

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.¹ It is among the six elements in which areawide planning 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

¹ 40CFR130.6(c)(3).

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.²

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 where it is allowed to infiltrate the ground

² Ohio EPA, "Continuing Planning Process." Draft, 1998.

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.

One additional definition clarification is needed. The Clean Water 2000 WQMP recognizes two classes of sanitary sewer lines and associated facilities. The first is labeled "service lines" These are the pipes, pump stations, and associated structures necessary to collect wastewater from areas being served by a wastewater treatment system. The second class is labeled "transmission lines". These are the pipes, pump stations, and other structures that are necessary to transport wastewater collected within a service area to the treatment facility without providing service to any locations along their path. Transmission lines are unavailable to adjacent or nearby landowners for sanitary service. In accordance with Ohio Law governing public utilities, transmission lines are not restricted to being located within the Facility Planning Area that provides the wastewater flows that they transport.

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 sewer service was 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 sewer service was in place or was 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 used to determine 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 2000 census for consistency review purposes. After the Year 2010 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

As part of the Clean Water 2000 planning process, 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 (NEORSD)
 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
 NEORSD
 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
 NEORSD
 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

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		
Satellite DMA Jurisdiction	County	POTW Owner/Operator
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

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		
Satellite DMA Jurisdiction	County	POTW Owner/Operator
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.

The Clean Water 2000 WQMP generally accepted 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 the 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 Clean Water 2000 WQMP remedied 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.³

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 approval by the NOACA Board of Directors. 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)).

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.

³ 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.

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.

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.

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 Board of Directors.

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

Some communities in the Region are served by a neighboring community or regional system. 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 (HSTs) 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 before Ohio EPA processes an application 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 must conform to population projections contained in the WQMP in accordance with Policy 4-5.

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.

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 to maintain consistency with the plan if they agree with the plan's projections. Departure from plan projections must be approved by NOACA's Board of Directors as a condition to maintain consistency with the plan.

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 Clean Water 2000 WQMP. FPA boundary disputes are strongly encouraged to be resolved prior to the review for consistency by NOACA's Water Quality Subcommittee, Planning and Programming Committee and Board of Directors.

A Designated Management Agency (DMA) requesting FPA modification(s) must notify, and solicit support from, the affected jurisdictions (lead DMAs, satellite DMAs, cities, villages, townships and counties) within the proposed modified area, as determined by NOACA staff. The requesting DMA must submit the proposed update to the affected jurisdictions in a manner that can be verified by NOACA on when the information was received. The affected jurisdictions have a maximum 90 calendar days to comment on the requested FPA modification(s), commencing the following working day from which the verifiable notification was received by each jurisdiction from the requesting DMA.

The FPA modification request submitted to NOACA by the DMA applicant must include comment letters received or proof of notification from all affected jurisdictions. Once NOACA has received the FPA modification request, including comment letters or proof of notification from all affected jurisdictions, NOACA staff will proceed with a review to determine consistency with its 208 Plan. Additional information or meetings may be required for the FPA modification request to be consistent with this plan and proceed to the Water Quality Subcommittee for review.

NOACA staff will prepare a recommendation based on its 208 Plan and present the FPA modification request to the Water Quality Subcommittee. NOACA will also notify all affected jurisdictions of the date and time when the Water Quality Subcommittee will

consider the FPA modification. At that meeting, representatives from the affected jurisdictions may choose to attend to present their opinions on the proposed FPA modification request. The Water Quality Subcommittee reserves the right to table any FPA modification request until the next Water Quality Subcommittee meeting.

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 based on Ohio EPA guidelines 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 established Ohio EPA guidelines for wastewater treatment affordability would not be met if the application for change were allowed to proceed. In Ohio, the affordability rate as used by Ohio EPA's Division of Environmental and Financial Assistance is 1.5% of the median family income with the sewer district. 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 Planning and Programming Committee and the Board of Directors. 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 preliminary 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 JEDD⁴ or a CEDA⁵, 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.

4 Ohio Revised Code 715.70-.71

5 Ohio Revised Code 701.07

