

Chapter 2

Environmental Policies

Introduction

Areawide Water Quality Management Policies

One role of this *Areawide Water Quality Management Plan* is to describe the roles and responsibilities of the region's many local governments in carrying out specific aspects of the Clean Water Act. These roles protect the environment and public health through municipal sewerage services. They also include promoting good water quality and habitat by preventing non-point source pollution. These governmental services are laid out as *Areawide Water Quality Management Plan* policies in the five chapters following this one:

3. Water Quality Management Framework
4. Public Wastewater Treatment
5. On-Site Sewage Treatment
6. Agricultural Runoff
7. Stormwater Management

Treating or preventing water pollution does not completely fulfill the “fishable and swimmable” goals of the Clean Water Act. A healthy and productive Lake Erie fishery, for instance, requires more than just pure water. It requires a food chain to support the fish, all of which requires habitat and food sources throughout the lake, rivers, and all their tributaries. In addition, there are sources of water quality impairment that don't fit neatly into point or non-point categories. One purpose of this chapter is to record TMACOG's policies on such issues.

In addition to local governments, Designated Management Agencies (see Chapter 3), and regulatory agencies, there are many stakeholders in natural resources. Business and industry require clean water for manufacturing, commerce, transportation, and tourism, to name just a few uses.

Besides businesses, non-profit agencies, governmental agencies and special districts play important roles. Examples include park districts, land conservancies and trusts, and watershed councils. Some stakeholders work through TMACOG committees; others are part of another organization, sometimes with the participation of TMACOG members or staff. This chapter recognizes stakeholder plans in two ways:

- Documents developed by TMACOG committees or staff are incorporated by reference as part of this *Areawide Water Quality Management Plan*.
- Documents of other stakeholders are recognized as compatible plans, whose goals TMACOG supports.

Both types of documents so recognized are listed later in this chapter.

Water Quality Goals

Water quality is regulated through Water Quality Standards in the Ohio Administrative Code, and in the Clean Water Act through National Pollutant Discharge Elimination System (NPDES) Permits. NPDES permits legally require wastewater to be cleaned to specific parameters before it may be discharged. State and federal laws regulate wetlands, landfills, onsite sewage systems, animal feeding operations, among others. Other laws and documents define the principles of water quality protection.

Clean Water Act

The Clean Water Act (PL 92-500 and its revisions) is often characterized as calling for “fishable and

swimmable” waters. Although the Act does not use this precise phrase, this is a concise way of putting it.

- (1) *it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;*
- (2) *it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;*
- (3) *it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;*
- (4) *it is the national policy that Federal financial assistance be provided to construct publicly owned waste treatment works;*
- (5) *it is the national policy that areawide treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State;*
- (6) *it is the national policy that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone and the oceans; and*
- (7) *it is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution¹*

The Water Pollution Control Federation, now the Water Environmental Federation, made these observations:

PL 92-500 established the following precepts: First, no discharger can assume the right to pollute navigable waters. All discharges must obtain a permit to continue such actions. Second, permits shall contain limitations on the composition and concentrations of the polluting substances in them. ... Third, some of the permit conditions are based on the technological capability of control, rather than on the biological capability of receiving waters to purify themselves. “Dilution is not the solution to pollution,” as the saying goes. ... Fourth and finally, controls higher than the minimum are to be based on receiving water quality.²

The Six “Free-Froms”

Ohio Administrative Code, besides setting quantifiable water quality standards and stream use attainments, states clean water goals in qualitative terms that are easy to visualize. It includes six statements of types of pollution that streams are to be free from.³ They define a desired future state for waterways, which discharge permits and numerical standards are intended to achieve.

The following general water quality criteria shall apply to all surface waters of the state including mixing zones. To every extent practical and possible as determined by the director, these waters shall be:

- (1) *Free from suspended solids or other substances that enter the waters as a result of human activity and that will settle to form putrescent or otherwise objectionable sludge deposits, or that will adversely affect aquatic life;*
- (2) *Free from floating debris, oil, scum and other floating materials entering the waters as a*

1 Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) Title I Sec. 101. (a)

2 *The Clean Water Act with Amendments*, Water Pollution Control Federation, 1982, page 1

3 OAC §3745-1-04

- result of human activity in amounts sufficient to be unsightly or cause degradation;*
- (3) *Free from materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance;*
 - (4) *Free from substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life and/or are rapidly lethal in the mixing zone;*
 - (5) *Free from nutrients entering the waters as a result of human activity in concentrations that create nuisance growths of aquatic weeds and algae.*
 - (6) *Free from public health nuisances associated with raw or poorly treated sewage. A public health nuisance shall be deemed to exist when the conditions set forth in paragraph [below] are demonstrated. [the Ohio Administrative Code goes on to define “nuisance.”]*

The Six “Free-froms” are also stated as general objectives of the Great Lakes Water Quality Agreement.⁴

The Great Lakes Water Quality Agreement

The United States and Canada signed the Great Lakes Water Quality Agreement in Ottawa on November 22 1978. The Agreement’s stated purpose was:

The purpose of the Parties is to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem. In order to achieve this purpose, the Parties agree to make a maximum effort to develop programs, practices and technology necessary for a better understanding of the Great Lakes Basin Ecosystem and to eliminate or reduce to the maximum extent practicable the discharge of pollutants into the Great Lakes System.

Consistent with the provisions of this Agreement, it is the policy of the Parties that:

- (a) *The discharge of toxic substances in toxic amounts be prohibited and the discharge of any or all persistent toxic substances be virtually eliminated;*
- (b) *Financial assistance to construct publicly owned waste treatment works be provided by a combination of local, state, provincial, and federal participation; and*
- (c) *Coordinated planning processes and best management practices be developed and implemented by the respective jurisdictions to ensure adequate control of all sources of pollutants.*⁵

The International Joint Commission (IJC) is a binational organization established by the Boundary Waters Treaty in 1909 to advise the Governments of the United States and Canada on preventing or resolving problems along their common border. This includes addressing the pollution problems of the Great Lakes. Over the years the IJC has become involved in issues related to such matters as water and air quality, lake levels, and power generation.

Several Annexes to the Agreement have been adopted over the years. Two are of specific concern for this Areawide Water Quality Management Plan.

⁴ *Great Lakes Water Quality Agreement of 1978 as Amended by Protocol Signed November 18 1987, Article III. International Joint Commission, 1989.*

⁵ *Great Lakes Water Quality Agreement of 1978 as Amended by Protocol Signed November 18 1987, Article II. International Joint Commission, 1989.*

Annex 3, the Phosphorus Load Reduction Supplement was signed on October 16 1983.

The purpose of the following program is to minimize eutrophication problems and prevent degradation with regard to phosphorus in the boundary waters of the Great Lakes System. The goals of phosphorus control are:

- (a) Restoration of year-round aerobic conditions in the bottom waters of the Central Basin of Lake Erie;*
- (b) Substantial reduction in the present levels of algal biomass to a level below that of a nuisance condition in Lake Erie...⁶*

The Phosphorus Control Annex set specific targets for phosphorus load reductions to Lake Erie. It called for cutting annual loading from its 1976 level of 20,000 metric tons per year to 11,000 metric tons. In 2007, Ohio EPA convened its *Ohio Lake Erie Phosphorus Task Force* to determine what practices may have changed since 1995 that could increase dissolved reactive phosphorus loads, and lead to algae blooms. This issue is discussed in Chapter 1.

Remedial Action Plans

On November 18 1987 Annex 2 for Remedial Action Plans and Lakewide Management Plans was signed in Toledo, Ohio. This Annex defined an “Area of Concern” (AOC) as “a geographic area that fails to meet the General or Specific Objectives of the Agreement where such failure has caused or is likely to cause impairment of beneficial use or of the area’s ability to support aquatic life.”⁸ Four AOCs are located in Ohio: Ashtabula, Cuyahoga, Black, and Maumee Rivers.

Remedial Action Plans (RAPs) were undertaken for all forty-three of the AOCs to provide a coordinated cleanup and restoration of impaired beneficial uses of waterways. The Agreement identifies fourteen beneficial uses which may result from “a change in the chemical physical or biological integrity of the Great Lakes System.” RAPs were charged with undertaking “...a systematic and comprehensive ecosystem approach to restoring and protecting beneficial uses in Areas of Concern ...”

The beneficial use impairments identified by Annex 2 of the Agreement are:

- (1) Restrictions on fish and wildlife consumption;*
- (2) Tainting of fish and wildlife flavor;*
- (3) Degradation of fish and wildlife populations;*
- (4) Fish tumors or other deformities;*
- (5) Bird or animal deformities or reproduction problems;*
- (6) Degradation of benthos;*
- (7) Restrictions on dredging activities;*
- (8) Eutrophication or undesirable algae;*
- (9) Restrictions on drinking water consumption, or taste and odor problems;*
- (10) Beach closings;*
- (11) Degradation of aesthetics;*

⁶ *Great Lakes Water Quality Agreement of 1978 as Amended by Protocol Signed November 18 1987, Annex 3. International Joint Commission, 1989.*

⁸ *Great Lakes Water Quality Agreement of 1978 as Amended by Protocol Signed November 18 1987, Annex 2. International Joint Commission, 1989.*

- (12) *Added costs to agriculture or industry;*
- (13) *Degradation of phytoplankton and zooplankton populations; and*
- (14) *Loss of fish and wildlife habitat.*

The beneficial use impairments apply specifically to the lower Maumee River because it is an Area of Concern. The two other major rivers in the region, the Portage and the Sandusky, are not Areas of Concern. The beneficial use impairments also apply to these rivers because they are tributaries of Lake Erie, and beneficial use impairments are an issue for the Lake Erie Lakewide Management Plan (LaMP). The difference for the three rivers is that for the Maumee, an AOC, there is an emphasis on *restoration* of beneficial uses. For the Portage and Sandusky, not AOCs, there is a greater emphasis on *protection* of beneficial uses.

Environmental Quality Policies

Use of Policies

This Plan adopts the following statements as TMACOG policy and guidance to staff. These policies are set to fulfill the goals of the Clean Water Act and the Great Lakes Water Quality Agreement at the local and regional level.

The policies set by this plan should be used for the following purposes:

- (1) Set goals for the TMACOG *Annual Work Plan* and committees of TMACOG, subject to approval of the TMACOG Board of Trustees.
- (2) Set goals for projects and funding applications to be conducted by TMACOG staff and committees of TMACOG subject to approval of the Chairman of the TMACOG Environmental Council.
- (3) Support projects and funding applications of TMACOG members, project partners, and environmental stakeholders of the region, subject to the approval of the Chairman of the TMACOG Environmental Council.
- (4) Support financial assistance requests through the “A-95” Regional Clearinghouse Review Process. Compatible projects should be recommended to the federal funding agency as “consistent with regional goals,” subject to approval by the TMACOG Executive Committee.
- (5) Support federal, state, and local legislation subject to approval by the TMACOG Board of Trustees

Policy and Goal Statements

The following policy and goal statements are endorsed by the Plan:

- (1) Support public wastewater treatment infrastructure
 - a) Support implementation and funding of public wastewater collection and treatment needs identified in Chapters 4 and 5 of this Plan
 - b) Assist Designated Management Agencies (DMAs), as identified in Chapter 3 of this Plan, in planning, implementing, and financing sanitary sewerage infrastructure

- c) Coordinate DMAs and provide technical assistance to plan efficient and cost-effective sanitary sewerage facilities
 - d) Coordinate DMAs and provide technical assistance to assist in meeting NPDES permit requirements
- (2) Support Federal Assistance for Public Wastewater Treatment Infrastructure Financing
- a) The federal government should participate in funding projects by funding at least a base percent of mandated sewerage projects through grant funding. Implementation schedules should be based on available grant funding. Support should be in the form of grants, in preference to loans, using Clean Water Act §201 grants, USDA Rural Utility Service, or equivalent mechanisms.
 - b) The criteria for an “affordable” sewerage project should be based on comprehensive economic factors, rather than a set percentage of Median Household Income. Sewerage mandates should take into account the point of diminishing returns, or cost/benefit analysis of environmental benefit for expenditure of money. In particular the criteria avoid imposing an economic or competitive disadvantage on local businesses.
 - c) State Revolving Fund loans, if used for economic stimulus, should provide zero percent or negative interest loans to communities.
 - d) The federal government needs to be a partner with local governments by providing grant funds for sewerage improvements. Communities that do not receive federal grant funds should instead be granted time flexibility on CSO mandates until a new implementation schedule can be developed based on the redefined “affordability” criteria that account for community economic impact.
- (3) Reduce Eutrophication and Nutrient Loadings
- a) Reduce phosphorus loadings to Lake Erie and achieve targets of the Phosphorus Reduction Strategy
 - b) Reduce nitrogen loadings to Lake Erie and its tributaries to control eutrophication and protect drinking water sources
 - c) Support and provide financial assistance for best management practices to reduce nutrient loadings to Lake Erie and its tributaries.
- (4) Reduce Sediment Loading and Erosion
- a) Support and provide financial assistance for best management practices to reduce erosion and sediment loadings to Lake Erie and its tributaries, and achieve clear water
 - b) Reduce sediment loading to the Maumee River to maintain the economic viability of Toledo Harbor and its shipping channel
 - c) Support full state and federal funding for agricultural conservation incentive programs that encourage farmers to preserve floodplains, wetlands, and riparian habitat. Support includes but is not limited to the Conservation Reserve Enhancement Program (CREP).

- (5) Disposal/Reuse/Reduction of Maumee River Channel Dredged Material
- a) It is imperative for maintenance dredging of the Toledo shipping channel to provide access to the Port of Toledo for the economic benefit of the entire region.
 - b) Support reduction and ultimate elimination of disposal of Toledo harbor dredge material by discharge into Maumee Bay or Lake Erie.
 - c) Support measures to beneficially reuse dredge sediment on appropriate upland sites, or to create habitat areas in Maumee Bay or Lake Erie
 - d) Support conservation Best Management Practices throughout the Maumee River basin to reduce the river's sediment and nutrient loading to Lake Erie.
- (6) Support Stormwater Management
- a) Coordinate and provide technical assistance to local governments to fulfill NPDES Stormwater permit requirements efficiently
 - b) Support and provide financial assistance for stormwater best management practices on a watershed basis
 - c) Reduce pollutant loadings to streams from stormwater runoff, including nutrients, sediment, pesticides, oil, and metals.
- (7) Protect Natural Habitat
- a) Preserve, protect, and restore wetlands and natural habitat areas
 - b) Recognize high priority areas for protection and restoration of natural habitat:
 - i. The Oak Openings
 - ii. The Maumee Bay South Coastline
 - c) Preserve, protect, and, where needed, expand floodplains and their stormwater storage capacity for the prevention of flooding and to provide riparian or aquatic habitat
 - d) Support voluntary, compensated acquisition of natural areas for the purpose of preservation or restoration by governmental or non-profit agencies.
 - e) Support recreational use of and public access to waterways and natural areas where they do not endanger the natural habitat

Oak Openings Region

The region's single most important natural habitat area is the Oak Openings region. The Maumee RAP calls for preservation and acquisition of fish and wildlife habitats, specifically recommending wet prairies and oak savannahs of western Lucas County, in the Oak Openings area. The *Swan Creek Plan of Action* gives its highest priority to preserving floodplains and wetlands as natural habitats.

The Oak Openings Region, located within portions of the Swan Creek and Ottawa River watersheds, is a 130 square mile area supporting globally rare oak savanna and wet prairie habitats. It is home to more rare species of plants and animals than any other area of Ohio.

Its trees, plants, sandy soils, wet prairies, and floodplains benefit the region by acting as natural filters for our air and water.

Natural floodplain corridors occur between the Oak Openings Region and Lake Erie along the Maumee River, Swan Creek, and Ottawa River. Preserved natural floodplains in these areas help to balance the effects of development and the resulting downstream effects of increased urban runoff. Floodwater is slowed within the broad forested areas of the floodplain allowing for groundwater replacement, and evaporation to take place.

The Oak Openings Region with its wet prairies and savannas, together with the connecting corridors along the Maumee River, Swan Creek, and Ottawa River should be given the highest priority for preservation. By maintaining the natural character of these areas, they will continue to benefit humans, and wildlife, long into the future.

For these reasons, this Plan recognizes the Oak Openings region as a sensitive and unique habitat area, and recommends it as a priority area for protection and restoration of habitat. Additional areas may be recognized by this Plan upon based on recommendation of the affected watershed council.

Maumee Bay South Coastline

This plan recognizes coastal natural areas as important habitat. They may include wetlands, but also provide shoreline habitat and natural beauty for both recreation users and residents. This plan identifies the south coast of Maumee Bay from the east side of the mouth of the Maumee River to Little Cedar Point within the boundaries of Ohio's Critical Coastal Area⁹.

- (8) Support the Clean Ohio Fund
 - a) Supports State of Ohio funding for the Clean Ohio Fund.
 - b) Requests that the Ohio General Assembly take appropriate steps to authorize Clean Ohio Fund funds, including but not limited to legislation or placing continuation of the Clean Ohio Fund on a statewide ballot measure.

- (9) Support Removal of Drainage Obstructions on the Portage River
 - a) Support removal of logjams that are causing localized flooding problems and removal of individual leaning trees that are likely to cause or contribute to future logjam obstructions.
 - b) Encourage the Boards of Commissioners of Wood, Hancock, and Seneca Counties to direct any obstruction removal projects to be designed to minimize disturbance of riparian habitat or removal of vegetation that does not currently or likely to form logjams.
 - c) Support comprehensive, impartial watershed studies and research on all sources and impacts of flooding on the Portage River analyses conducted under the auspices of appropriate governmental agencies.

- (10) Support Healthy Fish and Wildlife Communities

- a) Eliminate consumption advisories for fish from Lake Erie and its tributaries in the TMACOG region
 - b) Sustain and increase fish populations of Lake Erie and its tributaries, both for number of fish and diversity of species. Reduce fish kills in power plant intakes. Consider the Walleye as our primary indicator species.
 - c) Sustain and increase wildlife populations of the region. Consider the Bald Eagle as our primary indicator species.
 - d) Restore and sustain a healthy benthic macroinvertebrate community to streams of the region.
- (11) Reduce Pesticide Loadings to Lake Erie and its Tributaries
- a) Support best management practices for use of pesticides, both for agricultural and residential purposes
 - b) Support reduced use of pesticides, and use of less persistent pesticides
- (12) Eliminate Persistent Toxic Chemicals
- a) Support remediation of land and stream sediments contaminated with persistent toxic chemicals
 - b) Support the Great Lakes Water Quality Agreement's goal to virtually eliminate discharges of toxic substances in toxic amounts.
 - c) Support funding and implementation of pollution prevention programs
- (13) Reduce Bacterial Contamination
- a) Reduce fecal bacterial loadings to Lake Erie, its tributaries, and their sediments to provide for safe water recreation throughout the bathing season
 - b) Reduce discharges of fecal bacteria and pathogens in wastewater effluent and surface runoff to protect human health and meet recreational use designations of water quality standards
 - c) Support and require replacement of onsite sewage treatment systems by public sewers wherever practicable
 - d) Promote and require proper operation and maintenance of onsite sewage treatment systems in areas where it is not practicable to replace them with public sanitary sewers.
 - e) Eliminate swimming or wading advisories for Lake Erie and its tributaries in the TMACOG region.
- (14) Support Ohio Legislation and Regulations for Onsite Sewage Treatment Systems
- a) Base the definition of "ponding" as a legal nuisance [ORC §3718.011(B)] on evidence of repeated or persistent ponding
 - b) Provisions regulating vertical separation distances between onsite sewage treatment systems and limiting soil layers should allow use of mounded systems and avoid requirements for

mechanical pretreatment equipment.

- c) Support regulations allowing design of subsurface drains (“curtain drains”) to be installed at shallow enough depths to drain by gravity where feasible.
- d) Support a consistent, risk-based methodology for determining seasonal high water table as a limiting condition and the basis for a vertical separation distance from the soil absorption system
- e) Encourage onsite sewage treatment designs to provide effective sewage treatment in the soil conditions of northwest Ohio with a minimum of mechanical equipment; and support research and demonstration projects for such designs
- f) Support grant and revolving loan programs to help low income residents afford onsite sewage system repairs and replacements.

(15) Animal Feeding Operations (AFOs)

- a) TMACOG is neither pro-AFO nor anti-AFO, but stresses that siting, permitting, and operation of AFOs must be fact-based, and founded on sound science and effective Best Management Practices for protection of the environment and public health
- b) support comprehensive, impartial watershed studies and research on all sources and impacts of pollutants, potential impacts on the quality of surface and ground water from application of manure to agricultural fields, impacts to air quality and monitoring of pests related to AFOs
- c) support funding proposals for studies, research, demonstration projects, and implementation related to Best Management Practices related to AFOs
- d) support use of Comprehensive Nutrient Management Plans as a Best Management Practice for using manure as an agricultural resource
- e) support AFO siting criteria that take into consideration soil conditions and geology, avoiding water and gas wells, and proximity to residential areas
- f) recommend studies of infrastructure (especially road) impacts, and infrastructure improvement and maintenance costs resulting from the establishment, expansion, and operation of AFOs
- g) recommends against siting AFOs within the bounds of 100 year floodplains

(16) Control invasive species and prevent introduction of additional invasive species

- a) Support comprehensive federal legislation to prevent the introduction and spread of aquatic invasive species from all sources, ultimately eliminate the introduction and spread of aquatic invasive species from ballast water discharged into the Great Lakes.

(17) Exclude Invasive Asian Carp Species from the Great Lakes

- a) The U.S. Army Corps of Engineers should aggressively expedite full operation of the dispersal barrier system and to establish structural measures to prevent the inadvertent introduction of Asian carp from floodwaters of the Des Plaines River into the Chicago

Sanitary and Shipping Canal.

- b) Federal agencies should take every action necessary and possible to keep Asian carp out of the Great Lakes, including closing the two Chicago locks; chemical controls; increased monitoring (eDNA) and speed up test processing; building additional barriers; finishing the electric barrier system and operating it at optimal power; and the construction of hydrological barriers to prevent overflow (flooding) exchange between the Illinois and Des Plaines River basins, the Illinois and Michigan Canal, and the Chicago Sanitary and Ship Canal.
 - c) The most effective solution for the health of both the Mississippi River and Great Lakes watersheds is separation, barring migration of invasive species, and that this goal must start with investigation to identify alternatives for existing uses of the Chicago Sanitary and Shipping Canal, including for stormwater and wastewater control and commercial and recreational navigation.
 - d) Congress should reinforce the authority for and provide funding to the U.S. Army Corps of Engineers and other federal agencies to develop a specific plan of how to hydrologically separate the Mississippi River and Great Lakes basins to prevent further migration of any Asian carp and to continue aggressive monitoring and response efforts in Chicago-area waterways.
- (18) Support and conduct environmental education programs for both the general public and targeted groups
- (19) Support Beneficial Uses identified by Great Lakes Water Quality Agreement
- a) Support restoration and protection of beneficial uses in the Lower Maumee River AOC
 - b) Support protection of beneficial uses in the rest of the TMACOG, and restoration where needed.
- (20) Protect groundwater for a safe, reliable, and high quality source of potable water
- (21) Protect surface drinking water supplies through watershed programs such as Source Water and Assessment Protection (SWAPs) plans.
- (22) Support protecting the waters of the Great Lakes against bulk diversions outside the watershed
- a) TMACOG encourages the Ohio and Michigan to continue the process of the Great Lakes Basin Water Resources Compact and the Great Lakes Basin Sustainable Water Resources Agreement
 - b) Supports Compact language that does not impose unnecessarily rigid water use restrictions for municipal water supplies.

- (23) Support preparation of Total Maximum Daily Load (TMDLs) assessments for watersheds of the region.

- (24) Support water quality monitoring and assessment to track progress in achieving these environmental policies.

Documents Incorporated into this Plan by Reference

| Title | Author | Year | TMACOG Library Catalogue | Web Address |
|--|--|-----------|--------------------------|---|
| §208 of the Federal Water Pollution Control Act Amendments (P.L. 92-500) as amended by the Clean Water Acts of 1977, 1982, and 1987 (P.L. 95-271, 97-440, and 100-4) | | | On file at TMACOG | |
| Activities and Accomplishments in the Maumee Area of Concern 1991-2001 | Hull & Associates, Maumee RAP | 1996-2006 | NA | http://www.partnersforcleanstreams.org/publications.html |
| American Heritage Rivers Nomination for the Maumee River | TMACOG Toledo/Lucas County Port Authority | 1997 | 1376-Mau | NA |
| Bylaws of the Toledo Metropolitan Area Council of Governments | | | On file at TMACOG | http://www.tmacog.org/Bylaws%20Approved%20by%20G.%20A.%201-30-03.pdf |
| Curriculum Guide: Water Quality Testing for Secondary Schools Maumee Bay Watershed Project | TMACOG, Maumee RAP, Fraleigh | 1993 | 7950-Cur | NA |
| Curriculum Guide: Water Quality Testing for Secondary Schools Maumee Bay Watershed Project | TMACOG Maumee River Area of Concern Remedial Action Plan (RAP) Implementation Committee Fraleigh | 1993 | 7950-Cur | NA |
| Elmore Ohio: Wellhead Protection Plan | TMACOG | 1993 | 1386-Elm (2 vol.) | NA |
| Environmental Resources Inventory: Landfills Dumps & Hazardous Waste Sites | TMACOG | 1993 | 1472.5-TMACOG | NA |
| Environmental Resources Inventory: Prime Agricultural Land TMACOG Region | TMACOG | 1993 | 1370-Env | NA |
| Environmental Resources Inventory: Wetland Areas TMACOG Region | TMACOG | 1992 | 1370-Env | NA |
| Environmental Resources Inventory: Wildlife Habitat Areas TMACOG Region | TMACOG | 1993 | 1370-Env | NA |

| Title | Author | Year | TMACOG Library Catalogue | Web Address |
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| Federal Register §35.1521 et seq. Vol. 44 No. 101, Wednesday May 23, 1979, Rules and regulations | | | On file at TMACOG | NA |
| Flooding and Erosion Related to Urbanization: Swan Creek Watershed Lucas County Ohio | TMACOG Metropolitan Park District of the Toledo Area Earthview Inc. | 1973 | 7560-Flo | NA |
| From Satellites to Earthworms: Improving Farm Management | TMACOG RAP Agricultural Runoff Action Group | 1996 | 1382-Sat | NA |
| Gibsonburg Ohio Wellhead Protection Plan | TMACOG | 1992-4 | 1386-Gib (2 vol.) | NA |
| Lindsey Ohio: Wellhead Protection V.1: Ground Water Information | TMACOG | 1991-2 | 1386-Lin 2 volumes | NA |
| Lucas County Summary of Phosphorus Load Changes from Non-Agricultural Sources: 1982 Vs. 1989 | TMACOG | 1990 | 1464-Luc | NA |
| Making Funding Work for Water & Sewer | TMACOG | 1995 | 3568-Mak | NA |
| Maumee RAP Recommendations Report | TMACOG, Maumee RAP Advisory Committee | 1991 | 1376-Mau | NA |
| Maumee RAP Stage I Report | Ohio EPA, TMACOG, Maumee River Remedial Action Plan Advisory Committee | 1990 | 1376-Mau | NA |
| Maumee River Basin Remedial Action Plan Rap: Investigation Report: Turtle Creek Packer Creek Toussaint River | TMACOG, RAP | 1993 | 1376-Mau | NA |
| Maumee River RAP: Storm Drain Stenciling Program Project Handbook: Dump No Waste Drains to Lake | TMACOG | 1995 | 1466-Mau | NA |
| Maumee Area of Concern Stage 2 Watershed Restoration Plan | Maumee RAP Partners for Clean Streams Duck & Otter Creek Partnership Ohio EPA TMACOG | 2006 | | http://www.partnersforcleanstreams.org/publications.html |

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| Ohio Revised Code Section 167.01 - 167.08, "Regional Councils of Governments" | | | On file at TMACOG | |
| Ohio Revised Code Section 6111.03, "Powers of Director of Environmental Protection." | | | On file at TMACOG | |
| Ottawa County Summary of Phosphorus Load Changes from Non-Agricultural Sources: 1982 Vs. 1989 | TMACOG | 1990 | 1464-Ott | NA |
| Ottawa River -- Swan Creek Urban Runoff Demonstration Project | TMACOG Lucas SWCD | 1993 | 1466-Ott | NA |
| Ottawa River Risk Assessments | Limno-Tech, Intertox, Parametrix for TMACOG | 2001 | 1373-Eco | http://www.epa.gov/glnpo/sediment/OttawaRiver/ra2001/index.html http://www.tmacog.org/Environment/Ottawa%20River%20web%20page/Ottawa_River_Remediation.htm |
| Ottawa River Sediment Remediation Priorities | TMACOG / Hull & Associates / Ohio EPA | 2003 | 1373-Ott | NA |
| Ottawa River Sediment Remediation Priorities | Hull & Associates and Blasland Bouck and Lee for TMACOG / US EPA Region V Great Lakes Regional Program Office (GLNPO) | 2004 | 1373-Ott | NA |
| Sampling Report for the Ottawa River: Toledo, Lucas County, Ohio | US EPA Region V Great Lakes Regional Program Office (GLNPO) / Tetra Tech | 2006 | 1373-Sam | NA |
| Ottawa River Sediment Investigation Report: Stickney Avenue Depositional Zone (report with CD) | TMACOG / Hull / Limno-Tech / US EPA Region V Great Lakes Regional Program Office (GLNPO) | 2007 | 1373-Ott | NA |
| Ottawa River Habitat Restoration Inventory | TMACOG / Mannik & Smith / National Fish and Wildlife Foundation | 2008 | 1370-Ott | http://www.tmacog.org/Environment/Ottawa_River_habitat.htm |
| Package Sewage Treatment Plant Inventory | TMACOG | | Computer database on file at TMACOG | NA |
| Paving Paradise | TMACOG - Maumee RAP - Swan Creek Action Group | 1999 | 1466-PAV | NA |
| Pemberville Ohio Groundwater Protection Plan | TMACOG | 1990-2 | 1386-Pem (2 vol.) | NA |
| Pesticides and Lawn Care | TMACOG | 1993 | 1445-Pes | NA |
| Portage River - Journey to | BGSU, TMACOG | 2001 | 1376-Por | NA |

| Title | Author | Year | TMACOG Library Catalogue | Web Address |
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| the Great Black Swamp | | | | |
| Portage River Basin Council Volunteer Stream Corridor Survey | TMACOG | 1999 | 1376-Por | NA |
| Portage River Basin Water Quality Study | TMACOG | 1995 | 7950-Por (2 volumes) | NA |
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