

WASTEWATER UTILITY TREATMENT CAPACITY

I. INTRODUCTION

Requirements of the Highlands Act

Among the requirements of the Highlands Act are to include “A smart growth component that includes an assessment, based upon the resource assessment ... of opportunities for appropriate development, redevelopment, and economic growth, and a transfer of development rights program which shall include consideration of public investment priorities, infrastructure investments, economic development, revitalization, housing, transportation, energy resources, waste management... (Section 11.a.(6)).

II. APPROACH AND INITIAL ACTION

To implement this section of the Highlands Act, the Highlands Council analyzed the treatment capacity limitations of existing Highlands Region Domestic Sewer Facilities and their associated wastewater service areas (both existing area served and full sewer service areas) to estimate the amount of wastewater utility treatment capacity potentially available for redevelopment and regional growth opportunities. The RMP seeks to identify where development and redevelopment can be reasonably accommodated within the Highlands Region within available treatment capacity limitations and without harm to ecological and water resources.

The analysis would include the following actions:

- identify areas currently served by existing wastewater facilities
- identify the full wastewater service areas for these facilities
- determine available treatment capacity for facilities that have the ability to support some level of regional growth or redevelopment
- determine areas where the projected redevelopment and development treatment capacity demands may exceed the available capacity of these facilities
- identify appropriate wastewater service areas consistent with regional growth or redevelopment areas that have a projected wastewater treatment demand consistent with existing treatment capacity limitations
- evaluate the potential or limitations for future expansion of wastewater treatment capacity based on existing water quality concerns and other limitations, and through the control of infiltration and inflow

In furtherance of this approach the Council took or will take the following initial actions:

- Identified Highlands Domestic Sewer Facilities that have the potential to service regional growth or redevelopment opportunities within the Highlands Region.
- Estimated the Available Wastewater Treatment Capacity for each Highlands Domestic Sewer Facility that may be available to support regional growth or redevelopment opportunities within the Highlands Region.
- Allocated Redevelopment Treatment Capacity within Existing Areas Served by a Highlands Domestic Sewer Facility to ensure there is adequate treatment capacity to encourage appropriate redevelopment opportunities or TDR Receiving Zones.
- Establish Highlands Wastewater Sewer Service Areas that incorporate that portion of a Proposed Service Area served by existing Highlands Domestic Sewer Facilities that are appropriate to serve as regional growth or redevelopment areas, and have sufficient treatment capacity to service projected wastewater treatment demand (through the RMP).
- Identify potential Future Wastewater Treatment Expansion Areas served by existing wastewater treatment facilities within the Highlands Region (through the RMP).

- Developed strategies and standards for inclusion in the Policy Guidance Element, Land Use Capability Map and Implementation Framework Element of the Plan. (See following section).

III. STRATEGIES & STANDARDS

A. Policy Guidance Element

RMP Standards

The standards for the protection of Wastewater Utility Treatment Capacity will include the following types of standards:

To protect Highlands resources:

- Prohibit construction of sewer lines within Tier 1 of Well Head Protection Areas that may result in seepage of untreated sewage into ground water supplies.
- Prohibit expansion of a future sewer service area within critical natural resource areas in any LUCM zone, including the Highlands Preservation Area.

To provide for Smart Design:

- Require use of water conservation devices for any redevelopment or development activity including renovations to existing single family residences and commercial/industrial buildings.
- Incorporate standards for mandatory inspection of new or existing single family residences or commercial/industrial development to prevent non-wastewater inflow to wastewater collection systems.

To address Regional Growth:

- Require adoption of an approved wastewater management plan or amendment to an existing plan substantially consistent with the Highlands Service Area included in the RMP.
- Require minimum development standards for residential properties served by wastewater treatment facilities at a density greater than or equal to than 2 dwelling units per acre, and equivalent commercial and business Floor to Area Ratios (FAR) to ensure cost-effective utility service.
- Prioritize allocation of available wastewater treatment capacity within TDR Receiving Zones adopted by a municipality and approved by the Highlands Council.

B. Land Use Capability Map and Standards

The Land Use Capability Map will include various overlay zones, currently called Regional Protection Zone (most environmentally sensitive), Regional Conservation Zone (middle level) and Regional Development Zone (most appropriate for development). A number of factors will be considered in determining into which zone particular land belongs. For wastewater treatment capacity, the Land Use Capability Map will include the following standards for the following three zones:

Regional Protection Zone:

- Prohibit provision of wastewater treatment collection systems beyond Existing Areas Served within the Regional Protection Zone, including the Highlands Preservation Area, except for those areas identified in the RMP to be a Special Planned Area, projects that are exempt from the Highlands Act, or areas required to be served to address a clear and imminent threat to public health, as determined by the Highlands Council in consultation with the NJDEP.

Regional Conservation Zone:

- Allow for the provision of wastewater collection systems within and immediately adjacent to Existing Areas Served within the Regional Conservation Zone to serve areas identified in the RMP to be a

Special Planned Area, or an area required to be served to address a clear and imminent threat to public health as determined by the Highlands Council in consultation with the NJDEP.

- Discourage compact development in areas that are not served by Highlands Domestic Sewer Facilities.

Regional Development Zone:

- Prioritize allocation of existing wastewater treatment capacity to Special Planned Areas or Regional Growth Areas that can accommodate TDR Receiving Zones.
- Allow for the expansion or provision of wastewater collection systems adjacent to Existing Areas Served to serve areas identified in the RMP to be appropriate for Regional Growth, or an area required to be served to address a clear and imminent threat to public health as determined by the Highlands Council in consultation with the NJDEP.

C. Implementation Framework Element

Pre-Conformance Strategies

- Submit the Highlands Wastewater Service Area mapping to NJDEP for review as a basis for review of subsequent wastewater planning and treatment works approvals.
- Develop guidelines to incorporate appropriate Highlands Preservation Area exemptions or prior-approved projects into the Highlands Wastewater Service Area map.
- Develop guidelines in consultation with NJDEP regarding standardized procedures for preparing Wastewater Management Plans.
- Obtain Governor's designation establishing the Highlands Council as the designated water quality planning agency for the Highlands Region.

Conformance Strategies

- Require that municipal conformance approval include an approved wastewater management plan that conforms with NJDEP rules and is consistent with the Highlands Wastewater Service Area identified in the RMP.
- Allow for adjustments and revisions to Highlands Wastewater Service Area to include Redevelopment Areas, projects deemed exempt from the requirements of the Highlands Act, areas that obtained final subdivision approval and Treatment Works approval prior to the effective date of the Act, or areas that possess an imminent threat to public health upon demonstration that the critical natural resources of the Highlands will be maintained.

Five Year Highlands Resource Protection and Planning Goals

- Coordinate efforts with NJDEP and wastewater utility authorities to develop standardized water quality models to evaluate the assimilative capacity of waters that receive wastewater discharges consistent with TMDL requirements established by NJDEP.
- Coordinate with and facilitate NJDEP review and approval of wastewater management plan amendments for proposed service areas that are consistent with the Highlands Wastewater Service Areas identified in the RMP.

Coordination and Consistency Considerations:

- Develop a coordinated program with the NJDEP to track ground water and surface water discharges within the Highlands Region and maintain current estimates of available capacity.
- Develop a coordinated monitoring program with the NJDEP and the USGS to identify water quality concentrations related to surface water effluent discharges.

- Develop a coordinated regulatory review program with the NJDEP to ensure consistency of domestic treatment works approvals and wastewater management plans with the resource protection and smart growth provisions of the RMP.
- Develop technical guidance with the NJDEP to promote water conservation measures in Highlands municipalities and in municipalities supplied with Highlands water.

Local Participation Considerations:

- Develop educational program for municipal officials on water conservation measures and methods to control infiltration and inflow to maximize available wastewater treatment capacity.
- Develop training and educational program for municipal and county planning board and environmental commissioners on methods for using the Regional Master Plan to develop updated wastewater management plans.

IV. DISCUSSION