

# Chapter 1

## Introduction and Overview of the Plan

**This chapter presents an overview of 208 planning, summarizes the original 208 Plan completed in 1981, outlines goals, and provides an overview of the Clean Water Plan.**

### **I. Introduction**

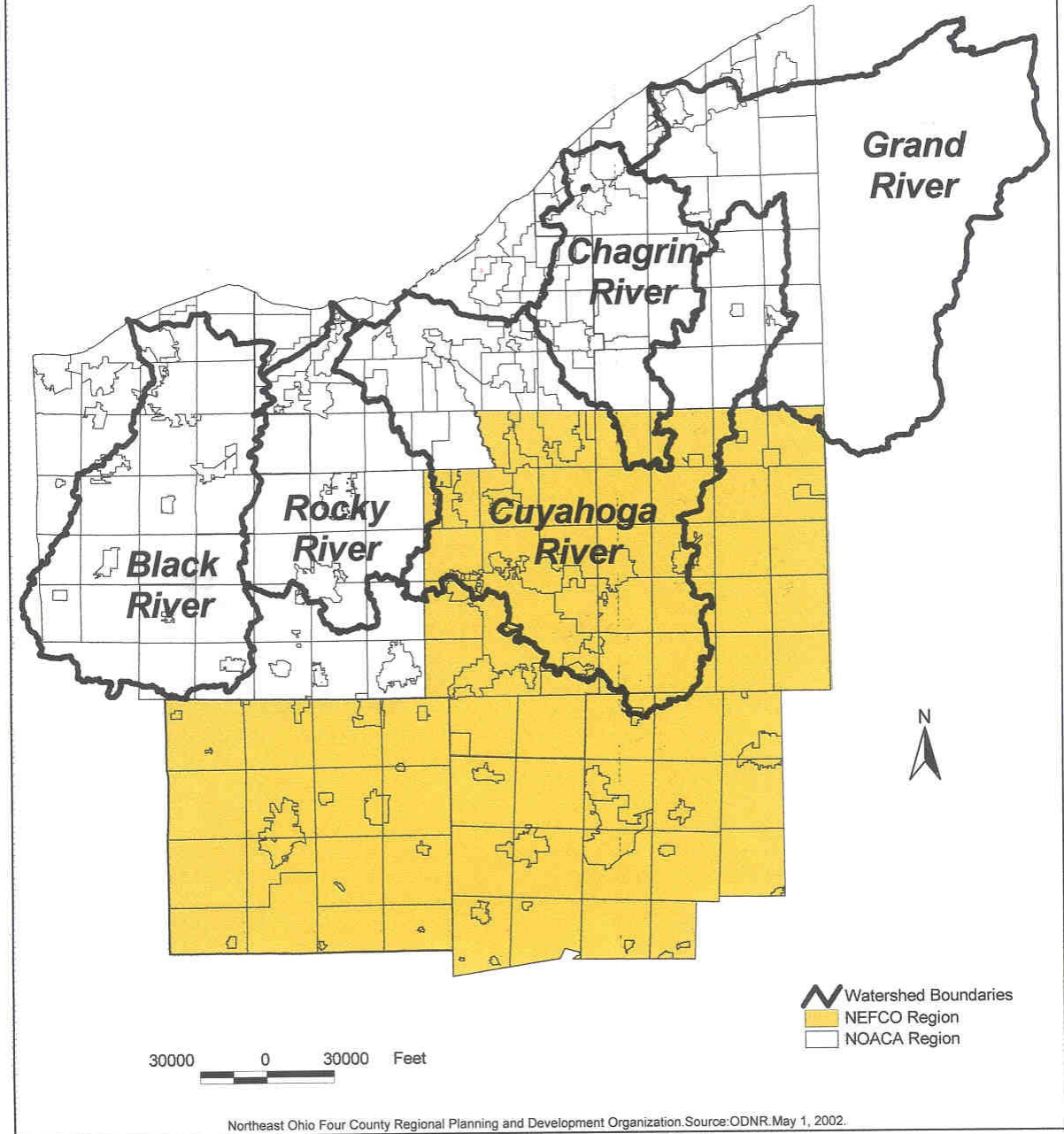
This document is the second major update to the region's 208 areawide water quality management plan (WQMP) since the first one was done in 1981. It is the result of the labor product of the collaborative efforts of many local public officials from the region representing counties, municipalities, sewer agencies, county health agencies, planning departments, conservation agencies and representatives of Ohio EPA, ODNR and the Ohio Department of Health and local watershed groups who assisted staff from NEFCO in formulating the plan.

The update focuses on water quality management information and challenges in five river basins tributary to Lake Erie in Northeast Ohio. From west to east these are the Black River in Lorain and Medina Counties, the Rocky River in Cuyahoga, Lorain, Medina and Summit Counties, the Cuyahoga River in Cuyahoga, Summit, Portage and Geauga Counties, the Chagrin River in Lake, Geauga, Cuyahoga and Portage Counties and the Grand River in Lake, Geauga and Portage. The CWP planning area for the Ohio River Basin includes all of Stark and Wayne Counties, the eastern portion of Portage County, and the southern part of Summit County. This area includes the Tuscarawas River, Nimishillen Creek, Sugar Creek, Killbuck Creek, and tributaries to the Mahoning River, Sandy Creek, Muddy Creek, and Mohican River. Figures 1-1a and b shows the NEFCO Wastewater Management Planning Area with major watersheds.

Both NEFCO and the Northeast Ohio Areawide Coordinating Agency (NOACA) were designated by the Governor of Ohio under provisions of the federal Clean Water Act to perform the areawide planning required under Section 208 of that Act. NEFCO was designated by the Governor of Ohio in 1979 pursuant to 33 U.S.C. Section 1288 (FWPCA Section 208), and NOACA was similarly designated in 1975. These agencies were designated because they are organizations governed by Boards of local elected officials with regional planning responsibilities in a metropolitan area. NEFCO is organized as a Regional Council of Governments under ORC 167.01 **et seq.**

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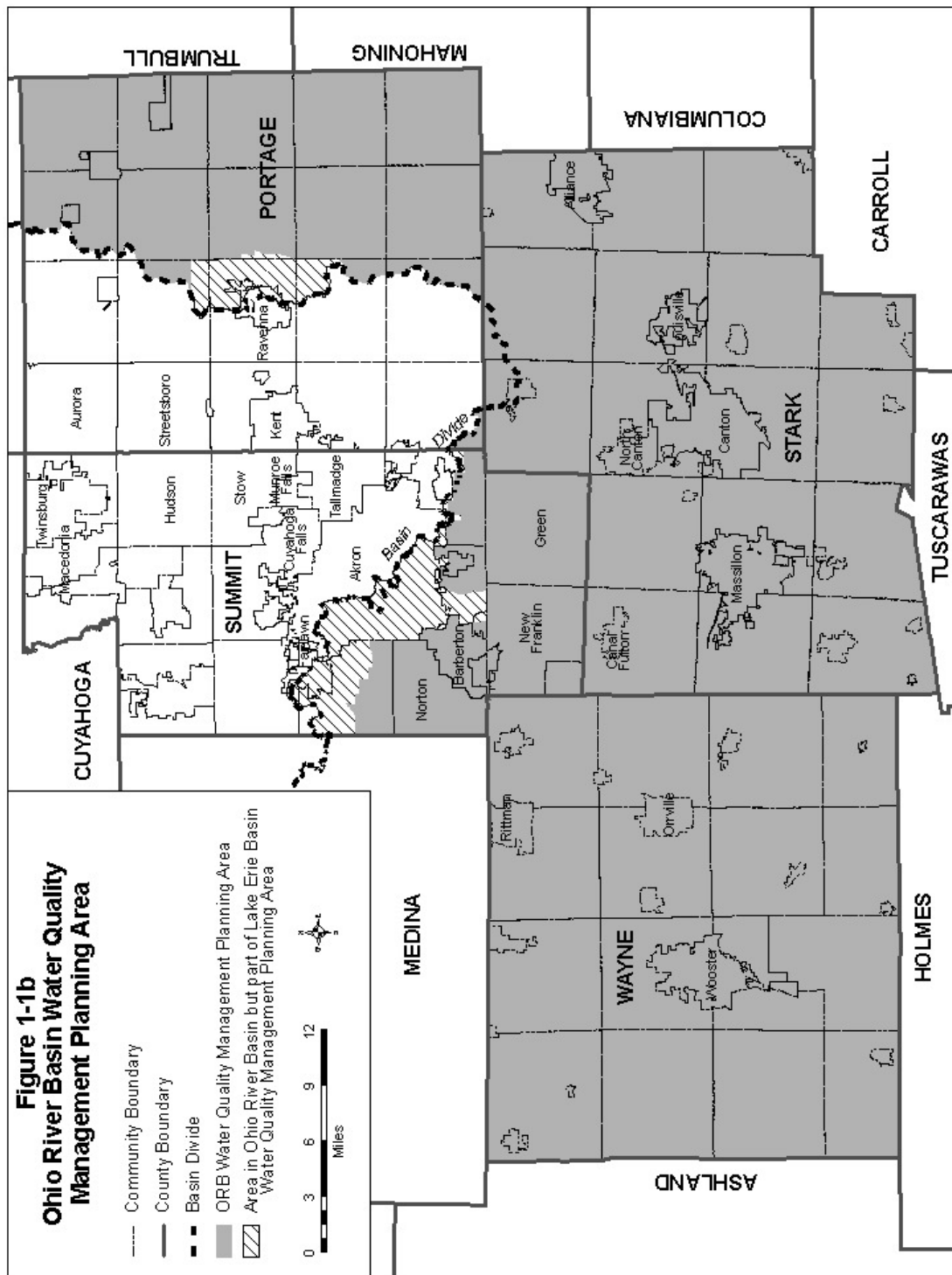
**Figure 1-1a  
Lake Erie Basin Wastewater Management  
Planning Area**



Approved by the NEFCO General Policy Board (GPB)

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## **Section 208 of the Clean Water Act**

Section 208 of the Clean Water Act sets forth requirements for water quality management planning (WQMP). In the urbanized areas of the state, the responsibilities for water quality management planning are shared by areawide and state agencies. Both municipal wastewater treatment issues and nonpoint source management and control are to be addressed in areawide water quality management plans. Water quality management plans guide implementation by defining implementation responsibilities of management agencies with municipal waste treatment or nonpoint source management responsibilities that are thereby designated to perform specific control recommendations. Authority to perform the WQMP function is provided in state law at ORC 6111.02(A), 41-42.<sup>1</sup>

The areawide water quality management plan is one of several tools provided in the Clean Water Act for the State to address water pollution and meet designated water quality standards in lakes, rivers and streams. Other tools include water quality standards setting, water quality assessments, the issuance of National Pollutant Discharge Elimination System (NDPES) permits to control discharges, assistance in financing wastewater management facilities, enforcement, and water quality monitoring activities. In water quality assessment, the state is responsible for evaluating and establishing a water body's capacity for receiving pollutant loads without compromising its intended use. Measuring the assimilative capacity involves establishing for streams Total Maximum Daily Loads (TMDLs) and water quality-based effluent limits. These standards provide a foundation for permit issuance. Table 1-1 illustrates water quality management roles and responsibilities among state, regional and local agencies.

## **II. Original Areawide Water Quality Plans**

### **THE 1979 NORTHEAST OHIO LAKE ERIE BASIN (NEOLEB) PLAN AND THE 1981 NEFCO PLAN**

In 1979 a joint NEFCO/NOACA Board (Northeast Ohio Lake Erie Basin) Board first adopted an Areawide Water Quality Management Plan in 1979. Elements of this plan included:

- 1) a subplan for Publicly-Owned Sewage Treatment Facilities and Facilities Planning Areas (POTW/FPA) which identified public jurisdictions with lead responsibility for managing and building improvements to the wastewater treatment facilities needed to attain water quality standards for the region;

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<sup>1</sup>Confer Ohio EPA's *Continuing Planning Process (Draft 6/30/98)* document for a detailed review of state and federal authority to perform planning and implementation responsibilities under the Clean Water Act.

**Table 1-1: Water Quality Management Functions in Ohio**

<b><u>Function</u></b>	<b><u>Lead Implementation Responsibility</u></b>
Water Quality Monitoring and Assessment	Ohio EPA has lead implementation responsibility
Water Quality Standards Setting	Ohio EPA has lead implementation responsibility
Water Quality Modeling and Total Maximum Daily Loads	Ohio EPA has lead implementation responsibility
Water Quality Management Planning	Ohio EPA and Areawide Planning Agencies have shared planning responsibilities
NDPES Permits Issuance Point Sources Storm Water Permits Pretreatment	Ohio EPA has lead implementation responsibility Ohio EPA has lead implementation responsibility Local POTWs have lead implementation responsibility with Ohio EPA oversight
Public Wastewater Treatment and Conveyances	Local Designated Management Agencies have lead implementation responsibility with Ohio EPA oversight
Sludge Management	Local POTWs have lead implementation responsibility with Ohio EPA oversight: (OAC 3745-40)
Waste Treatment Works Construction State Revolving Fund Loan Management	Ohio EPA and OWDA share management responsibility
Home Sewage Treatment System Management	Local health departments have implementation responsibility with oversight from ODH
Semi-Public Sewage Disposal System Management	Ohio EPA has primary implementation responsibility but delegates some implementation responsibilities to local health departments
Management of Combined Sewers	Local POTWs have implementation and CSO long term control planning responsibility with Ohio EPA oversight
Management of Sanitary Sewers	Local POTWs have SSO long term control planning and implementation responsibility
Nonpoint Source Administration State Assessment State Management Plan Federal Grants Administration State Grants Administration	Ohio EPA has lead implementation responsibility Ohio EPA shares implementation responsibility with ODNR Ohio EPA has lead implementation responsibility ODNR has lead implementation responsibility
Nonpoint Source Controls Storm Water Management Urban Sediment and Runoff Agricultural Pollution Control	Municipalities and counties have implementation responsibility Counties and municipalities have lead implementation responsibility Voluntary controls by individual landowners are undertaken with incentives provided by USDA
Watershed Planning	Various forms of voluntary planning by state and local agencies are undertaken

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- 2) a sewage treatment plant residuals subplan which outlined a coordinated approach to the management and disposal of sewage treatment plant sludge in the planning area;
- 3) a storm water runoff/sediment control subplan, which recommended policies and planning functions for storm water management by various local management agencies in the region, with a role for municipalities, counties, local agricultural agencies, and state agencies. A key recommendation was the implementation of county urban sediment/erosion control programs as permitted by Section 307-79 of the Ohio Revised Code enacted in 1980;
- 4) a rivers and waterways subplan which proposed enactment of legislation whereby projects of regional significance affecting water quality would be subject to a new regional environmental review procedure as well as reviews to be coordinated with local zoning and building permit policies. In addition, the subplan recommended the enactment of Critical Water Resource Protection legislation at the state level;
- 5) an industrial residuals subplan which recommended the establishment of an industrial hazardous waste facility in Northeast Ohio;
- 6) an environmental health subplan which outlined a series of recommendations for improving county level management of home sewage disposal systems in the region;
- 7) a technical program subplan which outlined the water quality data collection and analysis necessary to maintain the plan;
- 8) a continuing planning subplan which spelled out a plan implementation oversight structure and the role of the areawide agencies and local governments in sustaining plan implementation.

#### THE 1981 NEFCO PLAN

On October 20, 1981, the NEFCO General Policy Board adopted a revised and expanded Clean Water Plan which addressed water quality issues in the four county planning area. The Plan contained recommendations in fifteen separate areas, which addressed all known water quality problems in the four counties. Six areas concentrated on “point source” pollution, primarily caused by then inadequate wastewater treatment plants. Recommendations concerning “nonpoint source” pollution are made in six additional areas. The remaining three areas included recommendations for incorporating water quality information into local government decisions, for an ongoing data collection program to assess water quality, and for the institution of an areawide “continuing planning management structure” to coordinate on-going planning activities relating to water quality management.

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NEFCO's plan was divided into four documents:

Volume One:	Summary & Recommendations
Volume Two:	Technical Program & Baseline Documentation
Volume Three:	Point Source Documentation
Volume Four:	Nonpoint Source Documentation

### **Implementation and Updates of the 1979 and 1981 Plans**

Much has happened with the implementation of the plans in the two intervening decades. The municipal waste treatment components of the 1979 and 1981 plans have been virtually completed. Implementation of the nonpoint source elements has been less successful because of the voluntary nature of those recommendations. Nevertheless, some counties and cities have made progress in better management of home sewage systems and in the implementation of urban sediment control programs at construction sites. Other plan elements and responsibilities were carried out by the Ohio EPA.

Most recommendations of the earlier plans were predicated on a twenty-year planning horizon. Nearly three decades have passed since then and it is useful to revisit the water quality management planning issues. While several minor updates to the original plans were made to address changes to management agencies and wastewater facilities planning areas, and to incorporate additional technical studies as they were completed, this plan update represents the first major overhaul of the plan since 2003 (Lake Erie Basin) and 2005 (Ohio River Basin).

### **III. Northeast Ohio's Water Quality Problems Today**

The public investments in wastewater treatment anticipated in the 1979 and 1981 plans have revitalized water quality and aquatic life. However, in spite of these improvements, significant water quality problems remain in the region due to storm water, sanitary sewer overflows and combined sewer overflows, on-site wastewater systems, agriculture, residential and commercial development, and habitat disruption.

Nonpoint pollution sources and storm water runoff now pose greater threats to regional water quality. These threats originate from a variety of potential sources, including new point source discharges from residential and commercial developments, construction activities and the combined effects of land disturbances to construct these new developments. This has transformed the landscape from rural, sparsely populated, vegetated open spaces to large areas of denser populations, with increased in imperviousness (pavements, parking lots, and buildings). This transformation is threatening critical water resources once thought relatively secure from water pollution threats (upland drinking water reservoirs, headwaters areas, and high quality streams once far removed from urbanization). Thus, while the perceived water pollution problems of the

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1970s have largely been addressed, there remains a whole new set of water pollution challenges.

#### **IV. Goals of this 208 Plan Update**

Several goals were established as a framework for plan development:

- 1) The plan should adopt a watershed and subwatershed approach that coordinates agencies addressing point and nonpoint pollution sources as the basis for management planning;
- 2) The plan should optimize use of the existing infrastructure for development prior to investing public monies in new infrastructure;
- 3) The plan should be protective of what has been gained in environmental quality and outline measures needed to be undertaken to meet designated uses with particular attention to enhanced protection of critical water resource areas;
- 4) The planning process should educate local public decision makers on regional water quality management issues; and
- 5) The plan should elicit public support for plan implementation.

#### **Focus of this 208 Plan Update**

This plan update primarily focuses on the threats to water quality posed by the rapidly developing areas of the region. Thus, attention has focused on issues of planned sewer expansions in the suburban counties, on better management of home sewage systems and semi-public sewage disposal systems, on more vigorous attention to the control of nonpoint source pollution, and on the protection of the region's regionally important water resources.

The plan is also concerned with the problems of the older urbanized areas which for the most part have addressed the problems of point source discharges from sewage treatment plants.

The plan includes three forms of directive: **policies, recommendations and strategies.**

**Policies** are definitive water quality management planning responsibilities of the designated areawide planning agency (NEFCO).

**Recommendations** include (1) proposed actions to be undertaken by local public jurisdictions and state agencies to implement the plan under existing authorities of state law or (2) legislative recommendations which require changes in law to implement the plan.

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**Strategies** outline planning steps needed to support implementation of the plan.

The plan articulates the region's future goal to balance development and economic growth with a sustainable high level of water quality. The plan implores public officials and the general public to undertake actions to protect the region's water resources for the next generation. It sets an agenda for continuing water quality management planning in NEFCO's counties for the coming decade.

## **V. Steps to Certification**

The plan update will be circulated for public review and comment from local jurisdictions and agencies, the general public and the Ohio EPA. With approval of this document by the NEFCO General Policy Board, the final plan will be submitted to the Ohio EPA for certification by the Governor who then sends it to the USEPA for approval. Once approved, the plan will become effective.

## **VI. Plan for this Document**

The plan for this document is as follows:

**Executive Summary** - provides a summary of the plan.

**Chapter 1** - provides an overview of the plan.

**Chapter 2** - summarizes existing water quality conditions and expected development trends over the next twenty years.

**Chapter 3** - presents the plans of local and county jurisdictions concerning new wastewater infrastructure, sewers and wastewater treatment facilities, anticipated to be necessary over the next twenty years. These plans are the result of consultations with county, municipal and township officials who developed the local plans. Chapter 3 also discusses how updates to these sewer plans will be addressed by NEFCO in the Clean Water Plan.

**Chapter 4** - presents recommendations for better management of home sewage systems for those large areas of the region which will remain unsewered over the next twenty years. These recommendations are the result of a year long discussion among the seven county health departments with management responsibility in Northeast Ohio.

**Chapter 5** - presents recommendations for implementation of nonpoint source controls by local jurisdictions in several areas including storm water management, riparian protection, urban sediment control, construction site design and others. This chapter also discusses the need for better wet weather standards in the region's urban streams.

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**Chapter 6** - identifies regionally important water resources in Northeast Ohio and makes a series of recommendations for enhancing the protection of these resources.

**Chapter 7** - describes water quality conditions in urban areas of the region and presents an urban streams restoration planning process.

**Chapter 8** - makes recommendations on augmenting the role and impact of watershed planning groups in the region.

**Chapter 9** - describes the processes by which the counties, local jurisdictions and the public have been involved in the plan's development.

**Chapter 10** - presents the program of continuing planning that will be required to assure that the plan is implemented.

**Chapter 11** - describes the process by which this plan will be reviewed and certified by the State.