

# **Chapter 3**

## **Wastewater Management Facilities Planning**

**This chapter updates wastewater management facilities planning areas (FPA) for the NEFCO Lake Erie Basin 208 Plan Areawide study and identifies local jurisdictions to be designated as management agencies (DMA) under Section 208 of the Federal Clean Water Act and included under the Clean Water Plan (CWP) for wastewater management planning. It identifies wastewater management options and prescriptions within each facilities planning area that were developed by the DMA 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.**

Once the CWP is adopted, certified and approved, these DMAs, FPAs and wastewater management options and prescriptions become part of the region's CWP. The Ohio EPA's decisions concerning certain National Pollutant Discharge Eliminating System (NPDES) permits, permits to install (PTI) and State Revolving Fund (SRF) loans for wastewater treatment must be consistent with the CWP.

This chapter presents policies to enhance governing areawide coordination of local wastewater management planning. These policies address:

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

The chapter also includes recommendations for (a) conforming the land use plans of local jurisdictions to the CWP, and (b) recognizing the use of Joint Economic Development District (JEDD) procedures for 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 (CWA). Municipal waste treatment is among the nine elements to be included or referenced as part of the CWA elements.<sup>1</sup> It is among the six elements in which areawide planning agencies are actively involved in Ohio.

---

<sup>1</sup>40CFR130.6(c)(3).

In response to a court challenge, Ohio EPA has established a standard process for the review of NPDES permit and Permit to Install (PTI) applications statewide. (In areas of the state outside of the jurisdiction of areawide planning agencies, the Ohio EPA has begun the process of updating 208 Plans. In designated areas of the state, the Ohio EPA has requested that area wide agencies update the corresponding areawide 208 Plan element for municipal waste treatment.) The Ohio EPA addresses the full scope of Ohio's Water Quality Management planning in its Continuing Planning Process (CPP) document.<sup>2</sup>

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.

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. NEFCO and NOACA consult on planning matters in the watersheds that are shared by parts of both planning areas. The two major Lake Erie watersheds in this shared category are the Cuyahoga River and the Chagrin River, but also includes portions of the Rocky River and Grand River in Summit and Portage Counties respectively.

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

The 1981, the NEFCO 208 CWP established the basis for evaluating all sewerage plans that have been proposed over the twenty 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 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 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 1981 CWP also recognized Summit and Portage Counties as DMAs for wastewater planning for the unincorporated portions of their respective counties that lie inside and outside of established FPAs. In cases where the unincorporated area lies within an established FPA, county wastewater planning was incorporated into the lead DMA's facilities plan. A DMA of either type was recognized as a 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

---

<sup>2</sup>Ohio EPA, "Continuing Planning Process." 1998.

frame.

The DMA designation process prevented two separate treatment facilities from planning for the same area. This was important because cost/benefit and feasibility analyses hinged on the projected service demand. The sizing of sewer lines and wastewater treatment plants (WWTPs) had to reflect existing and projected populations. If POTWs competed 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 1981 Plan specified the entity that is the DMA in every area where sanitary sewers were in place or were being considered.

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

### **FACILITIES PLANNING AREA STATUS UNDER THE ORIGINAL 208 PLANS**

The rationale for the delineation of the FPA boundaries in the original NEFCO Plan varied. Some communities limited their planning area to their existing jurisdictional authority. Others extended their planning area 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.

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 the 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 1981 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. Locally another dispute arose when Summit County sent flows from the County's Hudson Plant to Fish Creek (WWTP) by pumping rather than via gravity through the Mud Brook Interceptor to the Akron WWTP. Each of these conflicts was resolved by a conflict resolution process established under the auspices of the region's 208 Plans. This process helped to provide for the orderly implementation of facility planning and sanitary sewer infrastructure construction under the 208 Plan.

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, situations 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.

Most existing FPAs were established as part of the Construction Grants Program established under Section 208 of the Clean Water Act to help fund sewage treatment improvements. For the 208 Plan, a FPA was typically subdivided into three general categories. These include (a) areas that are already served with sanitary sewers; (b) areas that would most likely be seweraged 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 project and allocate growth within their planning area and identify options for wastewater management. Many communities were able to take advantage of federal funds made available for this purpose. Other communities were unable to meet the eligibility match requirements for these grants and developed general sewerage plans in consultation with the Ohio EPA.

No matter what facility planning actions were taken in the past, there had to be a rationale for each decision made by DMAs. The 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 pollution problems associated within their sewer district. 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 communities.

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

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, NEFCO is responsible for evaluating consistency in its respective area. The following procedures were followed in determining consistency within the 208 Plan.

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 Plans became outdated. A plan update was accomplished in 1984 to update the population projections that were recalculated following the release of the 1980 census. NEFCO currently utilizes population projections based on the 1990 census as reference for consistency review purposes. After the Year 2000 census is completed, and new county projections are prepared by the Ohio Department of Development, Office of Strategic Research, new local population projections will be developed for this purpose.

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

NEFCO also reviewed the adequacy of the project's selected treatment alternative. Often the old 201 plans contained a listing and analysis of various approaches to wastewater treatment for an area, followed by a recommended option. NEFCO incorporated a review of this recommendation in its consistency review.

Under the original 208 Plan, any action proposed by the 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; c) conformed to regional population projections, and d) adequately treated wastewater. 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. If the applicant proposed to extend service into any area where no facility planning had yet taken place, the proposal was deemed consistent with the 208 Plan as long as the local community officials affected by the extension agreed to it and the Ohio EPA approved it.

While most of these projections and allocations incorporated into the original 208 Plans 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 208 Plan. This CWP update makes the FPA boundaries current and provides an orderly process for future revisions.

## **II. Updating the Designation of Management Agencies, Facilities Planning Areas, and**

## Consistency Review Policies

### Definition of Primary (lead) DMA and Secondary DMA

Governmental entities within Facilities Planning Areas; which have the right to plan for wastewater treatment and conveyance are referred to as designated management agencies (DMAs).

For the purposes of this Clean Water Plan, typically for each Facilities Planning Area, a single governmental entity is the “Primary Designated Management Agency,” which treats the wastes (wastewater). A **Primary DMA** must have the capacity to comply with the list below as well as **to refuse to receive any wastes (wastewater) from any municipality, or subdivision thereof, which does not comply with any provision of the Clean Water Plan.**

Typically, the **Primary DMA** is the county or municipality that owns and operates the central wastewater treatment plant (WWTP). In cases where a DMA uses the services of a primary DMA’s WWTP or where a 6119/9117 township and county sewer district exists, these entities will be considered as **Secondary DMAs**, responsible for building, operating, and maintaining the sewers under their jurisdiction. The **Secondary DMA** has local responsibility for facilities planning and requesting Plan Amendments as necessary within the boundaries of its sewer district (subject to a sewer agreement(s) with the Primary DMA). There may be more than one Secondary DMA within each FPA using the WWTP of a Primary DMA.

The following is provided as background information on designated management agencies.

Depending on its assigned role, a Primary DMA must have the capacity to (text shown in bold taken from Section 208 of the Clean Water Act):

- have legal authority to provide service to its area;
- **carry out its assigned portion of the areawide waste (wastewater) treatment management plan;**
- **accept and utilize grants, or other funds from any source, for wastewater treatment management or nonpoint source control purposes;**
- **raise revenue, including the assessment of waste (wastewater) treatment charges or other necessary funding, to implement its assigned portion of the Plan.** Needed revenues may include staff funding, or for DMAs that own or operate POTWs, assessments of wastewater treatment charges;
- cooperate with and assist the NEFCO Environmental Resources Technical Advisory Committee (ERTAC) in the performance of its Plan responsibilities;
- **accept for treatment industrial wastes (wastewater);**
- **manage effectively waste (wastewater) treatment works and related facilities**

**servicing such an area in conformance with the Plan** and effectively manage POTW and related point and nonpoint source facilities and practices in conformance with the Plan;

- **directly or by contract, to design and construct new works, and operate and maintain new and existing works as required by the Plan;**
- **incur short- and long-term indebtedness;**
- **assure in implementation of an areawide waste (wastewater) treatment management plan that each participating community pays its proportionate share of treatment costs.**

For this plan update, NEFCO and responsible management agencies undertook a comprehensive review of DMAs and FPAs in the original 208 Plan, to update DMAs and FPAs to reflect current conditions. This was done by circulating maps of FPAs from the original 208 Plans with a request that the Primary and Secondary DMAs consult with affected jurisdictions to update the maps. Treatment plants constructed after the original planning period were also identified and their lead agencies were contacted. DMAs were asked to identify in their respective FPA the following:

- (1) areas currently served with sanitary sewers; (yellow)
- (2) areas expected to be served with sanitary sewers within the next twenty years; (orange)
- (3) areas that will be served by a publicly-owned treatment works (POTW) or by home sewage disposal systems (HSDSs) (home sewage treatment systems (HSTSs)) and semi-public sewage disposal systems (SPSDSs); (green)
- (4) areas that will be served by nondischarging (including underground injection or infiltration basins) HSDSs (HSTSs) and SPDSs (cream); and
- (5) areas without a wastewater treatment planning prescription. (white)

The results of this effort were then used to update county facility planning maps and circulated for review and comment to 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 identified which local or county jurisdictions currently have responsibilities for wastewater facility planning. These jurisdictions, shown in Table 3-1, have management responsibilities for facility planning associated with wastewater treatment facilities that they own. The local jurisdictions or agencies in Table 3-1 will be reaffirmed DMAs for their FPAs in this plan once it has been certified and approved. DMAs include municipalities, counties, and sanitary sewer districts authorized under Ohio law to perform these functions.

Summit and Portage Counties are designated as the wastewater management planning agency for a) the service areas of existing sewage treatment plants that they own or operate and b) all unincorporated areas of their respective county. The geographical extent of the FPAs associated with the above listed DMAs and FPAs are shown in Appendix 3-1.

Appendices 3-2 to 3-12 show 208 facilities planning areas within Summit and Portage Counties that are in the Cuyahoga River, Chagrin River, and Grand River Basins. Also included are the wastewater planning options, prescriptions and current information developed by each DMA with input from affected local jurisdictions within each Facilities Planning Area in the NEFCO area. The boundaries, however, shown in these figures are generalized as discussed in Policy 3.1 below.

Appendix 3-13 provides prescriptions for the portions of the Portage County Regional Sewer District in the Cuyahoga River basin (Mantua, Rootstown, and Suffield Townships) and the Grand River basin (Hiram and Nelson Townships) that are not included within any FPA boundaries.

### **RECOMMENDED POLICIES FOR DETERMINING CONSISTENCY WITH THE CWP**

This section presents recommended policies for governing changes to DMAs and FPAs and procedures for making wastewater management plans consistent with the CWP. These policies are:

- 3-1 DMAs and their current FPA boundaries for wastewater management planning;
- 3-2 Endorsements of Modifications to FPA Boundaries;
- 3-3 Development of Local Wastewater Management options and prescriptions;
- 3-4 208 Plan Consistency Actions for Ohio EPA and USEPA;
- 3-5 Utilization of Areawide Population Projections;
- 3-6 a&b Updating and/or Revising the Facilities Planning Area of Designated Management Agencies
- 3-7 Nomination of New Designated Management Agencies (DMAs).

#### **Policy 3-1: DMAs and Current FPA Boundaries**

**With the adoption of this Plan update by the NEFCO General Policy Board, the local jurisdictions or agencies identified in Table 3-1 are confirmed as the DMAs for wastewater management planning within the FPAs set forth in Appendices 3-2 to 3-12.**

This CWP update accepts FPA boundary decisions that were formally or informally approved by the 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 since the 1981 NEFCO 208 CWP should be recognized in this CWP 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 provided maps identifying FPA boundaries in the 1981 CWP. DMAs were requested to revise existing FPA boundaries to accommodate

changes that had been realized over the last twenty years and expected development during the next twenty years. This process also allowed DMAs to propose the removal of areas from its previously defined FPA that it has no plans for sewerage. Expansion of Facilities Planning Areas could also be proposed with the consent of affected jurisdictions.<sup>3</sup>

---

<sup>3</sup> The boundaries that are recognized by this update replace all boundaries previously developed in the original 208 plans 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 Medina County and the City of Akron. 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. A new FPA is being established for Randolph Township.

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 farthest reaches of their planning area. They have established new boundaries to reflect this. Communities that fall into this group include the City of Twinsburg. The City of Akron and Summit County (for its Hudson-Streetsboro WWTP (Summit County portion)) extended their planning areas to provide service to areas not originally included in a planning area.

**Table 3-1: NEFCO Region Primary Designated Management Agencies\***

<u><b>Portage County</b></u>	<u><b>Summit County</b></u>
City of Aurora	City of Akron
Aurora Central WWTP	Akron WPCS
Aurora Westerly WWTP	Northeast Ohio Regional Sewer District
City of Kent	Southerly WWTP
Kent WWTP	City of Twinsburg
Village of Mantua	Twinsburg WWTP
Mantua WWTP	Summit County
City of Ravenna	Fish Creek WWTP
Ravenna WWTP	Pond Brook WWTP
Portage County	Robinwood Hills
Streetsboro Regional WWTP	Copley Meadows
Red Fox WWTP	
Boling Brook WWTP	
Twin Lakes WWTP	
Franklin Hills WWTP	
Rivermoor Estates	
Randolph (pending)	
Fairlane Estates WWTP	

\*A Primary DMA is the county or municipality that owns the central wastewater treatment plant.

Many facilities planning areas encompass political jurisdictions, with autonomous wastewater planning ability which lie physically beyond the political jurisdiction boundaries of the DMA responsible for wastewater planning (Table 3-2). The CWP recognizes service agreements that exist between a POTW owner and the jurisdictions serviced by that POTW. Those agreements can specify which wastewater planning functions are to be assumed by the DMAs. All plans developed for the DMAs are recognized by the CWP.

NEFCO maintains detailed mapping files as part of its geographic information system (GIS). With the adoption of this update by the NEFCO Board the files maintained in this format are the definitive statement of all boundaries unless a more detailed map 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 the Ohio EPA, NEFCO can accept those boundaries with the consent of the affected jurisdictions. In all cases, the NEFCO 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 after review and acceptance by NEFCO. NEFCO will provide electronic copies of all approved updates to the Northeast District Office of the Ohio EPA.

**Table 3-2**  
**Incorporated Jurisdictions and Associated Primary and Secondary**  
**Designated Management Agencies (DMA) for wastewater management planning**

Local Government	County	Facilities Planning Area	Primary Designated Management Agency (DMA)(s) <sup>1</sup>		Secondary Designated Management Agency (DMA) <sup>2</sup>
			DMA	Destination of Wastewater	
City of Akron	Summit	Akron	City of Akron	Akron WPCS	BTSSD, City of Akron, City of Barberton, City of Cuyahoga Falls, City of Fairlawn, City of Munroe Falls, City of Stow, City of Tallmadge, PCRSD, SCMSD, Village of Lakemore, Village of Mogadore, Village of Silver Lake
City of Cuyahoga Falls	Summit	Akron	City of Akron	Akron WPCS	SCMSD, City of Akron, City of Cuyahoga Falls
City of Fairlawn	Summit	Akron	City of Akron	Akron WPCS	City of Fairlawn
City of Hudson	Summit	Fish Creek, CVI, Hudson-Streetsboro	SCMSD, NEORS, SSSD4	Fish Creek WWTP, Southerly WWTP, Hudson-Streetsboro WWTP	SCMSD, City of Hudson
City of Macedonia	Summit	CVI	NEORS	Southerly WWTP	SCMSD
City of Munroe Falls	Summit	Akron, Fish Creek	City of Akron, SCMSD	Akron WPCS, Fish Creek WWTP	SCMSD
City of Stow	Summit	Akron, Fish Creek	City of Akron, SCMSD	Akron WPCS, Fish Creek WWTP	SCMSD
City of Tallmadge	Summit/Portage	Akron, Fish Creek	City of Akron, SCMSD,	Akron WPCS, Fish Creek WWTP	SCMSD, City of Tallmadge
City of Twinsburg	Summit	Twinsburg	City of Twinsburg	Twinsburg WWTP	TWSD, SCMSD
Bath Township Water and Sewer District (BTSSD)	Summit	Akron	City of Akron, SCMSD	Akron WPCS, Robinwood Hills WWTP	SCMSD, BTSSD
Twinsburg Water and Sewer District (TWSD)	Summit	Pond Brook, Twinsburg	SCMSD, SSSD4, NEORS	Twinsburg WWTP, Southerly WWTP, Hudson-Streetsboro WWTP, Aurora Shores WWTP	SCMSD, PCRSD, TWSD
Village of Boston Heights	Summit	CVI	NEORS, SCMSD	Southerly WWTP	SCMSD
Village of Mogadore	Summit/Portage	Akron	City of Akron	Akron WPCS	SCMSD
Village of	Summit	CVI	NEORS	Southerly	Village of Northfield

**Table 3-2**  
**Incorporated Jurisdictions and Associated Primary and Secondary**  
**Designated Management Agencies (DMA) for wastewater management planning**

Local Government	County	Facilities Planning Area	Primary Designated Management Agency (DMA)(s) <sup>1</sup>		Secondary Designated Management Agency (DMA) <sup>2</sup>
			DMA	Destination of Wastewater	
Northfield				WWTP	
Village of Peninsula <sup>3</sup>	Summit	CVI	N/A	N/A	N/A
Village of Reminderville	Summit	Pond Brook	SCMSD	Aurora Shores WWTP	SCMSD
Village of Richfield	Summit	CVI	NEORS	Southerly WWTP	Village of Richfield
Village of Silver Lake	Summit	Akron	City of Akron	Akron WPCS	Village of Silver Lake, SCMSD
City of Aurora	Portage	Aurora	City of Aurora	Aurora WWTP, Aurora Shores WWTP	City of Aurora
City of Kent	Portage	Kent, Fish Creek	City of Kent, PCRSD	Kent WWTP, Franklin Hills	City of Kent, PCRSD
City of Ravenna	Portage	Ravenna	City of Ravenna	Ravenna WWTP	City of Ravenna, PCRSD
City of Streetsboro	Portage	Hudson-Streetsboro, Kent	SSSD4, PCRSD	Hudson-Streetsboro WWTP Twin Lakes WWTP	SSSD4, PCRSD
Village of Brady Lake	Portage	Fish Creek	PCRSD	Franklin Hills WWTP	PCRSD
Village of Mantua	Portage	Mantua	Village of Mantua	Mantua WWTP	Village of Mantua
Village of Sugar Bush Knolls	Portage	Kent	City of Kent, PCRSD	Twin Lakes WWTP	PCRSD

Akron WPCS - Akron Water Pollution Control Station

BTWSD – Bath Township Water and Sewer District

CVI - Cuyahoga Valley Interceptor

DMA - Designated Management Agency

FPA – Facilities Planning Area

NEORS - Northeast Ohio Regional Sewer District

PCRSD - Portage County Regional Sewer District (Portage County Water Resources)

POTW - Publicly-Owned Treatment Works

SCMSD - Summit County Metropolitan Sewer District (Dept. of Environmental Services)

SSSD4 - Streetsboro Sanitary Sewer District No. 4 (Portage County Water Resources)

TWSD - Twinsburg Water and Sewer District

WWTP - Wastewater Treatment Plant

<sup>1</sup>Primary DMA is the county or municipality that owns the central wastewater treatment plant (WWTP).

<sup>2</sup>Secondary DMA is the county, municipality, or political entity that builds, operates, and maintains the sewers under their jurisdiction.

<sup>3</sup>Does not have any sewers or wastewater plant.

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

### **Policy 3-2: Endorsement of Modifications to FPA Boundaries**

**The NEFCO General Policy Board must approve updated 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 Appendices 3-2 to 3-12. For changes requested after the plan update is certified, the DMA requesting a change must apply to NEFCO for redefinition of its boundaries. This will require the DMA to solicit support from all affected units of government including any other DMA that may be affected by the redefinition. If an FPA proposal crosses the planning area boundary between NOACA and NEFCO, the approval of both agencies will be required.

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

**DMAs are encouraged to develop wastewater management options and prescriptions within their facilities planning areas in cooperation with affected local jurisdictions. These options and prescriptions 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 NEFCO CWP (see Policy 3-4).**

This update to the NEFCO CWP offers local communities an opportunity to have input into the definition of future wastewater planning in areas that are not sewered.

At present, DMAs develop sewerage plans that are cost efficient from an engineering standpoint within their FPA. While coordination with local governments regularly occurs, 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 encouraged to identify where they want or do not want central sewers. The DMA in each FPA must consult with affected jurisdictions and take into account their input in all cases that do not raise engineering or efficiency limitations.

In those areas where local officials want wastewater treatment to be exclusively individual on-site systems, several conditions must be met.

- 1) The county or municipal health departments responsible for managing on-site systems must authorize their use in the area under discussion.
- 2) The provisions of ORC 6111 and OAC 3701-29-02(L) and OAC 3701-29-02(M) requires connection to sanitary sewers when they become available by order of local or County Health Department. See bottom of Page 4-2; consistency
- 3) 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.

Facilities planning areas maps contained in Appendices 3-2 through 3-12 indicate in generalized terms the preferences of local officials regarding future sanitary sewer service areas in the Lake Erie Basin.

As with FPA boundary maps, detailed boundary locations and community specific preferences are in the GIS data base maintained by NEFCO. This data base will be consulted when consistency reviews are made. The information contained in this data base reflects the input from local elected and appointed officials who responded to a request from the areawide planning agencies during the plan update process.

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 facilities planning area to ascertain community preferences for sanitary sewer service.

Existing policies of local management agencies who have legal responsibility and authority to influence wastewater treatment, continue to be recognized under this proposed policy. Local health department policies are specifically recognized. The Ohio EPA and ODH are working in consultation with USEPA to develop a NPDES permitting policy that will apply to individual on-site wastewater treatment systems that have an off-lot discharge. The CWP will incorporate the policy arrived at by this negotiation as soon as it is agreed to by the Ohio EPA.

Local community preferences remain flexible to the extent desired by the community. These community specific preferences serve to guide the wastewater planning 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 have served notice to all landowners of the need for them to plan for the installation, operation, maintenance, and replacement of 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 3-4: 208 Plan Consistency Actions for Ohio EPA and USEPA**

**Consistency with this CWP update 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. Also, as per Ohio EPA's Division of Environmental and Financial Assistance (DEFA) policy, a consistency review will also be required of applicants for grants or loans under the Clean Water Act.**

This policy is consistent with current Ohio EPA policies in undesignated 208 planning areas of the state. Under the CWP 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 WWTP permitted 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.

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

The Ohio EPA will process all applications in accordance with existing regulations for PTIs that apply to treatment works servicing an individual lot that are in accordance with the declarations by jurisdictions contained in Appendices 3-2 to 3-12. 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 3-5: Utilization of Areawide Population Projections**

**All applications subject to Policies 3-3 and 3-4 will utilize population projections that are consistent with those provided in Appendices 3-2 to 3-12. NEFCO will periodically update projections based upon new community level census data. Updated population projections will be incorporated into the CWP by amendment.**

The consistency review process will include the assessment of the most recent population projections generated by the areawide planning process utilized by NEFCO.

The Ohio Department of Development prepares the official population projections for the State

of Ohio. They allocate projections to the county level. NEFCO 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 the Ohio EPA. The population projections shown in Appendixes 3-2 to 3-12 were produced by NEFCO in 1990. These projections are used by NEFCO for consistency reviews. In 2000, NEFCO staff extended these projections to the year 2030. They were approved by the NEFCO General Policy Board in May 2000. The methodology and community projections are included in Appendix 3-14. This set of projections is used as reference information to the projection figures contained in Appendixes 3-2 to 3-12.

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

### **Policy 3-6: Updating and/or Revising the Facilities Planning Areas of Designated Management Agencies**

**Designated Management Agencies that own a Publicly-Owned Treatment Works for wastewater have lead responsibility for sewer planning i.e. updating and/or revisions within the boundaries of the sewer districts in the Facilities Planning Area subject only to appeal to the NEFCO General Policy Board under Policies 3-6a and 3-6b below. However, the county will continue to have responsibility for sewer planning in conformity with any agreements with the DMA and 201 facility plan in all unincorporated areas, including those within an established FPA. County agencies will submit their sewer plans to the DMA to be incorporated into their facilities plan.**

This policy addresses how responsibility for sewer planning is established and how it is to be updated when the need arises. It also gives affected jurisdictions guidance for challenging DMA decisions. It is important to note that the 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 NEFCO Environmental Resources Technical Advisory Committee (ERTAC) and General Policy Board.

## **Guidelines for Updating a 201 Facilities Planning Area**

The following guidelines should be used when requesting an update to a 201 Facilities Plan, under NEFCO's Clean Water Plan.

### **Application Packet**

The Designated Management Agency (DMA) proposing a 201 modification will submit the following items in its proposed 201 update application:

- a) Purpose;
- b) Introduction;
- c) Brief description of why the 201 needs to be updated;
- d) Historical information of existing 201 FPA boundary (include map);
- e) Historical information of existing wastewater prescription;
- f) Map of proposed 201 changes (if colored maps are used, include 50 of each for the ERTAC mailout);
- g) Updated wastewater treatment planning prescriptions and wastewater planning options;
- h) Conclusion;
- i) Received comment letters.

### **Process for Review**

- a) The DMA requesting the 201 update must submit the proposed 201 update by certified mail (or be able to show adequate proof of when the process has started) to the legally recognized DMA that has primacy over the area in question, the lead DMA for the 201 Facilities Planning Area, NEFCO, and local governments within the proposed 201 update Facilities Planning Area for review and comment.
- b) The DMA requesting the 201 update should secure comment letters from the legally recognized DMA that has primacy over the area in question, the lead DMA, and local governments within the proposed 201 update FPA.
- c) If not already provided, the legally recognized DMA that has primacy over the area in question, the lead DMA, and local governments within the proposed 201 update FPA will have a maximum of 90 days upon receipt of the certified mail (or other proof as shown in 'a' above) (unless extended by the ERTAC) to respond to the DMA requesting the update.
- d) The DMA requesting the 201 update will submit the proposed 201 application packet with received comment letters to NEFCO for review two weeks prior to NEFCO's Environmental Resources Technical Advisory Committee (ERTAC) meeting in order to allow enough time for NEFCO to conduct a 201/208 consistency review.

### **NEFCO Staff 201/208 Clean Water Plan Consistency Review**

NEFCO staff will conduct a 201/208 Consistency Review of the proposed 201 update, based on the following criteria, and make its recommendation to the ERTAC:

- a) Staff reviews proposed project's (201) FPA boundaries with those in NEFCO's Clean Water Plan (CWP);

- b) Staff checks to see whether the project’s population projections are consistent with those in the CWP;
- c) Staff reviews the adequacy of the project’s selected treatment alternative (wastewater treatment planning prescriptions and wastewater planning options).
- d) Staff prepares a recommendation on the above three criteria and submits the 201 update to the ERTAC for consideration.

**ERTAC and NEFCO General Policy Board Review**

- a) The DMA requesting the 201 update will present the proposed 201 update to the ERTAC and NEFCO staff will present the 201 consistency review findings to the ERTAC with its recommendation.
- b) The ERTAC will conduct a technical review of the 201 update and forward through NEFCO staff a recommendation for consideration by the General Policy Board.
- c) NEFCO staff will present the consistency review results and the ERTAC recommendation to the General Policy Board. It is recommended that the DMA requesting the 201 update be present at the General Policy Board meeting to answer any questions that the General Policy Board may have.
- d) The General Policy Board makes a determination and staff communicates this to the applicant.
- e) The General Policy Board decision will be forwarded to Ohio EPA-NEDO for inclusion in its 201 plans as a component of the overall 208 update for PTI and NPDES permitting.
- f) The 201 will then be incorporated into NEFCO’s Clean Water Plan (mapping, wastewater prescription).

**Time-line for 201 Facilities Planning Area Updates**

The DMA requesting the 201 update must submit the proposed 201 update by certified mail (or be able to show adequate proof of when the process has started) to the legally recognized DMA that has primacy over the area in question, the lead DMA for the 201 Facilities Planning Area, NEFCO, and local governments within the proposal 201 update facilities planning area for review and comment. A 90-day comment period shall commence the following working day from which the certified mail (or adequate proof of process initiation) has been received.

The DMA submitting the 201 update will submit the proposed 201 revision with comment letters to NEFCO, a minimum of one week prior to NEFCO’s ERTAC mailout to permit enough time for the NEFCO staff to conduct a 201/208 consistency review of the proposed 201 update.

**Policy 3-6a: Responsibility for sewer planning will be with the Primary Designated Management Agency(s) in each established Facilities Planning Area in all cases of challenge when they can demonstrate any of the following:**

- a. that the system affordability 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. that the sewer system rated capacity will be exceeded;**
- d. 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 administered by the Ohio EPA.**
- e. if the DMA can show that it will suffer undue harm, or if it can demonstrate that system integrity would be compromised by the change, it must be given the opportunity to maintain primacy.**
- f. if an existing primary and/or secondary DMA has constructed components of their sewer system (WWTP or collection system) to serve the requested change in FPA area, no change in the FPA would be allowed unless compensation is made for capital expenditures.**

Conflicts stemming from problems related to officially recognized FPA boundaries are expected to occur from time to time. Furthermore, they will 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 has no plans to extend service. An appeal process that could result in the redefinition of existing FPA boundaries is necessary.

Under this policy, the DMA 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 DMA 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 will maintain the right to provide for sewerage of the designated area if they can demonstrate that it will be harmed by a redesignation. Demonstrations of economic harm need to show that the existing or future level of affordability as established by federal guidelines for wastewater treatment affordability will not be met if the application for change is allowed to proceed. Further, in the absence of any agreement between DMAs, approval of a request for a change in FPAs is dependent upon any existing prorated capital (WWTP or sewer collection system) for existing or future servicing of the requested area being reimbursed to the existing primary and/or secondary DMA. 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 conditions preclude a requested change in FPA boundaries.

In cases where central sewers are needed and are the only means available to comply with an Ohio EPA order to resolve an existing water quality problem, the primary and/or secondary 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 primary and/or secondary DMA is not prepared or is not able to proceed in a timely manner, the DMA applicant for change can request a redrawing of the FPA boundary. However, the primary DMA has the right to make the sewer extensions and capacity upgrades should the secondary DMA be unable or unwilling to make such an extension.

**Policy 3-6b: Planning responsibility for limited areas can be transferred from the Designated Management Agency in an established Facilities Planning Area in cases of challenge when the DMA applicant for change can demonstrate all of the following:**

- a. that none of the conditions established by 3-6a 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 unreasonable for the DMA applicant community;**
- c. that an alternative sewerage plan exists that protects the environment, and that the alternative plan is technically achievable, economically affordable, and politically acceptable;**
- d. that the proposed DMA has the legal authority to act.**

Transfers must be approved by the Ohio EPA and incorporated by amendment to the CWP. A DMA's planning standing would be dependent on the ability and willingness to proceed with the sewer extensions (and capacity upgrades if necessary) to areas within an established FPA that request 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 politically acceptable. If the proposed plan is consistent with all other aspects of the CWP, it can result in a change being made to the existing FPA definition in favor of the applicant. The NEFCO continuing planning process will provide a forum for all affected parties to effect a consensus agreement. When consensus cannot be reached, the NEFCO ERTAC 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.

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 to another existing POTW or as a last resort, to an entirely new POTW if one can be constructed. Any such consideration is to be consistent with the Ohio EPA's objectives to eliminate, where feasible, small POTWs in the same relatively general area as existing larger POTWs. All applications for the redrawing of existing FPA boundaries must be accompanied by plans which 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 3-7: Nomination of New Designated Management Agencies**

**New Designated Management Agencies (DMAs) can be established to provide sanitary sewer service in newly created Facilities Planning Areas (FPAs). The proposed DMA and if applicable, new Facilities Plan will be submitted to the Ohio EPA for review and comment. Approval by the NEFCO Board is necessary for these DMAs and FPAs to be recognized by the Clean Water Plan (CWP). The new DMAs and FPAs will be incorporated into the CWP by amendment.**

All governmental 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 facilities 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 NEFCO Board (**see Policy 3-6**).

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. NEFCO staff will seek comment from the Ohio EPA on all new DMAs and FPAs. Following the NEFCO Board approval, the Ohio EPA will utilize the new designation(s) in its permit decision process.

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

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

**Recommendation 3-1: Local and county jurisdictions are encouraged to conform land use plans to the wastewater service options and prescriptions identified in Appendices 3-2 to 3-13.**

Ideally the planning choices reflected in wastewater management options and prescriptions presented in Appendices 3-2 through 3-13 are consistent with local land use plans. The effectiveness of the CWP will be enhanced to the extent that it is consistent with these land use plans.

**Recommendation 3-2: Local jurisdictions should consider the use of the Joint Economic Development District (JEDD) approach or the Cooperative 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 and has a policy of annexation for service. This is rationalized because the municipality has used their sewer revenues and/or tax base to support the construction, operation, and maintenance of their sewer infrastructure and is attempting to insure that all beneficiaries pay a fair share of these costs. Annexation is the tool to accomplish this.

Compulsory annexations to receive sanitary sewer service are often strongly contested. Use of a substitute measure, a JEDD<sup>4</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 to allow an exchange of services and sharing of tax revenues. JEDD or CEDA agreements must be approved by vote of township residents. JEDD contracts include joint economic development districts, township service or sub-service areas, and non-service areas. Sewer (and water) lines are extended to joint economic development districts and, by petition (75 percent) to township service or sub-service areas. Township residents (or others) working in the joint economic districts are subject to an income tax that partially pays the capital cost of the extensions. All matters, including approving extensions, changes in joint economic districts or township service areas are made by an equally represented township/municipality represented the JEDD Board. JEDDs promote controlled economic and real estate valuation growth in designated economic districts while limiting suburban sprawl. In non-JEDD or CEDA agreement areas where the 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 an encouraged alternative in the CWP.

JEDD or CEDA agreements should be preceded by a sewer service agreement as necessary. These sewer service agreements should follow the 201 update process as described in Chapter 3, Policy 3-6 to assure consistency with local facilities planning areas.

---

<sup>4</sup>Ohio Revised Code 715.70-.71