

## VIII. Municipal Wastewater Management Chapters

### Vernon Township

2010 Population = 23,943

Land Area = 68.2 square miles

2010 Population Density = 351 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

Vernon Twp. has a wastewater collection system that serves a portion of the municipality and conveys wastewater flow to the Upper Wallkill SCMUA facility. There is also an “Effluent Recharge Force Main” back to the SCMUA facility with Discharge to Ground Water of 265,000 gallons per day located in Vernon. This provides ground water back to the Black Creek watershed, as approved by DEP.

The larger 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. The facilities discharge to surface water or ground water, and Facilities Tables for each NJPDES Permit are listed at the end of this chapter.

The following table lists facilities governed by a State T-1 Permit, which is a “General Permit for Sanitary Subsurface Disposal” for discharges greater than 2,000 gallons per day. The T-1 Permits are typically for sites constructed in years prior to State regulations

**Table A - Existing NJPDES T-1 Facilities:**

<b>NJPDES</b>	<b>Facility Name</b>	<b>Project Summary</b>	<b>Block</b>	<b>Lot</b>	<b>Street Address</b>	<b>X Coord.</b>	<b>Y Coord.</b>
NJG0087491	Baldwin Apartments	2-building apartment complex with 24 units (total of 28 bedrooms)	141	10.01	Omega Drive	495850	862849
NJG0107212	D&R Group Vernon	20,032 sq. ft. medical arts building, with physician's offices	190.02	2	212 Route 94	491841	858928
NJG0140091	Great Gorge Terrace Condominium Assoc.	11 buildings with 44 condominium units	232.01	1-44	Old Rudetown Road		
NJG0168076	Hidden Valley Ski Resort	Ski resort with a maximum capacity of 600 people, and recreational area with a maximum capacity of 50 people.	192.02	2.5	44 Breakneck Road	498069	857029
NJG0136875	Tall Timbers Camp Ground	Campground with 977 campsites served by seepage pits, septic tanks, disposal fields and holding tanks	Various		100 Tall Timbers Road	481183	869208
NJG0062677	Vernon Colonial Plaza	32,507 sq. ft. shopping center consisting of retail/professional use.	270	6.03	40 Rt. 94	479007	852517
NJG0131415	Vernon Valley Plaza	Shopping center	145	1.05	530 Rt. 515 (Vernon-Stockholm Road)	496718	860213
NJG0073415	Wawayanda State Park	State park with lake, restroom facilities			Off Warwick Drive		

**Build-out in Septic Areas and DEP Nitrate Dilution Model**

In running the DEP Build-out Model, all undeveloped land was included as available for nitrate dilution for future septic density. The results are shown in **Table B** by portion of HUC-11 watershed. For the purposes of this analysis it is inconsequential if one municipality’s zoning exceeds the DEP Model Total Allowed, provided that the regional HUC-11 watershed does not exceed the Total New Allowed Units. The regional HUC-11 watershed totals are provided on pages 36 – 39 of the County WMP. For the three HUC-11 watersheds, Total Zoned is below the DEP Model for Total Allowed New Septics so the nitrate dilution is projected to be within acceptable range for the watersheds.

<b>Table B - Additional Development at Build-out, Septic Area</b>				
<b>Watershed (HUC-11)</b>	<b>Total Undeveloped Land Available for Dilution (Acres)</b>	<b>DEP Nitrate Dilution Model: Acres/New Septic</b>	<b>DEP Model: Total New Septics Allowed</b>	<b>Total New Septics based on Zoning</b>
Walkkill (above road to Martins)	185	4.8	40	50
Walkkill (below road to Martins)	1,227	5.0	245	180
Pochuck Creek	2,943	4.8	610	420

Based on existing zoning, the projected number of new septic units in each HUC-11 watershed will not exceed the DEP maximum units allowable based on nitrate dilution and maintaining 2 mg/L ground water quality. The NJDEP Build-out Model should be viewed as a rough indicator. The Model includes variables with a range of values (such as household size) and assumes that existing zoning would not change. It is a regional planning tool with just one focus: to identify possible areas of future stresses on ground water quality. The number of maximum allowable units is a theoretical number, and local municipal plans could provide for much less growth. There are many other considerations for municipalities, and it is not meant to replace or override the local perspective. Given the rural character of Sussex County, its roads and infrastructure, its quality of life, these are some other factors important to planning for future growth. **Appendix J** further describes the NJDEP Build-out Model and some of its limitations as well.

**Build-out and Sewer Capacity Analysis**

A build-out projection was done for Vernon Center as part of their Center Designation process in 2003. A build-out study analyzes land available for development (i.e. undeveloped and not constrained due to environmentally sensitive areas) within each general zone of the Vernon Center. It showed over 500 residential units projected and over 300,000 square feet of commercial/nonresidential development.

Vernon Township is currently working with the Highlands Council on a build-out analysis of their Center area.

The build-out analysis is based on existing zoning, but has no timeframe attached to it. 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. It is useful to compare the SCMUA allocation amount, existing flow and build-out flow to evaluate whether additional wastewater capacity would be needed in the future.

Vernon has 0.380 Million Gallons per Day allocation from SCMUA Discharge to Surface Water permit to Walkkill River, and 0.265 MGD allocation for Discharge to Ground Water.

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.>

<b>Table C - Summary of Ordinance Adoption In Highlands Planning Area</b>			
<b>Ordinance</b>	<b>Date Adopted</b>	<b>Complies with NJAC 7:15</b>	<b>Comments and More Protective Standards</b>
Stormwater Management (Ground Water Recharge Maintenance)	3/27/2006	County Planning Board certification on 5/1/2006	
Riparian Zone Protection (optional)			
Steep Slope Protection (optional)			
Dry Conveyances in Sewer Service Area			
Septic Connection in Sewer Service Area	Vernon Twp. MUA policies		