

Chapter 1

Introduction and Overview of the Plan

In the early 1970's, the Governor of Ohio, under the provisions of the Clean Water Act, designated Eastgate Regional Council of Governments (Eastgate), formerly Eastgate Development and Transportation Agency (EDATA), as the planning agency for Mahoning and Trumbull counties. The goal of Wastewater Treatment Management Planning is to coordinate the efforts of all the water management agencies as they relate to wastewater treatment planning. By coordinating efforts, duplication is minimized, consensus is built, and communication is enhanced. All parties are provided with the opportunity to be involved in the planning affecting their operation. The process also helps ensure that adequate public input occurs. Eastgate submitted their first 208 Plan in 1977. This chapter provides an overview of Eastgate's current 208 planning efforts, summarizes the original 208 Water Quality Management Plan submitted in 1977, and outlines information and goals for the updated plan.

1.1 Introduction

Eastgate's Areawide Wastewater Treatment Management Plan (AWTMP) focuses on water quality management issues within Mahoning and Trumbull County's four major watersheds: (from north to south) the Grand River Watershed, in northwest Trumbull County; the Mahoning River Watershed, in central Trumbull County and Mahoning County; the Pymatuning-Shenango Watershed, in eastern Trumbull County; and the Little Beaver Creek Watershed, spanning in and out of southern Mahoning County.

Since the inception of the 208 Plan, its purpose to protect water quality has remained steady, but the focus of the plan has expanded. In the past, the 208 Plan focused on the construction of wastewater treatment plants and control of industrial, municipal and nonpoint source pollution. Today's 208 Plan continues to focus on controlling nonpoint source pollution, but expands to include discussions on home and state regulated sewage treatment systems, population and economic trends, and the protection of our area's critical resources such as drinking water sources, floodplains, and wetlands. Eastgate collaborated with its designated counties, municipalities, sewer agencies, county health departments and planning commissions, conservation and watershed groups, and representatives from the Ohio EPA to gather and incorporate relative, chapter specific information and recommendations for the plan update.

1.2 Clean Water Act: Section 208

The Clean Water Act (CWA) addresses water pollution in the United States and provides measures for protecting our Nation’s surface waters. The main goal of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s Waters”¹. Wastewater treatment management planning is addressed within Section 208 of the CWA. Section 208 sets forth requirements to achieve the goals of the CWA on a state by state basis. Section 208 established shared responsibilities for wastewater treatment management planning for areawide and state agencies. Wastewater treatment management plans are created under this section and used to address municipal wastewater treatment issues and nonpoint source pollution management and control measures. These management plans direct local and regional implementation by defining implementation responsibilities specific to agencies with municipal wastewater treatment or nonpoint source management responsibilities who have been designated to perform specific control.

An areawide wastewater treatment management plan is one of many tools set forth by the CWA and utilized by the State of Ohio to combat water pollution and restore the water quality of the state’s waters. Other components of the CWA utilized include water quality monitoring and assessments, the administering of the National Pollution Discharge and Elimination System (NPDES) permit program to control discharges, financial assistance for wastewater treatment management facilities, and enforcement of existing rules and regulations. Water quality assessments are the responsibility of the State of Ohio and help the state determine at what capacity a water body can receive pollutant loads without degrading its intended use. The Ohio EPA established the Total Maximum Daily Load (TMDL) program and other water quality effluent limits for streams to provide the foundations for permit issuance. The wastewater treatment plan utilizes all the programs, gathering background information and data, to mold and support Eastgate’s AWTMP update efforts in creating an essential tool that addresses local and regional environmental needs.

1.3 Eastgate’s Original 208 Water Quality Management Plan

The first 208 Plan produced by Eastgate was submitted to the Ohio EPA in 1977 and covered Mahoning and Trumbull Counties. The focus of the original 208 Plan was centered around designing and the construction of wastewater treatment plants to serve the established sewer districts. Elements of Eastgate’s 208 Plan included:

- A municipal Collection and Treatment volume dedicated to developing a technical plan for the Eastgate wastewater planning area, consistent with Section 208 of the Clean Water Act. This volume identified the sanitary sewers within Eastgate’s areawide planning area;

¹ Clean Water Act, Section 101 (a)

- A Wastewater Management volume identifying and defining the management responsibilities and requirements of entities involved in the wastewater planning process;
- A Storm Water Pollution Control volume consisting of educational tools, a list of best management practices, and a list of continuing wastewater planning functions representing a plan to abate storm water runoff pollution;
- A Nonpoint Source Pollution volume identifying potential sources and strategies to remove them from surface waters; and
- An Industrial Wastewater Control volume discussing the possibility of municipal wastewater treatment plants treating industrial wastewater as well as domestic sewage. The volume suggests performing a feasibility study to determine the possibility of any Wastewater Treatment Plant (WWTP) within a facility planning area treating such wastewater in addition to their municipal treatment load. This volume was constructed during the steel era of the Youngstown-Warren area.

1.4 Implementation of the Original 208 Plan

Over the past forty-one years, some of the municipal wastewater treatment plants set forth in the original plan have been completed as illustrated by the number of Publicly Owned Treatment Works (POTWs) constructed, while others did not prosper due to funding restrictions. Original 201 Facility Planning Area (FPA) boundaries were separated and redefined to illustrate the service area for each newly constructed POTW and management agencies (MAs) were established for those areas. Although the recommendations of the original plan were predicted for a twenty-year time span, decades have passed before an upgrade to the plan began. Minor updates were made to address the wastewater treatment options in May of 2008.

1.5 Water Quality Problems in Eastgate's AWTMP Area

Public participation and investments in wastewater treatment have improved greatly since the 1977 plan due to the addition of extra stages to the water treatment process. However, significant water quality problems continue to exist within the urbanized areas, mainly due to storm water and combined sewer overflows (CSO).

Controlling water quality problems is a pressing issue within the developing areas of Mahoning and Trumbull Counties. Land use plays an integral role in the protection of our area's water quality. As more rural, open vegetated green spaces are sold for development and/or infrastructure upgrading, the land characteristics that once protected our area's water quality are compromised for an increase in impervious surfaces (i.e. rooftops, buildings, parking lots, and roadways). A new group of pollution challenges emerged threatening our area's water

quality and forcing new measures to be created due to changes in development and environmental trends.

1.6 Goals for Eastgate's New AWTMP

Goals for the original 208 plan were developed based on the need to collect and treat municipal wastewater. Since the late 1970's, water quality improved with the development of several wastewater treatment plants, leaving new goals to be established that address current water quality management needs. The following goals have been created for the continual development and update of the AWTMP:

- The plan should utilize a regional watershed approach to protect the region's surface waters and the watersheds that feed into them by coordinating resource agency efforts as the basis for management planning;
- The plan should optimize use of the existing infrastructure for development prior to investing public monies in new infrastructure;
- The plan should be protective of the environmental gains our region has achieved and continue to reinforce the benefits of such gains by promoting the further protection of the planning area's critical resources;
- The plan should incorporate and reinforce protective measures utilized by governing agencies and outline additional measures to assure the region's water resources achieve state attainment standards;
- The plan should serve as an educational tool for local officials and the public on regional water quality management issues.

1.7 Focus of the AWTMP

The focus of the plan update centers around restoring the region's watersheds to full attainment and addressing the existing water quality threats posed by sprawling development patterns. In turn, attention shifted from establishing wastewater treatment facilities and addressing point source pollution to sanitary sewer planning, improved management of home sewage treatment systems and the semi-public sewage disposal systems, controlling nonpoint sources of pollution, and protecting the region's critical resources.

The AWTMP contains two forms of guidance: recommendations and policies. Recommendations include proposed regional actions for local and/or state agencies to implement the plan under current authorities of state law. They also include words of support for initiatives underway in our countries and encourage the continuation of such efforts in the region. Policies are established water quality management responsibilities of the designated areawide planning agency.

The plan represents a vision of the region's future that seeks to balance development and economic growth with a sustainable high quality of the water environment. The plan is a challenge to public officials and the public to undertake actions to protect water resources for the next generation. It sets an agenda for continuing water quality management planning in the Mahoning Valley for the coming decade.