

AREAWIDE WATER QUALITY PLAN  
2005 UPDATE TO CLEAN WATER 2000 PLAN

(Chapter 4 and an Amendment  
adopted by Resolution No. 2005-042)

Northeast Ohio Areawide Coordinating Agency

Documents Certified  
pursuant to Section 208 of the Clean Water Act

STATE OF OHIO

Division of Surface Water  
Ohio Environmental Protection Agency

2006

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List of Section 208 Plan Materials for Certification - Final 2006

The regional or areawide planning agency listed below has prepared and adopted, pursuant to their bylaws, the Section 208 plan updates described below. Ohio EPA is charged with reviewing these materials to ensure the following:

- ▶ the documents are consistent with basin plans;
- ▶ the documents (original plan and updates) cover the required planning elements; and
- ▶ the documents (plans) are consistent with one another.

Ohio EPA staff concluded the above criteria are satisfied. The following documents have been certified by the State of Ohio as an update to the Areawide Waste Treatment Management Plans prepared pursuant to Section 208 of the Clean Water Act and the State's Water Quality Management Plan maintained pursuant to Section 303 of the Clean Water Act.

Item or Document	Description	Supplemental Materials on File
<b>Northeast Ohio Areawide Coordinating Agency (NOACA)</b>		
Areawide Water Quality Plan 2005 Update to Clean Water 2000 Plan (Chapter 4, with maps and appendices);  Facility Planning Area boundary changes adopted by resolution No. 2005-042	Revisions were made to Chapter 4, Wastewater Management Facility Planning that include: <ul style="list-style-type: none"> <li>▶ changes in text</li> <li>▶ Facility Planning Area changes</li> <li>▶ sewer planning options in selected areas</li> <li>▶ replacement of Appendix 4-3 (community level population projections) by NOACA Technical Memorandum TM-05-01.</li> </ul> Changes in the Facility Planning Area boundaries for Painesville and Lake County adopted by the Governing Board 09/09/2005	1. Email requesting certification of update and amendment (10/25/05) 2. Resolution Nos. 2004-032, 2005-029, 2005-030

# **Areawide Water Quality Plan 2005 Update to Clean Water 2000 Plan**

**(Chapter 4)**

## **Executive Summary**

**June 2005**

**NORTHEAST OHIO AREAWIDE COORDINATING AGENCY  
1299 Superior Avenue  
Cleveland, OH 44114-3204**

This report was prepared with funding assistance under Section 604(b) of the Clean Water Act, through an agreement with the Ohio Environmental Protection Agency, and contributions from local jurisdictions.

## **Introduction**

NOACA has prepared an update the Facility Planning Element of the Clean Water 2000 Plan. This update consists of several components. The first addresses FPA boundary changes approved by the NOACA Board since the plan was last updated in December 2003.

A second component is an update to the Sewer Planning Options map for the region based on input received from Designated Management Agencies from sewer planning studies conducted since the Clean Water Plan was last updated.

A third component of the update is the revision of Chapter 4 of the Clean Water Plan titled “Wastewater Management Facility Planning”.

The fourth component of the update involves the incorporation the Agency’s Certified Community-Level Population and Employment Allocations contained in NOACA Technical Memorandum TM-05-01.

The Water Quality Subcommittee recommended acceptance of this update at its meeting on May 18, 2005. The NOACA Board approved the update with Resolution 2005-030.

The Clean Water 2000 Plan document is hereby updated to become the Clean Water 2000 Plan, Revised June 2005. A copy of the revised Plan will be maintained in the Information Resource Room of NOACA and will be posted on the Agency’s website ([www.noaca.org](http://www.noaca.org)) in place of the original document. A copy is also attached here as Appendix A.

### **Facility Planning Area/Sewer Planning Updates 1**

The FPA boundary changes approved by the NOACA Board since December 2003 include the transfer of a single property from the Elyria to Lorain (Resolution 2004-032), the expansion of the Greater Mentor FPA to include a portion of Kirtland, the Lorain County/LORCO transfer to Grafton, and the Painesville/Lake County boundary adjustments (the latter 3 part of Resolution 2005-029). Concurrent with these changes, the sewer options are also being updated to indicate that sanitary sewers will now be extended into the modified FPA lands. The update to the Sewer Planning Options map includes adjustments provided by Geauga County.

The new FPA boundary file for GIS applications is an ArcView shape file named “June 2005 FPA”. The sewer planning option is a shapefile named “June 2005 SPZ”. Figures 4-1 through 4-5 of the Clean Water 2000 Plan that show generalized FPA boundaries will be replaced with Figures 4-1 through 4-5 Revised, June 2005. Figures 4-6 through 4-10 that show the sewer planning options will be replaced by Figures 4-6 through 4-10 Revised, June 2005.

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1 The NOACA Governing Board previously requested FPA boundary changes involving a section of Willoughby Hills in the Willoughby/Eastlake FPA being transferred to Euclid (Resolution 2005-014). This change was certified by the State and approved by U.S. EPA in July 2005.

## **Chapter 4 Update**

A Work Group was established by the Water Quality Subcommittee to revise Chapter 4 in order to provide clarifying language to those sections that involve guidance regarding Plan Consistency Reviews and resolving disputes relative to FPA boundary changes.

The Work Group recommended several changes to Chapter 4: Wastewater Management Facility Planning of the Clean Water 2000 Plan. The changes address four issues:

1. Ohio EPA requested that language be added referring to the Ohio EPA's Regulated Sewage Treatment Systems (RSTSS) and recognizing Ohio EPA's role in determining consistency with the NOACA Plan (see page 4-3 of Chapter 4). Ohio EPA also asked that NOACA supply the language added on page 4-13. This language allows FPA boundary changes to be recognized immediately upon Board approval.
2. In the past, the language in Policy 4-6b referring to "politically acceptable" was the cause for much uncertainty. The Work Group changed the language to "supported by the affected local government(s) with jurisdiction over the area." This language is the same as used by Ohio EPA in their Water Quality Management Plan for the Columbus area.
3. Language has been added to prohibit the creation of holes in existing FPAs that would inhibit future sewer line expansions. This change is also included in Policy 4-6b.

Language throughout the Chapter was modified to clearly distinguish between individual on-site wastewater systems and communal or semi-public systems. Definitions were added to the Chapter to clarify the differences between these system types.

### **Population and Employment Allocations**

The fourth component of the update involves the incorporation the Agency's Certified Community-Level Population and Employment Allocations contained in NOACA Technical Memorandum TM-05-01. The contents of "Appendix 4-3: Community Level Population Projections" are replaced in their entirety by NOACA Technical Memorandum TM-05-01.

# **Chapter 4**

## **Wastewater Management Facility Planning**

**This chapter updates wastewater management facility planning areas for the Northeast Ohio 208 Plan study area. It reaffirms local jurisdictions that are designated as management agencies under the Water Quality Management Plan for wastewater management planning. It also identifies wastewater management options within each facility planning area that were developed with the advice of affected local jurisdictions. These options represent current judgments about where sewers will be extended and where areas will remain unsewered over the course of the next twenty years.**

The designated management agencies, their facility planning area boundaries, and the identified wastewater management options identified below form a central element of the region's certified WQMP. Ohio EPA's decisions concerning certain NPDES permits, permits to install (PTIs) and State Revolving Fund loans for wastewater treatment must be consistent with the WQMP.

This chapter sets forth policies governing areawide coordination of local wastewater management planning. These policies address:

- (1) Designated Management Agencies (DMAs) and their Facility Planning Area (FPA) boundaries for wastewater management planning;
- (2) Modifications to FPA Boundaries;
- (3) Development of Local Wastewater Management options;
- (4) Ohio EPA and USEPA 208 Plan Consistency Actions;
- (5) Utilization of Areawide Population Projections;
- (6) Modifications to DMAs;
- (7) Nomination of New DMAs.

The chapter also includes recommendations for (a) conforming the land use plans of local jurisdictions to the WQMP, and (b) encouraging the use of Joint Economic Development District (JEDD) procedures to address potential conflicts among local jurisdictions over the extension of wastewater services to currently unsewered areas.

### **I. Introduction**

Water quality planning requirements are specified in Sections 205(j), 208 and 303 of the Clean Water Act. Municipal waste treatment is among the nine elements to be included or referenced as part of the WQMP plan elements.<sup>3</sup> It is among the six elements in which areawide planning

<sup>3</sup> 40CFR130.6(c)(3).

agencies are actively involved in Ohio. One of the objectives of Section 208 of the Clean Water Act was to establish integrated and coordinated facility planning for wastewater management. In order to accomplish this objective in urban areas where competition for service areas was expected to be a concern, the Clean Water Act called for the designation of areawide planning agencies to assist in the resolution of such conflicts as they might arise. Ohio EPA serves in this role in the undesignated areas of Ohio.

NOACA is designated under Section 208 as the planning agency for Cuyahoga, Geauga, Lake, Lorain, and Medina Counties. NEFCO is designated as the planning agency for Portage, Stark, Summit and Wayne Counties. NOACA and NEFCO consult on planning matters in the watersheds that are shared by parts of both planning areas. The two major Lake Erie watersheds in this category are the Cuyahoga River and the Chagrin River.

In response to a court challenge, Ohio EPA has established a standard process for the review of NPDES permits and Permit to Install (PTI) applications statewide. This process requires that Water Quality Management Plans be up to date. The Ohio EPA addresses the full scope of Ohio's Water Quality Management planning in its Continuing Planning Process document.<sup>4</sup>

For purposes of clarity, the following discussion relies on a series of three general wastewater treatment options: publicly owned treatment works (POTWs), communal systems, and on-site systems. These systems are defined as follows:

*Publicly Owned Treatment Works or (POTW):* A "treatment works" as defined by section 212 of the Clean Water Act (33 U.S.C. 1292), which is owned by the City, County, State or other public entity. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant.

*On-site sewage treatment systems:* Sewage treatment systems that have a capacity of less than 25,000 gallons/day, that in general are physically located on the property that they serve. These systems provide sanitary wastewater treatment for a single residential, commercial, or industrial building or complex. The local health authority permits systems that treat one, two, or three family residences. Residential systems serving more than three families are permitted by Ohio EPA. Systems serving commercial or industrial facilities are also permitted by Ohio EPA. Examples of this system type include septic tanks, aeration systems, and mound systems among others.

*Communal Systems:* Treatment works that collect sanitary wastes from more than one building or property and convey that flow to a treatment system that may be located on or off of the property or properties being served. Communal systems may be privately or publicly owned. They may serve residential, commercial, or industrial uses. They may discharge treated wastes either to a permitted receiving stream or the discharge may be constrained to a designated area

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<sup>4</sup> Ohio EPA, "Continuing Planning Process." Draft, 1998.

where it is allowed to infiltrate the ground and/or be evaporated into the air. Package wastewater treatment systems and spray irrigation systems are examples of communal systems.

Ohio EPA is the agency responsible for permitting Regulated Sewage Treatment Systems (OEPA RSTs). RSTs apply to all development, except one, two and three family dwellings, that are served by an Industrial, Semi-public, Private, or Municipal wastewater treatment system. Some of these systems are on-site sewage treatment systems and some are communal systems as defined above. RSTs are evaluated for consistency with the NOACA Plan according to these definitions.

## **DESIGNATED MANAGEMENT AGENCIES UNDER THE ORIGINAL 208 PLANS**

The 1979 NOACA 208 Water Quality Management Plan for this region established the basis for evaluating all sewerage plans that have been proposed over the years since the 208 Plan was adopted. For each area where sewers were being planned, a single local management agency was designated for all facility planning. This agency became a Designated Management Agency (DMA) for wastewater management planning under this element. DMAs include municipalities, counties, and sanitary sewer districts authorized under Ohio law to perform these functions. As part of the DMA designation process, the owners/operators of Publicly Owned Wastewater Treatment Works (POTWs) were designated by the 208 Plan to have the authority for sewer-related planning in clearly demarcated boundaries. These boundaries were commonly referred to as 201 boundaries (after Section 201 of the Clean Water Act) and are now known as Facility Planning Areas (FPAs). For each FPA delineated, the local wastewater management agency became the primary designee (the DMA) for sewer planning in the established FPA into the future. The 1979 WQMP also recognized Geauga, Lake, Lorain, and Medina Counties as DMAs for wastewater planning in the FPA created for the unincorporated portions of their respective counties that lie outside of any other established FPA. A DMA of either type was recognized as the lead agency within its FPA by the 208 Plan and was charged with the responsibility of identifying plans to solve existing wastewater related problems and to accommodate projected growth over a twenty year time frame.

The DMA mechanism prevented two separate treatment facilities from being planned for the same area. This was important because cost/benefit and feasibility analyses hinge on the projected service demand. The sizing of sewer lines and wastewater treatment plants must reflect existing and projected populations. If two POTWs were to compete for the same customers, the duplication of service would be cost prohibitive, could result in plant operation problems, or both. All FPA boundaries that were certified in the 1979 Plan specify clearly the entity that is the DMA in every area where sanitary sewers were in place or were being considered.

Many facility planning areas encompass land areas that lie outside of the political jurisdiction boundaries of the DMA responsible for wastewater planning. The WQMP recognizes all service agreements that exist among a POTW owner/operator and the jurisdictions serviced by that POTW. Those agreements can specify which wastewater planning functions are to be assumed by the satellite jurisdictions. Each satellite jurisdiction named in such an agreement is recognized as a DMA for wastewater management planning in accordance with the service agreement with the POTW owner/operator.

## **FACILITY PLANNING AREA STATUS UNDER THE ORIGINAL 208 PLAN**

At the time that the original FPA boundaries were established, communities considered several factors. Some communities limited their planning area to the extent of their existing jurisdictional authority. Others extended their boundaries outside of their jurisdictional boundaries based on the sewershed concept (areas that drain by gravity to a treatment works or could be handled efficiently with the limited use of pump stations). In some areas, the County Sanitary Engineer assumed the facilities planning role for all or much of a county. Others, such as the Northeast Ohio Regional Sewer District, took a regional approach to providing sewer service far out into the future.

During the time that the 208 Plan was developed, there was little conflict in the establishment of FPA boundaries. Conflicts that did arise were resolved to the satisfaction of all parties and incorporated into the Plan. Before Ohio EPA accepted any FPA boundary definition, affected municipalities and counties had to agree on the boundary. As a result of this, facility planning proceeded in a timely manner at most of the region's POTWs.

Subsequent to the adoption of the 1979 208 Plan, disputes between POTWs started to arise. As time passed and plans began to be implemented, numerous small coordination issues arose. A major one involved the extension of interceptor lines proposed by the Northeast Ohio Regional Sewer District into areas which were currently being served by municipally owned POTWs. A conflict resolution process established under the auspices of the region's 208 Plans resolved each of these conflicts. This process helped to provide for the orderly implementation of facility planning and sanitary sewer infrastructure construction under the 208 Plan.

Most existing FPAs were recognized as part of the Construction Grants Program established under the Clean Water Act to help fund sewage treatment improvements. A facility planning area was typically subdivided into three general categories. These include (a) areas that were already served with sanitary sewers, (b) areas that would most likely be sewered during the next 20 years, and (c) areas where sewers were not likely to be extended for at least 20 years. The decision as to the classification of any given area was made by the DMA in accordance with planning guidelines established by USEPA. The charge to each DMA was to develop a plan to provide for adequate wastewater treatment over the 20-year time frame. They had to allocate projected growth within their planning area and identify options for handling such distributions.

For all of the facility planning actions that were taken in the past, there had to be a rationale for each decision made by DMAs. Ohio EPA had to concur with each of these decisions, at least as to the effects that they would have on receiving streams. DMAs had to develop and implement plans that would satisfactorily solve any pollution problems associated with their system. Expansion of a service area beyond that identified in the facility plan was allowed as long as they met all applicable water quality standards and had received the consent of affected jurisdictions.

Planning for future wastewater treatment needs is an inexact science. Assumptions are made relative to the size and extent of population growth. During the engineering phase of some projects, obstacles sometimes arise so as to render previously preferred alternatives impractical. With time, local conditions can change resulting in modifications to previously preferred alternatives. New treatment works continue to be proposed to meet growth demands. Planning changes that resulted

from these factors were accommodated in the Plan by the development of a consistency review procedure.

## **CONSISTENCY REVIEWS UNDER THE ORIGINAL 208 PLAN**

Under the 208 Plan, a Consistency Review was required whenever an application was made by a DMA for federal grants or loans under the Clean Water Act. This application could be to increase an existing discharge amount, to extend new sewer lines into a previously unsewered area, or to install an entirely new discharge. As the Areawide Planning Agency, NOACA was responsible for evaluating consistency in its respective area. The following procedures were followed in determining consistency within the 208 Plan.

Under the 208 Plan, any action proposed by a DMA was deemed consistent with the plan as long as it a) met Ohio EPA's technical requirements; b) consisted solely of actions that were within the existing FPA boundary; and c) conformed to regional population projections. If a DMA planned to extend service outside of its established FPA boundary, consistency was not attained until all affected parties agreed to the need for the change. This meant that Ohio EPA had to agree that the proposal represented a viable alternative for providing adequate waste treatment in an efficient manner. If a proposal infringed into the FPA of an adjacent DMA, the applicant had to secure the permission of the neighboring DMA. Some applicants proposed to extend service into areas where no facility planning had yet taken place. Such a proposal was deemed consistent with the 208 Plan as long as the local jurisdictions affected by the extension agreed to it and the Ohio EPA approved it.

All proposed projects that were seeking funding assistance were reviewed for consistency with regional population projections. This was done for two reasons. The Clean Water Act provides financial assistance only to those projects which serve existing and projected populations. The Act does not support the building of excess capacity as a means to attract development that would have occurred elsewhere. Such a move could undermine the efficiency or cost effectiveness of other treatment works. The regional review of population figures used to size the proposed facility also identified optimistically high projections that could lead to the inability of a community to financially support its POTW if its projections are not realized.

As time passed, the population projections contained in the original Plan became dated. A plan update was accomplished in 1984 to update the population projections that were recalculated following the release of the 1980 census. NOACA currently utilizes population projections based on the 1990 census for consistency review purposes. After the Year 2000 census is completed, new population projections will be developed for this purpose.

NOACA reviewed an applicant's population projections for consistency with areawide projections. If they were not consistent, the applicant was notified of the discrepancy and Ohio EPA was notified of the differences. Ohio EPA then worked with the community in question to examine the potential consequences if a community's projections are not realized. Ohio EPA ultimately determined whether the project should proceed as designed.

While most of these projections and allocations incorporated into the original 208 Plan proved to be accurate, some areas did develop faster or slower than expected. During the time that has elapsed since the original facility plans were prepared, some elements were implemented as designed. Other

elements were implemented with changes. A few elements were not implemented at all. In some circumstances, plans were made and implemented that were not considered in the original effort. This WQMP update makes FPA boundaries current and provides an orderly process for future revisions.

## **II. Updating the Designation of Management Agencies, Facility Planning Areas, and Consistency Review Policies**

For this plan update, NOACA undertook a comprehensive review of DMAs and FPAs in the original 208 Plan, and worked with the responsible management agencies to update FPAs to current conditions. This was done by circulating for review and comment maps of FPAs on file from the original 208 Plan with a request that the lead agency in each case consult with affected jurisdictions to update maps as appropriate. Treatment plants constructed after the original planning period were also identified and their lead agencies were also contacted. Lead agencies were asked to identify for their respective areas the following:

- (1) Areas currently served with sanitary sewers;
- (2) Areas expected to be served with sanitary sewers connected to an existing POTW during the next twenty years;
- (3) Areas expected to be served with sanitary sewers connected to a new POTW in the next twenty years;
- (4) Areas expected to remain on individual on-lot systems or communal systems, and where local officials are oriented to maintaining an unsewered status for the foreseeable future;
- (5) Areas currently unsewered where local officials are oriented to accepting sewers if feasible and if found to be consistent with the WQMP; and
- (6) Areas for which no wastewater management options have been declared.

The results of this effort were then used to update county level facility planning maps that were circulated for review and comment by affected local and county jurisdictions. This process generated ongoing planning discussions in each of the counties involved with the plan update. This update process also involved identifying which local or county jurisdictions currently have lead agency responsibilities for wastewater facility planning. These jurisdictions are identified in Table 4-1 as having management responsibilities for facility planning associated with wastewater treatment facilities that they own or operate. The local jurisdictions or agencies identified in Table 4-1 are reaffirmed as Designated Management Agencies for wastewater management planning for their Facility Planning Areas under the auspices of this plan once it has been certified and approved.

Table 4-2 identifies satellite jurisdictions recognized as Designated Management Agencies for wastewater management planning in accordance with service agreements that they have with POTW owner/operators serving all or a portion of their jurisdiction.

The Clean Water 2000 plan reaffirms Geauga, Lake, Lorain, and Medina Counties and LORCO as the designated wastewater management planning agency for a) the service areas of existing package plants that they own or operate and b) those portions of their respective counties that lie in unincorporated areas outside of another established Facility Planning Area. The geographical extent of the FPAs associated with the above listed DMAs and FPAs is shown in Figures 4-1 through 4-5 (attached in Appendix 4-1).

**Table 4.1: Designated Management Agencies/lead Agencies  
That Own or Operate a Public Wastewater Treatment Works**

(Individual Wastewater Treatment Plants are identified only where necessary to avoid confusion.)

**Cuyahoga County**

Bedford  
Bedford Heights  
Chagrin Falls  
Euclid  
Lakewood  
Northeast Ohio Regional  
Sewer District (NEORSB)  
Easterly WWTP  
Southerly WWTP  
Westerly WWTP  
North Olmsted  
North Royalton  
North Royalton "A" WWTP  
North Royalton "B" WWTP  
Rocky River  
Solon  
Strongsville  
Strongsville "B" WWTP  
Strongsville "C" WWTP  
Medina County  
Hinckley WWTP

**Geauga County**

Auburn Corners  
Burton  
Chardon  
Geauga County  
McFarland Creek WWTP  
Balance of Unincorporated County Area  
Middlefield  
NEORSB  
Easterly WWTP

**Lake County**

Euclid  
Lake County  
Heatherstone WWTP  
Greater Mentor WWTP  
Madison WWTP  
Balance of Unincorporated County Area  
Madison Village  
Painesville  
Willoughby  
Willoughby-Eastlake WWTP

**Lorain County**

Amherst  
Avon Lake  
Elyria  
Grafton  
LaGrange  
Lorain City  
Black River WWTP  
P.Q.M. WWTP  
Lorain County  
Balance of Unincorporated County Area  
Lorain Rural Wastewater District  
Portions of Unincorporated County Area  
Oberlin  
NEORSB  
Southerly WWTP  
North Ridgeville  
French Creek WWTP  
Vermilion  
Wellington

**Medina County**

Lodi  
Medina County  
Chippewa-on-the-Lake  
Hinckley WWTP  
Liverpool WWTP  
Balance of Unincorporated County Area  
Seville  
Spencer  
Wadsworth  
Westfield Center

<b>Table 4-2 Jurisdictions that serve as Designated Management Agencies for wastewater management planning (Satellite DMAs) for areas contained within the Facility Planning Area of another jurisdiction</b>		
<b>Satellite DMA Jurisdiction</b>	<b>County</b>	<b>POTW Owner/Operator</b>
Bay Village	Cuyahoga	Rocky River
Beachwood		NEORS
Bedford		NEORS
Bedford Heights		NEORS
Berea		NEORS
Bratenahl		NEORS
Brecksville		Medina County, NEORS
Broadview Heights		Medina County, NEORS
Brook Park		NEORS
Brooklyn		NEORS
Brooklyn Heights		NEORS
Cleveland		NEORS
Cuyahoga County		NEORS, North Olmsted
Cleveland Heights		NEORS
Cuyahoga Heights		NEORS
East Cleveland		NEORS
Fairview Park		North Olmsted
Garfield Heights		NEORS
Gates Mills		NEORS
Glenwillow		Bedford Heights
Highland Heights		NEORS
Highland Hills		NEORS
Independence		NEORS
Lakewood		NEORS
Linndale		NEORS
Lyndhurst		NEORS
Maple Heights		NEORS
Mayfield		NEORS
Mayfield Heights		NEORS
Middleburg Heights		NEORS
Newburgh Heights		NEORS
North Randall		NEORS
North Royalton		Medina County, NEORS
Oakwood Village		NEORS, Bedford Heights
Olmsted Falls		NEORS
Olmsted Township		NEORS, North Olmsted
Orange Village		NEORS
Parma		NEORS
Parma Heights		NEORS
Pepper Pike		NEORS
Richmond Heights		NEORS, Euclid
Seven Hills		NEORS

<b>Table 4-2 Jurisdictions that serve as Designated Management Agencies for wastewater management planning (Satellite DMAs) for areas contained within the Facility Planning Area of another jurisdiction</b>		
<b>Satellite DMA Jurisdiction</b>	<b>County</b>	<b>POTW Owner/Operator</b>
Shaker Heights		NEORS
Solon		NEORS
South Euclid		NEORS, Euclid
Strongsville		Medina County, NEORS
University Heights		NEORS
Valley View		NEORS
Walton Hills		NEORS
Warrensville Heights		NEORS
Westlake		Rocky River
Geauga County	Geauga	Middlefield
South Russell		Geauga County
Eastlake	Lake	Willoughby
Fairport Harbor		Lake County
Grand River		Lake County
Kirtland Hills		Lake County
Lake County		Madison, Painesville
Lakeline		Willoughby
Mentor		Lake County
Mentor-on-the-Lake		Lake County
Painesville		Lake County
Timberlake		Willoughby
Waite Hill		Willoughby
Wickliffe		Euclid
Willoughby Hills		Euclid, Willoughby
Willowick		Euclid
Avon	Lorain	Avon Lake, North Ridgeville
Lorain County		Elyria, Grafton, Lorain, Oberlin,
LORCO		LORCO membership area
Sheffield		North Ridgeville
Sheffield Lake		Lorain
South Amherst		Lorain
Brunswick	Medina	Medina County
Medina		Medina County
Medina County		Lodi, Rittman, Seville, Wadsworth

Figures 4-1 through 4-5 depict facility planning areas by county for each of the five counties in the 208 planning area. Figures 4-6 through 4-10 (attached in Appendix 4-2) depict wastewater planning options developed by each DMA with the advice of affected local jurisdictions within each Facility Planning Area in the NOACA area. The boundaries shown in these figures are generalized as discussed in Policy 4.1 below.

## **POLICIES FOR DETERMINING CONSISTENCY WITH THE WQMP**

This section sets forth policies governing changes to Designated Management Agencies and Facility Planning Areas and procedures for determining wastewater management plans consistent with the WQMP. These policies address:

- (1) Designating Management Agencies and their current Facility Planning Area boundaries for wastewater management planning;
- (2) Future Modifications to FPA Boundaries;
- (3) Development of Local Wastewater Management options;
- (4) Ohio EPA and USEPA 208 Plan Consistency Actions;
- (5) Utilization of Areawide Population Projections;
- (6) Modifications to DMAs;
- (7) Nomination of New DMAs.

### **Policy 4-1: Designated Management Agencies and Current Facility Planning Area (FPA) Boundaries**

**With the adoption of this Plan update, local jurisdictions or agencies identified in Table 4-1 are confirmed as Designated Management Agencies for wastewater management planning within the Facility Planning Areas set forth in Figures 4-1 through 4-5 of Appendix 4-1.**

This WQMP update accepts FPA boundary decisions that were formally or informally approved by Ohio EPA in the past. Considerable confusion existed in some areas as to which of numerous sewer plans and planning boundary definitions that have been produced over the years should be recognized in this WQMP update. The lack of a formal procedure to clearly identify FPA boundaries and to track changes to these definitions over time is partially responsible for this confusion. The plan update process remedies this situation.

All owners or operators of POTWs were sent maps identifying FPA boundaries in the 1979 WQMP. During the update process, DMAs were given an opportunity to propose changes within existing FPA boundaries to accommodate changes that had been realized over the last twenty years. This process also allowed a DMA to propose the removal of subareas that it has no plans for sewerage

from its previously defined FPA. Expansion of Facility Planning Areas could also be proposed with the consent of affected jurisdictions.<sup>5</sup>

NOACA maintains detailed mapping files as part of its Geographic Information System (GIS). With the adoption of this update by the NOACA Board, the files maintained in this format are the definitive statement of all FPA boundaries unless a more detailed definition has been created by a DMA as part of its wastewater planning process. If a DMA has a more detailed map of boundaries in a report that has been submitted to and approved by Ohio EPA, NOACA can accept those boundaries with the consent of affected jurisdictions. In all cases, the NOACA GIS maps are the definitive source of FPA boundaries. Requests for changes to existing boundaries must be submitted by a DMA and will be recognized in the plan only after review and acceptance by NOACA. NOACA will provide electronic copies of all approved updates to the Northeast District Office of Ohio EPA (and will make them available to the public by posting updates on the Agency's website ([www.noaca.org](http://www.noaca.org))).

Each DMA responsible for wastewater planning should develop plans covering a twenty-year time frame. The appropriate time for the development of these twenty-year plans is predicated by the life expectancy of each wastewater treatment plant. When the planning cycle of an existing facility looks to upgrade or expand that facility, a part of the planning that takes place should review wastewater treatment needs for all areas within the plant's FPA boundary over the twenty-year time frame. The results of this planning will be recognized by the WQMP when accepted by Ohio EPA.

#### **Policy 4-2: Modifications to Facility Planning Area (FPA) Boundaries**

**The NOACA Board must approve all future changes to FPA boundary definitions. The Board must also approve all new FPAs. These changes are effective on Board approval and will be reflected in the next plan update submitted for certification.**

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<sup>5</sup> The boundaries that are recognized by this update replace all boundaries previously identified in the original 208 plan for the area. While there continues to be marked similarity between the boundaries established by the original 208 Planning process and the boundaries included in this update, there are notable differences. Boundary changes fall into two categories: those that reflect changes initiated by planning for active sewer extensions, and those that involve a strategic refocusing of planning objectives. Examples of the former category include the boundaries between the FPAs of (a) the Cities of Lorain and Elyria, (b) Medina County and the City of Akron, (c) the Greater Mentor WWTP and the City of Painesville, (d) Greater Mentor WWTP and Heatherstone WWTP. Each of these changes occurred as the former FPA boundary was moved to serve an area in a bordering FPA that could not be otherwise serviced in a timely or efficient manner. The DMAs of both FPAs agreed to the changes and Ohio EPA concurred. New FPAs were established for Amherst and Bedford Heights.

The second category of FPA boundary changes was based on facility planning that progressed after the initial 208 process. Several DMAs centralized their planning focus within their initial 201 FPA boundaries. These communities concluded that they had no intention of extending out to the furthest reaches of their planning area. They have established new boundaries to reflect this. Communities that fall into this group include the City of Oberlin, Newbury Township and Burton Village. The Cities of North Olmsted and Euclid, and Medina County (for its Hinckley WWTP) extended their planning areas to provide service to areas not originally included in a planning area. The Northeast Ohio Regional Sewer District renamed large tracts of their 201 FPA boundaries to "Sewer Planning Option Zones". Their intention is not to extend into any of these areas unless mutually agreed to by local officials and NEORSDD.

The updated plan recognizes the FPA designations that are identified in Figures 4-1 through 4-5. For changes requested after the Board adopts the plan update, the DMA requesting a change must apply to NOACA for redefinition of its boundaries. This will require the DMA to solicit support from all affected jurisdictions including any other DMA that may be affected by the redefinition.

If a change is sought for a FPA that crosses the planning area boundary between NOACA and NEFCO, the approval of both agencies will be required.

The transfer of planning responsibilities for sewer and wastewater treatment between FPAs are subject to a number of conditions, and must be approved by Ohio EPA prior to consideration by the NOACA Governing Board. Provided the policies of this chapter are followed, any such updates and revisions to NOACA's Clean Water Plan shall be effective for the purpose of permit consistency reviews immediately upon adoption by the NOACA Governing Board.

### **Policy 4-3: Development of Local Wastewater Management Options**

**DMAs should develop wastewater management options within their facility planning areas in consultation with affected local jurisdictions. These options must comply with requirements of the Clean Water Act. To the extent that the option identified involves the enlargement of an existing POTW, the construction of a new POTW or the extension of sewers, that option must conform to consistency requirements of the WQMP (see Policy 4-4).**

This update to the WQMP offers local communities an opportunity to have more formalized input into the definition of future waste handling plans in areas that are not yet sewered.

At present, DMAs develop sewerage plans that are optimized from an engineering standpoint within their FPA. While coordination with local jurisdictions regularly occurs when a POTW serves more than a single community, there is no provision in the existing 208 plan that would encourage engineering plans to be amended based upon the desire of a local government to manage growth within its jurisdiction. This update to the 208 Plan provides such a mechanism. Local governments are being encouraged to identify where they want central sewers and where they do not. The DMA in each FPA must consult with affected jurisdictions and take account of their input in cases that do not raise engineering or efficiency limitations.

In those areas where local officials want to restrict wastewater treatment to individual on-site systems, several conditions must be met. The county or municipal health departments responsible for managing on-site systems must authorize their use in the area under discussion. The provisions of ORC 6111 and OAC 3701-29-02 (L&M) that require connection to sanitary sewers when they become available must be complied with. The designation of an area as 'on-site systems only' applies as long as Ohio EPA does not mandate sewers under ORC 6117.34 if a water quality problem is demonstrated. The Clean Water 2000 Plan recommends a number of home sewage disposal management policies and practices for implementation by local health departments as a means of improving the performance of these systems and reducing their impact on water quality (see Chapter 5 below).

Figures 4-6 through 4-10 in Appendix 4-2 indicate in generalized terms the preferences of local officials regarding future sanitary sewer service areas.

As with FPA boundary maps, detailed boundary locations are registered in the GIS database maintained by NOACA. This database will be consulted when consistency reviews are made. Table 4-3 in Appendix 4-2 reflects the input from local elected officials who responded to a request from NOACA in the plan update process. Preferences expressed will be selected from the set of options described in Appendix 4-2

A neighboring community or regional system serves some communities in the region. The preferences expressed by these communities are subject to the acceptance of the DMA providing service. During a 208 plan consistency review, the DMA must demonstrate that consultation has occurred with communities in its facility planning area to ascertain community preferences for sanitary sewer service.

Policies of local health departments who have legal responsibility and authority to influence wastewater treatment continue to be recognized under this policy. This includes the policy on dry sewers issued by the Lorain County General Health District that provides for the installation of sanitary sewers in subdivisions that are likely to be reached by sanitary sewer extensions in the future while home sewage disposal systems are installed in the interim.

Ohio EPA and ODH are working in consultation with USEPA to develop a NDPEs permitting policy that will apply to individual home sanitary treatment systems (HSTSs) that have an off-lot discharge. This WQMP will incorporate the policy arrived at by this negotiation as soon as it is agreed to by Ohio EPA.

Local community plans remain flexible to the extent desired by the community. These plans serve to guide the wastewater management decisions of local landowners. It is recognized that all documented wastewater related water quality problems that exist now or that develop in the future, must be remediated in a timely manner by the best means available. Where wastewater related problems do not exist, local jurisdictions can decide if they prefer to protect water quality by utilizing individual on-site systems or centralized sanitary sewers. By identifying the areas that have no plans for sewer extensions in the next 20 years in this Plan, jurisdictions notify all landowners of the need for them to plan for the installation and maintenance of individual on-site systems. In areas where sanitary sewers are likely to be extended, repair and maintenance of problematic on-site systems may be warranted instead of total system replacement. In all cases, landowners are provided notice by this Plan to consult with local government officials before proceeding with their wastewater plans.

#### **Policy 4-4: 208 Plan Consistency Actions by Ohio EPA and USEPA**

**Consistency with this Plan will be required whenever an application is made to the Ohio EPA for (a) a permit to discharge pollutants into the waters of the state (NPDES Permit) or (b) a Permit-to-Install. A consistency review will also be required of applicants for grants or loans under the Clean Water Act. Ohio EPA will not approve a permit to install or a Clean Water Act loan or grant until consistency with this Plan has been determined.**

Under the WQMP update, a consistency review will be required whenever an application is made to the Ohio EPA for a permit to discharge pollutants into the waters of the state. This applies to applications to increase an existing discharge amount, to extend new sewer lines into a previously unsewered area, or to install an entirely new discharge. A consistency review will also be required of applicants for grants or loans under the Clean Water Act.

Ohio EPA will notify NOACA of all permit applications that apply to a Publicly Owned Treatment Works (POTW). NOACA must certify that proposed POTW actions are consistent with the current FPA boundary definitions, that they address the future sewerage declarations made by the local officials in the affected area, and that they conform to population projections contained in the WQMP.

Ohio EPA may process all applications for PTIs that apply to treatment works servicing an individual lot that are in accordance with the declarations by jurisdictions contained in Appendix 4-2. Proposals that involve the installation or expansion of central sewers not connected to a POTW should be referred to the local jurisdiction for review prior to Ohio EPA consideration.

#### **Policy 4-5: Utilization of Areawide Population Projections**

**All applications subject to Policies 4-3 and 4-4 must utilize population projections that are consistent with those provided in Appendix 4-3. NOACA will periodically update projections based upon new community level census data. Updated population projections will be incorporated into the plan by amendment.**

The consistency review process includes the assessment of the most recent population projections generated by the areawide planning process utilized by NOACA.

The Ohio Department of Development prepares the official population projections for the State of Ohio. They allocate projections to the county level. NOACA is the lead agency for allocating the State's county level projections to minor civil divisions in its region. When the agency updates its projections, it will forward a copy to the Northeast District Office of Ohio EPA. The most recent minor civil division population projections produced by NOACA are the ones to be used for consistency reviews.

The minor civil division population projections serve as a starting point for the evaluation of population projections within facility planning areas. The facility planning process may disaggregate community projections to smaller areas. This may be accomplished based on an evaluation of available land for development combined with local zoning. Additional inputs can be used as appropriate. The final allocations will be deemed consistent with the plan if they agree with the plan's projections. Departure from plan projections must be accepted by NOACA before consistency is established.

#### **Policy 4-6: Modifications to Facility Planning Areas of Designated Management Agencies**

**Designated Management Agencies that own or operate a Publicly Owned Treatment Works for wastewater have lead responsibility for sewer planning within their established Facility Planning Area subject only to appeal to the NOACA Board under Policies 4-6a and 4-6b below.**

This policy addresses how lead responsibility for sewer planning is established and how it is to be changed when the need arises. It also gives affected jurisdictions guidance for challenging DMA decisions. It is important to note that Ohio EPA cannot issue a permit for any action that is not consistent with the 208 Plan. FPA boundary disputes must be resolved prior to the review for consistency of any project by the NOACA Board.

**Policy 4-6a: Lead responsibility for sewer planning will be maintained by the Designated Management Agency in each established Facility Planning Area in all cases of challenge when they can demonstrate any of the following:**

- a. that the system affordability or financial viability would be negatively impacted by the suggested change;**
- b. that system efficiency, defined as the ability to meet its NPDES permit limitations, would be compromised by a suggested change; or**
- c. the change would result in a violation of a condition of a Section 201 Facilities Construction Grant received through the USEPA or a provision of a State Revolving Fund Loan administered by the Ohio EPA.**

Conflicts stemming from problems related to officially recognized FPA boundaries are expected to occur from time to time. Furthermore, they may take on new dimensions that were not considered during the development of the original Plan. Some areas covered by an existing facility plan may want sewers to be extended to them while the POTW owner either has no plans to extend service or has unacceptable conditions for service. An appeal process that could result in the redefinition of existing FPA boundaries is necessary.

Under this policy, the Designated Management Agency for an approved FPA will continue to have primacy for sewer planning but that primacy will no longer be as absolute as in the past. The request of any applicant to transfer a specified area out of a recognized FPA needs to be open to consideration. A process to deal with the evaluation of each application must follow established guidelines. For instance, the existing DMA can maintain the right to provide for sewerage of the designated area if it can demonstrate that its treatment system will be harmed by a redesignation. If the DMA can show that it will suffer economic harm, or if it can demonstrate that system integrity would be compromised by the change, it must be given the opportunity to maintain primacy. One demonstration of economic harm that would preclude the FPA boundary change would be the documentation that established federal guidelines for wastewater treatment affordability would not be met if the application for change were allowed to proceed. The NOACA Board can decide if economic harm is suffered in cases involving the transfer of an area out of an existing FPA in order to pursue a lower costing option.

System efficiency and integrity concerns must be tied to reasonable expectations that a WWTP will be unable to maintain compliance with its discharge permit limits. USEPA or the Ohio EPA must

certify those cases where 201 Facility Grant or State Revolving Fund Loan conditions preclude a requested change in FPA boundaries.

In cases where central sewers are needed to comply with an Ohio EPA order to resolve an existing water quality problem, the DMA's primacy standing would be dependent on its ability and willingness to proceed with the sewer extensions and capacity upgrades if necessary. If the DMA is not prepared or is not able to proceed in a timely manner, the applicant for change can request a redrawing of the FPA boundary.

**Policy 4-6b: Lead planning responsibility for limited areas can be transferred from the Designated Management Agency in an established Facility Planning Area in cases of challenge when applicant for change can demonstrate all of the following:**

- a. that none of the conditions established by 4-6a apply;**
- b. that the existing DMA is unprepared or is unwilling to extend service to the challenged area, or that they have conditions that are unacceptable to the applicant community;**
- c. that an alternative sewerage plan exists that protects the environment, and that the alternative plan is technically achievable, economically justifiable, and supported by the affected local government(s) with jurisdiction over the challenged area; and,**
- d. that the proposed DMA has legal authority to act.**

Transfers must be approved by Ohio EPA and incorporated by amendment to the WQMP. A DMA's lead planning standing would be dependent on its ability and willingness to proceed with the sewer extensions (and capacity upgrades if necessary) to areas assigned to an established DMA that requests such extensions. If the DMA is not prepared or is not able to proceed in a timely manner, the applicant for change can request a redrawing of the FPA boundary. This request would be considered with the intention of identifying viable alternative wastewater alternatives. The applicant would be required to demonstrate that an alternative exists, that the alternative is technically achievable, economically affordable and supported by the affected local government(s) with jurisdiction over the challenged area. Jurisdiction, as used here, refers to political and administrative authority, not the Facility Planning authority of the challenged DMA. However, the applicant may not create a hole or other discontinuity in the planning area of the current DMA that would compromise the ability of that DMA from extending sewer service to any area in its FPA in the future. If the proposed plan is consistent with all other aspects of the WQMP, it can result in a change being made to the existing FPA definition in favor of the applicant. The NOACA ongoing planning process will provide for a meeting with all affected parties in an attempt to effect a consensus agreement. When consensus cannot be reached, the NOACA Water Quality Subcommittee will hear all viewpoints, and render a recommendation for action to the Policy Board. The Board action on such requests would constitute an update to the Plan as far as future consistency reviews are concerned in the challenged area. (See **Policy 10-4**).

Where no other acceptable solution can be found, a community that is part of another community's FPA can request the right to develop plans to direct their wastewater to an alternative treatment works. This could be another existing POTW or an entirely new facility if one can be constructed. All applications for the redrawing of existing FPA boundaries must be accompanied by plans that

demonstrate that an environmentally acceptable and affordable alternative exists. These plans must demonstrate that the reassignment of the area will not jeopardize the ability of the POTW currently slated to serve the disputed area to comply with its NPDES permit conditions. These plans must also estimate the impacts on existing rate structure of that POTW

#### **Policy 4-7: Nomination of New Designated Management Agencies**

**New Designated Management Agencies can be established to provide sanitary sewer service in newly created Facility Planning Areas. Facility plans generated under this option must be approved by Ohio EPA, and incorporated by amendment to the WQMP.**

All entities that are not designated as a DMA must apply for such status before their permit application can be processed. To become a DMA designee, the applicant must have adequate legal authority under Ohio law and clearly identify the geographical extent of its proposed facility planning area and sewer service area. It must also demonstrate that all affected local governments have been consulted in the development of the project. Support from all affected jurisdictions (municipalities in incorporated areas and county government in unincorporated areas) must be secured. Any FPA infringements must be resolved either with the approval of the infringed upon DMA or by appeal to the NOACA Board (see **Policies 4-6 and 10-4**).

The applicant may propose an area for designation as an FPA that is larger than the current or proposed project service area. This can be done where it makes sense for the purposes of future sewer planning. After the Ohio EPA reviews and approves the request for a FPA designation, the Board will act to adopt a resolution so stating.

#### **RECOMMENDATIONS FOR SUPPORTING ACTIONS BY LOCAL JURISDICTIONS**

This section presents recommendations concerning wastewater management planning that reflect the input and decisions of local governments and agencies.

**Recommendation 4-1: Local jurisdictions are encouraged to conform local land use plans to the wastewater service options identified in Figures 4-6 through 4-10.**

Ideally the planning choices reflected in wastewater management options presented in Figures 4-6 through 4-10 will be consistent with local land use plans. The effectiveness of the WQMP will be enhanced to the extent that it is consistent with these land use plans.

**Recommendation 4-2: Local jurisdictions should consider the use of the Joint Economic Development District (JEDD) approach or the Community Economic Development Agreement (CEDA) approach to address conflicting interests in the process of wastewater treatment infrastructure.**

Numerous cases exist in the region where a municipality owns and operates a POTW whose FPA includes portions of surrounding townships. Some of these communities have a policy of extending sewer service only to areas that are annexed into the community. This is required because the municipality has used their tax base to support the construction, operation, and maintenance of their

sewer infrastructure and is attempting to insure all beneficiaries pay a fair share of these costs. Annexation is the tool that they choose to use to accomplish this.

Annexation is usually contested in Northeast Ohio. Compulsory annexations in order to receive sanitary sewer service are often strongly contested. Use of substitute measures such as a JEDD<sup>6</sup> or a CEDA<sup>7</sup>, is encouraged to meet the needs of both the municipality in question and the neighboring township. A JEDD or CEDA can be established by neighboring communities and can allow an exchange of services and a sharing of tax revenues. In the scenario of a municipality attempting to recover capital costs, township residents in the area to be affected by the extension of sewer lines agree to be subject to an income tax rate that would provide the municipality with the funds that they seek before extending the sewer lines. Where loss of business base is an issue, additional tax sharing may have to be negotiated. While not a solution for every case, the JEDD approach is encouraged in the WQMP.

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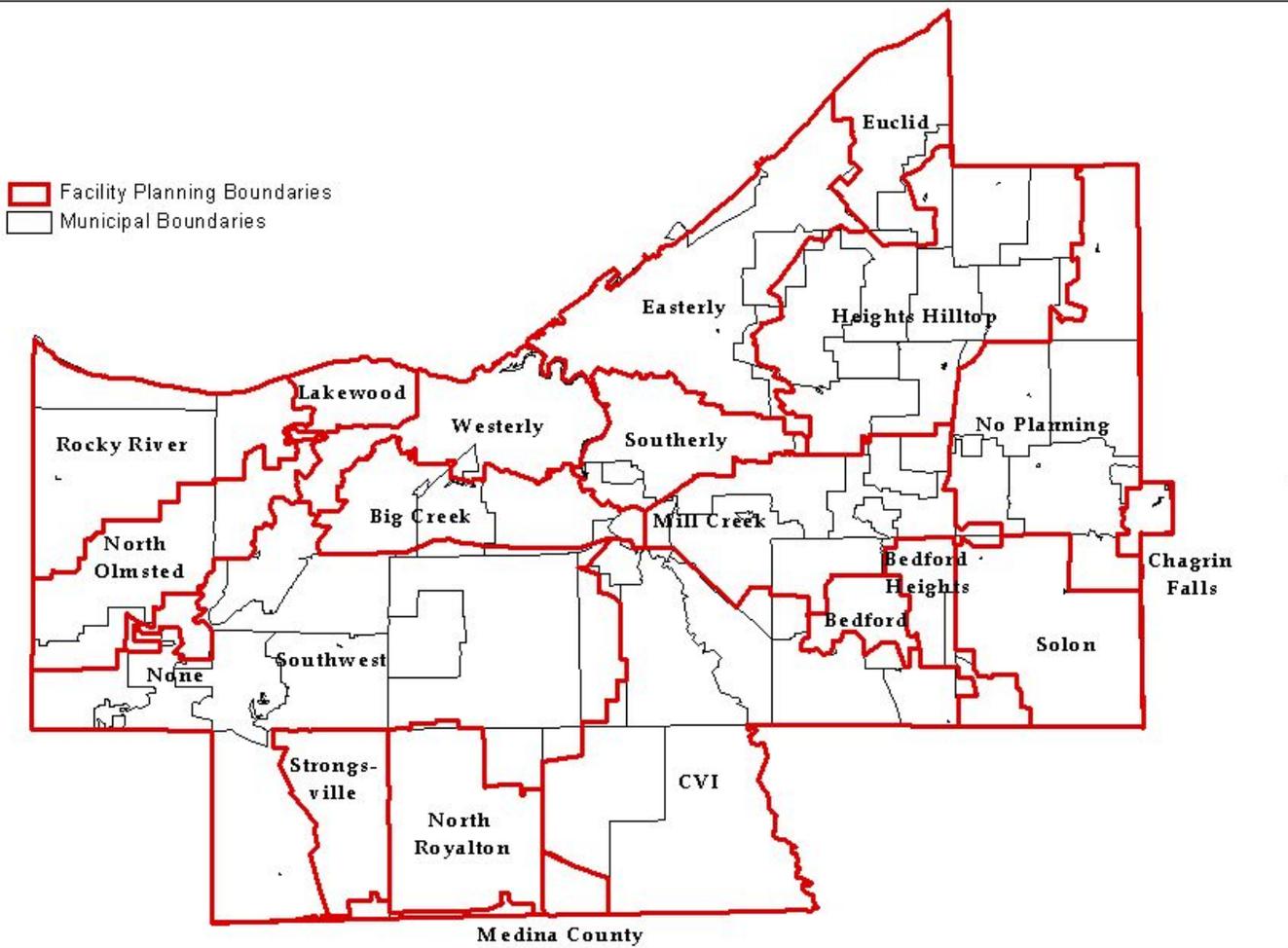
6 Ohio Revised Code 715.70-.71

7 Ohio Revised Code 701.07

# **Appendix 4-1**

**COUNTY LEVEL MAPS OF  
FACILITY PLANNING AREAS**

# Cuyahoga County Facility Planning Areas



Northeast Ohio 208 Water Quality Management Plan

Prepared by:  
Northeast Ohio  
Regional  
Coordinating  
Agency  
NORCO  
June  
2005

Figure 4-1 Revised, June 2005

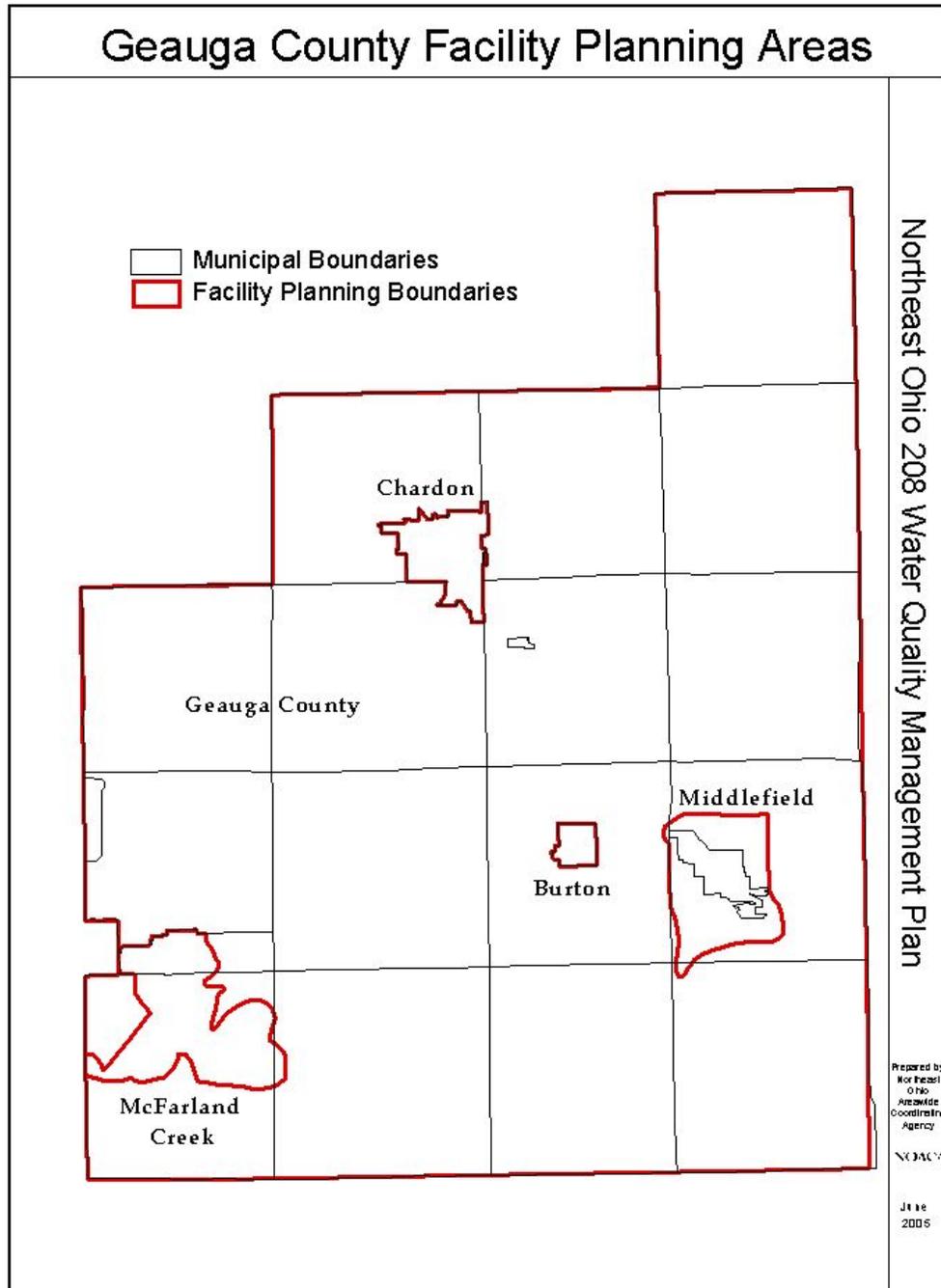
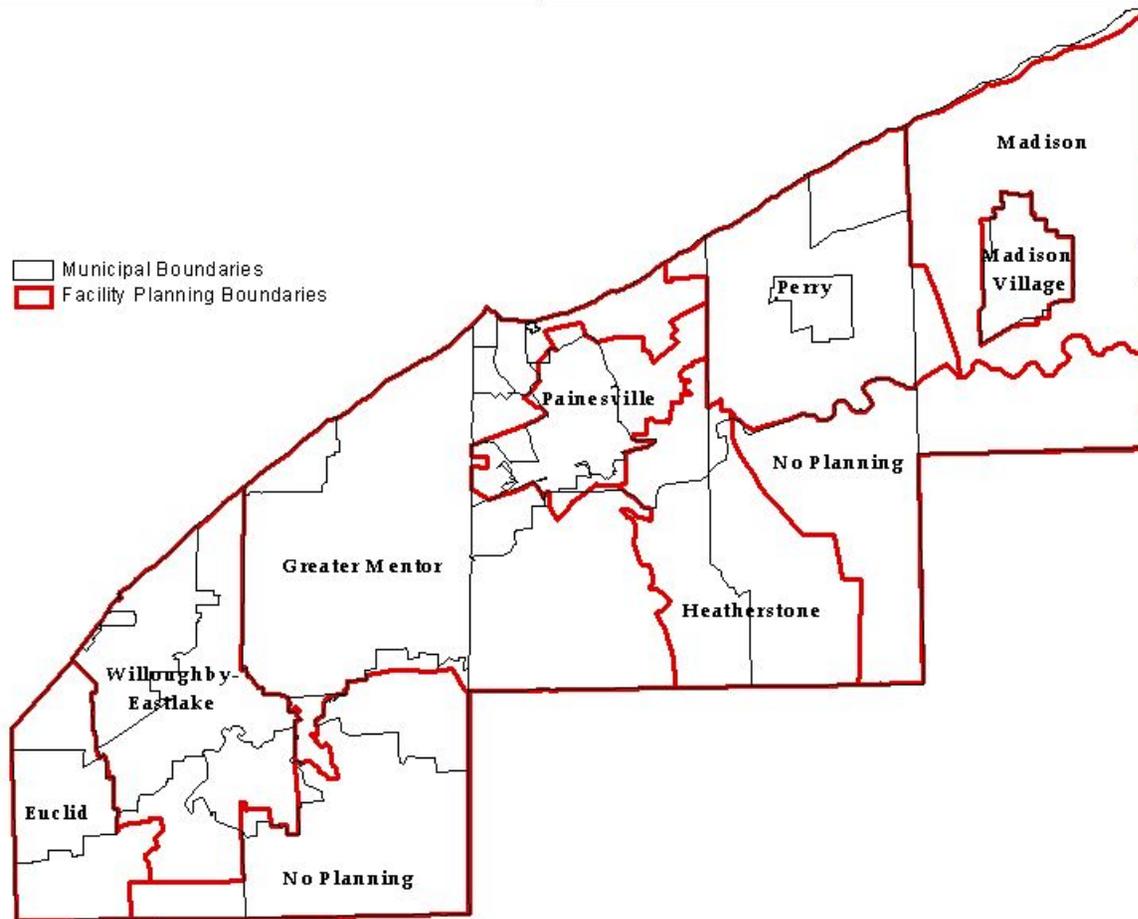


Figure 4-2 Revised, June 2005

# Lake County Facility Planning Areas



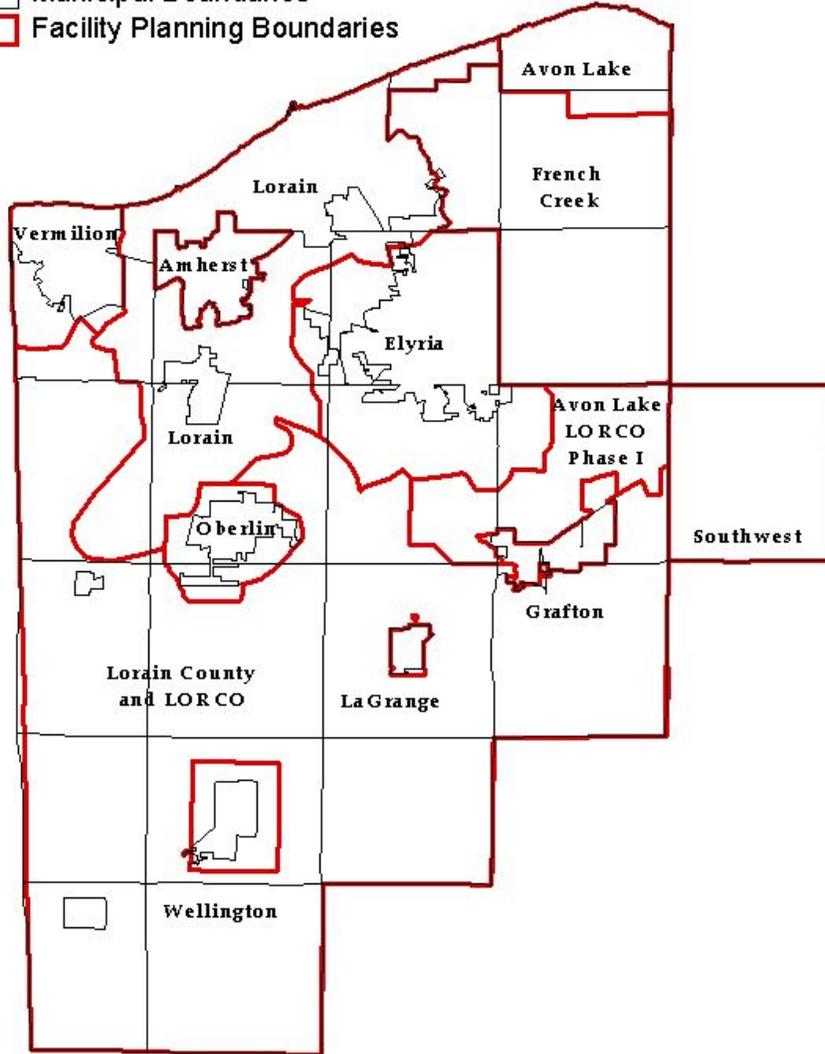
Northeast Ohio 208 Water Quality Management Plan

Prepared by:  
Northeast Ohio  
Regional  
Coordinating  
Agency  
June  
2005

Figure 4-3 Revised, June 2005

# Lorain County Facility Planning Areas

- Municipal Boundaries
- ▭ Facility Planning Boundaries



Northeast Ohio 208 Water Quality Management Plan

Prepared by:  
Northeast  
Ohio  
Areawide  
Coordinating  
Agency

NOACA

June  
2005

Figure 4-4 Revised, June 2005

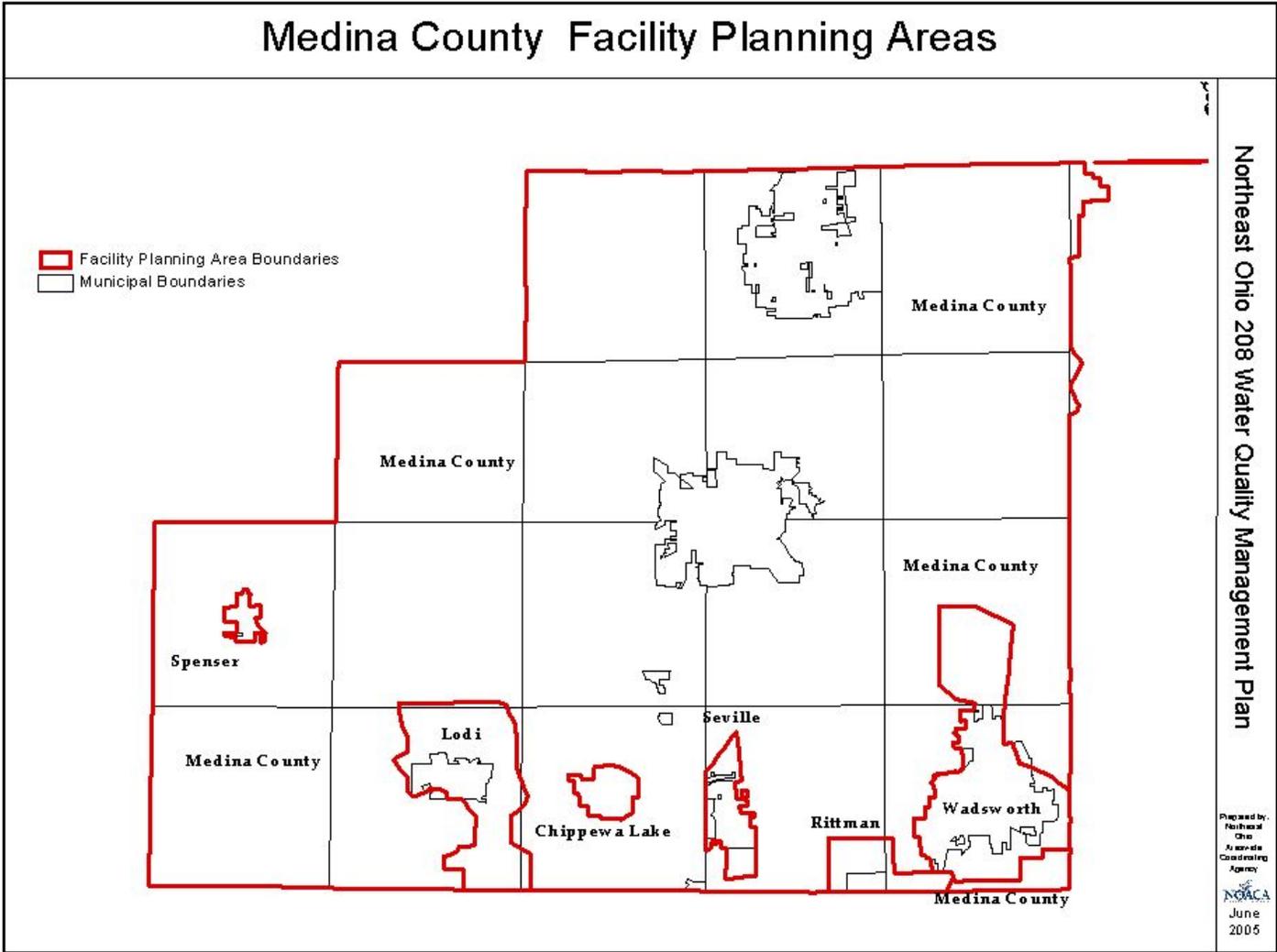


Figure 4-5 Revised, June 2005

## **Appendix 4-2**

### **Criteria for Establishing Consistency for Community Plans for Wastewater Treatment**

#### **Criteria for Establishing Consistency for Community Plans for Wastewater Treatment**

All communities in the NOACA WQMP area were surveyed by mail to provide information on how they want their community's wastewater to be treated out into the future. A series of options was presented to them from which they could select one or more for various portions of their community. The list of available options is contained in Table 4-3.

The following criteria have been established to guide the determination of consistency with the WQMP for any proposed wastewater treatment expansion. In a limited number of cases, communities have selected options that supplement the general statements made below. These community specific options are identified in Table 4-4. Community specific options modify or replace the general criteria as appropriate. The accompanying Figures 4-6 to 4-10 show the generalized options selected by local jurisdictions.

**Criterion 1: Central sewers that do not connect to the POTW that serves the Facility Planning Area in which a proposed project area lies are inconsistent with the WQMP without the expressed permission of the resident municipality in incorporated areas, and the County in unincorporated areas, and the Designated Management Agency that owns or operates the applicable POTW if different from the resident community. On-site wastewater system installations, repairs, or up-grades are consistent with the WQMP in areas where sewer plans exist to meet service needs until sanitary sewers are available.**

Under the WQMP an area is considered to be "currently sewered" if adequate wastewater capacity exists at a POTW to treat the wastes generated in the area, and an adequate collection system is in place to transfer those wastes to the POTW. There may be pockets of unsewered properties within this classification. Often these properties, when developed, could easily be connected to the central system. This classification can also include unsewered pockets that cannot economically or physically be connected to the central system. These pockets could also include areas with an insufficient density of wastewater sources to warrant extension of collection lines at this time. For facility planning purposes, these pockets are included in the "sewered" definition if the intent is to connect them to the central system if that ever becomes feasible. On-site treatment management practices continue to be in force in the interim. Properties that cannot yet be connected to the central system are permitted to install on-site systems as needed unless an exception is identified in Table 4-3 or Table 4-4. All sewer extensions to

serve these pockets will be deemed to be consistent with the WQMP as long as they do not require any expansion of the POTW that services them.

An area is classified as “expected to be sewered” if the local management agency perceives that sufficient capacity exists at a POTW, or can be added to it, to handle wastes generated in the area and that a demand exists to extend lines to the area in question. The demand could be the result of growth expectations or the need to address problems being caused by failing on-site treatment systems that exist in the area at the present time. Local officials, depending on their estimate of when projects will actually move forward, can subdivide this category into 5, 10 and 20-year time frames. For purposes of plan consistency, the timing of all projects is at the discretion of local communities. Timing declarations are estimates only and are not binding in any way. Consistency reviews are not affected by departures from these schedules. All central sewerage projects in these areas are subject to a consistency review. Individual properties in these areas can be serviced with on-site systems until sewers become available unless an exception is identified in Table 4-3 or Table 4-4.

Areas classified as “limited sewerage likely within 20 years” differ from the above classification in the confidence associated with the expectation that a demand will develop in the next twenty years. To be placed in this category a DMA has determined that adequate treatment capacity exists at a POTW and that limited collection line extension is affordable. What is different is that there may be no demand to extend lines at this time either because development pressure is low or that individual on-site systems are performing well. From a sewer planning perspective, it is reasonable to expect that sanitary sewers will eventually be extended into at least a portion of areas in this classification, but that extension is not likely to occur or to be completed in the next twenty years. All central sewerage projects in these areas are subject to a consistency review. Individual properties in these areas can be serviced with on-site systems until sewers become available unless an exception is identified in Table 4-3 or Table 4-4.

Criterion 2: Communal systems are inconsistent with the WQMP in areas identified as to remain served by on-site systems or in areas that are waiting for the extension of sanitary service without the expressed permission of the resident municipality in incorporated areas, or the County in unincorporated areas, and must be consistent with local zoning and building requirements of the municipality or township in which they are to be located.

Those areas that are classified in the “areas to remain served by on-site systems” represent several cases. Most are areas that have little demand for growth and are likely to remain rural far into the future. Many represent areas where expected growth can be accommodated with the use of individual on-site systems given existing zoning and building requirements. A few are areas where local officials are actively seeking service with sanitary sewers but have yet to develop viable projects.

“Communal systems” are small systems that use central sewers to collect wastewater from a number of individual properties and to treat it at a central point generally using an alternative treatment technology. New system designs are continuously being researched and the use of communal systems is expected to grow in the future. These systems can allow the use of conservation developments in areas where the use of individual on-lot systems would not support the concentration of building units to preserve open spaces. The use of such systems is restricted to jurisdictions that allow their use. All proposals must conform to local zoning and building regulations. Each request to use a communal system must be

approved the local jurisdiction in which it is to be located.

Criterion 3: On-site waste treatment system designs are approvable consistent with the permitting authorities of local municipal and county health authorities or the Ohio EPA whichever has jurisdiction over the application in question.

Communities, acting in concert with local health authorities and the Ohio EPA, have the option of declaring the types of on-lot systems that are to be used within their jurisdiction. There are two generic groups of systems that need to be considered: discharging and nondischarging systems. Nondischarging systems are on-site systems that have an on-lot discharge (e.g., a leaching system or mound type system). Discharging systems have off-lot discharges of wastewater. The most commonly used system of this type in the NOACA area is the aeration system. The primary difference between the two classes of systems is that discharging systems lead to immediate off-lot problems whenever the system is not operating as designed. For this reason, USEPA and Ohio EPA discourage their use. Communities can opt to require the use of nondischarging systems in all new construction so as to limit the impacts of malfunctioning systems on their residents. The continued use of discharging systems will be subject to permitting requirement of Ohio EPA acting in concert with USEPA.

Criterion 4: Installation or expansion of central sewers or treatment works are inconsistent with the WQMP in areas where sewer plans are undeclared; on-site treatment installations may proceed in such areas.

Areas that are classified as having “sewer plans undeclared” are areas where there is a mix of sanitary sewers and on-site systems and local officials have yet to identify their sewer plans, most usually because they are not yet complete. All land areas in this category need to develop their plans before any consistency action can be taken. The DMA(s) responsible for wastewater management planning in these areas must submit community sewer declarations for undeclared areas prior to the initiation of a consistency review by NOACA and Ohio EPA. The permitting and installation of on-site treatment systems in these areas may proceed pending completion of planning activities and the availability of central sewers.

### Table 4-3 Wastewater Planning Options

The following list represents some of the categories that local officials can consider for use in recommending how they want their community's wastewater to be handled in the future. Different categories can be applied to portions of a community. General headings (e.g., area is expected to be sewer) or more detailed definitions (e.g., area is expected to be served with sanitary sewers connected to an existing treatment plant) can be used. **Bold face type indicates the default definition that applies to all communities unless indicated otherwise in Table 4.4.**

1. Area is currently served with sanitary sewers:
  - A. Area is totally served with sanitary sewers connected to a specified, existing publicly owned treatment facility (POTW); all new construction will be connected to the central sewer system.
  - B. Area is currently served with sanitary sewers except for isolated pockets of on-site systems. On-site systems must be abandoned when collector sewers are available. New on-site systems may be used where collector sewers are unavailable.**
  - C. Area is totally served with sanitary sewers connected to a specified, existing commercial or semi-public package plant.
    - i. Package plant to be abandoned when POTW sanitary sewers become available.
    - ii. Package plant to remain in operation if and when POTW sanitary lines become available.
2. Area is expected to be served with sanitary sewers within the next 20 years (Pick one from each category)
  - A. Treatment options:
    - i. All future sewers will be connected to a specified existing, publicly owned treatment plant (POTW).**
    - ii. Area is expected to be served with sanitary sewers connected to a new POTW.
    - iii. Area is expected to be served with sanitary sewers connected to a new private treatment facility.
  - B. New system options until sewers become available:
    - i. On-site systems may be used but must be abandoned when sewers are available.**
    - ii. On-site systems may be used but dry sewers must be constructed.
    - iii. New on-site systems may not be used.

**Table 4-3**  
**Wastewater Planning Options**  
**(continued)**

3. Area where limited sewers can be extended in the next 20 years if a demand develops. (Pick one from each category.)

A. Treatment options:

- i. **All future sewers will be connected to a specified publicly owned treatment plant (POTW).**
- ii. Area is expected to be served with sanitary sewers connected to a new POTW.
- iv. Area is expected to be served with sanitary sewers connected to a new private treatment facility.

B New system options until sewers become available:

- i. **On-site systems may be used but must be abandoned when sewers are available.**
- v. On-site systems may be used but dry sewers must be constructed.
- vi. On-site systems may not be used until sewers are constructed.

4. Area designated to remain on on-site systems for the foreseeable future.

**A. Service to be provided only by on-site systems.**

- B. Area to be served by on-site systems except for communal systems used as part of an approved conservation development plan that results in no added units.

**Table 4-4**  
**Supplemental Wastewater Planning Declarations**

Cuyahoga County

The City of North Royalton requires that future sewer extension costs be borne by the developer.

Geauga County

The portions of Geauga County within the planning jurisdiction of the Department of Water Resources has sanitary sewer service restricted to areas that a) have an existing contractual obligation for such service, b) have been previously assessed for such service, c) are part of an existing or planned service area, or d) are determined by either the Ohio EPA or the Geauga Health District to be in violation of water pollution laws or regulations, and that all such violations could not be remedied, after exhausting all possible solutions, without the use of centralized water or sewer facilities. The Department of Water Resources must provide all sanitary service unless specifically exempted by the Geauga Board of Commissioners.

The City of Chardon will limit sewer extensions to areas that are within the City limits.

Chardon Township requests that no sanitary sewer service be provided for any portion of the township not in the Wintergreen Subdivision as currently platted.

Lake County

The Village of Kirtland will allow the use of communal wastewater treatment systems when used as part of an approved conservation development plan in areas that are otherwise to be served by on-site systems.

Painesville Township requests that sanitary sewer service be provided to all portions of the township.

Lorain County

The Lorain County General Health District requires that all subdivisions located within 2,000 feet of an established Facility Planning Area that are to be serviced by on-site wastewater treatment systems will install a sanitary sewer collection system that can be activated when sanitary sewer connections become available.

Ohio EPA and the Lorain County General Health District should consult the City of North Ridgeville prior to the issuance of a permit to install an on-site system within the municipality.

Medina County

The Medina County Sanitary Engineer will extend sewers in identified areas only in consultation with affected townships, cities, and/or villages.

Sharon Township requests that no expansion of sanitary service be allowed within the township.

## Community Plans for Wastewater Treatment in Cuyahoga County

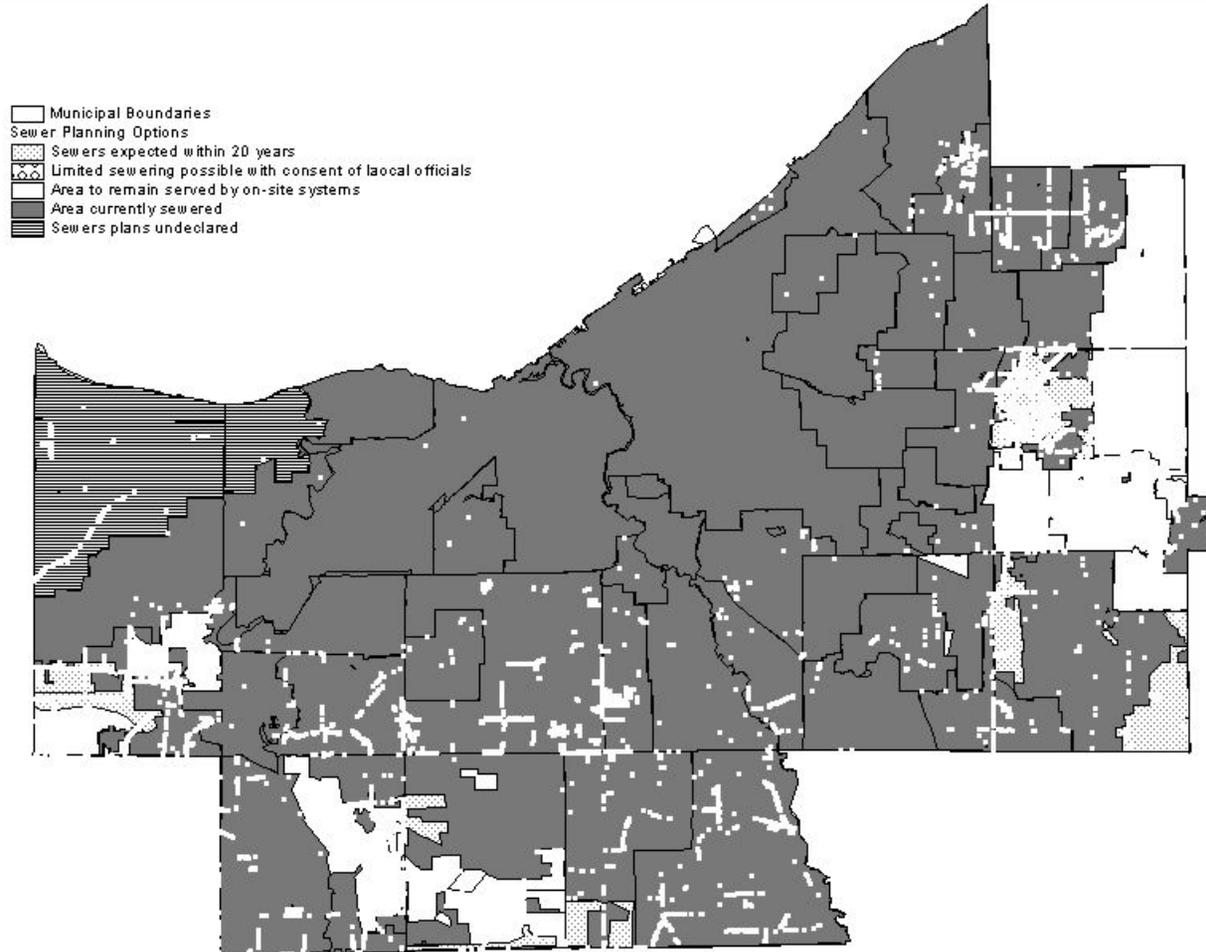


Figure 4-6 Revised, June 2005

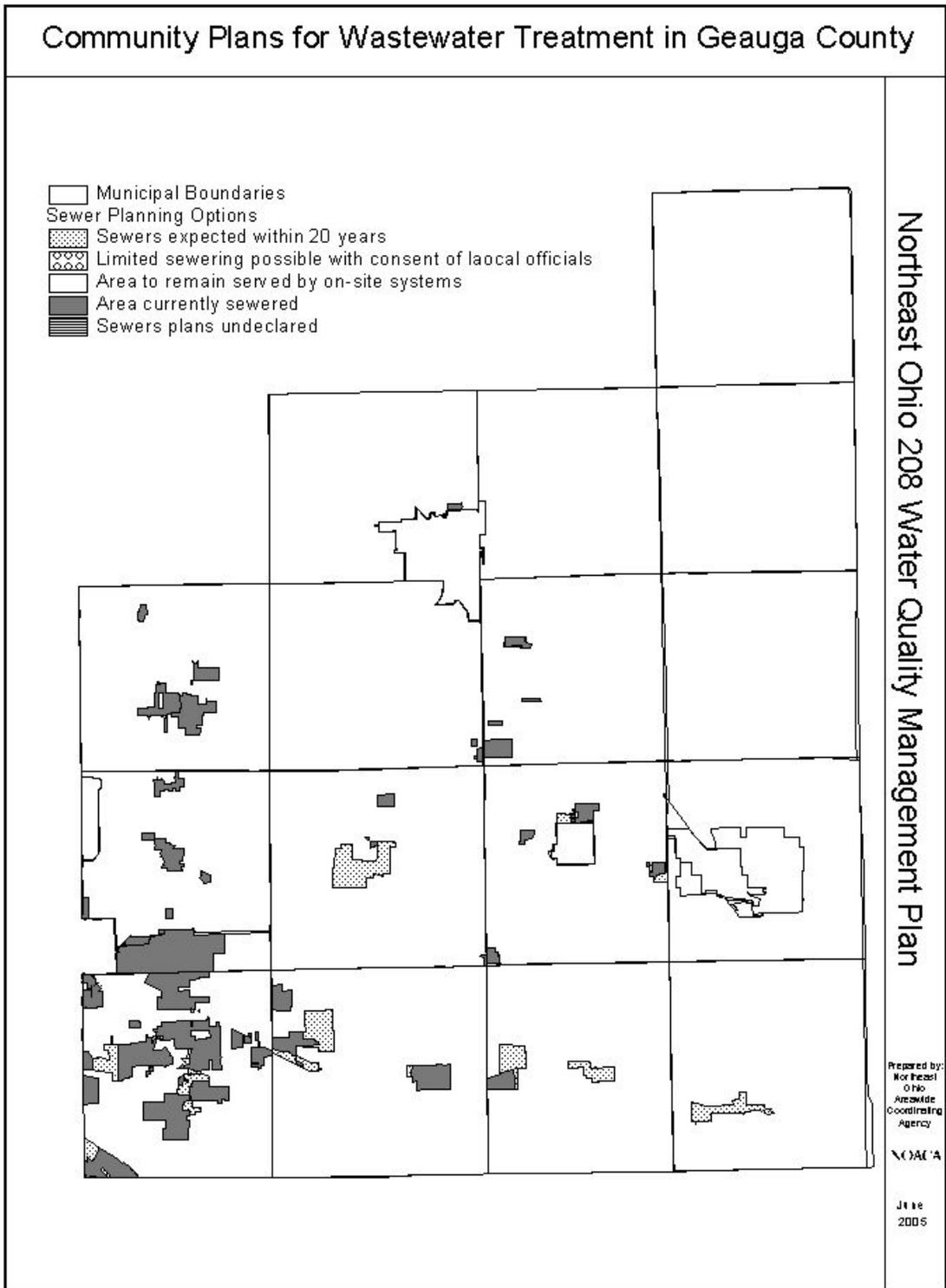
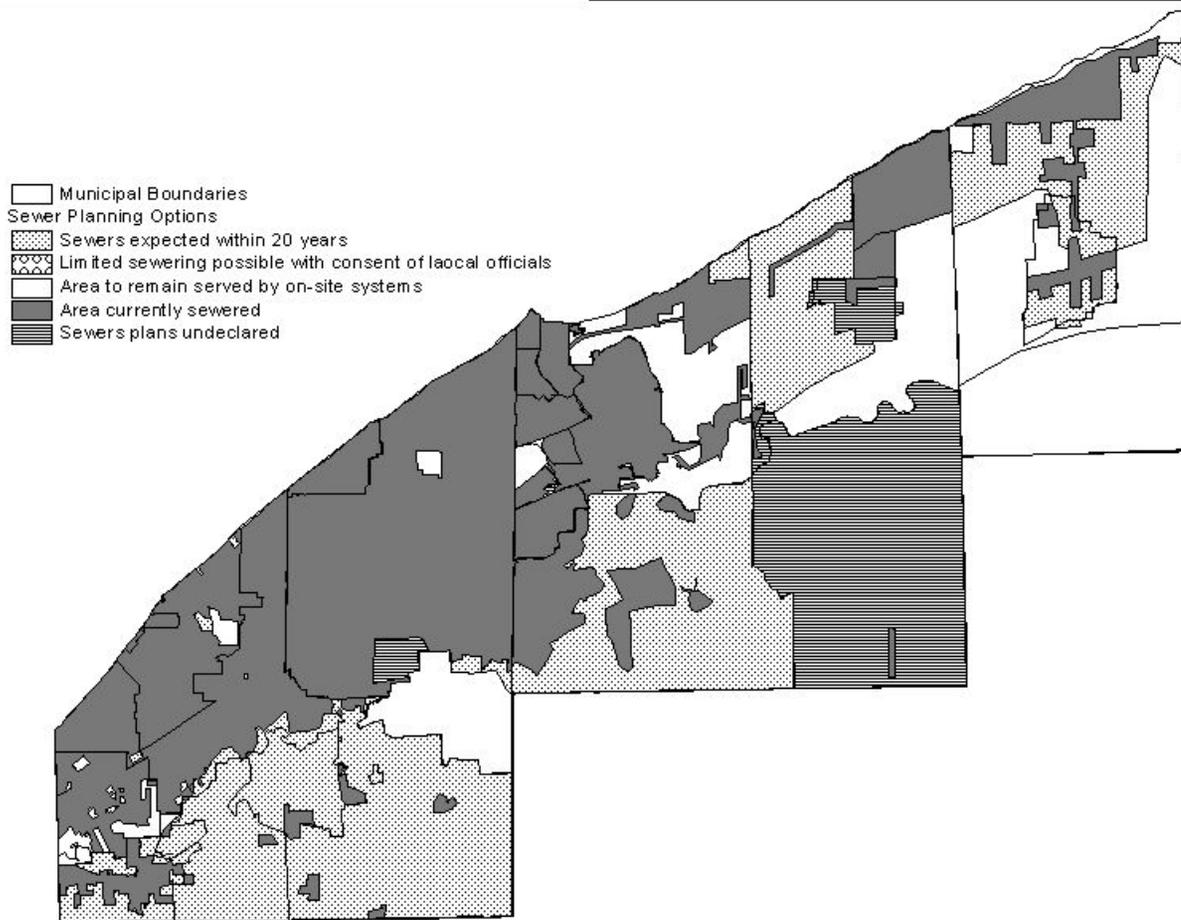


Figure 4-7 Revised, June 2005

## Community Plans for Wastewater Treatment in Lake County



Northeast Ohio 208 Water Quality Management Plan

Prepared by:  
Federal  
Ohio  
Aquatic  
Conserving  
Agency  
  
NRECA  
June  
2006

Figure 4-8 Revised, June 2005

# Community Plans for Wastewater Treatment in Lorain County

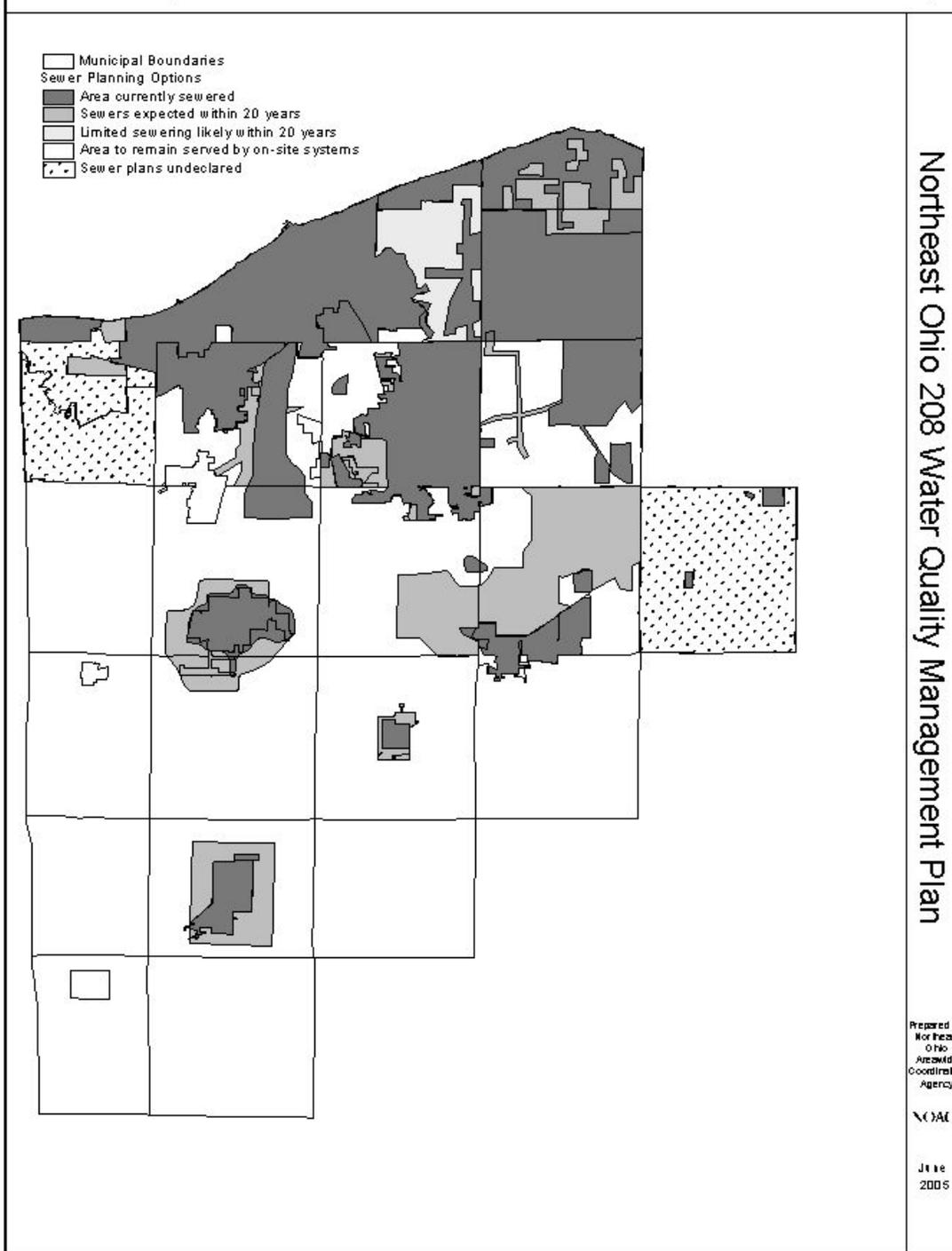
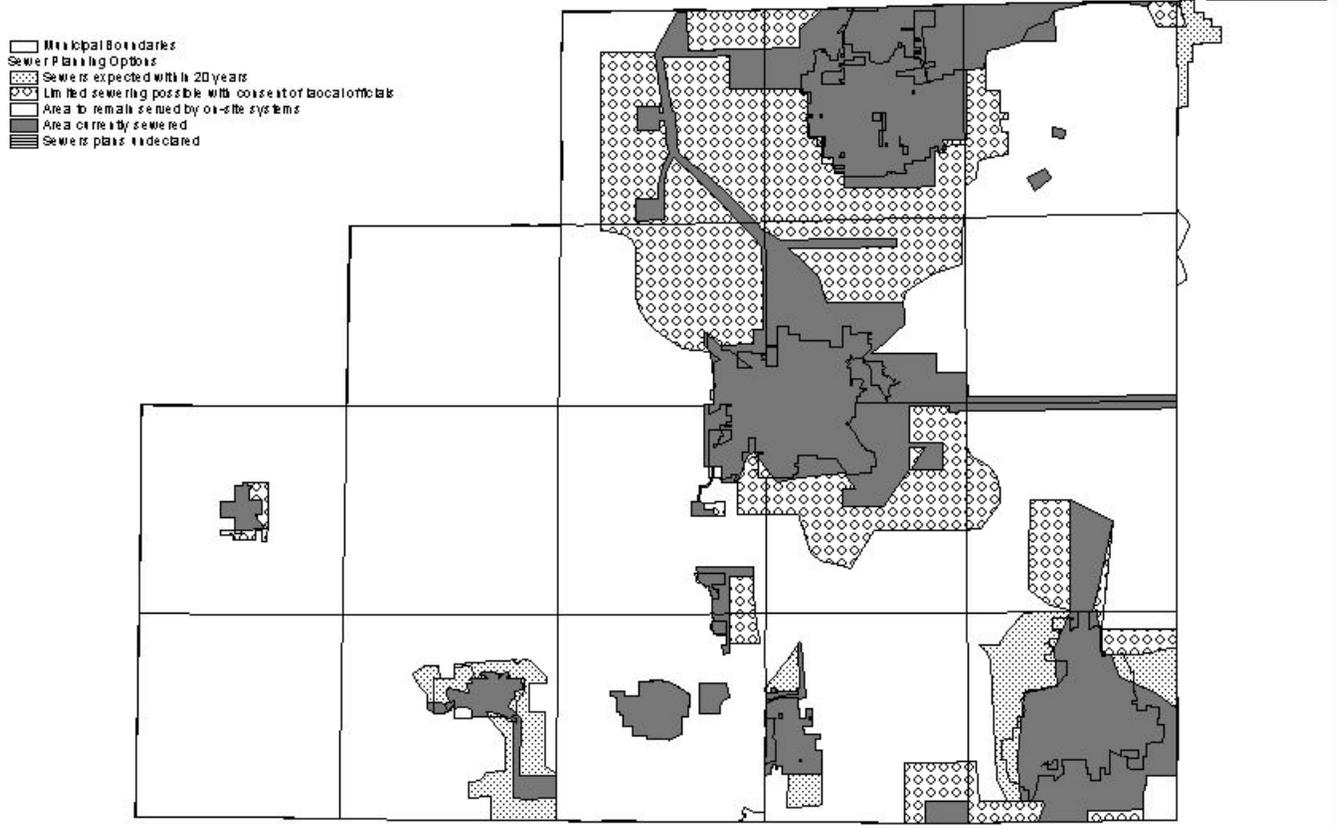


Figure 4-9 Revised, June 2005

# Community Plans for Wastewater Treatment in Medina County



Northeast Ohio 208 Water Quality Plan

Prepared by:  
 Federal  
 Ohio  
 Air and  
 Coastal  
 Agency  
 NRECA  
 June  
 2006

Figure 4-10 Revised, June 2005

**Appendix 4-3**  
**Certified**  
**Community-Level**  
**Population And Employment Allocations**  
**of the**  
**Northeast Ohio Areawide Coordinating Agency**

Abridged Version  
December 2004

Prepared by

**NORTHEAST OHIO AREAWIDE COORDINATING AGENCY**

Authors:

Robert Layton  
Bill Davis

DANIEL P. TROY  
BOARD PRESIDENT

HOWARD R. MAIER  
EXECUTIVE DIRECTOR

The preparation of this publication was financed through grants received from the Federal Highway Administration and the Ohio Department of Transportation and appropriations from the counties of and municipalities within Cuyahoga, Geauga, Lake, Lorain and Medina. The contents do not necessarily reflect official views or policies of the U.S. Department of Transportation or the Ohio Department of Transportation. This report does not constitute a standard or regulation.

**Abstract:**

Certified community-level population and employment allocations for use in three areas:

- 1) Input to the travel demand model (TDM) for the purpose of developing transportation plans, programs, and projects;
- 2) Demonstration of Transportation Conformity; and
- 3) Input to the NOACA Water Quality Management Planning Process.

The full TM-05-01 report disaggregates total employment in each county into three classes: basic employment, retail employment, and service employment. The tables containing the details each class of employment have been eliminated from this presentation. This is the only material that has been eliminated.

## Introduction

This document contains the Certified Community-Level Population And Employment Allocations of the Northeast Ohio Areawide Coordinating Agency (NOACA). The NOACA Governing Board moved at its September 10, 2004 meeting that the agency's Executive Director certify the population and employment projections in consultation with the various county planning commissions.

NOACA uses population and employment data for several specific planning activities. These include:

- 1) Input to the travel demand model (TDM) for the purpose of developing transportation plans, programs, and projects;
- 2) Demonstration of Transportation Conformity; and
- 3) Input to the NOACA Water Quality Management Planning Process.

In the past few years, the Census Bureau has been releasing data from the Year 2000 Decennial Census. The new data from this census must be incorporated into our current and future planning activities. Employment data from the 2000 Census Transportation Planning Package (CTPP) is the baseline data for future employment forecasts.

Additionally, the Ohio Department of Development, Office of Strategic Research, produces county-level population projections. NOACA and all other planning entities seeking to secure federal funds are required to use these state projections for the purposes outlined above. This requirement originated in August 1979 in an interdepartmental agreement signed by Governor James Rhodes. The agreement states:

“Beginning January 1, 1981, the Department of Economic and Community Development, pursuant to Section 122.06 (A), Ohio Revised Code, will be solely responsible for producing projections of population and population characteristics for State and sub-state areas for use by any department or agency of the State whose Director has signed this agreement, in planning, establishing the eligibility for funding, or qualifying for a benefit from the United States Government.”

The NOACA Board acknowledged this requirement most recently via Resolution No. 2003054. This resolution adopted the county-level population projections released by Ohio in June 2003.

Robert Layton, NOACA's Principal Economic Planner, allocated these population and employment projections to the communities within the NOACA region. These allocations will subsequently be further allocated to the Traffic Analysis Zone (TAZ) level for use in the travel demand model.

There are several things to be mindful of when reviewing these numbers:

- The CTPP is the only available source of the resident zone to work zone commute data that is necessary for travel demand modeling. As a result, employment estimates are predicated on data from the year 2000. Major changes in employment locations since 2000 will not be captured herein. They will be reflected in future updates when new Census data is released. The Census Bureau's American Community Survey, which is intended to be collected on an annual rather than decennial basis, will be of considerable benefit in allowing for more frequent updates of employment information in the model.
- The allocations do not constitute a plan for or an accepted vision of the area's population or employment future. In fact, as individual community- and county-level planning efforts come to fruition, their impacts will be reflected in future releases of the state's projections. These updated projections will be similarly allocated to the community- and TAZ-level for NOACA's planning needs.
- These allocations will not impact federal funding allocations for transportation. Funding levels are based on 2000 Census population levels and are not impacted by NOACA's population forecasts.

Local water quality planning efforts are also affected by these allocations. Federal law requires that applicants for wastewater infrastructure funding under the Clean Water Act must submit plans consistent with the region's 208 Water Quality Management Plan. As noted previously, the interdepartmental agreement requires the 208 Plan to be consistent with the State's projections as well. As a result, these allocations will help ensure that applicants have continued access to federal funds for their local water-quality planning efforts.

**CERTIFICATION OF  
COMMUNITY LEVEL POPULATION AND EMPLOYMENT ALLOCATIONS  
BY THE  
NORTHEAST OHIO AREAWIDE COORDINATING AGENCY**

**WHEREAS**, the Northeast Ohio Areawide Coordinating Agency (NOACA) is the Metropolitan Planning Organization (MPO) for the counties of Cuyahoga, Geauga, Lake, Lorain, and Medina; and

**WHEREAS**, federal regulations require an update of the region's long-range transportation plan every three years; and

**WHEREAS**, the development of this plan must meet numerous federal and state requirements in order to ensure continued access to federal funds for transportation projects; and

**WHEREAS**, the modeling of traffic in current and future years using an appropriately calibrated and validated travel demand model is one of these requirements; and

**WHEREAS**, the Ohio Department of Development (ODOD), Office of Strategic Research releases county-level population projections; and

**WHEREAS**, an interdepartmental agreement signed by Governor James Rhodes in August 1979 states:

“Beginning January 1, 1981, the Department of Economic and Community Development, pursuant to Section 122.06 (A), Ohio Revised Code, will be solely responsible for producing projections of population and population characteristics for State and sub-state areas for use by any department or agency of the State whose Director has signed this agreement, in planning, establishing the eligibility for funding, or qualifying for a benefit from the United States Government.”

and

**WHEREAS**, the aforementioned agreement therefore requires use of ODOD's population projections in NOACA's transportation, air, and water quality management planning programs; and

**WHEREAS**, the NOACA Governing Board adopted the county-level population projections issued by ODOD in Summer 2003 at its September 2003 meeting (Resolution 2003-054); and

**WHEREAS**, these county-level projections have been allocated to the community level and will subsequently be allocated to Traffic Analysis Zone (TAZ) level utilizing standard accepted statistical methods; and

**WHEREAS**, NOACA staff prepares community- and TAZ-level employment projections for the transportation, air, and water quality management planning programs using 2000 Census Transportation Planning Package Data as a baseline; and

**WHEREAS**, both population and employment are fundamental inputs to the NOACA's Travel Demand Model and population serves as a factor in determining the appropriate sizing of wastewater treatment facilities subject to the NOACA 208 Water Quality Management Plan; and

**WHEREAS**, neither the projections nor their associated travel demand model outputs are the final determinants of where, when, or how federal transportation dollars will be spent in the region. The NOACA Governing Board, through its Regional Transportation Investment Policy (Resolution 2003-051) contains NOACA policies for planning, programming and prioritizing federal-aid projects; and

**WHEREAS**, one agreed-upon set of population and employment projections will ensure that the NOACA Governing Board consistently meets federal and state transportation, air- and water-quality planning requirements; and

**WHEREAS**, the NOACA Governing Board moved at its September 10, 2004 meeting to authorize the Executive Director to certify the population and employment projections in consultation with the various county planning commissions for use in the travel demand model, air-quality attainment, and water-quality plan review; and

**WHEREAS**, NOACA staff has completed the attached population and employment projections in consultation with the various county planning commission.

**NOW, THEREFORE, BE IT CERTIFIED** by the Executive Director of the Northeast Ohio Areawide Coordinating Agency, whose Governing Board consists of 38 principal elected and other officials of general purpose local government throughout and within the

Counties of Cuyahoga, Geauga, Lake, Lorain, and Medina, that:

**Section 1:** The attached population and employment projections and allocations are adopted for use in the NOACA Travel Demand Model (TDM) for the purpose of developing transportation plans, programs, and projects.

**Section 2:** The attached population and employment projections and allocations are adopted for use in demonstrating conformity between transportation plans, programs and projects with the State Implementation Plan for Ozone.

**Section 3:** The attached population and employment projections and allocations are adopted for use in the NOACA Water Quality Management Planning Program.

**Section 4:** The attached population and employment projections and allocations are not to be construed to be a plan for or an accepted vision of the area's population or employment future.

**Section 5:** The attached population and employment projects will be reviewed and potentially revised each time the State releases new population projections.

Certified by the Executive Director of the Northeast Ohio Areawide Coordinating Agency.

Executive Director: signed Howard Maier

Date Signed: 12/20/04

**CUYAHOGA COUNTY  
TOTAL EMPLOYMENT**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>CUYAHOGA COUNTY</b>	733,945	747,933	722,023	727,764	727,267	718,803	710,340	706,340
<b>CLEVELAND</b>	332,050	294,684	271,738	264,017	255,327	245,986	236,962	229,977
<b>WEST SHORE REGION</b>								
Bay Village	2,477	2,689	2,649	2,698	2,715	2,672	2,631	2,608
Fairview Park	5,042	4,845	4,648	4,656	4,625	4,557	4,488	4,446
Lakewood	15,633	15,657	15,304	15,484	15,490	15,181	14,879	14,689
North Olmsted	12,310	14,170	14,034	14,400	14,606	14,650	14,656	14,729
Rocky River	8,450	9,417	9,299	9,509	9,597	9,545	9,480	9,461
Westlake	15,796	21,345	23,089	25,146	26,637	27,389	28,000	28,662
<b>SOUTH WEST REGION</b>								
Berea	8,912	9,568	9,470	9,760	9,946	10,014	10,051	10,139
Brook Park	16,294	15,511	14,492	14,139	13,699	13,116	12,519	12,044
Middleburg Hts.	13,580	18,231	18,822	19,943	20,749	21,178	21,509	21,913
Olmsted Falls	1,284	1,609	1,709	1,836	1,922	1,957	1,983	2,014
Olmsted Twp.	2,126	4,043	4,563	5,110	5,526	5,768	5,972	6,181
Strongsville	12,061	20,393	21,080	22,544	23,842	24,756	25,643	26,732
<b>SOUTH CENTRAL REGION</b>								
Brooklyn	10,076	13,269	12,719	12,727	12,635	12,443	12,225	12,089
Linndale	122	134	119	123	125	126	126	126
North Royalton	5,975	7,990	8,234	8,805	9,314	9,673	10,024	10,456
Parma	29,393	28,767	27,511	27,512	27,304	26,890	26,451	26,182
Parma Hts.	4,699	4,600	4,547	4,654	4,699	4,674	4,684	4,723
<b>CUYAHOGA REGION</b>								
Brecksville	7,335	10,507	11,093	11,900	12,459	12,683	12,865	13,079
Broadview Hts.	3,524	5,516	5,742	6,186	6,585	6,864	7,148	7,492
Brooklyn Hts.	3,157	4,635	4,673	4,877	5,018	5,086	5,126	5,191
Cuyahoga Hts.	6,617	7,470	7,067	7,061	7,039	7,013	6,946	6,936
Independence	13,365	17,196	17,668	18,597	19,196	19,360	19,470	19,647
Newburgh Hts.	1,106	2,094	2,203	2,400	2,573	2,720	2,838	2,968
Seven Hills	2,348	2,833	2,708	2,704	2,676	2,623	2,572	2,536
Valley View	4,321	7,725	7,794	8,169	8,456	8,641	8,775	8,950
<b>CHAGRIN SOUTHEAST REGION</b>								
Bedford	6,293	6,841	6,555	6,506	6,394	6,166	5,948	5,782
Bedford Hts.	8,879	9,659	9,263	9,268	9,207	9,050	8,859	8,740
Bentleyville	18	139	171	201	225	240	253	265
Chagrin Falls Twp	6	0	0	0	0	0	0	0
Chagrin Falls	3,161	2,950	2,800	2,780	2,739	2,679	2,621	2,579
Garfield Hts.	8,965	10,121	9,753	9,842	9,858	9,803	9,725	9,709
Glenwillow	410	828	815	839	855	864	868	878
Highland Hills	4,794	1,607	1,515	1,506	1,489	1,468	1,448	1,438
Hunting Valley	316	326	303	298	293	288	283	281
Maple Hts.	8,859	6,283	5,664	5,344	5,007	4,657	4,938	4,918
Moreland Hills	568	560	551	564	572	574	575	579
North Randall	3,782	2,579	2,340	2,236	2,135	2,046	1,963	1,897
Oakwood	1,487	3,049	3,228	3,504	3,731	3,901	4,038	4,188
Orange	1,026	1,119	1,210	1,317	1,392	1,425	1,454	1,484
Solon	22,794	24,484	24,223	25,039	25,722	26,090	26,429	27,010
Walton Hills	4,492	4,340	4,111	4,086	4,038	3,967	3,878	3,821
Warrensville Hts.	8,851	8,119	7,686	7,640	7,551	7,423	7,283	7,196

**CUYAHOGA COUNTY  
TOTAL EMPLOYMENT**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Woodmere	1,493	2,054	2,027	2,077	2,104	2,103	2,099	2,106
<b>HEIGHTS REGION</b>								
Cleveland Hts.	11,410	10,204	9,792	9,703	9,498	9,080	8,687	8,364
East Cleveland	6,779	6,335	6,133	6,164	6,128	5,976	5,820	5,707
Shaker Hts.	6,895	9,132	8,972	9,094	9,103	8,906	8,723	8,604
University Hts.	3,875	4,059	4,021	4,110	4,147	4,086	4,030	4,001
<b>HILLCREST REGION</b>								
Beachwood	15,739	20,151	21,635	23,423	24,674	25,208	25,653	26,144
Bratenahl	236	401	400	415	425	431	436	442
Euclid	24,282	18,906	17,307	16,649	15,932	15,169	14,419	13,808
Gates Mills	1,202	696	685	703	712	713	713	716
Highland Hts.	6,578	7,817	7,737	7,999	8,221	8,327	8,442	8,640
Lyndhurst	4,819	4,857	4,689	4,685	4,627	4,468	4,320	4,209
Mayfield Hts.	6,948	12,792	12,818	13,361	13,768	14,034	14,245	14,518
Mayfield	4,692	9,042	8,947	9,218	9,385	9,432	9,459	9,533
Pepper Pike	2,778	3,106	3,012	3,051	3,059	3,036	3,013	3,006
Richmond Hts.	4,502	5,007	5,410	5,887	6,233	6,415	6,565	6,725
South Euclid	5,806	5,472	5,275	5,303	5,281	5,207	5,130	5,084

**SOURCE: 1990 & 2000, U. S. Census Bureau (Census Transportation Planning Package); 2005 - 2030, County projections - NOACA; Sub-county allocations – NOACA in cooperation with Cuyahoga County Planning Commission**

**CUYAHOGA COUNTY  
TOTAL POPULATION**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>CUYAHOGA COUNTY</b>	1,412,140	1,393,845	1,356,860	1,332,540	1,309,640	1,301,870	1,289,960	1,274,020
<b>CLEVELAND</b>	505,616	477,459	445,353	424,360	407,077	399,411	390,716	381,225
<b>WEST SHORE REGION</b>								
Bay Village	17,000	16,087	15,678	15,280	14,870	14,488	14,089	13,674
Fairview Park	18,028	17,572	16,888	16,439	16,032	15,889	15,685	15,423
Lakewood	59,718	56,646	55,207	53,805	52,360	51,016	49,612	48,149
North Olmsted	34,204	34,113	33,471	33,046	32,576	32,492	32,258	31,875
Rocky River	20,410	20,735	20,674	20,633	20,502	20,545	20,482	20,310
Westlake	27,018	31,719	35,337	37,758	39,355	40,524	41,358	41,807
<b>SOUTH WEST REGION</b>								
Berea	19,051	18,970	18,587	18,333	18,060	18,005	17,869	17,651
Brook Park	22,865	21,218	20,502	19,800	19,083	18,401	17,698	16,975
Middleburg Hts.	14,702	15,542	16,017	16,330	16,479	16,663	16,743	16,710
Olmsted Falls	6,741	7,962	8,907	9,540	9,959	10,264	10,483	10,603
Olmsted Twp	8,380	10,575	12,351	13,548	14,366	14,933	15,360	15,625
Strongsville	35,308	43,858	46,032	48,236	50,401	52,665	54,874	57,016
<b>SOUTH CENTRAL REGION</b>								
Brooklyn	11,706	11,586	11,291	11,096	10,901	10,850	10,752	10,608
Linndale	159	117	99	100	100	101	101	101
North Royalton	23,197	28,648	30,068	31,507	32,922	34,401	35,844	37,243
Parma	87,876	85,655	82,324	80,134	78,152	77,453	76,459	75,185
Parma Hts.	21,448	21,659	21,484	21,367	21,178	21,191	21,099	20,898
<b>CUYAHOGA REGION</b>								
Brecksville	11,818	13,382	14,533	15,300	15,789	16,168	16,424	16,539
Broadview Hts.	12,219	15,967	16,758	17,561	18,349	19,173	19,977	20,757
Brooklyn Hts.	1,450	1,558	1,626	1,672	1,697	1,721	1,735	1,735
Cuyahoga Hts.	682	599	518	466	426	406	386	367
Independence	6,500	7,109	7,524	7,799	7,963	8,105	8,191	8,214
Newburgh Hts.	2,310	2,389	2,418	2,437	2,439	2,455	2,456	2,443
Seven Hills	12,339	12,080	11,657	11,378	11,121	11,035	10,906	10,735
Valley View	2,137	2,179	2,179	2,180	2,169	2,176	2,171	2,154
<b>CHAGRIN SOUTHEAST REGION</b>								
Bedford	14,822	14,214	13,853	13,501	13,139	12,801	12,449	12,082
Bedford Hts.	12,131	11,375	10,991	10,615	10,230	9,865	9,488	9,100
Bentleyville	674	947	1,177	1,334	1,444	1,517	1,575	1,613
Chagrin Falls Twp	202	135	99	100	100	101	101	101
Chagrin Falls Village	4,146	4,024	3,852	3,740	3,639	3,602	3,552	3,489
Garfield Hts.	31,739	30,734	29,360	28,457	27,663	27,362	26,963	26,474
Glenwillow	455	449	436	428	420	418	414	408
Highland Hills	1,726	1,618	1,498	1,420	1,357	1,328	1,296	1,262
Hunting Valley (part)	648	590	531	492	462	447	431	416
Maple Hts.	27,089	26,156	24,920	24,108	23,402	23,127	22,772	22,344
Moreland Hills	3,354	3,298	3,195	3,127	3,063	3,043	3,011	2,966
North Randall	977	906	830	781	741	722	702	682
Oakwood	3,392	3,667	3,846	3,965	4,033	4,096	4,132	4,137
Orange	2,810	3,236	3,557	3,771	3,911	4,015	4,088	4,124
Solon	18,548	21,802	22,882	23,978	25,054	26,180	27,278	28,343
Walton Hills	2,371	2,400	2,385	2,376	2,357	2,360	2,351	2,329
Warrensville Hts.	15,745	15,109	14,311	13,789	13,342	13,160	12,935	12,673

**CUYAHOGA COUNTY  
TOTAL POPULATION**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Woodmere	834	828	809	797	784	780	773	762
<b>HEIGHTS REGION</b>								
Cleveland Hts.	54,052	50,769	49,056	47,376	45,660	44,029	42,347	40,616
East Cleveland	33,096	27,217	26,299	25,398	24,478	23,604	22,702	21,774
Shaker Hts.	30,831	29,405	28,658	27,930	27,180	26,482	25,754	24,994
University Hts.	14,790	14,146	13,787	13,436	13,076	12,740	12,389	12,024
<b>HILLCREST REGION</b>								
Beachwood	10,677	12,186	13,310	14,060	14,542	14,910	15,162	15,282
Bratenahl	1,356	1,337	1,299	1,273	1,248	1,241	1,229	1,212
Euclid	54,875	52,717	49,987	48,197	46,662	46,042	45,271	44,366
Gates Mills	2,508	2,493	2,439	2,403	2,365	2,357	2,338	2,309
Highland Hts.	6,249	8,082	8,483	8,889	9,288	9,705	10,112	10,507
Lyndhurst	15,982	15,279	14,891	14,513	14,123	13,760	13,382	12,987
Mayfield Hts.	19,847	19,386	18,668	18,196	17,764	17,616	17,399	17,117
Mayfield	3,462	3,435	3,355	3,302	3,248	3,235	3,207	3,166
Pepper Pike	6,185	6,040	5,815	5,667	5,532	5,486	5,418	5,330
Richmond Hts.	9,611	10,944	11,934	12,594	13,017	13,341	13,562	13,666
South Euclid	23,866	23,537	22,864	22,421	21,989	21,865	21,649	21,343

**SOURCE: 1990 & 2000, U. S. Census Bureau; 2005 - 2030, County projections - State of Ohio, Office of Strategic Research; Sub-county allocations - NOACA in cooperation with Cuyahoga County Planning Commission**

**GEAUGA COUNTY  
TOTAL EMPLOYMENT**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Geauga County</b>	24,626	34,451	35,995	39,962	43,742	47,192	50,640	54,365
<b>Auburn Twp.</b>	96	1,288	1,423	1,678	1,661	1,880	2,093	2,312
<b>Bainbridge Twp.</b>	3,536	4,523	4,817	5,334	5,656	5,974	6,299	6,668
<b>Burton Village</b>	1,345	702	705	752	755	732	778	830
<b>Burton Twp.</b>	667	1,601	1,614	1,791	2,122	2,376	2,618	2,869
<b>Chardon City</b>	3,761	5,710	6,117	6,853	7,237	7,765	8,292	8,871
<b>Chardon Twp.</b>	1,069	397	408	433	436	462	488	519
<b>Chester Twp.</b>	3,578	3,077	3,144	3,353	4,041	4,291	4,538	4,818
<b>Claridon Twp.</b>	71	513	542	600	717	793	867	945
<b>Hambden Twp.</b>	89	508	566	647	667	730	792	860
<b>Huntsburg Twp.</b>	42	293	324	373	385	427	469	513
<b>Middlefield Village</b>	3,384	6,076	6,157	6,893	7,559	8,291	8,993	9,721
<b>Middlefield Twp.</b>	852	979	964	1,064	1,180	1,280	1,376	1,476
<b>Montville Twp.</b>	50	306	325	369	408	455	501	548
<b>Munson Twp.</b>	1,489	2,927	3,203	3,576	3,917	4,229	4,539	4,884
<b>Newbury Twp.</b>	2,809	2,592	2,579	2,794	3,087	3,236	3,384	3,547
<b>Parkman Twp.</b>	131	374	383	431	484	540	592	647
<b>Russell Twp.</b>	625	808	838	893	1,157	1,248	1,334	1,430
<b>S.Russell Village</b>	737	793	851	956	981	1,044	1,107	1,178
<b>Thompson Twp.</b>	208	400	416	458	513	553	592	635
<b>Troy Twp.</b>	87	584	619	715	778	886	988	1,093

**SOURCE: 1990 & 2000, U. S. Census Bureau (Census Transportation Planning Package); 2005 - 2030, County projections - NOACA; Sub-county allocations – NOACA in cooperation with Geauga County Planning Commission**

**GEAUGA COUNTY  
TOTAL POPULATION**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Geauga County</b>	81,129	90,895	94,440	98,820	101,290	104,810	106,790	109,180
<b>Auburn Twp.</b>	3,298	5,158	6,066	6,922	7,460	8,032	8,382	8,728
<b>Bainbridge Twp.</b>	9,694	10,916	11,354	11,888	12,188	12,614	12,853	13,141
<b>Burton Village</b>	1,349	1,450	1,477	1,522	1,545	1,586	1,608	1,638
<b>Burton Twp.</b>	2,838	2,908	2,898	2,933	2,944	2,993	3,016	3,057
<b>Chardon City</b>	4,446	5,156	5,430	5,740	5,919	6,155	6,290	6,446
<b>Chardon Twp.</b>	4,037	4,763	5,053	5,369	5,555	5,791	5,928	6,083
<b>Chester Twp.</b>	11,049	10,968	10,763	10,756	10,708	10,810	10,845	10,952
<b>Claridon Twp.</b>	3,016	3,173	3,201	3,273	3,306	3,380	3,418	3,473
<b>Hambden Twp.</b>	3,311	4,024	4,320	4,632	4,818	5,045	5,177	5,323
<b>Huntsburg Twp.</b>	2,642	3,297	3,577	3,865	4,038	4,243	4,364	4,494
<b>Middlefield Village</b>	1,898	2,233	2,366	2,512	2,598	2,707	2,770	2,842
<b>Middlefield Twp.</b>	4,111	4,418	4,501	4,638	4,708	4,832	4,899	4,988
<b>Montville Twp.</b>	1,682	1,984	2,104	2,236	2,313	2,412	2,469	2,533
<b>Munson Twp.</b>	5,775	6,450	6,685	6,980	7,145	7,384	7,518	7,681
<b>Newbury Twp.</b>	5,611	5,805	5,811	5,904	5,940	6,052	6,106	6,195
<b>Parkman Twp.</b>	3,083	3,546	3,722	3,924	4,040	4,195	4,284	4,387
<b>Russell Twp.</b>	5,765	5,674	5,545	5,521	5,484	5,525	5,535	5,584
<b>S.Russell Village</b>	3,402	4,022	4,270	4,541	4,699	4,901	5,018	5,149
<b>Thompson Twp.</b>	2,219	2,383	2,427	2,500	2,537	2,604	2,640	2,688
<b>Troy Twp.</b>	1,903	2,567	2,868	3,164	3,345	3,549	3,672	3,798

**SOURCE: 1990 & 2000, U. S. Census Bureau; 2005 - 2030, County projections - State of Ohio, Office of Strategic Research; Sub-county allocations - NOACA in cooperation with Geauga County Planning Commission**

**LAKE COUNTY  
TOTAL EMPLOYMENT**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Lake County</b>	87,493	102,836	111,634	120,750	129,222	136,684	144,146	152,732
<b>Concord Twp.</b>	1,365	3,637	4,760	5,898	6,854	7,605	8,424	9,331
<b>Eastlake City</b>	6,692	7,349	7,606	7,944	8,234	8,607	8,905	9,269
<b>Fairport Harbor Village</b>	910	860	901	947	982	1,009	1,034	1,068
<b>Grand River Village</b>	445	419	422	429	430	422	416	413
<b>Kirtland City</b>	1,615	2,201	2,548	2,877	3,147	3,342	3,552	3,790
<b>Kirtland Hills Village</b>	194	101	108	115	121	130	137	145
<b>Lakeline Village</b>	0	10	10	9	9	10	11	12
<b>Leroy Twp.</b>	29	355	440	524	593	645	701	764
<b>Madison Village</b>	434	1,500	2,145	2,803	3,372	3,854	4,366	4,933
<b>Madison Twp.</b>	3,440	3,622	4,367	5,152	5,643	6,103	6,422	6,816
<b>Mentor City</b>	23,867	33,377	35,164	36,980	38,648	40,113	41,671	43,418
<b>Mentor-on-the-Lake City</b>	710	875	972	1,066	1,152	1,250	1,338	1,435
<b>North Perry Village</b>	283	196	171	148	127	107	111	115
<b>Painesville City</b>	9,452	9,259	10,563	11,863	12,949	13,794	14,677	15,699
<b>Painesville Twp.</b>	8,498	5,386	5,288	5,199	5,779	6,196	6,655	7,189
<b>Perry Village</b>	291	533	582	628	663	676	694	718
<b>Perry Twp.</b>	1,974	2,764	3,463	4,217	4,852	5,382	5,948	6,580
<b>Timberlake Village</b>	21	40	47	54	60	67	74	81
<b>Waite Hill Village</b>	327	99	105	111	117	124	130	136
<b>Wickliffe City</b>	8,880	8,927	9,063	9,289	9,499	9,870	10,121	10,447
<b>Willoughby City</b>	13,472	16,236	17,557	18,913	20,174	21,248	22,401	23,729
<b>Willoughby Hills City</b>	2,274	2,962	3,129	3,274	3,406	3,544	3,656	3,797
<b>Willowick City</b>	2,320	2,128	2,225	2,312	2,411	2,580	2,703	2,847

**SOURCE: 1990 & 2000, U. S. Census Bureau (Census Transportation Planning Package); 2005 - 2030, County projections - NOACA; Sub-county allocations – NOACA in cooperation with Lake County Planning Commission**

**LAKE COUNTY  
TOTAL POPULATION**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Lake County</b>	215,499	227,511	230,510	233,890	233,760	234,520	233,290	232,340
<b>Concord Twp.</b>	12,432	15,282	16,432	17,416	17,769	17,478	17,353	17,260
<b>Eastlake City</b>	21,161	20,255	19,632	19,227	18,881	19,266	19,196	19,139
<b>Fairport Harbor Village</b>	2,978	3,180	3,235	3,293	3,295	3,302	3,284	3,270
<b>Grand River Village</b>	297	345	363	379	384	380	378	376
<b>Kirtland City</b>	5,881	6,670	6,955	7,210	7,280	7,232	7,187	7,153
<b>Kirtland Hills Village</b>	628	597	577	563	552	564	562	561
<b>Lakeline Village</b>	210	165	144	129	120	129	129	129
<b>Leroy Twp.</b>	2,581	3,122	3,337	3,522	3,586	3,534	3,509	3,491
<b>Madison Village</b>	2,477	2,921	3,092	3,241	3,290	3,252	3,230	3,214
<b>Madison Twp.</b>	15,477	15,507	16,601	17,807	17,596	17,657	16,975	16,397
<b>Mentor City</b>	47,358	50,278	50,378	50,478	50,578	50,678	50,778	50,882
<b>Mentor-on-the-Lake City</b>	8,271	8,127	7,973	7,886	7,783	7,903	7,871	7,845
<b>North Perry Village</b>	824	831	825	824	817	825	822	819
<b>Painesville City</b>	15,699	17,417	18,001	18,539	18,661	18,594	18,484	18,400
<b>Painesville Twp.</b>	13,218	15,123	15,823	16,445	16,624	16,496	16,392	16,314
<b>Perry Village</b>	1,012	1,195	1,266	1,327	1,347	1,332	1,323	1,316
<b>Perry Twp.</b>	4,944	6,214	6,736	7,180	7,345	7,207	7,154	7,114
<b>Timberlake Village</b>	833	775	741	718	701	719	717	715
<b>Waite Hill Village</b>	454	446	437	433	427	434	432	430
<b>Wickliffe City</b>	14,558	13,484	12,866	12,437	12,132	12,459	12,421	12,390
<b>Willoughby City</b>	20,510	22,621	22,719	22,817	22,915	23,013	23,111	23,211
<b>Willoughby Hills City</b>	8,427	8,595	8,574	8,594	8,538	8,615	8,574	8,543
<b>Willowick City</b>	15,269	14,361	13,804	13,427	13,139	13,452	13,407	13,371

**SOURCE: 1990 & 2000, U. S. Census Bureau; 2005 - 2030, County projections - State of Ohio, Office of Strategic Research; Sub-county allocations - NOACA in cooperation with Lake County Planning Commission**

**LORAIN COUNTY  
TOTAL EMPLOYMENT**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Lorain County</b>	99,508	107,607	107,225	111,574	115,129	117,606	120,083	123,388
<b>Amherst City</b>	4,284	5,388	5,349	5,520	5,641	5,720	5,800	5,930
<b>Amherst Twp.</b>	484	1,341	1,310	1,353	1,386	1,410	1,434	1,469
<b>Avon City</b>	2,338	4,970	5,392	5,936	6,500	6,905	7,316	7,701
<b>Avon Lake City</b>	8,146	8,270	8,112	8,445	8,746	8,963	9,182	9,451
<b>Brighton Twp.</b>	40	60	63	66	69	71	73	76
<b>Brownhelm Twp.</b>	57	229	228	240	250	257	265	274
<b>Camden Twp.</b>	641	183	177	182	186	188	190	194
<b>Carlisle Twp.</b>	2,409	2,098	2,076	2,136	2,174	2,197	2,219	2,262
<b>Columbia Twp.</b>	165	1,438	1,415	1,463	1,501	1,527	1,553	1,590
<b>Eaton Twp.</b>	2,061	1,977	1,968	2,020	2,050	2,065	2,079	2,114
<b>Elyria City</b>	26,897	29,582	28,982	29,793	30,340	30,708	31,075	31,728
<b>Elyria Twp.</b>	2,539	1,957	1,932	1,977	1,999	2,009	2,020	2,051
<b>Grafton Village</b>	1,273	1,205	1,207	1,283	1,342	1,393	1,441	1,506
<b>Grafton Twp.</b>	36	237	237	249	261	269	277	286
<b>Henrietta Twp.</b>	47	279	278	288	295	300	305	312
<b>Huntington Twp.</b>	49	213	205	212	217	221	226	232
<b>Lagrange Village</b>	654	1,109	1,077	1,107	1,130	1,146	1,161	1,187
<b>Lagrange Twp.</b>	61	348	345	361	375	384	394	406
<b>Lorain City</b>	28,378	22,124	21,981	22,800	23,449	23,880	24,313	24,917
<b>New Russia Twp.</b>	121	605	579	595	607	616	625	639
<b>North Ridgeville City</b>	5,097	6,238	6,482	6,916	7,332	7,624	7,918	8,227
<b>Oberlin City</b>	5,375	6,853	6,810	7,079	7,252	7,392	7,523	7,745
<b>Penfield Twp.</b>	26	335	323	335	347	355	363	374
<b>Pittsfield Twp.</b>	29	339	338	348	356	360	364	371
<b>Rochester Twp.</b>	73	75	67	65	61	59	57	56
<b>Sheffield Village</b>	1,054	2,504	2,658	2,870	3,081	3,232	3,385	3,538
<b>Sheffield Lake City</b>	878	964	950	973	986	993	1,001	1,018
<b>Sheffield Twp.</b>	2,913	2,282	2,336	2,448	2,542	2,605	2,668	2,746
<b>South Amherst Village</b>	336	312	309	320	329	335	340	348
<b>Vermilion City (part)</b>	953	1,091	1,096	1,141	1,178	1,205	1,231	1,267
<b>Wellington Village</b>	2,071	2,709	2,659	2,760	2,846	2,908	2,970	3,053
<b>Wellington Twp.</b>	23	292	283	293	301	307	313	321

**SOURCE: 1990 & 2000, U. S. Census Bureau (Census Transportation Planning Package); 2005 - 2030, County projections - NOACA; Sub-county allocations - NOACA in cooperation with Lorain County Planning Commission**

**LORAIN COUNTY  
TOTAL POPULATION**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Lorain County</b>	271,126	284,664	288,400	290,840	295,660	299,630	306,720	312,540
<b>Amherst City</b>	10,332	11,797	11,783	11,523	11,489	11,482	11,596	11,702
<b>Amherst Twp.</b>	5,879	6,174	6,233	6,138	6,166	6,195	6,289	6,369
<b>Avon City</b>	7,337	11,446	13,877	15,176	16,921	18,190	19,651	20,735
<b>Avon Lake City</b>	15,066	18,145	19,132	19,343	19,994	20,475	21,173	21,706
<b>Brighton Twp.</b>	812	942	983	987	1,014	1,034	1,064	1,088
<b>Brownhelm Twp.</b>	1,416	1,792	1,916	1,954	2,037	2,099	2,182	2,245
<b>Camden Twp.</b>	1,522	1,530	1,522	1,484	1,474	1,469	1,480	1,491
<b>Carlisle Twp.</b>	7,554	7,339	7,286	7,092	7,037	7,007	7,051	7,096
<b>Columbia Twp.</b>	6,594	6,912	6,995	6,898	6,941	6,981	7,094	7,190
<b>Eaton Twp.</b>	6,516	5,973	5,898	5,721	5,654	5,614	5,634	5,658
<b>Elyria City</b>	56,746	55,953	55,548	54,122	53,729	53,541	53,918	54,309
<b>Elyria Twp.</b>	3,699	3,520	3,455	3,338	3,285	3,251	3,252	3,259
<b>Grafton Village</b>	3,344	6,004	6,216	6,403	6,649	6,924	7,240	7,581
<b>Grafton Twp.</b>	2,013	2,722	2,964	3,054	3,218	3,338	3,493	3,610
<b>Henrietta Twp.</b>	1,795	1,873	1,893	1,864	1,873	1,882	1,911	1,935
<b>Huntington Twp.</b>	1,172	1,282	1,315	1,307	1,327	1,342	1,372	1,396
<b>Lagrange Village</b>	1,199	1,815	1,813	1,772	1,766	1,764	1,781	1,796
<b>Lagrange Twp.</b>	3,445	4,157	4,387	4,437	4,589	4,701	4,863	4,986
<b>Lorain City</b>	71,245	68,652	69,699	68,872	69,455	69,962	71,208	72,238
<b>New Russia Twp.</b>	1,886	1,918	1,925	1,888	1,888	1,891	1,914	1,934
<b>North Ridgeville City</b>	21,564	22,338	24,294	25,023	26,360	27,337	28,601	29,553
<b>Oberlin City</b>	8,191	8,195	8,139	8,030	8,033	8,097	8,230	8,397
<b>Penfield Twp.</b>	1,312	1,690	1,816	1,857	1,942	2,004	2,088	2,150
<b>Pittsfield Twp.</b>	1,546	1,549	1,546	1,509	1,503	1,500	1,514	1,526
<b>Rochester Twp.</b>	627	752	627	536	450	392	339	303
<b>Sheffield Village</b>	1,943	2,949	3,287	3,433	3,666	3,835	4,045	4,201
<b>Sheffield Lake City</b>	9,825	9,371	9,222	8,926	8,799	8,720	8,736	8,763
<b>Sheffield Twp.</b>	3,751	4,117	4,227	4,205	4,272	4,324	4,422	4,500
<b>South Amherst Village</b>	1,765	1,863	1,888	1,863	1,876	1,887	1,919	1,945
<b>Vermilion City (part)</b>	5,644	5,990	6,093	6,029	6,089	6,141	6,257	6,353
<b>Wellington Village</b>	4,140	4,511	4,634	4,619	4,700	4,765	4,880	4,975
<b>Wellington Twp.</b>	1,246	1,393	1,438	1,435	1,463	1,484	1,521	1,550

**SOURCE: 1990 & 2000, U. S. Census Bureau; 2005 - 2030, County projections - State of Ohio, Office of Strategic Research; Sub-county allocations - NOACA in cooperation with Lorain County Planning Commission**

**MEDINA COUNTY  
TOTAL EMPLOYMENT**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Medina County</b>	40,919	55,289	56,404	62,618	68,547	73,968	79,389	85,468
<b>Brunswick City</b>	4,107	7,282	7,405	8,024	8,894	9,695	10,434	11,259
<b>Brunswick Hills Twp.</b>	1,693	624	729	886	925	958	963	976
<b>Chatham Twp.</b>	58	166	177	198	225	251	266	284
<b>Granger Twp.</b>	67	1,671	1,708	1,861	2,172	2,469	2,868	3,299
<b>Guilford Twp.</b>	1,113	811	533	560	516	468	425	385
<b>Harrisville Twp.</b>	118	581	619	721	813	901	855	808
<b>Hinckley Twp.</b>	119	1,208	1,256	1,441	1,631	1,808	1,908	2,018
<b>Homer Twp.</b>	107	99	104	114	118	121	120	119
<b>Lafayette Twp.</b>	729	1,810	1,846	2,118	2,527	2,927	3,250	3,599
<b>Litchfield Twp.</b>	46	270	254	296	320	341	366	394
<b>Liverpool Twp.</b>	5,216	3,981	3,991	4,352	4,638	4,898	5,128	5,395
<b>Lodi Village</b>	1,294	1,304	1,457	1,756	1,862	1,952	1,695	1,428
<b>Medina City</b>	13,313	15,938	15,973	17,335	18,426	19,347	20,113	21,019
<b>Medina Twp.</b>	1,764	3,434	3,603	4,245	4,631	4,986	5,700	6,493
<b>Montville Twp.</b>	1,816	1,338	1,515	1,827	2,017	2,206	2,484	2,792
<b>Seville Village</b>	0	990	1,014	1,143	1,308	1,462	1,644	1,841
<b>Sharon Twp.</b>	123	1,596	1,662	1,844	2,190	2,524	2,875	3,251
<b>Spencer Twp.</b>	1,865	306	285	303	248	191	200	210
<b>Wadsworth City</b>	6,035	7,087	7,068	7,592	8,220	8,783	9,600	10,513
<b>Wadsworth Twp.</b>	40	1,869	1,947	2,182	2,603	3,010	3,384	3,784
<b>Westfield Twp.</b>	1,193	825	926	1,085	1,283	1,479	1,389	1,300
<b>Westfield Center Village</b>	54	1,497	1,663	1,928	2,017	2,073	2,442	2,846
<b>York Twp.</b>	49	602	670	807	965	1,119	1,280	1,455

**SOURCE: 1990 & 2000, U. S. Census Bureau (Census Transportation Planning Package); 2005 - 2030, County projections - NOACA; Sub-county allocations - NOACA in cooperation with Medina County Planning Commission**

**MEDINA COUNTY  
TOTAL POPULATION**

	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Medina County</b>	122,354	151,095	161,670	173,760	181,890	191,850	198,470	206,770
<b>Brunswick City</b>	28,230	34,481	35,241	36,000	37,500	39,000	40,500	42,000
<b>Brunswick Hills Twp.</b>	4,328	4,376	5,858	7,340	7,920	8,500	8,750	9,000
<b>Chatham Twp.</b>	1,799	2,158	2,331	2,504	2,683	2,862	2,839	2,816
<b>Granger Twp.</b>	2,932	3,928	3,964	4,000	4,250	4,500	5,160	5,820
<b>Guilford Twp.</b>	2,963	3,177	3,214	3,251	3,320	3,389	3,469	3,548
<b>Harrisville Twp.</b>	1,734	1,853	2,131	2,409	2,567	2,725	2,392	2,059
<b>Hinckley Twp.</b>	5,845	6,753	7,560	8,366	8,620	8,873	8,634	8,394
<b>Homer Twp.</b>	1,196	1,461	1,574	1,687	1,819	1,951	1,950	1,950
<b>Lafayette Twp.</b>	4,122	5,507	6,504	7,500	8,566	9,632	10,226	10,819
<b>Litchfield Twp.</b>	2,506	3,250	3,699	4,147	4,219	4,290	4,470	4,649
<b>Liverpool Twp.</b>	3,713	4,329	4,535	4,740	4,926	5,112	5,279	5,447
<b>Lodi Village</b>	3,042	3,061	3,807	4,552	4,703	4,853	3,966	3,080
<b>Medina City</b>	19,231	27,479	28,292	29,105	29,558	30,011	30,394	30,777
<b>Medina Twp.</b>	4,864	6,057	7,029	8,000	8,500	9,000	10,194	11,387
<b>Montville Twp.</b>	3,371	5,344	6,681	8,017	9,246	10,474	11,487	12,499
<b>Seville Village</b>	1,810	2,270	2,446	2,622	2,674	2,725	2,926	3,126
<b>Sharon Twp.</b>	3,234	4,244	4,389	4,534	4,792	5,050	5,600	6,151
<b>Spencer Twp.</b>	1,786	2,429	2,695	2,961	3,140	3,319	3,488	3,656
<b>Wadsworth City</b>	15,718	19,788	20,076	20,364	21,124	21,883	23,641	25,399
<b>Wadsworth Twp.</b>	3,375	2,645	2,823	3,000	3,088	3,176	3,286	3,395
<b>Westfield Twp.</b>	2,610	3,118	3,559	4,000	4,554	5,107	4,577	4,048
<b>Westfield Center Village</b>	784	1,054	1,165	1,275	1,244	1,213	1,390	1,567
<b>York Twp.</b>	2,479	2,333	2,860	3,386	3,796	4,205	4,694	5,182

**SOURCE: 1990 & 2000, U. S. Census Bureau; 2005 - 2030, County projections - State of Ohio, Office of Strategic Research; Sub-county allocations - NOACA in cooperation with Medina County Planning Commission**

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**NORTHEAST OHIO AREAWIDE COORDINATING AGENCY**

**M E M O R A N D U M**

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**TO:** NOACA Governing Board

**FROM:** Andy Vidra

**DATE:**

**RE: Facility Planning Area Change: Resolution 2005-042**

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The City of Painesville and Lake County have cooperatively submitted a request to modify their Facility Planning Area boundaries. The adjustment will allow for treatment of sanitary wastes from an area currently in the Painesville Facility Planning Area by Lake County at their Greater Mentor treatment Plant. Materials regarding this proposed change are attached.

The Water Quality Subcommittee reviewed this request at its meeting on August 17, 2005 and recommends support of this action.

**RESOLUTION NO. 2005-042**  
**(Clean Water 2000 Plan Amendment Facility Plan Area Boundary Change)**

**RESOLUTION OF THE GOVERNING BOARD  
OF THE  
NORTHEAST OHIO AREAWIDE COORDINATING AGENCY**

**WHEREAS**, the Northeast Ohio Areawide Coordinating Agency (NOACA) is an organization of local public officials of the five Ohio counties of Cuyahoga, Geauga, Lake, Lorain and Medina established to perform certain regional planning functions under local direction and in accordance with federal and state mandates; and

**WHEREAS**, NOACA is the areawide planning agency designated by the Governor of Ohio pursuant to Section 208 of the Federal Water Pollution Control Act, as amended, to engage in water quality management planning in the Northeast Ohio Lake Erie Basin, including the Cuyahoga, Chagrin, Grant, Rocky and Black River basins, on behalf of the counties of and municipalities and township within Cuyahoga, Geauga, Lake, Lorain and Medina; and

**WHEREAS**, Clean Water 2000, the current update to the NOACA 208 Plan was adopted by the NOACA Governing Board, certified by the Governor of Ohio and approved by USEPA; and

**WHEREAS**, Clean Water 2000 makes provision for modifications to wastewater treatment facility planning area boundaries subject to consent of affected parties and review by NOACA staff and the NOACA Water Quality Subcommittee; and

**WHEREAS**, NOACA has received a request to transfer a portion of the Painesville Wastewater Facility Planning Area to the Lake County Wastewater Facility Planning Area; and

**WHEREAS**, the request has secured letters of support from affected jurisdictions and has been reviewed by the NOACA staff; and

**WHEREAS**, the NOACA's EAC Water Quality Subcommittee has reviewed the request to transfer a portion of Painesville's Facility Planning Area to Lake County and is recommending Board approval; and

**RESOLUTION NO. 2005-042**  
**(Clean Water 2000 Plan Amendment Facility Plan Area Boundary Changes)**

-2-

**NOW, THEREFORE, BE IT RESOLVED** by the Governing Board of the Northeast Ohio Areawide Coordinating Agency, consisting of thirty-eight principal elected and other officials of general purpose local government throughout and within the Counties of Cuyahoga, Geauga, Lake, Lorain, and Medina, that:

**Section 1:** The Clean Water 2000 Plan is hereby amended to incorporate the transfer of a portion of the Painesville Wastewater Facility Planning Area to the Lake County Wastewater Facility Planning Area Wastewater Facility Planning Area as detailed in Exhibit A, and that the Sewer Planning designation for the transferred area be amended to “to be sewerred within 20 years”:

**Section 2:** The Executive Director be and he is hereby authorized and directed to forward certified copies of this to affected jurisdictions, to the Ohio EPA Director and to other appropriate officials in the executive branch.

Certified to be a true copy of a Resolution of the Governing Board of the Northeast Ohio Areawide Coordinating Agency adopted this 9<sup>th</sup> day of September 2005.

Secretary: \_\_\_\_\_

Date Signed:\_\_\_\_\_

**Exhibit A**  
**NOACA Board Resolution 2005-042**

1. Consistency Review Summary Sheet
2. Figure 1: General Location Map for the Fairport Nursery Road Facility Planning Area Boundary Change Request
3. Figure 2: Fairport Nursery Road Site Map

**Date received: May 5, 2005**

**Project Applicant: Lake County and the City of Painesville**

**Project Title: Fairport Nursery Road Transfer**

- Applicant is the Designated Management Agency for all of the affected area.
- Applicant is not the Designated Management Agency for all or part of the affected area, but **has** secured the approval of the entity or entities that are.
- Applicant is not the Designated Management Agency for all or part of the affected area, but **has not** secured the approval of the entity or entities that are.
  
- The applicant **does not** propose the extension of any sewer service.
  - The proposed project is limited to sewer system rehabilitation work.
  - The proposed project is limited to a plant expansion or modification to better handle wet weather flow volumes.
  
- The applicant **does** propose the extension of sewer service to an area lying entirely within the established facility planning area of the project sponsor.
  - The proposed extension **is** consistent with the current Community Plans for Wastewater Treatment for the affected area.
  - The proposed extension **is not** consistent with the current Community Plans for Wastewater Treatment for the affected area.
  
- The application involves a plant capacity expansion that **is** consistent with extant population projections included in the Clean Water 2000 Plan as most recently updated.
- The application involves a plant capacity expansion that **is not** consistent with extant population projections included in the Clean Water 2000 Plan as most recently updated.
  - The applicant **has** provided information that **has** sufficiently resolved any population project discrepancy.
  - The applicant **has not** provided information that sufficiently resolved the population projection discrepancy.

**Staff Comments:** The Fairport Nursery Road Transfer moves an area from the Painesville FPA into the Greater Mentor FPA. Painesville and Lake County have agreed to this transfer.

**Staff Disposition:** Staff recommends that this FPA boundary change be approved.

**Committee Disposition:** The committee endorsed this proposal at its meeting on August 17, 2005 and forwarded it to the NOACA Board.

**Board Disposition:**

**General Location Map for the  
Fairport Nursery Road  
Facility Planning Area Boundary  
Change Request**

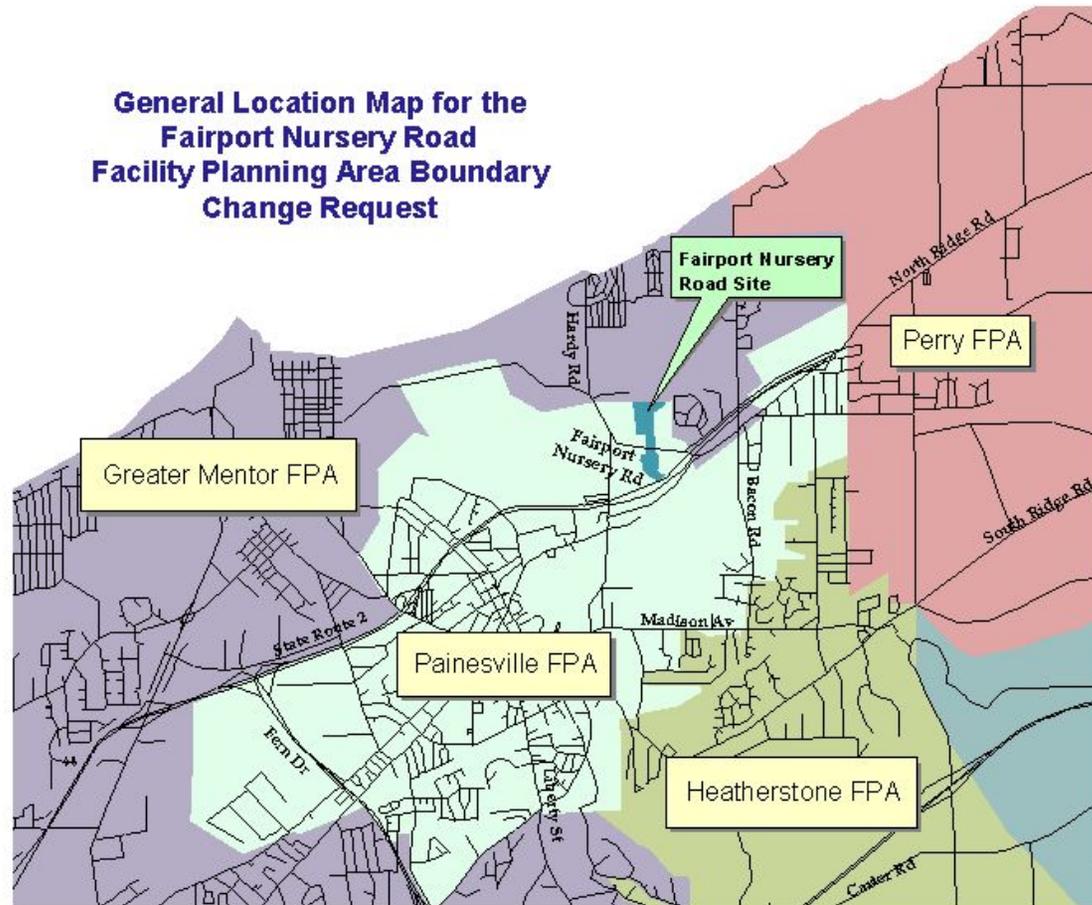


Figure 1 of Exhibit A  
NOACA Board Resolution 2005-042

# Fairport Nursery Road Site Map

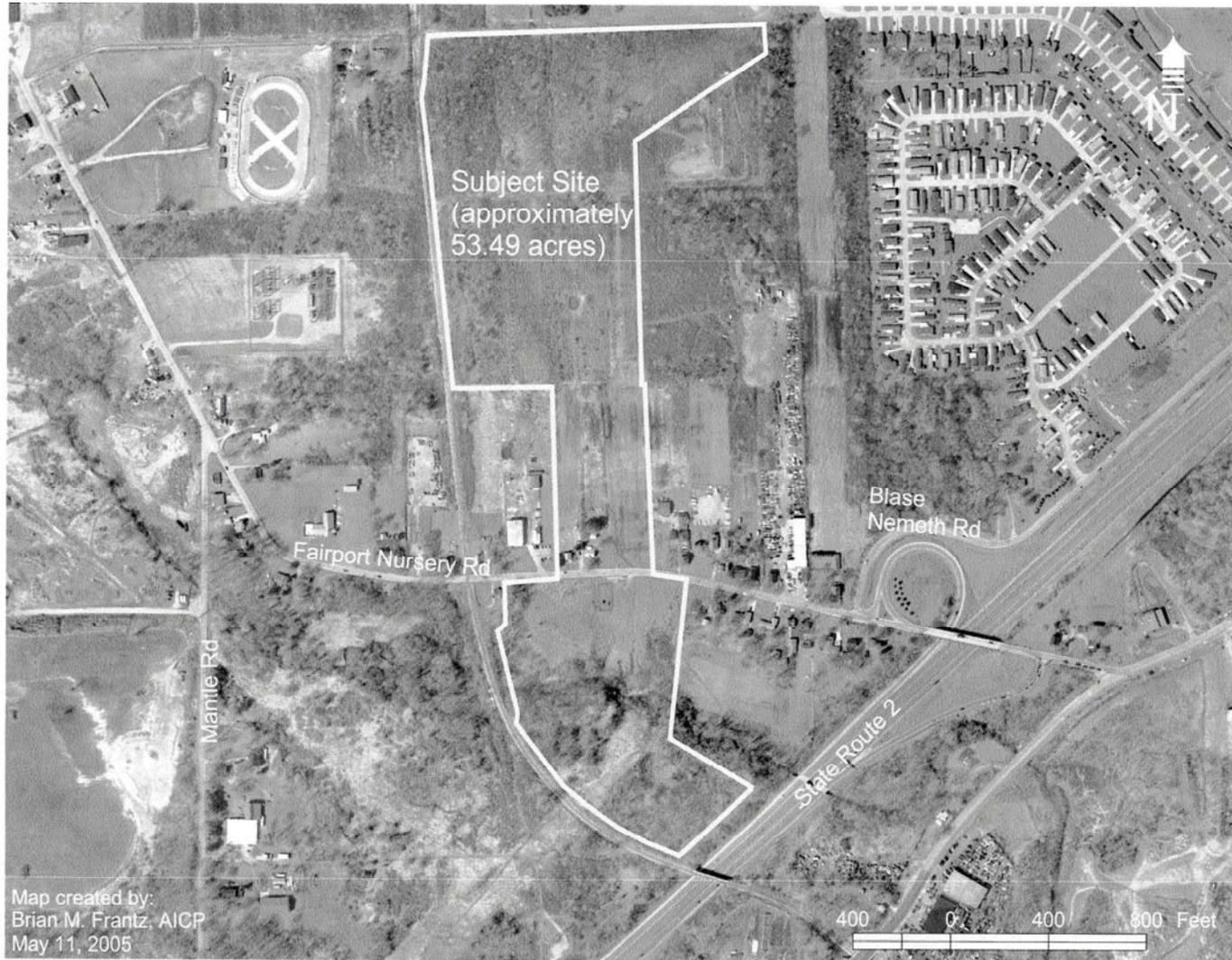


Figure 2 of Exhibit A  
NOACA Board Resolution 2005-042