# VIII. Municipal Wastewater Management Chapters Sparta Township

2010 Population = 19,722 Land Area = 37.39 square miles

2010 Population Density = 527 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**

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 are listed in the tables at the end of this chapter. The following descriptions of wastewater facilities includes proposed and existing ones:

#### North Village at Sparta

The approved sewer service area is located at Route 15 and White Lake Road. The project would consist of a mixed-use center with 238 residential units, retail and office space, restaurant, hotel, and athletic club, and a projected wastewater flow of 120,000 gallons per day (gpd) discharge to ground water. The owner/operator of the proposed wastewater treatment is CC Holdings, LLC and a franchise area would need to be established by Sparta Township, and NJ Board of Public Utilities jurisdiction would apply.

## Sparta Township - White Deer Plaza

This existing wastewater treatment facility (NJPDES Permit No. NJ0027057), located at the north end of Lake Mohawk, serves the downtown commercial areas and the Knoll Heights Senior Citizens Complex. The current annual average flow for this facility is 32,290 GPD and the projected future annual average flow for this facility is 50,000 GPD. The treated wastewater is discharged to the Wallkill River classified as FW2-NT. The treatment plant is owned by Sparta Township

#### Sparta Township - Alpine Elementary School

This existing wastewater treatment facility (NJPDES Permit No. NJ0027065), located on Andover Road, serves the Alpine Elementary School. The permitted annual average flow of this facility is 25,000 GPD. The treated wastewater is discharged to a tributary of the Pequest River classified as FW2-NT. The treatment plant is owned by the Sparta Township Board of Education.

## Sparta Township - Pope John XXIII High School

This existing wastewater treatment facility (NJPDES permit No.NJ0027049), located on Andover Road, serves the Pope John XXIII High School, Our Lady of the Lake Church, and Reverend George A. Brown School. The permitted annual average flow for this facility is 22,000 GPD. The treated wastewater is discharged to an unnamed tributary to Fox Hollow Lake, tributary to the Paulins Kill. This facility is owned by Pope John XXIII High School.

#### Sparta Township - Sussex County Technical School

This existing wastewater treatment facility (NJPDES Permit No. NJ0050806) serves the Sussex County Technical School, located on Route 94. The permitted annual average flow is 18,000 GPD. The treated wastewater is discharged to ground water. This facility is owned by the Sussex County Technical School.

## Sparta Township -Lake Mohawk Golf Club

The proposed wastewater treatment facility would serve the Lake Mohawk Golf Club. The individual subsurface sewage disposal systems are owned and operated by the Club. Lake Mohawk Golf Club had a Wastewater Plan Amendment approved in the past for a proposed NJPDES Permit that would serve a proposed new pro shop facility of 2,000 square feet, expansion of the existing clubhouse, the construction of a new maintenance building with a separate septic field, and the relocation of an existing septic field, with a proposed total wastewater design flow of 5,350 gallons per day (gpd) discharge to groundwater.

## <u>Sparta Township – Morris Lake Water Treatment Plant</u>

This facility (NJPDES Permit No. NJ0136603) is located at the Morris Lake reservoir, off of Glen Road in Sparta, which provides the water supply for the Town of Newton. The water filtration system treats the raw water from its intake, and the wastewater from the membrane filter backwash is discharged back into Morris Lake. The permitted average annual flow is 200,000 GPD, and the facility is owned and operated by the Town of Newton.

#### Sparta Township - Blue Heron Senior Housing

This proposed wastewater treatment facility (NJPDES Permit No. NJ0077127) would be designed to serve the planned senior housing development of 256 units (both independent and assisted living) on Blue Heron Road, off Route 15. The permitted annual average flow for this facility is 26,000 GPD, and the treated wastewater will be discharged to ground water. The treatment plant will be owned by DTH 15, LLC.

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

Table A - Existing NJPDES T-1 Facilities:

NJPDES	Facility Name	Project Summary	Street Address	X Coord.	Y Coord.
NJG0132314	Blue Heron Plaza	Exsiting 3-story office building	60 Blue Heron Road		
NJG0139491	Delmar Prof. Building	Multi-use bldg with offices, 2 apts.	200 Woodport Rd	456298	797630
NJG0102768	Greentree Village Townhomes	99 townhouse units with recreation	Sparta- Stanhope Rd	446731	809467

#### **Build-out in Septic Areas and DEP Nitrate Dilution Modeal**

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 HUC-11 watershed. Based on existing zoning, the projected number of New Septics at build-out will not exceed the DEP maximum New Septics Allowed 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				
Paulins Kill (above Stillwater Village)	1,711	4.8	356	185				
Pequest River (above Bear Swamp)	105	4.5	23	20				
Musconetcong River (above Trout Brook)	91	4.7	19	18				
Wallkill River (above road to Martins)	1,526	4.8	318	230				

DEP recognizes that their Build-out Model is approximate, so the results can be adjusted by a range of 10% when comparing Total New Septics Allowed with Total New Zoned Septics. The DEP Nitrate Dilution Model is a regional model. 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 (see pages 36 – 39 of the County WMP).

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.

### **Build-out and Sewer Capacity Analysis**

Sparta Twp. has a wastewater collection system that serves a portion of the municipality and conveys wastewater flow to the Upper Wallkill SCMUA facility. The Existing Sewer Service Area Map shows there are 3 pump stations in Sparta.

A build-out analysis looks at the acreage of land available for development (i.e., either undeveloped or underdeveloped, and not constrained due to environmentally sensitive areas) within each general zone of the municipality. Sparta Township completed a build-out analysis as part of their previous Municipal Wastewater Plan, and as part of the Center Designation process.

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.

- 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 D - Summary of Ordinance Adoption							
In Highlands Planning Area							
Ordinance	Date Adopted	Complies with NJAC 7:15	Comments and More Protective Standards				
Stormwater Management (Ground Water Recharge Maintenance)	7/25/2006	County Planning Board certification On 12/4/2006					
Riparian Zone Protection (optional)							
Steep Slope Protection (optional)							
Septic System Maintenance	1998	Sewage Disposal in Lake Mohawk Septic Management District					
Dry Conveyances in Sewer Service Area							
Septic Connection in Sewer Service Area							

Note: Highlands Preservation Area has Municipal Ordinance requirements under Highlands Council and Plan Conformance jurisdiction.