



State of Ohio
Environmental Protection Agency

STATE WATER QUALITY MANAGEMENT PLAN
including Section 208 Areawide Waste Management Plans

STATE OF OHIO

Final 2006

prepared by
Division of Surface Water
Ohio Environmental Protection Agency

Table of Contents

<u>Chapter</u>	<u>Content</u>	<u>Page</u>
1	Introduction	pg 1
	1.01 State Water Quality Management Plan Content and Purpose	pg 1
	1.02 208 Plans	pg 1
	1.03 Wastewater Facility Planning at the Local Level	pg 3
	1.04 Report Production Notes	pg 4
2	Water Quality Standards and Total Maximum Daily Loads (TMDLs)	pg 6
	2.01 Water Quality Standards	pg 6
	2.02 Beneficial Use Designations	pg 7
	2.03 Narrative "Free Froms"	pg 7
	2.04 Numeric Criteria	pg 7
	2.04.01 Chemical Criteria	pg 7
	2.04.02 Whole Effluent Toxicity Levels	pg 8
	2.04.03 Biological Criteria	pg 8
	2.05 Antidegradation Provisions	pg 9
	2.06 Public Participation	pg 9
	2.07 Ohio's TMDL Process	pg 9
	2.08 Ohio's 303(d) List and Schedule	pg 11
	2.09 Approved and Ongoing TMDL Projects	pg 12
	2.10 TMDL Program Documents included in State WQM Plan by Reference	pg 15
3	Effluent Limitations	pg 17
4	Ohio Nonpoint Source Pollution Control Program	pg 18
	4.01 What is Nonpoint Source Pollution?	pg 18
	4.02 Ohio Nonpoint Source Program	pg 18
	4.03 Update of the State Nonpoint Source Pollution Management Plan ..	pg 19
	4.04 Watershed Action Planning And Implementation and State Endorsed Watershed Action Plans	pg 20
	4.05 Nonpoint Source Program Documents included in State WQM Plan by reference	pg 23
5	Dredge and Fill, 401 Water Quality Certifications and Isolated Wetlands Permits	pg 25
	5.01 Nationwide Permits	pg 26
	5.02 Individual Section 401 Water Quality Certifications	pg 26
	5.03 Isolated Wetland Permit Program	pg 26
	5.04 Ohio Rapid Assessment Methods for Wetlands (ORAM)	pg 27
6	Basin Plans	pg 29

7	Groundwater	pg 30
	7.01 Future Needs	pg 31
8	Assessment of Water Quality and Regional Wastewater Treatment Needs	pg 32
9	Management Agencies and Prescriptions for Sewage Collection and Treatment	pg 35
10	Areawide Agency 208 Plans and Other Areawide State WQM Plan Content	pg 38
	10.01 Eastgate Regional Council of Governments (ERCOG)	pg 38
	10.02 Miami Valley Regional Planning Commission (MVRPC)	pg 38
	10.03 Northeast Ohio Areawide Coordinating Agency (NOACA)	pg 40
	10.04 Northeast Ohio Four County Regional Planning and Development Organization (NEFCO)	pg 40
	10.05 Ohio Kentucky Indiana Regional Council of Governments (OKI) ...	pg 40
	10.06 Toledo Metropolitan Area Council of Governments (TMACOG)	pg 41
	10.07 Updated Areawide 208 Plans Ready for Certification and Approval by U.S. EPA	pg 42
	10.08 Other Areawide Agency Planning Documents in the State WQM Plan	pg 43

List of Figures

1-1	Map depicting the seven governmental entities.....	pg 2
	responsible for 208 planning.	
2-1	12-step TMDL process.	pg 10
2-2	Map of TMDL watershed status.	pg 13
8-1	Regional water quality impacts, areas of population growth,	pg 34
	and Ohio EPA planning priorities.	

List of Tables

1-1	A reference chart listing 208 Plan materials	pg 5
	applicable in Ohio's 88 counties.	
2-1	Approved TMDL reports.	pg 14
4-1	Watersheds with state endorsed plans and	pg 21
	included by reference in the State WQM Plan.	
4-2	Watersheds with conditionally endorsed plans.	pg 22
7-1	Regulatory programs in Ohio that control the disposal	pg 30
	of potential pollutants on land and in subsurface excavations.	
8-1	Causes and sources of pollution associated with	pg 33
	urban and industrial waste treatment issues.	
9-1	Facility planning guidelines.	pg 36
9-2	A reference chart depicting the priority need for	pg 37
	comprehensive regional wastewater planning and the status of specific community wastewater treatment prescriptions in the 64 Ohio counties under the State's 208 Plan.	
10-1	List of approved Areawide Agency 208 Plans	pg 39
	included by reference in the State WQM Plan.	
10-2	List of Areawide Agency 208 Plans adopted by their respective	pg 42
	governing boards awaiting certification by the Governor as an element of the State WQM Plan.	
10-3	Updated State WQM Plan content applicable to,	pg 44
	or provided by, Areawide Agencies.	
10-4	An accounting of historical Areawide Agency documents	pg 45
	included by reference in the 2006 State WQM Plan update.	

List of Appendices

Appendix 1-1.

40 CFR 130.6

Appendix 2-1.

Summary of Ohio's Beneficial Use Designations;
Summary of Ohio's Numerical Water Quality Criteria; and
Summary of Ohio's Antidegradation Waterbody Classification System

Appendix 8-1.

Assessment of Regional Wastewater Collection and Treatment Needs in Ohio
(Summary information for 42 counties)

Appendix 8-2.

Assessment of Regional Wastewater Collection and Treatment Needs in Ohio
(Detailed information for Franklin County)

Appendix 9-1.

Management Agencies and Prescriptions for Sewage Collection and Treatment
in 42 Ohio Counties

Appendix 9-2.

Maps for specific prescriptions

Appendix 9-3.

208 Plan Prescriptions for Water Quality Protection within the Big Darby Creek
Watershed

Appendix 9-4.

Prescriptions and maps for Erie County

Appendix 10-1.

Updated Content for OKI - 2006 State Water Quality Management Plan

Appendix 10-2.

Extracted Content for ERCOG in Attachment C from the 1993 State WQM Plan
Certification Priority and Implementation Program Process (PIPP)

Appendix 10-3.

Extracted Content for MVRPC in Attachment C from the 1993 State WQM Plan
Certification Priority and Implementation Program Process (PIPP)

Appendix 10-4.

Extracted Content for NOACA in Attachment C from the 1993 State WQM Plan
Certification Priority and Implementation Program Process (PIPP)

Appendix 10-5.

Extracted Content for NEFCO in Attachment C from the 1993 State WQM Plan
Certification Priority and Implementation Program Process (PIPP)

Appendix 10-6.

Extracted Content for OKI in Attachment C from the 1993 State WQM Plan
Certification Priority and Implementation Program Process (PIPP)

Appendix 10-7.

Extracted Content for TMACOG in Attachment C from the 1993 State WQM Plan
Certification Priority and Implementation Program Process (PIPP)

1 Introduction

1.01 State Water Quality Management Plan Content and Purpose

Ohio EPA oversees the State Water Quality Management (WQM) Plan. The State WQM Plan is a requirement of Section 303 of the Clean Water Act and must include nine (9) discrete elements:

1. Total maximum daily loads (TMDLs)
2. Effluent limits
3. Municipal and industrial waste treatment
4. Nonpoint source management and control
5. Management agencies
6. Implementation measures
7. Dredge and fill program
8. Basin plans
9. Ground water

In layperson terms, the State WQM Plan is an encyclopedia of information used to plot and direct actions that abate pollution and preserve clean water. A wide variety of issues are addressed and are framed within the context of applicable laws and regulations. For some issues and locales, information about local communities may be covered in the plan. Other issues are covered only at a statewide level. Many of the topics or issues overlap with planning requirements of CWA Section 208 (items 3-9 above). The State WQM Plan includes, through references to separate documents, all 208 plans in the State.

1.02 208 Plans

The term "208 plan" is short for Areawide Waste Treatment Management Plan, a plan prepared pursuant to Section 208 of the Clean Water Act (CWA). Other titles used interchangeably with "208 plan" are "208 water quality management plan" and "areawide water quality management plan."

The 208 plans are prepared by the State of Ohio or one of six areawide planning agencies. In the 1970s under the newly enacted Clean Water Act, the Governor identified six primarily urban areas of Ohio for regional water pollution control planning. Areawide Councils of Governments were then designated as the lead planning agencies for developing 208 plans in 25 of Ohio's 88 counties¹. Each areawide planning agency maintains a single 208 plan covering the counties within its jurisdiction. The areawide agencies and their assigned counties are shown on Figure 1-1. See Chapter 10 for additional information about each areawide agency, their approved 208 plans, and any pending updates or amendments.

¹ Erie County was part of TMACOG's 208 plan until 2002 when it was officially removed, thereby falling within the State's 208 plan.

Figure 1-1. Map depicting the seven governmental entities responsible for 208 planning.



Government Agencies Responsible for 208 Plans

	TMACOG		MVRPC
	OKI		ERCOG
	NOACA		Counties in State 208 Plan, update 2005
	NEFCO		Counties in State 208 Plan, update 2006

The State of Ohio is responsible for maintaining the 208 plan applicable in the 64 counties not assigned to one of the areawide Agencies (see Figure 1-1). In 1979 Ohio EPA completed a set of *Initial Water Quality Management Plans*, each comprised of 3 parts, for 13 individual or combined major river basins in Ohio. These were the State's 208 plan. However the "initial" documents themselves were never updated or modified as indicated in this statement found in the 1993 State WQM Plan Certification:

"Although the CWA Section 208 Basin Plans were never fully updated after the initial Plans were written, the requirements of Section 208 and 205(j) have been carried out for the State of Ohio in programs described in the elements of the Planning and Implementation Program Process (PIPP) of the current WQM Plan."

Ohio EPA Division of Surface Water currently has the role of compiling 208 plan content for the Governor's certification as part of the State WQM Plan. In 2006, the Division has re-shaped the State WQM Plan and the 208 plan content for 42 of the 64 counties. The 208 plan content regarding sewage collection and treatment needs in the 64 counties of the State 208 Plan is, for the most part, over 20 years old and not reflective of current conditions. Therefore, in this year's update, Ohio EPA has removed outdated plan material in the State WQM Plan and has included new information in 42 of the 64 counties. Updates for the remaining 22 counties will occur in 2006. Table 1-1 provides a roadmap for accessing the 208 plan material applicable in Ohio's 88 counties.

1.03 Wastewater Facility Planning at the Local Level

Local governments typically conduct planning to meet the sewage disposal needs of the community. Ohio EPA has established guidelines for planning that are useful in the context of Section 208 and the State Water Quality Management Plan (see Chapter 9). Local governments that follow these guidelines are more likely to have the results of their planning work incorporated into the State 208 plan prepared by Ohio EPA. The Areawide Planning Agencies have established their own operating protocols, committees and processes to involve local governments in shaping their 208 plans.

Planning should account for long range sewer and treatment needs by looking at projections for community growth and development. Comprehensive land use planning, where available, is an excellent tool that can help those assessing the sewage disposal needs of a community or group of communities. In highly populated areas regional solutions involving several communities have proven to be a cost-effective means to solve sewage disposal problems in urban and suburban areas.

New development patterns have recently emerged near some population centers that is neither urban or suburban in character. The term exurbs has been used to describe a mix of land use and population densities located on the fringes of major cities. More information on this can be found through an a special program at the Ohio State University for the analysis of rural-urban change (<http://aede.ag.ohio-state.edu/programs/exurbs/def.htm>). Meeting the sewage disposal needs in exurb communities poses new challenges that could be cooperatively addressed through local

facility planning and updated 208 plans.

Sewage disposal needs can be met in a variety of ways dependent upon the situation, but in all cases local and State regulations must be followed to protect public health and safety, to ensure sanitary conditions and to avoid contamination of surface and ground waters.

1.04 Report Production Notes

The preparation of this report raised a number of issues and questions about the protocols available to generate information, and the best format to present it. Some major points are summarized here for the benefit of the reader, and to help shape the production and content of future updates. The Agency welcomes feedback on any of these points.

County Level Sub-Chapters - While much of Ohio EPA's work in surface water programs has been organized around watersheds, a county level sub-chapter or indexing system was used to present information about sewer and wastewater treatment needs, the local management agencies and the sewer prescriptions applicable in geographic areas. This was done to make it easier for the public and elected officials to locate community based and county level information.

Current Community Wastewater Information - The Agency's Surface Water Information Management System (SWIMS) is the basis of information on publicly owned treatment works found in Appendix 8-1. This is important information because it is used to assess the need for wastewater facility planning on a regional basis. An updated data base retrieval done in June 2006 is the source of information presented in the final version of Appendix 8-1. This step addressed the majority of omissions or errors that were made known to the Agency through in comment letters. None of the factual errors or incomplete listings were substantial enough to alter the conclusions regarding the need for regional wastewater facility planning. A few remaining comments on factual errors and incomplete errors remain have yet to be resolved, but have been recorded and corrections as appropriate will be entered into the SWIMS data base.

Local Mapping Data - Areawide planning agencies and local jurisdictions are encouraged to develop and share geographically referenced information about water quality conditions, sewer service planning areas and the specific locations of local waterways, storm sewers and sanitary sewers. Several of the areawide planning agencies have already done this and Ohio EPA intends to develop a single GIS map repository system for all 208 planning documentation. The detailed mapping of small headwater streams, storm sewers and sanitary sewers, while not directly part of the 208 plan, is extremely useful to the State and local communities. For example, Ross, Madison and Cuyahoga Counties recently obtained a detailed hydrograph map layer when areal photography was used to update soil survey information for these counties. The mapping of these small drainage ways can improve road, sewer and other infrastructure planning, basic land use planning, zoning and Greenway development planning.

Table 1-1 A reference chart listing 208 Plan materials applicable in Ohio's 88 counties.		
Counties	208 Planning Agency	208 Plan Reference and Where to Access Plan
Allen, Ashland, Ashtabula, Auglaize, Brown, Carroll, Champaign, Clark, Clinton, Columbiana, Crawford, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Hancock, Hardin, Henry, Highland, Holmes, Huron, Knox, Licking, Logan, Madison, Marion, Mercer, Morrow, Muskingum, Paulding, Pickaway, Putnam, Richland, Seneca, Shelby, Union, Van Wert, Williams, Wyandot	State of Ohio	The following chapters and appendices of State Water Quality Management Plan (2006): Chapters: 4, 5, 6, 7, 8, 9 Appendices: 8-1, 8-2, 9-1, 9-2, 9-3, 9-4 DSW web site: http://www.epa.state.oh.us/dsw/mgmtplans/208index.html
Adams, Athens, Belmont, Coshocton, Gallia, Guernsey, Harrison, Hocking, Jackson, Jefferson, Lawrence, Meigs, Monroe, Morgan, Noble, Perry, Pike, Ross, Scioto, Tuscarawas, Vinton, Washington	State of Ohio	Set of Initial Water Quality Management Plans, 1979: Scioto River Basin, Muskingum River Basin, Little Miami River Basin, Southwest Ohio River Tributaries, Hocking River Basin, Little Beaver Creek Basin, Southeast Ohio River Tributaries Basin, Central Ohio River Tributaries Basin All State WQM Plan certification updates through 1993 DSW web site: http://www.epa.state.oh.us/dsw/mgmtplans/208index.html
Mahoning, Trumbull	Eastgate Regional Council of Governments (ERCOG)	Each areawide Agency maintains and updates a single 208 plan for all the counties within its jurisdiction; further information about each areawide Agency, references to the specific 208 Plan documents, and in how to access them is presented in Chapter 10 of this document.
Darke, Greene, Miami, Montgomery, Preble	Miami Valley Regional Planning Commission (MVRPC)	
Cuyahoga, Geauga, Lake, Lorain, Medina	Northeast Ohio Areawide Coordinating Agency (NOACA)	
Portage, Stark, Summit, Wayne	Northeast Ohio Four County Regional Planning and Development Organization (NEFCO)	
Butler, Clermont, Hamilton, Warren	Ohio Kentucky Indiana Regional Council of Governments (OKI)	
Lucas, Ottawa, Sandusky, Wood	Toledo Metropolitan Area Council of Governments (TMACOG)	

2 Water Quality Standards and Total Maximum Daily Loads (TMDLs)

State WQM Plans are required to include the TMDLs developed by the Agency (40 CFR 130.6(c)(1); see Appendix 1-1). The State's Water Quality Standards program is described here because the purpose of TMDLs is to ensure that all waters attain their legally promulgated standards.

A TMDL is a written, quantitative assessment of water quality problems in a waterbody and contributing sources of pollution. A TMDL provides three essential pieces of information needed for water quality management: it calculates the amount a pollutant needs to be reduced to meet water quality standards; it allocates pollutant load reductions; and it provides the basis for taking actions needed to restore a waterbody. Additional information about Ohio's TMDL program is available on the TMDL Program page of the Division's web page (<http://www.epa.state.oh.us/dsw/index.html>).

Public notification and participation occurs as each TMDL report is prepared and finalized. Further description of Ohio's TMDL process is provided in Chapter 2.07.

Ohio's TMDLs are considered a part of the State WQM Plan as of the date they are approved by U.S. EPA. All TMDLs prepared by Ohio EPA and approved by U.S. EPA since 2000 are part of the State WQM Plan. A listing of approved TMDLs is found in Chapter 2.09 and links to those TMDL reports are available under TMDL Projects on the TMDL Program page of the Division's web page (<http://www.epa.state.oh.us/dsw/index.html>).

2.01 Water Quality Standards

Our water quality is constantly threatened by many different sources and types of pollution. Under the Clean Water Act, every state must adopt water quality standards to protect, maintain and improve the quality of the nation's surface waters. These standards represent a level of water quality that will support the goal of "swimmable/fishable" waters. Water quality standards are ambient standards as opposed to discharge-type standards. These ambient standards, through a process of back calculation procedures known as total maximum daily loads or wasteload allocations form the basis of water quality based permit limitations that regulate the discharge of pollutants into surface waters under the National Pollutant Discharge Elimination System (NPDES) permit program.

Ohio's water quality standards, set forth in Chapter 3745-1 of the Ohio Administrative Code (OAC), include four major components: 1) beneficial use designations; 2) narrative "free froms"; 3) numeric criteria; and 4) antidegradation provisions. Brief summaries of these components are presented in Chapters 2.02 through 2.05 and in Appendix 2-1.

Public participation in the development of water quality standards is described in Chapter 2.06.01. The State's Water Quality Standards are considered a part of the State WQM Plan as of the date they are approved by U.S. EPA.

2.02 Beneficial Use Designations

Beneficial use designations describe existing or potential uses of waterbodies. They take into consideration the use and value of water for public water supplies, protection and propagation of aquatic life, recreation in and on the water, agricultural, industrial and other purposes. Ohio EPA assigns beneficial use designations to waterbodies in the state. There may be more than one use designation assigned to a waterbody. Examples of beneficial use designations include: public water supply, primary contact recreation, and aquatic life uses (warmwater habitat, exceptional warmwater habitat, etc.)

Use designations are defined in paragraph (B) of rule 3745-1-07 of the OAC and are assigned in rules 3745-1-08 to 3745-1-32 of the OAC. Attainment of uses is based on specific numeric and narrative criteria. To ensure protection of these uses, Ohio EPA determines and assigns maximum concentrations for over 100 chemicals.

2.03 Narrative "Free Froms"

Narrative "free froms", located in rule 3745-1-04 of the OAC, are general water quality criteria that apply to all surface waters. The narrative criteria say that all waters shall be free from sludge, floating debris, oil and scum, color and odor producing materials, substances that are harmful to human, animal or aquatic life, and nutrients in concentrations that may cause algal blooms.

Much of Ohio EPA's present strategy regarding water quality based permitting is based upon the narrative free from, "no toxics in toxic amounts." Ohio EPA developed its strategy based on an evaluation of the potential for significant toxic impacts within the receiving waters. Very important components of this evaluation are the biological survey program and the biological criteria used to judge aquatic life use attainment.

2.04 Numeric Criteria

Numeric criteria are estimations of concentrations of chemicals and degree of aquatic life toxicity allowable in a waterbody without adversely impacting its beneficial uses. Although numeric criteria are applied to waterbodies, they primarily are used to regulate dischargers through NPDES permits. Numeric criteria consist of chemical criteria, whole effluent toxicity levels and biological criteria.

2.04.01 Chemical Criteria

Aquatic life and human health water quality criteria for individual chemicals are derived from laboratory studies of biological organisms' sensitivity to specific chemicals or combinations of chemicals. In these studies, organisms are exposed to known concentrations of a chemical under varying conditions. For aquatic life water quality criteria, the organisms exposed are a variety of fish, benthic macroinvertebrates and zooplankton. For human health water quality criteria, the organisms exposed are mammals, usually mice or rats.

Based on these tests, guidelines or national criteria recommendations are established by U.S. EPA. Ohio EPA uses these national criteria recommendations in combination with the latest scientific information in setting the appropriate chemical water quality criteria for Ohio's surface waters. Summary tables of aquatic life and human health water quality criteria are available.

Another class of chemical criteria are those associated with the Agricultural Water Supply use designation. These criteria protect against long term adverse effects on crops and livestock as a result of crop irrigation and livestock watering.

Chemical water quality criteria are in Chapter 3745-1 of the OAC.

2.04.02 Whole Effluent Toxicity Levels

Whole Effluent Toxicity (WET) measures the harmful effects of an effluent on living organisms. A bioassay or toxicity test measures the degree of response of an exposed test organism to a specific chemical or effluent. WET can only be measured using living organisms, not by an instrument. WET consists of acute and chronic toxicity tests. Acute toxicity tests measure the responses of organisms that occur soon after exposure to a test substance. Chronic tests measure the long-term response to test substances. WET measures the accumulative effects of chemicals present in an effluent that cannot be assessed using chemical-specific criteria.

Provisions addressing whole effluent toxicity are in paragraph (C) of rule 3745-1-07, rule 3745-2-09, and paragraph (B) of rule 3745-33-07 of the OAC.

2.04.03 Biological Criteria

Biological criteria are based on aquatic community characteristics that are measured both structurally and functionally. These criteria are used to evaluate the attainment of aquatic life uses. The data collected in these assessments are used to characterize aquatic life impairment and to help diagnose the cause of this impairment.

The principal biological evaluation tools used by Ohio EPA are the Index of Biotic integrity (IBI), the Modified Index of Well-Being (MIWB) and the Invertebrate Community Index (ICI). These three indices are based on species richness, trophic composition, diversity, presence of pollution-tolerant individuals or species, abundance of biomass, and the presence of diseased or abnormal organisms. The IBI and the MIWB apply to fish; the ICI applies to macroinvertebrates. Ohio EPA uses the results of sampling reference sites to set minimum criteria index scores for use designations in water quality standards.

Provisions addressing biological criteria are in paragraph (A)(6) of rule 3745-1-07 of the OAC.

2.05 Antidegradation Provisions

The antidegradation provisions describe the conditions under which water quality may be lowered in surface waters. Existing beneficial uses must be maintained and protected. Further, water quality better than that needed to protect existing beneficial uses must be maintained unless lower quality is deemed necessary to allow important economic or social development (existing beneficial uses must still be protected).

Provisions addressing antidegradation are in rule 3745-1-05 and rule 3745-1-54 of the OAC. Additional information is available at Antidegradation User's Guide - 2003.

2.06 Public Participation

Any interested individuals can have a role in the process of developing water quality standards. Ohio EPA reviews and, as appropriate, revises water quality standards at least once every three years. When water quality standards revisions are proposed, the public is notified of these revisions. A public hearing is held to gather input and comments.

The Division has convened special External Advisory Groups (EAGs) as a means to educate and build consensus on revisions to water quality standards rules. Each EAG consists of representatives of the regulated community, environmental and citizen groups, academia and Ohio EPA. The Division will consider the recommendations of the EAGs when revising the rules.

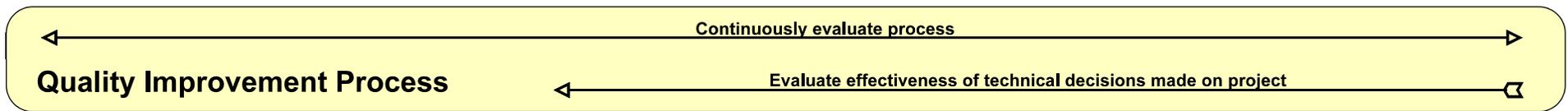
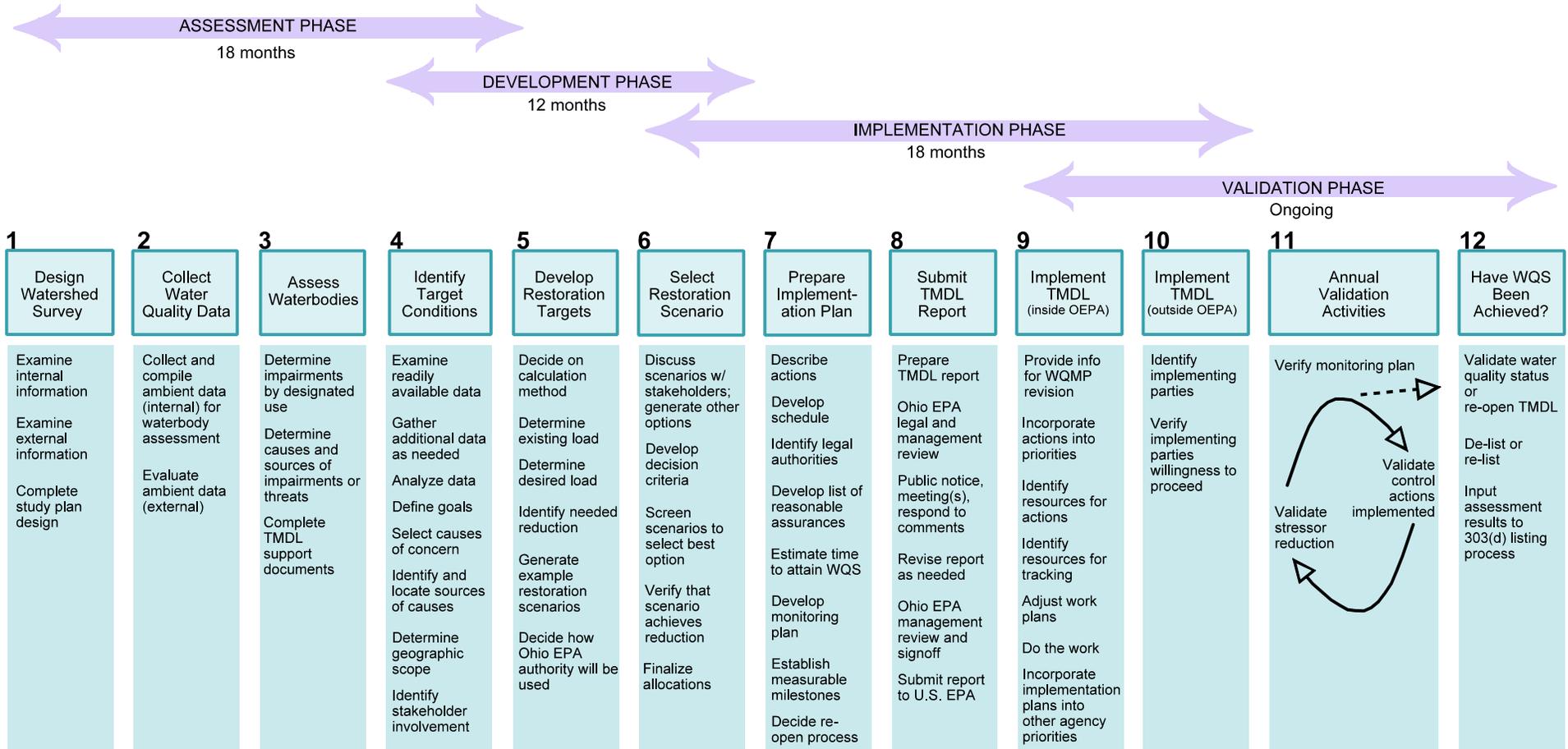
2.07 Ohio's TMDL Process

The Total Maximum Daily Load (TMDL) program, established under Section 303(d) of the Clean Water Act (33 U.S.C. 1313), focuses on identifying and restoring polluted rivers, streams, lakes and other surface waterbodies. A TMDL is a written, quantitative assessment of water quality problems in a waterbody and contributing sources of pollution. It specifies the amount a pollutant needs to be reduced to meet water quality standards (WQS), allocates pollutant load reductions, and provides the basis for taking actions needed to restore a waterbody.

Ohio's TMDL process is evolving. After bench marking with other states and U.S. EPA and analyzing our own rules and programs, the Division of Surface Water developed a 12-step project-management-based TMDL process to accomplish TMDLs (see Figure 2-1). The process builds on existing monitoring, modeling, permitting, and grant programs and works within our "five-year monitoring strategy." The process call for increased public involvement in problem-solving and decision-making. Through this reference the DSW TMDL Team Report (Ohio EPA 1999) is part of the State's WQM Plan. The report is available on the Division's web page (<http://www.epa.state.oh.us/dsw/index.html>).

Overview of the TMDL Project Process

Numbers on chart correspond to detailed task lists contained in Appendix B



The 12-step process contains four broad, overlapping phases:

- Assess waterbody health: biological, chemical, habitat
- Develop a restoration target and a viable scenario
- Implement the solution: inside/outside Ohio EPA
- Validate to monitor progress: delist or relist.

The important themes of the process include reaching out to involve others - the public and other agencies - and focusing on the goal of bringing waters into attainment. To do this we will build on our past experiences and explore new technology and methods. Finally, we will use a quality improvement process to measure the effectiveness of TMDLs, both administrative and technical decisions, and adjust the process as needed.

To gain the perspective of interests outside Ohio EPA, we convened an external advisory group. About 80 people met for over a year to discuss options and recommend how Ohio should approach TMDLs. Their recommendations to the Director of Ohio EPA in June 2000 addressed the listing process, how TMDLs should be developed and implemented, and how Ohio should deal with special problems such as mercury and air deposition.

Additional information on TMDLs is available on the U.S. EPA TMDL Web site.

2.08 Ohio's 303(d) List and Schedule

Each State is required by Section 303(d) of the Clean Water Act (33 U.S.C. 1313), to submit a prioritized list of impaired waters to U.S. EPA for approval (the "303(d) list"). The list indicates the waters of Ohio that are currently impaired and may require TMDL development in order to meet water quality standards. The process of preparing the 303(d) list following U.S. EPA guidelines and includes a public involvement through notification and public comment period.

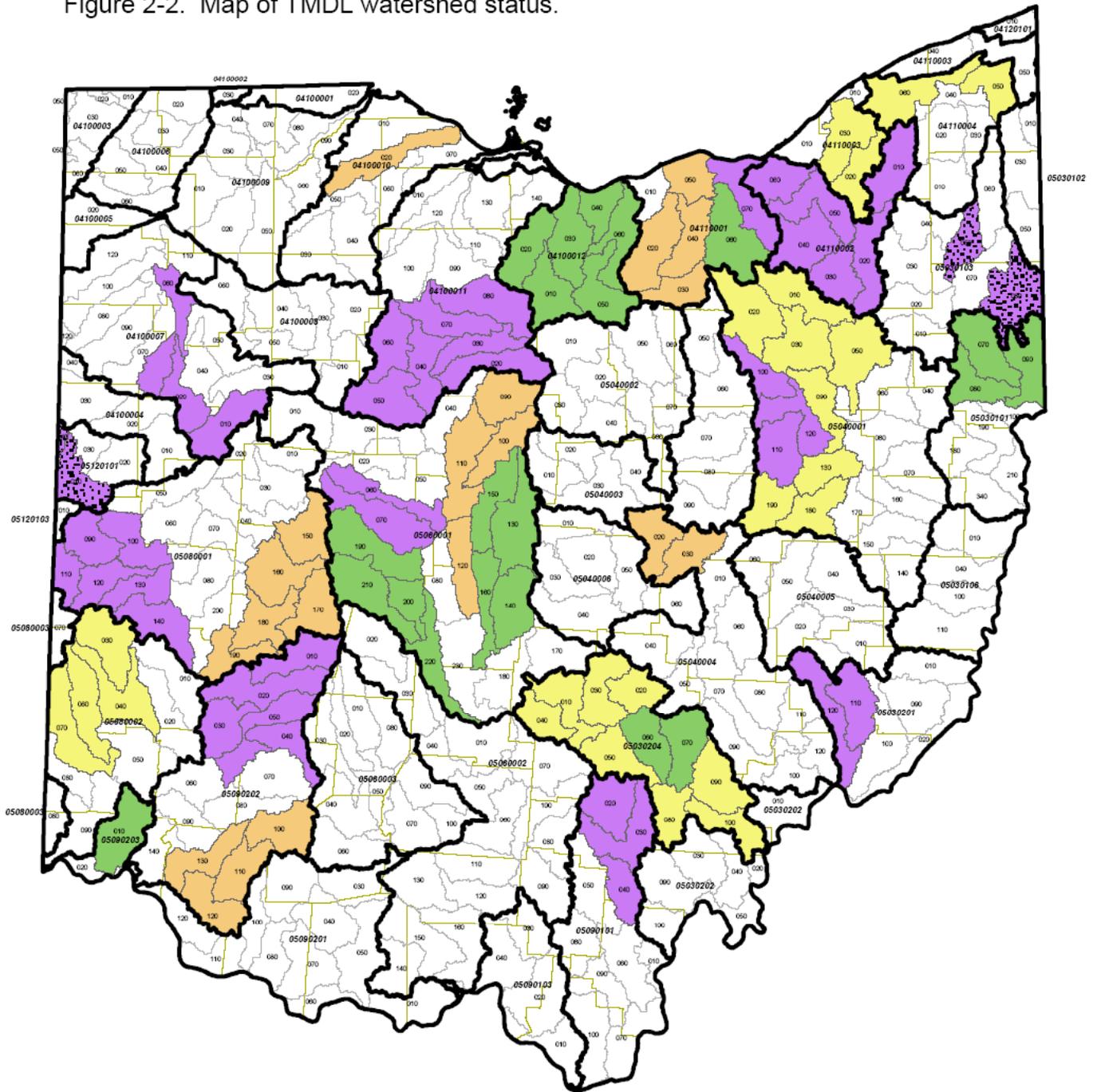
Ohio's 2004 TMDL priority list was approved by U.S. EPA on May 5, 2004. The list and schedule are contained in Appendix B.2. of the 2004 Integrated Water Quality Monitoring and Assessment Report. Prepared in accordance with federal guidance issued in July 2003, the Integrated Report satisfies the Clean Water Act requirements for both Section 305(b) water quality reports and Section 303(d) lists. The report describes the procedure that Ohio EPA used to develop the list and indicates which areas have been selected for TMDL development during FFY 2005 through 2006.

The 2004 Integrated Report supersedes the 2002 303(d) list and is hereby included in the State Water Quality Management Plan by reference. Future Integrated Reports and 303(d) lists shall become part of the State Water Quality Management Plan upon approval by U.S. EPA.

2.09 Approved and Ongoing TMDL Projects

Ohio EPA is moving forward on many TMDL projects. As of July 2005 U.S. EPA has approved 16 TMDL reports prepared by Ohio EPA. Figure 2-2 provides a State map showing the watersheds covered in these reports. The reports listed in Table 2-1, and the TMDLs contained therein, are part of the State's WQM Plan through reference. The TMDL reports, and a version of Figure 2-2 with better resolution to identify watersheds, can be accessed through the Division's web page (<http://www.epa.state.oh.us/dsw/index.html>).

Figure 2-2. Map of TMDL watershed status.



TMDL Status

- Final Report Approved by USEPA and Being Implemented
Middle Cuyahoga, Sugar, Plum Creek (Rocky), Upper Little Miami River, Bokes, Raccoon (Upper), Mill (Scioto), Lower Cuyahoga, Duck Creek, Upper Cuyahoga, Stillwater, Upper Auglaize, Upper Sandusky, Wabash River, Mahoning River (pathogens)
- Nearing Completion; Some Implementation Proceeding
Mill (Ohio), Sunday Creek, Monday Creek, Big Walnut Creek, Big Darby Creek, Vermilion, Huron River, Old Woman Creek, Little Beaver Creek, Rocky (bacteria)
- Development Phase *Black, Wakatomika Creek, Olentangy River, Mad River, Toussaint Creek, East Fork Little Miami River*
- Assessment Phase *Chagrin River, Grand River, Tuscarawas, Hocking River, Twin Creek, Fourmile Creek, Sevenmile Creek*
- Federal TMDLs *Wabash River, Mahoning River (pathogens)*

Table 2-1. Approved TMDL reports.	
Watershed	Dates of U.S. EPA Approval
Auglaize River (upper)	09/23/2004
Big Darby Creek	03/31/2006
Big Walnut Creek	09/26/2005
Bokes Creek	09/27/2002; 07/31/2003
Cuyahoga River (lower)	09/27/2004
Cuyahoga River (middle)	10/11/2000
Cuyahoga River (upper)	09/26/2003
Duck Creek (tributary to Ohio River)	09/26/2003
Euclid Creek	09/27/2005
Huron River	09/28/2005
Little Beaver Creek	09/28/2005
Little Miami River (upper)	07/02/2002; 05/13/2003
Mahoning River (U.S. EPA TMDL)	06/01/2004
Mill Creek (tributary to Ohio River)	04/26/2005
Mill Creek (tributary to Scioto River)	09/02/2003
Monday Creek	09/22/2005
Old Woman Creek	08/31/2005
Plum Creek (Rocky River)	12/04/2001
Raccoon Creek (upper)	03/20/2003
Rocky River	12/04/2001
Sandusky River (upper)	09/30/2004
Stillwater River	06/15/2004
Sugar Creek	11/20/2002; 07/08/2003
Sunday Creek	03/31/2006
Wabash River (U.S. EPA TMDL)	06/01/2004

2.10 TMDL Program Documents included in State WQM Plan by Reference

Ohio EPA. 1999 DSW TMDL Team Report. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2004. Total Maximum Daily Loads for the Upper Auglaize River Watershed. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2006. Total Maximum Daily Loads for the Big Darby Creek Watershed. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2005. Total Maximum Daily Loads for the Big Walnut Creek Watershed, Ohio. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2002. Total Maximum Daily Loads for Bokes Creek. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2003. Total Maximum Daily Loads for the Lower Cuyahoga River. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2000. Total Maximum Daily Loads for the Middle Cuyahoga River. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2004. Total Maximum Daily Loads for the Upper Cuyahoga River. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2003. Total Maximum Daily Loads for Duck Creek. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2005. Total Maximum Daily Loads for the Euclid Creek Watershed, Ohio. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2005. Total Maximum Daily Loads for the Huron River Watershed, Ohio. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2005. Total Maximum Daily Loads for the Little Beaver Creek Watershed, Ohio. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2004. Mahoning River Total Maximum Daily Load for Fecal Coliform Bacteria. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2002. Total Maximum Daily Loads for the Upper Little Miami River. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2004. Total Maximum Daily Loads for the Mill Creek Basin. Ohio EPA, Division

of Surface Water. Columbus, Ohio.

Ohio EPA. 2003. Total Maximum Daily Loads for the Mill Creek (Scioto River) Basin. Ohio EPA, Division of Surface Water. Columbus, Ohio.

USACE. 2005. Hocking River Basin, Ohio Monday Creek Subbasin Ecosystem Restoration Project Final Feasibility Report and Environmental Assessment . USACE, Huntington District Office. Huntington, West Virginia.

Ohio EPA. 2005. Total Maximum Daily Loads for the Old Woman Creek and Chappel Creek Watersheds, Ohio. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2002. Total Maximum Daily Loads for the Upper Raccoon Creek. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2001. Total Maximum Daily Loads for the Rocky River Watershed. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2004. Total Maximum Daily Loads for the Upper Sandusky River Watershed. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2004. Total Maximum Daily Loads for the Stillwater River Basin. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2002. Total Maximum Daily Loads for the Sugar Creek Basin. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2005. Total Maximum Daily Loads for the Sunday Creek Watershed. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2004. Total Maximum Daily Load (TMDL) for the Wabash River Watershed, Ohio. Ohio EPA, Division of Surface Water. Columbus, Ohio.

3 Effluent Limitations

State WQM Plans are required to contain effluent limitations, including water quality based effluent limitations, and schedules of compliance developed by the Agency (40 CFR 130.6(c)(2); see Appendix 1-1).

All effluent limitations and schedules for compliance prepared by Ohio EPA and issued in NPDES permits are part of the State WQM Plan. Public notification and participation occur as the NPDES permits are prepared and finalized. Further description of the process is found on the Division's Permits Program web page (<http://www.epa.state.oh.us/dsw/permits/permits.html>).

Effluent limits are considered a part of the State WQM Plan as of the date the NPDES permit is issued final. Listings of individual NPDES permits are available on through the Division's web page, NPDES Permit List page (<http://www.epa.state.oh.us/dsw/permits/npdeslist.html>).

All effluent limitations are developed and tracked using a client-server based information management system called Surface Water Information Management System (SWIMS). **The effluent limitations maintained in the SWIMS database are part of the State WQM Plan.** Data from SWIMS is periodically uploaded to U.S. EPA information management systems. U.S. EPA has several ways for the public to access effluent limitations, compliance schedules and compliance histories, including these web based access points:
Envirofacts Data Warehouse (<http://www.epa.gov/enviro/html/water.html#PCS>)
Enforcement and Compliance History Online (<http://www.epa.gov/echo/index.html>).

4 Ohio Nonpoint Source Pollution Control Program

State WQM Plans are required to “describe the regulatory and non-regulatory programs, activities and Best Management Practices (BMPs) which the agency has selected as the means to control nonpoint source pollution where necessary to protect or achieve approved water uses” (40 CFR 130.6(c)(1); see Appendix 1-1). These federal planning regulations also list specific categories or types of nonpoint pollution that should be addressed in the plan, most notable at this time in Ohio are agricultural and silvaculture, mines, construction, and urban storm water.

4.01 What is Nonpoint Source Pollution?

Section 502 (paragraph 19) of the Clean Water Act (CWA) defines pollution as human-induced alteration of waters caused by pollutants as well as non-pollutant agents, such as flow alteration, loss of riparian zone, physical habitat alteration, and introduction of alien taxa. Nonpoint source is pollution that is the result of land use activity or disturbance of the stream or aquifer system. Sources can be classified into two categories: polluted run-off and physical alterations. Polluted run-off is rain and snow melt flowing across the land surface or within ground water that picks up contaminants and carries them to the stream or into the aquifer. Physical alterations are changes to the stream channel or its corridor, including straightening, deepening, widening or changes in flow patterns.

The primary NPS causes of aquatic life use impairment in Ohio surface waters are (in decreasing priority order): 1) habitat modification²; 2) hydromodification³; 3) nutrients (phosphorus and nitrogen); and 4) silt/sediments.

4.02 Ohio Nonpoint Source Program

In a broad context, NPS pollution control is integral to the Ohio EPA surface water program. However, NPS pollution control is administered as a distinct program because of the manner in which the federal CWA addresses the issue.

The Ohio Nonpoint Source program focus is identifying and supporting implementation of management practices (MPs) and measures that reduce pollutant loadings, control pollution added from nonpoint sources to State waters and improve the overall quality of these waters. Without such additional actions to control nonpoint sources of pollution, watersheds cannot reasonably be expected to attain or maintain applicable Ohio water

² physical, man-made alterations to the channel, floodplain, and/or riparian zone of a stream, such as channelization, culverting headwater streams, destruction of riparian cover, and levee construction.

³ A subset of habitat modification that is often the result of certain habitat modifications. Hydromodification occurs when man-made structural changes alter the amount or physical character of the water in the stream. Examples include increased overland flow and higher storm flows as a result of development, tile drainage, and dams.

quality standards (see Chapter 2).

Our approach to NPS pollution control is evolving. After a comprehensive review of our own program needs, consideration of other state programs, and U.S. EPA recommendations, the Division of Surface Water (DSW) has streamlined its process for funding NPS projects, striving toward those that definitively restore, protect, or improve Ohio water resources. This approach underscores and integrates multiple DSW program commitments, such as Total Maximum Daily Load (TMDL) Reports (see Chapter 2), ecological assessment, and source water protection. The entire process builds upon existing monitoring, permitting, and modeling efforts, and works within our five year basin approach.

Our intent is increased integration of DSW program efforts with the goal of systematically addressing State waters impaired largely due to NPS impacts. Presently, the DSW goal is 80% aquatic life use attainment by 2010.

Local NPS implementation is a key to achieving state environmental targets. Ohio relies heavily on watershed management plans to identify and outline actions to correct water quality problems caused by NPS pollution. These plans emphasize: identification of the nature, extent, and cause of water quality problems; development and implementation of a plan to correct these problems; education and evaluation. The watershed management plans are developed locally with input and support from Ohio EPA, Ohio Department of Natural Resources (ODNR), Natural Resources Conservation Service (NRCS) and other agencies.

4.03 Update of the State Nonpoint Source Pollution Management Plan

Periodic production of an updated NPS Management Plan by each state is a requirement of Section 319 of the Clean Water Act. The plan outlines the State's recommendations for controlling NPS causes of water quality impairment. After notice and opportunity for public comment, a management plan is submitted to U.S. EPA. U. S. EPA endorsement of the plan insures continued federal funding for the Ohio 319 grants program, allows state and federal grant and loan funding to support a wide variety of NPS management measures, and links the coastal (Lake Erie basin) and state NPS plans at the state and federal levels.

In 2004 and 2005 an updated Ohio Nonpoint Source Pollution Management Plan was produced by a NPS Workgroup established in October 2003. The workgroup was sponsored by the Ohio Water Resources Council (OWRC), and chaired by Ohio EPA and ODNR. In March of 2003 a draft plan entitled *Getting to the Point About Nonpoint - 2005-2010 Ohio NPS Pollution Management Plan* was made available for comment on the Division's web page. The document was revised and submitted to U.S. EPA for approval in August 2005. This document fully supplants all prior NPS Management Plans and will be considered a part of the State WQM Plan as of the date it is approved by U.S. EPA.

4.04 Watershed Action Planning And Implementation and State Endorsed Watershed Action Plans

The review of a watershed action plan (WAP) by the State of Ohio, regardless of funding source for plan development, begins when a plan is submitted to Ohio EPA or ODNR, with a request for endorsement. The plan is distributed to the Area Assistance Team (AAT) and various divisions throughout ODNR and Ohio EPA for review and comment.

All reviewers are encouraged to provide general comments based on their own expertise to assist the local watershed group. However, comments specific to endorsement by the State are based on the extent to which the WAP adheres to the guidelines and criteria found in Appendix 8 Update to the Guide to Developing Local Watershed Actions Plans in Ohio (Ohio EPA 2003). Appendix 8 checklists completed by the reviewers are the basis for the WAP review letter.

Endorsement or conditional endorsement of WAP by the State of Ohio occurs when the local watershed group has adequately responded to the contents of the WAP review letter. Review and endorsement of WAP by officials of the Ohio EPA and ODNR ensures that: 1) all locally produced watershed plans, when implemented, will result in documented water quality improvement; and 2) the expenditure of available state and federal resources is linked to endorsed plans.

Once endorsed by the State the environmental targets within the local watershed action plans become components of the State of Ohio NPS Management Plan and State WQM Plan. New watershed plans are prepared and reviewed on a year round basis and approved on an individual basis. The current listing of approved watershed action plan is available on the DSW web page (<http://www.epa.state.oh.us/dsw/nps/NPSMP/index.html>); click the "start here" button and scroll to indexes. The following tables provide information on these endorsed WAPs as of June 2006.

Table 4-1. Watersheds with state endorsed plans that are included by reference in the State WQM Plan. Where available links to each watershed action plan have been provided on the DSW web page (<http://www.epa.state.oh.us/dsw/nps/NPSMP/index.html>); click the “start here” button and scroll to indexes.

Watershed	Hydrologic Unit Code(s)	Sponsor
Shayler Run Lower East Fork	05090202-130-060 05090202-130-050	East Fork Collaborative
White Oak Creek	05090201-090 05090201-100	Brown SWCD
Kokosing	05040003-010 05040003-020 05040003-030 05040003-040	Kokosing River Steering Committee, DNAP
Lower Alum Creek	05060001-160	Friends of Alum Creek and Tributaries
Lower Muskingum	05040004-080 (Meigs Creek sub-watershed)	Friends of the Lower Muskingum River
Leading Creek	05030202-090	Meigs SWCD
Duck Creek	05030201-110 05030201-120	Washington SWCD
Wolf Creek	05040004-090 05040004-100	Morgan SWCD
Lower Olentangy	05060001 - 120	Friends of the Lower Olentangy
Huff Run	05040001-080-050	Rural Action, Inc.
Grand Lake St. Marys	05120101-020	Mercer SWCD
Salt Creek	05040004-060-	Muskingum SWCD
Upper Mill Creek (Ohio R.)	05090903-010-010	Mill Creek Watershed Council of Communities
Bokes/Mill Creek (Scioto R.)- Powderlick Run sub-basin only	05060001-060	Union County SWCD
Stillwater River	05080001	Darke SWCD
Federal Valley	05030204-090	Rural Action, Inc.
Sandusky River Honey Creek sub-basin only)	04100011-080	Sandusky River Watershed Coalition
Little Miami River (Todd's Fork sub-basin only)	05090202-070	Little Miami River Partnership

Table 4-2. Watersheds with conditionally endorsed plans.			
Watershed	Hydrologic Unit Code(s)	Sponsor	Conditional Endorsement Includes:
Chagrin River	04110003-020 04110003-030	Chagrin River Watershed Partners	Riparian Area Protection
Mill Creek (Mahoning R. trib.)	05030103-080-010 05030103-080-020 05030103-080-030	Alliance for Watershed Action and Riparian Easements, Mahoning SWCD	Riparian Area Protection
Pleasant Run	05080001-200-50	Honey Creek Watershed Association, Miami County Park District	Pleasant Run sub-watershed impairments
Sunday Creek	05030204-070	Sunday Creek Watershed Group, Rural Action Inc.	Acid Mine Drainage Abatement Projects
Raccoon Creek	05090101-040	ILGARD at Ohio University	Acid Mine Drainage Abatement Projects
Bokes/Mill Creek	05060001-060	Bokes and Mill Creek Watershed Partnership, Union County SWCD	Riparian Corridor and Channel Restoration, Powderlick Run sub-watershed
Chagrin River	04110003-020 04110003-030	Chagrin River Watershed Partners	Riparian Area Protection
Mill Creek (Mahoning R. trib.)	05030103-080-010 05030103-080-020 05030103-080-030	Alliance for Watershed Action and Riparian Easements, Mahoning SWCD	Riparian Area Protection
Honey Creek	05080001-200-050	Miami County Park District	not specified
Sunday Creek	05030204-070	Sunday Creek Watershed Group, Rural Action Inc.	Acid Mine Drainage Abatement Projects
Raccoon Creek	05090101-040	ILGARD at Ohio University	Acid Mine Drainage Abatement Projects
Bokes/Mill Creek (all but Powderlick Run sub-watershed)	05060001-060	Bokes and Mill Creek Watershed Partnership, Union County SWCD	not specified
West Creek	04110002-060-040	West Creek	Conservation

Table 4-2. Watersheds with conditionally endorsed plans.			
		Preservation Committee	easements
Euclid Creek	04110003-010	Cuyahoga SWCD	Dam removal, HSTS, conservation development, stormwater management riparian/wetland setback ordinances
Upper Scioto River	05060001	Delaware SWCD	not specified
Headwaters, East Fork Little Miami River	05090202-100	Clermont SWCD	not specified
Lower Maumee (includes Ottawa R./Swan Creek headwaters)	04100009-020 04100009-080	TMACOG	not specified
Headwaters Sugar Creek	05040001-100	Wayne SWCD	not specified
Duck & Otter Creeks	04100010-009 04100010-010	Duck & Otter Creek Partnership, Inc.	not specified
Rocky River	04110001-060 04110001-070	NOACA	not specified
Upper Olentangy	05060001-090 05060001-100 05060001-110	City of Delaware	not specified

4.05 Nonpoint Source Program Documents included in State WQM Plan by reference

Brown County Soil and Water Conservation District. 2004. White Oak Creek Watershed Action Plan and Inventory. Melody Layford Dragoo, White Oak Creek watershed coordinator. Georgetown, Ohio. Dated 04/2004.

Duck Creek Watershed Partnership. 2005. A Comprehensive Watershed Management Plan for the Duck Creek Watershed (a collaboration of Partners of the Duck Creek Watershed Committee and residents for the Duck Creek watershed). Marietta, Ohio. Dated 02/2005.

East Fork Watershed Collaborative. 2003. East Fork Little Miami River Watershed Action Plan Lower East Fork Watershed Management Plan 2003. Dated 12/2003.

Federal Valley Watershed Group. 2006. The Federal Valley Watershed Action Plan. Dated 4/12/2006.

Friends of the Lower Olentangy Watershed. 2005. The Lower Olentangy Watershed Action Plan in 2003 - Strategies for protecting and improving water quality and recreational use of the Olentangy River and tributary streams in Delaware and Franklin Counties. Dated 03/2005.

The Friends of Alum Creek and Tributaries. 2005. Lower Alum Creek Watershed Action Plan. Dated 02/28/2005.

The Grand Lake St. Marys Watershed Project Joint Board of Supervisors. 2005. Grand Lake St. Marys Watershed Action Plan. Dated 2005.

Huff Run Watershed Restoration Partnership, Inc. 2005. Huff Run Watershed Plan. Dated December 2005.

Institute for Local Government Administration and Rural Development. 2005. Lower Muskingum River Watershed Management Plan: Meigs Creek Subwatershed. Ohio University. Athens, Ohio. Dated 01/2005.

Little Miami River Partnership. 2006. The Todd's Fork Watershed Action Plan. Dated 05/2006.

Meigs Soil and Water Conservation District. 2005. A Comprehensive Watershed Management Plan for the Leading Creek Watershed. Cynthia Bauers, Leading Creek watershed coordinator. Pomeroy, Ohio. Dated 01/2005.

Morgan County Soil and Water Conservation District. 2005. A Comprehensive Watershed Management Plan for the Wolf Creek Watershed (a collaboration of Partners of the Wolf

Creek Watershed Group and residents fo the Wolf Creek watershed). McConnellsville, Ohio Dated 06/2005.

Muskingum County Soil & Water Conservation District. 2005. A Comprehensive Watershed Management Plan for the Salt Creek Watershed. Dated 03/2005.

The National Center for Water Quality Research, Heidelberg College. 2006. Honey Creek Watershed Action Plan (Sandusky trib.). Dated 2/2006.

Ohio Department of Natural Resources. 2004. Kokosing Scenic River Watershed Plan. Ohio DNR, Division of Natural Areas and Preserves, Columbus, Ohio. Dated 04/2004.

Ohio EPA. 1997. Guide to Developing Local Watershed Action Plans. Ohio EPA, Division of Surface Water. Columbus, Ohio.

Ohio EPA. 2003. Appendix 8 Update - Outline of a Watershed Action Plan. (an update to Guide to Developing Local Watershed Action Plans, posted on Division's web page 2/7/03). Ohio EPA, Division of Surface Water. Columbus, Ohio.

State of Ohio. 2005. Getting to the Point About Nonpoint - 2005-2010 Ohio NPS Pollution Management Plan (Draft dated September 2005). Ohio EPA, Division of Surface Water. Columbus, Ohio.

Stillwater Watershed Project. 2006. Stillwater River Watershed Action Plan and Inventory. Dated 2/24/06.

Union Soil & Water Conservation District. 2005. Bokes/Mill Creek Watershed Action Plan. Dated 4/2003.

Upper Mill Creek Sub-watershed Action Plan Workgroup. 2003. Upper Mill Creek (Ohio R. trib.) Sub-watershed Action Plan. Dated 10/1/2003.

5 Dredge and Fill, 401 Water Quality Certifications and Isolated Wetlands Permits

Protecting the State's wetlands and other waters from adverse impacts caused by dredging or filling is a joint responsibility of the U.S. Army Corps of Engineers (Corps) and Ohio EPA. Under provisions of Sections 404 and 401 of the Clean Water Act, each agency has specific authority to issue permits, or deny permits, to dredge or place fill in surface waters of the State. In addition, activities impacting isolated wetlands (those wetlands not near rivers or larger bodies of water) are regulated by Ohio EPA under State law (sections 6111.02 to 6111.029 of the Ohio Revised Code). Ongoing program development work is carried out by the 401 Water Quality Certification Section and the Wetlands Ecology Section.

Section 404 (33 U.S.C. 1344) of the Clean Water Act requires that anyone (including private citizens and federal, state and local agencies) who wishes to discharge dredged or fill material into the waters of the U.S., regardless of whether on private or public property, must obtain a Section 404 permit from the Corps. Section 401 (33 U.S.C. 1341) of the Clean Water Act requires that any applicant for a Federal license or permit to conduct any activity that may result in any discharge must provide the licensing or permitting agency a certification from the State that any such discharge will comply with, among other things, the State's water quality standards. Ohio's water quality standards are in Chapter 3745-1 of the Ohio Administrative Code. Ohio EPA administers the Section 401 water quality certification program in Ohio under Chapters 3745-1 and 3745-32 of the Ohio Administrative Code.

Examples of activities that may require a Section 404 permit and a Section 401 water quality certification include:

- construction of boat ramps
- placing fill
- dredging
- mechanically clearing a wetland
- construction of dams or dikes
- stream straightening
- placement of riprap for erosion protection
- grading
- ditching
- building in a wetland
- stream channelization.

More background information about the federal Section 404 permit program and Ohio EPA's Section 401 water quality certification program are in the following Ohio EPA fact sheets, available on Ohio EPA's Section 401 water quality certification Web page.

Section 404 Permits. February 1997
Section 401 Water Quality Certifications. January 1997
Ohio Wetlands. January 1997
Wetlands and Water Quality. January 1997
What is Wetland Delineation? January 1997

5.01 Nationwide Permits

The Corps developed general Section 404 permits for certain types of projects that are similar in nature and cause minimal degradation to waters of the State. These permits are called Nationwide Permits (NWP) and substantially expedite the permitting process. The NWP issued by the Corps address 43 types of activities that range from boat ramp construction to surface coal mining activities. Ohio EPA certified, with conditions, 40 of those activities on May 22, 2002. Information has been provided by the four Corps districts that operate in Ohio (Huntington, Buffalo, Pittsburgh, and Louisville), regarding which of the NWP have been utilized, and how much of an impact has been authorized, in Ohio during state fiscal year 2004.

On July 1, 2003 Ohio EPA issued a Section 401 water quality certification to Section 404 Letters of Permission for seven types of Lake Erie Watershed projects that cause minimal degradation to waters of the State. These Letters of Permission (LOP) substantially also expedite the permitting process. To determine if a project qualifies for LOP coverage, or requires an individual Section 401 water quality certification from Ohio EPA, applicants first contact the Buffalo Corps of Engineers to discuss the project.

5.02 Individual Section 401 Water Quality Certifications

If an individual Section 401 water quality certification is required, Ohio EPA encourages all applicants to review the Agency's Pre-application Guidelines and Projects and Activities of Concern before applying. After reviewing these, applicants should obtain the following documents, available on Ohio EPA's Section 401 water quality certification Web page.

Section 401 Water Quality Certification Application Primer. August 1998
Application for Ohio EPA Section 401 Water Quality Certification. August 1998
Approved Mitigation Banks in Ohio (10/11/2002)

5.03 Isolated Wetland Permit Program

The Ohio EPA isolated wetland permitting program was legislatively created in response to a U.S. Supreme Court Decision in the case of Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers (Corps) 531 U.S. 159 (January 9, 2001). In its decision, the U.S. Supreme Court ruled that the Corps did not have authority to regulate isolated wetlands under Section 404 of the Clean Water Act. Prior to that ruling, the Corps regulated activities in all streams and wetlands through the issuance of 404 permits.

Section 401 of the Clean Water Act requires applicants to obtain a 401 water quality certification from the State having jurisdiction over the water body in order to obtain a 404 permit. As a result of the SWANCC decision, activities in isolated wetlands could not be permitted in the State of Ohio because there would be no 404 permit to trigger a 401 water quality certification, and because there was no independent State permitting program to take its place. Emergency rules adopted by Ohio EPA in April 2001 established a State permitting mechanism; however, these rules were effective for only 90 days.

On July 17, 2001, Ohio House Bill 231 was signed into law by Governor Bob Taft. The bill establishes a permanent permitting process for isolated wetlands. The provisions of this bill were incorporated in Section 6111 of the Ohio Revised Code, more specifically, Sections 6111.021 to 6111.029. The Corps retains all of its original authority to issue 404 permits for wetlands that are not considered isolated (jurisdictional wetlands), as well as other waters of the U.S.

On January 1, 2002, Ohio EPA issued a general isolated wetland permit. This permit became effective on February 11, 2002 and expires on February 11, 2007.

The applications forms below are available on Ohio EPA's Section 401 water quality certification Web page.

General Isolated Wetland Permit Application (Level One Review)
Individual Isolated Wetland Permit Application (Level Two Review)

5.04 Ohio Rapid Assessment Methods for Wetlands (ORAM)

The regulation of wetlands under Sections 401 and 404 of the Clean Water Act and the isolated wetland permit program has required the assessment of the function and quality of wetlands in order to determine whether to permit the destruction, alteration, or degradation of a wetland and to determine the appropriate level of mitigation that should be required. This type of assessment is different from the delineation of whether a particular location is a "wetland" at all, i.e. a "jurisdictional" wetland. Delineation attempts to draw a line around a location to call what lies within the line a "wetland" and subject to protection, and what lies outside the line, something else (typically upland areas).

Assessment attempts to determine the ecological quality and the level of function of a particular wetland. Among other things, the State of Ohio's wetland water quality standards (rules 3745-1-50 to 3745-1-54 of the Ohio Administrative Code) require applicants to use "an appropriate wetland evaluation methodology acceptable to the director" to determine the appropriate category for the wetland that is the subject of the application. These methods are often called "rapid assessment methods." The following Ohio rapid assessment method (ORAM) documents are available on Ohio EPA's Section 401 water quality certification Web page.

Version 5.0 Scoring Forms (final 2-1-01)
Version 5.0 Field Scoring Form (final 2-1-01)

Version 5.0 Users Manual (final 2-1-01)
Version 5.0 Score Calibration (draft 8-15-00)

6 Basin Plans

State WQM Plans are required to contain a discussion of “any relationship to applicable basin plans developed under Section 209 of the Act.” Section 209 of the Act says:

“(a) Preparation of Level B plans. The President, acting through the Water Resources Council, shall, as soon as practicable, prepare a Level B plan under the Water Resources Planning Act 42 U.S.C. 1962 et seq.] for all basins in the United States. All such plans shall be completed not later than January 1, 1980, except that priority in the preparation of such plans shall be given to those basins and portions thereof which are within those areas designated under paragraphs (2), (3), and (4) of subsection (a) of section 1288 of this title.

(b) Reporting requirements. The President, acting through the Water Resources Council, shall report annually to Congress on progress being made in carrying out this section. The first such report shall be submitted not later than January 31, 1973.”

In Ohio only one Level B planning effort was finished. The Ohio River Basin Commission was established to conduct the comprehensive joint planning work authorized under the Water Resources Planning Act of 1965. The Ohio River mainstem portion of the Level B report was finished in 1978. The ORB Commission ceased all planning work under the federal law in 1981.

In 1976 the Great Lakes Basin Commission published a Level A Framework Study authorized by the Water Resources Planning Act of 1965 that covered the Lake Erie drainage of Ohio. No Level B studies were prepared in the Ohio portion of the Lake Erie basin. A Presidential executive order (No. 12319) issued in 1981 terminated the Great Lakes Basin Commission.

Given the age of the Level A Framework Studies and the Level B basin plans, and the fact they are not being updated, Ohio EPA has concluded that the relationship of applicable basin plans to the State Water Quality Management Plan updates can be discussed in a historical context only. When time and circumstances allow, such historical comparisons may be drawn out in the State Water Quality Management Plan. However, normally no additional discussion of Level A or Level B studies done under the Water Resources Planning Act will be provided.

7 Groundwater

When the Clean Water Act (CWA) was enacted in 1972 there were very few national environmental laws in place for the assessment and control of threats to groundwater and surface waters posed by the disposal of solid wastes and industrial waste by-products in and on the land. In recognition of this, Section 208 of the CWA required that States identify the “process to control the disposal of pollutants on land or in subsurface excavations within such area to protect ground and surface water quality.” Federal water quality planning and management regulations for the State’s Water Quality Management Plan content repeat this requirement in CFR 130.6(c)(9).

In 2005 there are a large number of federal and State laws and regulations that regulate the disposal of materials on the land and in subsurface excavations. Some of the larger and more significant programs are listed below. The routine administration of these ongoing programs comprises the groundwater element of the State WQM Plan.

Table 7-1. Regulatory programs in Ohio that control the disposal of potential pollutants on land and in subsurface excavations.		
Program Name	Authority citation(s)	Program description available at:
Surface Water Programs		
Biosolids (Disposal of sewage sludge & septage)	40 CFR 503 ORC 6111.03; OAC 3745-40-01 through -07	General program information & overview http://www.epa.state.oh.us/dsw/sludge/biosolid.html includes links to these materials: 1) Ohio EPA Policy DSW-0100.028 (revision 1, 08/23/2002) Ohio’s Sewage Sludge Rules: Chapter 3745-40 of the Ohio Administrative Code 2) Fact Sheet - Domestic Septage Disposal in Ohio
Land Application of Sewage	ORC 6111.44, 6111.46	Agency is in process of drafting rules to regulate the land application of treated wastewater. http://www.epa.state.oh.us/dsw/rules/draft_land_app_2003.html
Permit To Install	ORC 6111.44, 6111.45	Provides oversight of on-site sewage system installation, lagoon installation, or any water pollution control project installation that has the potential to impact groundwater.
Other Programs		
Asbestos Emission Control	OAC Chapter 3745-20	http://www.epa.state.oh.us/dapc/asbestos
Coal Mine Waste	OAC Chapter 1501:13-9	Identification of Mine Area: Environmental Integrity, Postmining Use of Land http://www.ohiodnr.com/mineral/coal/c2.html
Concentrated Animal Feeding Facilities	OAC Chapter 901:10	http://www.ohioagriculture.gov/lepp/
Disposal Methods for Construction and	OAC Chapter 3745-400	http://www.epa.state.oh.us/dsiwm/pages/cddpro.html

Table 7-1. Regulatory programs in Ohio that control the disposal of potential pollutants on land and in subsurface excavations.		
Demolition Debris Licensed Facilities		
Hazardous Waste Management System	OAC Chapter 3745-50 et seq.	http://www.epa.state.oh.us/dhwm/
Industrial Solid Waste Landfill Facilities	OAC Chapter 3745-29	http://www.epa.state.oh.us/dsiwm/pages/indupro.html
Licenses for Solid Waste, Infectious Waste Treatment, or Construction and Demolition Debris Facilities	OAC Chapter 3745-37	http://www.epa.state.oh.us/dsiwm/pages/3745-37.html
Management Standards for Universal Waste	OAC Chapter 3745-273	http://www.epa.state.oh.us/dhwm/guidancedocs.html#UW
Oil and Gas Production	OAC Chapter 1501:9-1 et seq.	http://www.ohiodnr.com/mineral/oil/index.html
Residual Solid Waste Disposal	OAC Chapter 3745-30	http://www.epa.state.oh.us/dsiwm/pages/reswpro.html
(Home) Sewage Treatment Systems	Ohio Dept of Health OAC Chapter 3701-29	http://www.odh.ohio.gov/rules/final/f3701-29.aspx
Sewage Sludge	OAC Chapter 3745-40	http://www.epa.state.oh.us/dsw/sludge/biosolid.html
Solid Waste and Infectious Waste Regulations	OAC Chapter 3745-27	http://www.epa.state.oh.us/dsiwm/
Underground Injection Control Program	OAC Chapter 3745-34	http://www.epa.state.oh.us/ddagw/uic.html
Underground Storage Tanks	OAC Chapter 1301:7-9	http://www.com.state.oh.us/sfm/bust/
Used Oil Management Standards	OAC Chapter 3745-279	http://www.epa.state.oh.us/dhwm/guidancedocs.html#used
Voluntary Action Program	OAC Chapter 3745-300	http://www.epa.state.oh.us/derr/volunt/volunt.html

7.01 Future Needs

Additional up to date information about the interaction of ground waters with surface waters is needed in certain areas of the State, including the karst regions, the Mad River Valley and the Big Darby Creek watershed. The Agency intends to include such information in future updates to the State Water Quality Management Plan.

8 Assessment of Water Quality and Regional Wastewater Treatment Needs

This Chapter presents Ohio EPA's conclusions regarding the question of whether regional wastewater facility planning on a large, comprehensive and inter-governmental scale is necessary to address water quality issues and population forecasts. This is an important question because it determines the future course of wastewater facility planning conducted at the local level. Ohio EPA's findings on this question could be that current and future localized pollution problems can be addressed through ongoing efforts and the capacities of the individual local communities identified. Alternatively, the scope of current or potential water quality problems could be such that a coherent regional plan is needed to address the water quality, sewage collection and treatment needs of a larger area. The management agencies identified in Chapter 9 will need to undertake the more comprehensive facility planning work in the areas (counties) identified in this Chapter.

Information on water quality, population trends and condition of the wastewater infrastructure was examined in 42 of the 88 counties in Ohio⁴. The sources of information on current water quality conditions were the *Ohio 2004 Integrated Water Quality Monitoring and Assessment Report* and other selected biological and water quality survey reports prepared by Ohio EPA. Collectively these reports present a reasonably complete picture of whether streams, lakes and rivers meet their intended aquatic life and recreational standards. Information about the causes and sources of pollution is also available in these reports. Generally, if the reports identified that the attributes listed in the Table 8-1 were a significant cause or source of pollution in local waterways, then the locale was flagged for additional screening as to the need for large scale regional wastewater planning efforts.

The additional screening for regional wastewater treatment needs examined these features:

- current community wastewater information⁵ reported on NPDES permit 2A application forms;
- recent and projected county population trends as reported by the Extension Data Center, Ohio State University Extension, The Ohio State University; and
- the presence or absence of special water resource values indicated by higher water quality standard use designations or antidegradation categories (i.e., Exceptional Warmwater Habitat, Coldwater Habitat, Outstanding State Resource Water).

Not all findings of pollution from domestic wastewater sources merit a conclusion that large scale regional wastewater planning is necessary. Often pollution in rural settings can be remedied through the normal approach of consultation, technical assistance, local facility

⁴ Areawide planning agencies make this assessment for the 24 Ohio Counties where they prepare 208 plans. Twenty two (22) counties in southeast Ohio will be assessed in the next State WQM Plan update.

⁵ The age of the facility, whether or not discharge volumes approach plant design capacity, design and condition of the collection system, etc.

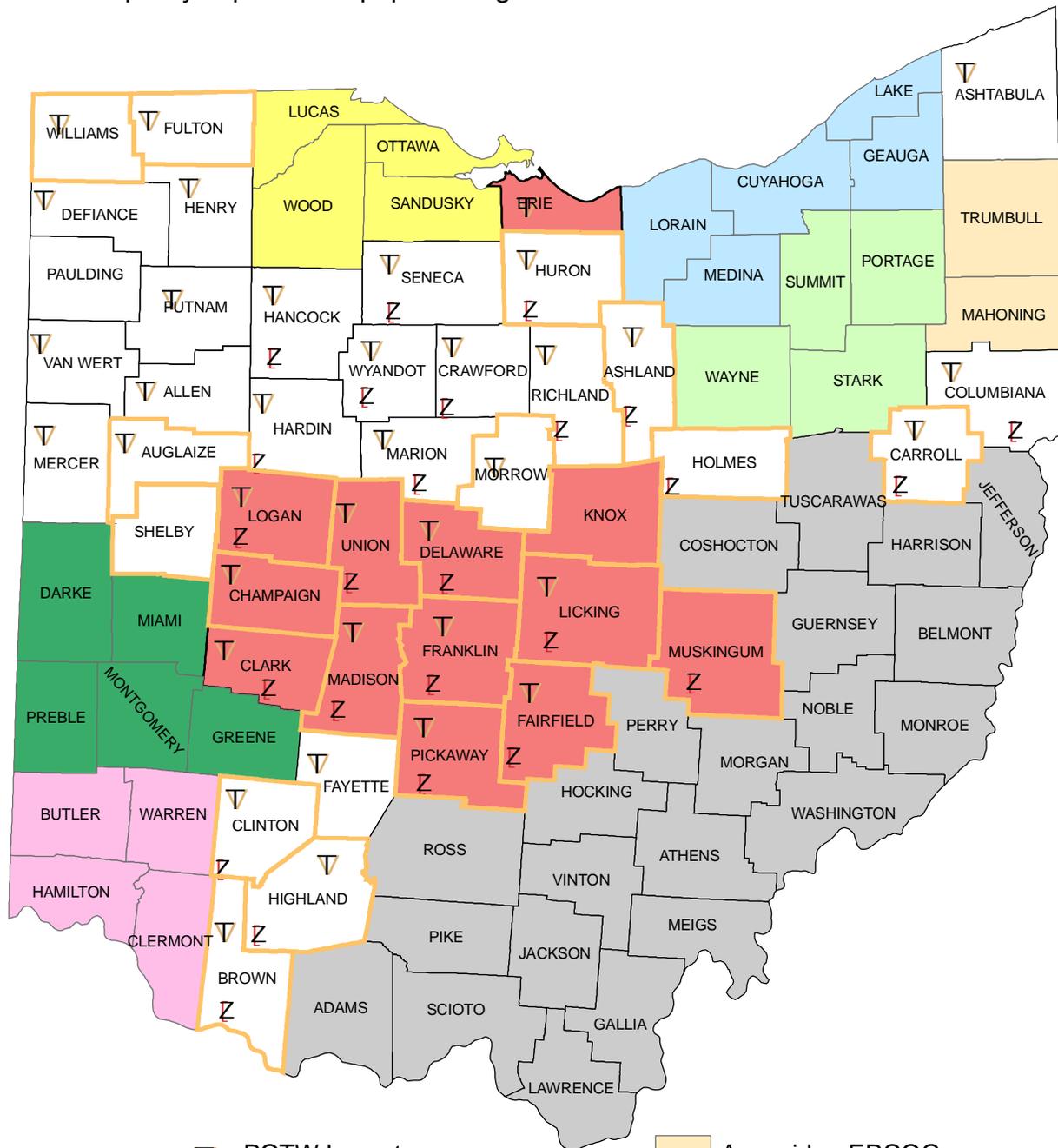
planning, and if needed, design and construction of upgraded local wastewater infrastructure. The need for large scale regional wastewater planning most frequently arises in situations involving more highly populated urban areas, areas of recent and anticipated population growth, or in areas of especially high water resource value.

Figure 8-1 summarizes the results of the Agency's analysis of where large scale regional wastewater planning is necessary to address current and future treatment capacity needs and to protect water quality. The highest priority counties where such planning is needed are: Champaign, Clark, Delaware, Erie, Fairfield, Franklin, Knox, Licking, Logan, Madison, Muskingum, Pickaway, and Union. These counties have experienced a moderate (5%) to a very high (> 35%) population growth over the past 15 years. They also have known water quality problems associated from domestic wastewater sources and/or special water resource values.

Appendix 8-1 provides additional details on water quality conditions in each County and the information reported on the NPDES permit Form 2A applications for Publicly Owned Treatment Works (POTW). Facilities might not be listed in Appendix 8-1 because of incomplete Form 2A applications, and the information reported has not been verified as accurate in all cases. Detailed water quality and facility information for Franklin County is found in Appendix 8-2.

Table 8-1. Causes and sources of pollution associated with urban and industrial waste treatment issues. Identification of these causes and sources in Ohio EPA reports triggered further consideration of the need for large scale regional wastewater facility planning.
Combined Sewer Overflows
Faulty Septic Tanks
Industrial Point Sources
Localized Water Quality Impacts from Community Wastewater Plants, Including Sewer Capacity and Wet Weather Overflow Issues
Ongoing Land Development
Sewage Line Construction
Small Flows from Package Wastewater Plants
Separate Sewer Overflows
Urban Runoff and Storm
Wet Weather Overflows from Combined Sewers

Figure 8-1. Map of counties showing 13 targets with other features including water quality impacts and population growth rates.



- ▽ POTW Impacts
- ⌘ Septic System Impacts
- ▭ 1990-2004 Population Growth > 5%
- Planning Priority**
- ▭ OEPA - highest priority
- ▭ OEPA - lower priority
- ▭ OEPA - not evaluated
- ▭ Areawide - ERCOG
- ▭ Areawide - MVRPC
- ▭ Areawide - NEFCO
- ▭ Areawide - NOACA
- ▭ Areawide - OKI
- ▭ Areawide - TMACOG

9 Management Agencies and Prescriptions for Sewage Collection and Treatment

Sections 303 and 208 of the Clean Water Act require that the State identify municipal and industrial waste treatment works (a.k.a. publicly owned treatment works, POTWs) and the management agencies responsible for their construction, operation and maintenance [see CFR 130.6(b)(3), (5) & (6)]. Thirty years ago at the start up of the Construction Grants program for federal funding of wastewater improvements this step was of critical importance in the development and funding of cost effective regional solutions to sewage pollution problems.

The 208 plan content regarding sewage collection and treatment needs in the 64 counties of the State 208 Plan is, for the most part, over 20 years old and not reflective of current conditions. Updated information regarding water quality conditions and the need for large scale regional planning is presented in Chapter 8 for 42 counties where Ohio EPA is responsible for 208 plan content. Ohio EPA has prepared an updated list of management agencies responsible for planning, constructing and operating POTWs in these same 42 counties. This update is found in Appendices 9-1 through 9-4. Information for the remaining 22 counties in southeast Ohio will be updated in 2006.

Specific prescriptions regarding wastewater collection and treatment responsibilities are listed in Appendix 9-1 where recent facility planning work was available to the Agency and it met the criteria listed in Table 9-1. In others situations generic prescriptions regarding wastewater collection and treatment responsibilities are provided that reflect existing legal authorities and responsibilities under State laws and regulations. Local communities may be asked to update facility planning information as a means to create specific prescriptions in subsequent State 208 plan updates. See Table 9-2 for an overview of the status of wastewater prescriptions in various Ohio counties.

Appendices 9-1 through 9-4 replace all prior State 208 and WQM Plan content regarding the identification of municipal and industrial waste treatment works, responsible management agencies and implementation measures for the 42 counties covered by this update.

Table 9-1. Facility planning guidelines. Entities performing wastewater facility planning should consider the following guidelines in order to assist the State with information that can be included in the updates to the State 208 plan.	
Steps	Materials Submitted in Facility Plan
1. Delineate current service area	Provide up to date maps of the current sewer service area with all trunk lines and pump stations shown. If possible these maps should be in a standard GIS format, or a CAD format transferable to GIS software.
2. Evaluate sewer system conditions	Identify needed improvements; provide cost estimates.
3. Evaluate need for additional sewer service area	Define a study area (FPA); delineate the geographic area that was evaluated relative to growth/development and the need for central sewers (provide on map).
4. Delineate projected service area	Forecast and map new areas expected to be sewerred in the next 20 years (projected service area); provide cost estimates.
5. Develop prescriptions for wastewater treatment in areas without sewers	Evaluate options and select interim prescriptions for areas expected to be sewerred within 20 years; Evaluate options and select permanent prescriptions for areas not expected to have sewers.
6. Evaluate wastewater treatment capacity	Itemize improvements, if any, to meet current needs (population now served) and provide cost estimates.
7. Determine future capacity need for treatment	Forecasts of population growth and other demands used assess the treatment capacity needed in next 20 years .
8. Evaluate future wastewater treatment capacity options	Identify feasible alternatives, select most likely option(s); Itemize improvements to meet future needs and provide cost estimates.
9. Develop general plan to implement improvements	Provide a capital improvement plan to finance necessary sewer and treatment upgrades; Include a schedule for improvements (sewers and treatment plant); Provide an operation and maintenance plan.
10. Qualify as Management Agency	Agree to provide services indicated in 208 plan; Obtain written agreements with other governmental jurisdictions if service involves more than one jurisdiction.

Table 9-2. A reference chart depicting the priority need for comprehensive regional wastewater planning and the status of specific community wastewater treatment prescriptions in the 64 Ohio counties under the State's 208 Plan.		
Counties	Priority for Regional Wastewater Planning / General Status of Prescriptions	Details found in:
Fairfield, Franklin, Licking	High / Specific prescriptions drafted; local communities should pursue facility planning that meets 208 plan needs	Appendix 9-1, 9-2 & 9-3
Erie	High / Specific prescriptions based on prior planning by TMACOG; local communities should pursue facility planning that meets 208 plan needs	Appendix 9-1 & 9-4
Champaign, Clark, Delaware, Knox, Logan, Madison, Muskingum, Pickaway, and Union	High / Generic prescriptions in place until specific prescriptions can be drafted; local communities should pursue facility planning that meets 208 plan needs	Appendix 9-1
Allen, Ashland, Ashtabula, Auglaize, Brown, Carroll, Clinton, Columbiana, Crawford, Defiance, Fayette, Fulton, Hancock, Hardin, Henry, Highland, Holmes, Huron, Marion, Mercer, Morrow, Paulding, Pickaway, Putnam, Richland, Seneca, Shelby, Van Wert, Williams, Wyandot	Low / Generic prescriptions are appropriate and in place; local communities may pursue facility planning that meets 208 plan needs and draft specific prescriptions for consideration in future State WQM Plan updates	Appendix 9-1
Adams, Athens, Belmont, Coshocton, Gallia, Guernsey, Harrison, Hocking, Jackson, Jefferson, Lawrence, Meigs, Monroe, Morgan, Noble, Perry, Pike, Ross, Scioto, Tuscarawas, Vinton, Washington	Unknown / Not applicable	Next update of State WQM Plan

10 Areawide Agency 208 Plans and Other Areawide State WQM Plan Content

The Areawide Planning Agencies adopt plan amendments through their respective governing boards. Ohio EPA oversight helps determine water quality priorities and consistency with other plan requirements and programs. The initial 208 plans prepared by the Areawide Agencies, and subsequent updates or amendments, are included as part of the State Water Quality Management (WQM) Plan required under Section 303 of the CWA. Areawide Planning Agencies have also prepared other water quality and planning documents that are included by reference in the State WQM Plan (See 10.08 for details).

10.01 Eastgate Regional Council of Governments (ERCOG)

The Eastgate Development and Transportation Agency was created in 1973 as the result of combining the then Council of Governments with the Mahoning and Trumbull Comprehensive Transportation Study. EDATA, as the agency became known, was established as a regional Council of Governments. In 1977 EDATA was authorized by the Governor of the State of Ohio to develop the original Areawide Water Quality Management Plan (AWQMP) pursuant to Section 208 of the Clean Water Act for Mahoning and Trumbull Counties. The Agency has subsequently changed its name to the Eastgate Regional Council of Governments. Additional information about the organization is available on its web site <http://www.eastgatecog.org/>.

The ERCOG documents listed in Table 10-1 comprise the current approved 208 plan for Mahoning and Trumbull Counties. These documents are hereby included by reference in the State Water Quality Management Plan. At this time there are four amendments to the ERCOG 208 Plan that have been approved by the ERCOG's General Policy Board that are pending certification by the State (See Table 10-2).

10.02 Miami Valley Regional Planning Commission (MVRPC)

MVRPC was formed in 1964 under Section 713.21 of the Ohio Revised Code. In the 70's, in response to federal mandates the organization was re-shaped to include elected officials from Darke, Greene, Miami, Montgomery and Preble Counties. Additional information about the organization is available on its web site <http://www.mvrpc.org/>.

In accordance with the Water Pollution Control Act amendments of 1972, MVRPC serves as the Regional Water Quality Planning Agency for the 5-county Miami Valley Region. In this role MVRPC prepared and continually maintains the Areawide Water Quality Management Plan. The Plan is not one document but a series of linked documents, reports, studies, and maps that describe the Miami Valley Region's water resources, identify sources of surface and groundwater pollution, and recommend strategies for addressing them. At this time there are no amendments or changes to the MVRPC 208 Plan that have been approved by the MVRPC Board of Directors that are pending certification by the State.

Table 10-1. List of approved Areawide Agency 208 Plans included by reference in the State WQM Plan.			
Agency	Date ¹	Title	How to Access ²
ERCOG	1977	Areawide Water Quality Plan	contact ERCOG or Ohio EPA
MVRPC	1983	208 Areawide Water Quality Management Plan	contact MVRPC or Ohio EPA
NOACA	11/2000	Clean Water 2000 - 208 Water Quality Management Plan for Northeast Ohio	http://www.noaca.org/cleanwaterplan.html
	12/2003	Clean Water 2000 Water Quality Management Plan Facility Planning Area (FPA) Boundary Update	http://www.epa.state.oh.us/dsw/mgmtplans/208CurrentPlan.html
	03/2005	Clean Water 2000 Water Quality Management Plan Amendment FPA Boundary Changes	contact NOACA or Ohio EPA
NEFCO	1979	Areawide Water Quality Management Plan	contact NEFCO or Ohio EPA
	06/2003	Clean Water Plan 208 Lake Erie Basin Water Quality Management Plan (Portage and Summit Counties)	http://www.epa.state.oh.us/dsw/mgmtplans/208CurrentPlan.html
OKI	06/1977	Regional Water Quality Management Plan	contact OKI or Ohio EPA
	varies	Amendments 1 to 26	
	04/2001	amendment number 27, RE Hunter-Dick's Creek area of Warren County	
	01/2003	amendment number 28, RE Western Hamilton County, City of Harrison and Harrison Twp.	
	10/2004	amendment number 29, RE City of Milford and Clermont County	
TMACOG	1980	Chapter 1 Areawide Overview	http://www.epa.state.oh.us/dsw/mgmtplans/208CurrentPlan.html
	10/2003	Chapters 3 - 7; Water Quality Management Framework, Public Wastewater Treatment, On-Site Sewage Treatment, Agricultural Runoff, Urban Runoff	

¹ A publication date, or date of approval by the governing board of the Areawide Agency.

² Where available a web site has been listed where the document can be accessed on-line. Older materials are available by contacting the organization listed through the following contacts:

Ohio EPA - (614) 644-2876; dan.dudley@epa.state.oh.us

ERCOG - (330) 779-3800; www.eastgatecog.org/

NOACA - (216) 241-2414; www.noaca.org

OKI - (513) 621-6300; www.oki.org

MVRPC - (937) 223-6323; www.mvrpc.org

NEFCO - (330) 252-0337

TMACOG - (419) 241-9155; www.tmacog.org

10.03 Northeast Ohio Areawide Coordinating Agency (NOACA)

NOACA was organized in 1968 and is currently the federally designated Metropolitan Planning Organization (MPO) for five counties of Northeast Ohio, which include Greater Cleveland and the Lorain area. NOACA's planning area covers the five counties of Cuyahoga, Geauga, Lake, Lorain and Medina. Additional information about the organization is available on its web site <http://www.noaca.org/index.html>.

NOACA's first 208 plan entitled *The Northeast Ohio Lake Erie Basin (NEOLEB) Water Quality Management Plan* was finished in 1979. In 2000 the Agency completed a comprehensive update to the 208 Plan entitled *Clean Water 2000 - 208 Water Quality Management Plan for Northeast Ohio*. There have been several amendments made to that plan. See Table 10-1 for the full current plan content. At this time there are a number of amendments to the NOACA 208 Plan that have been approved by the Governing Board that need to be reviewed and added to the State's WQM Plan. See Table 10-2 for these pending updates.

10.04 Northeast Ohio Four County Regional Planning and Development Organization (NEFCO)

NEFCO was established as a water quality planning agency when Summit and Portage Counties split in 1975 from the original make up of NOACA. Stark and Wayne Counties were added to create a regional planning agency for the Akron and Canton areas. The original NEFCO 208 plan was finished in 1979.

NEFCO collaborated with NOACA on a comprehensive update to their 208 Plan covering Summit and Portage Counties (the Lake Erie basin portion of the planning area) that was completed in 2003. A similar effort to update the Ohio River basin portion of the NEFCO planning area was recently approved by the NEFCO governing board. See Table 10-1 for the current plan content, and Table 10-2 for pending updates.

10.05 Ohio Kentucky Indiana Regional Council of Governments (OKI)

OKI was formed in 1964 and currently has 105 member organizations representing local governments and community groups from the eight counties in Ohio, Kentucky and Indiana that comprise the greater Cincinnati area. In 1974 OKI became the recognized regional waste treatment management planning agency in all 3 States. Additional information about the organization is available on its web site (<http://www.oki.org/index.asp>).

The four counties in Ohio included in OKI's 208 plan are Butler, Clermont, Hamilton and Warren. The OKI documents listed in Table 10-1 comprise the current approved 208 plan for these counties. These documents are hereby included by reference in the State Water Quality Management Plan. At this time there is one amendment to the OKI 208 Plan that have been approved by the Board of Trustees that needs to be reviewed and added to the State's WQM Plan.

10.06 Toledo Metropolitan Area Council of Governments (TMACOG)

Regional planning efforts in the Toledo area began in 1962 through the locally initiated Toledo Regional Area Plan for Action (TRAPA). TMACOG was formally organized in 1968 under the provisions Chapter 147 of the ORC, and subsequently merged with TRAPA in 1975. By 1975 TMACOG was also fully designated as the water quality planning agency under Section 208 of the Clean Water Act. Additional information about the organization is available on its web site <http://www.tmacog.org/>.

TMACOG's 208 Plan was originally developed between 1976 and 1980. From 1980 to 1998 updates were made as needed, particularly in Chapter 4, which deals with public sewage treatment facilities. From 1998 to the present TMACOG has prepared a number of 208 plan updates. See Table 10-1 for the current plan content, and Table 10-2 for pending updates.

10.07 Updated Areawide 208 Plans Ready for Certification and Approval by U.S. EPA

Five of the six areawide planning agencies have recently completed amendments or updates to their 208 Plans. While the details of the updating process used varied among the agencies, the basic approach was similar and involved staff and technical committee consideration of the changes, some degree of public notification and involvement regarding the changes, and a final step of approval by the organization's governing body. Each Agency then submitted its changes to Ohio EPA and requested that the new material be certified and forwarded to U.S. EPA for approval. All of the Areawide Agency 208 Plan updates are listed in Table 10-2. The documents can be accessed through the Division's web page (<http://www.epa.state.oh.us/dsw/mgmtplans/208index.html>).

As part of the update to the State WQM Plan Ohio EPA performed a review to ensure consistency with other parts of the State's 208 and WQM Plan. An opportunity for additional public review of the Areawide Agency material is afforded when the State WQM Plan update is released for comment and a public meeting is held. Pending the review of comments received, the Areawide Agency 208 Plan updates listed in Table 10-2 will be considered for certification by the Governor and subsequent submission to U.S. EPA.

Table 10-2. List of updates to Areawide Agency 208 Plans adopted by their respective governing boards and awaiting certification by the Governor as an element of the State WQM Plan.		
Agency	Date	Title / Content Note
ERCOG	Varies	<i>Amendments to Area Water Quality Plan, Mahoning and Trumbul Counties, Ohio/ Facility Planning Area boundaries, wastewater prescriptions and amendment process, per General Policy Board Resolution Nos. 024-2001, 058-2001, 046-3003, 033-2004</i>
MVRPC	N/A	None at this time
NOACA	06/2005	<i>Areawide Water Quality Plan , 2005 Update to Clean Water 2000 Plan / per resolutions 2005-030; changes to Chapter 4 -Wastewater Management Facility Planning; five (5) FPA boundary changes; updated sewer planning options map; certified community-level population and employment allocations</i>
	09/2005	<i>Clean Water 2000 Water Quality Management Plan Facility Planning Area Boundary Change / resolution 2005-042; changes to Greater Mentor / Painesville FPA</i>
NEFCO	07/2005	<i>Clean Water Plan Ohio River Basin Update Water Quality Management Plan, facility plan updates for Twinsburg and Akron, and Ohio EPA addendum / comprehensive update to 208 Plan</i>
OKI	11/2005	<i>Amendment number 30 Regional Water Quality Management Plan / Facility Planning Area updates in Warren County</i>
TMACOG	10/2005	<i>TMACOG Areawide Water Quality Management Plan / comprehensive review and update of 208 Plan</i>

10.08 Other Areawide Agency Planning Documents in the State WQM Plan

Between approximately 1983 and 1993 the Areawide Agencies and Ohio EPA prepared a great many documents of various kinds that were included by reference in the State's WQM Plan. An attachment to the State WQM Plan called the Priority and Implementation Program Process (PIPP) was used as a running compendium for all of the available information known to Ohio EPA regarding the nine (9) State WQM Plan elements.

1. Total maximum daily loads (TMDLs)
2. Effluent limits
3. Municipal and industrial waste treatment
4. Nonpoint source management and control
5. Management agencies
6. Implementation measures
7. Dredge and fill program
8. Basin plans
9. Ground water

There was a great deal of overlap and multiple listings of documents under the format used. For example, the same set of documents were listed as "WQM Plan Content" for the "OKI area" under the plan elements 1 and 2. In most situations references to original plans or documents were never removed as newer information was simply tacked onto the presentation of information. Over time many of the older documents have become outdated and of very limited use for making decisions about water quality today. In fact a few of these historically referenced documents can no longer be located.

The reader is referred to Attachment C of the 1993 State WQM Plan Certification for the last rendition of the PIPP plan content that was certified by the Governor (available on the Division's web page: <http://www.epa.state.oh.us/dsw/mgmtplans/208CurrentPlan.html>). While the State WQM Plan has been updated several times in recent years there has been little attention paid to the PIPP content until now. In 2004 all areawide Agencies were invited to undertake the task of reviewing and updating PIPP content using grant funding provided by U.S. EPA under Sections 205j and 604b of the Clean Water Act. OKI has finished the task and the 2006 State WQM Plan update includes this new information in lieu of the 1993 material. See Table 10-3 and Appendix 10-1 for details.

Until this review task is completed by other areawide Agencies and Ohio EPA staff the remainder of the 1993 PIPP plan content has been retained in the 2006 State WQM Plan update. This is done with the caveat that appropriate judgment must be applied regarding the age and applicability of information found in these historical documents and PIPP text. Table 10-4 provides an accounting of historical areawide Agency documents.

Table 10-3. Updated State WQM Plan content provided by areawide Agencies. This information is in addition to the specific Section 208 Plan maintained by areawide agencies. Documents are catalogued under the nine State WQM Plan elements. Ohio EPA is responsible for all materials listed under planning elements 1 (TMDLs) and 2 (effluent limits).

Agency	Plan Elements	Updated documents and text included in State WQM Plan by reference	Status of Review & Documents
OKI	3, 4, 5, 6, 7, 8 and 9	All documents and text identified in Appendix 10-1	OKI reviewed the historical information from 1993 State WQM Plan and prepared the material in Appendix 10-1; pending review of comments, material will be part of 2006 State WQM Plan
Ohio EPA	1	TMDLs <u>OKI</u> - Ohio EPA. 2004. Total Maximum Daily Loads for the Mill Creek Basin.	Ohio EPA reviewed the historical information from the 1993 State WQM Plan that applied to the OKI counties (see Appendix 10-6). The content under elements 1 and 2 are hereby removed from the State WQM Plan and replaced with the documents listed to the left
Ohio EPA	2	Effluent limits - see Chapter 3	

1. Total maximum daily loads (TMDLs)
2. Effluent limits
3. Municipal and industrial waste treatment
4. Nonpoint source management and control
5. Management agencies
6. Implementation measures
7. Dredge and fill program
8. Basin plans
9. Ground water

Table 10-4. An accounting of historical Areawide Agency documents included by reference in the 2006 State WQM Plan update. Documents are catalogued under the nine State WQM Plan elements. The majority of these documents were submitted pursuant to grant work plans under funding provided by U.S. EPA under Sections 205j and 604b of the Clean Water Act.

Agency	Plan Elements	Documents and text included in State WQM Plan by reference	Status of Review & Documents
ERCOG	3, 4, 5, 6, and 9	All documents identified in the EDATA entries in 1993 State WQM Plan Certification, Attachment 3 - Priority and Implementation Program Process (see Appendix 10-2)	Review pending
MVRPC	3, 4, 5, 6, 8, and 9	All documents identified in the MVRPC entries in 1993 State WQM Plan Certification, Attachment 3 - Priority and Implementation Program Process (see Appendix 10-3)	Review pending
NOACA	3, 4, 5, 6, 8, and 9	All documents identified in the NOACA entries in 1993 State WQM Plan Certification, Attachment 3 - Priority and Implementation Program Process (see Appendix 10-4)	Review pending
NEFCO	3, 4, 5, 6, 7, 8, and 9	All documents identified in the NEFCO entries in 1993 State WQM Plan Certification, Attachment 3 - Priority and Implementation Program Process (see Appendix 10-5)	Review pending
OKI	3, 4, 5, 6, and 9	All documents identified in the OKI entries in 1993 State WQM Plan Certification, Attachment 3 - Priority and Implementation Program Process (see Appendix 10-6)	Review complete; see Table 10-3 and Appendix 10-1
TMACOG	3, 4, 6, 7, 8, and 9	All documents identified in the TMACOG entries in 1993 State WQM Plan Certification, Attachment 3 - Priority and Implementation Program Process (see Appendix 10-7)	Review pending

1. Total maximum daily loads (TMDLs)
2. Effluent limits
3. Municipal and industrial waste treatment
4. Nonpoint source management and control
5. Management agencies
6. Implementation measures
7. Dredge and fill program
8. Basin plans
9. Ground water