

Cumberland County Wastewater Management Planning

In 1991, the Cumberland County Department of Planning and Development (CCDPD) assumed the role of the Wastewater Management Planning Agency for Cumberland County. The County was subsequently divided into four districts: the Cumberland County Utilities Authority Service Area; the Landis Sewage Authority Service Area; the City of Millville Sewer Utility and the Rural District. The first three sewerage facilities listed - all pre-existing - maintain responsibility for their districts. For the first time, however, a plan has been prepared for the Rural District, this by the CCDPD. The Rural District Plan provides guidance for wastewater management planning through the year 2010.

Following is a summary of the Rural District Wastewater Management Plan, along with recent wastewater management planning efforts for the other three districts:

Cumberland County Utilities Authority (CCUA)

The CCUA, based within the Cohansey River Basin in the western portion of the county, provides regional sewage treatment at its facility in Bridgeton. It processes sewerage from portions of the City of Bridgeton, Upper Deerfield Township, Hopewell Township and a small portion of Fairfield Township. The existing service area extends to Seabrook in Upper Deerfield and a small portion of Deerfield to the north, the Federal Prison in Fairfield to the east, and portions of Hopewell to the west. As of 1994, the average daily flow was 2.8 MGD (Million Gallons per Day), with a capacity of 7.0 MGD, and thus has ample capacity to accommodate sewer service area expansion. The sewer service area is planned to expand along Route 49 in Hopewell and Route 49 in Fairfield, along with the southeast section of Upper Deerfield and the Borough of Shiloh.

Landis Sewage Authority

The Landis Sewage Authority services the City of Vineland. Vineland is 69 square miles, New Jersey's largest city in terms of area. The Landis Sewage Authority owns and operates an 8.2 MGD advanced wastewater treatment facility, the largest public wastewater facility in New Jersey using land application of treated waste. The average daily flow is 5.4 MGD. The Authority is extending service into several residential areas that currently use septic systems to process waste, but no major expansion is planned.

The Authority uses all of the biosolids (sludge) produced from wastewater treatment on its own farm. Due to the large number of food processors in its service area, the wastewater and biosolids have a higher percentage of nitrogen and phosphorus. These plant nutrients are used as fertilizer on the Authority's 400-acre farm, which grows rye straw, hay, field corn and small grains like wheat, oats or barley. All crops raised on the farm are fed to livestock.

City of Millville Sewer Utility

The City of Millville Sewer Utility serves approximately 26,000 residents in the City of Millville. The treatment facility, located on the Maurice River at Fowser Road, has a capacity of 5.0 MGD. A sewer main and lateral rehabilitation project was just

completed, which reduced the average daily flow by 1.0 MGD and will serve to free up capacity for expansion of residential and industrial service. The average daily flow is about 2.1 MGD, and the capacity of the plant is 5.0 MGD.

Rural District

The Rural District Wastewater Management Plan Area consists of Commercial, Deerfield (except for sites served by the Cumberland County Utilities Authority), Downe, Lawrence and Maurice River Townships. Residential wastewater management in the district consists of individual subsurface septic systems under the jurisdiction of the Cumberland County Health Department; commercial and industrial plants have their own sewage facilities. The lack of wastewater infrastructure is a result of fiscal and environmental constraints, and limited regional demand.

Three areas are of special concern: the Village of Port Norris and the community of Laurel Lake in Commercial Township; and the Village of Fortescue in Downe Township. Partly due to the need to attract new industry and to establish the infrastructure for ecotourism, a future sewage treatment plant discharging 627,650 GPD (Gallons Per Day) to the Maurice River is proposed for Port Norris. This plant would serve the existing and future residential population in Port Norris and the seafood processing facilities in Shellpile and Bivalve. A plan of action must yet be prepared for Fortescue. The Plan recommends addressing Laurel Lake's septic problems through stringent subdivision and site plan codes for new developments.

Outside of these special areas of concern, the Plan recommends that villages, and zoning districts covering medium to high density residential uses and most commercial and industrial uses be served by wastewater facilities with flows under 20,000 GPD. Finally, in the remainder of the rural district, residential facilities with flows under 2,000 GPD are proposed. Non-domestic facilities with flows less than 20,000 GPD - such as those serving small food processors - are also proposed.



