priority Organics, nutrients, DO pathogens	100.8	9	Y
04110003-030	Lake Erie Trib(E of Cuyahoga tR to W of Grand R)	DO, Flow Alterations pathogens	119.0	8	Y
05030101-070	Middle Fork Little Beaver Creek	Unknown, Pesticides, Unionized Ammonia, Nutrient, Siltation, DO, Salinity/TDS/Chloride, Habitat Alteration, Oil and Grease, Natural Limit (Wetlands)	149.1	12	
05030101-080	W FK Little Beaver Creek	Unknown, siltation, Flow alteration, Natural Limit Wetlands	111.2	5	I
05030101-090	Little Beaver Creek (d/s Middle and W. Fk to mouth)	Unionized Ammonia, Nutrients, siltation, DO, Flow and habitat alteration, Pathogens, Natural limits (wetlands)	140.1	4	I
05080002-060	Sevenmile Creek		137.2	4	U

Long term schedule

U.S. EPA has received Ohio's long-term schedule for TMDL development for all waters on the State's 2002 Integrated Report for Category 5 waters[43]. As a policy matter, U.S. EPA has requested that states provide such schedules.[44] U.S. EPA is not taking any action to approve or disapprove this schedule pursuant to Section 303(d).

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[43] See Table 7 for long and short term schedules for TMDL development.

[44] 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.

Appendix A
to U.S. EPA Decision Document,
Partial Approval/Disapproval of Ohio's 2002 303(d) List

List of waters being added to Table 6 (Category 5) of Ohio's Integrated Report based on sport fish consumption advisories:

AU (HUC 11)	Description of water body	FCA	Listed Category	Pollutant
04100003-020	W. Branch St. Joseph River	one meal per week all species	2	PCB's
04100004-030	St. Mary's River	one meal per week (fresh water Drum, Norther Pike, Saugeye)	3	Mercury
04100010-050	Portage River	one meal per 2 months carp	3	PCB's
04100012-050	Vermillion River (headwaters to upstream East Branch)	One meal per month Small Mouth Bass	3	Mercury
04100012-060	Vermillion River (upstream East Branch to mouth)	One meal per month Small Mouth Bass	3	Mercury
04110001-030	E. Br. Black River (headwaters to downstream Coon Creek)	One meal per month Rock Bass, Smallmouth Bass, Yellow Bullhead	4B	Mercury
05040001-040	Sandy Creek (headwaters to downstream Still Fork)	One meal per month Carp	3	PCB's
05090103-040	Little Scioto River (upstream Rocky Fork to mouth); Ohio River tribs (downstream 8-digit divide)	One meal per month Rock Bass, Spotted Bass	3	Mercury
05090202-010	Little Miami River[1] (headwaters to upstream Massies Creek)	One meal per month for Sauger	4A	Mercury
		one meal per week of Channel Catfish, Smallmouth Bass		PCB's
05090101-100	Symmes Creek (downstream Buffalo Creek to mouth); Ohio River Tribs (Symmes Cr, to Big Sandy R.)	One meal per month Freshwater Drum, Sauger (area under the advisor is from St. Rt. 41 to Waterloo to the Ohio River)	3	Mercury
05090202-020	Little Miami River [2] (upstream Massies Creek to downstream Beaver Creek)	One meal per month entire length Sauger,	4A	Mercury

		one meal per week for Channel Catfish, Smallmouth Bass		Lead
05090202-030	Little Miami River [3] (downstream Beaver Creek to upstream Caesar Creek)	One meal per month entire length Sauger, one meal per week for Channel Catfish, Smallmouth Bass	4A	Mercury Lead
	Grand River Mainstem (downstream Mill Creek to mouth)	One meal per Month Carp 22" and larger, Freshwater Drum,	4B	PCB's
		Largemouth Bass, Smallmouth Bass, Yellow Bull head , Silver Redhorse and Walleye form Tote St. near Austinburg		Mercury
	Hocking River Mainstem (downstream Scott Creek to Mouth)	One meal per month Carp	3	PCB's
	Walhonding River Mainstem (entire Length)	One meal per month Channel Catfish, One meal per week Saugeye, Smallmouth Bass	2	PCB's
	Paint Creek (downstream Rocky Fork to mouth)	One meal per Month Largemouth Bass	2	Mercury
	Stillwater River Mainstem (downstream Greenville Creek to mouth)	One meal per Month Channel Catfish, Smallmouth Bass	4C	Mercury

1 In appendix C of the Integrated Report Ohio identifies cause of impairment to be metals, Unionized Ammonia, Nutrients, Organic Enrichment/DO, Flow Alteration, Other Habitat Alterations, Pathogens. Appendix C also indicates that there is a FCA for this section of the Little Miami. Although a TMDL was developed for this section it did not cover the FCA or Pathogens and therefore should remain on the list in Category 5.

2 In appendix C of the Integrated Report Ohio identifies cause of impairment to be metals, Unionized Ammonia, Nutrients, Other Habitat Alterations, Pathogens, Siltation, unknown Toxicity. Appendix C also indicates that there is a FCA for this section of the Little Miami. Although a TMDL was developed for this section it did not cover the FCA or Pathogens and therefore should remain on the list in Category 5.

3 In appendix C of the Integrated Report Ohio identifies cause of impairment to be Unionized Ammonia, Nutrients, Chlorine, Nutrients, Organic Enrichment/DO, Flow Alterations, Suspended Solids. Appendix C also indicates that there is a FCA for this section of the Little Miami. Although a TMDL was developed for this section it did not cover the FCA and therefore should remain on the list in Category 5.