

RIVERHEAD Comprehensive Plan Update



Chapter 11 Infrastructure and Utilities *Working Draft*

This document is presented in its current form as a preliminary draft for public review. We encourage all stakeholders to provide comments as your input will play a vital role in shaping the final version of the Comprehensive Plan. Please email comments to compplan@townofriverheadny.gov.

Please note that the document will be further refined once comments are received from the community. Since it is an interim document, it is in a raw formatted form. The revised draft will be arranged in a more graphic format with photos, figures, and other visual elements to enhance clarity and understanding. Thank you for your time and participation in this important planning process.

Submitted by BFJ Planning

February 21, 2024

CHAPTER 11: INFRASTRUCTURE AND UTILITIES

This chapter examines the existing infrastructure and utilities serving the Town of Riverhead. Utility infrastructure is critical to the health, safety, and welfare of the community. Water, sewer, electric, natural gas, and telecommunications facilities are relied upon by residents and businesses for day-to-date activity and contribute to the Town's economic wellbeing, and in supporting the health, safety, and welfare of the Town's inhabitants and the future demands of the residential, commercial, industrial markets. Each element of the community requires an adequate supply of clean potable water, energy, telecommunications including phone, internet access, and Wi-Fi connectivity, solid waste disposal and a sound sanitary infrastructure to safeguard the present and future health and welfare of the Town and its inhabitants, and of the entire ecosystem. These foundational elements are vital for safeguarding both the current and future well-being of the Town's residents and the broader ecosystem.

It is imperative to acknowledge that utility services in Riverhead, much like the rest of Long Island, are predominantly supplied by a combination of public, private, and semi-private entities. Therefore, fostering collaborative partnerships with these stakeholders is paramount for enhancing and expanding service provisions.

Furthermore, it is crucial to recognize the significant intersection between the Infrastructure chapter and the Sustainability and Resiliency chapter, particularly concerning stormwater management, energy supply, and emergency management. This underscores the importance of integrated planning and coordinated efforts to address overlapping challenges and opportunities effectively.

Stakeholder engagement, encompassing the public, agency representatives, Town staff, and officials, was integral to the update process through various meetings, including those with the project-specific Steering Committee and interviews with government agencies at Town, County, and State levels.

Existing Conditions

Electricity and Natural Gas

This section provides an overview of the utility companies responsible for providing electricity and natural gas. The Town has little control over the administration of these services beyond the oversight process as to where the utilities might locate new services, such as substations, power lines, battery energy storage, solar arrays, gas mains and other elements of the services that might be controlled through permitting and site plan approval processes.

Long Island Power Authority (LIPA) is a municipal subdivision of the State of New York that owns the electric transmission and electric distribution system serving all of Long Island and a portion of New York City (Rockaways). Since 2014, LIPA has contracted with New Jersey-based Public Service Enterprise Group to operate LIPA's electric infrastructure on LIPA's behalf. National Grid handed control of the electric infrastructure portion of LIPA business to PSEG in 2013. PSEG Long Island provides electricity to 1.1 million customers in Nassau and Suffolk counties, including the Town of Riverhead. KeySpan still operates the natural gas infrastructure on Long Island.

LIPA does not own or operate any generation plants or retail natural gas assets on Long Island, although many generation plants are under contract to LIPA to meet its power supply needs. Most of Long Island's largest

power plants are operated by National Grid, which owns three major steam turbine facilities originally constructed by the Long Island Lighting Company (LILCO) in the mid-20th century.

As of 2021, the South Fork Wind Farm and the Sunrise Wind projects are under construction, and the Empire Wind project is in planning, all of which are planned to connect to the Long Island power grid. While these facilities will provide for a more resilient climate friendly power grid, their specific impact on the Riverhead energy supply is speculative.

Virtually all of the electrical transmission lines in Riverhead are pole mounted overhead lines, which are susceptible to damage during weather events. As weather events become more frequent, service interruptions can be expected to increase as well. It behooves the Town of Riverhead to coordinate with the electrical utilities to ensure a modern, resilient grid is available for present and future residents and businesses in the Town.

Sanitary Waste

Sewer District Facilities

The Town of Riverhead is served by two sewer districts that allow for collection and treatment of wastewater at operates two sewage treatment plants owned and operated by the Town. In addition, the Town operates a scavenger waste facility that accepts and treats wastewater from parts of Brookhaven and the five east end towns. There are also two small private sewage treatment plants in the Town.

The Riverhead Sewer District treatment plant is located on River Avenue, off Riverside Drive just east of the downtown core. It was originally built in 1937, provided primary treatment and used chlorine for disinfection. The plant was upgraded in 1959 to a secondary treatment plant, and again in 2000, when sequencing batch reactors and ultraviolet light was installed for disinfection. The plant has a capacity of 1,200,000 gallons per day (gpd), and sees flow of approximately 900,000gpd. Twelve pumping stations convey wastewater to the treatment plant across 24 miles of pipe. The primary goal of the Riverhead Sewer District (RSD) is treating all the wastewater within the district's boundaries meeting all Environmental Protection Agency (EPA), New York State Department of Environmental Conservation (NYSDEC) and Suffolk

Riverhead Sewer District

- *Treatment plant on River Avenue constructed in the early 1937*
- *District serves downtown area and CR58 business district*
- *Twelve pumping stations which transport wastewater to the treatment plant*
- *Flow study underway to meet needs of increased downtown residential development*
- *Scavenger Waste facility on-site*
- *Sludge conditioning project underway*

Source: Riverhead Sewer District

County Department of Health Services (SCDHS) regulations and guidelines. The Riverhead Sewer District boundaries mainly include the downtown core and surrounding business districts; boundaries are shown on the map below. The Town scavenger waste plant is located on the same site, which accepts septic waste from the eastern towns via private cesspool and septic system companies. The district charges a fee for processing this waste, which goes toward the operating budget of the sewer district.

The Riverhead Sewer District is in the process of performing a flow study for the downtown area to determine if there is sufficient capacity to accommodate the additional flow expected from the proposed buildout of the additional residential units slated for the downtown area.

The Calverton Sewer District was formed in 1999 when the EPCAL property was conveyed to the Town. The Calverton District comprises the 550 acres in the EPCAL industrial core area. The treatment plant was built in the 1950's and three pumping stations transport wastewater to the treatment plant.



Sewer Area or District Type

- Private
- Town

Riverhead Sewer District Map Source: Suffolk County GIS

The Calverton Sewer District plant was upgraded and went online June of 2021. The Calverton Sewer District has also completed a Map and Plan to extend the sewer district boundaries to include the EPCAL property that is for sale. Thus, sanitary waste from development of the EPCAL property will be treated at a modern facility. The extension of the district boundaries is expected to take place once the property is sold.

The Riverhead Sewer District is currently seeking bids for improvements to the treatment plant to condition sludge into Class A bio-solids, a standard that would allow its use in unrestricted forms such as compost that could be used on sod farms, nurseries, or farms where the material will not come into direct contact with the grown item i.e.: potatoes, carrots etc. Local reuse of this waste product would save money currently being spent to truck the waste product to sanitary landfills off Long Island. Cost reduction was estimated in 2022 to be on the order of \$260,000/year.

Discussions with Sewer District staff during the information gathering efforts for the plan upgrade indicate that a significant challenge facing the district is in filling positions to operate and oversee the treatment processes in the plants and collection systems. The NYSDEC has strict licensure requirements, and entry level wages are not competitive. Pending retirements at the district could result in a shortage of qualified staff.

Calverton Sewer District

- *Formed in 1999 when the EPCAL property was transferred to the Town*
- *Treatment plant constructed in the early 1950's*
- *District consists of 550 acres which makes up the industrial core area*
- *Three pumping stations which transport wastewater to the treatment plant*
- *Boundaries to be extended when EPCAL property is sold for development*
- *Upgrade completed in 2021 to accommodate increased flow from EPCAL*

Source: Riverhead Sewer District

Innovative Alternative Wastewater Treatment

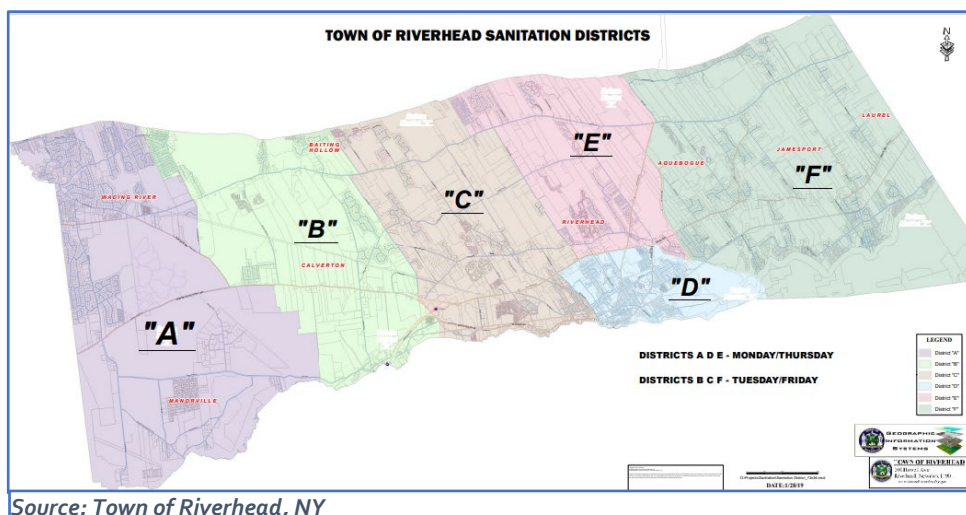
While the sewer district serves to treat a significant amount of the sanitary water produced in the Town, apart from smaller private treatment facilities, all the remaining sanitary waste produced in the town discharges to septic systems or cesspools, where it returns to groundwater and ultimately into the waters surrounding the Town, including the Peconic River. The nitrogen rich effluent feeds algal blooms in the river which have resulted in fish kills and other marine life mortality. Many of these parcels will never connect to a public sewer system due to infrastructure and funding constraints. This can be mitigated to an extent by the implementation of modern Innovative Alternative Onsite Wastewater Treatment Systems, referred to as I/A OWTS or simply I/A systems. Suffolk County has launched the Reclaim Our Water initiative to regulate the use of I/A OWTS to ensure these advanced wastewater treatment systems continue to reduce nitrogen as they are designed to do. To make the cost of I/A systems more affordable for homeowners, Suffolk County has developed a grant program to make funds available to homeowners to upgrade their systems to I/A.

Wastewater Reuse

In 2016, the Suffolk County-owned Indian Island golf course in Riverhead became the first and only golf course on Long Island to use reclaimed wastewater for irrigation use. The Town of Riverhead partnered with the Suffolk County Parks Department to initiate the project, which can provide up to 450,000 gallons per day of reusable water to irrigate the adjacent golf course, which is adjacent to the treatment plant. The project, which included the installation of 1,000 feet of force main piping between the treatment plant and golf course, was completed in time for the 2016 irrigation season. By diverting nitrogen from the Peconic River to the golf course, nitrogen discharge into the river is reduced. It can also reduce the amount of nitrogen fertilizer required to maintain the turf grass on the golf course.

Solid Waste and Recycling

Riverhead operated a municipal residential collection system and sanitary landfill until the mid-1990s. In 1993, the Town ceased accepting waste at its Young's Avenue landfill but continued to utilize the transfer station at this 40-acre facility. This transfer station is now closed. At present, solid waste services within the Town of Riverhead is provided by the Town of Riverhead Refuse and Garbage District which since 2012 is a unit of the Engineering



Department. The district is divided into six sub-districts, as shown on the map below. The Town's solid waste management program is subsidized by a Sanitation Tax for curbside solid waste collection and by the Town's General Fund through taxes.

Private carters under contract to the Town provide collection and disposal of residential waste, recyclables, yard waste and bulk waste. The private carters are responsible for disposition of the waste at facilities outside the Town of Riverhead. The Town also provides for residential yard waste collection and residential yard waste drop-off with compost offered to Town residents. The yard waste facility is now located at the Young's Avenue site. Household hazardous waste collection is conducted quarterly under the Town's STOP program (Stop Throwing Out Pollutants), a very successful program in the Town.

Commercial property owners must contract for private waste collection services. Source separated/curbside recycling is mandatory in Riverhead for both commercial and residential properties. The Town requires cardboard and newsprint and commingled materials (plastics, metals) to be recycled. The Town completed and received NYSDEC approval for its 2020-2029 Solid Waste Management Plan.

All residential solid waste is delivered to the Town of Brookhaven transfer station. At the Brookhaven Landfill, waste is consolidated into larger trucks and transported to an incineration facility in the Town of Hempstead.

The ash by product is returned to the Brookhaven Landfill. Paper and Cardboard Recycling Cardboard and paper are collected by the Town's contracted carter every other Wednesday and brought to West Babylon Co-mingled recyclables are collected and delivered to Town of Islip's Material Recovery Facility (MRF). Non-recyclable MSW is brought to the Town of Islip's Incinerator in Ronkonkoma, NY. The refuse is incinerated, and the energy is transformed into electricity. The ash byproduct is returned to the Brookhaven Landfill. Solid waste from all Town owned offices, buildings and park facilities are collected by Town Sanitation Department and transported to Cutchogue, NY.

As can be seen, the Town's solid waste system is intertwined at many levels with the Town of Brookhaven landfill, which is scheduled to close soon. Closure of this facility will result in the need identify new means of disposal of much of the end product of the Town's solid waste, which in turn is likely to have significant impact

on the cost of disposal. These cost increases will almost assuredly be passed along to the Town of Riverhead. The Town already has achieved a substantial reduction in per capita solid waste production between 2009 and 2019, and the 2020-2029 Solid Waste Management Plan projects a continued decrease in per capita waste production, achieved through a variety of measures including educational programs, composting, and incentive programs. However, due to projected population growth, the total amount of solid waste is still projected to increase. It is noted that NYS DEC has set reduction goals of 40% by 2030, and 90% by 2040.

Drinking Water

The primary goal of the Riverhead Water District is to protect the public health of its customers. The Riverhead Water district is approximately 44.3 square miles, with 234 miles of water main and 17 active groundwater wells at 10 separate well locations. The district services 35,000 customers with over 12,000 residential and commercial services, with many services feeding several customers (i.e. mobile home park or apartment buildings). Yearly revenue is dependent on water usage and will fluctuate dependent on wet or dry years, usually ranging from 8 to 9 million dollars/year Operating funds can vary up to 20% year to year since revenue is based on pumping demand. The district has a \$20,000,000 capital improvement plan.

District representatives identified a need for the district to plan for large scale industrial complexes, EPCAL, and residential development. Representatives stressed the need to find new sources of water supply. In the past, the district has not required the large scale developments to provide these sources, i.e.; Splish Splash Water Park who uses 15 million gallons a month in the peak summer months and did not contribute to the water supply infrastructure needed. These costs were spread out amongst all the customers. The water district now works closely with the planning department to ensure developers provide the funding for increased water supply and fire protection infrastructure if required. The district is attempting to secure a \$6 million dollar matching grant for manganese removal, \$700,000 lead pipe replacement grant, and applying for a grant to remove PFO's (a newly found contaminant) which is estimated to cost \$2 million. The \$400,000 installation of two 800' deep monitoring wells to monitor salt water

Riverhead Water District Statistics

- Created in 1916
- District covers entire Town, but not all of Town is on public water
- Seventeen (17) Active Wells drilled into Glacial and Magothy Aquifers
- Population served (2019) 35,000
- Water Drawn for Aquifer (2019) 2.4 billion gallons
- Conducts 1000+ tests per year for over 130 contaminants
- Quality generally excellent, but some areas of contamination exist

Recent Upgrades

- 2.0-million-gallon concrete ground storage tank installed at Tuthill's Lane well field
- Will enable the District to better meet peak demands in the eastern portion of Town
- Installation of mixing system at Palane Road storage tank
- upgrades to wells on Pulaski Street and Osborn Avenue

Planned Upgrades

- Upgrade aging infrastructure at wellfields on Osborn Avenue and Columbus Street (underway)
- Installation of test wells, plant upgrades and media replacement for perchlorate filter.
- District is in the planning stage for a new ground storage tank in Wading River and a new well in Calverton and hopes to begin construction on these new facilities in the coming year.

intrusion and help manage the overall water resources partnered with USGS and NYSDEC is underway. The district is currently working with local activist groups and the school district to implement and study more efficient irrigation of the vast farming lands to bring down the peak summer usage.

A water district such as Riverhead requires NYSDEC approval for expansion of its infrastructure showing supply calculations and needs. However, there has not been an approval for expansion from NYSDEC in over twenty years. According to water district representatives, this approval process has been problematic, and has complicated the EPCAL redevelopment process. SCWA and DEC are not in agreement on who should supply EPCAL, despite the fact that Riverhead has been serving the area since it was transferred to the Town. A solution must be developed for this situation so that the water district can continue to grow and operate.

Riverhead Water District staff also identified challenges emerging over the next several years:

- Many employees hired leave for other water agencies after they have gained experience since the pay rate is much higher. Retention of staff is approximately 50%.
- Summer irrigation needs place a substantial load onto the system, controls or limits need to be in place to avoid overburdening the system.
- New York State has recently added oversight over water supply and has more stringent regulations than the EPA. This Agency is fairly new, so it is yet to be seen what extra or necessary upgrades would be required as the district moves forward.
- TOR water district does not have an automated 'SCADA' system similar to SCWA. The SCADA system allows remote monitoring of conditions while the existing system (manual) requires more on hand employees.

Stormwater

In compliance with Federal statute, the Town of Riverhead's Stormwater Management Office maintains a Stormwater Management Plan that informs the NYSDEC what measures the Town takes on an annual basis to mitigate the impact of stormwater runoff into the surface waters surrounding the Town. Compliance reports are filed annually. In addition, based on observations and discussions with the Town's Highway Department, a continual maintenance issue is farm field runoff during heavy rain events. There are locations where highway crews must be dispatched on a continual basis to remove muddy runoff from the roadway surfaces. This has been problematic in many areas adjacent to agricultural lands. This issue is also common throughout eastern Suffolk County. Several chronic flooding locations have been identified:

- Sound Ave east of Edwards Ave, vicinity of Owens' Landscaping
- Manor Road, Calverton
- Roanoke Ave, north of Joyce Dr.
- Doctors Path north of NY25
- Reeves Ave west of Old Vine Road
- Reeves Ave between Horton Ave and Roanoke Ave
- Peconic Bay Blvd across from the town beach parking lot
- Sound Ave just east of Hulse Landing Road
- Edwards Ave approx. half mile south of Sound Ave

- Horton Ave vicinity Reeves Avenue

Since farmland run-off has the potential to be high in nutrients due to fertilizer use, and since chronically flooded roadways pose safety issues for motorists and increases the need for roadway repair and maintenance, it is desirable to seek solutions to mitigate these occurrences. Solutions should include conventional mitigation measures that accommodate stormwater once it has reached the roadways, but also include innovative measures that serve to mitigate flooding and can also increase run-off reabsorption by the soil prior to the run-off reaching the roadway. These measures are particularly appropriate where high groundwater might preclude a more conventional solution.

Conventional drainage infrastructure such as leaching basins can be deployed in isolated locations with or without measures to reduce sedimentation, petroleum-based contamination from automobiles, and other impacts. Connected systems, with or without recharge basins can be effective for larger areas. Innovative solutions including rain gardens and other means of delaying run-off to allow for additional time for stormwater to recharge into the aquifer can be considered. Rain gardens, also called bioretention facilities, are one of a variety of practices designed to increase rain runoff reabsorption by the soil. Rain gardens are beneficial for many reasons; they improve water quality by filtering runoff, provide localized flood control, create aesthetic landscaping sites, and provide diverse planting opportunities. They also encourage wildlife and biodiversity.

With respect to nutrients from farmland run-off, Best Management Practices (BMPs) are a set of available methods to reduce the volume and nutrient content in stormwater run-off. Riverhead encourages the use of Best Management Practices in the Town Code. Stormwater BMPs are also discussed in Chapter 7: Natural Resources. Certain BMPs are more appropriate for different soil types or contexts. Approaches that may be appropriate in Riverhead, particularly near farms are discussed in the main part of this chapter. include:

- **Adopting Nutrient Management Techniques:** Farmers can improve nutrient management practices by applying nutrients (fertilizer and manure) in the right amount, at the right time of year, with the right method and with the right placement. This can significantly reduce how much fertilizer reaches water bodies.
- **Using Conservation Drainage Practices:** Subsurface tile drainage is an important practice to manage water movement on and through many soils, typically in the Midwest. Drainage water can carry soluble forms of nitrogen and phosphorus, so strategies are needed to reduce nutrient loads while maintaining adequate drainage for crop production. Conservation drainage describes practices including modifying drainage system design and operation, woodchip bioreactors, saturated buffers, and modifications to the drainage ditch system.
- **Ensuring Year-Round Ground Cover:** Farmers can plant cover crops or perennial species to prevent periods of bare ground on farm fields when the soil (and the soil and nutrients it contains) are most susceptible to erosion and loss into waterways.
- **Planting Field Buffers:** Farmers can plant trees, shrubs, and grasses along the edges of fields; this is especially important for a field that borders water bodies. Planted buffers can help prevent nutrient loss from fields by absorbing or filtering out nutrients before they reach a water body.
- **Implementing Conservation Tillage:** Farmers can reduce how often and how intensely the fields are tilled. Doing so can help to improve soil health, and reduce erosion, runoff, and soil compaction, and therefore the chance of nutrients reaching waterways through runoff.

Goals and Strategies

Goal 1. Continue to meet emerging solid waste management challenges as disposal opportunities evolve

1.1 Continue to work toward the NYS DEC goal of 40% reduction in solid waste by 2030, and 90% by 2024.

While the Town of Riverhead currently generates higher amounts of residential waste than average communities, on a per capita basis, the town has achieved reduction from 8.2 lbs/day to 5.15 lbs/day between 2009 and 2019. The Town can reduce the amount of solid waste generated by encouraging recycling, expanding food scraps and composting programs, and encouraging home composting through education and distribution of composting bins. Composting is discussed further in Chapter 12: Sustainability and Resilience.

The Town currently pays a tipping fee of \$100 per ton for solid waste. Moving toward the DEC goals could potentially reduce the cost to the Town for waste disposal significantly. The Town should establish alternative programs to divert food waste. The National Recycling Goal is to increase recycling to 50% by 2030. The US EPA's 2021 Nation Recycling Strategy includes five objectives, which can be pursued by the Town:

1. Improve markets for recycled commodities through market development, analysis, manufacturing, and research.
2. Increase collection of recyclable materials and improve recycling infrastructure through analysis, funding, product design, and processing efficiencies.
3. Reduce contamination in the recycled materials stream through outreach and education to the public on the value of proper recycling.
4. Enhance policies and programs to support recyclability and recycling through strengthened federal and international coordination, analysis, research on product pricing, and sharing of best practices.
5. Standardize measurement and increase data collection through coordinated recycling definitions, measures, targets, and performance indicators.

1.2 Work with regional communities to identify alternative transportation methods to dispose of ash in anticipation of the closure of the Brookhaven landfill.

The Town's Solid Waste Management Plan (SWMP) includes investigation of alternative transportation methods to dispose of ash produced by incineration off of Long Island, to address the anticipated closure of the Town of Brookhaven's landfill when it reaches capacity, first for construction and demolition waste in 2024, and for ash by 2026. The Town has recently achieved successful reduction in hauling materials out of town, largely through processing yard waste in the town for composting, and through expansion of conventional recycling. Emerging sustainable waste management processes and technologies are discussed in more detail in Chapter 12: Sustainability and Resilience. For example, Yaphank is in the process of implementing an anaerobic digester project for the region in 2025.

Goal 2. Improve the efficiency of the existing Town Water Supply System, and ensure its ability to expand to address future demand

2.1 Complete the expansion of public water service to homes in Calverton and Manorville.

In areas that do not have public water service, properties rely on wells. Wells have been contaminated by the presence of PFOA/PFOS. To expand public water service to homes with contaminated wells, the Town should procure Federal funding, and coordinate the effort with those of the Suffolk County Water Authority (SCWA).

2.2 Improve the infrastructure and efficiency of the public water system.

The Town should use the 20 million dollars in the Water District's Capital Improvement Plan to meet DEC regulations and replace antiquated components of the system. In addition, the Town should implement the "SCADA" (Supervisory Control and Data Acquisition) system, like that used by the Suffolk County Water Authority, which includes remote monitoring of conditions in the district. The Town is currently constructing an additional storage tank in the "high zone" in Wading River, which will help improve pressure and service. The Town also requires significant private developments to extend water mains for water supply and fire protection to their developments.

2.3 Discourage unsustainable use of water resources.

One of the greatest uses of public water in Riverhead is the irrigation of private residential lawns during summer months. The Town should regulate the use of water during summer months to reduce strain on the system. The Town should also educate property owners about the unsustainable practice and encourage the use of rainwater harvesting and the planting of native species in gardens to reduce the demand for additional water. The Town should revisit code regulations that were proposed in 2023 to address this issue.

2.4 Ensure that the water system and resources can provide the quantity and quality of water needs in the future.

Long Island's sole source aquifer provides fresh water to the region. The long-term ability of the aquifer to provide clean water will depend on human activities and climate change. As discussed in Chapter 7: Natural Resources, pollution of groundwater can impact properties that are on wells and also endanger the public water supply. Alternative water supply options such as trucking water and desalination are costly and unsustainable.

The 2015 Suffolk County Comprehensive Water Resources Management Plan analyzes these challenges for the region and set goals for groundwater resource management, drinking water supply, surface water resource management, and wastewater management.¹ Likewise, The Suffolk County Sub-Watersheds Wastewater Plan (SWP) (July 2020) provides further recommendations that apply to Riverhead.

2.5 Clarify Town code with respect to water access.

Developers should be given clear understanding of what costs for water access will be before projects progress beyond conceptual stages.

¹ <https://www.suffolkcountyny.gov/Departments/Health-Services/Environmental-Quality/Water-Resources/Comprehensive-Water-Resources-Management-Plan>

2.6 Town, Riverhead Water District, Calverton Sewer District, and Riverhead Sewer District should establish procedures and guidelines for working with regional partners.

It is important for the Town, Riverhead Water District, Calverton Sewer District, and Riverhead Sewer District to establish procedures and guidelines for working with regional partners on projects to ensure the protection of and fortification of the Town and special district assets, notably its aquifer, critical environmental areas, water supply, and infrastructure and mitigate negative impacts to residents and rate payers within those special districts. An example of such project and need for evaluation and consideration of intermunicipal cooperation is SCWA project to install a new water main within to Town of Riverhead to supply the North Fork. As proposed the project has the potential to negatively impact critical environmental areas such as Peconic Bay and its tributaries, as well as cause substantial traffic related Impacts during construction. The project must be reevaluated in regard to its location within Peconic Bay Blvd, a narrow two-lane roadway that has limited shoulders and is in many areas proximate to state and town regulated wetlands. With preference to the utilization of the Town of Riverhead Peconic Bay Blvd interconnection and the establishment of a “pump and pay” agreement established between the Riverhead Water District and SCWA.

Goal 3. Continue to Protect Groundwater through modern wastewater treatment strategies

3.1 Improve the efficiency of the existing Town Sewer Systems and ensure the ability to address future demand.

Calverton and Riverhead are served by a public sewer system. Infrastructure ages and requires ongoing maintenance and investment to prevent groundwater contamination and continue adequate levels of service. As Riverhead grows, developers are connecting to the system and the Town may decide to extend sewer lines. The Town should monitor the capacity of the wastewater treatment facility and plan for expansions before capacity is met.

3.2 Continue to invest human resources to better manage wastewater systems.

Riverhead needs to attract and retain qualified Wastewater Treatment Operators (WTOs) through competitive salaries and other benefits. At present, an anticipated shortage in human resources could have an impact on operations.

3.3 Upgrade the pump stations in the Riverhead Sewer District.

The Town should ensure that it includes sequential upgrades to the 13 pump stations in Riverhead Sewer District in the annual budget. A capital improvements plan should identify priorities and costs.

3.4 Support the use of Innovative Alternative (I/A) Wastewater Treatment options in areas where sewerage is not feasible or appropriate.

As discussed in the Natural Resources Chapter, Suffolk County’s Septic Improvement Program and New York State Septic System Replacement Programs award homeowners and low-interest financing options to transition to Innovative and Alternative Onsite Wastewater Treatment Systems (I/A OWTS or I/A). The Town should inform and encourage property owners about these grants. The Town may also consider establishing its own grant program to supplement the County and State programs, as some other East End Towns have. CPF funds may be available for water improvements in Riverhead after 2030. The Town could waive or reduce permit fees for the installation of I/A systems to incentivize their use.

The Town should ensure that in all areas where wastewater is discharged to the ground (i.e., septic systems, constructed wetlands, and package treatments plants) are built with the appropriate densities and are designed to prevent nitrogen contamination of groundwater or surface water.

Goal 4. Coordinate with Electric, Natural Gas, Cellular Telephone/Wi-Fi, Cable TV, and Internet Service providers

4.1 Improve coordination with private companies that provide electricity, natural gas, and other services.

Private companies provide Electric Service, Natural Gas Service, Cellular Telephone/Wi-Fi, Cable TV, and Internet services to Town residents and businesses. While it is the best interest for residents to have more options and more reliable options, utility companies have been non-responsive to requests for information about their short- and long-range improvement plans.

The Long Island Power Authority is currently planning to assume operation of the electric grid by acquiring command of SERVCO, which Public Service Electric and Gas (PSE&G) utilizes to operate the electric grid.

4.2 Investigate engaging an additional internet service provider, to help address a significant need to provide improved internet service within the Town.

Broadband and digital access is becoming a more critical issue for the public because of increased work-from-home models, greater reliance on the internet for information, and online schooling during extreme weather or other events (e.g., COVID-19). The Town should continue to monitor such services on a regular basis and meet with internet service providers (ISPs) annually, with the goal of encouraging competition which will help to lower prices and improve service. The increasing ability of cellular and satellite companies to deliver internet should be monitored for any opportunities for alternative service.

Goal 5. Address localized highway flooding Issues.

5.1 Investigate chronic flooding locations, design, and install drainage infrastructure as appropriate.

Solutions should include conventional mitigation measures that accommodate stormwater once it has reached the roadways, but should also consider innovative measures that serve to mitigate flooding but can also increase run-off reabsorption by the soil prior to the run-off reaching the roadway. These measures are particularly appropriate where high groundwater might preclude a more conventional solution. Leaching basins can be deployed in isolated locations with or without measures to reduce sedimentation, petroleum-based contamination from automobiles, and other impacts. The Town should consider connected systems, with or without recharge basins for larger areas. In addition, innovative solutions including rain gardens and other means of delaying run-off to allow for additional time for stormwater to recharge into the aquifer can be considered.

5.2 Establish a structured framework for incorporating Best Management Practices (BMPs) to address stormwater run-off.

Best Management Practices (BMPs) are a set of available methods to reduce the volume and nutrient content in stormwater run-off. Riverhead encourages the use of Best Management Practices in the Town Code. Stormwater

BMPs are also discussed in Chapter 7: Natural Resources. Certain BMPs are more appropriate for different soil types or contexts. Approaches that may be appropriate in Riverhead, particularly near farms, include the following:

- **Adopting Nutrient Management Techniques:**
- **Using Conservation Drainage Practices**
- **Ensuring Year-Round Ground Cover:**
- **Planting Field Buffers**
- **Implementing Conservation Tillage**

Additional details on these BMP's can be found in the main body of this chapter.