

VIII. Municipal Wastewater Management Chapters

Hamburg Borough

2010 Population = 3,277

Land Area = 1.16 square miles

2010 Population Density = 2,825 persons/sq. mile

This municipal chapter is an element of the Sussex County Wastewater Management Plan prepared by Sussex County Planning Division in accordance with N.J.A.C. 7:15.

Existing and Proposed Wastewater Infrastructure

Hamburg Borough has a wastewater collection system that conveys wastewater to the Sussex County Municipal Utilities Authority wastewater treatment facility located in Hardyston Twp. The SCMUA Upper Walkkill Water facility has a surface water discharge to the Walkkill River. The Existing Sewer Service Area map shows there are 6 existing pump stations in Hamburg Borough.

Wastewater facilities (discharge greater than 2,000 gallons per day) are regulated by NJ Dept. of Environmental Protection with individual New Jersey Pollutant Discharge Elimination System (NJPDES) Permits. There are no individual wastewater facilities with NJPDES Permits in Hamburg.

Build-out and Sewer Capacity Analysis

All of Hamburg Borough is designated as Highlands Planning Area. Using GIS data layers and the DEP Build-out Model, this provided a breakdown of the acreage of land available for development within each general zone of the municipality, based on the build-out analysis. The acreage of developable land was calculated by zoning district in the computer model, and then the number of residential units and commercial square footage at build-out was based on the existing zoning. For projecting industrial flows, there is no specific DEP formula in their Build-out Model, so it would be specified based on local input. The DEP Build-out Model does not account for redevelopment areas, so local input is valuable to identify additional projected wastewater flow for this type of growth in sewer areas.

Assuming 175 new residential units x 300 gallons per day (GPD)/ new unit = 52,500 GPD projected residential flow

Existing Flow, 2013 = 219,000 GPD

SCMUA Allocation = 420,000 GPD

Since the County Wastewater Management Plan is meant to be a 20-year plan, using that time period is valuable to realistically assess the possible need for additional sewer capacity and infrastructure for future development. We can compare the SCMUA allocation amount, existing flow and build-out flow to evaluate whether additional wastewater capacity would be needed in the future.

Build-out in Septic Areas and DEP Nitrate Dilution Model

All undeveloped land was included as available for nitrate dilution for future septic density. The results are shown by HUC-11 watershed. Based on existing zoning, the projected number of new septic units will not exceed the DEP maximum units allowable based on nitrate dilution and maintaining 2 mg/L ground water quality.

Table B - Additional Development at Build-out, Septic Area				
Watershed (HUC-11)	Total Undeveloped Land Available for Dilution (Acres)	DEP Nitrate Dilution Model: Acres/New Septic	DEP Model: Total New Septics Allowed	Total New Septics Based on Zoning
Walkkill River (above road to Martins)	53	4.8	11	7

3) Identify any areas subject to federal 201 grant limitations - NONE

4) Provide a checklist of ordinances adopted and pending to complete the municipal chapter.>

Table C - Summary of Ordinance Adoption			
Ordinance	Date Adopted	Complies with NJAC 7:15	Comments and More Protective Standards
Stormwater Management (Ground Water Recharge Maintenance)	4/4/2005	County Planning Board certification 12/4/2006	
Riparian Zone Protection (optional)			
Steep Slope Protection (optional)			
Dry Conveyances in Sewer Service Area			
Septic Connection in Sewer Service Area			