

II-5. Environment

Despite its urban character, Port Chester is home to a network of valuable natural resources that contribute to the Village's environmental health, resilience, and quality of life. Its tree canopy, topography, the Byram River, Port Chester Harbor, and the Long Island Sound provide wildlife habitat, improve air quality, reduce urban heat through shading, and create opportunities for recreation and community enjoyment. As the Village continues to grow, protecting and enhancing these resources will be essential to advancing sustainability and climate resilience. At the same time, understanding the relationship between natural systems and the built environment, including topography, wetlands, tides, weather patterns, impervious surface coverage, limited green space, and other built environment conditions, will help the Village reduce flood risk, plan for future infrastructure needs, and strengthen its resilience to climate change. The relationship between natural systems and urban development is crucial to ensuring the Village's resilience to climate change, identifying infrastructure needs, and preventing hazards.

The Village of Port Chester continues to prioritize investment in infrastructure maintenance and repairs to provide its community members with a safe, clean, and sustainable living environment. This Plan incorporates both climate change mitigation and adaptation strategies to enhance Port Chester's resilience. Mitigation strategies focus on reducing greenhouse gas emissions, while adaptation strategies prepare the Village for the impacts of changing climate conditions. Additionally, there are three census tracts in Port Chester identified as disadvantaged by the Climate Justice Working Group in 2023, which require consideration be given to vulnerable populations that may experience outsized impacts from climate change hazards, such as housing displacement and significant health concerns.

Climate change **mitigation strategies** include transitioning to renewable energy or more energy-efficient technologies, promoting low-carbon transportation, and improving waste management, among others, to mitigate the Village's contribution to climate change. **Adaptation strategies** include climate-resilient infrastructure, water management, stormwater management, urban greening for urban heat, early warning systems and disaster preparedness, and community engagement and policy planning efforts. **Climate resilience** generally refers to efforts by the Village, residents, and businesses to adapt to the current and projected impacts of climate change.

This chapter begins with an analysis of existing conditions, followed by a discussion of key issues, opportunities, and recommendations organized around the chapter goals addressing the Village's natural resources, sustainability and energy initiatives, climate adaptation and resiliency strategies, and infrastructure.

Existing Conditions

Natural Resources

Port Chester's natural resources are foundational to the Village's environmental health, resilience, and quality of life. Despite its urban character, the Village's tree canopy, waterways, wetlands,

topography, and waterfront provide valuable ecological, recreational, and aesthetic benefits. This section evaluates the Village's natural resources and identifies opportunities to protect, enhance, and integrate these assets as part of a more sustainable and resilient future.

Elevation and Steep Slopes

The Village of Port Chester sits at a low elevation. Most of the Village lies from 10-200 feet above sea level. The elevations in the northern and northwestern sections of the Village range from 90-200 feet, except for one small area around King Street School that is between 200 and 220 feet above sea level. Elevations in the southern and southeastern sections of the Village range from less than 10 feet to 90 feet.

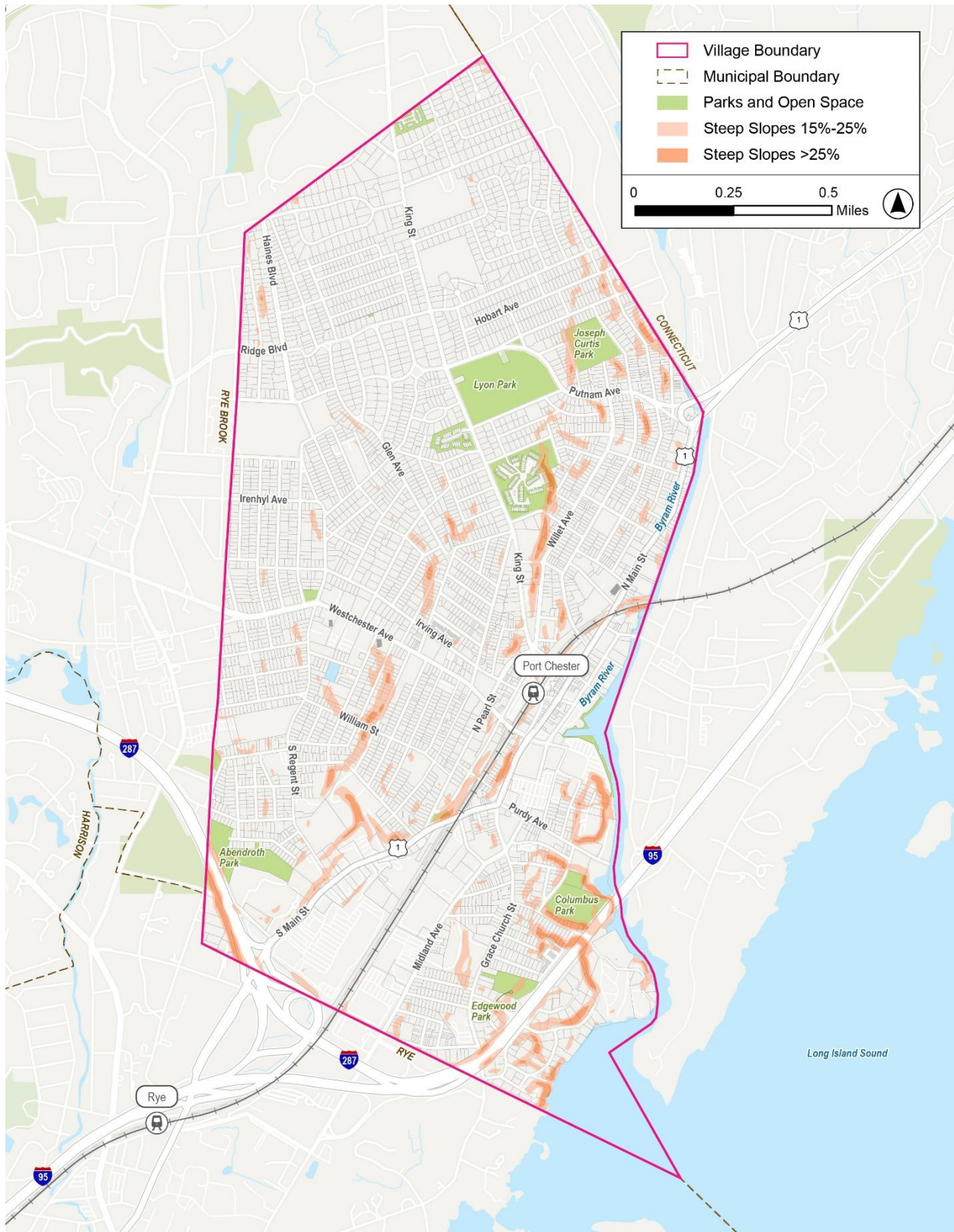
As shown in **Figure 5-1**, Port Chester has few areas with steep slopes. Most steep slopes are concentrated around Route 95 and Columbus Park, with two minor ridge lines that run North and South in the center of the Village. One runs from United Hospital to Westchester Ave along Spring Street. The other runs from the intersection of North Pearl Street and King Street, running North through Joseph Curtis Park and up to the intersection of Quintard Drive and Pilgrim Drive. The Village currently does not have an ordinance intended to preserve or mitigate potential impacts on steep slopes.

Tree Canopy

Trees are an important natural resource for municipalities. They can help mitigate erosion, absorb stormwater, provide wildlife habitat, combat the urban heat island effect, and increase property values. Port Chester is a small municipality of approximately 2.4 square miles, with only small parks and no conserved open space (see Chapter II-4). The Village's tree canopy is primarily within parks, along streets, and on lower density residential lots. This pattern is similar to other dense Westchester municipalities like Mount Vernon.

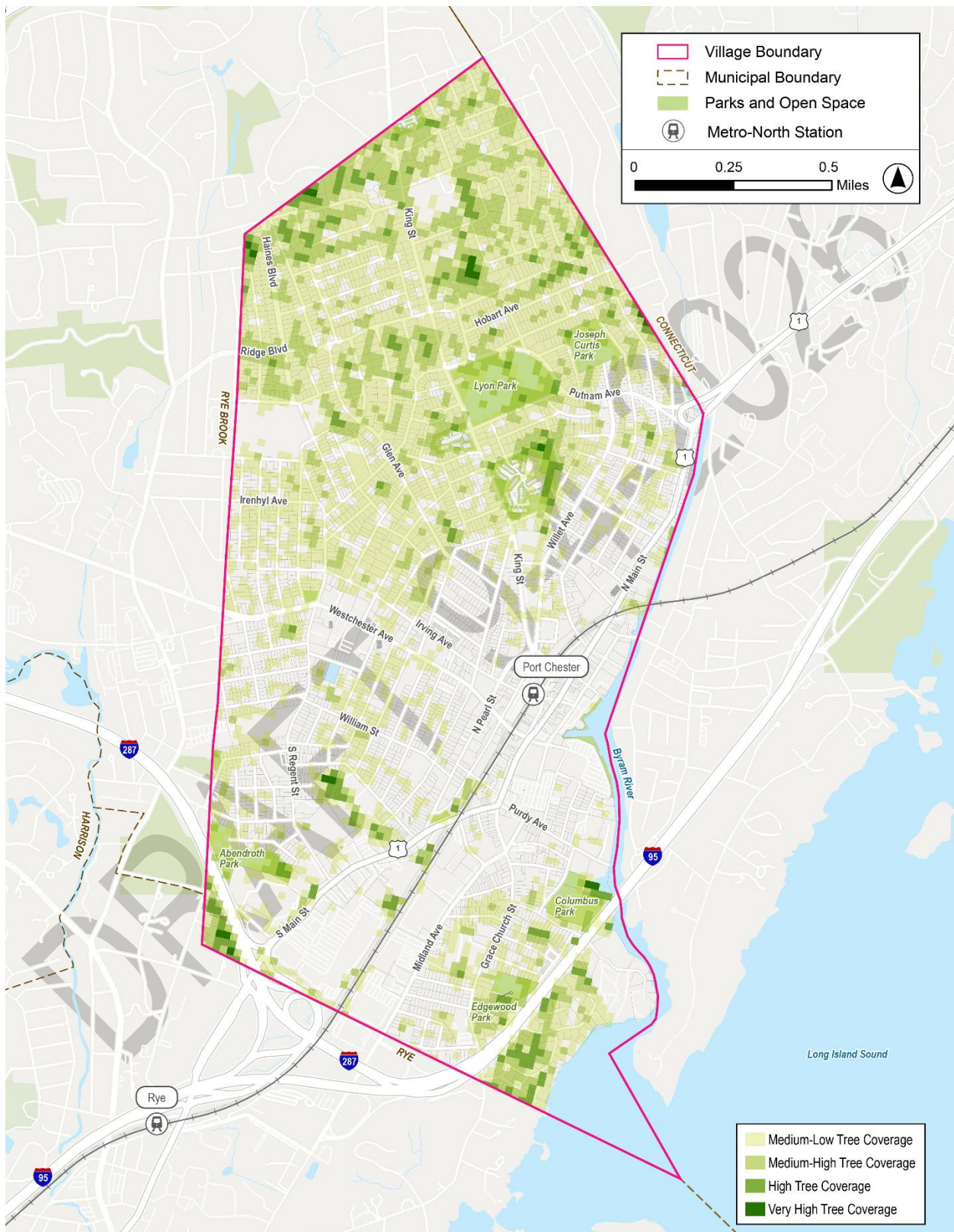
As shown in **Figure 5-2**, the Village's tree canopy is concentrated in the single-family neighborhoods in the northern portion of the Village and the residential area between I-95 and the Long Island Sound. **Figure 5-3** shows that the Village's tree canopy coverage has diminished since 2010, with the greatest loss occurring those same neighborhoods. The Village currently does not have a tree ordinance intended to preserve the tree canopy. The Village does have a tree planting program which.

Figure 5-1. Steep Slopes in Port Chester



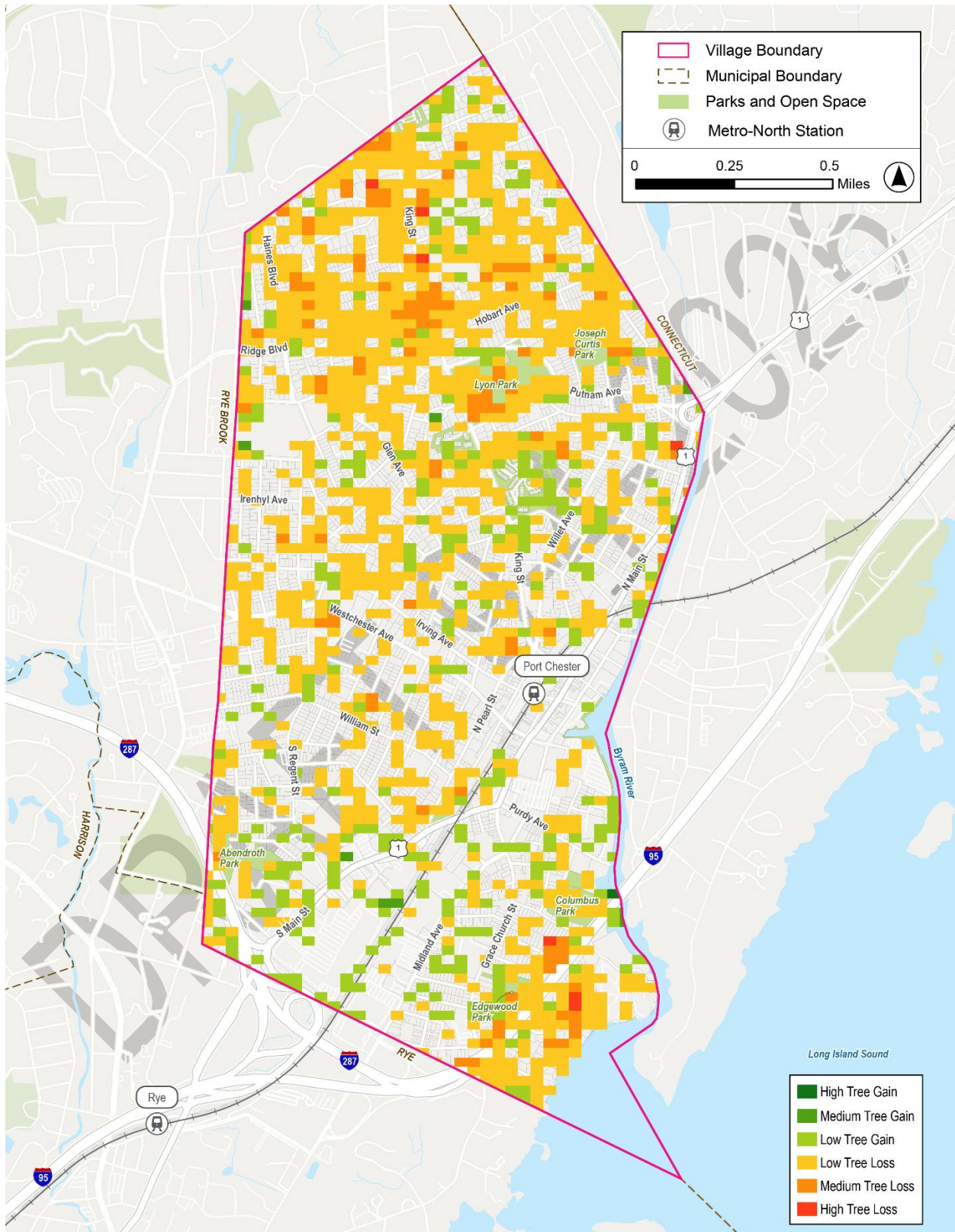
Source: Westchester County GeoHub, BFI Planning

Figure 5-2. Tree Coverage in Port Chester in 2023



Source: US Geological Survey (2023), Westchester County GeoHub, BfJ Planning

Figure 5-3. Change in Tree Coverage in Port Chester between 2000-2023



Source: US Geological Survey (2000, 2023), Westchester County GeoHub, BFI Planning

Surface Waters

Byram River

Considered a Priority Waterbody Stream by New York State Department of Environmental Conservation (NYSDEC), the Byram River runs on the eastern side of the Village from Route 1, along the Connecticut border to Port Chester Harbor where it meets the Long Island Sound (**see Figure 5-4**). Privately held commercial and industrial sites compose the majority of riverfront parcels on the Byram River, so there are few areas for public access. The Port Chester Marina Park and 1,600-foot Waterfront Promenade and the William James Memorial Gateway Park are the only publicly accessible waterfront areas in the Village.

The Village recently completed the replacement of the Port Chester Marina bulkhead. With a groundbreaking in 2021, the project replaced a vinyl bulkhead with an environmentally sensitive retention solution including riprap and a new retaining wall. The Port Chester Marina Park and Waterfront Promenade are currently under construction and will connect with the Village's LOOP project. The LOOP will connect the waterfront with the downtown area through streetscape improvements and placemaking design interventions. The LOOP project is further discussed in Chapter II-1 and II-3.

The Clean Water Act designates four specific uses for the Byram River: commercial shellfish harvesting where authorized, recreation, fish consumption, and habitat for wildlife. EPA testing carried out in 2024 lists the river as "Impaired," or "not fully supporting its designated uses" of commercial shellfish harvesting and recreation. It does not meet standards for fecal coliform and enterococcus, both of which can cause unsafe conditions for people. In 2025, the Village secured \$35 million in state grant funding for two sanitary sewer upgrade projects, which are expected to improve water quality in the Byram River.

Port Chester Harbor

Port Chester Harbor is the tidal bay where the Byram River meets the Long Island Sound (**see Figure 5-4**). Fox Island, located directly South of I-95 on Port Chester Harbor, has a mix of industrial and community facility uses, including the Village-owned DPW site and Port Chester Yacht Club, and Westchester County's Port Chester Wastewater Treatment Plant.

In 2021, NYSDEC reported that Port Chester Harbor is "Impaired" and requires a Total Maximum Daily Load (TMDL), which is a designation of the total amount of pollutants allowed to be released in the waterbody per day. Water quality testing in the harbor found heightened levels of fecal coliform, rendering it unsafe for recreational use and fish and shellfish consumption.

Long Island Sound

The southernmost part of Port Chester touches the Long Island Sound (**see Figure 5-4**). There is no public access to the Sound in the Village because its waterfront parcels are exclusively private, single-family lots.

The Sound is approximately 1,320 square miles and represents over 600 miles of coastline. It was designated as a National Estuary in 1987 and provides habitat to a great diversity of plant and animal life. These habitats have suffered greatly as development on the Sound has increased over

the years. In 2022, the EPA classified the Sound as impaired for both fishing and shell fishing because of heightened levels of nitrogen and dissolved oxygen.

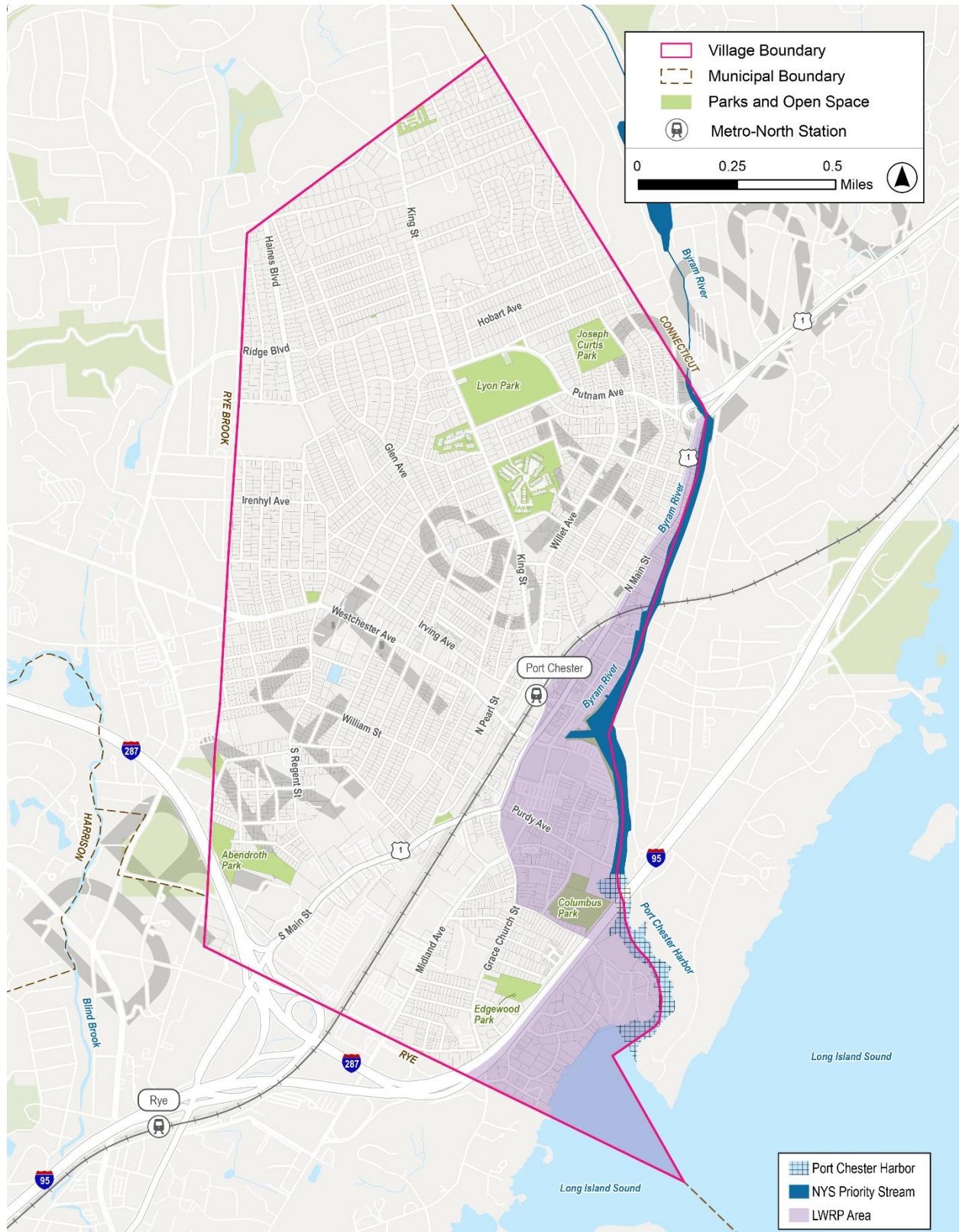
Local Waterfront Revitalization Program (LWRP)

As noted in Chapter I-2, the Village first adopted its LWRP in 1992, with its most recent update in 2023. As shown in **Figure 5-4**, the LWRP boundary covers the Village's waterfront along the Long Island Sound and the Byram River. The LWRP promotes strategies and policies to improve access to the Village's waterfront, and limit the effect of flooding, erosion, and pollution to protect human life, wildlife and, built assets.

To implement the LWRP, the Village adopted the Village of Port Chester Waterfront Consistency Review Law ("Waterfront Consistency Review") in 1992. The law established a Waterfront Commission, a five-member board appointed by the Board of Trustees, to review actions proposed within the LWRP area. No action in the coastal area can be approved, funded, or undertaken by a Village agency without a determination regarding its consistency by the Waterfront Commission. In addition, when an Environmental Impact Statement is prepared for a proposed action in the LWRP area, the draft EIS must identify applicable LWRP standards and discuss the effects of the proposed action on relevant policy standards.¹ Specific projects supported by the LWRP are listed in Chapter I-2.

¹ [Village of Port Chester Waterfront Consistency Review Law](#)

Figure 5-4. Priority Streams and Waterbodies and LWRP boundary in Port Chester



Source: New York State Department of Environmental Conservation, Westchester County GeoHub, BFJ Planning

Watersheds

A watershed is the land area in which water runoff flows into a particular stream or tributary. Watersheds are shaped by land topography, and one watershed is separated from the next by areas of higher elevation. The entire Village is in the Coastal Long Island Sound Watershed, which is located in the larger Long Island Sound Basin. Runoff from a particular parcel of land can have an impact on other parcels within the same basin. Land use and development within a basin affects the water quality of the watershed's wetlands, streams, and other natural waterways that receive water flow and outflow. Land use throughout the Village therefore impacts the environmental and ecological conditions of the Long Island Sound.

Wetlands

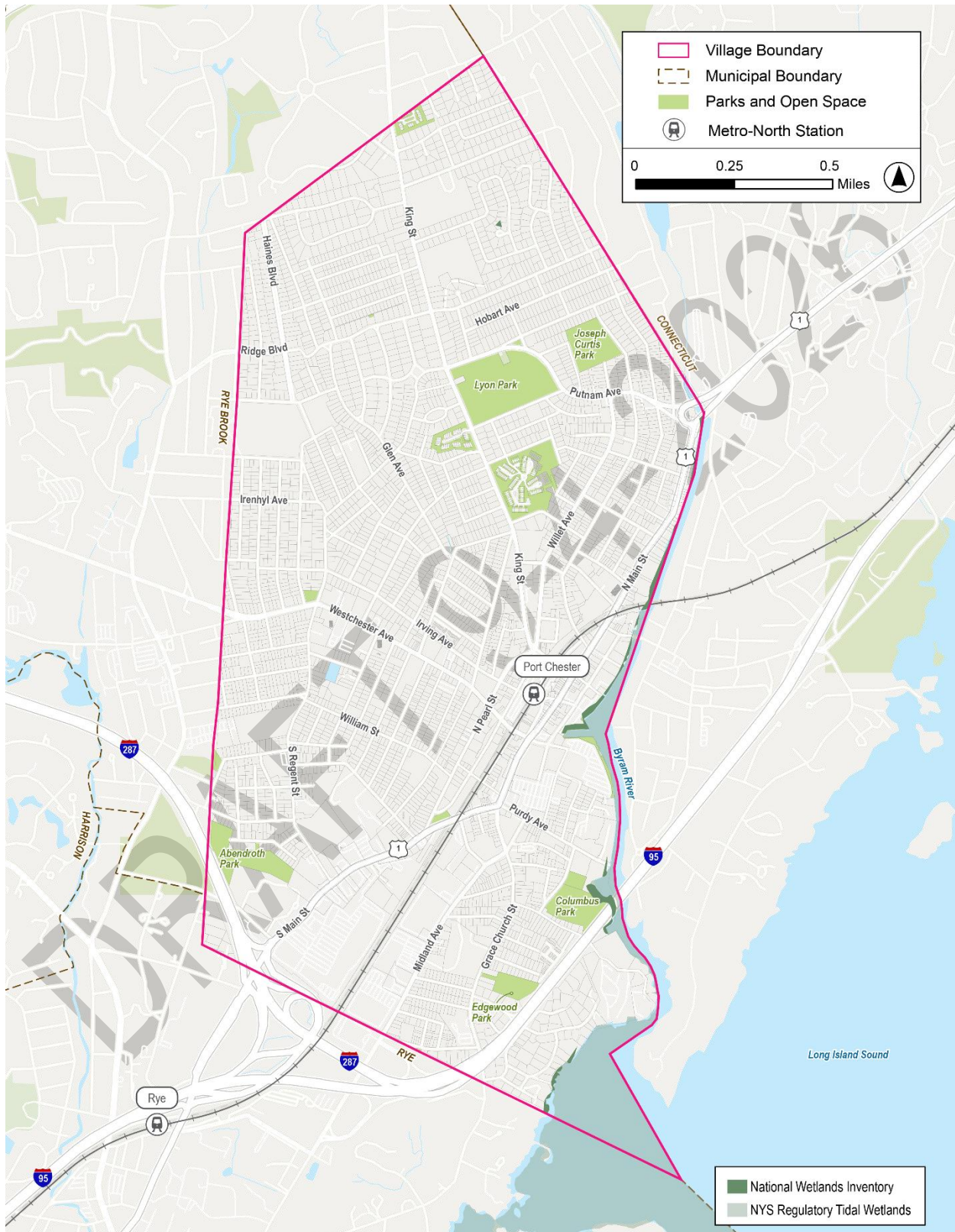
Wetlands are areas saturated by surface or ground water that support vegetation (e.g., swamps, marshes, bog). Wetlands are highly productive ecosystems which provide a variety of ecosystem services. Article 6 of the Village Zoning Code regulates the preservation of natural features and requires wetlands to be preserved as part of development projects.² Wetlands:

- Protect subsurface water resources;
- Filter and treat pollutants;
- Control erosion;
- Contribute to the natural character of a community;
- Sequester carbon;
- Absorb stormwater and prevent flooding; and
- Perform nutrient cycling and remove excess nitrogen from soils and water.

The Byram River waterfront is mapped as a tidal wetland and is both state and federally regulated (see **Figure 5-5**). According to the Village LWRP, the portion of tidal wetland located at the “north cove” by Purdy Avenue and I-95 showed evidence of biological activity which could be impacted by future development. There are no freshwater wetlands in the Village.

² <https://ecode360.com/37564788>

Figure 5-5 Federal and State Wetlands in Port Chester



Source: New York State Department of Environmental Conservation, Westchester County GeoHub, BFI Planning

Critical Environmental Areas

A Critical Environmental Area (CEA) is land designated by NYSDEC due to its exceptional environmental, historical, or public importance. CEAs receive special consideration during environmental reviews under the New York State Environmental Quality Review Act (SEQRA) process. To be designated as a CEA, an area must have an exceptional or unique character with respect to one or more of the following:

- A benefit or threat to human health;
- A natural setting, such as fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality;
- Agricultural, social, cultural, historic, archaeological, recreational, or educational values; or
- An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.

As shown in **Figure 5-6**, the Long Island Sound CEA includes all the Village's surface water, including Port Chester Harbor and the Byram River, and adjacent land area.

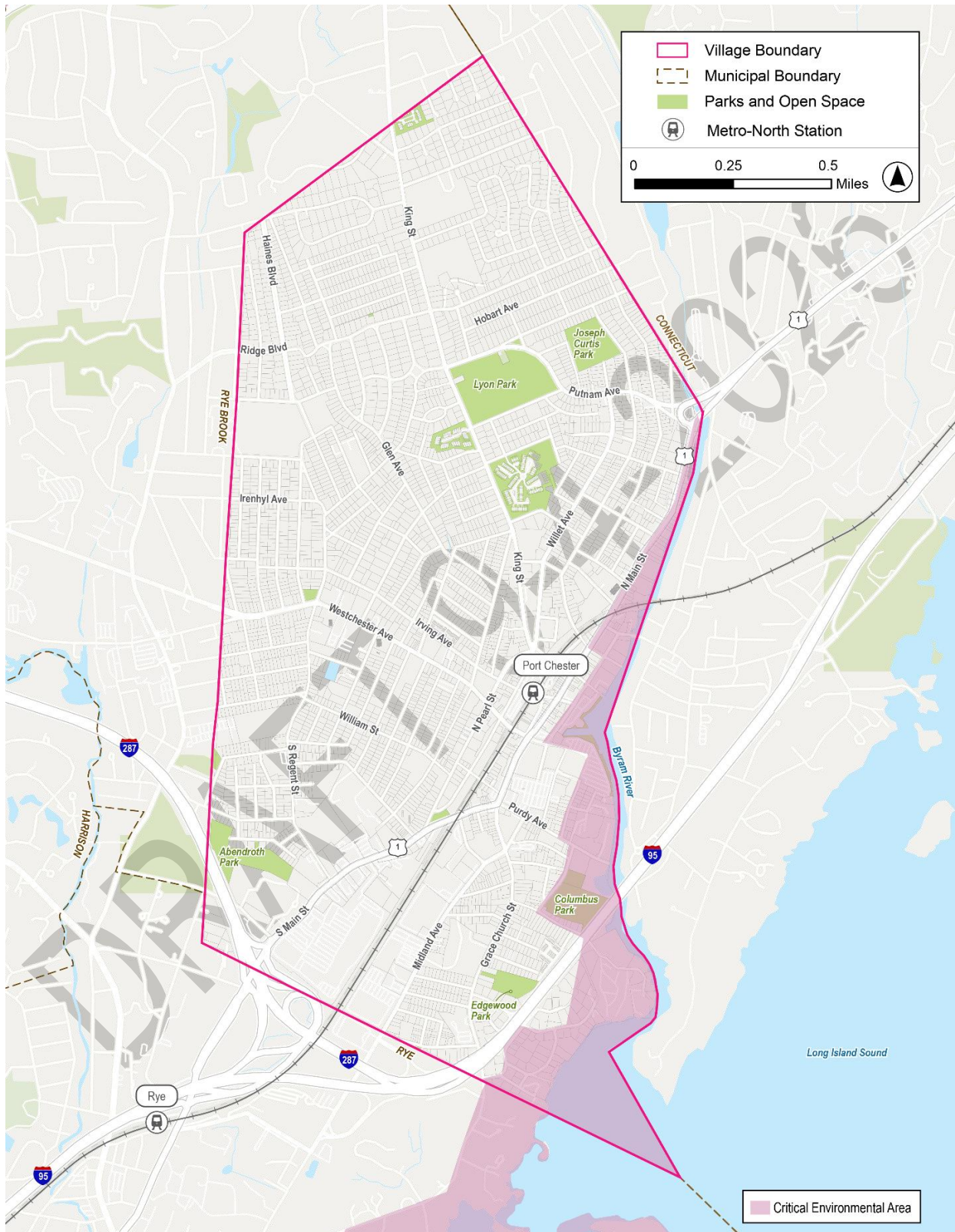
Significant Natural Heritage Communities

The coast along the Long Island Sound in Westchester County, from Larchmont to Port Chester, is designated by NYSDEC as a Natural Heritage Program Important Area for Wetland Animals. Important Areas do not have regulatory implications and are not intended to be used for site-review, including under the New York State Environmental Quality Review Act (SEQRA). They are informational and provide context for other ecological initiatives and data. In Westchester County, the coastline of the Long Island Sound is also classified as a Critical Environmental Area. CEA designation requires project applicants to determine potential significant impacts of any Type I or Unlisted Actions (under SEQRA) that may affect the area.

Endangered and Threatened Species and Habitats

In Port Chester, minimal natural habitats remain on land due to dense development and aquatic life may be limited by the current levels of pollution in its water bodies. Pollution from boats, industry, the sewer system and disturbances from channel dredging have decreased the Byram River's value as a habitat. The nearby Manursing Island Flats and Edith Read Wildlife Sanctuary in Rye (Westchester County Parks) provide important habitats for aquatic and animal life and serve as a refuge for migratory birds. While no detailed wildlife surveys have recently been conducted in Port Chester, the U.S. Fish and Wildlife Service has determined that endangered and threatened species found in the vicinity of Port Chester include the bald eagle, golden eagle, northern long-eared bat, tricolored bat, roseate tern, and monarch butterfly. In addition, the NYSDEC has noted that Port Chester's water bodies are in the vicinity of four endangered or threatened sea turtle species: The Leatherback, Green Turtle, Loggerhead, and Kemp's or Atlantic Ridley.

Figure 5-6. Critical Environmental Areas in Port Chester



Source: New York State Department of Environmental Conservation, Westchester County GeoHub, BFI Planning

Environmental Constraints

Chemical and Petroleum Spills

Since 2010, Port Chester has averaged 29 chemical and petroleum spills each year.³ In this period, there has been a downward trend in spills in the Village, with an average of 22 spills between 2021 and 2025. Equipment failure was the cause for nearly 60% of incidents, with an additional 10% caused by tank test failures. Only 7% of incidents stemmed from housekeeping issues or deliberate actions.

Chemical and Petroleum Storage Sites

There are three active chemical or petroleum storage facilities located in Port Chester.⁴ Westmore Fuel Company has two petroleum storage facilities on Purdy Avenue, and the Westchester County owned Port Chester Wastewater Treatment Plant at 75 Fox Island Road.

New York State Disadvantaged Community (DACs)

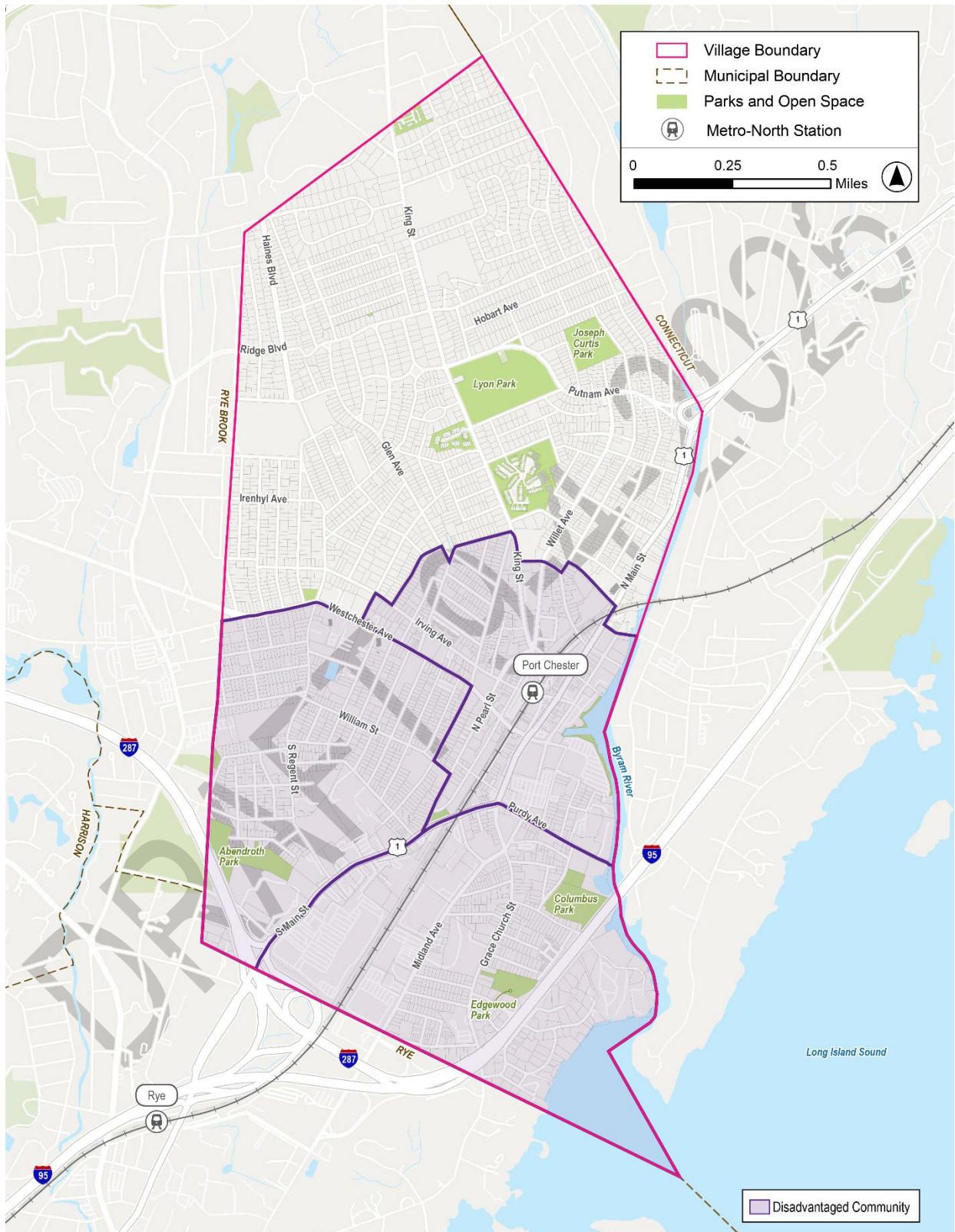
The New York State Environmental Conservation Law (ECL) §75-0101 defines disadvantaged communities as those “that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households.” DACs are identified by indicators including cumulative environmental pollution and environmental hazards, populations with lower incomes, high unemployment rates, high housing cost burdens, low homeownership rates, lower levels of educational attainment, higher concentrations of racial or ethnic groups that have historically experienced discrimination, and climate vulnerabilities including flooding and storm surge risks and urban heat island effects. DAC designation is intended to help prioritize historically disadvantaged communities most affected by climate change during the State’s green transition. DAC designation is meaningful because the New York Climate Leadership and Community Protection Act mandates that at least 40% of energy and climate investment funding be directed into these communities.

The three southern census tracts of the Village are designated as DACs. As shown in **Figure 5-7**, the downtown, area directly north of downtown, and area south of Westchester Avenue are all designated as DACs.

³ NYS Department of Environmental Conservation – DER Environmental Remediation Databases. Spill Incidents

⁴ NYS Department of Environmental Conservation – DER Environmental Remediation Databases. Bulk Storage Database

Figure 5-7. Disadvantaged Communities in Port Chester



Source: New York State Department of State, Westchester County GeoHub, BFI Planning

Sustainability and Energy

Sustainability presents an important opportunity for the Village of Port Chester to strengthen its long-term vision and better support future growth. While the 2012 Comprehensive Plan addressed a wide range of community priorities, it did not include a dedicated focus on sustainability. Integrating sustainability into this updated Comprehensive Plan will help guide land use decisions, promote resilient infrastructure, support economic development, advance social equity, and enhance the Village's ability to pursue future partnerships and funding opportunities. By considering the needs of both current residents and future generations, Port Chester can build a more resilient, inclusive, and environmentally responsible community. The following sections examine relevant sustainability policies and initiatives at the state, county, and local levels, the role of the Port Chester Sustainability Committee, and the potential use of the Climate Smart Communities framework to guide future action and benchmark progress against peer municipalities.

Existing Laws, Policies and Regulations, and Initiatives

Village of Port Chester

The Village of Port Chester has incorporated several sustainability-related provisions into the Zoning Code and planning initiatives that support environmentally responsible development:

- Section 345.405.A(11)(G) of the Port Chester Zoning Code provides Green Building and Site Planning guidance within the SD-PMU District, encouraging sustainable development practices as part of the development review process. Additionally,
- Section 345.405.V (Green Building and Infrastructure) affirms the Village's commitment to reducing its carbon footprint, greenhouse gas emissions, and dependence on fossil fuels by establishing green building and infrastructure requirements for new development.

These provisions address a range of sustainability measures and alternative energy sources, including opportunities like green infrastructure, installation of solar arrays or canopies, and geothermal systems. Further guidance on green infrastructure implementation is provided in the Village's 2018 Green Infrastructure Guide. Although these regulations provide a strong framework for sustainable development, the Zoning Code does not currently include provisions related to electric vehicles (EVs) or EV charging infrastructure, representing an opportunity for future code updates.

Beyond the Zoning Code, Port Chester's 2017 Strategic Plan reinforces the Village's commitment to sustainability by identifying smart growth as a key planning objective and recognizing the increasing importance of energy efficiency and responsible energy use in addressing climate change. The Village's current policies establish a solid foundation for sustainability in the municipality while highlighting opportunities to further strengthen the Village's climate and resilience initiatives.

To date, the Village has established a Sustainability Committee to advise the Village Manager on environmental stewardship and conservation initiatives, implemented a food scrap recycling and composting program to divert waste from the landfill, and has adopted the New York State Climate Smart Communities pledge.

Municipal governments are uniquely positioned to lead local sustainability and climate action. Through land-use planning, transportation investments, building policies, infrastructure decisions, waste management programs, and public engagement, municipalities can reduce greenhouse gas emissions, increase resilience to extreme weather, improve public health, lower operating costs, and enhance quality of life for residents.

Role of the Port Chester Sustainability Committee

The Port Chester Sustainability Committee is a volunteer advisory body appointed by the Village Manager to support environmental conservation and sustainability efforts within the Village. Its primary role is to advise the Village Manager on significant environmental issues affecting the community. As of 2026, there are two co-chairs on the committee and four members. The Village's Sustainability Initiatives include Food Scrap Recycling and Seed Swap & Giveaway. The committee further promotes environmental stewardship by providing resources to Village residents through online platforms. Information and topics include bird-friendly yards, food scraping FAQs, butterfly conservation and tracking tools, community science information, and information about pesticides.

Climate Smart Communities (CSC) - Port Chester's Status

The Climate Smart Communities (CSC) is a statewide framework to help guide municipalities on strategies that they can take to meet their sustainability goals. Port Chester is currently a registered Climate Smart Community without a bronze or silver designation, according to the NYSDEC CSC website. This means the Village Board has adopted the CSC Pledge but has not yet completed and documented the actions required to earn bronze or silver certification status. To advance the status, the Village of Port Chester would need to complete the mandatory pledge elements of designating a CSC Coordinator and creating a CSC Task Force. After that, the Village can begin documenting completed actions across the program's 10 pledge elements to accumulate the required points. The 10 pledge elements are:

1. Pledge to be a climate smart community.
2. Set goals, inventory emissions, plan for climate action.
3. Decrease community energy use.
4. Increase community use of renewable energy.
5. Realize benefits of recycling and other climate-smart solid waste management practices.
6. Reduce greenhouse gas emissions through use of climate-smart land-use tools.
7. Enhance community resilience and prepare for the effects of climate change.
8. Support development of a green innovation economy.
9. Inform and inspire the public.
10. Commit to an evolving process of climate action.

To achieve Bronze certification, the Village must earn a minimum of 120 points, while Silver certification requires a minimum of 300 points.

Case Study: Ossining CSC Bronze Status Achievement

The Village of Ossining in Westchester County completed the following 23 pledge elements, receiving 178 points, to achieve a Bronze designation: Bronze designation:

- Pass a Resolution Adopting the CSC Pledge
- Appointed a CSC Task Force
- Appointed a CSC Coordinator
- National/Regional Climate Program
- Government Operations GHG Inventory
- Community GHG Inventory
- Benchmarking – Municipal Buildings
- Installed LED Street Lights
- Energy Code Enforcement Training
- Installed Heat Pumps at Cedar Lane Arts Center
- Residential Organic Waste Program
- Comprehensive Plan with Sustainability Elements
- Completed NYStretch Energy Code
- Adopted a Complete Streets Policy
- Planning for Biking and Walking (in Comprehensive Plan)
- Installed Electric Vehicle Charging Stations
- Created a Local Forestry Program and Tree Inventory
- Zoning for Protection of Natural Areas
- Part of County’s Climate-resilient Hazard Mitigation Plan
- Green Financing (Ossining is on the EIC NY PACE list with an OPEN C-PACE Program)
- Completed Community Choice Aggregation
- Climate-related Public Events (Annual Earth Day Festival)
- Created a Local Climate Action Website (Green Ossining)

Additional actions that a community could pursue to advance from Bronze toward Silver Climate Smart Communities certification could include developing a municipal Climate Action Plan, conducting renewable energy feasibility studies, adopting environmentally preferable purchasing policies, installing municipally owned clean energy systems, expanding bicycle and pedestrian infrastructure, implementing traffic calming measures, improving access to public transit, establishing cooling centers, conserving natural areas, and increasing community education and outreach through public campaigns, climate-related events, and other engagement initiatives.

Village of Port Chester Green Infrastructure Guide

The Village developed a Green Infrastructure Guide in 2018, with support from the Long Island Sound Futures Fund and the National Fish and Wildlife Foundation (NFWF). The purpose of this guide is to provide the Village and private property owners with resources to promote green infrastructure practices that improve stormwater management and water quality in the Byram River. Although this guide is advisory in nature, it could form the foundation for more robust design standards for new development and for Village-led projects on public land.

Westchester County

The County's Office of Energy Conservation and Sustainability coordinates initiatives focused on green building, energy conservation, greenhouse gas reduction, recycling, water conservation, and sustainable development. In 2024, the County adopted a Climate Action Plan and completed a greenhouse gas emissions inventory for government operations, establishing a roadmap to reduce emissions 40 percent below 1990 levels by 2030 and 85 percent below 1990 levels by 2050, consistent with New York State climate goals. The County is also advancing a Climate Vulnerability Assessment and Adaptation Plan to address risks associated with flooding, extreme heat, sea-level rise, and other climate-related hazards.

Westchester County sustainability and energy related priorities include expanding renewable energy generation through large-scale solar projects, improving energy efficiency in public facilities, supporting electric vehicle infrastructure and fleet electrification, reducing waste through food scrap recycling and composting programs, conserving natural resources, and strengthening community resilience. The County works closely with municipalities and regional partners to advance climate action planning on a local scale, greenhouse gas inventories, and implementation of sustainability initiatives.

Westchester County provides a strong model for local climate action and sustainability through its Office of Energy Conservation and Sustainability, comprehensive climate planning efforts, and a wide range of programs focused on renewable energy, waste reduction, transportation, and resilience. The County has developed a Climate Action Plan, greenhouse gas inventory, and Climate Vulnerability Assessment, while supporting initiatives such as solar energy deployment, food waste diversion, home composting, EV charging infrastructure, and sustainable fleet programs. Port Chester is already benefiting from the County's 2025 EV Charging Program, which will bring a public charging location with 23 ports to the Village Hall parking lot. The Village could further leverage regional resources by pursuing closer alignment with County initiatives and exploring participation in Sustainable Westchester, a consortium that helps municipalities advance clean energy, building decarbonization, community solar, energy efficiency, and other sustainability programs.

New York State

New York State has established a strong policy framework to reduce greenhouse gas emissions and improve energy efficiency. The Climate Leadership and Community Protection Act (CLCPA) sets statewide targets to reduce greenhouse gas emissions by 60 percent below 1990 levels by 2024, achieve an 85 percent reduction by 2050, and reach net-zero emissions by 2050. The State's Energy Conservation Construction Code of New York State (ECCCNYS) provides the technical standards for energy-efficient building design and construction, ensuring that new development and major renovations minimize energy use. These requirements are supported by 2025 New York State Energy Law, which establishes the legal framework for the development, adoption, and enforcement of the Energy Code statewide. Together, these policies guide municipalities toward cleaner energy systems, more efficient buildings, and long-term climate resilience.

The Village can play an important role in educating residents, businesses, and property owners about sustainability programs and funding opportunities available through New York State.

Organizations such as the New York State Energy Research and Development Authority (NYSERDA) offer a variety of resources that support energy efficiency, clean energy adoption, and greenhouse gas emissions reduction. These include programs for home energy assessments (NYSERDA's Home Energy Plan), energy-efficiency upgrades, heat pump installations (NYS Clean Heat), solar energy systems (NY-Sun), and financial assistance for income-eligible households seeking to improve the energy performance of their homes (EmPower+). By providing awareness of these programs and directing community members to available technical and financial assistance, the Village can help expand and encourage local participation in sustainability initiatives and advance community-wide energy and climate goals.

Climate Adaptation and Resiliency

Climate change increases the likelihood and severity of extreme weather events, posing a significant threat to communities. Our understanding of climate change and ability to use models to develop projections for extreme weather events is evolving. With this information, it is possible to include climate resiliency in planning efforts to prepare and address vulnerabilities. Port Chester is starting by identifying climate hazards that pose the greatest risk to the community and high-level opportunities for enhancing its resilience. Flooding and urban heat are of greatest concern based on the Village's location, infrastructure, and dense, impervious development. Additionally, smoke from wildfires in other parts of the country or Canada may become more prevalent in the region, causing air quality issues and posing health risks, and hotter summer temperatures could impact the amount of surface water available to Port Chester. The following sections provide additional context related to Port Chester's existing conditions and future hazards based on current climate change projections.

Flooding

According to NYS DEC, heavy precipitation events are expected to increase in frequency throughout much of the State. Surface water over paved areas flows to drainage structures that eventually drain to the Byram River, which borders the eastern boundary of the Village. The flow of stormwater from these precipitation events could overwhelm the Village's aging stormwater infrastructure and result in localized flooding.

Much of the Village's existing shoreline was once underwater land that has been filled over the past 200 years. A large portion of the area between Main Street and the Byram River is considered a FEMA special flood hazard area. The current base flood elevation for downtown Port Chester is 12 feet within the 100-year flood zone (**Figure 5-8**); however, by the 2080s, Westchester County may see over three feet of sea level rise (according to the high-medium projection in Table 5-1), which would increase the base flood elevation.⁵ Sea level rise will also increase the height and frequency of high-tide flooding (see **Table 5-1**).

⁵ U.S. Climate Resilience Toolkit – Climate Mapping for Resilience and Adaptation

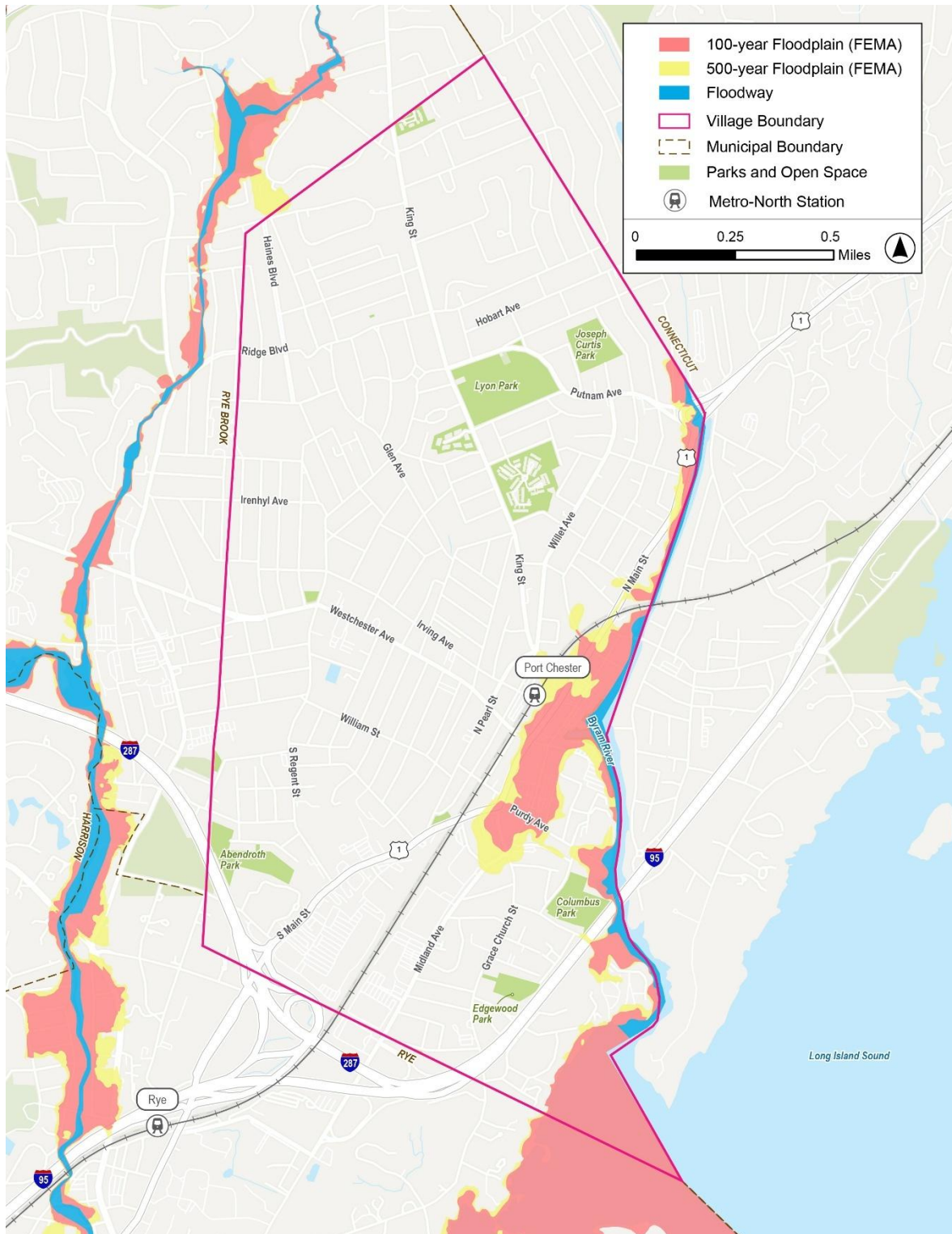
Table 5-1. Projected Sea Level Rise Estimates⁶ in Inches (Long Island Region)

Time Interval	Low	Medium	High-medium	High
2030s	7	10	12	14
2050s	13	18	21	25
2080s	23	32	41	48
2100	27	39	54	69

Source: <https://dec.ny.gov/environmental-protection/climate-change/new-york-response/crra>

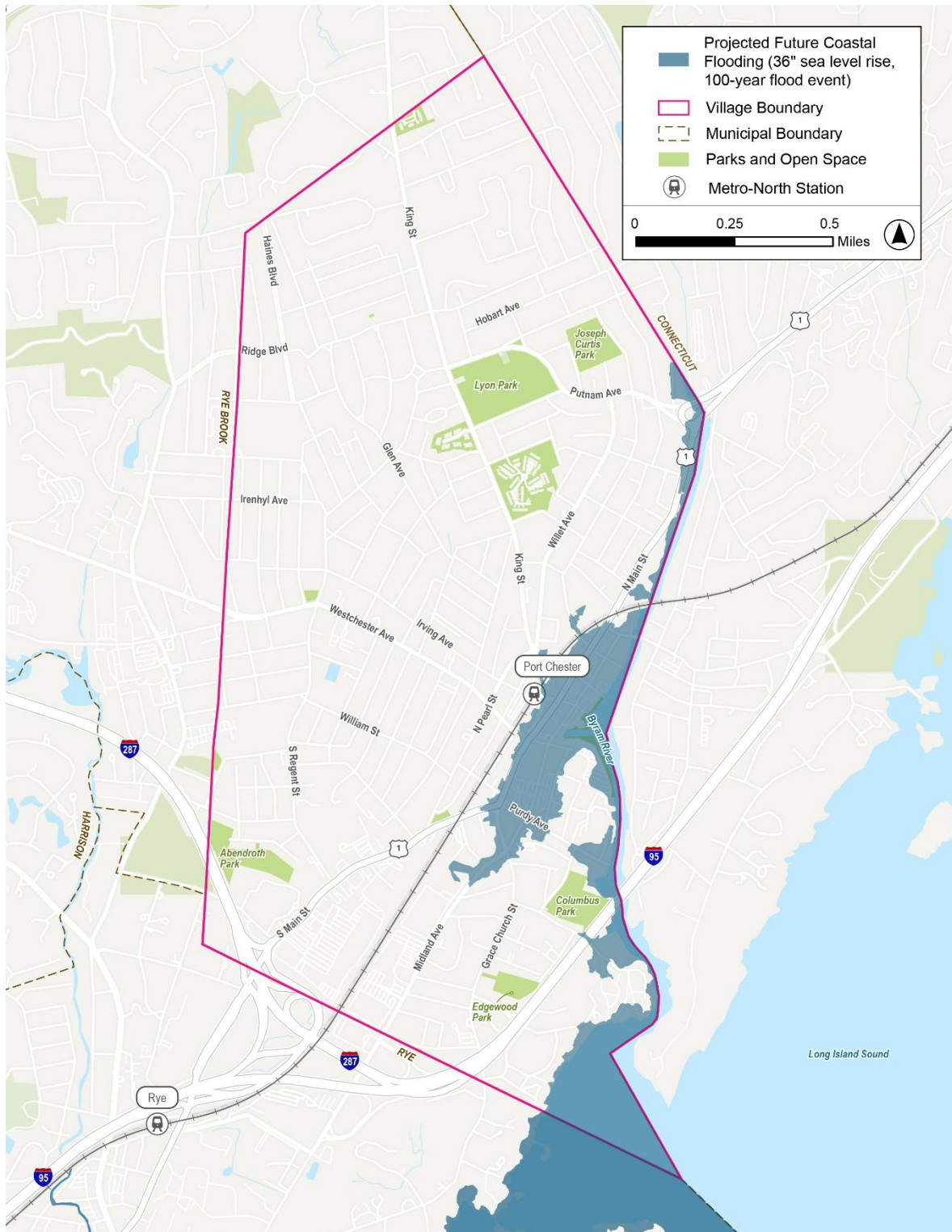
⁶ Projection scenarios are based on Shared Socioeconomic Pathways 2-4.5 and 5-8.5, which account for future greenhouse gas emissions trajectories as well as socioeconomic and technological developments. The low, medium, and high estimates are based on 10th percentile, 25th to 75th percentile, and 90th percentile, respectively.

Figure 5-8. FEMA Floodplains in Port Chester



Sources: FEMA, New York State Department of State, Westchester County GeoHub, Ramboll

Figure 5-9. Projected Future Coastal Flooding



Sources: NYSERDA New York State Sea Level Rise Viewer, New York State Department of State, Westchester County GeoHub, Ramboll

Figure 5-10. Historic Map of Port Chester, NY from 1867



Source: Port Chester, Westchester Co., N.Y.; Atlas of New York and Vicinity From actual Survey, 1867; Retrieved from David Rumsey Map Collection, davidrumsey.com, July 2026.

Historic maps that show the location of pre-development wetlands and waterways can help to reinforce our understanding of why certain areas are more susceptible to flooding. In Port Chester, the present-day location of the “gut” along Abendroth Avenue appeared as a tributary waterbody to the Byram River in the 1860s (**Figure 5-9**). This waterbody extended further south, between present-day S. Main Street and Traverse Avenue (generally following the route of Waterfront Place). Also on historic maps, a pond appears to the west of the train tracks, just north of present-day Westchester Avenue. The pond was fed by a stream that extended northwest and north through the Village. Historic waterbodies sometimes help to explain the location of present-day flooding by highlighting low points in the topography.

Storm surge further intensifies coastal inundation events but is primarily confined to the southern-most portion of the Port Chester shoreline. In 2012, Superstorm Sandy flood levels exceeded 10 feet in elevation from the Byram River near Port Chester.⁷ Much of the downtown waterfront area is below 10 feet in elevation. Tropical Storm Ida overloaded the sanitary sewer overflow (SSO) systems at Abendroth Avenue and King Street in 2021 and caused the Bulkley Drain on Irving Avenue to burst. Other areas with significant flood concern include Westchester Avenue and North Main Street and Purdy Avenue and Don Bosco Place. While flood events of this magnitude are rare, warming air and ocean temperatures promote the formation of stronger storms, which could make events like this more common. Projections show that coastal flooding from tropical cyclones will increase and that the east coast is likely to experience more intense extratropical cyclones.

In 2007, the Village of Port Chester adopted Chapter 181, Flood Damage Prevention, into its Code. This chapter is provided to protect human life and health and minimize expenditure on flood control projects among other objectives. Article 5 of this chapter provides construction standards for development within coastal high-hazard areas. Since many of the structures near the waterfront were built prior to the enactment of these standards, it is likely that many do not meet the current building regulations.

There are several flood mitigation projects in progress on the Byram River. The 2021 Westchester County Hazard Mitigation Plan recommended upgrading Byram River bulkheads, and the Village Marina Bulkhead Revitalization Project is currently in Phase 3 of construction to include a new retaining wall around the Costco parking lot. Additionally, the Byram River Basin Flood Risk Management Project will remove two U.S. Route 1 bridges over the Byram River in Port Chester, NY and Greenwich, CT to alleviate upstream flooding, managing up to the 50-year storm event; however, this is unlikely to improve flood conditions in Port Chester.

The Village has implemented extensive flood mitigation work across the community and additional work is planned. Glen Avenue, Glendale Place, and Olivia Street are three examples of the Village's extensive flood remediation work. These ongoing efforts are further discussed in the Stormwater Sewer section below.

Urban Heat

Westchester County is expected to experience an increase in extreme heat over the coming decades, with the annual number of days with a maximum temperature above 90 degrees Fahrenheit anticipated to double according to climate models from the 5th National Climate Assessment. NYS DEC anticipates an average annual increase of between 3 and 7 heat waves by mid-century.⁸ These higher temperatures within the context of Port Chester's high percentage of hardscape, especially in the downtown, could stress the Village's energy supply and community services.

⁷ U.S. Geological Survey – Flood Event Viewer

⁸ A heat wave is defined as three or more consecutive days with maximum temperatures at or above 90 degrees Fahrenheit.

Much of Port Chester's housing stock is relatively old, with only 19 percent of total housing units built since 1970; however, according to the U.S. Census Bureau's Local Air Conditioning Estimates (2023), nearly all households have some form of air conditioning.

Wildfire and Air Quality

In June 2023 and July 2026, much of the Northeastern U.S. experienced degraded air quality as a result of uncontained wildfires in Canada. While the risk of wildfires in Port Chester is not anticipated to significantly increase with climate change, the air quality impacts from wildfires in other parts of the U.S. or Canada could result in more frequent and longer periods of unhealthy air quality.

Westchester County has a history of exceeding air quality standards set by the U.S. Environmental Protection Agency, including ozone, carbon monoxide, and fine particulate matter. Ambient air quality issues could be exacerbated by the increasing prevalence of wildfire smoke, raising the risk posed to sensitive populations.

Drought

Many locations in the state experienced a multi-year drought in the 1960s. Although wet conditions are anticipated to prevail in the future, changes in the distribution of rainfall could lead to more frequent short-term seasonal droughts. The primary source of Port Chester's water supply is sand-filtered surface water from Greenwich, CT. The current water demand is met; however, average and maximum daily demand has been increasing in recent years. This increased demand combined with higher summer drought risk could require Port Chester to expand its water supply capacity.

Additionally, drier soil conditions from reduced snow cover and earlier snowmelt can worsen the impact of flooding from precipitation events since water does not drain as effectively under dry soil conditions.

Infrastructure

Water Supply

Aquarian Water Company provides water to the Village of Port Chester, primarily sourcing sand-filtered surface water from Greenwich, CT. While water demand and maximum daily demand are currently met, the Village does experience periodic low water pressure in its system due to substandard pipes (diameters less than 8 inches), demands from the City of Rye, storage tank sizes, and increases in peak demands from the high storage areas. Larger homes and lawn sprinkler systems have raised the average and maximum daily demands in recent years. Additionally, Westchester Joint Water Works has some water available but would require new agreements between the two companies.

The water supply distribution infrastructure is owned and maintained by Veolia. Water main breaks are a recurring issue for the Village due to the age of pipe materials with 25 reportedly occurring in the past two years. Additionally, Veolia is working on siting a new location for a water tower to help meet future water demands.

Sanitary and Storm Sewers

The Village still utilizes much of its original infrastructure, including sewer systems dating back to the early 1900s or earlier. Recent repair and replacement efforts have increased capacity and improved the efficacy of the pipes. Efforts have focused on addressing Sanitary Sewer Overflows (SSOs) and identifying areas of interconnected sanitary and stormwater sewer systems. The Village produced an Engineering Report in 2022 detailing a plan to upgrade the sewer system by reducing inflow and infiltration into the system, eliminate illicit stormwater sewer connections, and eliminate sewer overflows. Since then, the Village has successfully disconnected or has a plan to disconnect the remaining cross-connections between the sanitary and stormwater sewer systems.

Sanitary Sewer Overflows (SSOs) occur when raw sewage is unintentionally released from a sanitary sewer system before reaching a treatment facility. These overflows can contaminate waterways, pose risks to public health, and are typically caused by rain volume exceeding capacity or by blockages, pipe failures, excessive infiltration of stormwater or groundwater, power outages, or other system malfunctions.

The Village underwent public works improvements in the 1920s including installation of sewers and drains; however, the majority of sewers south of Westchester Avenue were previously installed prior to 1900. The average lifespan of these pipes is 75 to 100 years, so they are reaching the end of their design life. Additionally, Port Chester's population has grown by 25 percent over the past 80 years, and a 2022 Housing Needs Assessment identified water infrastructure capacity concerns. The 2022 Sanitary Sewer Upgrades Engineering Report identified undersized trunk sewers. Infrastructure upgrades are necessary not only to improve the condition of or replace aging pipes but also to adjust the capacity of systems to meet growing demands.

Sanitary Sewer

The Port Chester Sanitary Sewer District is comprised mainly of vitrified clay pipes and covers an area of approximately 2.7 square miles within the Village of Port Chester and small portions of the City of Rye and Village of Rye Brook. There are two pump stations serving a total of approximately 100 houses in the Village. The sewer system is completely owned by the Village of Port Chester.

A Sewer System Evaluation Survey completed in 1995 identified sources of inflow and infiltration into Westchester County's sewer system including manhole deficiencies, pipe fractures, joint defects, pipe dips, service connection defects, cross-connections with the stormwater sewer, and tidal flow along the Byram River. These sources of inflow total an estimated 1.6 million gallons per day for a 3-inch rainfall from both public and private direct connections of storm sewers. At times, the pipes along Beech Street and Don Bosco Place experience surcharges from tidal inflow alone. These deficiencies compromise the sanitary sewer's capacity for handling sewage.

The Village has resolved some of these issues by repairing pipe joints, replacing and sealing manholes, and installing pipe liners. Smoke testing was completed in 2023 and 2024 to identify segments of sewers that may exhibit inflow during heavy rainfall as a result of cross connections between catch basins and sanitary sewer lines. Port Chester also installed flow monitors at eight locations to start field inspections and dye tests as part of a larger Sanitary Sewer Revitalization

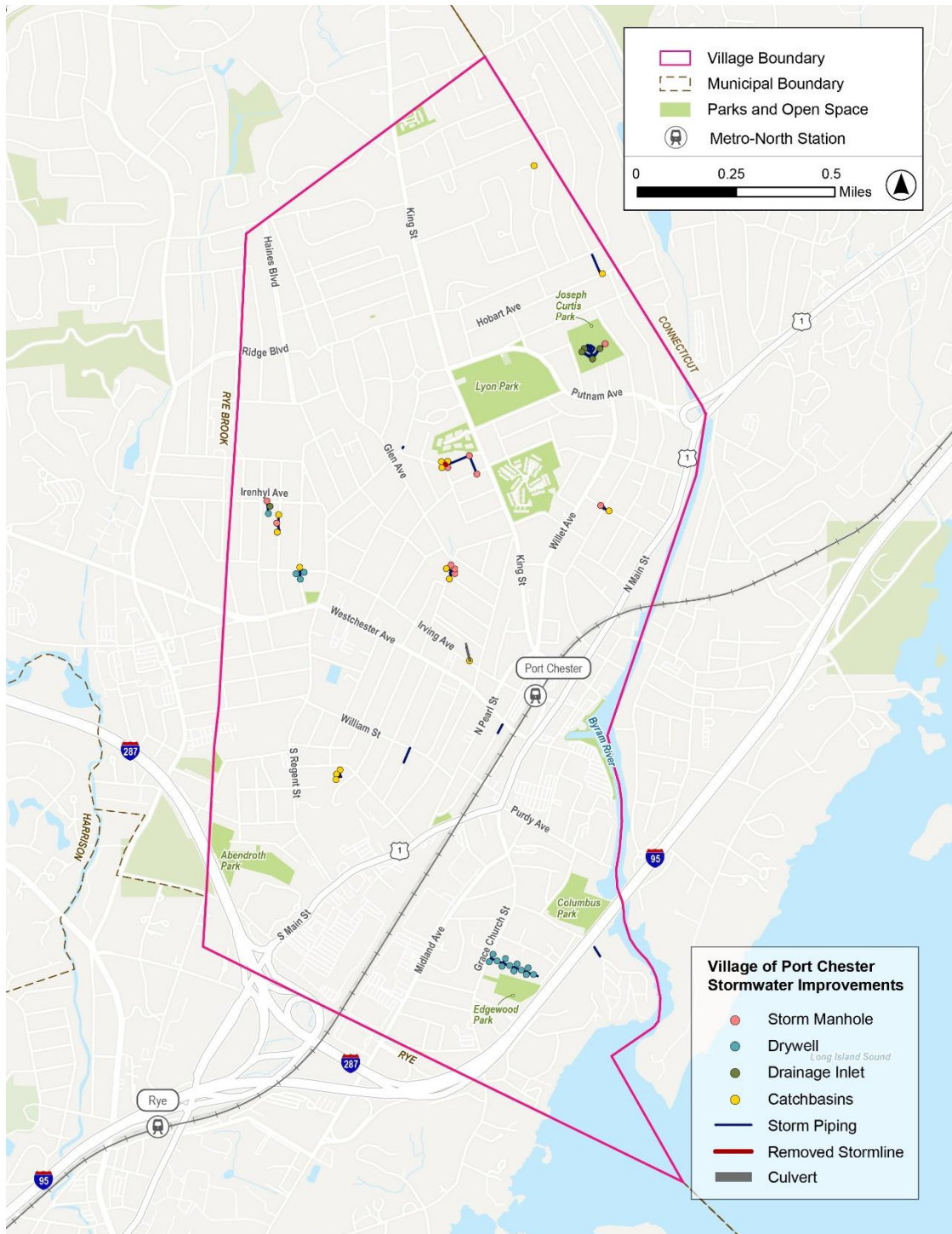
Project that will replace trunk sewers with larger sewers that can adequately transfer peak flows. Phase I construction is ongoing along Ryan Street and Beech Street, terminating at the intersection of Smith Street and Westchester Avenue. This phase of the project eliminates the SSO at Abendroth Avenue and removes known inflow and infiltration. Future phases will focus on upgrading trunk and sub-trunk sewer pipes and removing SSOs at King Street and Boston Post Road.

Stormwater Sewer

The stormwater sewer system serving the Village conveys stormwater to the Byram River through seven primary outfalls along the shoreline. The system's infrastructure has deteriorated due to age and lack of repair and no longer meets the capacity requirements at some locations. The Village has been issued a Municipal Separate Storm Sewer System permit from NYSDEC, requiring the Village to submit a stormwater management plan and annual stormwater report in an effort to combat water pollution.

In 2022, Port Chester completed a restoration project at Glen Avenue to expand the stormwater infrastructure following Tropical Storm Ida. A 3,500-gallon subterranean detention basin was installed at the intersection of Glen Avenue and Haseco Avenue in addition to 12 stormwater catch basins up to Leicester Street. The Village is near the completion of a stormwater improvement project in the Glendale neighborhood in northwest Port Chester that includes the installation of new precast box culverts redirecting stormwater away from backyards on Glen Avenue and new catch basins along roads.

Figure 5-11. Municipal Stormwater Improvement Projects in Port Chester



Sources: New York State Department of State, Westchester County GeoHub, Delaware Engineers, Ramboll

Wastewater Treatment

The Port Chester Wastewater Treatment Plant, owned and operated by the Westchester County Department of Environmental Facilities, is located on Fox Island Road and handles all sanitary sewage generated by the Village. Following primary and secondary wastewater treatment, wastewater is sent to the Blind Brook Wastewater Treatment Plant in the City of Rye for discharge into the Long Island Sound. The current capacity of the treatment plant is 6 million gallons of inflow per day, and secondary treatment capacity is 12.2 million gallons per day. Current inflow at the plant is around 5 million gallons per day with larger flows during rain events. A study for upgrading the wastewater treatment plant's capacity is underway.

Solid Waste

A solid waste transfer station is located on Fox Island Road, east of I-95 as part of the Port Chester Department of Public Works complex. Port Chester is responsible for picking up trash and recycling from the Village to the transfer stations, and Westchester County is responsible for the permanent disposal of Port Chester's solid and hazardous waste. The Village has distributed multi-lingual recycling and trash disposal instructions to residents in the past and issues violations when necessary.

Chapter 275 of the Village Code regulates the collection and recycling of solid waste. Additionally, the Village adopted Coastal Management Policies as part of its Local Waterfront Revitalization Program, including a policy to minimize environmental degradation in Port Chester's coastal area from solid waste and other hazardous substances and waste.

Issues, Opportunities, and Recommendations

1.1. *Protect water resources and reduce flood risk.*

The Village has taken critical steps to expand the storm sewer system to mitigate flooding from rain events. These upgrades to grey infrastructure are a necessary component of Port Chester's resilience to the impacts of climate change. Village-wide and watershed-scale approaches are necessary to address inland flooding from extreme rain events.

The Byram River and Long Island Sound have impaired water quality which prevents people from safely using these waterbodies for their designated purposes (see existing conditions section of this chapter). Impaired water quality is a result of stormwater runoff, direct discharges, and regional pollution. The Village should continue to take a multi-strategy approach working with partners and neighboring communities to improve water quality to meet or exceed federal standards.

1.1.1. *Consider strategies to minimize flood exposure in FEMA Flood Zones.*

Flooding along the Byram River and Long Island Sound is addressed in Section 181 of the Village Code. FEMA periodically updates the Flood Insurance Rate Maps (FIRMs) and the Village Code refers to the FIRMs to regulate development in the flood zone.

As sea level rise continues to impact the Village, Port Chester should periodically review the Flood Damage Prevention code to assess whether the FEMA maps and local regulations provide adequate protection on new development in the flood plain.

The Village should consider adopting the 500-year storm standard, which exceeds the current NYSDEC requirement, to protect against future severe weather events.

1.1.2. *Conduct a Village-wide flood mitigation study for extreme rain events.*

A Village-wide flood mitigation study for extreme rain events would include flood modeling to assess flood hot spots, major flow paths, and opportunities on publicly owned land to develop multi-functional flood mitigation measures that also provide improved civic space. Include a cost-benefit analysis to determine the most efficient integrated strategies (green and grey infrastructure) to mitigate flooding from extreme rain events.

Examples of multi-functional stormwater management infrastructure projects that provide community co-benefits

Saw Mill River Daylighting, Yonkers, NY



Source: Groundwork USA

Southwest Resiliency Park, Hoboken, NJ



Source: City of Hoboken, NJ

Washington and Stenton Rain Garden, Philadelphia, PA



Source: Philadelphia Water Department

Tasinge Plads, Copenhagen, DK



Source: Ramboll

Carlsberg City Park, Copenhagen, DK



Source: Ramboll

Remiseparken, Copenhagen, DK



Source: Ramboll

1.1.3. *Develop stormwater management regulations that are more stringent than New York State regulations to limit stormwater runoff from new development.*

Develop a Village-wide green infrastructure program to install nature-based solutions for stormwater management, reduce urban heat, improve open space, and expand the tree canopy. A systematic program for green infrastructure will help to guide Village departments and identify creative strategies to leverage the public right-of-way for nature-based solutions that address climate impacts and provide community co-benefits.

Nature Based Solutions (NBS) are sustainable strategies that protect, restore, and manage natural ecosystems to address challenges such as climate change, water security, biodiversity loss, and disaster risk, while delivering co-benefits like improved public health, cooling effects, and traffic safety.

1.1.4. Strengthen impervious surface coverage standards throughout the Village.

Impervious surfaces, structures or improvements that prevent water infiltration can exacerbate flooding conditions when stormwater infrastructure is inadequate. The Village regulations prescribe maximum impervious surface coverage limits for each character district. These range from 60% in the CD-3 Neighborhood District (a single-family residential district) to 100% coverage in downtown urban core districts. The CD-3.R-20, CD-3.R7, and CD-3.R5 single-family residential districts do not have regulations restricting impervious coverage, although they do have minimum usable open space requirements, pervious surfaces are not specified.

The Village should consider adding impervious surface coverage maximums to the CD-3.R-20, CD-3.R7, and CD-3.R5 districts, evaluate whether adjustments to reduce impervious surface maximums are feasible in other districts, and to require pervious surfaces where feasible. Existing pervious areas, including landscaping and open space should be preserved to the Village's best ability.

1.1.5. Identify opportunities for shoreline restoration, wetland protection, and public open space along the waterfront.

The Byram River waterfront can become an asset for public open space, flood mitigation, and biodiversity, but this will require a long-term vision and adaptive strategies depending on existing site conditions. Where feasible, the riverfront should be explored for installation of nature-based solutions such as living shorelines, restoration of the floodplain and wetlands, enhanced open space, and flood mitigation measures.

Wetlands provide important environmental benefits, including improved water quality, stormwater storage, flood mitigation, and wildlife habitat. In Port Chester, wetland areas are along the waterfront, where they are closely tied to both the Village's environmental resources and its long-term goals for waterfront access and resilience.

The Village should look for opportunities to protect, restore, and enhance these areas as waterfront properties are redeveloped. This could include zoning changes or other requirements that encourage private developers to preserve wetland areas, restore degraded shoreline conditions, provide natural buffers, incorporate living shoreline techniques, and create publicly accessible waterfront open space where appropriate. The Village could also consider conservation easements, public access easements, acquisition of key parcels, or a combination of these tools.

Where flood-prone properties present recurring risk or limited redevelopment potential, the Village should also explore voluntary buyout or acquisition programs. These programs could be paired with wetland restoration, flood storage, shoreline habitat creation, or new public open space. This approach would help reduce flood risk over time while also improving ecological function and expanding the Village's waterfront open space network.

Opportunity areas include extending the Port Chester Marina Park Downtown Waterfront Promenade around the Costco parking lot, transitioning the Port Chester side of the Byram River along North Main Street into a public open space (see Chapter II-1 and Chapter II-4), leveraging undeveloped open space below Columbus Park to create living shorelines and floodplain restoration, and identifying private property that is vacant, available for redevelopment or publicly owned property for enhancements.

The Village should consider incorporating the Waterfront Edge Design Guidelines (WEDG), or a similar tool, into its zoning and development regulations. Linking WEDG-based design standards to development incentives could encourage projects that enhance public access, ecological function, flood resilience, and overall waterfront quality.

1.1.6. Carry out policies set forth in the Village's updated Local Waterfront Revitalization Plan (LWRP).

The LWRP, first adopted in 1992 and most recently updated in 2023, serves as a long-term development guide for the protection of natural resources along the Village's waterfront, including the Byram River, Port Chester Harbor, and Long Island Sound. The Plan proposed a suite of coastal management policies, proposed land and water uses, and techniques for implementation of the plan.

1.1.7. Continue to upgrade stormwater infrastructure to address flooding and drainage into water bodies.

The Village has been proactively upgrading stormwater infrastructure to address flood-prone areas and separate sanitary and stormwater sewage systems. The Village will continue with its plans to disconnect the remaining cross-connections between the sanitary and stormwater sewer systems.

1.1.8. Partner with neighboring municipalities, Westchester County, and regional organizations to improve water quality.

While Port Chester is directly impacted by water quality issues in the Byram River, Port Chester Harbor, and Long Island Sound, it is not solely responsible for the clean-up of these resources. The Byram River and Long Island Sound follow the border of New York and Connecticut, making inter-agency cooperation necessary for improving water quality. Municipalities, including Greenwich Connecticut and shoreline communities in Westchester County, state agencies, including NYSDEC and Connecticut Department of Energy and Environmental Protection, and non-

profit organizations such as the Long Island Sound Partnership, Save the Sound, and the Nature Conservancy, and even federal agencies, including the U.S. Army Corps of Engineers and Environmental Protection Agency, play roles in improving regional policies and conditions of the Long Island Sound and integrated water bodies.

1.1.9. *Continue to participate in the Long Island Sound Watershed Intermunicipal Council (LISWIC).*

The Village has previously been a part of the Long Island Sound Watershed Intermunicipal Council (LISWIC) and should continue to participate in the council. The LISWIC works to protect the Long Island Sound watershed through regional coordination, public education, resilience initiatives, advocacy, and the sharing of best practices for stormwater management and environmental stewardship.

1.2. *Protect and expand the Village's tree canopy.*

Trees improve air quality, reduce urban heat, improve biodiversity, and beautify the Village. Development pressure, limited planting space, and the loss of mature trees to disease, storm damage, or construction may threaten the Village's canopy over time. The Village should pursue a proactive approach to canopy protection and expansion, including maintaining and enforcing tree preservation standards, prioritizing street tree and park plantings, and encouraging tree planting on private property, particularly in areas of the Village with the least existing coverage.

1.2.1. *Consider a Tree Ordinance to regulate tree removal and planting on private property.*

Currently, the Village has a provision in Section 345-405.R of the Village Code that restricts the removal of trees within 30 feet of a thoroughfare line or 50 feet of a single-family district (CD-3, CD-3.R20, CD-3.R7, CD-3.R5) or SD-PRD district boundary, which have a diameter of eight inches or more or trees required or shown on an approved site plan.

Most of the canopy loss that the Village has experienced in the past few decades has occurred in single family residential districts.

A Tree Preservation Ordinance would help maintain and enhance the remaining tree canopy on private property. The Ordinance would require a permit for removal of certain trees on private property; would set standards for tree replacement, including replacement tree size and appropriate native species; would define terms such as significant and specimen tree, with criteria and/or restrictions on removal; and would require tree planting and maintenance plans for new development that disturbs the Village's tree inventory.

1.2.2. *Identify potential locations for new street trees, especially in Downtown.*

Port Chester's downtown has a limited tree canopy. Improved tree canopy can reduce the urban heat island affect, improve the pedestrian experience, and promote local economic development. The Village should identify streets with rights-of-way that are large enough to accommodate new plantings.

1.2.3. *Continue to implement and evolve the municipal tree planting program.*

Free tree giveaway programs can help encourage property owners to plant trees. Tree giveaway programs can engage schools, residents, local religious institutions, and commercial properties to build the local tree canopy. In addition, the Village can provide educational materials on native plants, including relevant species, care instructions, and benefits provided.

1.2.4. *Improve landscaping requirements.*

The Village has landscaping requirements for development in the CD-3, R2F, CD-4, CD-4MU, CD-5, CD-5T, CD-5W, CD-6, SD-PRD, however, these are not always applicable and are often limited to planting shrubs around the perimeter or one tree per 50 feet of frontage. Section 345-405.R of the Village Code provides landscaping standards for private lots, including provisions for maintenance, planting types, and locations.

Establish clear design and maintenance standards for tree pits, including the use of protective hardware, grates, or low fencing, and provide guidelines for complementary sidewalk plantings such as raised containers and small planting beds. These measures will encourage the installation, long-term maintenance, and health of street trees and other landscaping, helping to enhance the public realm and urban resilience.

Landscaping requirements can help promote tree planting and tree preservation during the site plan review process. Recommendations concerning landscaping requirements will be further discussed in Chapter II-1.

1.3. *Increase biodiversity in the Village.*

Biodiversity, having a variety of native plants, animals and other organisms, helps the ecosystem function. Different species support the overall ecosystem through processes like pollination, nutrient cycling, pest control, improving air quality, and filtering water. Biodiversity contributes to resilience to diseases, invasive species, droughts, and extreme weather events. Urbanization, impervious surfaces, and the spread of invasive species all put pressure on the Village's ecosystems and reduce the diversity of habitats. The Village has the opportunity to increase plantings through incentives and updates to the Village Code.

1.3.1. *Adopt incentives to encourage nature-based solutions in new development.*

There is an opportunity to improve biodiversity by integrating natural features, such as pollinator and rain gardens, bioswales, and green roofs in new developments. Green roofs provide site-specific benefits, including better heat insulation, and community-wide benefits, including lower ambient heat and increased biodiversity.

1.3.2. *Expand biodiversity on Village-owned properties.*

The Village should continue to create and maintain pollinator and rain gardens and other interventions on municipal properties that promote biodiversity and improve stormwater management. The Village could also consider adopting Integrative Pest Management and Natural Lawns to reduce or eliminate its pesticide use on municipal properties. Pesticides can hurt pollinator populations, pollute surface and ground waters, and harm pets and other mammals.

1.3.3. *Clarify the Village Code to permit natural lawns.*

To integrate natural resource preservation and habitat restoration throughout Port Chester, the Village can clarify the Village's Property Maintenance law (Chapter 245) to encourage native garden design in lieu of full grass lawns. Natural lawns also reduce the need for pesticides and can be Integrative Pest Management strategies, including aeration and tilling and encouraging native predators. The Village should explore legislation to require removal of invasive species on private property.

1.4. *Become a more environmentally sustainable community.*

Community sustainability requires the Village to look beyond individual projects and consider how municipal operations, private development, and community behavior collectively impact the environment. This includes reducing energy consumption, encouraging renewable energy use, and promoting sustainable building practices. The Village should lead by example through its own municipal facilities and operations while also providing residents and businesses with the tools, incentives, and information needed to make more sustainable choices.

1.4.1. *Establish a vision, goals, benchmarks, and targets to guide the Village's sustainability initiatives.*

The Village should use the actions identified through the Climate Smart Communities (CSC) program as a framework for advancing sustainability and pursuing Bronze or Silver certification. As an initial step, the Village should prepare a Climate Action Plan that establishes ambitious, yet achievable greenhouse gas (GHG) emissions reduction targets aligned with the goals of New York's Climate Leadership and Community Protection Act (CLCPA), including a 60 percent reduction by 2040, and a 85 percent reduction by 2050. The Plan should also identify strategies to help private property owners reduce community-wide GHG emissions and establish a system to monitor and report progress toward achieving these targets.

1.4.2. *Create a long-term plan to transition the municipal fleet to low- and zero-emission vehicles (green fleet).*

The Village should consider transitioning its municipal vehicle fleet to more fuel-efficient, low-emission, and electric vehicles (EVs) as existing vehicles reach the end of their useful life. Rather than replacing the entire fleet at once, the Village should adopt a phased replacement strategy that aligns vehicle purchases with regular fleet retirement schedules and budget cycles.

1.4.3. *Expand Electric Vehicle (EV) infrastructure and require EV charging stations in all public and private parking lots and structures throughout the Village.*

The Village should support the transition to electric vehicles by expanding access to charging infrastructure through EV-ready parking requirements, public charging stations, and partnerships with property owners and charging providers. The Village should also prioritize equitable access by exploring curbside charging options and working with employers, condominiums, and rental properties to address charging barriers for residents without off-street parking.

1.4.4. *Incorporate Mandatory Green Building Standards into Development Regulations*

The Village should strengthen sustainability requirements for new development by incorporating green building standards into its zoning code and development review process.

Port Chester currently requires Site Plan Approval to provide a LEED checklist but does not require certification. Recent revisions to the New York State Environmental Quality Review Act (SEQRA) will result in fewer residential developments subject to environmental review. Therefore, local site plan review procedures will become more important for ensuring that green infrastructure and green building elements are included in new development.

There are different strategies that the Village could consider strengthening green building standards, including:

- For all new residential, commercial, mixed-use, and institutional developments in Port Chester, it will be encouraged or required to meet recognized green building standards (such as LEED Silver certification, Green Globes, ENERGY STAR, Enterprise Green Communities, or the NYSEERDA Zero Energy Ready Homes program) that promote energy efficiency, water conservation, indoor environmental quality, and sustainable construction practices.
- Establish a sustainability checklist or point-based scoring system that developers must complete as part of site plan review and incorporate into the Village Code. Award points or incentives for features such as renewable energy systems, electric vehicle charging infrastructure, green roofs, native landscaping, stormwater management improvements, and high-performance building envelopes.
- Adopt the NYStretch Energy Code (2020) to require enhanced energy efficiency for new construction.
- Update the Village Code to incentivize or require green building elements and retrofits such as solar panels, heat pumps, EV charging stations, and energy efficiency improvements (e.g., by streamlining permitting requirements).

1.4.5. *Explore community solar opportunities.*

The Village should explore opportunities to participate in or facilitate community solar projects that allow residents, businesses, and municipal facilities to benefit from renewable energy without installing solar panels on their own properties. Community solar programs can expand access to clean energy, reduce electricity costs, and support local sustainability and climate goals. Explore successful case studies such as White Plains and Brooklyn's Sunset Park neighborhood, where community-based solar initiatives have expanded renewable energy access and energy affordability.

Successful Solar Stories

White Plains, NY partnered with the New York Power Authority (NYPA) to advance a Community Solar Project that leverages municipal properties for solar installations, creating renewable energy opportunities for residents. The city was among the first municipalities in New York to adopt the Unified Solar Permit, streamlining the approval process for residential solar installations.

Sunset Park Solar in Brooklyn, NY is New York City's first community-led solar project, featuring a 685-kilowatt solar installation to be built on the rooftop of the Brooklyn Army Terminal. The project will enable renters, homeowners, and small businesses to access clean solar energy without rooftop installation costs, while generating revenue to support a community-governed resilience fund and deliver affordable, reliable renewable energy to the Sunset Park community.

1.4.6. *Explore municipal solar opportunities.*

Port Chester should expand the capacity for solar energy through installation of photovoltaics on municipal buildings, solar canopies over public (school district or municipal) parking areas or over bicycle parking near the train station, and solar-powered lighting or infrastructure on municipal properties. The Village should explore NYSEERDA's Model Solar Energy Local Law, which is a framework to evaluate and update local regulations, supporting the planning, installation, operation, maintenance, and decommissioning of solar energy systems that can align with local needs and priorities.

1.4.7. *Explore thermal energy networks (TENs) in Port Chester.*

The Village should explore ways to capture excess heat for reuse. A district-scale thermal network can capture low- to medium-temperature excess heat from the Village's large-scale bakeries and the water treatment plant, distributing it to nearby buildings, processes, and district heating systems, delivering energy savings, emissions reductions, and resilience benefits.

1.4.8. *Implement green building retrofits on municipal properties to reduce GHG emissions and reduce energy costs for the Village.*

Conduct Energy Audits for Village-owned buildings to identify cost-effective strategies to reduce energy costs.

1.4.9. *Explore community strategies to make Port Chester more sustainable.*

The Village should expand opportunities for residents and businesses to reduce energy use and transportation-related emissions through partnerships, education, and infrastructure investments, and working with County and State agencies to educate residents and property owners about available incentives through programs such as NYSERDA. The Village should also promote sustainable transportation by developing a Village-wide Complete Streets Program to improve walking, bicycling, and transit access, while expanding electric vehicle charging infrastructure through the installation of chargers in Village-owned parking lots and evaluating opportunities for on-street charging locations.

1.5. *Reduce heat risks and enhance community resilience to rising temperatures.*

Increasing temperatures and more frequent extreme heat events pose a growing risk to public health, particularly for vulnerable populations such as the elderly, young children, and those without reliable access to air conditioning. Dense development, dark paved surfaces, and limited tree canopy in the downtown area of Port Chester can make temperatures significantly higher than surrounding areas. Addressing this challenge requires a combination of strategies, including expanding tree canopy and green space, promoting cool and green roofs, incorporating reflective or permeable surfaces in public infrastructure, and ensuring residents have access to cooling resources during extreme heat events.

1.5.1. *Adapt the Village to higher temperatures and more prevalent heat waves.*

Conduct a village-wide heat mitigation study to create a plan for systematic heat mitigation. Solutions that emerge from such a study may include expanding the tree canopy, painting roofs white, providing shade and misting structures in the downtown, expanding cooling centers during extreme heat weather, and developing a multi-lingual communication/education campaign.

1.5.2. *Conduct a Climate Vulnerability and Risk Assessment.*

The Village should continue to evaluate the potential impacts of flooding, storm surge, sea level rise, and extreme heat, and incorporate climate risk considerations into major planning initiatives, including updates to the Comprehensive Plan, Hazard Mitigation Plan, and Capital Improvement Program. These efforts should prioritize social vulnerability and environmental justice to ensure that resilience investments equitably protect the residents and neighborhoods most vulnerable to the impacts of climate change.

1.5.3. *Strengthen emergency preparedness and response.*

The Village should strengthen emergency preparedness by ensuring that residents have access to safe, reliable resources before, during, and after emergencies. This includes maintaining cooling centers, identifying flood-safe community facilities,

equipping critical facilities with backup generators, and coordinating emergency planning and response efforts with Westchester County and neighboring municipalities. The Village should also provide multilingual public education and outreach materials on emergency preparedness, evacuation procedures, and resilience measures to ensure all residents have access to critical information before and during emergencies.

1.6. Continue to maintain and enhance sewer, water, and solid waste infrastructure.

Reliable systems for sewer, water, and solid waste are foundational to public health, environmental quality, and quality of life in Port Chester. Much of this infrastructure is aging and faces increasing pressure from development, population growth, and the impacts of climate change, including more intense storms and rising demand on water resources. Continued investment in maintaining, upgrading, and modernizing these systems is necessary to ensure they can reliably serve the community, prevent service disruptions, and support future growth in a sustainable manner.

1.6.1. Repair and maintain sewer infrastructure.

Continue to implement the 2022 Sanitary Sewer Upgrades Engineering Report to reduce inflow & infiltration problems.

1.6.2. Advocate for regular maintenance of water supply lines by Veolia.

1.6.3. Advocate to the County to upgrade the Port Chester Wastewater Treatment Plant (WWTP).

Port Chester WWTP emitted 51 metric tons (MT) of carbon dioxide equivalent (CO₂e) in 2019, according to the Westchester County Inventory of Government Operations Greenhouse Gas Emissions. The Westchester County Local Government Operations Climate Action Plan called for improvements at the Port Chester WWTP facility to help decrease the County's contributions to climate change.

The Port Chester facilities are in need of smaller more energy efficient turbo-blowers, which employ newer technologies and utilize less energy to deliver the required amount of air to biological treatment tanks. Port Chester WWTP also needs boiler upgrades to more efficient boilers when the current ones are at or near their expected useful life.

1.6.4. Responsibly manage solid waste.

The Village should continue to evaluate opportunities to improve the efficiency, cost-effectiveness, and long-term sustainability of its solid waste management system, including assessing the feasibility of privatizing solid waste collection as recommended in the 2012 Comprehensive Plan. The Village should also expand public education and outreach on proper waste disposal, recycling, and waste reduction practices to promote environmental stewardship and improve the effectiveness of the solid waste system.