OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

Ohio 2002 303(d) List Integrated Report
USEPA Approval/Disapproval
Date: 7-17-03
#15

Jo Lynn Traub, Director
Water Division
U.S. EPA Region V
77 West Jackson Blvd. (W-15J)
Chicago, Illinois 60604-3507

Dear Ms. Traub:

I am pleased to submit the final Ohio 2002 Integrated Water Quality Monitoring and Assessment Report for U.S. EPA's review and approval under Section 303(d) of the Clean Water Act. The report incorporates the integrated approach to Section 305(b) and Section 303(d) reporting, as suggested in U.S. EPA's November 2001 guidance.

The draft integrated report was available for public review and comment from August 21 to September 20, 2002. Copies of the draft report were available on Ohio EPA's web page and by mail upon request. A summary of the comments received and Ohio EPA's responses are included in Appendix D of the report.

Please contact Trinka Mount of the Division of Surface Water at (614) 644-2140 if you need additional information. We look forward to your approval.

Sincerely,

Christopher Jones
Director

cc: Kevin Pierard, Chief, Watershed Nonpoint Source Branch, U.S. EPA Region V

Enclosures
H:\TMDL\303(d) Listing\2002\report final\2002_303_submittal_letter.wpd

RECEIVED
BY DK DATE 10/3/02

OhioEPA

State of Ohio Environmental Protection Agency

Division of Surface Water
October 1, 2002
FINAL FOR U.S. EPA APPROVAL

Ohio 2002

Integrated Water Quality Monitoring and Assessment Report

prepared to fulfill the requirements of
Sections 305(b) and 303(d) of the Clean Water Act

ASSESS *THE SITUATION*

PRIORITIZE *THE PROBLEMS*

SCHEDULE *THE WORK*

Table of Contents

1 Purpose 1

2 Introduction 1

3 Focus on Watersheds 2

4 Definition of Assessment Unit 3

5 Assess 4
- 5.1 Streams and Rivers 4
  - 5.1.1 Aquatic Life Uses
  - 5.1.2 Recreation Use
  - 5.1.3 Sport Fish Consumption
  - 5.1.4 Drinking Water Use
- 5.2 Inland Lakes, Ponds, and Reservoirs 8
- 5.3 Wetlands 9
- 5.4 Ohio River 9
- 5.5 Lake Erie Nearshore, Islands, and Lacustuaries (Including Maumee and Sandusky Bays) 10
- 5.6 Establishing Assessment Categories 10

6 Prioritize 11
- 6.1 Ohio River and Lake Erie 12
- 6.2 Removing Waters From the 303(d) List 12

7 Schedule 14
- 7.1 Ohio TMDL Status 14
- 7.2 Long-Term Schedules for Monitoring and TMDLs 15
- 7.3 Short-Term Schedule for TMDL Development 16

8 Public Involvement 16

Maps

Tables

Appendix A. Summary of Listing Recommendations of the Ohio TMDL External Advisory Group

Appendix B. Watershed Delineation Changes Since the 1998 303(d) Listing

Appendix C. Detailed Information for Each 11-digit-HUC Assessment Unit

Appendix D. Response to Public Comments

List of Maps

(Maps follow all text.)

Watershed (HUC11) Assessment Units

Large River Assessment Units

Aquatic Life Use Status of HUC11 Assessment Units

Aquatic Life Use Status of Large River Assessment Units

Recreational Use Status of HUC11 Assessment Units

Recreational Use Status of Large River Assessment Units

Categories of HUC11 Assessment Units

Categories of Large River Assessment Units

Priority of Impaired Waters: HUC11 Watersheds

Ohio TMDLs in Progress

Ohio Long-Term Monitoring Schedule

Ohio Long-Term TMDL Schedule

List of Tables

(Tables follow all text and maps, in the order cited.)

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Table 2. Status of Watershed (HUC11) Assessment Units (Summary Table)

Table 3. Waters on the 1998 List Not on the 2002 List

Table 4. Short-Term Schedule for TMDL Development

Table 5. TMDLs Approved in Past Two Years

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

1 Purpose

This report describes the status of Ohio's waters, as required by section 305(b) and 303(d) of the federal Clean Water Act. Recent guidance from the U.S. Environmental Protection Agency (U.S. EPA) directs states to prepare an integrated 305(b) water quality inventory and 303(d) list of impaired water bodies for all waters of the state. Section 305(b) requires a summary of the status of the state's surface waters, while Section 303(d) of the Clean Water Act requires the state to develop a list of water bodies that do not meet established standards. Such waters are referred to as "impaired waters." The state must take appropriate action to improve impaired water bodies, such as developing total maximum daily loads (TMDLs).

2 Introduction

The 2002 integrated report is the next step in Ohio's continuing evolution to a fully-formed watershed basis for water quality reporting. U.S. EPA's 2002 Integrated Water Quality Monitoring and Assessment Report Guidance, dated November 2001, sets forth a new approach to water quality reporting in satisfying the Clean Water Act requirements for both Section 305(b) water quality reports and 303(d) impaired waters lists. In response to this federal guidance and lessons learned in doing TMDL projects in recent years, this report incorporates some changes in data interpretation and a refined methodology for judging the quality of Ohio's waters.

Traditionally, biological and chemical data collected at sampling sites has been aggregated, catalogued, and reported in terms of water body segments in Ohio's 305(b) reports. Recognizing the importance of addressing water quality impairments on a watershed basis, Ohio EPA, in its 1998 303(d) list, aggregated and prioritized the waterbody segments to produce a watershed-based listing. While a watershed basis has proven to be desirable, the underlying segment reference has produced confusion. Thus, with the 2002 integrated reporting and listing cycle, a methodology that moves directly from site attainment observations to reporting on watershed condition is being adopted.

Ohio has maintained a strong linkage between 305(b) reporting and 303(d) listing. Under the title of "Water Resource Inventories," Ohio has prepared 305(b) reports every two years since 1988 using biological-based assessments. 303(d) lists were compiled in 1992, 1994, 1996, and 1998.

Since the 1998 303(d) list was completed, the listing process has been examined through a number of venues. For example, in Ohio an external advisory group on TMDLs made recommendations on how to improve listing in Ohio, as summarized in Appendix A. The Ohio River Valley Water Sanitation Commission (ORSANCO) hosted a TMDL workgroup to promote consistency in 305(b) reporting and 303(d) listing among states draining to the Ohio River. Nationally, U.S. EPA convened a federal advisory group on TMDLs, a work group on consolidated listing and methodology, and gathered public comment as part of redrafting TMDL rules. Congress sought input on TMDLs from both the Government Accounting Office and the National Research Council. All of these activities, and others, have played some role in this report, either through federal guidance or Ohio's reaction to the guidance and recent experience in completing TMDLs for impaired waters.

Differences from the 1998 303(d) list occur primarily for the following reasons:

- The "integrated" guidance: the 2002 federal guidance that calls for the integration of the 305(b) and 303(d) reporting is fundamentally different in scope, organization, and options for communicating about waters than previous guidance for these reports.

- More recent data: the 1998 303(d) list was based on the 1996 305(b) data, which incorporated data collected between 1979 and 1994. This report uses data collected since 1990.

- Watershed delineation: the 1998 303(d) list prioritized watersheds using a draft set of watershed boundaries; that work is now final.

- Watershed focus in methodology: Ohio EPA's experience with TMDLs since the completion of the 1998 303(d) list has reinforced the need for a watershed focus in programmatic planning.

This report includes a discussion of why a watershed focus is vital to restoring Ohio's waters, how Ohio is defining an "assessment unit," the methodology used in the assessment, how waters may be removed from the 303(d) list, schedules for monitoring and completing TMDLs, and a summary of public involvement in the preparation of the report. Several appendices provide additional detail. The status of Ohio's waters is presented in a series of tables and maps following the text.

3 Focus on Watersheds

In 1990 the Ohio EPA initiated an organized, sequential approach to monitoring and assessment termed the Five-Year Basin Approach. One of the principal objectives of this new approach was to better coordinate the collection of ambient monitoring data so that information and reports would be available in time to support water quality management activities such as the reissuance of NPDES permits and periodic revision of the Ohio water quality standards (WQS).

The initial step in this process was to section the state into twenty-five different areas which represented aggregations of subbasins within major river basins. The twenty-five areas were each assigned to one of five basin years with respect to the five Ohio EPA districts. Thus within a given year, monitoring takes place within five of the areas and within each of the five Ohio EPA districts. Five years is required to complete the cycle of monitoring within each of the twenty-five areas. Once the field monitoring is completed, data analysis and reporting takes place. The end product is typically a Biological and Water Quality Study (also known as a technical support document (TSD)) which contains the summary and integration of the biological, chemical, and physical assessments. These documents are available electronically on the Ohio EPA Division of Surface Water web page at http://www.epa.state.oh.us/dsw/document_index/psdindx.html.

Since 1998, Ohio EPA has used a process called geometric site selection to identify sampling locations in watersheds targeted for TMDL development. The drainage area of the watershed is divided in half. This value is subsequently halved and so on. Sampling locations which best match these drainage areas are used in combination with other longitudinally relevant sites to adequately assess the watershed. For example, in a 500-mi^2 watershed a site would be located at 250 mi^2. Other sites would be located at 125 mi^2, 63 mi^2, 31 mi^2, 16 mi^2, 8 mi^2, and 4 mi^2. In

this example there would probably be about 30 4-mi^2 sites, 15 8-mi^2 sites, 10 16-mi^2 sites, 5 31-mi^2 sites, 3 63-mi^2 sites and between 15 to 20 other mainstem sites.

Through these complete watershed evaluations, Ohio EPA has gained some unique perspectives on data extrapolation and credibility especially with regard to small drainages. Additionally, we have encountered some problems with segment-dependent assessments. These problems include:

- Since determination of aquatic life use attainment status is specific to a sampling site, translation of site attainment status to segment attainment status limits assessment coverage and results in underutilization of data applicability.

- Segments force a linear analysis of data. Spatial analysis of data from small drainage areas is preferred.

- Characterization of attainment status within segments, expressed as a proportion of total monitored miles, will inevitably be skewed by the status of segments in small drainage areas if comprehensive watershed sampling is conducted. Small streams are most common.

- Identifying segments is a continuous process. Measures of total assessment coverage are confounded by the growing universe of assessment responsibility.

To address these issues, for this assessment Ohio EPA is adopting a watershed grading technique that incorporates a spatial analysis of sub-basins in addition to the traditional segment approach. This technique fosters direct comparisons of aquatic life use attainment status on a watershed scale. It is a fair reflection of the magnitude of water pollution in a particular area. As such, it is helpful in prioritizing remediation efforts.

4 Definition of Assessment Unit

An assessment unit provides a practicable way to summarize water quality data and to convey information about the inferred status of the water being evaluated. Therefore, an assessment unit changes with the provided analysis. Comparisons between assessment units are useful in water quality management, therefore, some consistency between assessment units is desirable. However desirable, this is not the current condition. In the future, Ohio EPA anticipates incorporating water quality information about streams, lakes, wetlands, water supplies, etc., in one assessment unit encompassing an area in size that is likely to be commensurate with the scale of any necessary remediation.

Although some progress has been made toward this end, this report continues to consider the status of streams separately from lakes which likewise are considered differently than wetlands and water supplies. Each lake that has been assessed in Ohio is considered to be an individual assessment unit. Lake Erie is divided into three assessment units. The Ohio River Valley Sanitation Commission evaluates the status of the Ohio River in sixteen segments which form the state's southern border. Each of these segments is an assessment unit. The status of Ohio's wetlands and water supplies is not reported in any comprehensive format. The Ohio EPA is developing programs to assess these waters.

Previous Ohio EPA 305(b) reports have exclusively used waterbody segments as assessment units. With this integrated report we present a method to assess an entire 11-digit hydrologic unit code (HUC) rather than reach specific segments within the HUC. Thus, 331 HUCs have become principal assessment units for Ohio EPA. Ohio has twenty-three rivers which drain areas considerably larger than 500 mi^2. Rivers of this size have been excluded from the HUC assessment units. Instead, these rivers are considered to be separate assessment units. Information about the status of these rivers is presented in a completely linear context. In both cases, it is not necessary to subdivide these assessment units unless more detailed information is desired. In that case, individual site performance is most instructive.

The 1998 303(d) list prioritized watersheds using a draft set of watershed boundaries being developed cooperatively by several federal and state government agencies. The agencies completed their work in 1999 and agreed to use the watershed boundaries. Thirty-three (about 10%) of the watershed delineations changed from those used in the 1998 303(d) list, mostly involving Ohio River tributaries. The changes are outlined in Appendix B.

In summary, assessment units considered in this report include the following:

- 331 11-digit HUCs to describe watersheds
- 23 large river units
- 3 Lake Erie units.

5 Assess

Once the assessment unit is defined, data are assembled for each unit. The data are evaluated to determine whether the unit is supporting, partially supporting, or not supporting its designated uses. Each AU is then categorized, or placed in one of the five unique assessment categories identified by U.S. EPA in the integrated reporting guidance.

5.1 Streams and Rivers

Ohio EPA has been instrumental in the development of biological criteria for assessing water resources and has focused the reporting on the assessment of waters in regards to aquatic life use. Focusing on aquatic life use is advantageous in that the criteria are often more stringent than those required for other uses, and the aquatic life use designation applies to almost every Ohio waterbody. Accordingly, the protection of aquatic life use should result in the protection of all other uses.

However, opportunities to improve waterbodies designated for recreation and as drinking water sources may be missed if the focus is only on aquatic life use. With this reporting cycle, a coarse grading of recreation use is introduced and a plan for future consideration of the drinking water use is outlined.

5.1.1 Aquatic Life Uses

Ohio EPA has been evaluating streams using similar methods for more than twenty years. Our stream evaluations are based on the experience gained through the collection of about 20,000 fish population samples, 8,000 macroinvertebrate samples and more than 68,000 water chemistry samples. It is the most robust database of its type in existence. This report is based on data collected since 1990.

Ohio has seven tiers in its aquatic life use designation system (OAC 3745-1-07(B)). Through a use attainability analysis, a given stream reach is 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 solely used to determine attainment status.

A structured process known as the Stream Regionalization Project was used to select reference or least impacted sites in each of Ohio's five ecoregions. Biological data from these sites was used to develop ecoregion specific biocriteria for each aquatic life use. A biological community at a sampling site must achieve the relevant criterion in all three indices in order to be in full attainment of the water quality standard (note: some indices may not apply in certain circumstances). Partial attainment is determined if 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 were codified in the Ohio Water Quality Standards (OAC 3745-1-07, Table 7-16) in 1990.

Consequently, an individual sampling site is Ohio EPA's most fundamental assessment unit. Any expression of attainment in a larger context is derived from the performance of pertinent sites and a thorough evaluation of all available water quality data. In a linear reach, the position of various sites in relation to pollution sources and applicable landscape features is used to assign distances with degrees of impairment. Typically, overall attainment is reported as a proportion of the larger assessment area. Hence, 80% attainment across ten river miles is a direct reflection of data that indicated the biological community in eight miles of a particular stream fully attained the appropriate aquatic life use.

Ohio has twenty-three rivers of various lengths with drainages of at least 500 mi^2. The status of these river assessment units is determined according to the linear method. The length of the river deemed to be in attainment is divided by the total length of the river to yield one value which represents the most general expression of the river's aquatic life use status. Table 1 contains summary information about each of these large-river assessment units.

Ohio has 331 HUCs encompassing a median size of 130 mi^2. The status of these HUC assessment units is determined according to a combination of spatial and linear analysis. The proportional attainment status of all sites with drainages less than 5 mi^2 is averaged with the proportion of attainment at all sites with drainage areas between 5 mi^2 and 20 mi^2. This average proportion of attainment is averaged with the proportion of attainment at all sites with drainage areas between 20 mi^2 and 50 mi^2. Effectively, the resulting average is a proportion of attainment status which is weighted toward the biological performance documented in a downstream direction. This proportion is averaged with the linear proportion of attainment for all reaches in the HUC which have drainages of between 50 mi^2 and about 500 mi^2. The outcome, a number ranging from zero to one, is multiplied by 100 to be presentable on a more common 0 to 100 scale. This number is the average of the proportional attainment status of sites with drainages of less than 50 mi^2 in a HUC and the proportion of miles of attainment for any streams in the HUC which drain between 50 mi^2 and about 500 mi^2. The final number can be considered to be an average grade of aquatic life use status for a HUC assessment unit.

Adequate sampling is necessary to represent the aquatic life use attainment status for all streams in a HUC. Despite Ohio EPA's significant biological sampling effort, about one third of the state's HUC assessment units are precluded from this analysis due to insufficient data.

About one half of these unassessed HUCs were evaluated prior to 1990 but have not been sampled since then. In other unassessed HUCs where recent sampling may have occurred, the scope of monitoring was likely judged too limited to adequately generate a HUC aquatic life use score. Generally, at least five sample sites are minimally considered necessary for extrapolation. Presently, Ohio EPA prefers that the principal investigators make informed decisions about the data relevance for a particular HUC evaluation rather than institute specific guidance on minimum effort.

Recognizing the state's limited resources, one way to increase HUC assessment coverage is to utilize all available relevant data. While Ohio EPA uses data from a variety of sources in its work, the data used to determine the aquatic life use status in this report was primarily collected by the Ohio EPA. Some additional biological data was provided by the Ohio Department of Natural Resources, Northeast Ohio Regional Sewer District, Miami University and Ohio Northern University. Those interested in providing data for aquatic life use attainment status determinations may attend appropriate training (such as the Voluntary Action Program training provided by Ohio EPA) or otherwise become competent in Ohio EPA biological sampling protocols. All data used to make attainment determinations is carefully reviewed for consistency with all Ohio EPA methods and guidance.

Table 1 and Appendix C contain summary information about the 23 large-river and the 331 HUC assessment units, respectively.

5.1.2 Recreation Use

Determination of recreational use impairment has been infrequent in Ohio. Indeed, it is uncertain whether any assessment unit has ever been documented to be in non-attainment of its recreational use. Previous 305(b) reports have included an analysis of the potential for non-attainment in various streams but listing has not occurred due to complexities in the data collection and use determination process. With the introduction of the HUC assessment unit, a strategy to begin listing Ohio's most severe recreational use impaired areas has been developed.

Ohio has three recreational uses including bathing waters, primary contact and secondary contact. Stream reaches are assigned an appropriate use. Ohio EPA collects bacteriological data as part of a comprehensive watershed evaluation. However, Ohio water quality standards indicate at least five samples in a thirty day period are necessary to establish a violation. This resource intensive protocol is not observed in part because collecting more samples across a wide area is more consistent with Ohio EPA's overall watershed approach. The implied targeted sampling should occur after critical areas are identified in a watershed assessment.

Ohio also has another standard which utilizes bacteriological data to establish public health nuisances (OAC 3745-1-04). This standard is similar to the secondary contact criteria but the requisite number of samples is at least two. In any case, it is reasonable to expect Ohio streams to be free from contamination associated with sewage. Exceedences of the bacterial concentrations associated with the secondary contact criteria represent potentially gross impairment. Therefore, a method to identify areas of excessive bacterial pollution and to identify these assessment units as impaired is desirable.

In this report any of the 23 river assessment units or any of the 331 HUC assessment units where at least five exceedences of the secondary contact criterion maximum (5000/100 ml Fecal Coliform or 576/100 ml *E. Coli*) have been recorded in the last five years are identified as

impaired. Additionally, if a dermal contact advisory has been issued by the Ohio Department of Health or a county health board for any part of the assessment unit, then the affected unit will be identified as impaired. This will qualify these units for the development of a TMDL to address recreational use issues.

The availability of bacteriological data is widespread especially in comparison with requisite data for other beneficial use determinations. The Ohio Department of Natural Resources monitors state park beaches. The Ohio Department of Health and county health boards also collect data that is likely to be appropriate for recreational use determinations. However, Ohio EPA was not able to consider other potentially valid data for this report. All bacteriological data used to characterize recreational use impairment in this report was collected by Ohio EPA. Six assessment units were identified as impaired based on an Ohio Department of Health or a county health board dermal contact advisory.

In the near future, it is anticipated that Ohio EPA will implement a more robust recreational use attainment analysis. The ability to accept data from external contributors will be considered at that time. However the use attainment process matures, it is certain that assessment units shown as impaired for recreation use in Appendix C would continue to be considered to be impaired under any new appraisal protocols.

5.1.3 Sport Fish Consumption

Conceptually, the importance of identifying streams from which the consumption of fish is not advisable is consistent with the Clean Water Act. However, Ohio does not include fish consumption among the codified beneficial uses. Since the use is not established, no criteria exist and attainment status cannot be assessed. Instead, the Ohio Department of Health issues the Sport Fish Consumption Advisory based on data collected by Ohio EPA and the Ohio Department of Natural Resources. The 2002 advisory can be viewed at http://www.odh.state.oh.us/alerts/fishadv.pdf.

Determination of sport fish consumption use attainment status is not necessarily synonymous with the issuance of an advisory. Should a recommendation that people refrain from eating carp more than once a week from a particular stream be regarded as an impaired use? Clearly, a recommendation that no fish should be consumed from a given river is non-attainment but the lack of criteria confound other interpretations.

A reasonable determination of impairment might be based on the one meal a month advisory. However, the extent of the Ohio Department of Health recommendations are broad in comparison with Ohio EPA assessment units. For instance, a typical advisory applies to the entire named stream even though the supporting data is often specifically associated with an individual site. While the purposes of both programs overlap and it is probable that the same data can be used to establish attainment status and advisories, there are significant differences in the intended uses of the information. In this situation, the implications of incorrectly characterizing an assessment unit as impaired cannot be dismissed especially in light of the fact that the public is well served by the advisory listing.

Obviously, further development of the sport fish consumption use is required. It is outside the scope of this report to attempt to discern non-attainment. Despite this, Ohio EPA is aware that streams have been identified where the health risks associated with eating fish are relatively greater. To begin to address this dilemma, any assessment unit which is considered to be in non-attainment of another beneficial use will be given a higher priority if any part of the unit is

the subject of an Ohio Department of Health Sport Fish Consumption Advisory. The priority will reflect the severity of the advisory limitations.

5.1.4 Drinking Water Use

The inclusion of drinking water assessments within the 305(b) report may help identify potential impairments to drinking water sources. Coordinating drinking water assessments with the Source Water Assessment and Protection (SWAP) program would lead to a more comprehensive picture of the overall quality and potential threats to Ohio's water resources. A more complete picture could assist in the ranking of waterbodies for 303(d) listing and potentially increase the funding opportunities available for improvement and protection of drinking water resources. Focusing funding of water quality improvement plans to watersheds with impaired drinking water sources would decrease costs of water supply treatment, thereby providing savings to communities while improving the overall health of the waterbodies for use by both aquatic and human life.

As the incorporation of assessing drinking water supplies would be a new addition to Ohio's 305(b) process, Ohio EPA has initiated the following activities to develop an appropriate methodology for assessing drinking water sources in Ohio:

1. Nationwide Drinking Water Assessment Methodology Summaries. Ohio EPA reviewed 305(b) reports and related materials from other states and contacted corresponding agency representatives to determine how this process is carried out nationwide. For states which had not previously assessed the drinking water use, the state was contacted to determine if it was planning on assessing the drinking water use in future reports.

2. Ohio Drinking Water Assessment Criteria. Beginning in the summer of 2002, an Agency workgroup will focus on developing a methodology appropriate for assessing the drinking water use in Ohio. The workgroup will review the methodologies practiced by other states and data from public water supply systems to establish criteria for evaluating the drinking water use.

3. Data Sources for Drinking Water Assessment. The workgroup will examine existing and potential data sources for assessing the drinking water use. These sources include, but are not limited to, the following: public water system treated and raw data, Ohio EPA ambient data and Ohio EPA SWAP data. A method for collection of data should be established by Spring 2003, so data collection for this use may begin Summer 2003.

4. Data Analysis for Drinking Water Assessment. By spring 2003, the workgroup will have a framework in place for analyzing collected data. The analysis method will include guidelines for determining full-, partial-, and non-support categories. The completion of this and the above tasks should allow drinking water assessments to be complete for the 2004 integrated report.

5.2 Inland Lakes, Ponds, and Reservoirs

Functionally, Ohio EPA's program to assess lakes began in 1989 when a Clean Water Act Section 314 Lake Water Quality Assessment grant supported the evaluation of 52 lakes. Various additional grants enabled the evaluation of 89 more lakes through 1995. An analysis and determination of use status for 447 public lakes (>5 acres in surface area) was presented in Volume 3 of the 1996 Ohio Water Resource Inventory (305(b) report). Since then, Ohio EPA

has monitored 53 lakes. Data from this effort has not been analyzed in a manner that facilitates inclusion in this report.

Although fewer resources have been available for Ohio EPA lake data collection and analysis, a significant lake evaluation tool was developed that is potentially applicable today. The Lake Condition Index was created to characterize overall ecosystem health and to assess beneficial use status. The Index was revised in 1996 to address changes in the interpretation of the threatened use, full attainment status. Even so, the current implications of identifying a lake as impaired with the necessity of a TMDL, were not anticipated. Hence, uncertainty exists about whether a lake sampled in the early 1990s that was deemed threatened should be considered in priority rankings for TMDL development.

Ohio is obliged to report on the water quality of lakes, ponds, and reservoirs, but dedicated funding to support a lakes monitoring program has not been available. With renewed attention to this shortcoming, an updated assessment of lake quality including under-utilized data is possible. Additionally, HUCs have been identified for TMDL development. Ohio EPA's watershed approach strives to address all water quality issues in a HUC. It follows that lakes in TMDL areas should be evaluated concurrently with other water resources and that appropriate remedial actions should ensue. However, current resources are not available to incorporate lake assessments in Ohio monitoring or TMDL analyses.

5.3 Wetlands

Ohio EPA began development of tools to determine beneficial use status in wetlands in 1996. In 1998, the State of Ohio established wetland water quality standards. Narrative criteria have been codified which protect the functional and recreational aspects of a designated wetland. Numeric biological criteria are anticipated in the future. These criteria will establish benchmarks for attainment of a likely tiered ecoregion-specific wetland use system. The ecological integrity of a particular wetland will be evaluated using vascular plants, macroinvertebrates, and amphibians.

With more than 200,000 potential wetlands to be evaluated, methods to accurately characterize the status of an assessment unit which may include several designated wetlands are being considered. A probabilistic evaluation of wetland quality in several HUCs has been initiated. To date, 121 individual wetlands have been assessed. Attainment status of these wetlands will be determined subsequent to further advances in wetland water quality standards.

5.4 Ohio River

Ohio EPA participated in an Ohio River Valley Water Sanitation Commission (ORSANCO) workgroup to promote consistency in 305(b) reporting and 303(d) listing. Following that effort, ORSANCO prepared and endorsed a 305(b) report for the Ohio River. For the purposes of this report, Ohio EPA defers to ORSANCO's analysis and includes as impaired those Ohio River areas bordering Ohio that are identified as impaired in ORSANCO's 305(b) report.

Approximately 450 miles of the Ohio River's 981-mile length flows along the southern boundary of Ohio. Of that length, ORSANCO indicates the following miles of impairment by use:

- 7 miles of aquatic life use impairment: partial support, based on biological data
- 80.1 miles of contact recreation use impairment, partial and non-support, pathogens

- 10.5 miles of public water supply use impairment, partial support, phenols
- 450.9 miles of fish consumption use support: partial support, PCBs, dioxin, mercury.

5.5 Lake Erie Nearshore, Islands, and Lacustuaries (Including Maumee and Sandusky Bays)

Aquatic life use determinations are predicated on a narrative description of the aquatic community associated with the relevant use tier. In the absence of numeric criteria, the narrative expectation provides the impairment determination. Ohio EPA completed *Development of Biological Indices Using Macroinvertebrates in Ohio Nearshore Waters, Harbors, and Lacustuaries of Lake Erie in Order to Evaluate Water Quality* in 1997. In 1999, *Biological Monitoring and an Index of Biotic Integrity for Lake Erie's Nearshore Waters* was produced. The data analysis in these documents provide a foundation to establish numeric biocriteria for aquatic life use in Lake Erie along the Ohio shoreline and in lacustuary areas.

The term "lacustuary" was coined to specify the zone where Lake Erie water levels have intruded into tributary river channels. The aquatic life use status of a lacustuary is included in the assessment of the tributary river. Excluding lacustuaries, the status of the Lake Erie shoreline is evaluated in three assessment units: western basin nearshore, islands, and central basin nearshore ("nearshore" in this case meaning areas within 100 meters of the shoreline). Techniques to assess open water areas are being explored under grants from the Ohio Lake Erie Protection Fund.

Concurrent with Ohio EPA's efforts to evaluate Lake Erie conditions, an international plan to improve attainment of beneficial uses began in 1994. The Great Lakes Water Quality Agreement provided the impetus for a bi-national Lakewide Management Plan for Lake Erie. The plan addresses 14 beneficial uses for Lake Erie, 11 of which are impaired, and establishes action plans to promote restoration. Ohio EPA has a leadership role in the development and implementation of the plan.

For this report, fish community data which best represent current conditions along the Lake Erie nearshore and island shorelines was evaluated against the expectations established in the documents cited above. In the western basin nearshore, 17% attainment was documented. Around the islands, 46% attainment was documented. In the central basin nearshore, 32% attainment was documented. Macroinvertebrate data has not been collected since 1996. Further development of the macroinvertebrate assessment methods are warranted before use characterizations are forthcoming.

The status of aquatic life use along the Ohio shoreline is strongly influenced by adjacent land use practices and by tributary conditions. To achieve full attainment, remedial actions directed at improving land use in Ohio are required. Therefore, it is reasonable for the Ohio EPA to include the Lake Erie nearshore on the Ohio 303(d) list. Ohio EPA is working with the other appropriate jurisdictions to attain a desired future state for Lake Erie. Listing the Lake Erie nearshore for TMDL development and our involvement with various Lake programs are part of Ohio's commitment to international restoration activities.

5.6 Establishing Assessment Categories

After assessing the status of the various uses of each assessment unit, one of five categories is assigned to each unit, or area assessed. Waterbodies with impairments are listed in

Categories 4 and 5. Waterbodies that are not impaired are shown in Categories 1 through 3. The categories are defined as follows:

1. Suitable data available, the assessment unit is attaining the water quality standard, and no use is threatened.
2. Attaining some of the designated uses; no use is threatened; and insufficient or no data or information available to determine if the remaining uses are attained or threatened.

3. Insufficient or no data or information to determine if any designated use is attained.

4. Impaired or threatened for one or more designated uses but does not require the development of a TMDL, because
   A. All needed TMDLs have been completed.
   B. Other pollution control requirements are reasonably expected to result in the attainment of the water quality standard in the near future.
   C. Impairment is not caused by a pollutant.

5. The water quality standard is not attained. The assessment unit is impaired or threatened for one or more designated uses by a pollutant(s), and requires a TMDL.

Category 5 constitutes the Section 303(d) list of waters impaired or threatened by a pollutant(s) for which one or more TMDL(s) are needed.

6 Prioritize

Waters identified as impaired and requiring a TMDL (Category 5) are prioritized according to the type and degree of impairment. As a practical matter, only the 331 11-digit-HUC and the 23 large-river assessment units are included in the priority-setting exercise. Recognizing the functionality and importance of watersheds, areas and assessment units identified in other ways (inland lakes, Lake Erie nearshore areas) are assigned the priority of the appropriate surrounding or contiguous 11-digit HUC.

The 11-digit-HUC and the large-river assessment units were evaluated using the following set of priorities (maximum possible total points is 13):

- Status of the Recreation Use, as determined by the factors identified in this assessment (bacteria and dermal contact). Any assessment unit having a Recreation Use impairment is automatically a high-priority water. (7 points)

- Status of the Aquatic Life Use, as determined by the factors identified in this assessment. The assessment unit scores were segregated into three sub-priority classes, as follows:

  - Low priority for TMDL, 0 to 39: scores in this range generally indicate severe basin-wide problems, comprehensive degradation that may require significant time and resources and broad-scale fixes, including, possibly, fundamental changes in land use practices. Educating about how water quality is affected by various practices and encouraging stewardship may be more effective in these areas than a traditional TMDL approach. For example, a program by Ohio EPA and the Ohio Department of Natural Resources that funds watershed coordinators to develop a comprehensive,

implementable, community-driven watershed plan may be appropriate in these areas. (1 point)

- Medium priority for TMDL, 80 to 99: scores in this range generally indicate a localized water quality issue. Addressing the impairment may not require a complete watershed effort; rather, a targeted fix for a particular problem may be most effective. (2 points)

- High priority for TMDL, 40 to 79: scores in this range indicate a problem of such scale that purposeful action should produce a measurable response within a 10-year period. These waters are the best candidates for a traditional TMDL. The watershed coordinator idea mentioned above can also work effectively in these areas in concert with a TMDL effort. (3 points)

Because the evaluation of the Aquatic Life Use is more highly developed, it is possible to consider another important aspect of the assessment. Where over half of the Aquatic Life Use "non-attainment" is "partial," the chances for recovery are better. Thus, additional consideration is given to assessment units with this characteristic (1 point). This has the effect of moving such an area to the next higher class.

- Additional consideration is given to assessment units with a fish consumption advisory. (1 point)

- Additional consideration is given to areas where recent data, sufficient to proceed with a TMDL, are available. (1 point)

No modifications were made to account for NPDES permit changes and other abatement measures made since the last 303(d) listing, as is allowed under Section 303(d). It is Ohio EPA's opinion that waters should remain on the TMDL list until an assessment indicates that impairment has been abated.

The priority information is reported in both the summary table (Table 1) and the detailed information for each assessment unit (Appendix C).

6.1 Ohio River and Lake Erie

Other organizations have accepted lead responsibility for TMDLs in two special waters affected by multiple jurisdictions: U.S. EPA for the open waters of Lake Erie, ORSANCO for the mainstem of the Ohio River. Ohio EPA automatically assigns these waters a low priority *for Ohio EPA-initiated action.* Ohio EPA will participate in TMDL actions conducted by the lead organizations.

6.2 Removing Waters From the 303(d) List

Federal regulations require a demonstration of good cause for not including waterbodies on the 303(d) list that were included on previous 303(d) lists (pursuant to 40 CFR 130.7(b)(6)(iv)). Good cause includes, but is not limited to, more recent and accurate data, more sophisticated water quality modeling, flaws in the original analysis that led to the waterbody being listed, or changes in conditions.

The 1998 Ohio 303(d) list included 273 HUCs based on data from 881 waterbody segments. The method used to develop this integrated report evaluated HUCs using site-specific data. Some rationale for not "filtering" the data with a segment analysis in route to constructing a HUC assessment is presented in Section 3. An additional reason to avoid segmentation is that some interpretations of the 1998 list disregarded the 273 HUCs and instead suggested that TMDLs were necessary to improve each waterbody segment. In this view, each cause associated with each non-attaining segment would require a TMDL. Effectively, this perspective considers segments to be discrete entities. Ohio EPA's objective is to restore beneficial uses in entire watersheds. Segment assessment confuses this objective. Ohio EPA is developing TMDLs to improve conditions in all streams in a targeted watershed.

The 2002 Ohio 303(d) list identifies 205 HUCs and 15 large rivers for TMDL development. Apparent discrepancies between the former and present lists were reviewed to ensure that any exclusions were justified with good cause. One inconsistency that confounds direct comparison is that in the intervening years the boundaries of some HUCs have changed, as described earlier. Consequently, some impaired streams are in different HUCs today. Another mismatch between the two lists is that Ohio EPA now excludes large river data from the HUC assessment. In 1998 many HUCs were listed for TMDL development based on an impaired large river within the HUC. Often, the only sampling which has occurred in the HUC is on the large river. Now, the large-river data which supported the 1998 HUC listing is used instead to uphold the listing of the large river. If no other data are available to characterize the HUC, the HUC is considered unassessed.

This changing of streams within HUCs and reconsidering of data utility can be confusing. To avoid potential lapses between the lists, the present relevance of each of the 881 waterbody segments was individually reviewed. This investigation determined that 91 segments in 56 HUCs were incorrectly part of the 1998 303(d) list. Two flaws in the 1998 listing methods were discovered in this inquiry:

- Some waters were listed based on old data (older than ten years in 1998)
- Some waters were listed based on insufficient data (often only one sampling site)

The 1998 list was prepared using data that had been compiled for the 1996 305(b) report. Although those compiling the list desired to use "recent and readily available data," a mistake likely occurred when the 305(b) assessment year was erroneously considered to be the year of data collection. The1988 305(b) report presented the status of aquatic life use against proposed biological criteria for the first time. To do so, all previous data were entered in a computer database in a 1988 category field. Data in this field was subsequently used to understand trends in two-year 305(b) report cycles. In 1996, the database included fields for 1996, 1994, 1992, 1990, and 1988. In 1998, it would have been logical to assume that data in the 1988 field fit within a ten-year period (1996 to 1986).

Regardless of how the situation occurred, 31 HUCs appear on the 1998 303(d) list based on data in 60 segments that was typically collected in the early 1980s. In 1998, Ohio EPA would not have considered fifteen-year-old data to be "recent" even though it was "readily available." Nevertheless, this data should be considered in its context. Historically, impairment was documented. Future monitoring should be scheduled with priority toward these HUCs.

Another flaw in the 1998 list occurred when an insufficient amount of data was used to characterize a HUC. Absent a linear relationship between multiple sites, extrapolation of site

attainment status to segment attainment status is difficult. For the purposes of explaining statewide trends in a 305(b) report, data from a single site has sometimes been used to infer the quality of a larger reach. The associated implications of this were more fully realized after the 1998 303(d) list was published.

It is unusual for Ohio EPA to have current data from only one or two sampling locations within a HUC. These situations occur where a reference site exists but no other sampling has been initiated. In some cases, single site sampling occurs in tributary streams to a larger river that are accessed by boat. Other peculiar situations may also occur. The 1998 303(d) list included 25 HUCs based on limited data from 31 segments. These data insufficiencies were not apparent during previous listings because the number of sites within a segment is not available in the 305(b) database. What is relevant now is that Ohio EPA is removing 25 HUCs from the 303(d) list that should not have been listed in 1998.

Finally, three HUCs on the 1998 303(d) list have been retained although the data which supported this placement is now considered old. The aquatic life use in these HUCs is impacted by historic and current mining-related activities.

Table 3 identifies the HUCs and associated segments on the 1998 list that are not on the 2002 303(d) list. The three HUCs that were retained are also identified. It is important to note that these waters are not being abandoned. Because there is some evidence of impairment, even though the data are old or limited in scope, these waters are given a higher priority for monitoring.

As part of three approved TMDLs, some waters that were demonstrated to be in attainment were to be removed during the next listing opportunity. However, with the evolution to more in-depth watershed assessment analysis with this listing, these changes may occur as part of the general analysis but they are not specifically pursued.

7 Schedule

Once waters are assessed and the problems prioritized, the next step is to determine a schedule to address the monitoring needs of all waters and restoration needs (including TMDLs) of the impaired ones. Various factors must be considered, including Ohio's ongoing TMDL work and the process identified to do TMDLs, the monitoring strategy, and the resources available for the work.

7.1 Ohio TMDL Status

Ohio EPA is currently working on TMDLs in twenty project areas, encompassing approximately sixty assessment units, as illustrated in the "TMDLs In Progress" map. All of these TMDLs address Aquatic Life Use impairments, and one also addresses a Recreation Use impairment. TMDLs in four of the areas are approved, and implementation is proceeding.

Ohio EPA is committed to producing meaningful TMDLs. From the outset of Ohio EPA's TMDL work, a basic tenet has been that the effort must be a meaningful expenditure of resources - not doing the work to "check off a box," but to bring about real environmental improvement. While Ohio EPA has the responsibility to establish TMDLs based on federal regulatory requirements, it also has a responsibility to the people of Ohio to protect, improve, and restore

the integrity of all waters in Ohio. The TMDL process provides a road map for the specific implementation of a watershed-based delivery of resources aimed at eliminating impairments to Ohio waters.

Ohio EPA has worked to build on traditional programmatic strengths in monitoring, modeling, permitting, and nonpoint source incentives to develop an integrated approach to TMDLs that aligns program goals and uses resources efficiently. In addition to program integration, Ohio adopted an active stakeholder process for its TMDLs. Given the fact that nonpoint source pollution is the dominant cause of impairment in Ohio, this local involvement is a key to success in restoring impaired waters. Recent experience has reinforced the importance of public involvement in local problem-solving and decision-making, as local stakeholders work to formulate implementation plans or reach consensus on local priorities. While such involvement leads to better decisions and more sustainable solutions, it complicates project schedules and makes product delivery more difficult to predict.

In addition to public involvement, an important feature of Ohio's TMDL process is the in-depth watershed assessment that typically kicks off the project. While the "causes and sources" included in this document are valid for various uses, decisions about how to bring waters into attainment with aquatic life, recreation, and other uses are best made with recent data. Thus, how best to approach restoration of uses and what parameters to target within TMDLs is decided as part of the TMDL project itself.

Ohio's TMDL program approach has been endorsed by an external advisory group of Ohio citizens, businesses, and interest groups. As U.S. EPA reconsiders its TMDL rule in light of the National Research Council (NRC) 2001 study, it is notable that Ohio's program already incorporates many of the NRC recommendations.

A schedule for completing all TMDLs in Ohio within fifteen years (from 1998) was established in February 1999. The schedule called for a limited number of projects in the first few years, with an accelerated pace beginning with the 2002 field season (TMDLs to U.S. EPA in 2004). Neither of the actions needed to move to the accelerated pace materialized, namely the completion of federal TMDL rule revisions and technical guidance and the acquisition of additional funding for TMDLs in the state budget cycle. Accordingly, in August 2001, Ohio EPA notified U.S. EPA Region 5 that the TMDL schedule would be revised. In October 2001, U.S. EPA was sued by several environmental interest groups over the pace of progress in Ohio's TMDL program. This was the 41st such lawsuit in the country. Ohio and various utilities and industry groups have intervened in this litigation.

We continue to seek other sources of funding for TMDLs and to work with other agencies or groups to produce TMDLs and similar products.

7.2 Long-Term Schedules for Monitoring and TMDLs

Ohio's five-year basin approach provides a foundation for scheduling monitoring and TMDL projects. The assessment methodology allows that, generally, monitoring data up to ten years old are valid for judging assessment units, so it follows that each assessment unit must be monitored at least once every ten years to maintain full coverage. Thus, each assessment unit is assigned to one of the next two monitoring cycles using the following factors:

- Ohio EPA's Five-Year Basin Monitoring Strategy

- Time since most recent assessment
- Distribution of work effort among Ohio EPA district offices
- TMDL schedule.

Our experience in doing TMDLs indicates that local involvement is a key to success. Although one indicator of local involvement is included among the scheduling criteria, it is difficult to gauge the level of local interest sufficient to sustain a TMDL effort. Thus, the schedule is flexible and can be influenced by expressions of local interest to undertake a TMDL (e.g., significant interest from local citizens and decision-makers, especially combined with letters of resolution from local governments).

The long-term TMDL schedule was generated based on the following criteria:

- Existing commitments
- Priority ranking
- Presence of a funded watershed coordinator who can assist with TMDL activities
- Distribution of work effort among Ohio EPA district.

In an effort to maintain the monitoring and TMDL schedule, Ohio EPA is committed to researching and pursuing additional resources, both in terms of funding and partnering opportunities.

The scheduling and TMDL information is reported on the detailed information sheets for each assessment unit (large rivers in Table 1 and watersheds in Appendix C). Table 7 isolates and sorts the scheduling information by monitoring year. Both the long-term monitoring and TMDL schedules are illustrated on maps included in the report.

7.3 Short-Term Schedule for TMDL Development

Ohio EPA has scheduled several TMDL projects during the next two years, as described in Table 4. TMDLs approved in the past two years are listed in Table 5.

8 Public Involvement

Ohio EPA convened an advisory group that included representatives from the regulated community (e.g., industries, municipalities), environmental groups, consultants, citizens, state and federal agencies, farm organizations, and development interests. The group, which included about eighty active participants, met from late 1998 to June 2000. One subgroup addressed listing issues. Their conclusions were as follows:

- Monitoring and data quality are essential
- Use outside data of highest quality
- Endorse priorities of 1998 list
- Increase attention to human health issues
- Quantify "cost of inaction"
- More monitoring is needed
- Data should be accessible and geographically referenced
- Increased public involvement is needed
- Current funding and resources are inadequate.

The cost associated with implementing the advisory group's listing recommendations was $3.2 million annually; the cost for implementing all advisory group recommendations was $9.7 million annually. Ohio EPA used these estimates to seek additional state funding but ultimately was unsuccessful in competing with other state funding priorities. We have incorporated the "low cost" recommendations (the first four listed above), and we continue to seek ways to address all of the group's recommendations.

Much of the data used in this report has been presented to the public in meetings and publications concerning individual watersheds. Data and assessments have also been available in previous 305(b) reports. All of this information can be accessed from the following Internet web site: http://www.epa.state.oh.us/dsw/document_index/psdindx.html.

Comments were solicited on the draft Integrated Report in a 30-day comment period, August 21 through September 20, 2002. The responses to those comments are contained in Appendix D.

Maps

Watershed (HUC11) Assessment Units

Large River Assessment Units

Aquatic Life Use Status of HUC11 Assessment Units

Aquatic Life Use Status of Large River Assessment Units

Recreational Use Status of HUC11 Assessment Units

Recreational Use Status of Large River Assessment Units

Categories of HUC11 Assessment Units

Categories of Large River Assessment Units

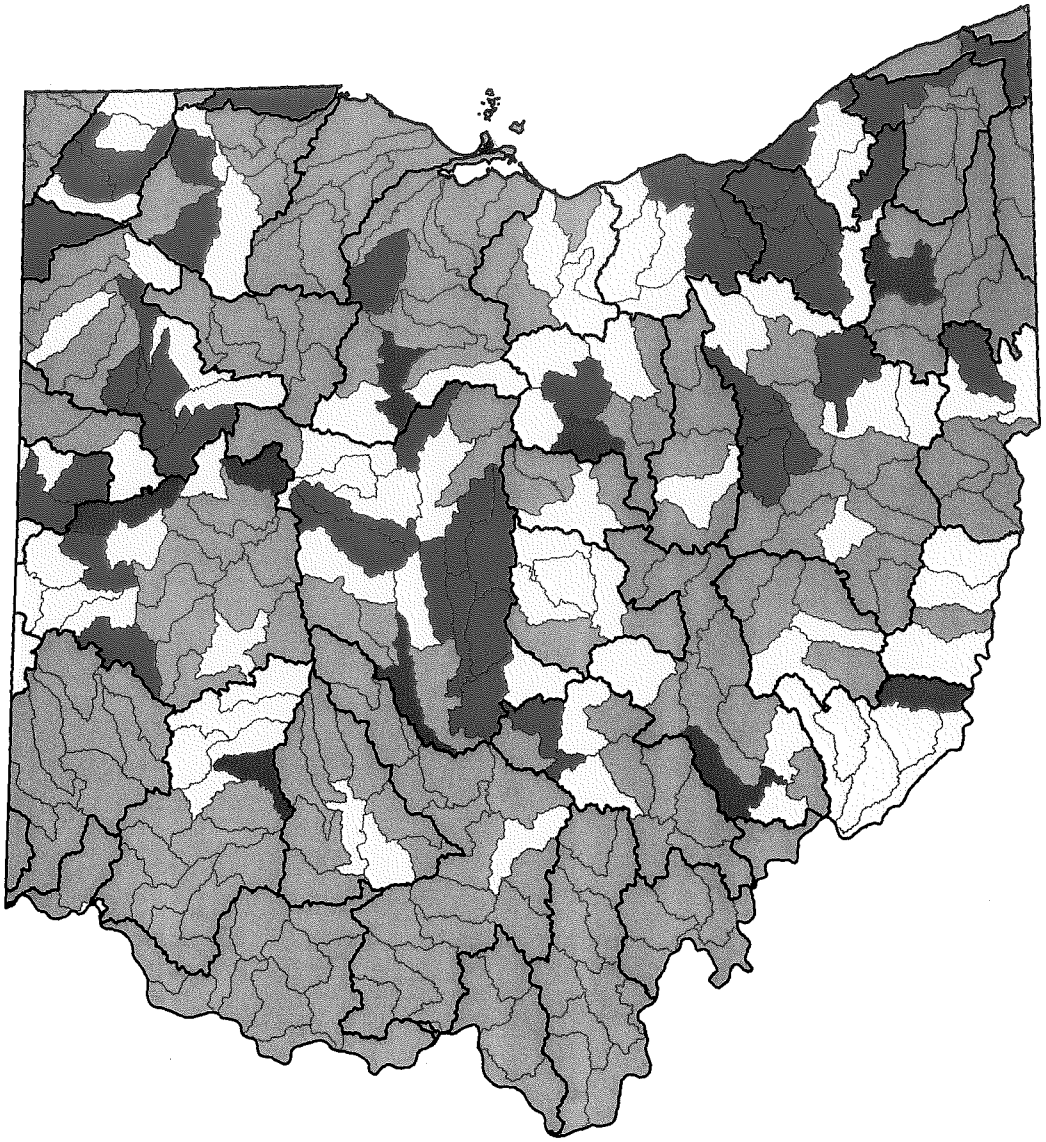
Priority of Impaired Waters: HUC11 Watersheds

Ohio TMDLs in Progress

Ohio Long-Term Monitoring Schedule

Ohio Long-Term TMDL Schedule

Ohio 2002 Integrated Report
Recreational Use Status of HUC11 Assessment Units



See Section 5.1.2 of 2002 Integrated Report

Indeterminate: Some data available, higher than primary contact value, but lower than secondary
Attaining: Data available, lower than primary contact value
Unknown: No data available
Impaired: Data available, higher than secondary contact value

Indeterminate
Attaining
Unknown
Impaired

OhioEPA
Division of Surface Water
BAW 9/27/02

Ohio 2002 Integrated Report
Watershed (HUC11) Assessment Units

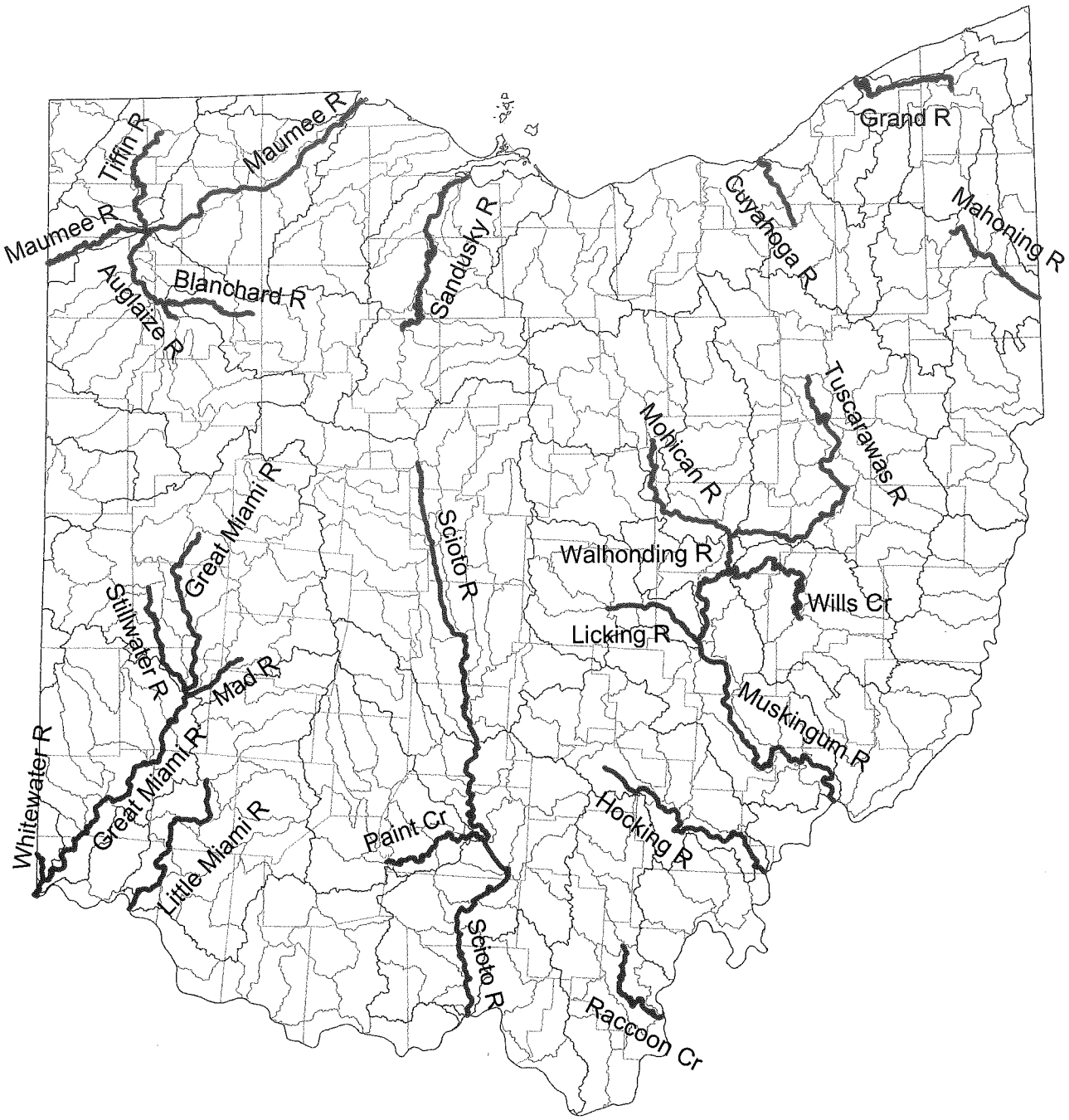
See Section 4 of 2002 Integrated Report

USGS 11-digit Hydrologic Unit Code	
05040001	First 8 digits of Watershed ID
010	Last 3 digits of Watershed ID

OhioEPA

Division of Surface Water
BAW 8/14/02

Ohio 2002 Integrated Report
Large River Assessment Units

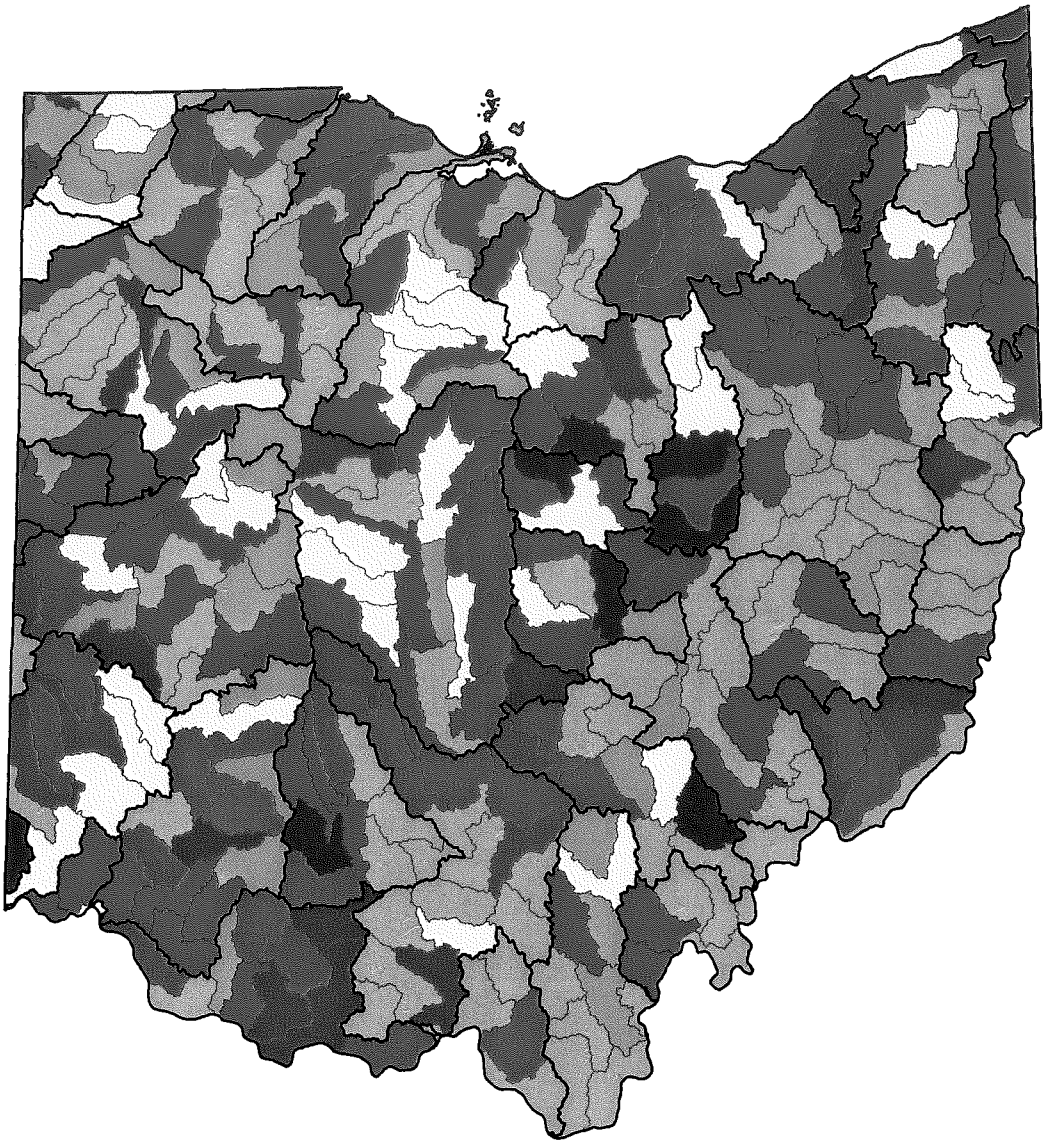


See Section 4 of 2002 Integrated Report

OhioEPA

Division of Surface Water
BAW 9/24/02

Ohio 2002 Integrated Report
Aquatic Life Use Status of HUC11 Assessment Units



See Section 5.1.1 of 2002 Integrated Report

Attainment Score

- no data
- 0-19 More Impairment
- 20-39
- 40-59
- 60-79
- 80-89
- 90-99 Less Impairment
- 100 Attaining WQS

OhioEPA

Division of Surface Water
BAW 9/27/02

Ohio 2002 Integrated Report
Aquatic Life Use Status of Large River Assessment Units

See Section 5.1.1 of 2002 Integrated Report

Attainment Score

- Unassessed
- 0-19 More Impairment
- 20-39
- 40-59
- 60-79
- 80-89
- 90-99 Less Impairment
- 100 Attaining WQS

OhioEPA

Division of Surface Water
BAW 9/27/02

Ohio 2002 Integrated Report
Recreational Use Status of Large River Assessment Units

See Section 5.1.2 of 2002 Integrated Report

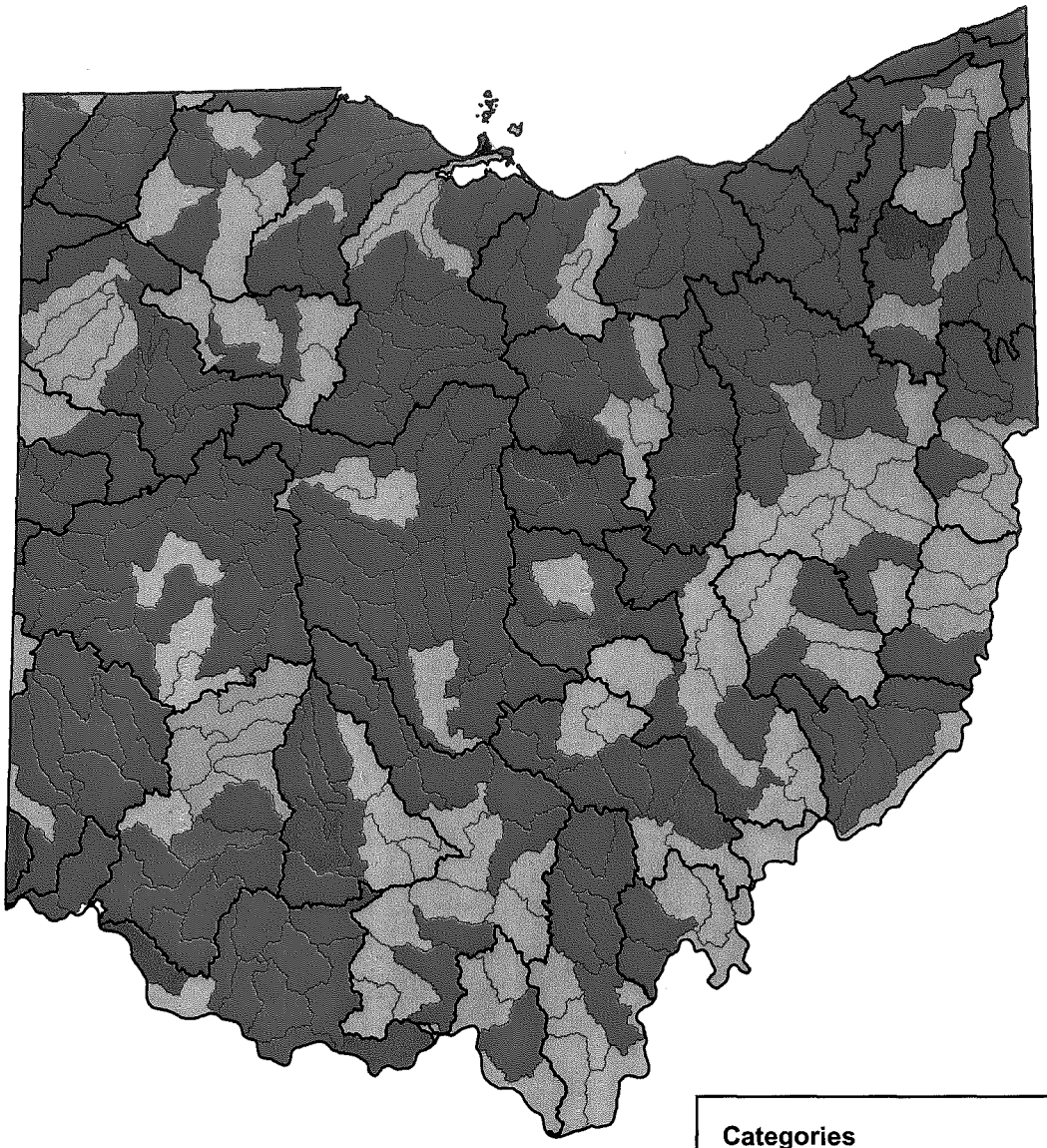
Indeterminate: Some data available, higher than primary contact value, but lower than secondary
Attaining: Data available, lower than primary contact value
Unknown: No data available
Impaired: Data available, higher than secondary contact value

Indeterminate
Attaining
Unknown
Impaired

OhioEPA

Division of Surface Water
BAW 9/26/02

Ohio 2002 Integrated Report
Categories of HUC11 Assessment Units



See Section 5.6 of 2002 Integrated Report

Categories

- 1: Attaining WQS
- 2: Attaining some WQS
- 3: Insufficient data
- 4A: Impaired, TMDLs completed
- 4B: Impaired, use other controls
- 4C: Impaired
- 5: Impaired, need TMDL

OhioEPA

Division of Surface Water
BAW 9/27/02

Ohio 2002 Integrated Report
Categories of Large River Assessment Units

See section 5.6 of 2002 Integrated Report

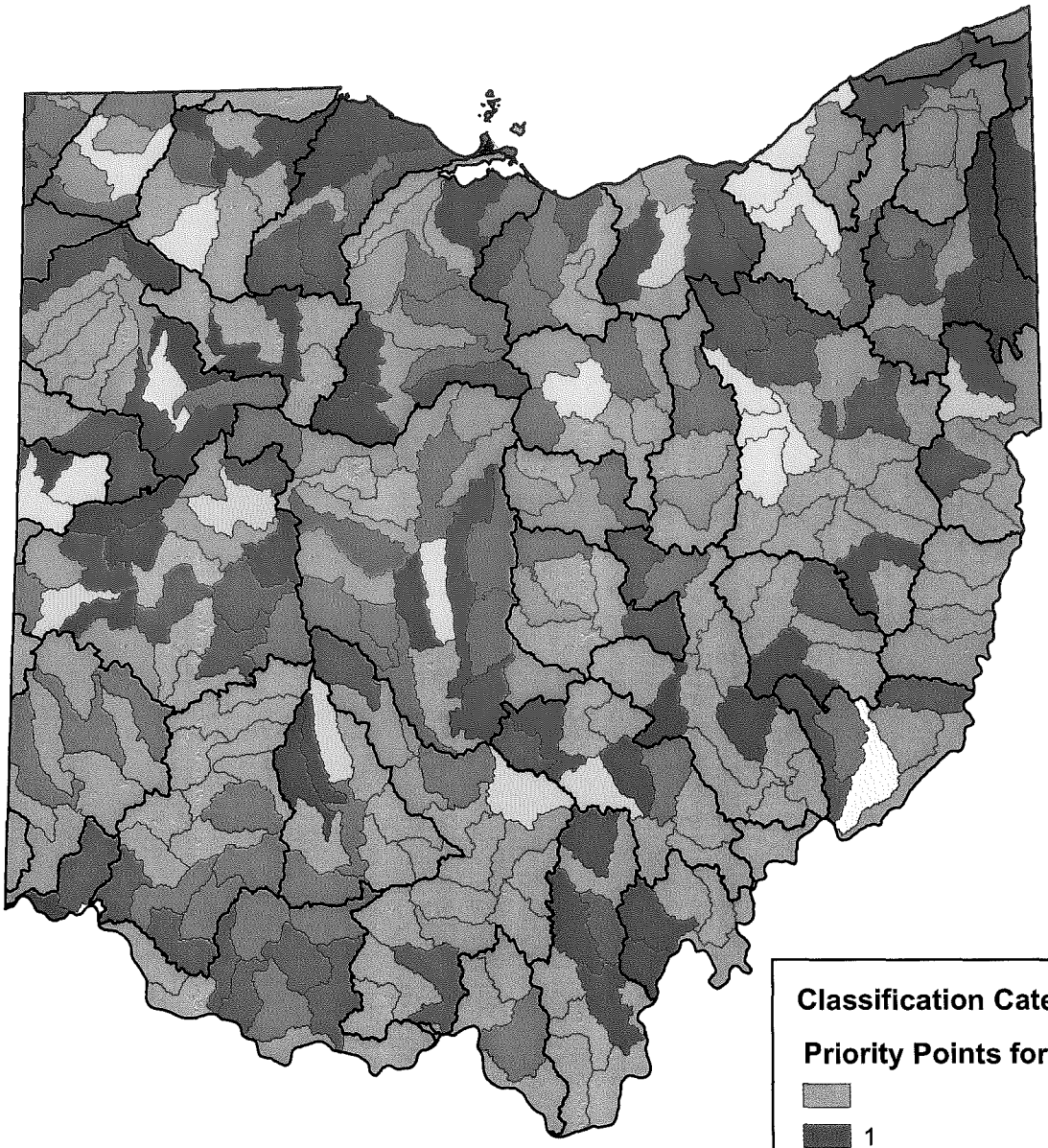
Categories

- <all other values>
- 1:Attaining WQS
- 2: Attaining some WQS
- 3: Insufficient data
- 4A: Impaired, TMDLs completed
- 4B: Impaired, use other controls
- 4C: Impaired
- 5: Impaired, need TMDL

OhioEPA

Division of Surface Water
BAW 9/27/02

Ohio 2002 Integrated Report
Priority of Impaired Waters: HUC11 Watersheds



Classification Categories

Priority Points for TMDL

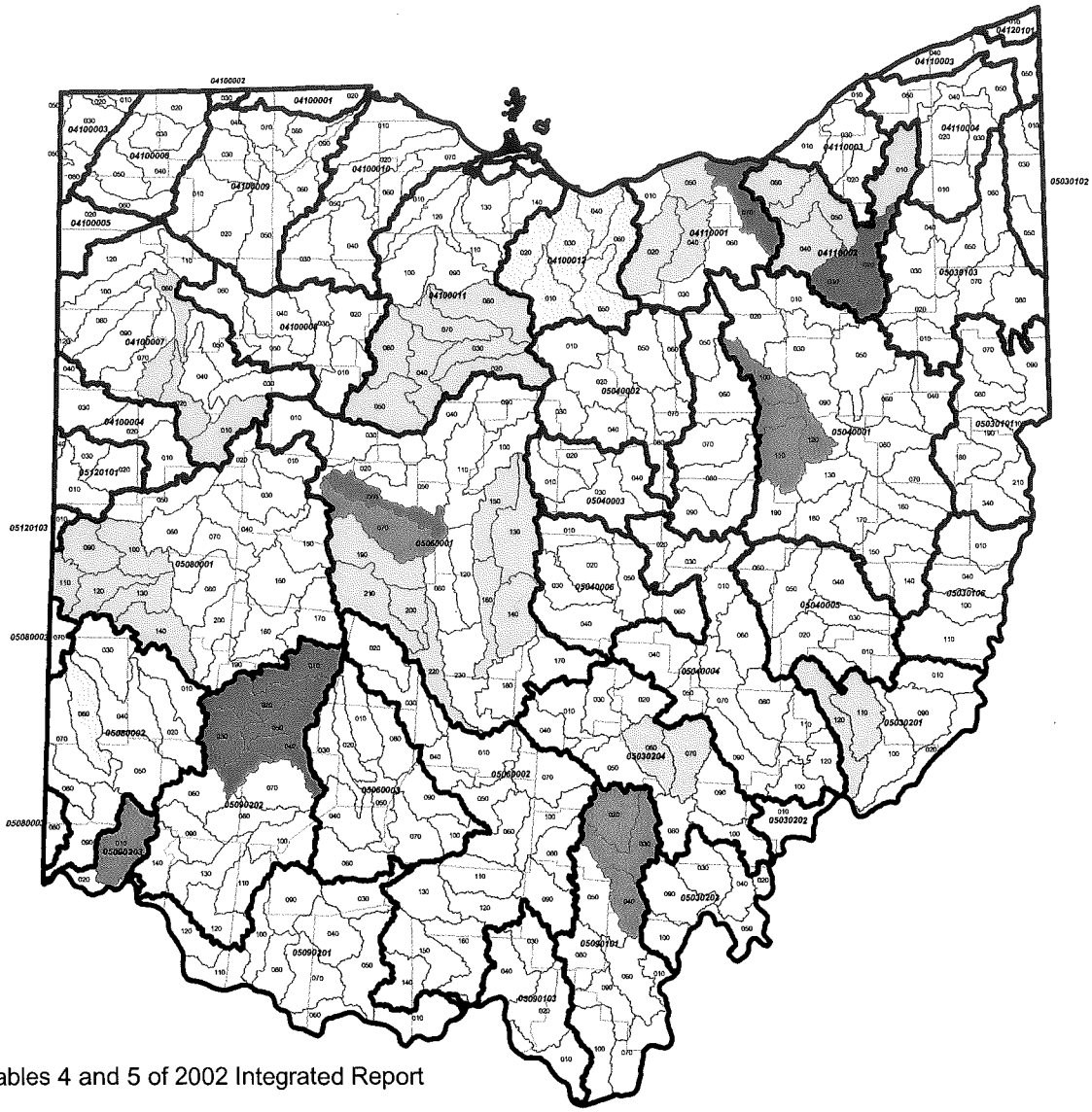
- 1
- 2
- 3
- 4
- 5
- 6
- 8
- 9
- 10
- 11
- 12

See Section 6 of 2002 Integrated Report

OhioEPA

Division of Surface Water
BAW 9/27/02

Ohio 2002 Integrated Report
TMDLs In Progress



See Tables 4 and 5 of 2002 Integrated Report

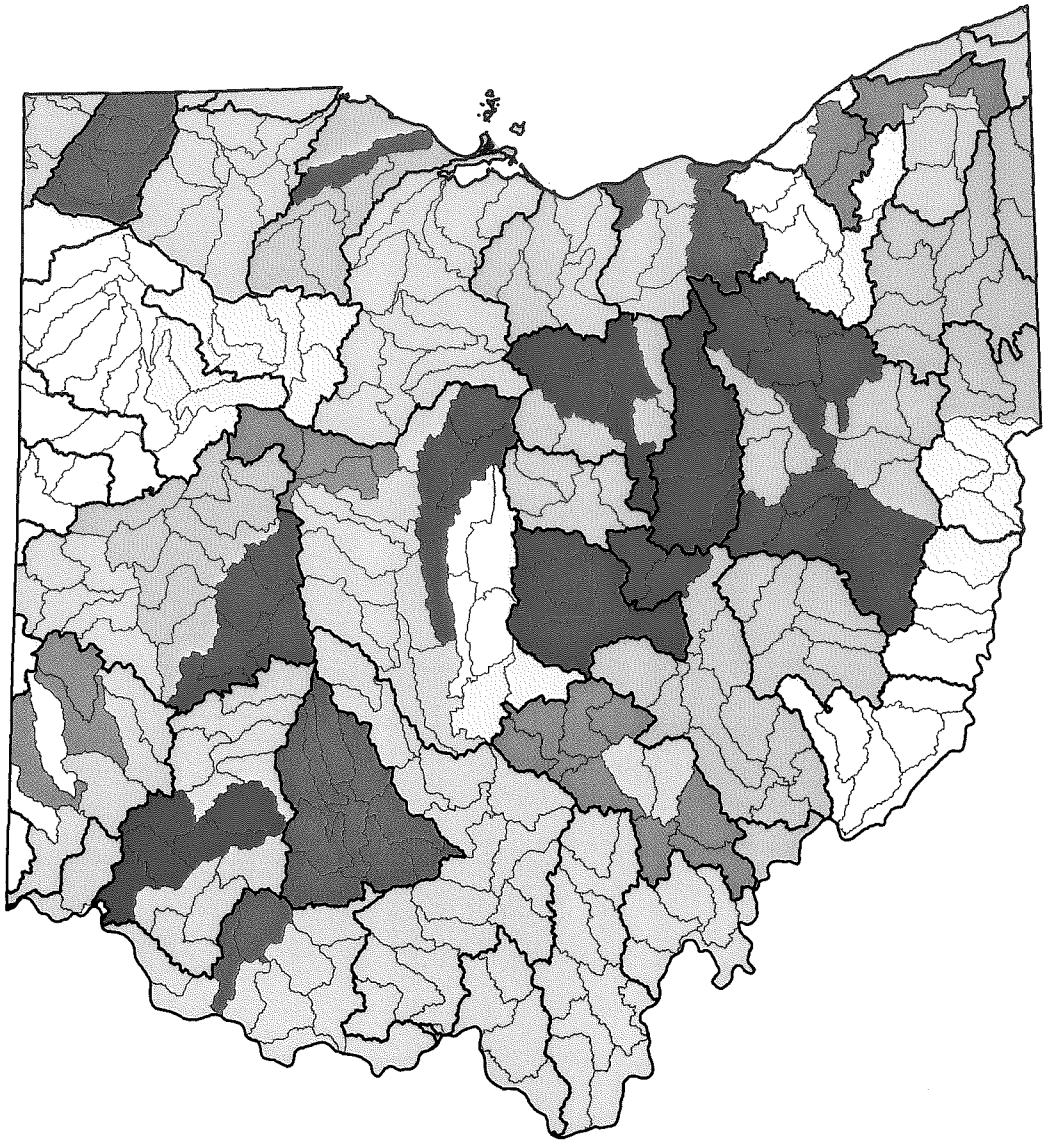
TMDL Status

- Approved by USEPA and in the Implementation Phase
  Middle Cuyahoga, Plum Creek (Rocky), Upper Little Miami River, Bokes
- Draft Report Pending USEPA Approval and in the Implementation Phase
  Sugar, Mill (Ohio), Raccoon, Mill (Scioto)
- Development Phase *Upper and Lower Cuyahoga, Black, Duck Creek, Stillwater, Sunday/Monday, Upper Auglaize, Big Walnut Creek, Big Darby Creek, Upper Sandusky*
- Assessment Phase *Vermilion, Huron River, Sevenmile Creek*

OhioEPA

Division of Surface Water
BAW 9/30/02

Ohio 2002 Integrated Report
Ohio Long-Term Monitoring Schedule



See Section 7 of 2002 Integrated Report

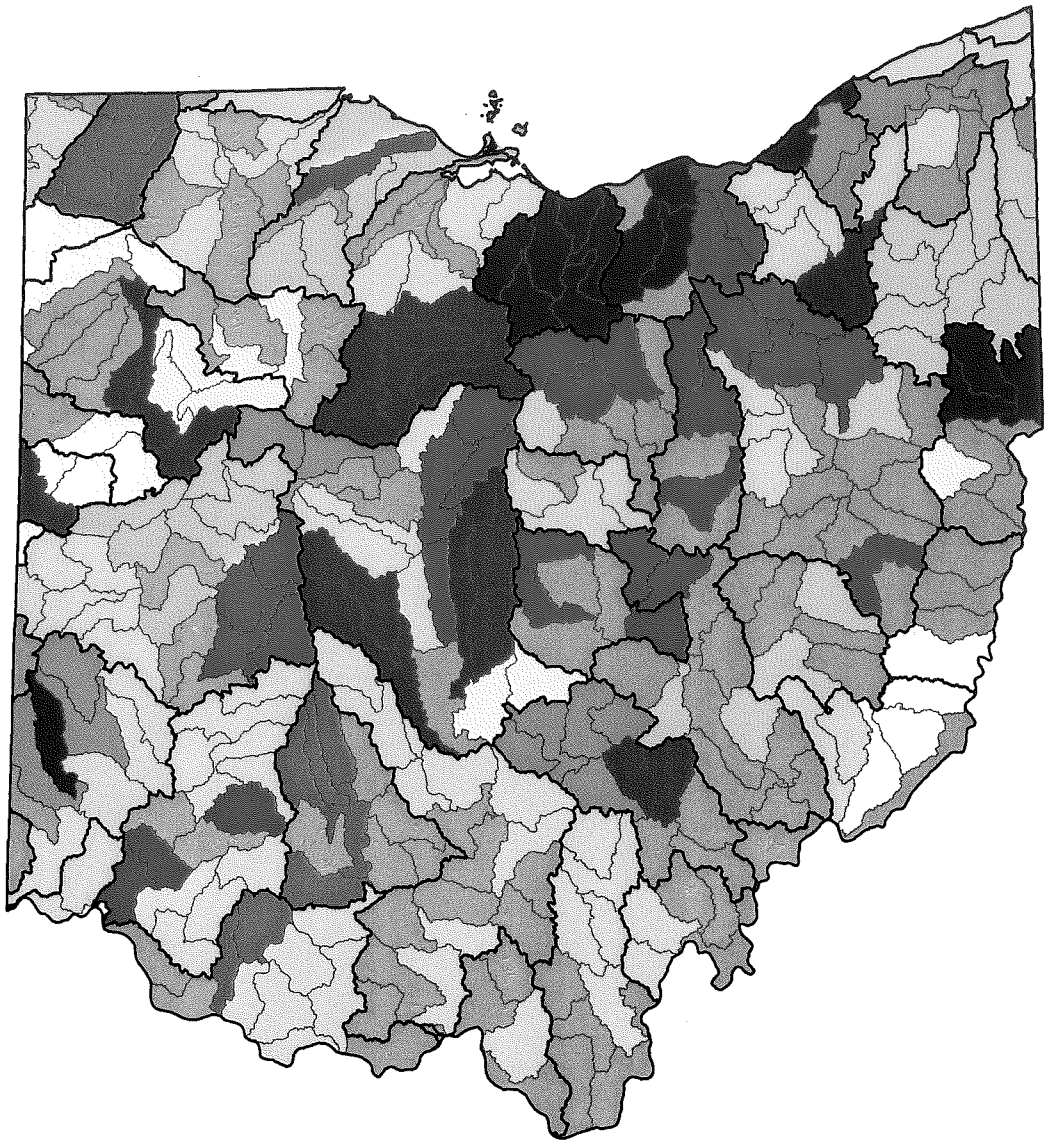
Monitoring Schedule

2003	2008
2004	2009
2005	2010
2006	2011
2007	2012

OhioEPA

Division of Surface Water
BAW 9/27/02

Ohio 2002 Integrated Report
Ohio Long-Term TMDL Schedule



See Section 7 of 2002 Integrated Report

TMDL Schedule

2000	2005	2010
2001	2006	2011
2002	2007	2012
2003	2008	2013
2004	2009	2014

OhioEPA

Division of Surface Water
BAW 9/27/02

Tables

Table 1.	Status of Large Rivers Assessment Units (Detail Table)	23 pages
Table 2.	Status of Watershed (HUC11) Assessment Units (Summary Table)	23 pages
Table 3.	Waters on the 1998 List Not on the 2002 List	4 pages
Table 4.	Short-Term Schedule for TMDL Development	3 pages
Table 5.	TMDLs Approved in Past Two Years	1 page
Table 6.	303(d) List of Prioritized Impaired Waters (Category 5)	15 pages
Table 7.	Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units	16 pages

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Maumee River Mainstem (Indiana border to Lake Erie)	6608.0

Aquatic Life Use Assessment

Sampling Year(s): 1992, 1993, 1996, 1997

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	107.87
AU Monitored Miles:	94.35
# Sites Sampled:	51
# Miles Full Attainment:	44.00
# Miles Partial Attainment:	13.15
# Miles Non-Attainment:	37.20

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	46.7	13.9	39.4

High Magnitude Causes	High Magnitude Sources
Flow Alteration	Nonirrigated Crop Production
Other Habitat Alterations	Channelization - Agriculture
Turbidity	Combined Sewer Overflow
Nutrients	Major Municipal Point Source
Unionized Ammonia	
Siltation	
Total Toxics	

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 2
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 2

Total # Bacteria Sites in AU: 29

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "Do Not Eat" Fish Consumption Advisory is in effect for the Maumee River (Channel Catfish). The area under the advisory is from Waterville to the mouth. A "One Meal per Week" advisory (Freshwater Drum, Largemouth Bass) is also in effect for the same stretch of the river. A "One Meal per Month" advisory is in effect for the entire length of the river (Carp, Smallmouth Bass). Lastly, a "One Meal per Week" advisory is in effect (Channel Catfish) from the Indiana border to Waterville.
In addition to the fish consumption advisories, there is a "One Meal per Week" Ohio Snapping Turtle Consumption Advisory in effect for the entire length of the Maumee River.

Integrated Report Assessment Category: 5 **Priority Points: 4** **Scheduled Monitoring: 2010**

The entire length of the Maumee River mainstem (excluding the Lake Erie impounded reach) was last sampled in 1997. Fish consumption advisories for several species of fish are in effect, as well as a Snapping Turtle Consumption Advisory. The City of Toledo is initiating a major CSO remediation project which will positively benefit the lower mainstem within Lucas County. Future monitoring of the Maumee River mainstem assessment unit will be conducted within the normal rotating basin schedule after the cessation of the project and when sufficient recovery time has elapsed.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Tiffin River Mainstem (downstream Brush Creek to mouth)	777.0

Aquatic Life Use Assessment

Sampling Year(s): 1992

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	19.67
AU Monitored Miles:	19.67
# Sites Sampled:	3
# Miles Full Attainment:	0.00
# Miles Partial Attainment:	19.67
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	0.0	100.0	0.0

High Magnitude Causes	High Magnitude Sources
Other Habitat Alterations	Channelizartion - Agriculture
Siltation	Highway/Road/Bridge/Sewer Line
	Nonirrigated Crop Production

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria:
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations:

Total # Bacteria Sites in AU: 0

Other:

Impairment? Unknown

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Tiffin River (Northern Pike, Smallmouth Bass). The area under the advisory includes the entire length of the river.

Integrated Report Assessment Category: 5 **Priority Points: 3** **Scheduled Monitoring: 2006**

The Tiffin River mainstem has not been sampled since 1992.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Auglaize River Mainstem (downstream Ottawa River to mouth)	2435.0

Aquatic Life Use Assessment

Sampling Year(s): 1996, 2000

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	33.26
AU Monitored Miles:	23.73
# Sites Sampled:	5
# Miles Full Attainment:	14.26
# Miles Partial Attainment:	4.10
# Miles Non-Attainment:	5.37

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	60.1	17.3	22.6

High Magnitude Causes	High Magnitude Sources
Flow Alteration	Flow Reg/Mod - Development Channelization - Agriculture

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria:
>576 colonies/100 ml. E. coli bacteria):

 # Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 3

Other:

Impairment? No

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Auglaize River (Freshwater Drum, Smallmouth Bass). The area under the advisory is from U.S. Rt. 33 in Wapakoneta to the mouth at Defiance. Additionally, A "One Meal per Week" advisory is in effect (Channel Catfish, Carp) for the same stretch of the river.

Integrated Report Assessment Category: 5 **Priority Points: 4** **Scheduled Monitoring: 2010**

Development of a TMDL is underway for the upper Auglaize River watershed including the Auglaize River mainstem between the Ottawa River and the Little Auglaize River (about 2/3 of the designated mainstem reach). Monitoring in support of the TMDL was conducted in 2000.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Blanchard River Mainstem (downstream Dukes Run to mouth)	771.0

Aquatic Life Use Assessment

Sampling Year(s): 1996

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	35.65
AU Monitored Miles:	14.65
# Sites Sampled:	3
# Miles Full Attainment:	9.65
# Miles Partial Attainment:	5.00
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	65.9	34.1	0.0

High Magnitude Causes	High Magnitude Sources
Flow Alteration	Channelization - Agriculture
Organic Enrichment/DO	

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 0
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 1

Other:

Impairment? Indeterminate

Fish Consumption Assessment

Integrated Report Assessment Category: 5 **Priority Points: 3** **Scheduled Monitoring: 2005**

Recent sampling in the mainstem (1996) was focused primarily in the 30 mile reach upstream and downstream from Findlay. Several reference sites have been sampled in other reaches.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Sandusky River Mainstem (downstream Tymochtee Creek to mouth)	1420.0

Aquatic Life Use Assessment

Sampling Year(s): 2001

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	65.73
AU Monitored Miles:	29.73
# Sites Sampled:	14
# Miles Full Attainment:	24.93
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	4.80

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	83.9	0.0	16.1

High Magnitude Causes

High Magnitude Sources

Causes and Sources are pending based on the assessment of the 2001 field data.

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria:
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations:

Total # Bacteria Sites in AU: 0

Other:

Impairment? Unknown

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Sandusky River (Channel Catfish, Largemouth Bass). The area under the advisory includes the entire length of the river. Additionally, a "One Meal per Week" advisory is in effect (Carp).

Integrated Report Assessment Category: 5 **Priority Points: 5** **Scheduled Monitoring: 2009**

Development of a TMDL is underway for the upper Sandusky River watershed (headwaters to north of Tiffin and covering about 1/2 of the designated mainstem reach). Monitoring in support of the TMDL was conducted in 2001.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Cuyahoga River Mainstem (downstream Brandywine Creek to mouth including old river channel)	809.0

Aquatic Life Use Assessment

Sampling Year(s): 1996, 1999, 2000

Aquatic Life Use(s): WWH, LRW

Impairment? Yes

AU Total Length (miles):	25.34
AU Monitored Miles:	25.34
# Sites Sampled:	26
# Miles Full Attainment:	5.68
# Miles Partial Attainment:	12.38
# Miles Non-Attainment:	7.28

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	22.4	48.9	28.7

High Magnitude Causes	High Magnitude Sources
Organic Enrichment/DO	Combined Sewer Overflow
Unknown Toxicity	Major Municipal Point Source
Other Habitat Alterations	Contaminated Sediments
Total Toxics	Dredging/Development
Unionized Ammonia	Marinas
	Spills
	Urban Runoff/Storm Sewers (NPS)
	Streambank Modification/Destabilization

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion

>5000 colonies/100 ml. fecal coliform bacteria: 13

>576 colonies/100 ml. E. coli bacteria): 18

Sites in AU w/ Bacteria Violations: 7

Total # Bacteria Sites in AU: 7

Other:

Impairment? Yes

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Cuyahoga River (Carp, Largemouth Bass, White Suckers 11 inches and larger). The area under the advisory is from the Ohio Edison Dam Pool in Cuyahoga Falls to Lake Erie. Additionally, a "One Meal Every 2 Months" advisory is in effect (Brown Bullhead, Yellow Bullhead) and a "One Meal per Week" advisory (White Suckers under 11 inches) for the same stretch of the river.

Integrated Report Assessment Category: 5 **Priority Points: 10** **Scheduled Monitoring: 2010**

Development of a TMDL is underway for the lower Cuyahoga River basin including the Cuyahoga River mainstem reach. Monitoring in support of the TMDL was conducted in 1996, 1999, and 2000.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Grand River Mainstem (downstream Mill Creek to mouth)	705.0

Aquatic Life Use Assessment

Sampling Year(s): 1995

Aquatic Life Use(s): EWH, WWH, SSH

Impairment? Yes

AU Total Length (miles):	41.28
AU Monitored Miles:	35.67
# Sites Sampled:	21
# Miles Full Attainment:	33.47
# Miles Partial Attainment:	1.60
# Miles Non-Attainment:	0.60

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	93.8	4.5	1.7

High Magnitude Causes	High Magnitude Sources
Salinity/TDS/Chlorides	Waste Storage/Storage Tank Leaks

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion

>5000 colonies/100 ml. fecal coliform bacteria: 0

>576 colonies/100 ml. E. coli bacteria): 1

 # Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 3

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Grand River (Carp 22 inches and larger, Freshwater Drum, Largemouth Bass, Smallmouth Bass, Yellow Bullhead, Silver Redhorse). The area under the advisory includes the entire length of the river. Additionally, A "One Meal per Month" advisory is in effect (Walleye) upstream from Tote St. near Austinburg. Lastly, a "One Meal per Week" advisory is in effect (Carp under 22 inches) for the entire length of the river.

Integrated Report Assessment Category: 4B **Priority Points:** **Scheduled Monitoring: 2004**

The Grand River is one of the higher quality large rivers in Ohio. With the exception of a fish consumption advisory for several species, there are few problems on this river. Aquatic life impairment in the mainstem is restricted to the lacustuary reach of the river and has been attributed to the Diamond Shamrock waste lagoons.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Mahoning River Mainstem (downstream Eagle Creek to Pennsylvania Border)	1075.0

Aquatic Life Use Assessment

Sampling Year(s): 1994

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	46.82
AU Monitored Miles:	45.11
# Sites Sampled:	30
# Miles Full Attainment:	0.30
# Miles Partial Attainment:	5.80
# Miles Non-Attainment:	39.01

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	0.7	12.9	86.4

High Magnitude Causes		High Magnitude Sources	
Metals	Oil and Grease	Combined Sewer Overflow	Minor Industrial Point Source
Nutrients	Thermal Modifications	Contaminated Sediments	Source Unknown
Organic Enrichment/DO		Dam Construction - Development	
Pathogens		Major Municipal Point Source	
Priority Organics		Spills	
Other Habitat Alterations		Urban Runoff/Storm Sewers (NPS)	
Cause Unknown		Flow Reg/Mod - Development	
Chlorine		Hazardous Wastes	

Recreation Use Assessment

of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion

>5000 colonies/100 ml. fecal coliform bacteria: 15

>576 colonies/100 ml. E. coli bacteria): 14

Sites in AU w/ Bacteria Violations: 2

Total # Bacteria Sites in AU: 2

Other: A "Dermal Contact Advisory" is in effect for the Mahoning River due to PAHs and PCBs contamination. The area under the advisory is from NW Bridge Rd. in Warren to the Pennsylvania border.

Impairment? Yes

Fish Consumption Assessment

A "Do Not Eat" Fish Consumption Advisory is in effect for the Mahoning River (Channel Catfish, Carp). The area under the advisory is from NW Bridge Rd. in Warren to the Pennsylvania border. Additionally, a "One Meal per Month" advisory is in effect (Walleye), and a "One Meal per Week" advisory (White Crappie) for the same stretch of the river. Lastly, a "One Meal per Month" advisory is in effect (Smallmouth Bass) from Berlin Lake Dam to the Pennsylvania border.

Integrated Report Assessment Category: 5 **Priority Points: 9** **Scheduled Monitoring: 2008**

Severe sediment and water column contamination is present in the Mahoning River from Warren to the Pennsylvania border. Biological communities are impaired throughout this reach of the river. This is one of the few rivers in the state that has a "Do Not Eat" fish consumption advisory issued by the Ohio Department of Health. Additionally, a "Dermal Contact Advisory" is in effect. A TMDL for bacteria will be prepared by the USEPA for the Mahoning River mainstem (Duck Creek to the Shenango River) in 2003. In addition, a major ACOE dredging project is under evaluation for the mainstem.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Hocking River Mainstem (downstream Scott Creek to mouth)	1197.0

Aquatic Life Use Assessment

Sampling Year(s):

Aquatic Life Use(s): WWH

Impairment? Unknown

AU Total Length (miles):	68.96
AU Monitored Miles:	0.00
# Sites Sampled:	0
# Miles Full Attainment:	0.00
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	0.0	0.0	0.0

High Magnitude Causes

High Magnitude Sources

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion

>5000 colonies/100 ml. fecal coliform bacteria: 0

>576 colonies/100 ml. E. coli bacteria): 0

Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 1

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Hocking River (Carp). The area under the advisory includes the entire length of the river.

Integrated Report Assessment Category: 3 **Priority Points:** **Scheduled Monitoring: 2004**

The designated Hocking River mainstem assessment unit has not been sampled since 1990. However, fish tissue sampling was done in 1997 and 1999.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Tuscarawas River Mainstem (downstream Sippo Creek to mouth)	2596.0

Aquatic Life Use Assessment

Sampling Year(s): 1995, 1998

Aquatic Life Use(s): EWH, WWH

Impairment? Yes

AU Total Length (miles):	90.77
AU Monitored Miles:	30.10
# Sites Sampled:	16
# Miles Full Attainment:	0.00
# Miles Partial Attainment:	9.10
# Miles Non-Attainment:	21.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	0.0	30.2	69.8

High Magnitude Causes	High Magnitude Sources
Cause Unknown	Source Unknown
Organic Enrichment/DO	Contaminated Sediments
Priority Organics	Industrial Point Sources
Nutrients	Urban Runoff/Storm Sewers (NPS)

Recreation Use Assessment

of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 3
>576 colonies/100 ml. E. coli bacteria): 2

Sites in AU w/ Bacteria Violations: 3

Total # Bacteria Sites in AU: 6

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Tuscarawas River (Channel Catfish, Smallmouth Bass, Yellow Bullhead). The area under the advisory is from St. Rt. 619 (Turkeyfoot Rd.) in Barberton to St. Rt. 416 (South Broadway St.) in New Philadelphia. Additionally, a "One Meal Every 2 Months" advisory (Carp), and a "One Meal per Week" advisory (Largemouth Bass, Rock Bass) are in effect for the same stretch of the river.

Integrated Report Assessment Category: 5 **Priority Points: 2** **Scheduled Monitoring: 2003**

A full survey of the Tuscarawas River including the designated mainstem reach has not been done since 1989. Most of the sampling on the mainstem has been related to hazardous waste sites, and biological reference sites. The lower 20 miles of the stream were sampled as part of the 1994 upper Muskingum River survey.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Mohican River Mainstem (entire length)	1004.0

Aquatic Life Use Assessment

Sampling Year(s): 1997, 1998

Aquatic Life Use(s): WWH

Impairment? No

AU Total Length (miles):	27.58
AU Monitored Miles:	8.10
# Sites Sampled:	2
# Miles Full Attainment:	8.10
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	100.0	0.0	0.0

High Magnitude Causes

High Magnitude Sources

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion

>5000 colonies/100 ml. fecal coliform bacteria: 0

>576 colonies/100 ml. E. coli bacteria): 0

 # Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 1

Other:

Impairment? Indeterminate

Fish Consumption Assessment

Integrated Report Assessment Category: 2 **Priority Points:** **Scheduled Monitoring: 2007**

Sampling of the Mohican River mainstem assessment unit has been limited (2 sites), but both indicated full attainment of regional biological criteria.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Walhonding River Mainstem (entire length)	2256.0

Aquatic Life Use Assessment

Sampling Year(s): 1994

Aquatic Life Use(s): EWH

Impairment? No

AU Total Length (miles):	23.19
AU Monitored Miles:	23.19
# Sites Sampled:	3
# Miles Full Attainment:	23.19
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	100.0	0.0	0.0

High Magnitude Causes

High Magnitude Sources

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria:
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 2

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Walhonding River (Channel Catfish). The area under the advisory includes the entire length of the river. Additionally, a "One Meal per Week" advisory is in effect (Saugeye, Smallmouth Bass) for the same stretch of the river.

Integrated Report Assessment Category: 2 **Priority Points:** **Scheduled Monitoring: 2007**

The Walhonding River mainstem assessment unit supports exceptional biological diversity (EWH) and full attainment of regional biological criteria. With the exception of a fish consumption advisory for three species, there are no known problems associated with this river.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Muskingum River Mainstem (entire length)	8051.0

Aquatic Life Use Assessment

Sampling Year(s): 1994

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	111.14
AU Monitored Miles:	21.73
# Sites Sampled:	9
# Miles Full Attainment:	11.83
# Miles Partial Attainment:	9.90
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	54.4	45.6	0.0

High Magnitude Causes	High Magnitude Sources
Organic Enrichment/DO	Major Industrial Point Source

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 1
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 1

Total # Bacteria Sites in AU: 5

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Muskingum River (White Bass). The area under the advisory includes the entire length of the river. Additionally, a "One Meal per Week" advisory is in effect (Channel Catfish, Flathead Catfish, Saugeye, Spotted Bass) for the same stretch of the river.

Integrated Report Assessment Category: 5 **Priority Points: 5** **Scheduled Monitoring: 2008**

The entire Muskingum River mainstem assessment unit has not been sampled since 1988. The upper 20 miles of the assessment unit were sampled in 1994. The lower 90 miles has virtually no recent data, with the exception of one monthly ambient monitoring chemistry site at McConnelsville.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Wills Creek Mainstem (downstream Leatherwood Creek to mouth)	853.0

Aquatic Life Use Assessment

Sampling Year(s): 1994

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	64.98
AU Monitored Miles:	64.98
# Sites Sampled:	4
# Miles Full Attainment:	9.90
# Miles Partial Attainment:	41.88
# Miles Non-Attainment:	13.20

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	15.2	64.5	20.3

High Magnitude Causes	High Magnitude Sources
Siltation	Surface Mining

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion

>5000 colonies/100 ml. fecal coliform bacteria: 1

>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 1

Total # Bacteria Sites in AU: 1

Other:

Impairment? Indeterminate

Fish Consumption Assessment

Integrated Report Assessment Category: 5 **Priority Points: 2** **Scheduled Monitoring: 2008**

The middle and upper reaches of the Wills Creek mainstem assessment unit are impaired by a combination of heavy sedimentation and low stream gradient. Biological communities in this stretch of the river fell below regional biological criteria in 1994. Downstream from Wills Creek Reservoir, biological communities in the mainstem were significantly improved, meeting (or nearly meeting) Warmwater Habitat biological criteria.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Licking River Mainstem (entire length)	779.0

Aquatic Life Use Assessment

Sampling Year(s): 1993, 1994

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	30.21
AU Monitored Miles:	30.21
# Sites Sampled:	11
# Miles Full Attainment:	28.41
# Miles Partial Attainment:	1.80
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	94.0	6.0	0.0

High Magnitude Causes	High Magnitude Sources
Unionized Ammonia	Upstream Impoundment

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 2
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 1

Total # Bacteria Sites in AU: 1

Other:

Impairment? Indeterminate

Fish Consumption Assessment

Integrated Report Assessment Category: 5 **Priority Points: 3** **Scheduled Monitoring: 2007**

The Licking River mainstem has undergone dramatic improvement since the early 1980s. Sampling conducted in 1994 indicated 94% full attainment. Improvements are attributed to upgrades at the Newark WWTP. Aquatic life non-attainment is restricted to a short reach below Dillon Reservoir and is most likely due to the hypolimnetic reservoir release of hypereutrophic/eutrophic water.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Scioto River Mainstem (downstream Little Scioto River to mouth)	6517.0

Aquatic Life Use Assessment

Sampling Year(s): 1995, 1997-2000

Aquatic Life Use(s): WWH, MWH-Impounded

Impairment? Yes

AU Total Length (miles):	177.35
AU Monitored Miles:	151.79
# Sites Sampled:	67
# Miles Full Attainment:	137.15
# Miles Partial Attainment:	6.20
# Miles Non-Attainment:	8.44

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	90.3	4.1	5.6

High Magnitude Causes	High Magnitude Sources
Organic Enrichment/DO	Streambank Destabilization - Agriculture
Other Habitat Alterations	Major Industrial Point Source
Unionized Ammonia	Major Municipal Point Source
Flow Alteration	Dam Construction - Agriculture
	Dam Construction - Development
	Combined Sewer Overflow
	Flow Reg/Mod - Development

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion

>5000 colonies/100 ml. fecal coliform bacteria: 6

>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 5

Total # Bacteria Sites in AU: 31

Other:

Impairment? Yes

Fish Consumption Assessment

A "One Meal a Month" Fish Consumption Advisory is in effect for the Scioto River (Channel Catfish, Carp under 20 inches, Flathead Catfish 21 inches and over, Freshwater Drum). The area under the advisory includes the entire length of the river. Additionally, a "One Meal per 2 Months" advisory (Carp 20 inches and over), and a "One Meal per Week" advisory is in effect for the same stretch of the river. Lastly, a "One Meal a Month" advisory is in effect (Rock Bass) from Green Camp to Warrensburg.

Integrated Report Assessment Category: 5 **Priority Points: 11** **Scheduled Monitoring: 2011**

The Scioto River mainstem has been extensively monitored between Columbus and Circleville since 1988 to assess the improvements in the river due to upgrades at the two major WWTPs in Columbus. Additionally, large scale surveys were done in 1995 (upper Scioto River) and 1997 (lower Scioto River). While biological communities have recovered significantly since the 1970s and are generally performing very well, fish consumption advisories exist for several species of fish throughout the length of the river.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Paint Creek Mainstem (downstream Rocky Fork to mouth)	1144.0

Aquatic Life Use Assessment

Sampling Year(s): 1997

Aquatic Life Use(s): EWH, WWH

Impairment? No

AU Total Length (miles):	37.12
AU Monitored Miles:	37.12
# Sites Sampled:	12
# Miles Full Attainment:	37.12
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	100.0	0.0	0.0

High Magnitude Causes

High Magnitude Sources

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 0
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 12

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for Paint Creek (Largemouth Bass). The area under the advisory includes the entire length of the stream.

Integrated Report Assessment Category: 2 **Priority Points:** **Scheduled Monitoring: 2006**

The lower portion of Paint Creek is one of the highest quality large rivers in the state of Ohio. Exceptional biological diversity is present within this segment of the river. A Watershed Management Plan prepared by a CWA Section 319 funded Watershed Coordinator under the direction of the Paint Creek watershed SWCDs (Ross, Fayette, Highland, Greene, Madison, and Clinton) is currently under development. Monitoring in support of the project was conducted in the upper Paint Creek watershed by the Ohio EPA in 1997.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Great Miami River Mainstem (downstream Tawawa Creek to mouth)	5371.0

Aquatic Life Use Assessment

Sampling Year(s): 1994, 1995, 2000

Aquatic Life Use(s): WWH, MWH-Impounded

Impairment? Yes

AU Total Length (miles):	130.41
AU Monitored Miles:	130.38
# Sites Sampled:	89
# Miles Full Attainment:	87.42
# Miles Partial Attainment:	39.36
# Miles Non-Attainment:	3.60

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	67.0	30.2	2.8

High Magnitude Causes	High Magnitude Sources
Flow Alteration	Dam Construction - Development
Other Habitat Alterations	Flow Reg/Mod - Development
Organic Enrichment/DO	Major Municipal Point Source
Nutrients	Upstream Impoundment
Priority Organics	Combined Sewer Overflow
	Major Industrial Point Source
	Removal of Riparian Vegetation - Development

Recreation Use Assessment

of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 3
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 2

Total # Bacteria Sites in AU: 2

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "Do Not Eat" Fish Consumption Advisory is in effect for the Great Miami River (all sucker species). The area under the advisory is from the lowhead dam at Monument Avenue in Dayton to the Ohio River. Additionally, a "One Meal per Month" advisory is in effect (Largemouth Bass, Rock bass, Smallmouth Bass, White Bass), and a "One Meal per Week" advisory (Saugeye) for the same stretch of the river. Other advisories include Channel Catfish (One Meal per Week) and Carp (One Meal per Month) from Indian Lake to north of St. Rt. 73 near Middletown. Also, Channel Catfish, Freshwater Drum, Smallmouth Buffalo (One Meal per Week) and Carp, Flathead Catfish and Striped Bass Hybrid (One Meal per 2 months) from south of St. Rt. 73 near Middletown to the Ohio River.

Integrated Report Assessment Category: 5 **Priority Points: 5** **Scheduled Monitoring: 2008**

Surveys were conducted throughout the mainstem in 1994 (upper Great Miami River) and 1995 (lower Great Miami River). Most of the river is in full or partial attainment of biological criteria. However, a fish consumption advisory for numerous species throughout the length of the mainstem is in effect.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Stillwater River Mainstem (downstream Greenville Creek to mouth)	676.0

Aquatic Life Use Assessment

Sampling Year(s): 1994, 1999, 2001

Aquatic Life Use(s): EWH

Impairment? Yes

AU Total Length (miles):	32.38
AU Monitored Miles:	32.38
# Sites Sampled:	16
# Miles Full Attainment:	31.38
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	1.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	96.9	0.0	3.1

High Magnitude Causes	High Magnitude Sources
Other Habitat Alterations	Dam Construction - Development

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 1
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 1

Total # Bacteria Sites in AU: 14

Other:

Impairment? Indeterminate

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Stillwater River (Channel Catfish, Smallmouth Bass). The area under the advisory includes the entire length of the river.

Integrated Report Assessment Category: 4C **Priority Points:** **Scheduled Monitoring: 2009**

A TMDL is in progress for the Stillwater River basin. Monitoring in support of the TMDL was conducted in 1999. The entire mainstem assessment unit was in full attainment of biological criteria with the exception of one modified site (impounded) upstream from Englewood Dam. The aquatic life non-attainment was due to habitat modifications associated with the impounded reach.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Mad River Mainstem (downstream Donnels Creek to mouth)	657.0

Aquatic Life Use Assessment

Sampling Year(s): 1994

Aquatic Life Use(s): WWH

Impairment? Yes

AU Total Length (miles):	18.38
AU Monitored Miles:	18.38
# Sites Sampled:	12
# Miles Full Attainment:	15.86
# Miles Partial Attainment:	2.52
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	86.3	13.7	0.0

High Magnitude Causes	High Magnitude Sources
Cause Unknown	Source Unknown
Other Habitat Alterations	Channelization - Agriculture

Recreation Use Assessment

of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria:
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations:

Total # Bacteria Sites in AU: 0

Other:

Impairment? Unknown

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Mad River (Carp, Largemouth Bass). The area under the advisory is from U.S. Rt. 36 in Urbana to the mouth in Dayton. Additionally, a "One Meal per Week" advisory (White Sucker) is in effect for the same stretch of the river.

Integrated Report Assessment Category: 5 **Priority Points: 5** **Scheduled Monitoring: 2003**

Sampling done in 1994 indicated the the entire length of the Mad River mainstem assessment unit was either in full or partial attainment of regional biological criteria.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Whitewater River Mainstem (entire length)	1474.0

Aquatic Life Use Assessment

Sampling Year(s): 1996, 1997

Aquatic Life Use(s): WWH

Impairment? No

AU Total Length (miles):	8.26
AU Monitored Miles:	8.26
# Sites Sampled:	6
# Miles Full Attainment:	8.26
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	100.0	0.0	0.0

High Magnitude Causes

High Magnitude Sources

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria:
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations:

Total # Bacteria Sites in AU: 0

Other:

Impairment? Unknown

Fish Consumption Assessment

Integrated Report Assessment Category: 2 **Priority Points:** **Scheduled Monitoring: 2010**

Sampling done in 1996 showed full attainment of biological criteria in the Whitewater River mainstem assessment unit (lower 8.26 miles of stream located in Ohio). This is one of the few large Ohio rivers with 100% attainment of the aquatic life use and exceptional aquatic communities.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Raccoon Creek Mainstem (downstream Little Raccoon Creek to mouth)	681.0

Aquatic Life Use Assessment

Sampling Year(s): 1993, 1994, 1995

Aquatic Life Use(s): WWH

Impairment? No

AU Total Length (miles):	37.55
AU Monitored Miles:	22.37
# Sites Sampled:	6
# Miles Full Attainment:	22.37
# Miles Partial Attainment:	0.00
# Miles Non-Attainment:	0.00

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	100.0	0.0	0.0

High Magnitude Causes

High Magnitude Sources

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria: 0
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations: 0

Total # Bacteria Sites in AU: 2

Other:

Impairment? Indeterminate

Fish Consumption Assessment

Integrated Report Assessment Category: 2 **Priority Points:** **Scheduled Monitoring: 2009**

Full attainment of regional Warmwater Habitat biological criteria was achieved at all sampling locations monitored in the Raccoon Creek mainstem assessment unit. Despite extensive mining activities in the upper portion of the basin, the lower mainstem included in the assessment unit reflected no major adverse effects based on the most recent 1995 sampling.

Table 1. Status of Large Rivers Assessment Units (Detail Table)

Assessment Unit Description	Watershed Size (sq. mi.)
Little Miami River Mainstem (downstream Caesar Creek to mouth)	1757.0

Aquatic Life Use Assessment

Sampling Year(s): 1998

Aquatic Life Use(s): EWH, WWH

Impairment? Yes

AU Total Length (miles):	50.92
AU Monitored Miles:	48.02
# Sites Sampled:	16
# Miles Full Attainment:	11.80
# Miles Partial Attainment:	34.92
# Miles Non-Attainment:	1.30

	% Attainment (Monitored Miles)		
	Full	Partial	Non
Large River AU Attainment Status:	24.6	72.7	2.7

High Magnitude Causes	High Magnitude Sources
Nutrients	Major Municipal Point Source
Siltation	Minor Municipal Point Source
Suspended Solids	Nonirrigated Crop Production
Cause Unknown	Combined Sewer Overflow
Metals	Dam Construction - Development
Organic Enrichment/DO	Land Development/Suburbanization
Other Habitat Alterations	Urban Runoff/Storm Sewers (NPS)

Recreation Use Assessment

# of Samples w/ an Ohio WQS Violation of the Secondary Contact Recreation Maximum Criterion
>5000 colonies/100 ml. fecal coliform bacteria:
>576 colonies/100 ml. E. coli bacteria):

Sites in AU w/ Bacteria Violations:

Total # Bacteria Sites in AU: 0

Other:

Impairment? Unknown

Fish Consumption Assessment

A "One Meal per Month" Fish Consumption Advisory is in effect for the Little Miami River (Sauger). The area under the advisory includes the entire length of the river. Additionally, a "One Meal per Week" advisory is in effect (Channel Catfish, Smallmouth Bass).

Integrated Report Assessment Category: 5 **Priority Points: 3** **Scheduled Monitoring: 2007**

The TMDL for the upper Little Miami watershed (to and including the Caesar Creek watershed) was approved by USEPA in 2002. Monitoring for TMDL development focused on the lower watershed, including the Little Miami mainstem assessment unit, is scheduled for 2007.

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100001 020	Tenmile Creek; Ottawa River								
	147.0	Yes	Yes	Yes	Yes	5	9	2011	2013
04100002 030	Bear Creek (River Raisin basin)								
	26.5	Unknown	Unknown			3		2011	
04100003 010	East Branch St. Joseph River								
	25.2	Unknown	Unknown			3		2011	
04100003 020	West Branch St. Joseph River								
	14.9	No	Unknown		Yes	2		2011	
04100003 030	St. Joseph River (East/West Branches to downstream Bear Creek)								
	123.5	Yes	Unknown		Yes	5	3	2011	2013
04100003 050	Fish Creek								
	16.8	Yes	Unknown			5	2	2011	2013
04100003 060	St. Joseph River (downstream Bear Creek to downstream Sol Shank Ditch [IN]; excluding Fish Creek)								
	58.4	Yes	Unknown		Yes	5	3	2011	2013
04100004 010	St. Mary's River (headwaters to downstream Sixmile Creek)								
	134.3	Yes	Indeterminate		Yes	5	2	2010	2012
04100004 020	St. Mary's River (downstream Sixmile Creek to downstream Twelvemile Creek)								
	117.0	Yes	Unknown		Yes	5	2	2010	2012
04100004 030	St. Mary's River (downstream Twelvemile Creek to upstream Twentyseven Mile Creek [IN])								
	161.1	Unknown	Unknown		Yes	3		2010	
04100004 040	St. Mary's River (upstream Twentyseven Mile Creek [IN] to upstream Holthouse Ditch [IN])								
	26.0	Unknown	Unknown			3		2010	
04100005 020	Maumee River (downstream Hamm Ditch [IN] to upstream Tiffin River); excluding Maumee River								
	190.1	Yes	Yes			5	10	2010	2012
04100006 020	Bean Creek (downstream Lime Creek (Michigan) to downstream Mill Creek)								
	105.3	Yes	Indeterminate			5	3	2006	2008
04100006 030	Tiffin River (downstream Mill Creek to downstream Leatherwood Creek)								
	79.9	Yes	Indeterminate		Yes	5	4	2006	2008
04100006 040	Tiffin River (downstream Leatherwood Creek to upstream Lick Creek); excluding Tiffin River mainstem								
	166.2	Yes	Yes			5	8	2006	2008

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100006 050	Lick Creek								
	105.9	Yes	Yes			5	9	2006	2008
04100006 060	Tiffin River (downstream Lick Creek to mouth); excluding Tiffin River mainstem								
	100.4	Yes	Indeterminate			5	3	2006	2008
04100007 010	Auglaize River (headwaters to downstream Pusheta Creek)								
	148.2	Yes	Yes		Yes	5	11	2010	2003
04100007 020	Auglaize River (downstream Pusheta Creek to upstream Jennings Creek); excluding Auglaize R.								
	99.9	Yes	Yes			5	11	2010	2003
04100007 030	Ottawa River (headwaters to upstream Little Ottawa River)								
	134.3	Yes	Indeterminate			5	3	2005	2007
04100007 040	Ottawa River (upstream Little Ottawa River to upstream Sugar Creek)								
	106.1	Yes	Yes			5	8	2005	2007
04100007 050	Ottawa River (upstream Sugar Creek to mouth)								
	124.7	Yes	Indeterminate			5	1	2005	2007
04100007 060	Auglaize River (upstream Jennings Cr. to upstream L. Auglaize R.); excluding Auglaize R. mainstem								
	143.0	Yes	Yes			5	9	2010	2003
04100007 070	Little Auglaize River (headwaters to upstream Dog Creek)								
	124.0	Unknown	Unknown			3		2010	
04100007 080	Prairie Creek								
	106.2	Unknown	Indeterminate			3		2010	
04100007 090	Little Auglaize River (upstream Dog Creek to mouth; excluding Prairie Creek)								
	175.0	Unknown	Unknown			3		2010	
04100007 100	Auglaize River (downstream L. Auglaize R. to upstream Flatrock Cr.); excluding Auglaize R. mainstem								
	130.4	Unknown	Unknown			3		2010	
04100007 110	Powell Creek								
	97.6	Yes	Indeterminate			5	1	2010	2012
04100007 120	Auglaize River (Flatrock Creek to mouth); excluding Powell Creek and Auglaize R. mainstem								
	178.7	Yes	Unknown			5	2	2010	2012
04100008 010	Blanchard River (headwaters to downstream Potato Run)								
	140.8	Unknown	Unknown			3		2005	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100008 020	Blanchard River (downstream Potato Run to upstream Eagle Creek)								
	133.4	Unknown	Unknown			3		2005	
04100008 030	Blanchard River (upstream Eagle Creek to upstream Ottawa Creek)								
	115.0	Yes	Unknown			5	1	2005	2007
04100008 040	Blanchard River (upstream Ottawa Creek to upstream Riley Creek); excluding Blanchard R.								
	148.9	Unknown	Unknown			3		2005	
04100008 050	Riley Creek								
	85.6	Yes	Unknown			5	1	2005	2007
04100008 060	Blanchard River (downstream Riley Creek to mouth); excluding Blanchard R. mainstem								
	147.3	Unknown	Unknown			3		2005	
04100009 010	Maumee River (downstream Tiffin R. to upstream South Turkeyfoot Cr.); excluding Maumee R.								
	170.0	Unknown	Unknown			3		2011	
04100009 020	South Turkeyfoot Creek								
	149.1	Yes	Yes			5	8	2011	2013
04100009 030	Maumee R. (downstream S. Turkeyfoot Cr. to upstream Bad Cr.); excluding Maumee R.								
	103.0	Yes	Yes			5	10	2011	2013
04100009 040	Bad Creek								
	64.7	Yes	Indeterminate			5	1	2011	2013
04100009 050	Maumee River (downstream Bad Creek to downstream Beaver Creek); excluding Maumee R. mainstem								
	231.2	Unknown	Indeterminate			3		2011	
04100009 060	Maumee River (downstream Beaver Cr. to downstream N. Granger Island); excluding Maumee R.								
	83.7	Unknown	Unknown			3		2011	
04100009 070	Swan Creek (headwaters to upstream Blue Creek)								
	95.7	Unknown	Unknown			3		2011	
04100009 080	Swan Creek (upstream Blue Creek to mouth)								
	108.3	Yes	Unknown			5	1	2011	2013
04100009 090	Maumee River (downstream N. Granger Island to mouth); excluding Maumee R. mainstem								
	76.6	Yes	Unknown			5	1	2011	2013
04100010 010	Lake Erie tributaries (East of Maumee River to west of Toussaint River								
	204.7	Yes	Unknown			5	1	2008	2010

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100010 020	Toussaint Creek								
	143.1	Yes	Unknown			5	1	2003	2005
04100010 030	Middle Branch Portage River (headwaters to downstream Rocky Ford Creek)								
	168.6	Yes	Unknown			5	2	2008	2010
04100010 040	Middle Branch Portage River (downstream Rocky Ford Creek to downstream South Branch)								
	166.7	Yes	Unknown			5	2	2008	2010
04100010 050	Portage River (downstream South/Middle Branches to downstream North Branch)								
	77.2	Unknown	Unknown		Yes	3		2008	
04100010 060	Portage River (downstream North Branch to downstream Sugar Creek)								
	87.1	Yes	Unknown			5	3	2008	2010
04100010 070	Portage River (downstream Sugar Creek to mouth); Lake Erie tributaries west of Marblehead								
	111.3	Yes	Unknown		Yes	5	2	2008	2010
04100011 010	Muddy Creek; Lake Erie tributaries (Muddy Creek to Marblehead)								
	136.4	Unknown	Unknown			3		2009	
04100011 020	Sandusky River (headwaters to upstream Broken Sword Creek)								
	137.3	Yes	Indeterminate		Yes	5	2	2009	2003
04100011 030	Broken Sword Creek								
	94.5	Yes	Unknown			5	3	2009	2003
04100011 040	Sandusky River (downstream Broken Sword Creek to upstream Tymochtee Creek)								
	121.3	Yes	No		Yes	5	4	2009	2003
04100011 050	Tymochtee Creek (headwaters to downstream Warpole Creek)								
	171.6	Yes	Indeterminate			5	1	2009	2003
04100011 060	Tymochtee Creek (downstream Warpole Creek to mouth)								
	130.1	Yes	Unknown			5	1	2009	2003
04100011 070	Sandusky River (downstream Tymochtee Creek to upstream Honey Creek); excluding Sandusky R.								
	121.8	Yes	Unknown			5	4	2009	2003
04100011 080	Honey Creek								
	179.7	Yes	Unknown			5	3	2009	2003
04100011 090	Sandusky River (downstream Honey Creek to upstream Wolf Creek); excluding Sandusky R. mainstem								
	116.6	Yes	Unknown			5	3	2009	2011

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100011 100	Wolf Creek								
	157.8	Unknown	Yes			5	9	2009	2011
04100011 110	Green Creek								
	80.9	Unknown	Unknown			3		2009	
04100011 120	Sandusky River (downstream Wolf Creek to mouth); excluding Green Creek and Sandusky R. mainstem								
	108.4	Unknown	Unknown			3		2009	
04100011 130	Lake Erie tributaries (East of Green Creek to west of Mills Creek)								
	163.8	Yes	Unknown			5	1	2009	2011
04100011 140	Lake Erie tributaries (West of Mills Creek to East of Sawmill Creek)								
	104.3	Yes	Unknown			5	3	2009	2011
04100012 010	West Branch Huron River (headwaters to upstream Slate Run)								
	132.1	Yes	Unknown			5	3	2012	2004
04100012 020	West Branch Huron River (upstream Slate Run to mouth)								
	129.8	Yes	Unknown			5	2	2012	2004
04100012 030	Huron River, East Branch Huron River, Lake Erie tributaries (East of Sawmill Cr. to west of Huron R)								
	150.6	Yes	Indeterminate		Yes	5	3	2012	2004
04100012 040	Lake Erie tributaries (East of Huron River to West of Vermilion River)								
	83.2	Yes	Unknown			5	2	2011	2004
04100012 050	Vermilion River (headwaters to upstream East Branch)								
	140.3	Unknown	Indeterminate		Yes	3		2011	2004
04100012 060	Vermilion River (upstream East Branch to mouth)								
	127.7	Unknown	Indeterminate		Yes	3		2011	2004
04110001 010	Lake Erie tributaries (East of Vermilion River to West of Black River)								
	71.5	Unknown	Indeterminate			3		2006	
04110001 020	West Branch Black River								
	174.0	Yes	Indeterminate			5	1	2011	2004
04110001 030	East Branch Black River (headwaters to downstream Coon Creek)								
	95.8	Yes	Indeterminate		Yes	4B		2011	
04110001 040	East Branch Black River (downstream Coon Creek to mouth)								
	125.8	Yes	Indeterminate		Yes	5	5	2011	2004

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04110001 050	Black River; Lake Erie tributaries East of Black River to West of Porter Creek)								
	100.8	Yes	Yes	Yes	Yes	5	9	2011	2004
04110001 060	West Branch Rocky River								
	190.2	Yes	Yes		Yes	5	11	2006	2001
04110001 070	Rocky River; East Branch Rocky R.; Lake Erie tributaries (West of Porter Cr. to West of Cuyahoga R.)								
	139.8	Yes	Yes			5	11	2006	2001
04110002 010	Cuyahoga River (headwaters to downstream Black Brook)								
	148.9	Yes	Yes			5	9	2010	2002
04110002 020	Cuyahoga River (downstream Black Brook to downstream Breakneck Creek)								
	139.9	Yes	Indeterminate			5	3	2005	2000
04110002 030	Cuyahoga River (downstream Breakneck Creek to downstream Little Cuyahoga River)								
	112.2	Yes	Yes		Yes	5	9	2005	2000
04110002 040	Cuyahoga River (downstream Little Cuyahoga River to downstream Brandywine Creek)								
	153.9	Yes	Yes		Yes	5	9	2010	2002
04110002 050	Cuyahoga River (downstream Brandywine Cr. to downstream Tinkers Cr.); excluding Cuyahoga R.								
	138.1	Yes	Yes			5	8	2010	2002
04110002 060	Cuyahoga River (downstream Tinkers Creek to mouth); excluding Cuyahoga R. mainstem								
	115.6	Yes	Yes			5	8	2010	2002
04110003 010	Lake Erie tributaries (East of Cuyahoga River to West of Grand River); excluding Chagrin River								
	119.0	Yes	Yes			5	8	2010	2004
04110003 020	Chagrin River (headwaters to downstream Aurora Branch)								
	119.5	Yes	Indeterminate		Yes	5	4	2004	2006
04110003 030	Chagrin River (downstream Aurora Branch to mouth)								
	145.1	Yes	Indeterminate		Yes	5	4	2004	2006
04110003 040	Lake Erie tributaries (East of Grand River to West of Ashtabula River								
	114.9	Yes	Unknown			5	3	2009	2011
04110003 050	Ashtabula River								
	126.8	Yes	Yes		Yes	5	11	2009	2011
04110004 010	Grand River (headwaters to downstream Swine Creek)								
	156.7	Unknown	Unknown			3		2009	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04110004 020	Grand River (downstream Swine Creek to upstream Rock Creek)								
	131.9	Yes	Unknown			5	4	2009	2011
04110004 030	Rock Creek								
	70.7	Unknown	Unknown			3		2009	
04110004 040	Grand River (downstream Rock Creek to upstream Mill Creek)								
	57.7	Unknown	Unknown			3		2009	
04110004 050	Mill Creek								
	103.3	Unknown	Unknown			3		2004	
04110004 060	Grand River (downstream Mill Creek to mouth); excluding Grand R. mainstem								
	184.1	Yes	Yes			5	11	2004	2006
04120101 010	Conneaut Creek; Lake Erie tributaries (East of Ashtabula River to West of Conneaut Creek)								
	61.5	Yes	Unknown		Yes	5	4	2009	2011
04120101 060	Lake Erie tributaries (East of Conneaut Creek)								
	1.5	Unknown	Unknown			3		2009	
04120200 010	Lake Erie Islands								
	9.0	Unknown	Unknown			3		2009	
05030101 070	Middle Fork Little Beaver Creek								
	149.1	Yes	Yes	Yes	Yes	5	12	2008	2004
05030101 080	West Fork Little Beaver Creek								
	111.2	Yes	Indeterminate			5	5	2008	2004
05030101 090	Little Beaver Creek (downstream Middle and West Forks to mouth)								
	140.1	Yes	Indeterminate		Yes	5	4	2008	2004
05030101 100	Ohio River tributaries (downstream Little Beaver Creek to upstream Yellow Creek)								
	45.2	Unknown	Unknown			3		2005	
05030101 180	Yellow Creek (headwaters to upstream Town Fork)								
	118.7	Yes	Unknown			5	2	2005	2007
05030101 190	Yellow Creek (upstream Town Fork to mouth)								
	120.4	Unknown	Unknown			3		2005	
05030101 210	Ohio River tributaries (downstream Yellow Creek to upstream Cross Creek)								
	70.6	Unknown	Unknown			3		2005	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05030101 340	Cross Creek								
	127.5	Unknown	Unknown			3		2005	
05030102 010	Tributaries to Pymatuning Reservoir (within Ohio)								
	40.7	Unknown	Unknown			3		2008	
05030102 030	Pymatuning Creek								
	149.5	Yes	Unknown			5	1	2008	2010
05030102 050	Yankee Creek; Little Yankee Creek								
	94.6	Yes	Unknown			5	1	2008	2010
05030103 010	Mahoning River (headwaters to downstream Beech Creek)								
	129.2	Yes	Unknown			5	3	2008	2010
05030103 020	Mahoning River (downstream Beech Creek to downstream Berlin Dam)								
	118.7	Unknown	Unknown			3		2008	2010
05030103 030	Mahoning River (downstream Berlin Dam to downstream West Branch)								
	167.1	Yes	No		Yes	5	2	2008	2010
05030103 040	Mahoning River (downstream West Branch to upstream Duck Creek)								
	126.9	Yes	Unknown			4C	3	2008	2010
05030103 050	Mahoning River (upstream Duck Creek to upstream Mosquito Creek); excluding Mahoning R. mainstem								
	87.6	Unknown	Unknown			3		2008	2010
05030103 060	Mosquito Creek								
	138.1	Yes	Unknown			5	1	2008	2010
05030103 070	Mahoning River (downstream Mosquito Creek to upstream Mill Creek); excluding Mahoning R.								
	130.5	Yes	Unknown			5	1	2008	2010
05030103 080	Mahoning River (upstream Mill Creek to mouth); excluding Mahoning R. mainstem								
	185.7	Yes	Unknown			5	1	2008	2010
05030106 010	Ohio River tributaries (downstream Cross Creek to downstream Short Creek)								
	180.5	Unknown	Indeterminate			3		2005	
05030106 040	Ohio River tributaries (downstream Short Creek to downstream Wheeling Creek)								
	130.2	Unknown	Indeterminate			3		2010	
05030106 100	Ohio River tributaries (downstream Wheeling Creek to downstream McMahon Creek)								
	97.3	Unknown	Unknown			3		2010	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05030106 110	Ohio River tributaries (downstream McMahon Creek to downstream Fish Creek [WV])								
	229.8	Yes	Indeterminate			5	4	2010	2012
05030201 010	Ohio River tributaries (downstream Fish Creek [WV] to downstream Sunfish Creek)								
	123.8	Yes	No			5	2	2010	2012
05030201 020	Ohio River tributaries (downstream Sunfish Creek to upstream Muskingum River)								
	136.5	Unknown	Indeterminate			3		2010	
05030201 090	Little Muskingum River (headwaters to upstream Clear Fork)								
	148.9	Yes	Indeterminate			5	4	2010	2012
05030201 100	Little Muskingum River (upstream Clear Fork to mouth)								
	165.7	Yes	Indeterminate		Yes	5	6	2010	2012
05030201 110	East Fork Duck Creek								
	136.2	Yes	Indeterminate			5	3	2010	2002
05030201 120	Duck Creek; West Fork Duck Creek								
	149.6	Yes	Indeterminate			5	2	2010	2002
05030202 010	Ohio River tributaries (downstream Muskingum R. to upstream Hocking River); Little Hocking River								
	141.3	Unknown	Unknown			3		2008	
05030202 020	Ohio River tributaries (downstream Hocking River to upstream Shade River)								
	27.9	Unknown	Unknown			3		2009	
05030202 030	Middle Branch and West Branch Shade River								
	128.9	Unknown	Unknown			3		2009	
05030202 040	Shade River (Middle Branch and West Branch to mouth)								
	92.1	Unknown	Unknown			3		2009	
05030202 050	Ohio River tributaries (downstream Shade River to upstream Leading Creek)								
	81.7	Unknown	Unknown			3		2009	
05030202 090	Leading Creek								
	150.1	Yes	Unknown			5	1	2009	2011
05030202 100	Ohio River tributaries (downstream Leading Creek to upstream Kanawha River [WV])								
	88.8	Yes	Unknown			5	1	2009	2011
05030204 010	Hocking River (headwaters to Enterprise); excluding Rush Creek and Clear Creek								
	132.0	Yes	Yes		Yes	5	12	2004	2006

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05030204 020	Rush Creek (headwaters to upstream Little Rush Creek)								
	98.9	Unknown	Unknown			3		2004	2006
05030204 030	Rush Creek (upstream Little Rush Creek to mouth)								
	136.0	Unknown	Indeterminate			3		2004	2006
05030204 040	Clear Creek								
	91.8	Yes	Unknown			5	2	2004	2006
05030204 050	Hocking River (Enterprise to upstream Monday Creek); excluding Hocking R. mainstem dst. Duck Creek								
	126.3	Yes	Indeterminate		Yes	5	5	2004	2006
05030204 060	Monday Creek								
	116.0	Yes	Unknown			5	1	2009	2003
05030204 070	Sunday Creek								
	138.7	Yes	Unknown			5	3	2009	2003
05030204 080	Hocking River (downstream Monday Creek to Athens/RM 33.1); excluding Hocking R. mainstem								
	102.4	Unknown	Unknown			3		2004	
05030204 090	Federal Creek								
	144.6	No	Unknown			2		2004	
05030204 100	Hocking River (downstream Athens/RM 33.1 to mouth); excluding Federal Creek and Hocking R.								
	109.7	Unknown	Unknown			3		2004	
05040001 010	Tuscarawas River (headwaters to downstream Wolf Creek)								
	151.0	Yes	Indeterminate		Yes	5	2	2003	2005
05040001 020	Chippewa Creek								
	187.6	Yes	Indeterminate			5	2	2003	2005
05040001 030	Tuscarawas River (downstream Wolf Creek to downstream Sippo Creek); excluding Chippewa Creek								
	169.5	Yes	Unknown		Yes	5	2	2003	2005
05040001 040	Sandy Creek (headwaters to downstream Still Fork)								
	134.5	Unknown	Indeterminate		Yes	3		2012	
05040001 050	Nimishillen Creek								
	187.9	Yes	Yes		Yes	5	9	2003	2005
05040001 060	Sandy Creek (downstream Still Fork to mouth); excluding Nimishillen Creek								
	181.1	Yes	Indeterminate		Yes	5	2	2012	2014

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05040001 070	Conotton Creek (headwaters to downstream McGuire Creek)								
	141.8	Unknown	Unknown			3		2012	
05040001 080	Conotton Creek (downstream McGuire Creek to mouth)								
	144.3	Unknown	Unknown			3		2012	
05040001 090	Tuscarawas River (downstream Sippo Creek to upstream Sugar Creek); excluding Tuscarawas R.								
	113.4	Unknown	Unknown			3		2003	
05040001 100	Sugar Creek (headwaters to upstream Middle Fork)								
	97.3	Yes	Yes			5	8	2012	2002
05040001 110	South Fork Sugar Creek								
	137.7	Yes	Yes			5	8	2012	2002
05040001 120	Sugar Creek (upstream Middle Fork to mouth); excluding South Fork								
	121.3	Yes	Yes			5	8	2012	2002
05040001 130	Tuscarawas River (downstream Sugar Cr. to upstream Stillwater Cr.); excluding Tuscarawas R.								
	100.1	Unknown	Unknown			3		2003	
05040001 140	Stillwater Creek (headwaters to downstream Boggs Fork)								
	122.1	Unknown	Unknown			3		2007	
05040001 150	Stillwater Creek (downstream Boggs Fork to downstream Brushy Fork)								
	159.1	Yes	Unknown			5	1	2007	2009
05040001 160	Little Stillwater Creek								
	111.0	Unknown	Unknown			3		2007	
05040001 170	Stillwater Creek (downstream Brushy Fork to mouth); excluding Little Stillwater Creek								
	92.7	Unknown	Indeterminate			3		2007	
05040001 180	Tuscarawas River (downstream Stillwater Cr. to upstream Evans Cr.); excluding Tuscarawas R.								
	124.7	Unknown	Unknown			3		2003	
05040001 190	Tuscarawas River (upstream Evans Creek to mouth); excluding Tuscarawas R. mainstem								
	116.4	Unknown	Unknown			3		2003	
05040002 010	Black Fork Mohican River (headwaters to downstream Whetstone Creek)								
	161.4	Yes	Indeterminate			5	4	2007	2009
05040002 020	Black Fork Mohican River (downstream Whetstone Creek to downstream Rocky Fork)								
	139.7	Yes	Yes			5	8	2007	2009

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05040002 030	Clear Fork Mohican River (headwaters to downstream Cedar Fork)								
	112.1	Yes	Indeterminate			5	3	2012	2014
05040002 040	Clear Fork Mohican River (downstream Cedar Fork to mouth)								
	105.3	No	No			1		2012	
05040002 050	Jerome Fork Mohican River								
	161.5	Yes	Indeterminate			5	3	2007	2009
05040002 060	Muddy Fork Mohican River								
	105.3	Unknown	Unknown			3		2012	
05040002 070	Lake Fork Mohican River								
	79.8	Unknown	Unknown			3		2012	
05040002 080	Mohican River; Black Fork Mohican R. (downstream Rocky Fork to mouth); excluding Mohican R.								
	138.8	Unknown	Unknown			3		2007	
05040003 010	Kokosing River (headwaters to upstream North Branch)								
	100.5	Yes	Unknown			5	4	2012	2014
05040003 020	North Branch Kokosing River								
	97.9	No	Unknown			2		2012	
05040003 030	Kokosing River (downstream North Branch to upstream Jelloway Creek)								
	179.9	Yes	Indeterminate			5	4	2012	2014
05040003 040	Kokosing River (upstream Jelloway Creek to mouth)								
	106.3	Yes	Unknown			5	3	2012	2014
05040003 050	Killbuck Creek (headwaters to upstream Apple Creek)								
	138.6	Yes	Unknown			5	4	2007	2009
05040003 060	Killbuck Creek (upstream Apple Creek to downstream Salt Creek)								
	171.1	Yes	Unknown			5	3	2007	2009
05040003 070	Killbuck Creek (downstream Salt Creek to downstream Black Creek)								
	151.9	No	Unknown			2		2007	
05040003 080	Killbuck Creek (downstream Black Creek to mouth)								
	146.9	Yes	Indeterminate			5	4	2007	2009
05040003 090	Walhonding River; excluding Killbuck Creek and Walhonding R. mainstem								
	157.3	No	Unknown			2		2007	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05040004 010	Muskingum River(downstream Tuscarawas R./Walhonding R. to upstream Licking River)								
	130.9	Unknown	Unknown			3		2008	
05040004 020	Wakatomika Creek (headwaters to downstream Brushy Fork)								
	118.1	Yes	Unknown			5	2	2003	2005
05040004 030	Wakatomika Creek (downstream Brushy Fork to mouth)								
	116.1	Yes	Unknown			5	3	2003	2005
05040004 040	Jonathan Creek								
	193.9	Unknown	Indeterminate			3		2008	
05040004 050	Moxahala Creek (excluding Jonathan Creek)								
	108.4	Yes	Unknown			5	1	2008	2010
05040004 060	Salt Creek								
	144.8	Unknown	Unknown			3		2008	
05040004 070	Muskingum River (downstream Licking R. to upstream Meigs Cr.); excluding Muskingum R. mainstem								
	182.1	Unknown	Unknown			3		2008	
05040004 080	Meigs Creek								
	142.2	Yes	Unknown			5	1	2008	2010
05040004 090	Wolf Creek; West Branch Wolf Creek;								
	154.3	Unknown	No			2		2008	
05040004 100	South Branch Wolf Creek								
	79.6	Unknown	Indeterminate			3		2008	
05040004 110	Muskingum River (downstream Meigs Creek to upstream Big Run); excluding Muskingum R. mainstem								
	104.2	Unknown	Indeterminate			3		2008	
05040004 120	Muskingum River (upstream Big Run to mouth); excluding Muskingum R. mainstem								
	90.2	Unknown	Unknown			3		2008	
05040005 010	Seneca Fork								
	150.5	Unknown	Unknown			3		2008	
05040005 020	Wills Creek (headwaters to upstream Leatherwood Creek); excluding Seneca Fork								
	163.4	Yes	Indeterminate			5	1	2008	2010
05040005 030	Leatherwood Creek								
	91.6	Unknown	Indeterminate			3		2008	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05040005 040	Salt Fork								
	159.3	Yes	Unknown			5	2	2008	2010
05040005 050	Wills Creek (downstream Leatherwood Cr. to downstream Birds Run); excluding Wills Creek mainstem								
	164.9	Unknown	Unknown			3		2008	
05040005 060	Wills Creek (downstream Birds Run to mouth); excluding Wills Creek mainstem								
	122.9	Unknown	Unknown			3		2008	
05040006 010	North Fork Licking River (headwaters to downstream Sycamore Creek)								
	111.4	Yes	Indeterminate			5	3	2007	2009
05040006 020	North Fork Licking River (downstream Sycamore Creek to mouth)								
	129.0	Unknown	Indeterminate			3		2007	
05040006 030	Raccoon Creek								
	101.7	Yes	Indeterminate			5	4	2007	2009
05040006 040	South Fork Licking River (excluding Raccoon Creek)								
	184.9	Yes	Unknown			4B		2007	
05040006 050	Licking River (South Fork/North Fork to downstream Rocky Fork); excluding Licking R. mainstem								
	124.1	No	Indeterminate			2		2007	
05040006 060	Licking River (downstream Rocky Fork to mouth); excluding Licking R. mainstem								
	127.9	Yes	Unknown			5	2	2007	2009
05060001 010	Scioto River (headwaters to downstream Taylor Creek)								
	159.7	Yes	Unknown		Yes	5	3	2004	2006
05060001 020	Rush Creek								
	105.3	Unknown	Indeterminate			3		2004	
05060001 030	Scioto River (downstream Taylor Creek to upstream Little Scioto River); excluding Rush Creek								
	144.6	Yes	Indeterminate		Yes	5	4	2004	2006
05060001 040	Little Scioto River								
	112.6	Yes	Yes	Yes	Yes	5	9	2009	2011
05060001 050	Scioto River (downstream Little Scioto River to upstream Bokes Creek); excluding Scioto R. mainstem								
	140.0	Unknown	Indeterminate			3		2011	
05060001 060	Scioto River (upstream Bokes Creek to upstream Mill Creek); excluding Scioto R. mainstem								
	107.7	Yes	Yes			5	9	2009	2002

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05060001 070	Mill Creek								
	179.3	Yes	Yes			5	10	2009	2002
05060001 080	Scioto River (downstream Mill Creek to upstream Olentangy River); excluding Scioto R. mainstem								
	119.7	Yes	Indeterminate			5	1	2011	2013
05060001 090	Olentangy River (headwaters to downstream Flat Run)								
	133.6	Yes	Unknown			5	4	2003	2005
05060001 100	Whetstone Creek								
	114.5	Yes	Unknown			5	4	2003	2005
05060001 110	Olentangy River (downstream Flat Run to downstream Delaware Run); excluding Whetstone Creek								
	183.0	Yes	Indeterminate			5	3	2003	2005
05060001 120	Olentangy River (downstream Delaware Run to mouth)								
	113.0	Yes	Yes			5	8	2003	2005
05060001 130	Big Walnut Creek (headwaters to Hoover Dam)								
	189.6	Yes	Yes			5	10	2010	2003
05060001 140	Big Walnut Creek (downstream Hoover Dam to upstream Alum Creek); Blacklick Creek								
	145.7	Yes	Yes			5	10	2010	2003
05060001 150	Alum Creek (headwaters to Alum Creek Dam)								
	121.8	Yes	Yes			5	11	2010	2003
05060001 160	Big Walnut Creek (Alum Creek to mouth); Alum Creek (downstream Alum Creek Dam to mouth)								
	99.7	Yes	Yes			5	11	2010	2003
05060001 170	Walnut Creek (headwaters to downstream Sycamore Creek)								
	138.0	Yes	Indeterminate		Yes	5	4	2005	2007
05060001 180	Walnut Creek (downstream Sycamore Creek to mouth)								
	147.5	Yes	Yes		Yes	5	11	2005	2007
05060001 190	Big Darby Creek (headwaters to downstream Sugar Creek)								
	176.1	Yes	Indeterminate			5	4	2011	2003
05060001 200	Big Darby Creek (downstream Sugar Creek to upstream Little Darby Creek)								
	77.0	Yes	Unknown			5	3	2011	2003
05060001 210	Little Darby Creek								
	178.5	Yes	Unknown			5	3	2011	2003

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05060001 220	Big Darby Creek (downstream Little Darby Creek to mouth)								
	124.0	Yes	No			5	3	2011	2003
05060001 230	Scioto River (downstream Olentangy River to upstream Big Darby Creek); excluding Scioto R. mainstem								
	187.2	Unknown	Unknown			3		2011	
05060002 010	Scioto River (downstream Big Darby Cr. to upstream Kinnikinnick Cr.); excluding Scioto R. mainstem								
	162.4	Yes	Unknown		Yes	5	3	2011	2013
05060002 020	Deer Creek (headwaters to upstream Sugar Run)								
	146.7	Yes	Unknown			5	2	2011	2013
05060002 030	Deer Creek (upstream Sugar Run to upstream Dry Run)								
	163.1	Yes	Unknown			5	4	2011	2013
05060002 040	Deer Creek (upstream Dry Run to mouth)								
	102.1	Yes	Unknown			5	4	2011	2013
05060002 050	Scioto River (upstream Kinnikinnick Creek to upstream Paint Creek); excluding Scioto R. mainstem								
	97.0	Unknown	Unknown			3		2011	
05060002 060	Scioto River (downstream Paint Creek to upstream Salt Creek); excluding Scioto R. mainstem								
	129.1	Unknown	Unknown			3		2011	
05060002 070	Salt Creek (headwaters to upstream Queer Creek)								
	174.6	Yes	Unknown		Yes	5	5	2011	2013
05060002 080	Middle Fork Salt Creek								
	109.0	Unknown	Unknown			3		2011	
05060002 090	Little Salt Creek (excluding Middle Fork)								
	138.5	Unknown	Unknown			3		2011	
05060002 100	Salt Creek (upstream Queer Creek to mouth); excluding Little Salt Creek and Middle Fork Salt Creek								
	133.1	Yes	Indeterminate		Yes	5	4	2011	2013
05060002 110	Scioto River (downstream Salt Creek to downstream Pee Pee Creek); excluding Scioto R. mainstem								
	137.0	Unknown	Unknown			3		2011	
05060002 120	Scioto River (downstream Pee Pee Creek to upstream Sunfish Creek); excluding Scioto R. mainstem								
	104.8	Yes	Unknown			5	4	2011	2013
05060002 130	Sunfish Creek								
	144.4	Unknown	Unknown			3		2011	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05060002 140	South Fork Scioto Brush Creek								
	113.0	Unknown	Unknown			3		2011	
05060002 150	Scioto Brush Creek (excluding South Fork)								
	160.2	Unknown	Unknown			3		2011	
05060002 160	Scioto River (downstream Sunfish Creek to mouth); excluding Scioto Brush Cr. and Scioto R. mainstem								
	159.3	Yes	Unknown			5	2	2011	2013
05060003 010	Paint Creek (headwaters to downstream East Fork)								
	119.3	Yes	Unknown		Yes	5	5	2006	2008
05060003 020	Sugar Creek								
	81.5	Yes	Unknown			5	1	2006	2008
05060003 030	Rattlesnake Creek (headwaters to upstream Lees Creek)								
	130.6	Yes	Unknown			5	1	2006	2008
05060003 040	Rattlesnake Creek (upstream Lees Creek to mouth)								
	148.3	No	Unknown			2		2006	
05060003 050	Paint Creek (downstream East Fork to upstream Rocky Fork); excluding Sugar Cr. and Rattlesnake Cr.								
	95.0	Yes	Indeterminate		Yes	5	3	2006	2008
05060003 060	Rocky Fork Paint Creek								
	144.0	Yes	Unknown			5	3	2006	2008
05060003 070	Paint Creek (downstream Rocky Fork to downstream Lower Twin Creek); excluding Paint Creek								
	122.0	Unknown	Indeterminate			3		2006	
05060003 080	North Fork Paint Creek (headwaters to downstream Compton Creek)								
	120.5	Unknown	Unknown			3		2006	
05060003 090	North Fork Paint Creek (downstream Compton Creek to mouth)								
	114.0	Unknown	Unknown			3		2006	
05060003 100	Paint Creek (downstream Lower Twin Creek to mouth); excluding North Fork and Paint Creek mainstem								
	67.3	Unknown	Unknown			3		2006	
05080001 010	Great Miami River (headwaters to upstream Cherokee Mans Run)								
	100.0	Yes	No			5	2	2008	2010
05080001 020	Muchinippi Creek								
	88.5	Yes	Indeterminate			5	4	2008	2010

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05080001 030	Great Miami River (upst. Cherokee Mans Run to downstream Bokengehalas Cr.); excluding Muchinippi								
	149.7	Yes	Unknown		Yes	5	5	2008	2010
05080001 040	Great Miami River (downstream Bokengehalas Creek to downstream Plum Creek)								
	145.6	Yes	Unknown		Yes	5	4	2008	2010
05080001 050	Loramie Creek (headwaters to downstream Mile Creek)								
	147.4	Yes	No			5	1	2008	2010
05080001 060	Loramie Creek (downstream Mile Creek to mouth)								
	117.6	Yes	Indeterminate			5	1	2008	2010
05080001 070	Great Miami River (downstream Plum Creek to upstream Spring Creek); excluding GMR mainstem								
	146.8	Unknown	Unknown			3		2008	
05080001 080	Great Miami River (upstream Spring Creek to upstream Honey Creek); excluding GMR mainstem								
	139.5	Yes	Unknown			5	2	2008	2010
05080001 090	Stillwater River (headwaters to upstream Swamp Creek)								
	115.0	Yes	Indeterminate		Yes	5	4	2009	2002
05080001 100	Stillwater River (upstream Swamp Creek to upstream Greenville Creek)								
	121.4	Yes	Yes		Yes	5	12	2009	2002
05080001 110	Greenville Creek (headwaters to downstream West Branch)								
	70.1	Yes	Indeterminate		Yes	5	3	2009	2002
05080001 120	Greenville Creek (downstream West Branch to mouth)								
	97.6	Yes	Indeterminate		Yes	5	5	2009	2002
05080001 130	Stillwater River (downstream Greenville Cr. to upstream Ludlow Cr.); excluding Stillwater R mainstem								
	92.8	Yes	Indeterminate			5	1	2009	2002
05080001 140	Stillwater River (upstream Ludlow Creek to mouth); excluding Stillwater R. mainstem								
	148.0	Yes	Yes			5	9	2009	2002
05080001 150	Mad River (headwaters to downstream Kings Creek)								
	134.7	Yes	Unknown			5	1	2003	2005
05080001 160	Mad River (downstream Kings Creek to downstream Chapman Creek)								
	153.5	Yes	Unknown			5	2	2003	2005
05080001 170	Buck Creek								
	140.6	Yes	Unknown			5	3	2003	2005

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05080001 180	Mad River (downstream Chapman Creek to upstream Mud Creek); excluding Buck Cr. and Mad R.								
	128.2	Yes	Indeterminate		Yes	5	2	2003	2005
05080001 190	Mad River (upstream Mud Creek to mouth); excluding Mad R. mainstem								
	100.4	Unknown	Unknown			3		2003	
05080001 200	Great Miami River (upstream Honey Creek to upstream Mad River); excluding GMR mainstem								
	143.4	Unknown	Unknown			3		2008	
05080002 010	Great Miami River (downstream Mad River to upstream Bear Creek); excluding GMR mainstem								
	143.7	Yes	Unknown			5	3	2009	2011
05080002 020	Great Miami River (upstream Bear Creek to upstream Twin Creek); excluding GMR mainstem								
	140.2	Yes	Unknown			5	4	2009	2011
05080002 030	Twin Creek (headwaters to upstream Bantas Fork)								
	157.3	Yes	Unknown			5	4	2004	2006
05080002 040	Twin Creek (upstream Bantas Fork to mouth)								
	159.0	Yes	Unknown			5	3	2004	2006
05080002 050	Great Miami River (downstream Twin Creek to upstream Fourmile Creek); excluding GMR mainstem								
	189.2	Yes	Yes	Yes	Yes	5	4	2009	2011
05080002 060	Sevenmile Creek								
	137.2	Yes	Unknown			5	4	2010	2004
05080002 070	Fourmile Creek (excluding Sevenmile Creek)								
	160.6	Yes	Unknown			5	3	2004	2006
05080002 080	Indian Creek								
	71.9	Unknown	Unknown			3		2010	
05080002 090	Great Miami River (downstream Fourmile Creek to mouth); excluding Indian Creek and GMR mainstem								
	166.2	Yes	Unknown		Yes	5	4	2011	2013
05080003 070	East Fork Whitewater River								
	70.6	Unknown	Indeterminate			3		2010	
05080003 080	Whitewater River (downstream East Fork Whitewater R. [IN] to mouth); excluding Whitewater R								
	74.7	No	Unknown			2		2010	
05090101 010	Ohio River tributaries (downstream Campaign Creek to upstream Raccoon Creek)								
	45.4	Unknown	Unknown			3		2009	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05090101 020	Raccoon Creek (headwaters to upstream Hewett Fork)								
	135.5	Yes	Unknown			5	1	2009	2002
05090101 030	Raccoon Creek (upstream Hewett Fork to downstream Elk Fork)								
	155.0	Yes	Unknown			5	4	2009	2002
05090101 040	Raccoon Creek (downstream Elk Fork to upstream Little Raccoon Creek)								
	95.0	Yes	Unknown			5	2	2009	2002
05090101 050	Little Raccoon Creek								
	154.6	Yes	Unknown			5	1	2009	2011
05090101 060	Raccoon Creek (downstream Little Raccoon Creek to mouth); excluding Raccoon Creek mainstem								
	140.8	Yes	Unknown			5	1	2009	2011
05090101 070	Ohio River tributaries (downstream Raccoon Creek to upstream Symmes Creek)								
	139.0	Unknown	Unknown			3		2009	
05090101 080	Symmes Creek (headwaters to downstream Black Fork)								
	119.1	Unknown	Unknown			3		2009	
05090101 090	Symmes Creek (downstream Black Fork to downstream Buffalo Creek)								
	100.3	Unknown	Unknown			3		2009	
05090101 100	Symmes Creek (downstream Buffalo Creek to mouth); Ohio River tributaries (Symmes Cr. to Big Sandy								
	151.5	Unknown	Unknown		Yes	3		2009	
05090103 010	Ohio River tributaries (downstream Big Sandy River [WV] to upstream Pine Creek)								
	130.4	Unknown	Unknown			3		2009	
05090103 020	Pine Creek								
	184.2	Yes	Unknown			5	3	2009	2011
05090103 030	Little Scioto River (headwaters to upstream Rocky Fork)								
	107.8	Unknown	Unknown			3		2009	
05090103 040	Little Scioto River (upst. Rocky Fork to mouth); Ohio R. tribs. (dst Pine Cr. to dst 8-digit divide)								
	152.2	Unknown	Unknown		Yes	3		2009	
05090201 010	Ohio River tributaries (downstream 8-digit divide to upstream Ohio Brush Creek)								
	136.9	No	Unknown			2		2011	
05090201 030	Ohio Brush Creek (headwaters to downstream Baker Fork)								
	130.0	Yes	Unknown			5	3	2011	2013

Table 2: Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05090201 040	West Fork Ohio Brush Creek								
	134.1	Yes	Unknown			5	2	2011	2013
05090201 050	Ohio Brush Creek (downstream Baker Fork to mouth);excluding West Fork)								
	170.7	Yes	Unknown			5	2	2011	2013
05090201 060	Ohio River tributaries (downstream Ohio Brush Creek to upstream Eagle Creek)								
	67.9	Yes	Unknown			5	4	2011	2013
05090201 070	Eagle Creek								
	151.7	Yes	Unknown			5	3	2011	2013
05090201 080	Ohio River tributaries (downstream Eagle Creek to upstream Whiteoak Creek)								
	93.6	Yes	Unknown			5	2	2011	2013
05090201 090	East Fork Whiteoak Creek; North Fork Whiteoak Creek								
	147.4	Yes	Unknown			5	3	2006	2008
05090201 100	Whiteoak Creek (North Fork/East Fork to mouth)								
	87.9	Yes	Unknown			5	2	2006	2008
05090201 110	Ohio River tributaries (downstream Whiteoak Creek to upstream Big Indian Run)								
	97.4	Unknown	Unknown			3		2011	
05090201 120	Ohio River tributaries (upstream Big Indian Run to upstream Little Miami River)								
	108.2	No	Unknown			2		2011	
05090202 010	Little Miami River (headwaters to upstream Massies Creek)								
	129.6	Yes	Indeterminate		Yes	4A		2012	2002
05090202 020	Little Miami River (upstream Massies Creek to downstream Beaver Creek)								
	165.5	Yes	Indeterminate		Yes	4A		2012	2002
05090202 030	Little Miami River (downstream Beaver Creek to upstream Caesar Creek)								
	119.2	Yes	Indeterminate		Yes	4A		2012	2002
05090202 040	Anderson Fork Caesar Creek								
	94.8	Yes	No			4A		2012	2002
05090202 050	Caesar Creek (excluding Anderson Fork)								
	147.9	Yes	Indeterminate			4A		2012	2002
05090202 060	Little Miami River (downstream Caesar Creek to downstream Turtle Creek); excluding LMR mainstem								
	116.8	Unknown	Unknown			3		2007	

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05090202 070	Todd Fork (headwaters to upstream East Fork Todd Fork)								
	147.0	Yes	Unknown			5	3	2007	2009
05090202 080	Todd Fork (downstream East Fork Todd Fork to mouth)								
	114.6	Yes	Unknown			4B		2007	
05090202 090	Little Miami River (downstream Turtle Creek to downstream O'Bannon Creek); excluding LMR mainstem								
	110.3	Yes	Unknown			5	4	2007	2009
05090202 100	East Fork Little Miami River (headwaters to upstream Solomon Run)								
	140.8	Yes	Unknown		Yes	5	3	2012	2014
05090202 110	East Fork Little Miami River (upstream Solomon Run to upstream Cloverlick Creek)								
	116.7	Yes	Unknown		Yes	5	3	2012	2014
05090202 120	East Fork Little Miami River (upstream Cloverlick Creek to upstream Stonelick Creek)								
	123.1	Yes	Unknown		Yes	5	2	2012	2014
05090202 130	East Fork Little Miami River (upstream Stonelick Creek to mouth)								
	119.2	Yes	Unknown		Yes	5	3	2012	2014
05090202 140	Little Miami River (downstream O'Bannon Creek to mouth); excluding East Fork LMR and LMR mainstem								
	112.4	Yes	Unknown			5	2	2007	2009
05090203 010	Mill Creek								
	164.6	Yes	Unknown		Yes	5	2	2012	2002
05090203 020	Ohio River tributaries (downstream Little Miami R. to upstream Great Miami R.); excluding Mill Creek								
	48.6	Yes	Unknown			5	1	2011	2013
05090203 050	Ohio River tributaries (downstream Great Miami River to upstream Wolper Creek [KY])								
	0.1	Unknown	Unknown			3		2010	
05120101 010	Wabash River (headwaters to upstream Beaver Creek)								
	115.9	Yes	Yes			5	8	2010	2003
05120101 020	Beaver Creek (Grand Lake St. Marys and tributaries)								
	112.5	Yes	Yes			5	8	2010	2012
05120101 030	Beaver Creek (downstream Grand Lake St. Marys Dam to mouth)								
	58.6	Yes	Indeterminate			5	1	2010	2012
05120101 040	Wabash River (downstream Beaver Creek to upstream Loblolly Creek [IN])								
	12.6	Yes	Indeterminate			5	2	2010	2003

Table 2. Status of Watershed (HUC 11) Assessment Units (Summary Table)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment		Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
		Aquatic Life	Recreation						
05120103 010	Mississinewa River (headwaters to downstream Mud Creek [IN])								
	30.3	Yes	Indeterminate			5	4	2010	2012

Table 3. Waters on the 1998 List Not on the 2002 List

Assessment Unit	Description	Sampling Year
HUCs and associated segments that were inadvertently included on the 1998 303(d) list despite the fact that the data used to support the listing was more than 10 years old.		
04100007 070	Little Auglaize River (Evans Ditch to Dog Creek)	1983
	Little Auglaize River (Headwaters to Evans Ditch)	1983
04100007 080	Prairie Creek (Hagerman Creek to Little Auglaize River)	1983
	Prairie Creek (Headwaters to Hagerman Creek)	1983
04100007 090	Little Auglaize R. (Dog Creek to Auglaize River)	1983
	Dog Creek	1983
04100011 010	Muddy Creek (Headwaters to Gries Ditch)	1982
04100011 130	Pickerel Creek	1983
04100012 050	Vermilion River (Southwest Branch to East Branch)	1987
	Vermilion River (Headwaters to Southwest Branch)	1987
	Clear Creek	1987
05030101 170	Trib to Wills Creek	1983
05030101 190	Yellow Creek (Brush Creek to Ohio River)	1983
	North Fork Yellow Creek	1983
	Randolph Run	1983
	Yellow Creek (Town Fork to Brush Creek)	1983
05030101 210	Trib to Wills Creek	1983
05030101 340	Tributary to Dry Fork (Rm 5.43)	1983
	Cross Creek (Headwaters to Salem Creek)	1983
05030106 040	Wheeling Creek (Headwaters to Cox Run)	1983
	Deep Run	1988
05030106 100	McMahon Creek (Williams Creek to Ohio River)	1983
	Little McMahon Creek	1983
	Kings Run	1983
	Aults Run	1983
	McMahon Creek (Headwaters to Williams Creek)	1983
	Williams Creek	1991
05030204 020	Rush Creek (Headwaters to Little Rush Creek)	1982

Table 3. Waters on the 1998 List Not on the 2002 List

Assessment Unit	Description	Sampling Year
	Bluntnose Creek (Trib. To Rush Creek Rm 19.40)	1982
	Center Branch Rush Creek	1982
	Turkey Run	1982
05030204 030	Durbin Run	1982
	Raccoon Run	1982
05040001 020	Holmes Brook	1983
	Unnamed Trib. To Little Chippewa Creek	1986
05040001 070	Conotton Creek (Headwaters to Mcguire Creek)	1982
05040001 080	Conotton Creek (Indian Fork to Tuscarawas River)	1989
05040001 170	Stillwater Creek (Brushy Creek to Tuscarawas R.)	1983
05040001 190	White Eyes Creek	1983
	Evans Creek	1983
05040004 040	Kent Run	1986
	Jonathan Creek (Headwaters to Buckeye Fork)	1986
05040004 090	West Br. Wolf Creek (Laurel Run to Muskingum R.	1984
	West Br. Wolf Creek (Headwaters to Laurel Run)	1984
05040004 100	South Branch Wolf Creek	1984
05040004 110	Olive Green Creek	1984
05040005 030	Leatherwood Creek	1984
	Mud Run	1984
	Hawkins Run	1984
	Infirmary Run	1984
05040005 050	Crooked Creek	1984
05040006 020	Lake Fork	1984
05060002 080	Middle Fork Salt Creek (Headwaters to Pigeon Creek)	1986
	Middle Fork Salt Creek (Pigeon Creek to L. Salt Creek)	1986
05060002 090	Buckeye Creek	1986
05060002 130	Sunfish Creek (Chenoweth Fork to Scioto River)	1979
05060002 140	S Fk Scioto Brush (Shawnee Cr. To Scioto Brush Cr)	1984

Table 3. Waters on the 1998 List Not on the 2002 List

Assessment Unit	Description	Sampling Year
	Turkey Run	1979
	Mill Creek	1979
05060002 150	Scioto Brush Creek (Rarden Creek to South Fork)	1987
05080002 080	Indian Creek	1985
HUCs and associated segments that were inadvertently included on the 1998 303(d) list despite the fact that the data used to support the listing was insufficient (parenthesis number is number of sites).		
04100004 030	St. Marys River (Miami/Erie Canal to Sixmile Cr.)	1991 (5)
04100008 020	Blanchard River (The Outlet to Eagle Creek)	1989 (3)
04100009 070	Swan Creek (Ai Creek to Blue Creek)	1989 (1)
	Swan Creek (Headwaters to Ai Creek)	1989 (1)
04100010 060	Sugar Creek	1994 (2)
04100011 110	Beaver Creek Reservoir	1992 (1)
04110001 010	Beaver Creek	1992 (3)
04110004 010	Grand River Wildlife Area Lake	1995 (1)
04110004 030	Roaming Rock Lake	1995 (1)
04110004 050	Jefferson Reservoir (Lampson Lake)	1995 (1)
05030103 020	Berlin Reservoir	1989 (1)
	Deer Creek Reservoir	1995 (1)
05030106 010	Short Creek (Piney Fork to Ohio River)	1988 (2)
	Sally Buffalo Creek	1985 (1)
05030202 010	Little Hocking River	1990 (1)
05030202 020	Forked Run Lake	1995 (1)
05030202 040	Shade River	1990 (1)
05040001 040	Still Fork Sandy Creek	1993 (2)
05040001 160	Tappan Lake	1995 (1)
05040002 080	Black Fork Mohican R. (Rocky Fork to Clear Fork)	1988 (3)
05040006 040	Beaver Run	1989 (1)
05090101 070	Indian Guyan Creek (L. Indian Guyan Creek to Ohio River)	1990 (3)
05090101 090	Buffalo Creek	1990 (2)
	Caulley Fork	1990 (2)

Table 3. Waters on the 1998 List Not on the 2002 List

Assessment Unit	Description	Sampling Year
05090101 100	Symmes Creek (Venisonham Creek to Ohio River)	1990 (1)
05090103 010	Ice Creek	1990 (2)
05090103 030	Bear Run	1990 (1)
	Glady Run Swale	1993 (2)
05090202 070	Todd Fork (Dutch Creek to Little East Fork)	1984 (2)
	Todd Fork (Headwaters to Dutch Creek)	1982 (2)
	Dutch Creek	1983 (1)
HUCs and associated segments that were included on the 1998 303(d) list and are retained on the 2002 303(d) list, in spite of old data.		
05030202 100	Kyger Creek	1990
	Bell Lick Run	1982
05040004 050	Moxahala Creek (Headwaters to Jonathan Creek)	1988
	Ogg Creek	1987
05040004 080	Meigs Creek	1989
	Dyes Fork	1989

Table 4. Short-Term Schedule for TMDL Development

		TMDL Status			
Basin Code	**Basin Name**	**Aquatic Life**		**Recreation**	
04110002 010	Cuyahoga River (headwaters to below Black Brook)	in progress	2002		
04110002 040	Cuyahoga River (below Little Cuyahoga River to below Brandywine Creek)	in progress	2002	in progress	2002
04110002 050	Cuyahoga River (below Brandywine Creek to below Tinkers Creek)	in progress	2002	in progress	2002
04110002 060	Cuyahoga River (below Tinkers Creek to Lake Erie)	in progress	2002	in progress	2002
05030201 110	East Fork Duck Creek	in progress	2002		
05030201 120	Duck Creek (except East Fork)	in progress	2002		
05040001 100	Sugar Creek (headwaters to above Middle Fork Sugar Creek)	in progress	2002		
05040001 110	South Fork Sugar Creek	in progress	2002		
05040001 120	Sugar Creek (above Middle Fork to Tuscarawas River [except South Fork])	in progress	2002		
05060001 060	Scioto River (above Bokes Creek to above Mill Creek)	in progress	2002		
05060001 070	Mill Creek	in progress	2002		
05080001 090	Stillwater River (headwaters to above Swamp Creek)	in progress	2002		
05080001 100	Stillwater River (above Swamp Creek to above Greenville Creek)	in progress	2002		
05080001 110	Greenville Creek (headwaters to below West Branch)	in progress	2002		
05080001 120	Greenville Creek (below West Branch to Stillwater River)	in progress	2002		
05080001 130	Stillwater River (below Greenville Creek to above Ludlow Creek)	in progress	2002		
05080001 140	Stillwater River (above Ludlow Creek to Great Miami River)	in progress	2002		
05090101 020	Raccoon Creek (headwaters to above Hewett Fork)	in progress	2002		
05090101 030	Raccoon Creek (above Hewett Fork to below Elk Fork)	in progress	2002		
05090101 040	Raccoon Creek (below Elk Fork to above Little Raccoon Creek)	in progress	2002		

Table 4. Short-Term Schedule for TMDL Development

		TMDL Status	
Basin Code	**Basin Name**	**Aquatic Life**	**Recreation**
05090203 010	Mill Creek	in progress	2002
04100007 010	Auglaize River (headwaters to below Pusheta Creek)	in progress	2003
04100007 020	Auglaize River (below Pusheta Creek to above Jennings Creek)	in progress	2003
04100007 060	Auglaize River (above Jennings Creek to above Little Auglaize River)	in progress	2003
04100011 020	Sandusky River (headwaters to above Broken Sword Creek)	in progress	2003
04100011 030	Broken Sword Creek	in progress	2003
04100011 040	Sandusky River (below Broken Sword Creek to above Tymochtee Creek)	in progress	2003
04100011 050	Tymochtee Creek (headwaters to below Warpole Creek)	in progress	2003
04100011 060	Tymochtee Creek (downstream Warpole Creek to Sandusky River)	in progress	2003
04100011 070	Sandusky River (below Tymochtee Creek to above Honey Creek)	in progress	2003
04100011 080	Honey Creek	in progress	2003
05030204 060	Monday Creek	in progress	2003
05030204 070	Sunday Creek	in progress	2003
05060001 130	Big Walnut Creek (headwaters to Hoover Dam)	in progress	2003
05060001 140	Big Walnut Creek (below Hoover Dam to above Alum Creek)	in progress	2003
05060001 150	Alum Creek (headwaters to Alum Creek Dam)	in progress	2003
05060001 160	Big Walnut Creek (above Alum Creek [except above Alum Creek Dam] to Scioto River)	in progress	2003
05060001 190	Big Darby Creek (headwaters to below Sugar Run)	in progress	2003
05060001 200	Big Darby Creek (below Sugar Run to above Little Darby Creek)	in progress	2003
05060001 210	Little Darby Creek	in progress	2003

Table 4. Short-Term Schedule for TMDL Development

		TMDL Status	
Basin Code	**Basin Name**	**Aquatic Life**	**Recreation**
05060001 220	Big Darby Creek (below Little Darby Creek to Scioto River)	in progress 2003	
04100012 010	West Branch Huron River (headwaters to above Slate Run)	in progress 2004	
04100012 020	West Branch Huron River (above Slate Run to above East Branch Huron River)	in progress 2004	
04100012 030	Huron River (above East Branch to Lake Erie) and Lake Erie Tributaries (below Sawmill Creek to below Huron River)	in progress 2004	
04100012 040	Lake Erie Tributaries (below Huron River to above Vermilion River)	in progress 2004	
04100012 050	Vermilion River (headwaters to above East Branch)	in progress 2004	
04100012 060	Vermilion River (above East Branch to Lake Erie)	in progress 2004	
04110001 020	West Branch Black River (headwaters to Black River)	in progress 2004	
04110001 030	East Branch Black River (headwaters to below Coon Creek)	in progress 2004	
04110001 040	East Branch Black River (below Coon Creek to Black River)	in progress 2004	
04110001 050	Black River (below East Branch to Lake Erie) and Lake Erie tribs (below Black R. to above Porter Cr)	in progress 2004	
05080002 060	Sevenmile Creek	in progress 2004	

Table 5. TMDLs Approved in Ohio

		TMDL Status		
Basin Code	**Basin Name**	**Aquatic Life**		**Recreation**
04110002 020	Cuyahoga River (below Black Brook to below Breakneck Creek)	approved	2000	
04110002 030	Cuyahoga River (below Breakneck Creek to below Little Cuyahoga River)	approved	2000	
04110001 070	Rocky River (below West Br. to Lake Erie [including East Br.] and Lake Erie tribs [above Porter Cr to above Cuyahoga R])	approved	2001	
05090202 010	Little Miami River (headwaters to above Massies Creek)	approved	2002	
05090202 020	Little Miami River (above Massies Creek to below Beaver Creek)	approved	2002	
05090202 030	Little Miami River (below Beaver Creek of above Caesar Creek)	approved	2002	
05090202 040	Anderson Fork Caesar Creek	approved	2002	
05090202 050	Caesar Creek (except Anderson Fork)	approved	2002	
05060001 060	Scioto River (above Bokes Creek to above Mill Creek)	approved	2002	

Table 3. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05080001 100	Stillwater River (upstream Swamp Creek to upstream Greenville Creek)								
	121.4	Yes	Yes		Yes	5	12	2009	2002
05030204 010	Hocking River (headwaters to Enterprise); excluding Rush Creek and Clear Creek								
	132.0	Yes	Yes		Yes	5	12	2004	2006
05030101 070	Middle Fork Little Beaver Creek								
	149.1	Yes	Yes	Yes	Yes	5	12	2008	2004
05060001 180	Walnut Creek (downstream Sycamore Creek to mouth)								
	147.5	Yes	Yes		Yes	5	11	2005	2007
05060001 160	Big Walnut Creek (Alum Creek to mouth); Alum Creek (downstream Alum Creek Dam to mouth)								
	99.7	Yes	Yes			5	11	2010	2003
05060001 150	Alum Creek (headwaters to Alum Creek Dam)								
	121.8	Yes	Yes			5	11	2010	2003
05060001 001	Scioto River Mainstem (downstream Little Scioto River to mouth)								
	6517.0	Yes	Yes		Yes	5	11	2011	2013
04110004 060	Grand River (downstream Mill Creek to mouth); excluding Grand R. mainstem								
	184.1	Yes	Yes			5	11	2004	2006
04110003 050	Ashtabula River								
	126.8	Yes	Yes		Yes	5	11	2009	2011
04110001 070	Rocky River; East Branch Rocky R.; Lake Erie tributaries (West of Porter Cr. to West of Cuyahoga R.)								
	139.8	Yes	Yes			5	11	2006	2001
04110001 060	West Branch Rocky River								
	190.2	Yes	Yes		Yes	5	11	2006	2001
04100007 020	Auglaize River (downstream Pusheta Creek to upstream Jennings Creek); excluding Auglaize R.								
	99.9	Yes	Yes			5	11	2010	2003
04100007 010	Auglaize River (headwaters to downstream Pusheta Creek)								
	148.2	Yes	Yes		Yes	5	11	2010	2003
05060001 140	Big Walnut Creek (downstream Hoover Dam to upstream Alum Creek); Blacklick Creek								
	145.7	Yes	Yes			5	10	2010	2003
05060001 130	Big Walnut Creek (headwaters to Hoover Dam)								
	189.6	Yes	Yes			5	10	2010	2003

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05060001 070	Mill Creek								
	179.3	Yes	Yes			5	10	2009	2002
04110002 001	Cuyahoga River Mainstem (downstream Brandywine Creek to mouth including old river channel)								
	809.0	Yes	Yes		Yes	5	10	2010	2002
04100009 030	Maumee R. (downstream S. Turkeyfoot Cr. to upstream Bad Cr.); excluding Maumee R.								
	103.0	Yes	Yes			5	10	2011	2013
04100005 020	Maumee River (downstream Hamm Ditch [IN] to upstream Tiffin River); excluding Maumee River								
	190.1	Yes	Yes			5	10	2010	2012
05080001 140	Stillwater River (upstream Ludlow Creek to mouth); excluding Stillwater R. mainstem								
	148.0	Yes	Yes			5	9	2009	2002
05060001 060	Scioto River (upstream Bokes Creek to upstream Mill Creek); excluding Scioto R. mainstem								
	107.7	Yes	Yes			5	9	2009	2002
05060001 040	Little Scioto River								
	112.6	Yes	Yes	Yes	Yes	5	9	2009	2011
05040001 050	Nimishillen Creek								
	187.9	Yes	Yes		Yes	5	9	2003	2005
05030103 001	Mahoning River Mainstem (downstream Eagle Creek to Pennsylvania Border)								
	1075.0	Yes	Yes	Yes	Yes	5	9	2008	2003
04110002 040	Cuyahoga River (downstream Little Cuyahoga River to downstream Brandywine Creek)								
	153.9	Yes	Yes		Yes	5	9	2010	2002
04110002 030	Cuyahoga River (downstream Breakneck Creek to downstream Little Cuyahoga River)								
	112.2	Yes	Yes		Yes	5	9	2005	2000
04110002 010	Cuyahoga River (headwaters to downstream Black Brook)								
	148.9	Yes	Yes			5	9	2010	2002
04110001 050	Black River; Lake Erie tributaries East of Black River to West of Porter Creek)								
	100.8	Yes	Yes	Yes	Yes	5	9	2011	2004
04100011 100	Wolf Creek								
	157.8	Unknown	Yes			5	9	2009	2011
04100007 060	Auglaize River (upstream Jennings Cr. to upstream L. Auglaize R.); excluding Auglaize R. mainstem								
	143.0	Yes	Yes			5	9	2010	2003

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100006 050	Lick Creek								
	105.9	Yes	Yes			5	9	2006	2003
04100001 020	Tenmile Creek; Ottawa River								
	147.0	Yes	Yes	Yes	Yes	5	9	2011	2013
05120101 020	Beaver Creek (Grand Lake St. Marys and tributaries)								
	112.5	Yes	Yes			5	8	2010	2012
05120101 010	Wabash River (headwaters to upstream Beaver Creek)								
	115.9	Yes	Yes			5	8	2010	2003
05060001 120	Olentangy River (downstream Delaware Run to mouth)								
	113.0	Yes	Yes			5	8	2003	2005
05040002 020	Black Fork Mohican River (downstream Whetstone Creek to downstream Rocky Fork)								
	139.7	Yes	Yes			5	8	2007	2009
05040001 120	Sugar Creek (upstream Middle Fork to mouth); excluding South Fork								
	121.3	Yes	Yes			5	8	2012	2002
05040001 110	South Fork Sugar Creek								
	137.7	Yes	Yes			5	8	2012	2002
05040001 100	Sugar Creek (headwaters to upstream Middle Fork)								
	97.3	Yes	Yes			5	8	2012	2002
04110003 010	Lake Erie tributaries (East of Cuyahoga River to West of Grand River); excluding Chagrin River								
	119.0	Yes	Yes			5	8	2010	2004
04110002 060	Cuyahoga River (downstream Tinkers Creek to mouth); excluding Cuyahoga R. mainstem								
	115.6	Yes	Yes			5	8	2010	2002
04110002 050	Cuyahoga River (downstream Brandywine Cr. to downstream Tinkers Cr.); excluding Cuyahoga R.								
	138.1	Yes	Yes			5	8	2010	2002
04100009 020	South Turkeyfoot Creek								
	149.1	Yes	Yes			5	8	2011	2013
04100007 040	Ottawa River (upstream Little Ottawa River to upstream Sugar Creek)								
	106.1	Yes	Yes			5	8	2005	2007
04100006 040	Tiffin River (downstream Leatherwood Creek to upstream Lick Creek); excluding Tiffin River mainstem								
	166.2	Yes	Yes			5	8	2006	2008

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05030201 100	Little Muskingum River (upstream Clear Fork to mouth)								
	165.7	Yes	Indeterminate		Yes	5	6	2010	2012
05080001 120	Greenville Creek (downstream West Branch to mouth)								
	97.6	Yes	Indeterminate		Yes	5	5	2009	2002
05080001 030	Great Miami River (upst. Cherokee Mans Run to downstream Bokengehalas Cr.); excluding Muchinippi								
	149.7	Yes	Unknown		Yes	5	5	2008	2010
05080001 003	Mad River Mainstem (downstream Donnels Creek to mouth)								
	657.0	Yes	Unknown		Yes	5	5	2003	2005
05080001 001	Great Miami River Mainstem (downstream Tawawa Creek to mouth)								
	5371.0	Yes	Indeterminate		Yes	5	5	2008	2010
05060003 010	Paint Creek (headwaters to downstream East Fork)								
	119.3	Yes	Unknown		Yes	5	5	2006	2008
05060002 070	Salt Creek (headwaters to upstream Queer Creek)								
	174.6	Yes	Unknown		Yes	5	5	2011	2013
05040004 001	Muskingum River Mainstem (entire length)								
	8051.0	Yes	Indeterminate		Yes	5	5	2008	2010
05030204 050	Hocking River (Enterprise to upstream Monday Creek); excluding Hocking R. mainstem dst. Duck Creek								
	126.3	Yes	Indeterminate		Yes	5	5	2004	2006
05030101 080	West Fork Little Beaver Creek								
	111.2	Yes	Indeterminate			5	5	2008	2004
04110001 040	East Branch Black River (downstream Coon Creek to mouth)								
	125.8	Yes	Indeterminate		Yes	5	5	2011	2004
04100011 001	Sandusky River Mainstem (downstream Tymochtee Creek to mouth)								
	1420.0	Yes	Unknown		Yes	5	5	2009	2003
05120103 010	Mississinewa River (headwaters to downstream Mud Creek [IN])								
	30.3	Yes	Indeterminate			5	4	2010	2012
05090202 090	Little Miami River (downstream Turtle Creek to downstream O'Bannon Creek); excluding LMR mainstem								
	110.3	Yes	Unknown			5	4	2007	2009
05090201 060	Ohio River tributaries (downstream Ohio Brush Creek to upstream Eagle Creek)								
	67.9	Yes	Unknown			5	4	2011	2013

Table 3. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05090101 030	Raccoon Creek (upstream Hewett Fork to downstream Elk Fork)								
	155.0	Yes	Unknown			5	4	2009	2002
05080002 090	Great Miami River (downstream Fourmile Creek to mouth); excluding Indian Creek and GMR mainstem								
	166.2	Yes	Unknown		Yes	5	4	2011	2013
05080002 060	Sevenmile Creek								
	137.2	Yes	Unknown			5	4	2010	2004
05080002 050	Great Miami River (downstream Twin Creek to upstream Fourmile Creek); excluding GMR mainstem								
	189.2	Yes	Yes	Yes	Yes	5	4	2009	2011
05080002 030	Twin Creek (headwaters to upstream Bantas Fork)								
	157.3	Yes	Unknown			5	4	2004	2006
05080002 020	Great Miami River (upstream Bear Creek to upstream Twin Creek); excluding GMR mainstem								
	140.2	Yes	Unknown			5	4	2009	2011
05080001 090	Stillwater River (headwaters to upstream Swamp Creek)								
	115.0	Yes	Indeterminate		Yes	5	4	2009	2002
05080001 040	Great Miami River (downstream Bokengehalas Creek to downstream Plum Creek)								
	145.6	Yes	Unknown		Yes	5	4	2008	2010
05080001 020	Muchinippi Creek								
	88.5	Yes	Indeterminate			5	4	2008	2010
05060002 120	Scioto River (downstream Pee Pee Creek to upstream Sunfish Creek); excluding Scioto R. mainstem								
	104.8	Yes	Unknown			5	4	2011	2013
05060002 100	Salt Creek (upstream Queer Creek to mouth); excluding Little Salt Creek and Middle Fork Salt Creek								
	133.1	Yes	Indeterminate		Yes	5	4	2011	2013
05060002 040	Deer Creek (upstream Dry Run to mouth)								
	102.1	Yes	Unknown			5	4	2011	2013
05060002 030	Deer Creek (upstream Sugar Run to upstream Dry Run)								
	163.1	Yes	Unknown			5	4	2011	2013
05060001 190	Big Darby Creek (headwaters to downstream Sugar Creek)								
	176.1	Yes	Indeterminate			5	4	2011	2003
05060001 170	Walnut Creek (headwaters to downstream Sycamore Creek)								
	138.0	Yes	Indeterminate		Yes	5	4	2005	2007

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05060001 100	Whetstone Creek								
	114.5	Yes	Unknown			5	4	2003	2005
05060001 090	Olentangy River (headwaters to downstream Flat Run)								
	133.6	Yes	Unknown			5	4	2003	2005
05060001 030	Scioto River (downstream Taylor Creek to upstream Little Scioto River); excluding Rush Creek								
	144.6	Yes	Indeterminate		Yes	5	4	2004	2006
05040006 030	Raccoon Creek								
	101.7	Yes	Indeterminate			5	4	2007	2009
05040003 080	Killbuck Creek (downstream Black Creek to mouth)								
	146.9	Yes	Indeterminate			5	4	2007	2009
05040003 050	Killbuck Creek (headwaters to upstream Apple Creek)								
	138.6	Yes	Unknown			5	4	2007	2009
05040003 030	Kokosing River (downstream North Branch to upstream Jelloway Creek)								
	179.9	Yes	Indeterminate			5	4	2012	2014
05040003 010	Kokosing River (headwaters to upstream North Branch)								
	100.5	Yes	Unknown			5	4	2012	2014
05040002 010	Black Fork Mohican River (headwaters to downstream Whetstone Creek)								
	161.4	Yes	Indeterminate			5	4	2007	2009
05030201 090	Little Muskingum River (headwaters to upstream Clear Fork)								
	148.9	Yes	Indeterminate			5	4	2010	2012
05030106 110	Ohio River tributaries (downstream McMahon Creek to downstream Fish Creek [WV])								
	229.8	Yes	Indeterminate			5	4	2010	2012
05030101 090	Little Beaver Creek (downstream Middle and West Forks to mouth)								
	140.1	Yes	Indeterminate		Yes	5	4	2008	2004
04120101 010	Conneaut Creek; Lake Erie tributaries (East of Ashtabula River to West of Conneaut Creek)								
	61.5	Yes	Unknown		Yes	5	4	2009	2011
04110004 020	Grand River (downstream Swine Creek to upstream Rock Creek)								
	131.9	Yes	Unknown			5	4	2009	2011
04110003 030	Chagrin River (downstream Aurora Branch to mouth)								
	145.1	Yes	Indeterminate		Yes	5	4	2004	2006

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04110003 020	Chagrin River (headwaters to downstream Aurora Branch)								
	119.5	Yes	Indeterminate		Yes	5	4	2004	2006
04100011 070	Sandusky River (downstream Tymochtee Creek to upstream Honey Creek); excluding Sandusky R.								
	121.8	Yes	Unknown			5	4	2009	2003
04100011 040	Sandusky River (downstream Broken Sword Creek to upstream Tymochtee Creek)								
	121.3	Yes	No		Yes	5	4	2009	2003
04100007 001	Auglaize River Mainstem (downstream Ottawa River to mouth)								
	2435.0	Yes	No		Yes	5	4	2010	2003
04100006 030	Tiffin River (downstream Mill Creek to downstream Leatherwood Creek)								
	79.9	Yes	Indeterminate		Yes	5	4	2006	2008
04100001 001	Maumee River Mainstem (Indiana border to Lake Erie)								
	6608.0	Yes	Indeterminate		Yes	5	4	2010	2012
05090202 130	East Fork Little Miami River (upstream Stonelick Creek to mouth)								
	119.2	Yes	Unknown		Yes	5	3	2012	2014
05090202 110	East Fork Little Miami River (upstream Solomon Run to upstream Cloverlick Creek)								
	116.7	Yes	Unknown		Yes	5	3	2012	2014
05090202 100	East Fork Little Miami River (headwaters to upstream Solomon Run)								
	140.8	Yes	Unknown		Yes	5	3	2012	2014
05090202 070	Todd Fork (headwaters to upstream East Fork Todd Fork)								
	147.0	Yes	Unknown			5	3	2007	2009
05090202 001	Little Miami River Mainstem (downstream Caesar Creek to mouth)								
	1757.0	Yes	Unknown		Yes	5	3	2007	2009
05090201 090	East Fork Whiteoak Creek; North Fork Whiteoak Creek								
	147.4	Yes	Unknown			5	3	2006	2008
05090201 070	Eagle Creek								
	151.7	Yes	Unknown			5	3	2011	2013
05090201 030	Ohio Brush Creek (headwaters to downstream Baker Fork)								
	130.0	Yes	Unknown			5	3	2011	2013
05090103 020	Pine Creek								
	184.2	Yes	Unknown			5	3	2009	2011

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05080002 070	Fourmile Creek (excluding Sevenmile Creek)								
	160.6	Yes	Unknown			5	3	2004	2006
05080002 040	Twin Creek (upstream Bantas Fork to mouth)								
	159.0	Yes	Unknown			5	3	2004	2006
05080002 010	Great Miami River (downstream Mad River to upstream Bear Creek); excluding GMR mainstem								
	143.7	Yes	Unknown			5	3	2009	2011
05080001 170	Buck Creek								
	140.6	Yes	Unknown			5	3	2003	2005
05080001 110	Greenville Creek (headwaters to downstream West Branch)								
	70.1	Yes	Indeterminate		Yes	5	3	2009	2002
05060003 060	Rocky Fork Paint Creek								
	144.0	Yes	Unknown			5	3	2006	2008
05060003 050	Paint Creek (downstream East Fork to upstream Rocky Fork); excluding Sugar Cr. and Rattlesnake Cr.								
	95.0	Yes	Indeterminate		Yes	5	3	2006	2008
05060002 010	Scioto River (downstream Big Darby Cr. to upstream Kinnikinnick Cr.); excluding Scioto R. mainstem								
	162.4	Yes	Unknown		Yes	5	3	2011	2013
05060001 220	Big Darby Creek (downstream Little Darby Creek to mouth)								
	124.0	Yes	No			5	3	2011	2003
05060001 210	Little Darby Creek								
	178.5	Yes	Unknown			5	3	2011	2003
05060001 200	Big Darby Creek (downstream Sugar Creek to upstream Little Darby Creek)								
	77.0	Yes	Unknown			5	3	2011	2003
05060001 110	Olentangy River (downstream Flat Run to downstream Delaware Run); excluding Whetstone Creek								
	183.0	Yes	Indeterminate			5	3	2003	2005
05060001 010	Scioto River (headwaters to downstream Taylor Creek)								
	159.7	Yes	Unknown		Yes	5	3	2004	2006
05040006 010	North Fork Licking River (headwaters to downstream Sycamore Creek)								
	111.4	Yes	Indeterminate			5	3	2007	2009
05040006 001	Licking River Mainstem (entire length)								
	779.0	Yes	Indeterminate			5	3	2007	2009

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05040004 030	Wakatomika Creek (downstream Brushy Fork to mouth)								
	116.1	Yes	Unknown			5	3	2003	2005
05040003 060	Killbuck Creek (upstream Apple Creek to downstream Salt Creek)								
	171.1	Yes	Unknown			5	3	2007	2009
05040003 040	Kokosing River (upstream Jelloway Creek to mouth)								
	106.3	Yes	Unknown			5	3	2012	2014
05040002 050	Jerome Fork Mohican River								
	161.5	Yes	Indeterminate			5	3	2007	2009
05040002 030	Clear Fork Mohican River (headwaters to downstream Cedar Fork)								
	112.1	Yes	Indeterminate			5	3	2012	2014
05030204 070	Sunday Creek								
	138.7	Yes	Unknown			5	3	2009	2003
05030201 110	East Fork Duck Creek								
	136.2	Yes	Indeterminate			5	3	2010	2002
05030103 010	Mahoning River (headwaters to downstream Beech Creek)								
	129.2	Yes	Unknown			5	3	2008	2010
04110003 040	Lake Erie tributaries (East of Grand River to West of Ashtabula River								
	114.9	Yes	Unknown			5	3	2009	2011
04110002 020	Cuyahoga River (downstream Black Brook to downstream Breakneck Creek)								
	139.9	Yes	Indeterminate			5	3	2005	2000
04100012 030	Huron River, East Branch Huron River, Lake Erie tributaries (East of Sawmill Cr. to west of Huron R)								
	150.6	Yes	Indeterminate		Yes	5	3	2012	2004
04100012 010	West Branch Huron River (headwaters to upstream Slate Run)								
	132.1	Yes	Unknown			5	3	2012	2004
04100011 140	Lake Erie tributaries (West of Mills Creek to East of Sawmill Creek)								
	104.3	Yes	Unknown			5	3	2009	2011
04100011 090	Sandusky River (downstream Honey Creek to upstream Wolf Creek); excluding Sandusky R. mainstem								
	116.6	Yes	Unknown			5	3	2009	2011
04100011 080	Honey Creek								
	179.7	Yes	Unknown			5	3	2009	2003

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100011 030	Broken Sword Creek								
	94.5	Yes	Unknown			5	3	2009	2003
04100010 060	Portage River (downstream North Branch to downstream Sugar Creek)								
	87.1	Yes	Unknown			5	3	2008	2010
04100008 001	Blanchard River Mainstem (downstream Dukes Run to mouth)								
	771.0	Yes	Indeterminate			5	3	2005	2007
04100007 030	Ottawa River (headwaters to upstream Little Ottawa River)								
	134.3	Yes	Indeterminate			5	3	2005	2007
04100006 060	Tiffin River (downstream Lick Creek to mouth); excluding Tiffin River mainstem								
	100.4	Yes	Indeterminate			5	3	2006	2008
04100006 020	Bean Creek (downstream Lime Creek (Michigan) to downstream Mill Creek)								
	105.3	Yes	Indeterminate			5	3	2006	2008
04100006 001	Tiffin River Mainstem (downstream Brush Creek to mouth)								
	777.0	Yes	Unknown		Yes	5	3	2006	2008
04100003 060	St. Joseph River (downstream Bear Creek to downstream Sol Shank Ditch [IN]; excluding Fish Creek)								
	58.4	Yes	Unknown		Yes	5	3	2011	2013
04100003 030	St. Joseph River (East/West Branches to downstream Bear Creek)								
	123.5	Yes	Unknown		Yes	5	3	2011	2013
05120101 040	Wabash River (downstream Beaver Creek to upstream Loblolly Creek [IN])								
	12.6	Yes	Indeterminate			5	2	2010	2003
05090203 010	Mill Creek								
	164.6	Yes	Unknown		Yes	5	2	2012	2002
05090202 140	Little Miami River (downstream O'Bannon Creek to mouth); excluding East Fork LMR and LMR mainstem								
	112.4	Yes	Unknown			5	2	2007	2009
05090202 120	East Fork Little Miami River (upstream Cloverlick Creek to upstream Stonelick Creek)								
	123.1	Yes	Unknown		Yes	5	2	2012	2014
05090201 100	Whiteoak Creek (North Fork/East Fork to mouth)								
	87.9	Yes	Unknown			5	2	2006	2008
05090201 080	Ohio River tributaries (downstream Eagle Creek to upstream Whiteoak Creek)								
	93.6	Yes	Unknown			5	2	2011	2013

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05090201 050	Ohio Brush Creek (downstream Baker Fork to mouth);excluding West Fork)								
	170.7	Yes	Unknown			5	2	2011	2013
05090201 040	West Fork Ohio Brush Creek								
	134.1	Yes	Unknown			5	2	2011	2013
05090101 040	Raccoon Creek (downstream Elk Fork to upstream Little Raccoon Creek)								
	95.0	Yes	Unknown			5	2	2009	2002
05080001 180	Mad River (downstream Chapman Creek to upstream Mud Creek); excluding Buck Cr. and Mad R.								
	128.2	Yes	Indeterminate		Yes	5	2	2003	2005
05080001 160	Mad River (downstream Kings Creek to downstream Chapman Creek)								
	153.5	Yes	Unknown			5	2	2003	2005
05080001 080	Great Miami River (upstream Spring Creek to upstream Honey Creek); excluding GMR mainstem								
	139.5	Yes	Unknown			5	2	2008	2010
05080001 010	Great Miami River (headwaters to upstream Cherokee Mans Run)								
	100.0	Yes	No			5	2	2008	2010
05060002 160	Scioto River (downstream Sunfish Creek to mouth); excluding Scioto Brush Cr. and Scioto R. mainstem								
	159.3	Yes	Unknown			5	2	2011	2013
05060002 020	Deer Creek (headwaters to upstream Sugar Run)								
	146.7	Yes	Unknown			5	2	2011	2013
05040006 060	Licking River (downstream Rocky Fork to mouth); excluding Licking R. mainstem								
	127.9	Yes	Unknown			5	2	2007	2009
05040005 040	Salt Fork								
	159.3	Yes	Unknown			5	2	2008	2010
05040005 001	Wills Creek Mainstem (downstream Leatherwood Creek to mouth)								
	853.0	Yes	Indeterminate			5	2	2008	2010
05040004 020	Wakatomika Creek (headwaters to downstream Brushy Fork)								
	118.1	Yes	Unknown			5	2	2003	2005
05040001 060	Sandy Creek (downstream Still Fork to mouth); excluding Nimishillen Creek								
	181.1	Yes	Indeterminate		Yes	5	2	2012	2014
05040001 030	Tuscarawas River (downstream Wolf Creek to downstream Sippo Creek); excluding Chippewa Creek								
	169.5	Yes	Unknown		Yes	5	2	2003	2005

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05040001 020	Chippewa Creek								
	187.6	Yes	Indeterminate			5	2	2003	2005
05040001 010	Tuscarawas River (headwaters to downstream Wolf Creek)								
	151.0	Yes	Indeterminate		Yes	5	2	2003	2005
05040001 001	Tuscarawas River Mainstem (downstream Sippo Creek to mouth)								
	2596.0	Yes	Indeterminate		Yes	5	2	2003	2005
05030204 040	Clear Creek								
	91.8	Yes	Unknown			5	2	2004	2006
05030201 120	Duck Creek; West Fork Duck Creek								
	149.6	Yes	Indeterminate			5	2	2010	2002
05030201 010	Ohio River tributaries (downstream Fish Creek [WV] to downstream Sunfish Creek)								
	123.8	Yes	No			5	2	2010	2012
05030103 030	Mahoning River (downstream Berlin Dam to downstream West Branch)								
	167.1	Yes	No		Yes	5	2	2008	2010
05030101 180	Yellow Creek (headwaters to upstream Town Fork)								
	118.7	Yes	Unknown			5	2	2005	2007
04100012 040	Lake Erie tributaries (East of Huron River to West of Vermilion River)								
	83.2	Yes	Unknown			5	2	2011	2004
04100012 020	West Branch Huron River (upstream Slate Run to mouth)								
	129.8	Yes	Unknown			5	2	2012	2004
04100011 020	Sandusky River (headwaters to upstream Broken Sword Creek)								
	137.3	Yes	Indeterminate		Yes	5	2	2009	2003
04100010 070	Portage River (downstream Sugar Creek to mouth); Lake Erie tributaries west of Marblehead								
	111.3	Yes	Unknown		Yes	5	2	2008	2010
04100010 040	Middle Branch Portage River (downstream Rocky Ford Creek to downstream South Branch)								
	166.7	Yes	Unknown			5	2	2008	2010
04100010 030	Middle Branch Portage River (headwaters to downstream Rocky Ford Creek)								
	168.6	Yes	Unknown			5	2	2008	2010
04100007 120	Auglaize River (Flatrock Creek to mouth); excluding Powell Creek and Auglaize R. mainstem								
	178.7	Yes	Unknown			5	2	2010	2012

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100004 020	St. Mary's River (downstream Sixmile Creek to downstream Twelvemile Creek)								
	117.0	Yes	Unknown		Yes	5	2	2010	2012
04100004 010	St. Mary's River (headwaters to downstream Sixmile Creek)								
	134.3	Yes	Indeterminate		Yes	5	2	2010	2012
04100003 050	Fish Creek								
	16.8	Yes	Unknown			5	2	2011	2013
05120101 030	Beaver Creek (downstream Grand Lake St. Marys Dam to mouth)								
	58.6	Yes	Indeterminate			5	1	2010	2012
05090203 020	Ohio River tributaries (downstream Little Miami R. to upstream Great Miami R.); excluding Mill Creek								
	48.6	Yes	Unknown			5	1	2011	2013
05090101 060	Raccoon Creek (downstream Little Raccoon Creek to mouth); excluding Raccoon Creek mainstem								
	140.8	Yes	Unknown			5	1	2009	2011
05090101 050	Little Raccoon Creek								
	154.6	Yes	Unknown			5	1	2009	2011
05090101 020	Raccoon Creek (headwaters to upstream Hewett Fork)								
	135.5	Yes	Unknown			5	1	2009	2002
05080001 150	Mad River (headwaters to downstream Kings Creek)								
	134.7	Yes	Unknown			5	1	2003	2005
05080001 130	Stillwater River (downstream Greenville Cr. to upstream Ludlow Cr.); excluding Stillwater R mainstem								
	92.8	Yes	Indeterminate			5	1	2009	2002
05080001 060	Loramie Creek (downstream Mile Creek to mouth)								
	117.6	Yes	Indeterminate			5	1	2008	2010
05080001 050	Loramie Creek (headwaters to downstream Mile Creek)								
	147.4	Yes	No			5	1	2008	2010
05060003 030	Rattlesnake Creek (headwaters to upstream Lees Creek)								
	130.6	Yes	Unknown			5	1	2006	2008
05060003 020	Sugar Creek								
	81.5	Yes	Unknown			5	1	2006	2008
05060001 080	Scioto River (downstream Mill Creek to upstream Olentangy River); excluding Scioto R. mainstem								
	119.7	Yes	Indeterminate			5	1	2011	2013

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment: Aquatic Life	Beneficial Use Impairment: Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
05040005 020	Wills Creek (headwaters to upstream Leatherwood Creek); excluding Seneca Fork								
	163.4	Yes	Indeterminate			5	1	2008	2010
05040004 080	Meigs Creek								
	142.2	Yes	Unknown			5	1	2008	2010
05040004 050	Moxahala Creek (excluding Jonathan Creek)								
	108.4	Yes	Unknown			5	1	2008	2010
05040001 150	Stillwater Creek (downstream Boggs Fork to downstream Brushy Fork)								
	159.1	Yes	Unknown			5	1	2007	2009
05030204 060	Monday Creek								
	116.0	Yes	Unknown			5	1	2009	2003
05030202 100	Ohio River tributaries (downstream Leading Creek to upstream Kanawha River [WV])								
	88.8	Yes	Unknown			5	1	2009	2011
05030202 090	Leading Creek								
	150.1	Yes	Unknown			5	1	2009	2011
05030103 080	Mahoning River (upstream Mill Creek to mouth); excluding Mahoning R. mainstem								
	185.7	Yes	Unknown			5	1	2008	2010
05030103 070	Mahoning River (downstream Mosquito Creek to upstream Mill Creek); excluding Mahoning R.								
	130.5	Yes	Unknown			5	1	2008	2010
05030103 060	Mosquito Creek								
	138.1	Yes	Unknown			5	1	2008	2010
05030102 050	Yankee Creek; Little Yankee Creek								
	94.6	Yes	Unknown			5	1	2008	2010
05030102 030	Pymatuning Creek								
	149.5	Yes	Unknown			5	1	2008	2010
04110001 020	West Branch Black River								
	174.0	Yes	Indeterminate			5	1	2011	2004
04100011 130	Lake Erie tributaries (East of Green Creek to west of Mills Creek)								
	163.8	Yes	Unknown			5	1	2009	2011
04100011 060	Tymochtee Creek (downstream Warpole Creek to mouth)								
	130.1	Yes	Unknown			5	1	2009	2003

Table 6. 303(d) List of Prioritized Impaired Waters (Category 5)

Assessment Unit	Size (sq mi)	Beneficial Use Impairment Aquatic Life	Beneficial Use Impairment Recreation	Contact Advisory	Consumption Advisory	AU Category	Priority Points	Next Field Monitoring	Projected TMDL
04100011 050	Tymochtee Creek (headwaters to downstream Warpole Creek)								
	171.6	Yes	Indeterminate			5	1	2009	2003
04100010 020	Toussaint Creek								
	143.1	Yes	Unknown			5	1	2003	2005
04100010 010	Lake Erie tributaries (East of Maumee River to west of Toussaint River								
	204.7	Yes	Unknown			5	1	2008	2010
04100009 090	Maumee River (downstream N. Granger Island to mouth); excluding Maumee R. mainstem								
	76.6	Yes	Unknown			5	1	2011	2013
04100009 080	Swan Creek (upstream Blue Creek to mouth)								
	108.3	Yes	Unknown			5	1	2011	2013
04100009 040	Bad Creek								
	64.7	Yes	Indeterminate			5	1	2011	2013
04100008 050	Riley Creek								
	85.6	Yes	Unknown			5	1	2005	2007
04100008 030	Blanchard River (upstream Eagle Creek to upstream Ottawa Creek)								
	115.0	Yes	Unknown			5	1	2005	2007
04100007 110	Powell Creek								
	97.6	Yes	Indeterminate			5	1	2010	2012
04100007 050	Ottawa River (upstream Sugar Creek to mouth)								
	124.7	Yes	Indeterminate			5	1	2005	2007

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2003	2005	5	1	**04100010 020**	Toussaint Creek
2003	2005	5	2	**05040001 001**	Tuscarawas River Mainstem (downstream Sippo Creek to mouth)
2003	2005	5	2	**05040001 010**	Tuscarawas River (headwaters to downstream Wolf Creek)
2003	2005	5	2	**05040001 020**	Chippewa Creek
2003	2005	5	2	**05040001 030**	Tuscarawas River (downstream Wolf Creek to downstream Sippo Creek); excluding Chippewa Creek
2003	2005	5	9	**05040001 050**	Nimishillen Creek
2003		3		**05040001 090**	Tuscarawas River (downstream Sippo Creek to upstream Sugar Creek); excluding Tuscarawas R. mainstem
2003		3		**05040001 130**	Tuscarawas River (downstream Sugar Cr. to upstream Stillwater Cr.); excluding Tuscarawas R. mainstem
2003		3		**05040001 180**	Tuscarawas River (downstream Stillwater Cr. to upstream Evans Cr.); excluding Tuscarawas R. mainstem
2003		3		**05040001 190**	Tuscarawas River (upstream Evans Creek to mouth); excluding Tuscarawas R. mainstem
2003	2005	5	2	**05040004 020**	Wakatomika Creek (headwaters to downstream Brushy Fork)
2003	2005	5	3	**05040004 030**	Wakatomika Creek (downstream Brushy Fork to mouth)
2003	2005	5	4	**05060001 090**	Olentangy River (headwaters to downstream Flat Run)
2003	2005	5	4	**05060001 100**	Whetstone Creek
2003	2005	5	3	**05060001 110**	Olentangy River (downstream Flat Run to downstream Delaware Run); excluding Whetstone Creek
2003	2005	5	8	**05060001 120**	Olentangy River (downstream Delaware Run to mouth)
2003	2005	5	5	**05080001 003**	Mad River Mainstem (downstream Donnels Creek to mouth)
2003	2005	5	1	**05080001 150**	Mad River (headwaters to downstream Kings Creek)
2003	2005	5	2	**05080001 160**	Mad River (downstream Kings Creek to downstream Chapman Creek)
2003	2005	5	3	**05080001 170**	Buck Creek
2003	2005	5	2	**05080001 180**	Mad River (downstream Chapman Creek to upstream Mud Creek); excluding Buck Cr. and Mad R. mainstem
2003		3		**05080001 190**	Mad River (upstream Mud Creek to mouth); excluding Mad R. mainstem
2004	2006	5	4	**04110003 020**	Chagrin River (headwaters to downstream Aurora Branch)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2004	2006	5	4	**04110003 030**	Chagrin River (downstream Aurora Branch to mouth)
2004		4		**04110004 001**	Grand River Mainstem (downstream Mill Creek to mouth)
2004		3		**04110004 050**	Mill Creek
2004	2006	5	11	**04110004 060**	Grand River (downstream Mill Creek to mouth); excluding Grand R. mainstem
2004		3		**05030204 001**	Hocking River Mainstem (downstream Scott Creek to mouth)
2004	2006	5	12	**05030204 010**	Hocking River (headwaters to Enterprise); excluding Rush Creek and Clear Creek
2004	2006	3		**05030204 020**	Rush Creek (headwaters to upstream Little Rush Creek)
2004	2006	3		**05030204 030**	Rush Creek (upstream Little Rush Creek to mouth)
2004	2006	5	2	**05030204 040**	Clear Creek
2004	2006	5	5	**05030204 050**	Hocking River (Enterprise to upstream Monday Creek); excluding Hocking R. mainstem dst. Duck Creek
2004		3		**05030204 080**	Hocking River (downstream Monday Creek to Athens/RM 33.1); excluding Hocking R. mainstem
2004		2		**05030204 090**	Federal Creek
2004		3		**05030204 100**	Hocking River (downstream Athens/RM 33.1 to mouth); excluding Federal Creek and Hocking R. mainstem
2004	2006	5	3	**05060001 010**	Scioto River (headwaters to downstream Taylor Creek)
2004		3		**05060001 020**	Rush Creek
2004	2006	5	4	**05060001 030**	Scioto River (downstream Taylor Creek to upstream Little Scioto River); excluding Rush Creek
2004	2006	5	4	**05080002 030**	Twin Creek (headwaters to upstream Bantas Fork)
2004	2006	5	3	**05080002 040**	Twin Creek (upstream Bantas Fork to mouth)
2004	2006	5	3	**05080002 070**	Fourmile Creek (excluding Sevenmile Creek)
2005	2007	5	3	**04100007 030**	Ottawa River (headwaters to upstream Little Ottawa River)
2005	2007	5	8	**04100007 040**	Ottawa River (upstream Little Ottawa River to upstream Sugar Creek)
2005	2007	5	1	**04100007 050**	Ottawa River (upstream Sugar Creek to mouth)
2005	2007	5	3	**04100008 001**	Blanchard River Mainstem (downstream Dukes Run to mouth)
2005		3		**04100008 010**	Blanchard River (headwaters to downstream Potato Run)
2005		3		**04100008 020**	Blanchard River (downstream Potato Run to upstream Eagle Creek)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2005	2007	5	1	**04100008 030**	Blanchard River (upstream Eagle Creek to upstream Ottawa Creek)
2005		3		**04100008 040**	Blanchard River (upstream Ottawa Creek to upstream Riley Creek); excluding Blanchard R.
2005	2007	5	1	**04100008 050**	Riley Creek
2005		3		**04100008 060**	Blanchard River (downstream Riley Creek to mouth); excluding Blanchard R. mainstem
2005	2000	5	3	**04110002 020**	Cuyahoga River (downstream Black Brook to downstream Breakneck Creek)
2005	2000	5	9	**04110002 030**	Cuyahoga River (downstream Breakneck Creek to downstream Little Cuyahoga River)
2005		3		**05030101 100**	Ohio River tributaries (downstream Little Beaver Creek to upstream Yellow Creek)
2005	2007	5	2	**05030101 180**	Yellow Creek (headwaters to upstream Town Fork)
2005		3		**05030101 190**	Yellow Creek (upstream Town Fork to mouth)
2005		3		**05030101 210**	Ohio River tributaries (downstream Yellow Creek to upstream Cross Creek)
2005		3		**05030101 340**	Cross Creek
2005		3		**05030106 010**	Ohio River tributaries (downstream Cross Creek to downstream Short Creek)
2005	2007	5	4	**05060001 170**	Walnut Creek (headwaters to downstream Sycamore Creek)
2005	2007	5	11	**05060001 180**	Walnut Creek (downstream Sycamore Creek to mouth)
2006	2008	5	3	**04100006 001**	Tiffin River Mainstem (downstream Brush Creek to mouth)
2006	2008	5	3	**04100006 020**	Bean Creek (downstream Lime Creek (Michigan) to downstream Mill Creek)
2006	2008	5	4	**04100006 030**	Tiffin River (downstream Mill Creek to downstream Leatherwood Creek)
2006	2008	5	8	**04100006 040**	Tiffin River (downstream Leatherwood Creek to upstream Lick Creek); excluding Tiffin River mainstem
2006	2003	5	9	**04100006 050**	Lick Creek
2006	2008	5	3	**04100006 060**	Tiffin River (downstream Lick Creek to mouth); excluding Tiffin River mainstem
2006		3		**04110001 010**	Lake Erie tributaries (East of Vermilion River to West of Black River)
2006	2001	5	11	**04110001 060**	West Branch Rocky River
2006	2001	5	11	**04110001 070**	Rocky River; East Branch Rocky R.; Lake Erie tributaries (West of Porter Cr. to West of Cuyahoga R.)
2006		2		**05060003 001**	Paint Creek Mainstem (downstream Rocky Fork to mouth)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2006	2008	5	5	**05060003 010**	Paint Creek (headwaters to downstream East Fork)
2006	2008	5	1	**05060003 020**	Sugar Creek
2006	2008	5	1	**05060003 030**	Rattlesnake Creek (headwaters to upstream Lees Creek)
2006		2		**05060003 040**	Rattlesnake Creek (upstream Lees Creek to mouth)
2006	2008	5	3	**05060003 050**	Paint Creek (downstream East Fork to upstream Rocky Fork); excluding Sugar Cr. and Rattlesnake Cr.
2006	2008	5	3	**05060003 060**	Rocky Fork Paint Creek
2006		3		**05060003 070**	Paint Creek (downstream Rocky Fork to downstream Lower Twin Creek); excluding Paint Creek mainstem
2006		3		**05060003 080**	North Fork Paint Creek (headwaters to downstream Compton Creek)
2006		3		**05060003 090**	North Fork Paint Creek (downstream Compton Creek to mouth)
2006		3		**05060003 100**	Paint Creek (downstream Lower Twin Creek to mouth); excluding North Fork and Paint Creek mainstem
2006	2008	5	3	**05090201 090**	East Fork Whiteoak Creek; North Fork Whiteoak Creek
2006	2008	5	2	**05090201 100**	Whiteoak Creek (North Fork/East Fork to mouth)
2007		3		**05040001 140**	Stillwater Creek (headwaters to downstream Boggs Fork)
2007	2009	5	1	**05040001 150**	Stillwater Creek (downstream Boggs Fork to downstream Brushy Fork)
2007		3		**05040001 160**	Little Stillwater Creek
2007		3		**05040001 170**	Stillwater Creek (downstream Brushy Fork to mouth); excluding Little Stillwater Creek
2007		2		**05040002 001**	Mohican River Mainstem (entire length)
2007	2009	5	4	**05040002 010**	Black Fork Mohican River (headwaters to downstream Whetstone Creek)
2007	2009	5	8	**05040002 020**	Black Fork Mohican River (downstream Whetstone Creek to downstream Rocky Fork)
2007	2009	5	3	**05040002 050**	Jerome Fork Mohican River
2007		3		**05040002 080**	Mohican River; Black Fork Mohican R. (downstream Rocky Fork to mouth); excluding Mohican R. mainstem
2007		2		**05040003 001**	Walhonding River Mainstem (entire length)
2007	2009	5	4	**05040003 050**	Killbuck Creek (headwaters to upstream Apple Creek)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Unit

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2007	2009	5	3	**05040003 060**	Killbuck Creek (upstream Apple Creek to downstream Salt Creek)
2007		2		**05040003 070**	Killbuck Creek (downstream Salt Creek to downstream Black Creek)
2007	2009	5	4	**05040003 080**	Killbuck Creek (downstream Black Creek to mouth)
2007		2		**05040003 090**	Walhonding River; excluding Killbuck Creek and Walhonding R. mainstem
2007	2009	5	3	**05040006 001**	Licking River Mainstem (entire length)
2007	2009	5	3	**05040006 010**	North Fork Licking River (headwaters to downstream Sycamore Creek)
2007		3		**05040006 020**	North Fork Licking River (downstream Sycamore Creek to mouth)
2007	2009	5	4	**05040006 030**	Raccoon Creek
2007		4		**05040006 040**	South Fork Licking River (excluding Raccoon Creek)
2007		2		**05040006 050**	Licking River (South Fork/North Fork to downstream Rocky Fork); excluding Licking R. mainstem
2007	2009	5	2	**05040006 060**	Licking River (downstream Rocky Fork to mouth); excluding Licking R. mainstem
2007	2009	5	3	**05090202 001**	Little Miami River Mainstem (downstream Caesar Creek to mouth)
2007		3		**05090202 060**	Little Miami River (downstream Caesar Creek to downstream Turtle Creek); excluding LMR mainstem
2007	2009	5	3	**05090202 070**	Todd Fork (headwaters to upstream East Fork Todd Fork)
2007		4		**05090202 080**	Todd Fork (downstream East Fork Todd Fork to mouth)
2007	2009	5	4	**05090202 090**	Little Miami River (downstream Turtle Creek to downstream O'Bannon Creek); excluding LMR mainstem
2007	2009	5	2	**05090202 140**	Little Miami River (downstream O'Bannon Creek to mouth); excluding East Fork LMR and LMR mainstem
2008	2010	5	1	**04100010 010**	Lake Erie tributaries (East of Maumee River to west of Toussaint River
2008	2010	5	2	**04100010 030**	Middle Branch Portage River (headwaters to downstream Rocky Ford Creek)
2008	2010	5	2	**04100010 040**	Middle Branch Portage River (downstream Rocky Ford Creek to downstream South Branch)
2008		3		**04100010 050**	Portage River (downstream South/Middle Branches to downstream North Branch)
2008	2010	5	3	**04100010 060**	Portage River (downstream North Branch to downstream Sugar Creek)
2008	2010	5	2	**04100010 070**	Portage River (downstream Sugar Creek to mouth); Lake Erie tributaries west of Marblehead

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2008	2004	5	12	**05030101 070**	Middle Fork Little Beaver Creek
2008	2004	5	5	**05030101 080**	West Fork Little Beaver Creek
2008	2004	5	4	**05030101 090**	Little Beaver Creek (downstream Middle and West Forks to mouth)
2008		3		**05030102 010**	Tributaries to Pymatuning Reservoir (within Ohio)
2008	2010	5	1	**05030102 030**	Pymatuning Creek
2008	2010	5	1	**05030102 050**	Yankee Creek; Little Yankee Creek
2008	2003	5	9	**05030103 001**	Mahoning River Mainstem (downstream Eagle Creek to Pennsylvania Border)
2008	2010	5	3	**05030103 010**	Mahoning River (headwaters to downstream Beech Creek)
2008	2010	3		**05030103 020**	Mahoning River (downstream Beech Creek to downstream Berlin Dam)
2008	2010	5	2	**05030103 030**	Mahoning River (downstream Berlin Dam to downstream West Branch)
2008	2010	4	3	**05030103 040**	Mahoning River (downstream West Branch to upstream Duck Creek)
2008	2010	3		**05030103 050**	Mahoning River (upstream Duck Creek to upstream Mosquito Creek); excluding Mahoning R. mainstem
2008	2010	5	1	**05030103 060**	Mosquito Creek
2008	2010	5	1	**05030103 070**	Mahoning River (downstream Mosquito Creek to upstream Mill Creek); excluding Mahoning R.
2008	2010	5	1	**05030103 080**	Mahoning River (upstream Mill Creek to mouth); excluding Mahoning R. mainstem
2008		3		**05030202 010**	Ohio River tributaries (downstream Muskingum R. to upstream Hocking River); Little Hocking River
2008	2010	5	5	**05040004 001**	Muskingum River Mainstem (entire length)
2008		3		**05040004 010**	Muskingum River(downstream Tuscarawas R./Walhonding R. to upstream Licking River)
2008		3		**05040004 040**	Jonathan Creek
2008	2010	5	1	**05040004 050**	Moxahala Creek (excluding Jonathan Creek)
2008		3		**05040004 060**	Salt Creek
2008		3		**05040004 070**	Muskingum River (downstream Licking R. to upstream Meigs Cr.); excluding Muskingum R. mainstem
2008	2010	5	1	**05040004 080**	Meigs Creek
2008		2		**05040004 090**	Wolf Creek; West Branch Wolf Creek;

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2008		3		**05040004 100**	South Branch Wolf Creek
2008		3		**05040004 110**	Muskingum River (downstream Meigs Creek to upstream Big Run); excluding Muskingum R. mainstem
2008		3		**05040004 120**	Muskingum River (upstream Big Run to mouth); excluding Muskingum R. mainstem
2008	2010	5	2	**05040005 001**	Wills Creek Mainstem (downstream Leatherwood Creek to mouth)
2008		3		**05040005 010**	Seneca Fork
2008	2010	5	1	**05040005 020**	Wills Creek (headwaters to upstream Leatherwood Creek); excluding Seneca Fork
2008		3		**05040005 030**	Leatherwood Creek
2008	2010	5	2	**05040005 040**	Salt Fork
2008		3		**05040005 050**	Wills Creek (downstream Leatherwood Cr. to downstream Birds Run); excluding Wills Creek mainstem
2008		3		**05040005 060**	Wills Creek (downstream Birds Run to mouth); excluding Wills Creek mainstem
2008	2010	5	5	**05080001 001**	Great Miami River Mainstem (downstream Tawawa Creek to mouth)
2008	2010	5	2	**05080001 010**	Great Miami River (headwaters to upstream Cherokee Mans Run)
2008	2010	5	4	**05080001 020**	Muchinippi Creek
2008	2010	5	5	**05080001 030**	Great Miami River (upst. Cherokee Mans Run to downstream Bokengehalas Cr.); excluding Muchinippi Cr.
2008	2010	5	4	**05080001 040**	Great Miami River (downstream Bokengehalas Creek to downstream Plum Creek)
2008	2010	5	1	**05080001 050**	Loramie Creek (headwaters to downstream Mile Creek)
2008	2010	5	1	**05080001 060**	Loramie Creek (downstream Mile Creek to mouth)
2008		3		**05080001 070**	Great Miami River (downstream Plum Creek to upstream Spring Creek); excluding GMR mainstem
2008	2010	5	2	**05080001 080**	Great Miami River (upstream Spring Creek to upstream Honey Creek); excluding GMR mainstem
2008		3		**05080001 200**	Great Miami River (upstream Honey Creek to upstream Mad River); excluding GMR mainstem
2009	2003	5	5	**04100011 001**	Sandusky River Mainstem (downstream Tymochtee Creek to mouth)
2009		3		**04100011 010**	Muddy Creek; Lake Erie tributaries (Muddy Creek to Marblehead)
2009	2003	5	2	**04100011 020**	Sandusky River (headwaters to upstream Broken Sword Creek)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2009	2003	5	3	**04100011 030**	Broken Sword Creek
2009	2003	5	4	**04100011 040**	Sandusky River (downstream Broken Sword Creek to upstream Tymochtee Creek)
2009	2003	5	1	**04100011 050**	Tymochtee Creek (headwaters to downstream Warpole Creek)
2009	2003	5	1	**04100011 060**	Tymochtee Creek (downstream Warpole Creek to mouth)
2009	2003	5	4	**04100011 070**	Sandusky River (downstream Tymochtee Creek to upstream Honey Creek); excluding Sandusky R. mainstem
2009	2003	5	3	**04100011 080**	Honey Creek
2009	2011	5	3	**04100011 090**	Sandusky River (downstream Honey Creek to upstream Wolf Creek); excluding Sandusky R. mainstem
2009	2011	5	9	**04100011 100**	Wolf Creek
2009		3		**04100011 110**	Green Creek
2009		3		**04100011 120**	Sandusky River (downstream Wolf Creek to mouth); excluding Green Creek and Sandusky R. mainstem
2009	2011	5	1	**04100011 130**	Lake Erie tributaries (East of Green Creek to west of Mills Creek)
2009	2011	5	3	**04100011 140**	Lake Erie tributaries (West of Mills Creek to East of Sawmill Creek)
2009	2011	5	3	**04110003 040**	Lake Erie tributaries (East of Grand River to West of Ashtabula River
2009	2011	5	11	**04110003 050**	Ashtabula River
2009		3		**04110004 010**	Grand River (headwaters to downstream Swine Creek)
2009	2011	5	4	**04110004 020**	Grand River (downstream Swine Creek to upstream Rock Creek)
2009		3		**04110004 030**	Rock Creek
2009		3		**04110004 040**	Grand River (downstream Rock Creek to upstream Mill Creek)
2009	2011	5	4	**04120101 010**	Conneaut Creek; Lake Erie tributaries (East of Ashtabula River to West of Conneaut Creek)
2009		3		**04120101 060**	Lake Erie tributaries (East of Conneaut Creek)
2009		3		**04120200 010**	Lake Erie Islands
2009		3		**05030202 020**	Ohio River tributaries (downstream Hocking River to upstream Shade River)
2009		3		**05030202 030**	Middle Branch and West Branch Shade River
2009		3		**05030202 040**	Shade River (Middle Branch and West Branch to mouth)
2009		3		**05030202 050**	Ohio River tributaries (downstream Shade River to upstream Leading Creek)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2009	2011	5	1	**05030202 090**	Leading Creek
2009	2011	5	1	**05030202 100**	Ohio River tributaries (downstream Leading Creek to upstream Kanawha River [WV])
2009	2003	5	1	**05030204 060**	Monday Creek
2009	2003	5	3	**05030204 070**	Sunday Creek
2009	2011	5	9	**05060001 040**	Little Scioto River
2009	2002	5	9	**05060001 060**	Scioto River (upstream Bokes Creek to upstream Mill Creek); excluding Scioto R. mainstem
2009	2002	5	10	**05060001 070**	Mill Creek
2009		4		**05080001 002**	Stillwater River Mainstem (downstream Greenville Creek to mouth)
2009	2002	5	4	**05080001 090**	Stillwater River (headwaters to upstream Swamp Creek)
2009	2002	5	12	**05080001 100**	Stillwater River (upstream Swamp Creek to upstream Greenville Creek)
2009	2002	5	3	**05080001 110**	Greenville Creek (headwaters to downstream West Branch)
2009	2002	5	5	**05080001 120**	Greenville Creek (downstream West Branch to mouth)
2009	2002	5	1	**05080001 130**	Stillwater River (downstream Greenville Cr. to upstream Ludlow Cr.); excluding Stillwater R mainstem
2009	2002	5	9	**05080001 140**	Stillwater River (upstream Ludlow Creek to mouth); excluding Stillwater R. mainstem
2009	2011	5	3	**05080002 010**	Great Miami River (downstream Mad River to upstream Bear Creek); excluding GMR mainstem
2009	2011	5	4	**05080002 020**	Great Miami River (upstream Bear Creek to upstream Twin Creek); excluding GMR mainstem
2009	2011	5	4	**05080002 050**	Great Miami River (downstream Twin Creek to upstream Fourmile Creek); excluding GMR mainstem
2009		2		**05090101 001**	Raccoon Creek Mainstem (downstream Little Raccoon Creek to mouth)
2009		3		**05090101 010**	Ohio River tributaries (downstream Campaign Creek to upstream Raccoon Creek)
2009	2002	5	1	**05090101 020**	Raccoon Creek (headwaters to upstream Hewett Fork)
2009	2002	5	4	**05090101 030**	Raccoon Creek (upstream Hewett Fork to downstream Elk Fork)
2009	2002	5	2	**05090101 040**	Raccoon Creek (downstream Elk Fork to upstream Little Raccoon Creek)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2009	2011	5	1	**05090101 050**	Little Raccoon Creek
2009	2011	5	1	**05090101 060**	Raccoon Creek (downstream Little Raccoon Creek to mouth); excluding Raccoon Creek mainstem
2009		3		**05090101 070**	Ohio River tributaries (downstream Raccoon Creek to upstream Symmes Creek)
2009		3		**05090101 080**	Symmes Creek (headwaters to downstream Black Fork)
2009		3		**05090101 090**	Symmes Creek (downstream Black Fork to downstream Buffalo Creek)
2009		3		**05090101 100**	Symmes Creek (downstream Buffalo Creek to mouth); Ohio River tributaries (Symmes Cr. to Big Sandy R)
2009		3		**05090103 010**	Ohio River tributaries (downstream Big Sandy River [WV] to upstream Pine Creek)
2009	2011	5	3	**05090103 020**	Pine Creek
2009		3		**05090103 030**	Little Scioto River (headwaters to upstream Rocky Fork)
2009		3		**05090103 040**	Little Scioto River (upst. Rocky Fork to mouth); Ohio R. tribs. (dst Pine Cr. to dst 8-digit divide)
2010	2012	5	4	**04100001 001**	Maumee River Mainstem (Indiana border to Lake Erie)
2010	2012	5	2	**04100004 010**	St. Mary's River (headwaters to downstream Sixmile Creek)
2010	2012	5	2	**04100004 020**	St. Mary's River (downstream Sixmile Creek to downstream Twelvemile Creek)
2010		3		**04100004 030**	St. Mary's River (downstream Twelvemile Creek to upstream Twentyseven Mile Creek [IN])
2010		3		**04100004 040**	St. Mary's River (upstream Twentyseven Mile Creek [IN] to upstream Holthouse Ditch [IN])
2010	2012	5	10	**04100005 020**	Maumee River (downstream Hamm Ditch [IN] to upstream Tiffin River); excluding Maumee River mainstem
2010	2003	5	4	**04100007 001**	Auglaize River Mainstem (downstream Ottawa River to mouth)
2010	2003	5	11	**04100007 010**	Auglaize River (headwaters to downstream Pusheta Creek)
2010	2003	5	11	**04100007 020**	Auglaize River (downstream Pusheta Creek to upstream Jennings Creek); excluding Auglaize R. mainstem
2010	2003	5	9	**04100007 060**	Auglaize River (upstream Jennings Cr. to upstream L. Auglaize R.); excluding Auglaize R. mainstem
2010		3		**04100007 070**	Little Auglaize River (headwaters to upstream Dog Creek)
2010		3		**04100007 080**	Prairie Creek

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2010		3		**04100007 090**	Little Auglaize River (upstream Dog Creek to mouth; excluding Prairie Creek)
2010		3		**04100007 100**	Auglaize River (downstream L. Auglaize R. to upstream Flatrock Cr.); excluding Auglaize R. mainstem
2010	2012	5	1	**04100007 110**	Powell Creek
2010	2012	5	2	**04100007 120**	Auglaize River (Flatrock Creek to mouth); excluding Powell Creek and Auglaize R. mainstem
2010	2002	5	10	**04110002 001**	Cuyahoga River Mainstem (downstream Brandywine Creek to mouth including old river channel)
2010	2002	5	9	**04110002 010**	Cuyahoga River (headwaters to downstream Black Brook)
2010	2002	5	9	**04110002 040**	Cuyahoga River (downstream Little Cuyahoga River to downstream Brandywine Creek)
2010	2002	5	8	**04110002 050**	Cuyahoga River (downstream Brandywine Cr. to downstream Tinkers Cr.); excluding Cuyahoga R. mainstem
2010	2002	5	8	**04110002 060**	Cuyahoga River (downstream Tinkers Creek to mouth); excluding Cuyahoga R. mainstem
2010	2004	5	8	**04110003 010**	Lake Erie tributaries (East of Cuyahoga River to West of Grand River); excluding Chagrin River
2010		3		**05030106 040**	Ohio River tributaries (downstream Short Creek to downstream Wheeling Creek)
2010		3		**05030106 100**	Ohio River tributaries (downstream Wheeling Creek to downstream McMahon Creek)
2010	2012	5	4	**05030106 110**	Ohio River tributaries (downstream McMahon Creek to downstream Fish Creek [WV])
2010	2012	5	2	**05030201 010**	Ohio River tributaries (downstream Fish Creek [WV] to downstream Sunfish Creek)
2010		3		**05030201 020**	Ohio River tributaries (downstream Sunfish Creek to upstream Muskingum River)
2010	2012	5	4	**05030201 090**	Little Muskingum River (headwaters to upstream Clear Fork)
2010	2012	5	6	**05030201 100**	Little Muskingum River (upstream Clear Fork to mouth)
2010	2002	5	3	**05030201 110**	East Fork Duck Creek
2010	2002	5	2	**05030201 120**	Duck Creek; West Fork Duck Creek
2010	2003	5	10	**05060001 130**	Big Walnut Creek (headwaters to Hoover Dam)
2010	2003	5	10	**05060001 140**	Big Walnut Creek (downstream Hoover Dam to upstream Alum Creek); Blacklick Creek

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2010	2003	5	11	**05060001 150**	Alum Creek (headwaters to Alum Creek Dam)
2010	2003	5	11	**05060001 160**	Big Walnut Creek (Alum Creek to mouth); Alum Creek (downstream Alum Creek Dam to mouth)
2010	2004	5	4	**05080002 060**	Sevenmile Creek
2010		3		**05080002 080**	Indian Creek
2010		2		**05080003 001**	Whitewater River Mainstem (entire length)
2010		3		**05080003 070**	East Fork Whitewater River
2010		2		**05080003 080**	Whitewater River (downstream East Fork Whitewater R. [IN] to mouth); excluding Whitewater R mainstem
2010		3		**05090203 050**	Ohio River tributaries (downstream Great Miami River to upstream Wolper Creek [KY])
2010	2003	5	8	**05120101 010**	Wabash River (headwaters to upstream Beaver Creek)
2010	2012	5	8	**05120101 020**	Beaver Creek (Grand Lake St. Marys and tributaries)
2010	2012	5	1	**05120101 030**	Beaver Creek (downstream Grand Lake St. Marys Dam to mouth)
2010	2003	5	2	**05120101 040**	Wabash River (downstream Beaver Creek to upstream Loblolly Creek [IN])
2010	2012	5	4	**05120103 010**	Mississinewa River (headwaters to downstream Mud Creek [IN])
2011	2013	5	9	**04100001 020**	Tenmile Creek; Ottawa River
2011		3		**04100002 030**	Bear Creek (River Raisin basin)
2011		3		**04100003 010**	East Branch St. Joseph River
2011		2		**04100003 020**	West Branch St. Joseph River
2011	2013	5	3	**04100003 030**	St. Joseph River (East/West Branches to downstream Bear Creek)
2011	2013	5	2	**04100003 050**	Fish Creek
2011	2013	5	3	**04100003 060**	St. Joseph River (downstream Bear Creek to downstream Sol Shank Ditch [IN]; excluding Fish Creek)
2011		3		**04100009 010**	Maumee River (downstream Tiffin R. to upstream South Turkeyfoot Cr.); excluding Maumee R. mainstem
2011	2013	5	8	**04100009 020**	South Turkeyfoot Creek
2011	2013	5	10	**04100009 030**	Maumee R. (downstream S. Turkeyfoot Cr. to upstream Bad Cr.); excluding Maumee R.

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2011	2013	5	1	**04100009 040**	Bad Creek
2011		3		**04100009 050**	Maumee River (downstream Bad Creek to downstream Beaver Creek); excluding Maumee R. mainstem
2011		3		**04100009 060**	Maumee River (downstream Beaver Cr. to downstream N. Granger Island); excluding Maumee R. mainstem
2011		3		**04100009 070**	Swan Creek (headwaters to upstream Blue Creek)
2011	2013	5	1	**04100009 080**	Swan Creek (upstream Blue Creek to mouth)
2011	2013	5	1	**04100009 090**	Maumee River (downstream N. Granger Island to mouth); excluding Maumee R. mainstem
2011	2004	5	2	**04100012 040**	Lake Erie tributaries (East of Huron River to West of Vermilion River)
2011	2004	3		**04100012 050**	Vermilion River (headwaters to upstream East Branch)
2011	2004	3		**04100012 060**	Vermilion River (upstream East Branch to mouth)
2011	2004	5	1	**04110001 020**	West Branch Black River
2011		4		**04110001 030**	East Branch Black River (headwaters to downstream Coon Creek)
2011	2004	5	5	**04110001 040**	East Branch Black River (downstream Coon Creek to mouth)
2011	2004	5	9	**04110001 050**	Black River; Lake Erie tributaries East of Black River to West of Porter Creek)
2011	2013	5	11	**05060001 001**	Scioto River Mainstem (downstream Little Scioto River to mouth)
2011		3		**05060001 050**	Scioto River (downstream Little Scioto River to upstream Bokes Creek); excluding Scioto R. mainstem
2011	2013	5	1	**05060001 080**	Scioto River (downstream Mill Creek to upstream Olentangy River); excluding Scioto R. mainstem
2011	2003	5	4	**05060001 190**	Big Darby Creek (headwaters to downstream Sugar Creek)
2011	2003	5	3	**05060001 200**	Big Darby Creek (downstream Sugar Creek to upstream Little Darby Creek)
2011	2003	5	3	**05060001 210**	Little Darby Creek
2011	2003	5	3	**05060001 220**	Big Darby Creek (downstream Little Darby Creek to mouth)
2011		3		**05060001 230**	Scioto River (downstream Olentangy River to upstream Big Darby Creek); excluding Scioto R. mainstem
2011	2013	5	3	**05060002 010**	Scioto River (downstream Big Darby Cr. to upstream Kinnikinnick Cr.); excluding Scioto R. mainstem
2011	2013	5	2	**05060002 020**	Deer Creek (headwaters to upstream Sugar Run)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2011	2013	5	4	**05060002 030**	Deer Creek (upstream Sugar Run to upstream Dry Run)
2011	2013	5	4	**05060002 040**	Deer Creek (upstream Dry Run to mouth)
2011		3		**05060002 050**	Scioto River (upstream Kinnikinnick Creek to upstream Paint Creek); excluding Scioto R. mainstem
2011		3		**05060002 060**	Scioto River (downstream Paint Creek to upstream Salt Creek); excluding Scioto R. mainstem
2011	2013	5	5	**05060002 070**	Salt Creek (headwaters to upstream Queer Creek)
2011		3		**05060002 080**	Middle Fork Salt Creek
2011		3		**05060002 090**	Little Salt Creek (excluding Middle Fork)
2011	2013	5	4	**05060002 100**	Salt Creek (upstream Queer Creek to mouth); excluding Little Salt Creek and Middle Fork Salt Creek
2011		3		**05060002 110**	Scioto River (downstream Salt Creek to downstream Pee Pee Creek); excluding Scioto R. mainstem
2011	2013	5	4	**05060002 120**	Scioto River (downstream Pee Pee Creek to upstream Sunfish Creek); excluding Scioto R. mainstem
2011		3		**05060002 130**	Sunfish Creek
2011		3		**05060002 140**	South Fork Scioto Brush Creek
2011		3		**05060002 150**	Scioto Brush Creek (excluding South Fork)
2011	2013	5	2	**05060002 160**	Scioto River (downstream Sunfish Creek to mouth); excluding Scioto Brush Cr. and Scioto R. mainstem
2011	2013	5	4	**05080002 090**	Great Miami River (downstream Fourmile Creek to mouth); excluding Indian Creek and GMR mainstem
2011		2		**05090201 010**	Ohio River tributaries (downstream 8-digit divide to upstream Ohio Brush Creek)
2011	2013	5	3	**05090201 030**	Ohio Brush Creek (headwaters to downstream Baker Fork)
2011	2013	5	2	**05090201 040**	West Fork Ohio Brush Creek
2011	2013	5	2	**05090201 050**	Ohio Brush Creek (downstream Baker Fork to mouth);excluding West Fork)
2011	2013	5	4	**05090201 060**	Ohio River tributaries (downstream Ohio Brush Creek to upstream Eagle Creek)
2011	2013	5	3	**05090201 070**	Eagle Creek
2011	2013	5	2	**05090201 080**	Ohio River tributaries (downstream Eagle Creek to upstream Whiteoak Creek)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2011		3		**05090201 110**	Ohio River tributaries (downstream Whiteoak Creek to upstream Big Indian Run)
2011		2		**05090201 120**	Ohio River tributaries (upstream Big Indian Run to upstream Little Miami River)
2011	2013	5	1	**05090203 020**	Ohio River tributaries (downstream Little Miami R. to upstream Great Miami R.); excluding Mill Creek
2012	2004	5	3	**04100012 010**	West Branch Huron River (headwaters to upstream Slate Run)
2012	2004	5	2	**04100012 020**	West Branch Huron River (upstream Slate Run to mouth)
2012	2004	5	3	**04100012 030**	Huron River, East Branch Huron River, Lake Erie tributaries (East of Sawmill Cr. to west of Huron R)
2012		3		**05040001 040**	Sandy Creek (headwaters to downstream Still Fork)
2012	2014	5	2	**05040001 060**	Sandy Creek (downstream Still Fork to mouth); excluding Nimishillen Creek
2012		3		**05040001 070**	Conotton Creek (headwaters to downstream McGuire Creek)
2012		3		**05040001 080**	Conotton Creek (downstream McGuire Creek to mouth)
2012	2002	5	8	**05040001 100**	Sugar Creek (headwaters to upstream Middle Fork)
2012	2002	5	8	**05040001 110**	South Fork Sugar Creek
2012	2002	5	8	**05040001 120**	Sugar Creek (upstream Middle Fork to mouth); excluding South Fork
2012	2014	5	3	**05040002 030**	Clear Fork Mohican River (headwaters to downstream Cedar Fork)
2012		1		**05040002 040**	Clear Fork Mohican River (downstream Cedar Fork to mouth)
2012		3		**05040002 060**	Muddy Fork Mohican River
2012		3		**05040002 070**	Lake Fork Mohican River
2012	2014	5	4	**05040003 010**	Kokosing River (headwaters to upstream North Branch)
2012		2		**05040003 020**	North Branch Kokosing River
2012	2014	5	4	**05040003 030**	Kokosing River (downstream North Branch to upstream Jelloway Creek)
2012	2014	5	3	**05040003 040**	Kokosing River (upstream Jelloway Creek to mouth)
2012	2002	4		**05090202 010**	Little Miami River (headwaters to upstream Massies Creek)
2012	2002	4		**05090202 020**	Little Miami River (upstream Massies Creek to downstream Beaver Creek)
2012	2002	4		**05090202 030**	Little Miami River (downstream Beaver Creek to upstream Caesar Creek)
2012	2002	4		**05090202 040**	Anderson Fork Caesar Creek
2012	2002	4		**05090202 050**	Caesar Creek (excluding Anderson Fork)

Table 7. Monitoring and TMDL Schedule for Ohio's Watershed and Large River Assessment Units

Field Monitoring	Projected TMDL	AU Category	Priority	Assessment Unit	
2012	2014	5	3	**05090202 100**	East Fork Little Miami River (headwaters to upstream Solomon Run)
2012	2014	5	3	**05090202 110**	East Fork Little Miami River (upstream Solomon Run to upstream Cloverlick Creek)
2012	2014	5	2	**05090202 120**	East Fork Little Miami River (upstream Cloverlick Creek to upstream Stonelick Creek)
2012	2014	5	3	**05090202 130**	East Fork Little Miami River (upstream Stonelick Creek to mouth)
2012	2002	5	2	**05090203 010**	Mill Creek