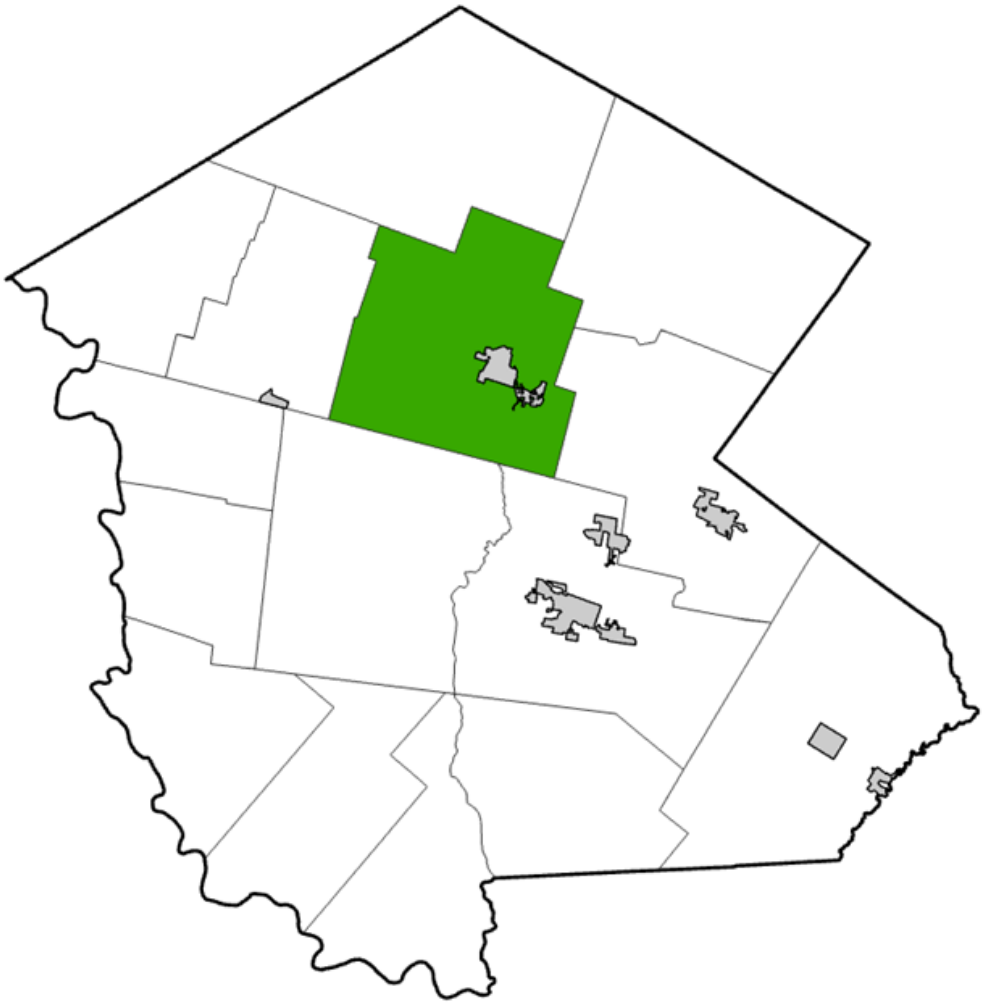
Sullivan County Assessment of Potable & Wastewater Infrastructure

VOLUME II

Town of Liberty



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Volumes I and II are part of a larger report.
The full Sullivan County Assessment of Potable and
Wastewater Infrastructure Report may be requested from the
Sullivan County Division of Planning, Community Development and Environmental Management

1. ABOUT THIS DOCUMENT

In 2025, the Sullivan County Division of Planning, Community Development, and Environmental Management (DPEM) undertook, with the support of Delaware Engineering, DPC, a project to assess water supply and wastewater management infrastructure throughout the County.

As part of that project, known as the Countywide Assessment of Potable and Wastewater Infrastructure (CAPWI), water and sewer infrastructure serving residents and businesses in each of the County's twenty-two municipalities was surveyed, inventoried, and evaluated. This document details the results of this effort and presents the information in a series of Community Reports. The CAPWI Volume 1 Report reflects the information developed within this Volume 2 Report through a series of recommended actions aimed at supporting water and sewer service county-wide, and advanced by the County.

1.1 Using this Document

The information is structured around inventory and evaluation of each community's water supply and wastewater management infrastructure. While emphasis is placed on municipally owned systems, the report surveys and documents other centralized and regulated decentralized water and sewer systems in the Community. Individual on-site facilities are beyond the scope of this report, though it is noted where in the County these systems are exclusively relied on. Mapping showing service areas and other key information accompanies the report. Sources and methods are also described.

The information in this volume is, in general, not at a level of detail or intended to provide analysis of system or component capacity, be used in the design of specific capital projects, provide detailed system mapping, assess or recommend specific operational techniques or strategies, or other similar activities requiring development of precise technical information and detailed engineering assessment. Instead, this volume provides an inventory and planning-level evaluation of these systems in support of policy and programmatic needs and decision making.

The Countywide Water and Sewer Evaluation and Recommendations report can be viewed by visiting the following website from DPEM.
https://www.sullivanny.gov/Departments/PlanningEnvironmental/PlansandStudies/CAPWI

Individual Community Profile reports have also been prepared as part of the CAPWI project and are intended to be standalone documents that can be used by a variety of audiences,

including municipal leaders and officials, residents, and businesses, seeking basic information about water and sewer service in the municipality.

Finally, many of the terms used have specific meanings and are further elaborated upon in a Glossary attached to this report. Terms appearing in the Glossary are denoted in underline throughout the document, and in the electronic version, you may click these terms to be taken directly to where that term appears in the Glossary.

1.2 Understanding the Data: Public vs. Private Infrastructure

As stated previously, the primary focus of this report is inventorying municipally owned water and sewer systems in Sullivan County. However, the community profile reports also provide limited information on privately-owned systems where relevant and publicly available. In order to understand the data presented, the reader must first have a basic understanding of the regulatory framework governing the operation of different types of water and sewer systems in New York State.

Regardless of ownership, there are two regulatory agencies that are primarily responsible for issuing permits and approvals for drinking water and wastewater systems – the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC).

1.2.1 Public Water Systems (NYSDOH)

In Sullivan County, the NYSDOH is the agency responsible for regulating public water systems. This includes water systems owned and operated by a municipality, as well as privately-owned water supply companies, and even hospitals, gas stations, and other facilities with private wells. When it comes to water systems, public means that these systems serve the public at large – not the form of ownership.

In general, water systems regulated by NYSDOH as public water systems are classified as either community water systems or non-community water systems (see Glossary for more information). The data contained in this report is limited to community water systems**,** whether publicly or privately owned. Information about non-community water systems (including those that service transient seasonal populations like camps and bungalow colonies) is included, where available, but is not further detailed.

1.2.2 Wastewater Treatment Facilities (NYSDEC)

New York State's wastewater discharge regulations are administered by the NYSDEC through the State Pollutant Discharge Elimination System (SPDES) program, which requires

permits for any facility that is designed to treat and discharge wastewater. That includes sewage treatment plants that discharge effluent directly to a surface waterbody (like a nearby lake or stream) as well as facilities that discharge wastewater into the ground (like septic systems and sand filters).

No SPDES permit is required for a facility designed to treat less than 1,000 GPD, and Minor SPDES projects (those with wastewater discharges of less than 10,000 GPD) are typically covered by a NYSDEC General Permit (GP-0-25-002). Only wastewater treatment facilities that don't fall into one of those two categories (Major SPDES projects) are detailed in this report. Those include centralized systems (e.g., Publicly Owned Treatment Works), regulated decentralized systems (e.g., "package plants"), and commercial-sized septic systems that discharge to groundwater. Like water systems, wastewater treatment facilities can be publicly or privately owned.

Although the SPDES program is involved in the centralized wastewater systems with which the CAPWI effort is primarily concerned, the City of New York and DRBC each regulate in parallel wastewater facilities within their respective geographies. Of further note is that residential systems handling less than 1,000 GPD are regulated by NYSDOH.

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2. GLOSSARY OF TERMS

2.1 Action Level (AL)

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

2.2 Annual Water Quality Report (AWQR)

The Annual Water Quality Report is required by federal law and NYS regulation and is designed to provide consumers with information on the quality of the water delivered by their public water system. Systems serving fewer than 1,000 service connections are required to report information on the water source and water treatment, the levels of any detected contaminants, and compliance with drinking water rules, plus general educational information. The report also includes an explanation of the size of the population served by the system, which also typically includes the number of service connections. These reports are available at municipal offices and on municipal websites for public consumption.

2.3 Centralized System (Water or Sewer)

Centralized systems, which can be water supply or wastewater management, refer to infrastructure that is, typically but not exclusively, municipally owned and which is characterized by extensive distribution and conveyance networks serving large areas. Water supply and wastewater management are provided at typically larger-scale facilities. These systems are highly regulated. This infrastructure consists of both collection and conveyance, as well as treatment.

2.4 Decentralized System (Water or Sewer)

These systems are characterized by smaller numbers of connections and with water supply and wastewater treatment works provided closer to the users or source of demand. This term includes individual on-site water supply wells and septic systems serving single users, but also encompasses systems serving multiple connections that are regulated similarly to centralized systems.

2.5 Collection and Conveyance System

The sanitary sewer collection and conveyance system refers to the elements of the sewer system that enable wastewater to flow from points where it's generated to the point(s) where it's treated. In this report, the system begins at the point of connection to individual users and consists, generally, of pipes, manholes, pump stations, forcemains, and upstream wastewater storage (flow attenuation).

2.6 Community Water System (CWS)

A public water system (i.e., one that serves 15 or more service connections used by year-round residents or regularly serves at least 25 year-round residents - see definition in this document) that supplies water to the same population year-round. Examples of community water systems include municipally owned (cities, towns, or villages) public water supplies, public water authorities, or privately-owned water suppliers such as homeowner associations, apartment complexes, and mobile home parks that maintain their own drinking water system. See also the discussion in this Glossary of non-community water systems.

Community water system information, where available, is presented in tabular format. The following table provides an explanation of the meaning of the various values contained in each of the fields.

Water System	Service Area	SDWA #	Population	Connections
[Name of water system]	*[The Primary type of area that is served by the* public water system*: MHP =* mobile *home park]; HOA = Home-owners association;* Residential = Residential area; etc.]	*[Safe Drinking Water Information System (SDWIS) ID number]*	*[The reported population that is served by the system in SDWIS reporting.]*	*[The reported number of service connections within a system in SDWIS reporting.]*

2.7 Deferred Maintenance

In this report, deferred maintenance refers to the postponement of essential upkeep, repairs, or replacements for public facilities, infrastructure, or equipment. These typically minor items will become delayed to the point where they end up impacting performance and reliability, becoming far more costly to rectify. Small maintenance over many years is

more sustainable than waiting for an issue to happen, such as a water main break due to an unrepaired detected leak, or continuing to operate with undersized or obsolete equipment instead of upgrading to something that will save time and money over the long run.

2.8 Delaware River Basin (DRB) and Delaware River Basin Boundary

The area of drainage into the Delaware River and its tributaries, including Delaware Bay, is regulated by the DRBC. Its size is approximately 13,500 sq. miles and includes land in four states.

2.9 Delaware River Basin Commission (DRBC)

The Delaware River Basin Commission is the regional body created in 1961 by the Delaware River Basin Compact signed among the states of Delaware, New Jersey, Pennsylvania, and New York with the force of law to oversee managing the Delaware River system across state boundaries. Among other regulatory programs, DRBC addresses projects in the basin that withdraw from or discharge to the basin's waters over certain thresholds. The threshold for water withdrawals is taking water from ground or surface water, or diversion, or transfer in or out of the Basin, when the daily average gross withdrawal during any 30 consecutive-day period exceeds 100,000 gallons. The threshold for discharges is those over 50,000 GPD during any consecutive 30-day period from wastewater treatment facilities or the importation or exportation of wastewater.

2.10 Delaware River Basin Commission (DRBC) Docket

The record of decision made by DRBC, pursuant to its authority under the 1961 Compact, relating to an application for a permit, including those relating to regulated water withdrawals and discharges. Dockets contain information about water and sewer systems and permitted withdrawal and discharge thresholds.

2.11 Distressed Communities

As per the Empire State Development Corporation and NYS Climate Act, distressed or disadvantaged communities are those that bear the burden of negative public health effects, environmental pollution, and climate change impacts that possess population decline, economic hardships, high unemployment, and high concentrations of low to moderate-income households.

2.12 Disinfection Byproducts (DBPs)

DBPs are substances produced when chlorine, used for disinfection of water, reacts with organic materials in the water. The formation of DBPs is usually a greater concern for water systems that use surface water, such as rivers, lakes, and streams, as their source, as these sources are more likely to contain organic materials necessary for these reactions.

Total trihalomethanes (TTHM) are volatile regulated disinfection DBPs that can pose significant cancer, organ, and reproductive risks. They include chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

Total haloacetic acids (THAA) are regulated disinfection DBPs that can pose cancer and developmental health risks. They include monochloroacetic, dichloroacetic, trichloroacetic, monobromoacetic, and dibromoacetic acids.

2.13 Equivalent Dwelling Unit (EDU)

An EDU is a measurement for water usage that standardizes all users into units based on the demand of one single-family dwelling unit. EDUs are used by utility providers to calculate service charges associated with the probable demand for each user.

2.14 New York State Environmental Facilities Corporation (EFC)

EFC is a NYS public benefit corporation that assists communities and certain businesses throughout New York State to undertake critical water quality infrastructure projects by providing access to low-cost capital, grants, and expert technical assistance. As such, EFC plays a significant role in capital projects undertaken by NYS municipalities. A primary goal is to ensure that these projects remain affordable while safeguarding essential water resources. EFC develops and advances financing strategies to maximize the funding that can be made available, aiding compliance with Federal and State requirements, and promoting green infrastructure practices. In implementing these programs, EFC partners with NYSDEC and NYSDOH on wastewater and drinking water supply projects, respectively.

EFC allocates state and federal funds to participating entities in the form of grants and loans. Major programs include the Clean Water State Revolving Fund (CWSRF), which is oriented toward sanitary sewer and wastewater infrastructure projects, and the Drinking Water State Revolving Fund (DWSRF), which is oriented toward water supply infrastructure projects. These funds “revolve” as borrowers pay their loans back, with payments in turn used to finance new projects; EFC also uses revenue bonds to increase available capital.

Other programs include the engineering planning grants (EPG) program, which provides support to fund the engineering reports required to apply to EFC for financial assistance. EFC provides financial assistance in the form of subsidized loans and grants, such as through the WIIA program created under the 2015 Water Infrastructure Improvement Act.

2.15 Environmental Protection Agency (EPA)

The Environmental Protection Agency (EPA) protects human health and the environment by developing and enforcing regulations, conducting research, providing education, and issuing grants. EPA sets and enforces national standards and federal environmental laws, and cleans up contaminated sites. EPA is ultimately responsible for oversight of key laws affecting both water supply and wastewater management, including the National Pollutant Discharge Elimination System (NPDES); oversight of states, local governments, and water suppliers to enforce the standards under the Safe Drinking Water Act; and regulation of solid and hazardous waste. Importantly, EPA also administers critical funding sources supporting investment in drinking water and clean water (wastewater management) infrastructure.

2.16 Gallons per Day (GPD)

Gallons per day is a unit of measurement that defines the rate of volume flow, or use, for a liquid, such as water, over a 24-hour period. GPD is often used as a measurement of, e.g., the quantity of water consumed by a user or the amount of wastewater generated over the course of a day.

2.17 Gallons per Minute (GPM)

Gallons per minute is a unit of measurement for flow rate, indicating the volume of a liquid that passes a specific point in one minute. GPM is often used to indicate, e.g., the capacity of a water well.

2.18 Individual On-Site Facilities or Systems (Water or Sewer)

As used in this report, individual facilities (or systems) are a subtype of decentralized infrastructure serving a single user, most commonly via on-site water supply wells and septic systems. These wells and septic systems are mainly regulated under building codes, the NYS sanitary code (administered by NYSDOH), and NYSDEC (i.e., with respect to water well drilling and licensing of well drillers). However, these systems may also be regulated

similarly to centralized systems, depending on capacities and types of uses or users served (see Regulated Decentralized Systems).

2.19 Inflow and Infiltration (I&I)

Inflow is when storm water enters the sanitary sewer system (e.g., from a sump pump or roof leader), while infiltration is when groundwater seeps into the system (e.g., due to high groundwater and defects or cracks in pipes and manholes). Both are problems for wastewater treatment, as this "clean" water adds unnecessary volume to the system, which can overload treatment plants or reduce capacity in elements of the conveyance system, such as pipes or pump stations.

2.20 Influent (WWTP)

Influent flow refers to the incoming wastewater that enters a wastewater treatment plant. It is measured at a point prior to the wastewater entering any portion of the treatment process.

2.21 Maximum Contaminant Level (MCL)

MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal (MCLG) as possible. MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. MCLs are required to be reported on a water system's AWQR.

2.22 Methyl Tert-Butyl Ether (MTBE)

Methyl tert-butyl ether is a chemical historically used as a gasoline additive. It is a type of volatile organic compound (VOC) that can contaminate groundwater by evaporating easily and dissolving in water.

2.23 Million Gallons per Day (MGPD)

Million gallons per day is a unit of measurement that defines the rate of volume flow, or use, for a liquid, such as water, over a 24-hour period, reported in increments of 1 million gallons. MGPD is often used as a measurement of water produced by a source or wastewater treated at a WWTP over the course of a day.

2.24 Municipal System (water or sewer)

This is the term used throughout the report to denote ownership by a municipal corporation, such as a village or town, of a centralized water supply or wastewater management system.

2.25 New York State Department of Health (NYSDOH)

NYSDOH is responsible for administering the rules and regulations governing both water supply and wastewater management. Under regulatory power delegated by USEPA, NYSDOH regulates public water systems, including community water systems, in NYS. NYSDOH also regulates certain wastewater management systems under an agreement with the New York State Department of Environmental Conservation (NYSDEC); NYSDOH-regulated systems typically include residential septic systems and other wastewater facilities with a flow of less than 1,000 GPD.

2.26 Non-Community Water System

According to NYSDOH, a non-community water system is a public water system (i.e., a water system with at least 5 service connections or that regularly serves an average of at least 25 people daily for at least 60 days out of the year) that serves the public but does not generally serve the same people year-round. There are two types of non-community water systems: transient and non-transient non-community water systems.

- Transient Non-community Water System – A transient non-community water system is a non-community water system that serves different people for more than six months out of the year. Rest stops, parks, convenience stores, and restaurants with their own water supplies are examples of transient non-community water systems. In Sullivan County, summer camps that maintain their own water systems are also examples of transient non-community water systems.
- Non-transient Non-community Water System – A non-transient non-community water system is a non-community water system that serves the same people more than six months per year, but not year-round. Schools, colleges, hospitals, and factories with their own water supplies are examples of non-transient non-community water systems.

Non-community water systems are regulated by NYSDOH as public water systems (see public water system discussion in this Glossary). For purposes of this report, these systems are discussed where information is available.

2.27 NYC Watershed Boundary

The NYC Watershed Boundary encompasses the NYC watershed, defined as the land area contributing surface water to the New York City water supply. Activities within the NYC watershed are subject to the City of New York's Rules and Regulations for the Protection of Contamination, Degradation, and Pollution of the New York City Water Supply and its Sources. This includes wastewater management systems, such as individual on-site septic systems and wastewater treatment plants.

2.28 NYSDEC Water Withdrawal Permit

Any water withdrawal system with the capacity to withdraw 100,000 gallons per day (GPD) (also referred to as "threshold volume") or more of surface water, groundwater, or a combination thereof requires registration with, permitting from, and reporting to NYSDEC, pursuant to Part 601 of the New York Compilation of Codes, Rules, and Regulations (NYCRR).

2.29 Other System (water or sewer)

This is the term used throughout the report to denote ownership by a non-municipal entity, such as a mobile home park, industrial campus, or homeowner’s association, of a centralized water supply or wastewater management system.

2.30 Per- and polyfluoroalkyl substances (PFAS)

According to the EPA, PFAS are widely used, long-lasting chemicals, components of which break down very slowly over time. Because of their widespread use and persistence in the environment, many PFAS are found in the blood of people and animals all over the world and are present at low levels in a variety of food products and in the environment. PFAS are found in water, air, fish, and soil at locations across the nation and the globe. Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals. There are thousands of PFAS chemicals, of which are found in many different consumer, commercial, and industrial products. Questions remain in terms of how to better detect these compounds, the extent of human exposure, the magnitude of human and environmental harm, and how to manage these chemicals. Under recent rulemaking, the EPA will regulate five PFAS individually. They are PFOA, PFOS, PFNA, PFHxS, and HFPO-DA. EPA will regulate four PFAS as a mixture: PFHxS, PFNA, HFPO-DA, and PFBS.

2.31 Public Service Commission (PSC) Docket

A PSC docket is a file for a specific case or proceeding containing official documents, hearing transcripts, and public comments related to the regulation of utility companies, such as those for electric, gas, and water services. Certain privately owned centralized sewer systems and water supply systems are regulated by PSC pursuant to the NYS Transportation Corporations law. In general, sanitary conveyance and treatment systems serving more than one service connection (NYSDEC SPDES Permit regulations (6 NYCRR 750-1.6(f)) and water supply systems -- except municipally-owned systems - selling, furnishing, and distributing water for domestic, commercial and public purposes (Art. 4-B of the NYS Public Service Law) are regulated by PSC with respect to rates, charges, and other aspects of utility operations.

2.32 Public Water System

Pursuant to federal and NYS regulations, a public water system is defined as one that provides water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year. A public water system may be publicly or privately owned.

2.33 Ragging

As used in this report, "ragging" refers to the accumulation and entanglement of fibrous, non-biodegradable debris in and around the impellers of wastewater treatment pumps, including, but not limited to, wet wipes, rags, hair, and plastics. This phenomenon creates rope-like bundles that obstruct flow, reduce efficiency, and cause costly maintenance issues.

2.34 Regulated Decentralized System (Water Supply or Wastewater Management)

A regulated decentralized system is a subcategory of decentralized infrastructure that is regulated similarly to centralized systems. Regarding water supply, this term includes a public water system, as defined by NYSDOH in regulation, that typically is privately owned but may also include systems owned by municipalities. It encompasses centralized and certain decentralized water supply systems, but also other public water systems, such as those serving restaurants. In addition to NYSDOH, these systems may also be regulated by NYSDEC and DRBC (for water withdrawals). Regarding wastewater management, these systems may discharge to surface water or groundwater and require SPDES permits (i.e.,

capacity to discharge 1,000 gpd or more). Depending on their location, these systems may also be regulated by DRBC and/or NYCDEP.

2.35 Rotating Biological Contactors (RBC)

An RBC is a fixed-film treatment process used in the secondary treatment of wastewater. It consists of a series of closely spaced, parallel discs mounted on a rotating shaft, which is supported just above the surface of the wastewater. Microorganisms grow on the surface of the discs, where biological degradation of pollutants takes place prior to discharge into the environment.

2.36 Service Area

As used in the report, service area refers to the geography within which users may be served by centralized water or sewer systems.

2.37 Special District (e.g., water district or sewer district)

A special district refers to the special-purpose government vehicle that towns and counties in NYS are authorized to create for the purpose of providing a service. In this report, special district generally refers to the authority for NYS towns to create water districts and sewer districts pursuant to NYS Town Law Article 12 and Article 12-a. A special district has three discrete elements: The legal requirements governing formation and operation, the taxation and administration by which a town provides water or sewer service, and the engineering and design of the infrastructure supporting the provision of these services. NYS General Municipal Law Art. 17-a also provides for the consolidation of water and sewer districts. In NYS, villages do not have the authority to create special districts and instead provide water and sewer service pursuant to Articles 11 and 14 of the NYS Village Law, respectively.

2.38 State Pollutant Discharge Elimination System (SPDES)

SPDES is the permit program in NYS that addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. NYSDEC administers the program under authority created in 1972 by the Clean Water Act, known as the NPDES permit program. Under NPDES, state governments are authorized by the EPA to perform many permitting, administrative, and enforcement aspects of the program. In this report, SPDES and associated NYSDEC permitting refer to the outlet or discharge pipe (referred to as a "point source") that discharges sanitary wastewater into the surface waters or ground

waters of the state, and constructing or operating a disposal system such as a sewage treatment plant.

2.39 State Pollutant Discharge Elimination System (SPDES) Permit "Administrative" or "SAPA" Renewal

SAPA renewal (or continuation; also called "administrative renewal") is the process by which certain SPDES permits may be issued without a full technical review by NYSDEC. It typically occurs on a 5-year cycle, based on the date of permit issuance. Authority for SAPA renewals lies in NYS's State Administrative Review Act (SAPA). Provided a SPDES permittee makes a timely application to NYSDEC for renewal of an existing SPDES permit, NYSDEC may authorize, administratively, that permittee to continue to operate their regulated discharge. This continuation is typically permitted under the terms and conditions of the prior SPDES permit. It is important to note that SAPA renewal can result in situations where a SPDES permit, after several SAPA renewal cycles, may get out of alignment with applicable standards, and compliance with contemporary standards can ultimately require capital investment.

2.40 State Pollutant Discharge Elimination System (SPDES) Environmental Benefit Permit Strategy (EBPS)

"Also known in NYS regulation as a Modification Priority Ranking System, EBPS is the system that establishes procedures to manage State Pollutant Discharge Elimination System (SPDES) permit renewal applications in a manner that prioritizes permits based upon their potential or actual impact to the environment. Under this system, SPDES permit holders are assigned a score and rank that then determines the order in which NYSDEC staff carry out a full technical review to determine whether a permit needs modification. Facilities are assigned a score for applicable priority ranking factors, each of which is then multiplied by a value according to assessed potential impacts to water quality. A longevity factor is applied based on the permit type and time since full technical review (long form permit application). These scores are added together, and a rank is assigned. The higher the EBPS Permit Priority Score, the higher the priority that permit has for full technical review and modification initiated by NYSDEC."

2.41 State Pollutant Discharge Elimination System (SPDES) Permit Full Technical Review

Full technical review is the process by which NYSDEC reviews applications for SPDES permits. It is in contrast to SAPA renewal. Full technical review may be initiated by NYSDEC or may be initiated due to a permittee's request to modify their existing permit (e.g., to

increase the flow of a WWTP). Reviews are performed based upon potential water quality impact or major changes to the facility's flow and wastewater treatment system. The process involves determining whether new effluent limits and other permit requirements, such as best management practices or a compliance schedule, are needed.

2.42 Submersible Chopper Pumps

This type of pump is a centrifugal pump designed for liquid submersion, which is equipped with a cutting system that "chops" up all incoming solids prior to pumping to minimize clogging within a wastewater system.

2.43 Sullivan County Partnership

Officially "The Sullivan County Partnership for Economic Development", is a private not-for-profit corporation that serves as the one-stop resource for business development in the County. The Partnership is a team that works to find the most advantageous and cost-effective locations for the expansion of industry and supports small business development by providing guidance and technical assistance through a variety of financing options.

2.44 Trickling Filters

A trickling filter is a step in pollutant removal at a wastewater treatment facility that uses microorganisms to remove organic matter by distributing it over a fixed bed of porous sediment.

2.45 Variable Frequency Drive (VFD)

A variable frequency drive (VFD) is an electronic device that controls the speed of an AC motor by adjusting the frequency and voltage of the power supplied to it. VFDs are energy efficient when demand on a motor or system varies, as VFD output can be varied based on demand or load. This is in contrast to across-the-line drives, which operate at full voltage and cannot be varied.

2.46 Wastewater Treatment Plant (WWTP)

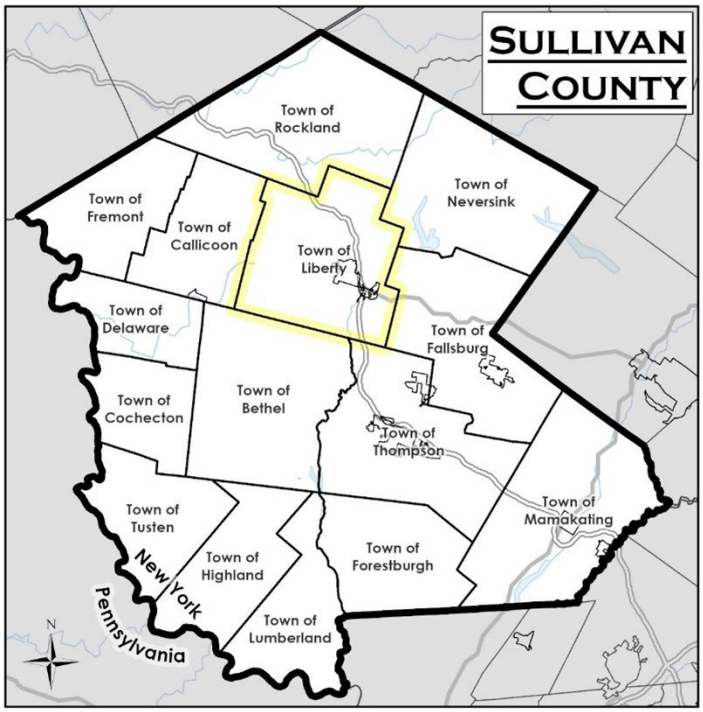
A wastewater treatment plant is the location at which pollutants are removed from wastewater collected, and is a critical element of a wastewater management system. WWTPs typically involve several processes. Preliminary treatment is the measurement, screening, and removal of inorganic material (grit). Primary treatment is a physical settling process that removes larger solids (e.g., in a settling tank or clarifier). Secondary treatment

is a biological process in which dissolved solids are converted by microorganisms into a cellular or biological mass that can be later removed (e.g., in a secondary clarifier). Tertiary or advanced treatment involves disinfection (e.g., chlorine or UV light) as well as nutrient, additional solids, or biochemical oxygen demand (BOD) removal.

2.47 Water Distribution System

Water distribution system refers to the system elements that convey water from the source of supply to individual user connections. It includes infrastructure like pipes (water mains), valves, treatment facilities, storage tanks, and booster stations. Hydrants may be connected to the distribution system and serve water supply functions, such as flushing of mains, but hydrants also serve as part of fire suppression systems.

3. MUNICIPAL OVERVIEW



The Town of Liberty is in the north-central portion of Sullivan County and is bordered to the north by the towns of Rockland and Neversink, to the east by Fallsburg, to the west by Callicoon, and to the south by Bethel and Thompson. Liberty contains the Village of Liberty, which is centrally located on the eastern side of the Town. The Town covers an area of approximately 81 square miles, with NYS Route 17 running north to south through its core. NYS Routes 52 and 55 also cross through the Town and intersect in the Village. According to the 2021 ACS, the Town had an estimated population of 10,146 people. The primary population center is the Village of Liberty, while other populated locations consist of unincorporated hamlets, including Ferndale, White Sulphur Springs, Swan Lake, and Parksville.

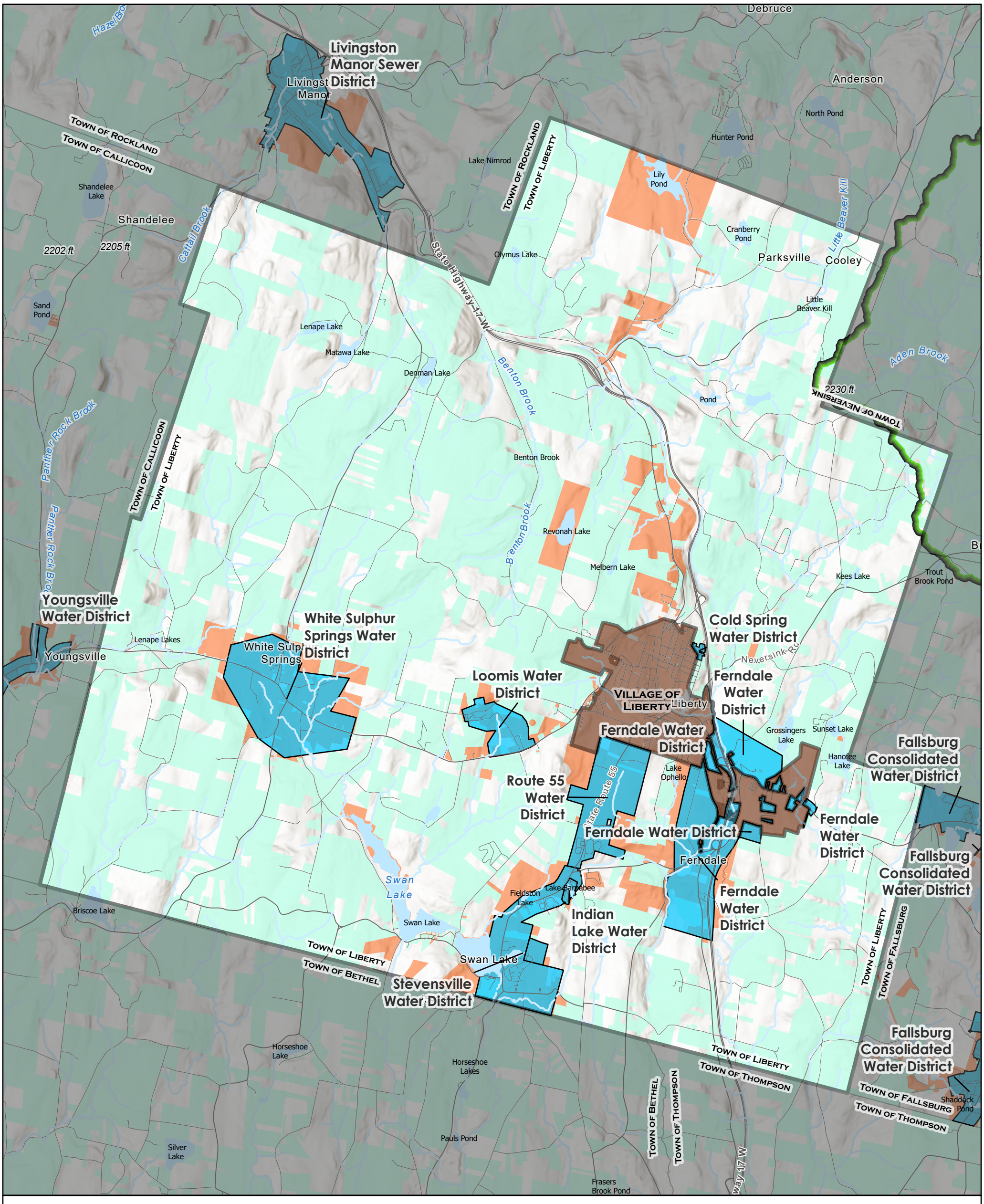
The Town of Liberty owns and operates public water and sewer systems for the benefit of the property owners within these service areas and their associated special districts. There are four sewer districts and seven water districts administered by the Town of Liberty. In addition, portions of the Town's and Village's water and sewer systems are interconnected, with the Town relying on the Village system for wastewater treatment in the areas adjacent to the Village. In addition, the Village directly supplies several areas of the Town with water and sewer service.

The Town lies entirely within the DRBC boundary. Two relatively small areas in the northeastern portions of the Town lie within the NYC watershed boundary.

4. WATER SUPPLY AND DISTRIBUTION INVENTORY & EVALUATION

Town of Liberty Water Facilities Map

Sullivan County, New York



Prepared by: Delaware Engineering, DPC
Date: January 2026
Source: Sullivan County, NYSDEC, ESRI World Terrain

0 0.5 1 2 3 4 Miles

N

- Municipal Water Service Areas
- Centralized or Regulated Decentralized Service
- Individual On-Site Systems
- Delaware River Basin (Entire Town)
- NYC Watershed (Entirely Outside)
- Town Boundary
- Other Municipalities
- Stream
- Waterbody

4.1 Municipal Systems

The Town provides municipal water service to several hamlet areas; the Village of Liberty also provides water service to certain portions of the Town. Supply for the Town's system consists of two well fields and the Village of Liberty. There are approximately 524 service connections. The Stevensville well field serves areas within the Ferndale, Indian Lake, Loomis, Route 55, and Stevensville water districts, representing about 345 connections. The White Sulphur Springs wellfield serves an area within a water district of the same name, with about 160 connections. The Village of Liberty system serves 19 connections in an area adjacent to the Village of Liberty within the Cold Spring Road water district. In addition, the Village of Liberty serves roughly 100 users within the Hamlet of Parksville.

Table 1. Town of Liberty water withdrawal permit information (all figures in GPD)

Water System	Component	Max Rate (GPD)	Average Daily w/d	Peak Day w/d	NYSDEC Permitted w/d	DRBC Permitted w/d
Liberty - White Sulfur Springs	WWS Well #1	230,400	35,178	126,000	250,000	1,508,064
	WWS Well #2	230,400				
Liberty - Stevensville	Well #1	230,400	273,600	859,000	1,085,000	
	Well #2					
	Well #3	230,400				
	Well #4	648,000				
	Well #4B	648,000				
Liberty - Sherwood-Roth	Sherwood Well	720,000	273,600	859,000	1,085,000	
	Roth Well	720,000				

4.1.1 System Components Inventory and Overview

The Town's distribution system consists of three booster pump stations, six water storage tanks, one covered reservoir, and several miles of transmission and distribution water mains. The majority of existing water distribution system was originally installed in the 1960s. It is predominantly comprised of 8-inch diameter water mains, which are made up partially of asbestos-cement pipe, with the remainder being ductile iron pipe.

The Stevensville and White Sulphur Springs sources are interconnected but generally operate separately. The Village of Liberty and Town systems are also interconnected, but this connection has not been in service since the Village of Liberty constructed the Lily Pond reservoir and treatment system. As noted, to maintain hydraulics in the system, the

Town uses several booster stations, and the aforementioned points of interconnection involve hydraulic differences that affect flow through those locations.

Over the past several decades, the Town has undertaken upgrades to the distribution system, including replacement of about 1,500 feet of 12" main along Upper Ferndale Road in an area prone to water main breaks. In addition, where breaks have recently occurred, these sections have been replaced with both cast iron and HDPE pipes. As noted above, the seasonality of demand is a consideration for the Town's system, and seasonality also affects the distribution system, with July and August peak demands placing a load on certain booster stations of up to 80% of capacity.

Asbestos cement (transite) mains were originally used to serve the White Sulphur Springs area. As it aged, this pipe became increasingly prone to water main breaks. The Town began working to replace transite water mains throughout the district in 2005, and this goal was accomplished in 2020. During this process, most or all of the water services have been replaced up to the curb stop valves.

According to the 2023 AWQR, the Cold Spring water system tested higher than MCL for disinfection byproducts, including both total trihalomethanes (TTHM) and total haloacetic acids (THAA). The source of Cold Spring supply is the Village of Liberty's water system, of which the surface water reservoir, Lily Pond, is a primary source. These byproducts are formed when organic matter found in surface water reacts with disinfectants, which are used to control many microorganisms. According to the EPA, byproducts, if consumed in excess of these standards over many years, may, over these longer periods of time, increase health risks. DBPs, although studied with mixed results, are likely to be associated with certain cancers and reproductive issues. According to the 2020 AWQR for the WSS system, the Town reported no violations or exceedances. Similarly, the Town did not report violations or exceedances in 2023 for the Loomis, Stevensville, Route 55, or Ferndale water systems.

4.1.2 Recent/Future Upgrades

As noted above, starting in the mid-2010s, the Town made substantial investments in the infrastructure supporting the Stevensville District, including the installation of a new water storage tank, improvements to the wellfield, and replacement of pipe in portions of the distribution system. The project addressed seasonally heavy demands, wellfield capacity and operational issues, aging water mains, and the replacement of obsolete asbestos cement pipe. In addition, approximately 1,500 LF of 12" water line along Upper Ferndale Road was upgraded to cement-lined ductile iron pipe in 2020. At the aforementioned Route

55 WST location, the old 250,000-gallon tank removed from service was abandoned in place and remains on the site.

The Town also, beginning in 2014, undertook a long-term project to replace aging and deteriorating watermains in the White Sulphur Springs Water District. Between 2014 and 2021, a total of $4.3 M in Community Development Block Grant (CDBG) funding was secured to replace nearly 11,000 lineal feet of watermain along with hydrants, valves, and water services. Other work completed using the CDBG funding included the redevelopment of an existing but non-operational well to provide the water district with a reliable backup source.

In order to increase the overall capacity of the Town's system, the Town has sought development of additional sources of supply to supplement the existing well-field complexes. In the late 2010's, the Town hired a hydrogeologist and conducted a search of two (2) areas of the Town underlain by the South Fallsburg-Woodbourne unconsolidated aquifer, generally centered on Paul's Lake, a stretch of Leslie Road between Route 52 and McIntosh Road, and a portion of the Middle Mongaup River south of Swan Lake Road. However, the search yielded no viable additional water sources.

The Town, working with partners such as the Village of Liberty and Sullivan County Partnership, has engaged in several efforts aimed at infrastructure planning. With support from the Town, the Sullivan County Partnership spearheaded an effort to evaluate opportunities for economic development along a roughly 3.5-mile section of the Old Route 17 corridor in the Town of Liberty and the Town of Thompson, between I-86 exits 101 and 102. Among other recommendations, this study assessed opportunities to enhance water supply infrastructure availability in this area. In addition, the Town, in partnership with the Village of Liberty, undertook an infrastructure master planning effort in early 2022. That plan, finalized in late 2025, made a series of recommendations relating to water supply and distribution in the area generally adjacent to the Village and north of the Old Route 17 corridor area.

In part an outgrowth of these planning exercises, the Town has secured over $20 M in state and federal grant funding to support upgrades and extension of municipal water and sewer infrastructure to support economic development activities along the Old Route 17 Corridor. Specifically, the Town has identified a need to increase the size from 6-inch to at least 12-inch approximately 5,700 lineal feet of water main along Old Route 17, as well as extend this main about 800 lineal feet south to a planned business park. In addition, approximately 2,350 lineal feet of the existing 8-inch diameter main and appurtenances connected to the Village's water system from the Exit 100 roundabout, under NY 17/86, and

extending onto Triangle Road (on-ramp to NY 17/86 West) to be upgraded to a 12-inch diameter pipe in order to improve hydraulics and capacity in this portion of the Town's system.

4.1.3 Finances and Administration

As part of the data collection process, information about system finances and budgeting was requested and researched from publicly available sources; local codes governing system administration and use were also reviewed, where publicly available. This information, where available, was used in order to develop an understanding of key metrics, including revenues and trends, expenses and trends, rate structure, revenues versus expenditures, debt service, and reserves.

Analysis of available financial information against the following metrics is as follows.

- Revenues and trends – Revenues are generated primarily through metered water sales, including summer surcharges. For the Route 55 and Stevensville water districts, interfund transfers from other served districts also account for a portion of revenues.
- Expenses and trends - The Town has a single budget line for the Water and Sewer Department, which had a 2025 budget of $1,043,236.00 and consisted mainly of personnel services. This line is then allocated to each of the eleven (11) districts in rough proportion to each district's share of appropriations. Given that only two (2) of the Town's water districts produce water, the Town accounts for water delivered to non-producing districts within the Town as interfund transfers in the budget; the Cold Spring Road District receives water directly from the Village of Liberty. Expenses connected to the water districts accounted for about 17% of the Town's 2025 budget.
- Rate structure - In the Town's water districts, O&M costs are charged based on water consumption. The Town also maintains a summer surcharge fee of $4.25 per 1,000 gallons over 100,000 gallons, applicable to the quarterly billing period, including June, July, and August. The outside-district rate varies by water district from about 30% to 60% higher.
- Revenue versus expenditures – In general, across the Town's water districts, revenues have exceeded expenditures, and this appears to be largely due to the Town underestimating revenues and overestimating expenses.

- Debt service - Stevensville for debt service in connection with the aforementioned capital improvements in the Stevensville system. In 2025, it amounted to about 20% of the Stevensville district budget.
- Reserves – Over the past few years, the Town has maintained about $225,000 in water supply-related capital reserve funding. The funds include: Water and Sewer Major Equipment, water lines capital fund, Route 55 water, and Stevensville capital.
- Water use law – Chapter 144 of the Town code is the sewer use law.

4.2 Other Systems

There are two users with water withdrawal capacity requiring a NYSDEC water withdrawal permit: Grossinger Country Club and Sullivan County Golf Course. The withdrawals mainly exist to serve the needs of these golf courses and, at the time of this writing, do not provide water service as part of a public water supply system. Based on information available, there are several regulated community water systems in the Town (Table 2).

Table 2. Town of Liberty regulated community water systems

Water System	Service Area	SDWA #	Population	Connections
MOUNTAIN VIEW MEADOWS MHP	MHP	NY5201348	140	48
TCFD - HARRIS	Medical	NY5225004	600	35
HUDSON VALLEY FOIE GRAS-FERNDALE	Industrial	NY5230008	120	19
GOOD LIFE MHP	MHP	NY5201345	200	101
LEISURE LAKE ESTATES CONDOMINIUMS	MHP	NY5230210	285	95

4.3 Challenges and Opportunities

Capacity in the Town's system has been identified as a challenge as it relates to the seasonality of demand it experiences and the potential of the system to support demand from additional users. As noted, the Town has sought to develop additional source capacity, and it is possible that other potential sources, such as the Hanofee Park area, adjacent to the 2018 northeast water search area and also underlain by the South Fallsburg-Woodbourne aquifer, could be an opportunity. As well, the Grossinger's Resort property has historically supplied its own water, and its source potentially could be

developed for additional supply, and the Town has sought to partner with land developers to develop additional water sources as part of their projects.

The population serviced by and demand placed on the Town's water districts can vary significantly throughout the year, as a number of summer residents live in seasonal camps or summer homes connected to the municipal water systems. June, July, and August peak daily flows are typically double peak flows for the remainder of the year.

An opportunity lies in partnering with the Village of Liberty, especially as it relates to increasing the water that can be supplied by the Village's Elm Street Well. To increase capacity from this source, investment is needed, and the opportunity to increase the user base sharing these costs would benefit both the Town and the Village, including by providing increased system resiliency. Lily Pond, the area's only active surface water source, has been limited by both reservoir capacity (i.e., the historical determination that its safe yield is 750,000 GPD) and by the water treatment plant infrastructure. Moreover, it is unclear the extent to which the existing system of transmission and distribution mains has the capacity to convey additional water even if additional production were to occur, and an opportunity lies in further investigation of system hydraulics.

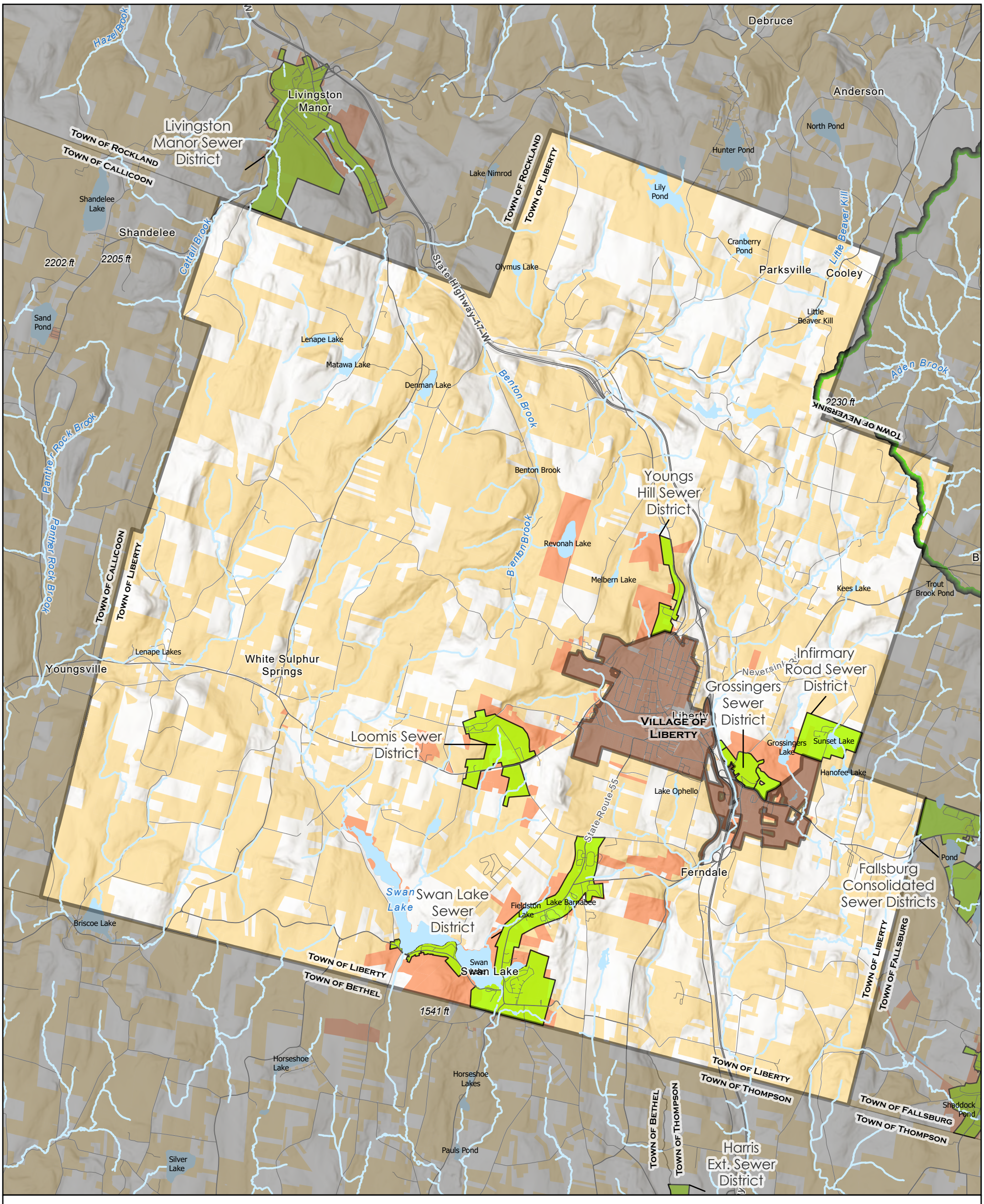
Supporting large-scale manufacturing and industrial users can be a challenge, as these large water users have the potential to impact wastewater system operations and capacity significantly, both when they commence and should they ever terminate operations. Certain types of processing facilities also require specialized processes to adequately treat certain waste products.

Other challenges relate to the age of portions of the distribution system, such as the Stevensville water storage tank, which requires capital improvements, and the approximately 7,500 LF of aging 10" cast iron water main along Route 55 between the bridge on Briscoe Road and the Stevensville WST, which has seen frequent breaks. Portions of this line have been replaced as part of recent projects and during water main break fixes. Finally, according to the 2024 AWQR, the Town reported detecting DBPs at levels in excess of the MCL, and addressing DBPs can be a challenge due to seasonal and other dynamics in surface water sources.

5. SANITARY SEWER AND WASTEWATER TREATMENT INVENTORY & EVALUATION

Town of Liberty Wastewater Facilities Map

Sullivan County, New York



Prepared by: Delaware Engineering, DPC
Date: January 2026
Source: Sullivan County, NYSDEC, ESRI World Terrain

0 0.5 1 2 3 4 Miles

N

- Municipal Sewer Service Areas
- Centralized or Regulated Decentralized Service
- Individual On-Site Systems
- Delaware River Basin (Entire Town)
- NYC Watershed (Entirely Outside)
- Town Boundary
- Other Municipalities
- Stream
- Waterbody

5.1 Municipal Systems

The Town operates a municipal system that provides sewer service to areas of White Sulphur Springs and Swan Lake, as well as some areas adjacent to the Village of Liberty. Areas adjacent to the Village are interconnected with the Village sewer system, with treatment ultimately provided by the Village WWTP. Parts of the Town's systems serving these areas, especially east of I-86, are comprised of relatively extensive conveyance infrastructure, such as pump stations. Conversely, about 53 parcels receive services from the Village's collection system as out-of-district users.

Other areas of the Town, including the White Sulphur Springs (WSS) and Swan Lake service areas, each have separate collection and treatment systems. The entire Town lies within the Delaware River Basin, and the municipal systems are regulated, in part, by DRBC. The Town's infrastructure includes two wastewater treatment plants, eight pump stations, and about 10 miles of sewer collection mains, as further described below.

5.1.1 System Components Inventory and Overview

The municipal systems serving the Town are described below.

5.1.1.1 Swan Lake

The WWTP serves residents and businesses in the hamlet of Swan Lake, which has a full-time population of approximately 1,500 residents, as well as some seasonal communities and second homes. The area served by this system comprises about 606 parcels spanning an area of 735.2 acres with about 455 service connections. Sixty-two percent of the district's parcels are classified as single-family residences, and 22% as vacant lands, with the remaining 16% mixed between seasonal residences, multifamily residences, manufactured residential, commercial, religious, recreational, and public utility uses. There are no large industrial users connected to the system.

The Swan Lake WWTP, which is located along the southern town boundary with the Town of Bethel, was completed in 1983. The WWTP has an average monthly maximum daily flow of 365,000 GPD, with a maximum permitted flow of 425,000 GPD into a tributary of the West Branch Mongaup (a Class C trout stream). The Swan Lake WWTP sees double the peak flows in the summer months (June to August) compared to other times of the year. With respect to the collection and conveyance system, during storm events and wet weather, flows can exceed the capacity of elements of the collection system. The system consists of gravity sewers and pump stations, both privately and publicly owned.

The Swan Lake WWTP has experienced SPDES permit compliance issues. In 2023 and 2024, SPDES permit effluent limits were exceeded for various parameters, with non-

compliance principally related to excessive screenings and rags entering the plant and clogging the process equipment, most notably the oxidation ditch jet aerators. Earlier, in 2022, SPDES permit effluent limits were also exceeded for various parameters, likely also due to ragging as well as seasonal low flows to the plant, aging equipment, and other environmental factors, like ambient temperatures and dilution of process liquids due to seasonal precipitation with snowmelt.

5.1.1.2 Loomis

The Loomis WWTP was constructed in 1985, upgraded in phases in the mid-2010s, and is permitted for a monthly average of 80,000 GPD; however, it is currently only operating at between 25,000 and 30,000 GPD. The sanitary sewer system services year-round and seasonal residences, as well as the Town highway garage, the Sullivan County B.O.C.E.S. buildings, with the Cornell Cooperative Extension Building, two out-of-district developments, and two in-district developments. Flow to the Loomis WWTP has been falling due to the decline in the number of single-family district users. This has been a result of property vacancies and consolidations through acquisition by a single residential user. Roughly one-third of the land within the district is under single ownership, and there is no plan at present for the future use of these properties.

The Loomis system consists of approximately 15,000 lineal feet of sewer main, most of which is 6" PVC (about 9,400 lineal feet) and 6" transite (about 2,000 lineal feet). There is one pump station, the Fancher's PS. The Loomis conveyance system was extensively evaluated in the mid-2010's as part of a response to NYSDEC regulatory compliance actions relating chiefly to permitted flow exceedances caused by I&I in the collection system. Pursuant to that action, sewer main replacement, repairs to system components, and rehabilitative work on this system were carried out.

According to NYSDEC's EBPS, this facility received a rank of 469 and a score of 6. The score components are based on the age of the existing SPDES permit and time since the last time the facility submitted a long-form permit application, together with required comprehensive effluent sampling. In general, the higher the EBPS rank, the more likely it is that the permit for this facility will undergo a full technical review by NYSDEC in the near future.

5.1.1.3 Village of Liberty

Other portions of the Town's municipal system are connected to the Village-owned conveyance system and discharge to the Village WWTP. In these areas, the collection system is owned and operated by the Town.

North of the Village, the Town owns and operates approximately 4,500 lf of 8" cast iron main installed in the 1970s that serves about 30 parcels along Youngs Hill and Parksville Rd. This main connects to the Village system at the Town-Village line on Youngs Hill Rd.

East of the Village of Liberty, the Town owns and operates about 2,500 lf of 8" PVC gravity sewer along Infirmary Road, along with the Infirmary Road pump station, which connects to the Village system, ultimately discharging through the Village's Millers pump station. This area primarily serves the Sullivan County Human Services Campus. Also, in this area lies the former Grossingers Resort. Although the property is not currently in use, a new resort is planned for the site, which could include a 250-room hotel, a renovated golf course, a convention center, and other attractions. The site is served by a system of sewer mains directly connected to the Village's collection system and served by the Village WWTP.

5.1.2 Recent/Future Upgrades

The sewer systems serving the Town have been the subject of substantial historical and ongoing investments by both the Town and the Village of Liberty. Upgrades to the Swan Lake WWTP and Loomis WWTP are discussed below. The Village of Liberty system, including recent upgrades, is described in the accompanying municipal report in this volume (see the Village of Liberty report).

5.1.2.1 Swan Lake

Since 2019, the Town has been advancing a project to upgrade the Swan Lake WWTP. The facility has exceeded its useful life and, as noted above, can no longer consistently meet permit effluent limits. In addition, due to high summer/seasonal flows, the plant lacks sufficient capacity to accommodate existing and future growth within the district.

The proposed WWTP upgrade is designed to increase the plant's treatment capacity from its current 0.425 MGD to 0.960 MGD. The project is in the final phases of design and regulatory permitting. The NYSDEC has provided preliminary effluent limits, and the new SPDES permit will require nutrient removal. To address this, the upgrade will include the introduction of new, advanced waste tertiary treatment facilities, which will have the flexibility to manage high seasonal flows and also be able to consistently meet stringent nutrient limits. In addition, the project involves relocating an existing influent pump station and headworks out of the flood zone.

The cost of the upgrade/expansion project is estimated to be $40 M, and the Town has secured over $11.4 M in grant funding with 0% hardship financing from NYSEFC. However, due to the relatively small size of the sewer district, the annual cost to a typical single-family home in the sewer district could more than double without additional funding. In

response to public opposition to the project, the Town Board committed to exploring additional grant opportunities designed to make the project more affordable.

5.1.2.2 Loomis

The Loomis WWTP was last upgraded in 2017. That $3.1 M project consisted of expanding the existing plant to include a second RBC unit and a new secondary clarifier. The existing influent flow splitter box was replaced with a new, larger splitter box, and the existing sand filters were rehabilitated. A new chemical feed building was also constructed as part of the upgrade. These improvements increased the plant's capacity from 80,000 GPD to 100,000 GPD.

5.1.2.3 Hamlet of Parksville

Over the past several years, the Town has undertaken to study the provision of municipal sewer service to the Parksville area. There are about 40 existing potential users and potential for additional users of about 30. Two studies have been undertaken. One study evaluated the installation of a new WWTP discharging to the Little Beaver Kill but recommended the construction of a connection to the Village of Liberty system. The second study evaluated the installation of a community septic-type system involving secondary treatment and discharge to groundwater via an absorption bed sized to accommodate the anticipated flow of about 28,500 GPD. At the time of writing, this project remains in the feasibility and concept phase.

5.1.3 Finances and Administration

As part of the data collection process, information about system finances and budgeting was requested and researched from publicly available sources; local codes governing system administration and use were also reviewed, where publicly available. This information, where available, was used in order to develop an understanding of key metrics, including revenues and trends, expenses and trends, rate structure, revenues versus expenditures, debt service, and reserves.

Analysis of available financial information against the following metrics is as follows.

- Revenues and trends – Sewer rents constitute the majority of revenues per district. In the Loomis district, the budget line for sewer agreement fee – which appears to represent an agreement with an out-of-district user – is about half of the revenue in that district.
- Expenses and trends - The Town has a single budget line for the Water and Sewer Department, which had a 2025 budget of $1,043,236.00 and consisted mainly of human resources costs. This line is then allocated to each of the eleven (11)

districts in rough proportion to each district's share of appropriations. Sewer expenditures are about 14% of the Town's appropriations.

- Rate structure – The Town charges for service (O&M) and capital costs. The O&M fee for sewer service is calculated based on estimated total effluent received at the plant and then allocated to users based on their total annual water use in the district, and then transformed into units equivalent to 75,000 gallons per day of effluent. In those districts carrying debt, sewer unit shares for debt service are calculated in accordance with the schedule of rates found in the Liberty Town Code Article XIII Sewer District Capital Charge - §121-60 Schedule of Rates. Sewer Units are computed based on land road frontage and property improvements separately and are totaled for each parcel. Vacant land is assigned the same road frontage units as improved land. In addition, users in the Youngs Hill sewer district, for which the Village provides treatment, are charged a separate user fee by the Village.
- Revenue versus expenditures – In general, across the Town's sewer districts, revenues have exceeded expenditures.
- Debt service – The Town's 2025 budget includes about $67,000 in debt service, associated with the Loomis and Youngshill portions of the system. This is about 7% of total sewer appropriations.
- Reserves – The Town maintains four reserve funds: Water and Sewer Major Equipment Infirmary Road Sewer Capital Fund; Loomis Sewer Capital Fund; and Swan Lake Sewer. In general, since 2023, the Town has created increases in each of these funds, which run about 25% of the total sewer budget.
- Sewer use law - Chapter 121 of the Town code is the Town's sewer use law.

5.2 Other Systems

There are several SPDES permits for private wastewater facilities in the Town. There is one commercial private permitted wastewater discharge facility in the Town owned by Shelly Realty Corporation for County Petroleum Products, Inc. This facility discharges into the Mongaup River, a Class B(T) waterway, with discharges of both stormwater tank test water.

Permits have also been issued for the following non-commercial facilities:

- Camp Yeshiva STP for renewal of a permit for a 17,000 GPD facility with a discharge to a tributary to Swan Lake (B);

- Camp Gan Israel for renewal of a permit for a 29,400 GPD facility with a discharge to Little Beaver Kill Trib (B(T));
- Camp Bnos for renewal of a permit for a discharge to surface waters; and
- Camp Machna Shalva Bobov for renewal of a permit for a discharge to surface waters.

In addition, the following SPDES permits are pending or have statuses other than issued:

- Devany Estates for a new permit for a facility with a capacity of 45,000 GPD to surface waters;
- Lipkowitz Trailer Units for a facility with discharge to groundwater;
- Camp Rayim for a facility with a discharge to surface waters;
- Camp Agudah for renewal of a permit involving a discharge to Middle Mongaup River (B(T));
- Cross Farms School for a new permit for a facility with a capacity of 15,000 GPD with a discharge to surface waters.

5.3 Challenges and Opportunities

Like the water districts, the population and demand of the Town's sewer districts can vary significantly throughout the year. The ability of the Village of Liberty's sewer system to accept additional flow is an opportunity, but it is limited to areas adjacent to the Village.

As described above, the Swan Lake WWTP is over 35 years old, approaching its current permitted treatment capacity, and will require a comprehensive system upgrade to maintain long-term SPDES permit compliance. The planned upgrade will address those issues, but there is strong public opposition to the project locally.

Finally, as noted above, the Town has evaluated providing municipal sewer service to the Hamlet of Parksville. There is presently no centralized sewer collection and treatment system in the area. All sewer treatment is provided by individual on-site septic systems, and many of these systems are older and in less suitable soils or are vulnerable to flood waters. In addition, certain commercial establishments, like restaurants, may have difficulty in meeting wastewater regulatory standards with individual, on-site systems, which is a challenge to further commercial activity in the Hamlet. The small user numbers, combined with the extent and nature of the collection and conveyance system, create financial challenges.

6. METHODOLOGY AND SOURCES

In preparing this report, publicly available data were collected and reviewed, along with any additional documentation supplied by a municipal representative, county office, or other authoritative sources. In addition, the project team contacted and interviewed key individuals who have specialized knowledge of their local systems. The following is a list of sources consulted.

- DRBC Water Supply Docket Number D-1967-121 CP-2
- Liberty V/T Infrastructure Master Plan (2025)
- Shelly Realty Corporation for County Petroleum Products, Inc SPDES (NY0260355)
- Cold Spring Annual Water Quality Report (AWQR) 2023 (NY5230111)
- Ferndale Annual Water Quality Report (AWQR) 2023 (NY5203326)
- Loomis Annual Water Quality Report (AWQR) 2023 (NY5203332)
- Route 55 Annual Water Quality Report (AWQR) 2023 (NY5203343)
- Stevensville Annual Water Quality Report (AWQR) 2023 (NY5211831)
- White Sulphur Springs Annual Water Quality Report (AWQR) 2023 (NY5203347)
- NYSDEC Department Application Review Tracking (DART) system (accessed October 2025)
- EPA Community water system Service Area Boundaries (accessed September 2025)