

IV. Delineation of Sewer Service Areas and Planning Integration

The Water Quality Management Plan (WQMP) rules at N.J.A.C. 7:15-5.22 require coordination with and solicitation of comments or consent from certain agencies, entities and plans, and consistency with other plans. This section addresses those requirements. This chapter provides the method used to delineate future sewer service areas based on the mapping of significant environmentally sensitive areas, and consistency with other regional plans.

Environmentally Sensitive Areas Maps (Maps 5 and 6)

Under the Water Quality Management Planning Rules, large contiguous environmentally sensitive areas, generally defined as 25 acres or greater in size, should be excluded from sewer service areas except under certain circumstances such as providing service to development that has already secured prior approvals or center based development approved by the DEP through the Plan Endorsement process. Map 5 shows the final results for the mapping of environmentally sensitive areas, based on the information described above and the WQMP rules. (See Appendix Q) This map was created using the following process:

The Middlesex County Office of Planning (MCOP) was provided with the Environmentally Sensitive Area GIS layer by the NJDEP and then undertook the following tasks:

1. MCOP staff merged GIS layers for Wetlands, Category One (C1) Riparian Zones, Natural Heritage Priority Sites, Threatened and Endangered Species Habitats and any other relevant layers utilized by the County into a single composite GIS coverage;
2. Staff corrected the composite areas by eliminating those areas designated as urban in the most recent land use/land cover layer to address land use/land cover modifications that have occurred since the environmental feature layers were prepared;
3. Utilizing the existing maps from the 2000 Lower Raritan-Middlesex County Wastewater Management Plan as a starting point, MCOP staff performed a NJDEP directed exercise that defined the existing sewer service areas by removing environmentally sensitive areas that were identified using several GIS coverages, including: C1 Stream Buffers, Natural Heritage Priority Sites, 2002 Land Use/Land Cover areas defined as wetlands and relevant coverages obtained from the NJDEP Landscape Project. At the same time, County staff made inquiries and conducted local outreach meetings involving municipal public works directors to obtain the most current information available on existing sewer line locations and their extent within each municipality. Subsequently, mapping was revised to resolve any inaccuracies revealed through the municipal vetting process. The refined product of this research is depicted in Map 2; encompassing all existing sewer service areas within each municipality. Map 2 is determined to be of sufficient accuracy to depict the existing sewer service areas on a County-wide scale;
4. MCOP staff identified and deleted any composite areas less than 25 acres in size from the map of environmentally constrained areas. Map 5 of the WMP shows the most up to date environmentally sensitive areas. (See Appendix L) These areas are used to eliminate the potential for sewer service areas except where sewer service already exists. Exceptions are allowed for infill development or approved endorsed plans. It is noted for public information purposes that the excluded areas will be protected through other NJDEP regulatory programs such as the Flood Hazard Area Control Act and Freshwater Wetlands Act rules, and may be protected by municipal ordinances as well.

Sewer Service Areas in Environmentally Sensitive Areas

The Water Quality Management Plan (WQMP) rules allow for inclusion of environmentally sensitive areas under limited conditions. The following modifications were considered for the County WMP:

Where a development has secured approval under the Municipal Land Use Law and possesses a valid wastewater approval, the site may be included in the sewer service area if consistent with that valid wastewater approval. Where a project has an approved site-specific Water Quality Management Plan (WQMP) and Wastewater Management Plan (WMP) amendment from the NJDEP, the project may be included in the wastewater management plan consistent with that approved site specific amendment for a period of six years from the date the amendment was adopted. Such developments are reflected as area served or area added in the Municipal SSA Maps (Municipal Map A).

Where environmentally sensitive areas are bordered on either side by areas with existing sewer service, and where the infill development would generate 2,000 gpd or less of sewage based on existing zoning, and where the area to be included does not include habitat critical to the recovery potential or the survival of a local population of an endangered or threatened species, the area was included in the SSA.

Where sewer service is necessary to support center based development under an “endorsed plan” (through the State Planning Commission relative to the State Development and Redevelopment Plan) and would not remove habitat critical to endangered or threatened species. Where such modifications have been made, they are noted in the individual municipal chapters.

Where necessary to create a linear boundary that is related to recognizable geographic features and would not remove habitat critical to the recovery potential or the survival of a local population of an endangered or threatened species, the area was included in the SSA.

Exceptions to the Use of Geographic or Political Boundaries

The only exception to the use of geographic or political boundaries in Middlesex County is the use of environmentally restricted layers to designate a wastewater boundary for some large sub-dividable parcels.

Coastal Zone Management

New Jersey’s coastal zone has been established pursuant to the federal Coastal Zone Management Act of 1972 and was federally approved in 1978. The Rules on Coastal Zone Management (N.J.A.C. 7:7E) establish the substantive rules of the Department of Environmental Protection regarding the use and development of coastal resources. These rules provide the basic policy direction for planning actions undertaken by the Department of Environmental Protection in the Coastal Zone as per Section 306 of the Federal Coastal Zone Management Act. Planning decisions affecting New Jersey’s coastal zone under the New Jersey Water Quality Planning Act and Section 208 of the Federal Clean Water Act must be consistent with the New Jersey’s coastal zone management program.

New Jersey’s rules on Coastal Zone Management are utilized by the state’s Division of Land Use Regulation in the review of permit applications and coastal decision-making. The rules also address issues of location, use, and resources. New Jersey’s rules provide for a balancing between economic development and coastal resource protection, as well as recognize that coastal management involves explicit consideration of a broad range of concerns, in contrast to other resource management programs which have a more limited scope of concern.

Coastal Zone Management (continued)

The Coastal Zone Management Rules represent the State's substantive standards for the use and development of resources in New Jersey's coastal zone. These rules are used to review permit applications submitted under the Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19-1 et seq., the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., and the Waterfront Development Law, N.J.S.A. 12:5-3. The rules are also a basis for making recommendations to the Tidelands Resource Council on applications for Tidelands Instruments, and are applied in other Department decision-making pursuant to N.J.A.C. 7:7E-1.2.¹

The Rules on Coastal Zone Management include identification of 48 Special Areas requiring special management consideration. The Rules on Coastal Zone Management generally prohibit development on beaches, dunes and in coastal high hazard areas. These areas have also been excluded from sewer service under this wastewater management plan because providing centralized sewer service would encourage a development pattern inconsistent with the environmental sensitivity, recreational importance, and risk to life and property in these areas.

The Rules on Coastal Zone Management further define planning areas within the coastal zone designed to shape future development patterns along the coast. Among the five coastal planning areas the Coastal Fringe, Coastal Rural and Coastal Environmentally Sensitive Planning Areas are identified as areas to encourage growth in compact centers and to maintain low density and low intensity development outside of those centers. The extension of centralized sewer service in these planning areas is inconsistent with the growth and protection objectives of New Jersey's Coastal Zone Management program and therefore, these coastal planning areas have been excluded from sewer service areas. See Map 2 for a depiction of sewer service areas and coastal planning areas.

Goals of Coastal Zone Management Rules

Proposed developments tying into existing and proposed sewer service areas which require coastal permits must demonstrate compliance with all applicable sections of the Coastal Zone Management rules including, but not limited to, Wetlands (N.J.A.C. 7:7E-3.27), Wetlands Buffers (N.J.A.C. 7:7E-3.38), Secondary Impacts (N.J.A.C. 7:7E-6.3), Public Facility Use Policies (N.J.A.C. 7:7E-7.6), Water Quality (N.J.A.C. 7:7E-8.4), Ground Water Use (N.J.A.C. 7:7E-8.6) and the policies under General Land Areas rules, Subchapters 5, 5A and 5B.

The New Jersey Department of Environmental Protection maintains that both the Coastal Zone Management Program and the Coastal Zone Management rules are founded on eight general coastal goals². These goals convey results that the Coastal Management Program strives to accomplish. Each goal is complemented by related policies that set forth the means to achieve that goal. The Coastal Zone Management rules include coastal goals that were approved under the Federal Coastal Zone Management Act (16 U.S.C. 1450).

The first goal is to maintain healthy coastal ecosystems. The policies to do so include protecting, enhancing, and restoring coastal habitats and their living resources to promote water quality, aesthetics, biodiversity, recreation and healthy coastal ecosystems; as well as to manage coastal activities in order to protect existing natural resources and the environment.

The second goal is to maintain an effective management of ocean and estuarine resources. This goal incorporates three policies. The first is to develop and implement management measures to attain sustainable recreational and commercial fisheries. Another policy is to manage commercial uses to help reduce conflict between users and encourage water dependent uses. The third policy is to administer the safe and environmentally sound use of coastal waters and beaches in an effort to protect natural, cultural and aesthetic resources, promote safe navigation, as well as to provide recreational opportunities for citizens.

¹ Coastal Zone Management rules, Coastal Management Program – Enforceable Policies, NJDEP, http://www.nj.gov/dep/cmp/czm_enforcepolicies.html

² Coastal Zone Management rules, NJDEP. <http://www.state.nj.us/dep/landuse/7-7e.pdf>

Goals of Coastal Zone Management Rules (continued)

The third goal, to provide meaningful public access to and use of tidal waterways and their shores, includes six corresponding policies. The policies are: to preserve public trust rights to tidal waterways and their shores; to preserve and enhance views of the coastal landscape to enrich aesthetic and cultural values and vital communities; to conserve and increase safe, environmentally sound, and meaningful public access from both the land and water to the tidal waterways and their shores for recreation and aesthetic experiences; to enhance public access by promoting adequate affordable public facilities and services; to balance diverse uses of tidal waterways and their shores; and to protect, enhance, and promote waterfront parks.

The fourth goal of the Coastal Zone Management Program is to maintain sustained and revitalized water-dependent uses. The first corresponding policy is to encourage, sustain and enhance active port and other water-dependent facilities, as well as maritime uses. The second policy is to encourage the redevelopment of inactive and under-utilized waterfront facilities for port, water-dependent and maritime uses. Another policy is to conserve waterfront sites for water-dependent activities. The fourth and final policy of this goal is to manage dredging in an environmentally sound manner, to promote environmentally sound and economically feasible dredge material management practices and to preserve historic dredged material placement sites.

The fifth goal is to preserve coastal open space, and entails three main policies. The first policy is to preserve, enhance, and restore open space including natural, scenic, historic, and ecologically important landscapes that include the following characteristics: the landscapes provide opportunities for passive and active recreation; the landscapes minimize natural hazards; the landscapes protect valuable wildlife and plant habitats and ecosystem health, for aesthetic and cultural values; or the landscapes must minimize impacts from nonpoint sources of pollution. The second policy of this goal is to promote and enhance public access to and use of open space where appropriate. The final policy of this goal is to promote strategies for the creation of new open space.

The sixth goal, to uphold safe, healthy and well-planned coastal communities and regions, includes seven main policies to achieve the goal. The first policy is to manage coastal activities and foster well-planned communities and regions that: encourage mixed-use redevelopment of distressed waterfront communities including underutilized, abandoned and contaminated sites; promote concentrated patterns of development; conserve water supply; ensure the availability of suitable waterfront areas for water dependent activities; create vibrant coastal communities and waterfronts; sustain coastal economies; provide meaningful public access to tidal waterways and their shores; protect the natural environment; preserve and restore significant historic and cultural resources and aesthetic coastal features; or minimize the threat of natural hazards to life and property. The other policies are to maintain, enhance and encourage maritime uses; to promote public health, safety, and welfare; to promote and implement strategies for the development of hazard mitigation plans; to preserve and enhance beach and dune systems and wetlands, and manage natural features to protect the public from natural hazards; as well as to promote and implement strategies that eliminate or reduce risks to human health and the ecosystem from coastal activities.

The seventh goal is to uphold coordinated coastal decision-making, comprehensive planning, and research. The policies of this goal are to promote the attainment of the New Jersey Coastal Management Program goals by encouraging other government agencies to employ the policies which supplement the goals; to encourage incorporation of the coastal goals and supplemental policies into State, regional and municipal land use management, funding and acquisition programs within the coastal zone; to ensure opportunities for public participation in coastal decision-making; to coordinate cooperative government sponsored and academic coastal research and information dissemination to foster informed decision-making; and to encourage the preparation of comprehensive plans including the following: land acquisition plans that further goals and supplemental policies of New Jersey's Coastal Management Program; and special area management plans that protect significant natural resources and provide the opportunity for sound coastal dependent economic development.

The eighth and final goal is to maintain coordinated public education and outreach. The first policy of this goal is to coordinate education and outreach activities on coastal issues. The second and final policy of this goal is to encourage coastal related education and participation opportunities for the public.

Coastal Area Facility Review Act (CAFRA)

CAFRA applies to projects near coastal waters in the southern part of the State. The CAFRA area begins where the Cheesequake Creek enters Raritan Bay in Old Bridge, Middlesex County. The law divides the CAFRA area into pieces or zones, and regulates different types of development in each zone. Generally, the closer you are to the water, the more likely it is that your development will be regulated. The CAFRA law regulates almost all development activities involved in residential, commercial, or industrial development, including construction, relocation, and enlargement of buildings or structures; and all related work, such as excavation, grading, shore protection structures, and site preparation.

CAFRA regulates development activities within the CAFRA zone. The law divides the CAFRA area into Planning Areas, and regulates different types of development in each Area including construction, relocation, and enhancement of buildings or structures; and all related work, such as excavation, grading, shore protection structures, and site preparation within the CAFRA zone.

The State CAFRA boundary begins at the point where the Cheesequake Creek enters Raritan Bay in Old Bridge Township, Middlesex County. This is the only area in the County where CAFRA applies. The portion contained in Middlesex County is comprised of roughly 1,400 acres within the Coastal Metropolitan Planning Area, 970 acres of designated Coastal Environmentally Sensitive Planning Area, and 535 acres of Coastal Park Planning Area. The largest portion of the CAFRA zone in the County, the Metropolitan Planning Area, is bounded entirely by the County's municipal boundary with Aberdeen Township, Monmouth County.

Middlesex County is wholly consistent with New Jersey's Coastal Zone Management Plan. Each proposed project is reviewed against relevant policies to ensure compliance.

Coordination with the Coastal Zone Management Program

The WMP of Middlesex County will not recommend the extension of sewer service areas into the coastal zones. These areas will be maintained to preserve the natural environment and ensure that any development compliments the coastal community wetlands in order to help preserve the character of the environmentally sensitive areas.

Consultation Requirements with Municipalities and Water Utilities

Table 16 lists the municipalities, wastewater and water utilities that have been consulted during the preparation of the County WMP. Middlesex County staff met with each of the 25 municipalities individually to review the new Wastewater Management Planning rules. Maps were prepared for each of the municipalities that showed the sewer service area from the year 2000 juxtaposed with the new NJDEP sewer service area that removed all environmentally sensitive areas of 25 acres or greater in size. Through letters to each municipality and face-to-face meetings with the municipal planners, engineers, administrators, and public works directors, the County detailed the information that is required in order to put a proposed project/parcel back into the sewer service area. In addition, the municipalities were asked to examine the proposed sewer service area map and highlight any existing vertical development discharging to sanitary sewer that was left out of the sewer service area as a result of outdated aerial information used. Also, the County reviewed municipal ordinances that are required to be adopted as part of the Wastewater Management Plan. Follow-up letters were written to each municipality with deadlines for submission of the information.

Consultation Requirements with Municipalities and Water Utilities (continued)

Table 16
Consultation Requirements with Municipalities and Water Utilities

<u>Municipality</u>	<u>Wastewater Utility</u>	<u>Water Supply Utility</u>
Carteret	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Cranbury	Middlesex County Utilities Authority (MCUA)	N.J. American
Dunellen	Middlesex County Utilities Authority (MCUA)	N.J. American
East Brunswick	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Edison	Middlesex County Utilities Authority (MCUA)	N.J. American
Helmetta	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Highland Park	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Jamesburg	Middlesex County Utilities Authority (MCUA)	N.J. American
Metuchen	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Middlesex	Middlesex County Utilities Authority (MCUA)	N.J. American
Milbourn	Middlesex County Utilities Authority (MCUA)	New Brunswick Water
Monroe	Middlesex County Utilities Authority (MCUA)	Monroe
New Brunswick	Middlesex County Utilities Authority (MCUA)	New Brunswick Water
North Brunswick	Middlesex County Utilities Authority (MCUA)	N.J. American
Old Bridge	Middlesex County Utilities Authority (MCUA) Western Monmouth Utilities Authority (WMUA)	Middlesex Water Old Bridge MUA
Perth Amboy	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Piscataway	Middlesex County Utilities Authority (MCUA)	N.J. American
Plainsboro	Stony Brook Regional Sewerage Authority, (SBRSA) United Water Princeton Meadows (UWPM)	N.J. American
Sayreville	Middlesex County Utilities Authority (MCUA)	Middlesex Water
South Amboy	Middlesex County Utilities Authority (MCUA)	Middlesex Water
South Brunswick	Middlesex County Utilities Authority (MCUA), Stony Brook Regional Sewerage Authority (SBRSA)	N.J. American
South Plainfield	Middlesex County Utilities Authority (MCUA)	N.J. American
South River	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Spotswood	Middlesex County Utilities Authority (MCUA)	Middlesex Water
Woodbridge	Middlesex County Utilities Authority (MCUA)	Middlesex Water

Proposed Sewer Service Areas

Map 3 shows all proposed wastewater service areas for the County WMP. The Sewer Service Area maps prepared in 2000 which show the future Sewer Service Areas in the county were used as the base layers used in the preparation of the current Proposed Sewer Service Map. From the base layers all environmentally sensitive areas including wetlands, Natural Heritage Priority Sites, and steep slopes that were in the NJDEP environmental layers were removed. This was further modified by adding properties which apply to be within the new Sewer Service Area and which have a preliminary or a final site plan approval from the local planning board, as well as a treatment works approval (TWA), if required, from the New Jersey Department of Environmental Protection. Finally the sewer service lines were adjusted after receiving Letters of Interpretation (LOI) and/or a Habitat Suitability Study for endangered species or habitat for specific properties which apply to be within the new Sewer Service Area.