

Executive Summary

The purpose of this Facilities Plan is to evaluate the wastewater collection, treatment and disposal needs of the Town of Ledyard and determine the adequacy of wastewater facilities for a twenty (20) year planning period. The evaluation was conducted in two phases:

1. Phase I – Needs assessment of the outlying areas of town, including Aljen Heights, Avery Hill, Christy Hill, and Gales Ferry, and identification of preliminary wastewater facilities alternatives
2. Phase II – Review of the remaining areas of town, including Ledyard Center, and analysis of wastewater facilities alternatives identified for all study areas

The following is a brief description of the findings and recommendations of this Plan:

1. The discharge capacity of the Highlands Wastewater Treatment Facility is severely limited by seasonally high groundwater. Additional subsurface disposal capacity at the facility is not possible and the feasibility of significantly increasing discharge to Seth Williams Brook is questionable.
2. The Highlands facility was last upgraded in 1997 and is in need of significant improvements to replace aged and outdated equipment. Some components from the original 1962 construction are still in operation while the rest is currently abandoned. The total estimated cost of capital improvements to the facility is \$1.0 million.
3. The Highlands facility collection system is not subject to excessive infiltration and inflow (I/I), although there may be isolated significant sources of inflow. Continued monitoring of flows at the Highlands WWTF is recommended for any observed changes relative to I/I.
4. Public sewers are necessary for the economic health of the Town. Without having access to both public water and sewer, planning goals for the future Gales Ferry and Ledyard Center village districts will likely remain unrealized.
5. Two development scenarios for the future Ledyard Center have been identified: “full build-out” and a less developed “no full build-out.”
6. For economic viability and protection of public health and the environment, public sewers are recommended for the following areas of Town: Aljen Heights/Avery Hill, Gales Ferry/Christy Hill, and the greater Ledyard Center area.
7. The recommended public sewer alternative is connecting Aljen Heights/Avery Hill, Gales Ferry/Christy Hill, and the greater Ledyard Center (full build-out) area to the Town of

Groton wastewater collection system. The estimated capital construction cost of this alternative is \$93.2 million, inclusive of recommended improvements to the Highlands WWTF. The project may be phased according to the time of need for sewerage in a particular study area.

8. Existing site conditions in the Town are not conducive to large scale subsurface disposal of treated wastewater. The only area that may be supported by a community onsite treatment and subsurface disposal facility is Aljen Heights/Avery Hill.
9. The majority of the Town will remain unsewered and continue to rely on conventional onsite wastewater disposal systems and repair/replace as necessary to comply with existing regulations. The Town should adopt an onsite wastewater management program to regulate inspection, maintenance, repair and replacement of all onsite systems to ensure protection of public health and the environment.