Village of Croton-on-Hudson
Local Waterfront Revitalization Program

Draft
July 2015

Prepared for
Village of Croton-on-Hudson, New York

Prepared by:
LWRP Advisory Committee
with assistance from BFJ Planning

ACKNOWLEDGEMENTS

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New York, NY 10003

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SECTION I:
BOUNDARY DESCRIPTION

The Village of Croton-on-Hudson is located on the eastern side of the Hudson River, in the northwest corner of Westchester County, approximately 40 miles north of New York City (see Figure 1). The 10.9 square-mile village includes 4.8 square-miles of land and 6.1 square-miles of water. Croton-on-Hudson lies within the Town of Cortlandt. Surrounding municipalities are the Town of Cortlandt to the north and east, the Town of New Castle to the east, and the Town and Village of Ossining to the south. 4.8 square miles of the village are located on land and 6.1 square miles are located under water. The Hudson River forms the Village's western boundary with the Village of Haverstraw across the River in Rockland County, and Croton River serves as part of its eastern boundary. Together, the rivers constitute approximately 71,280 feet of shoreline which includes 18,500 feet along the Croton River to the Croton Bay.

The inland boundary of the Coastal Zone is the eastern and northern boundary of the Village. The New York State Department of State (DOS) established this Coastal Zone boundary, which includes the entire Village, when it submitted a statewide program for Federal approval. The Local Waterfront Revitalization Program (LWRP) considers the entire Village of Croton-on-Hudson to have a direct and significant relationship with both the Croton and Hudson Rivers (see Figure 2). In addition, the topography of the Village is such that inland areas contain primary viewsheds of the rivers and waterfront and provide an important visual identity of the Village with the Rivers. The LWRP boundary in this plan is the same boundary that was utilized in the Village's prior LWRP, which was adopted in 1992.

CROTON-ON-HUDSON LWRP

FIGURE 1: REGIONAL CONTEXT

CROTON-ON-HUDSON, NY

Source: Westchester GIS, USGS, ESRI

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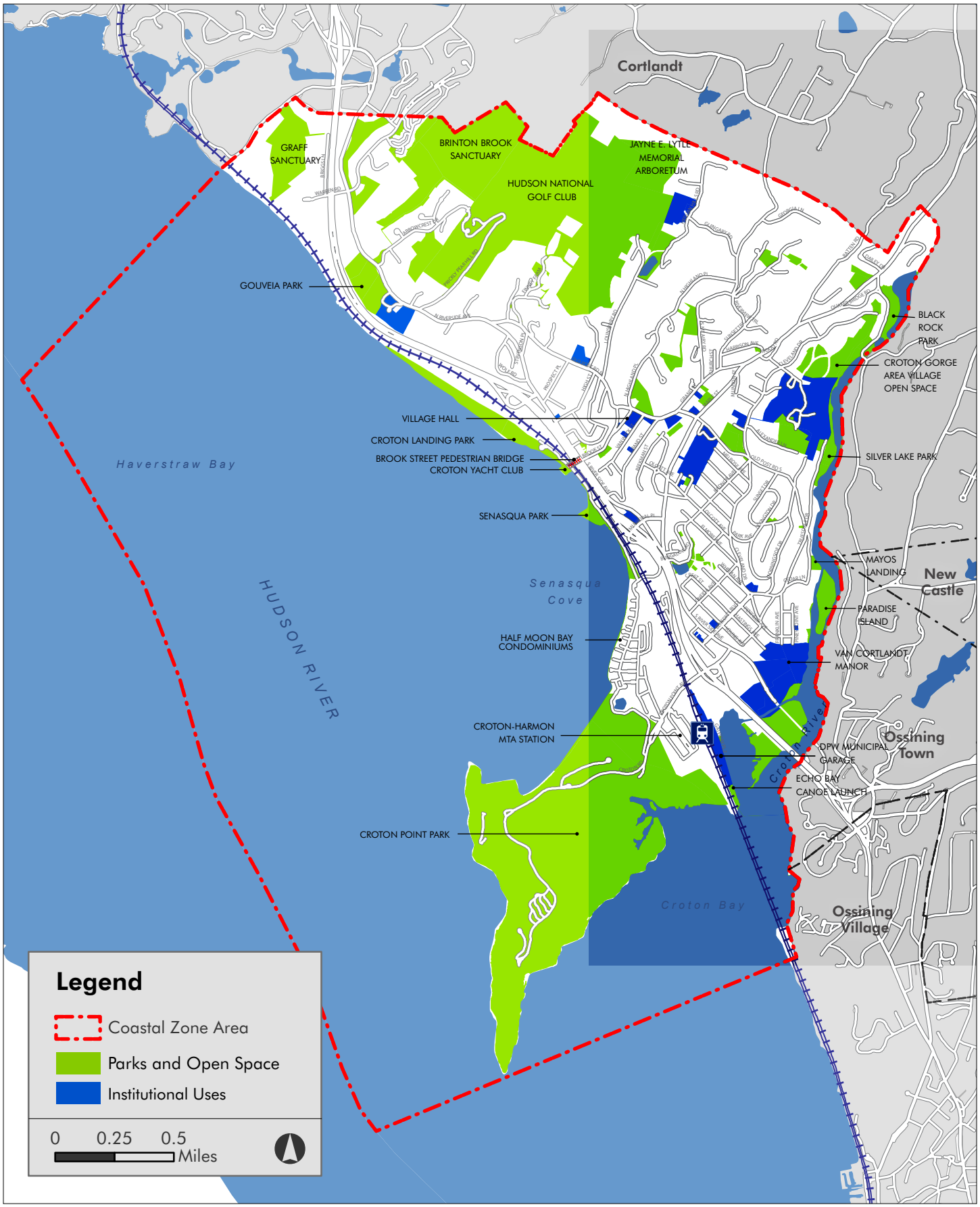

CROTON-ON-HUDSON LWRP

FIGURE 2: LWRP BOUNDARY

CROTON-ON-HUDSON, NY

Source: Esri, USGS

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SECTION II:
INVENTORY AND ANALYSIS

A. OVERVIEW

a. Local Waterfront Revitalization Program Background

Croton Bay

The Village adopted its initial Local Waterfront Revitalization Program (LWRP) in 1992 to guide development within its coastal area zone in a way that protects and preserves natural resources, and enhances public enjoyment of the waterfront. Croton-on-Hudson was one of the earliest municipalities to adopt a LWRP in Westchester County. Since completing its LWRP, the Village has worked to advance its implementation in many ways. The Village followed LWRP guidelines to increase accessibility to the Hudson River and Croton River, by acquiring properties and easements along its shoreline, improving public access and adding three recreational amenities to these areas. There have been many changes to the zoning and environmental laws intended to provide increased open space and waterfront access, and improved protections for natural resources. The following projects have substantially progressed or been completed since the 1992 LWRP was adopted:[1]

Croton Gorge Walking Trail: Village completed this trail along the Croton River from Silver Lake Park to Black Rock Park. A portion of the Croton Gorge land which includes the trail was rezoned PRE-1, in order to maintain the area for passive open space.

Silver Lake Park: Improvements include the reconstruction of stairs, the restoration of a picnic area and the establishment of a community garden. The Village also funded rehabilitation of the Silver Lake Dam and annual maintenance of the swimming beach. Landscaping plans that will enhance the appearance of the park and help with erosion control have been completed.

Black Rock Park: There have been some improvements at Black Rock Park such as the demolition of deteriorating structures and general landscaping and maintenance of the area. An area of the park has been designated as a dog park available to Village residents.

[1] LWRP Monitoring Report prepared by NYS DOS, December 2012

Croton Landing Park: In 2005, the Village began the construction of Croton Landing Park and a new road (Elliott Way). The project extended the Westchester County RiverWalk trail one mile north. In addition to the riverfront trail, Croton Landing Park has picnic areas, a playing field, benches, public restroom facilities, parking and a 9/11 memorial.

Echo Canoe Launch: Improvements to the Croton River/Croton Bay Boat Ramp (the Echo Boat Launch) and Village lands south of the Village parking areas at the Croton-Harmon Station were made to improve access to the Croton River for small boats (i.e. canoes, kayaks and other small water crafts). A parking area has been established with appropriate signage installed. Kayak rentals and lessons are available at the site on a seasonal basis.

Senasqua Park: Improvements to the park include the renovation of the bathhouse/public restrooms, replacement of playground equipment, repairs and upgrades to the drainage system, a reconfiguring of the parking lot and repairs and improvements to the boat ramp. Additional roadway improvements including a RiverWalk pathway are being planned between Senasqua Park and the Croton Yacht Club.

Traffic and Roadway Conditions: The Village is in the design stage of a project to construct vehicle, pedestrian and bicycle infrastructure along Croton Point Avenue from Veteran's Plaza, at the Croton-Harmon Train Station, to South Riverside Avenue, and then north on South Riverside Avenue to the intersection with Benedict Boulevard. Funding is from a federal Transportation Enhancement grant, Westchester County and the Village's capital project fund.

Elliott Way: The Village is evaluating designs for a project to provide pedestrian accommodations along Elliott Way between Senasqua Park and the Croton Yacht Club. The proposed elevated sidewalk will fill in a missing gap in the RiverWalk trail. The project also includes shore stabilization measures and additional improvements to the road, drainage and extension of the water main.

Stormwater Management: An inventory of the Village's stormwater collection system and outfalls has been completed. The Village has a Stormwater Management Program, implemented under the Environmental Protection Agency and New York State Department of Environmental Conservation (DEC) storm water regulations.

The 1992 LWRP also helped the Village secure a number of grants to pursue some of the initiatives outlined in the Program. A New York State Department of State (NYS DOS) Environment Protection Fund (EPF) LWRP grant award in 1996 allowed the Village to develop a vision and feasibility study for a newly acquired Hudson River waterfront parcel, which would ultimately become Croton Landing Park. An EPF

LWRP grant in 1998 allowed the Village to work in partnership with Historic River Towns of Westchester to develop a regional signage system for the County's Hudson River communities.

The LWRP has also served the purpose of coordinating local, State and Federal agency actions along the Village's waterfronts. In a major Federal consistency decision, the Village's LWRP was effective in contributing to a court ruling affirming the decision of the Secretary of the U.S. Department of Commerce upholding a DOS determination that Millennium Pipeline Company's proposed energy pipeline project did not comply with the Coastal Zone Management Act. The Federal Court found that alternative routes existed that would avoid harm to natural resources within the Village, including Haverstraw Bay and other protected wetlands.

In 2003, the Village adopted a new Comprehensive Plan, which updated the previous Master Plan from 1977. The updated Comprehensive Plan reflects changes in the Village since 1977, and was written to be consistent with the LWRP policies. In addition to the Comprehensive Plan, in 2007, the Village teamed with neighboring communities and Westchester County to prepare the Indian Brook-Croton Gorge Watershed Conservation Action Plan. This watershed plan was developed to protect and restore the natural resources in the Croton Bay watershed, most significantly the Croton River, Indian Brook Reservoir, existing wetlands and groundwater drinking sources and improving public access to the area.

The Village's long-term waterfront vision is now outlined in the 2003 Comprehensive Plan, the Indian Brook-Croton Gorge Watershed Conservation Action Plan and in amendments made to zoning and other local laws. This updated LWRP reflects ongoing efforts as well as new initiatives or proposed projects. Once adopted, it will serve as a strategic plan for Croton-on-Hudson's coastal zone area.

b. Croton-on-Hudson History

The Village of Croton-on-Hudson has a long and colorful history that is closely tied in with the waterfront. Most of the Village was built upon hills that slope naturally toward the Hudson and Croton Rivers, which form most of the Village's boundary; this has the effect of orienting the entire Village toward the waterfront. Many buildings situated on the streets and hills in the Village face either the Croton River or the Hudson River in order to take advantage of the dramatic views and access to the waterfront afforded by Croton-on-Hudson's unique location. The scenic views of the two rivers are enhanced by the parks, extensive wooded open space, and conservation areas throughout the Village.

The Hudson River, which forms Croton-on-Hudson's western boundary, is one of the defining features of the Village. The river was the impetus for its earliest settlements and industry, attracting Dutch traders in the 1600s and later supporting several industries, including shipping, ship building and brick manufacturing. In 1846, the tracks were laid for the Hudson River railroad line, and in the early 1900s, an engine terminal was constructed close to Croton Point. The construction of the railroad designated a large portion of waterfront property for utility and transportation uses, creating a barrier between the waterfront and the upland areas of the Village. This barrier was reinforced with the construction of north-south U.S. Route 9 in the 1960s and the closing of the Croton North railroad station in the 1960s.

Today, the railroad continues to have a significant presence adjacent to the waterfront, but the other waterfront industries have disappeared. Three parks – Westchester County's Croton Point Park at the southern end of Croton-on-Hudson, and the Village-owned Senasqua Park and Croton Landing Park – draw residents to the waterfront for recreational activities. In addition, several recent projects have created new residential and recreational uses along the waterfront, which has reconnected this area with the rest of the Village. These include the Half Moon Bay condominiums, which have a publicly accessible waterfront promenade and the Brook Street pedestrian bridge.

Like the railroad, the construction of the Croton Dam and the Croton Aqueduct played an important role in shaping the Village's development. Construction began on the original Croton Dam in 1837 after several water crises in New York City made clear the need for a clean and reliable water supply for the growing city. The New Croton Dam, built of stone, was completed in 1907, which created the New Croton Reservoir. Excess water from the reservoir leaves the spillway at the New Croton Dam into the Croton River, which recharges the aquifer in the Croton River Valley, which is the primary source of drinking water for the Village.

Most of Croton-on-Hudson's housing stock was built before 1969. Two of the oldest residential neighborhoods in the Village were originally separate communities: Mt. Airy and Harmon. Mount Airy was a Quaker enclave into the 1800s but evolved in the early 1920s into a summer colony that attracted many Greenwich Village artists and writers. Harmon, initially established in the early 20th century as an enclave for artists and writers, became home to railroad workers and commuters to New York City in the 1920s due to its proximity to the railroad station and railroad yards. Harmon was largely built out by the late 1940s in the post-World War II housing boom. Both communities were incorporated into the Village in 1925.

Following World War II, the Village's importance as a railroad town diminished as diesel replaced steam engines and long-distance passenger service declined. During this time, the Village transitioned into more of a commuter suburb, with many residents traveling to workplaces in New York City and other employment centers outside of Croton-on-Hudson.

In the past 20 years, new housing has been developed in the northern part of the and along the Hudson waterfront north of Croton Point Park. All of the subdivisions in the northern part of the Village have been single-family homes, while along the waterfront the Half Moon Bay condominiums were designed as a cluster subdivision. This recent development has increased the number of residential housing units resulting in population growth. As can be seen in Table 1, Croton-on-Hudson's population was at an all-time high of 8,070 persons in 2010. The population growth has been steady since 1980, when the Village's population was 6,889.

Since 2000, Croton-on-Hudson's population growth has been slightly less than the Town of Cortlandt but greater than that of Westchester County. Many factors influence the growth rate, including the rate of migration to the Village, an increase in housing starts and the birth rate.

Table 1: Croton-on-Hudson Population Fluctuations, 1980-2010

Year	Population	% Change
1980	6,889	
1990	7,018	1.9
2000	7,606	8.4
2010	8,070	6.1

Source: U.S. Census

Table 2: Population Growth, 2000 - 2010

Location	Total Population 2000	2010	% Change
Croton-on Hudson	7,606	8,070	6.1
Town of Cortlandt	38,467	41,592	8.1
Westchester County	923,459	949,113	2.8

Source: U.S. Census

B. EXISTING LAND AND WATER USES

a. Planning Areas

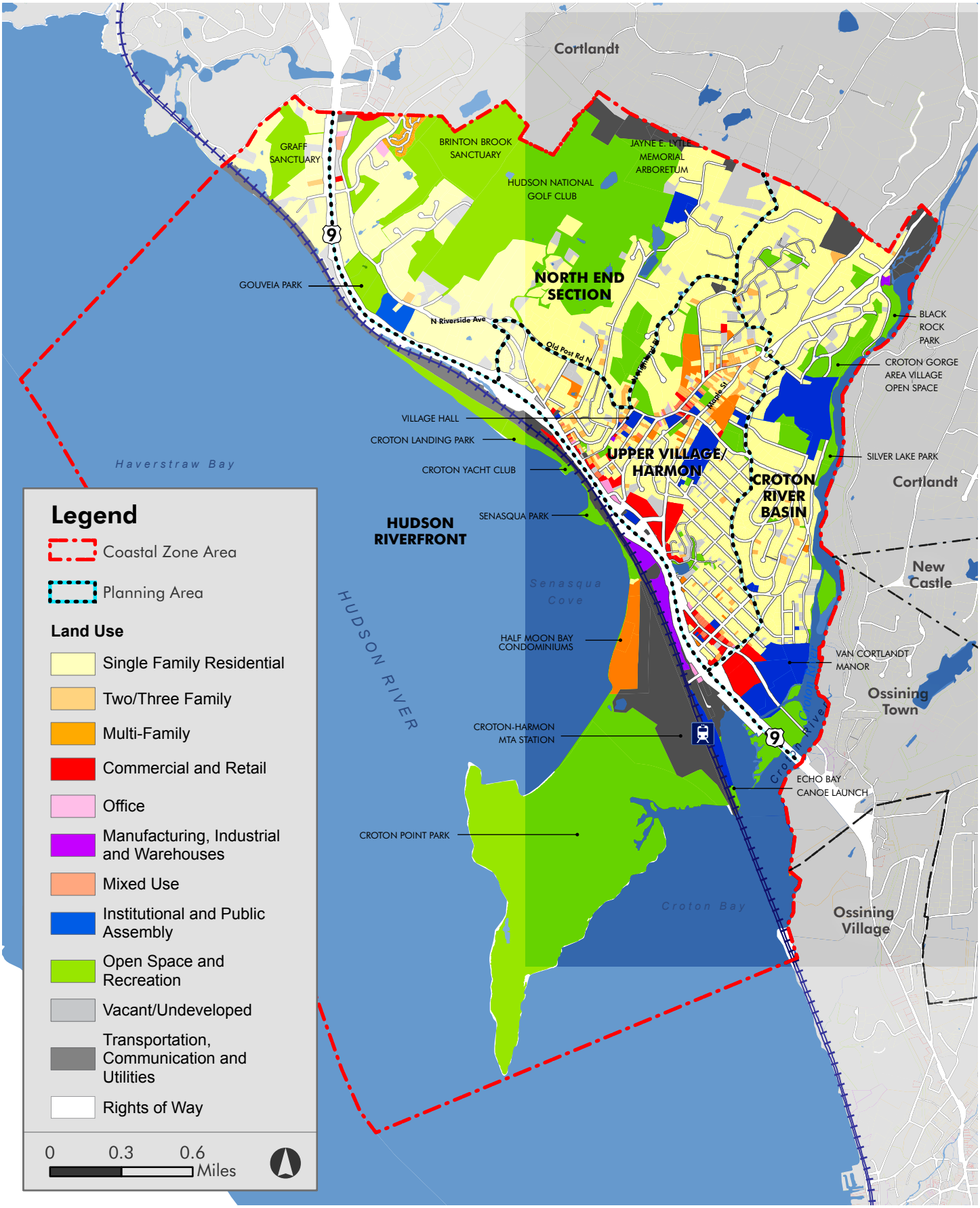
For purposes of best describing the existing land and water uses, the Croton-on-Hudson coastal zone area has been divided into four planning areas: the Hudson Riverfront, Upper Village/Harmon, Croton River Basin, and North End areas. Each planning area has one or more particular characteristics which give it a special identity and, to a large extent, define its current land and water use. Land uses for these planning areas are shown in Figure 3.

The Hudson Riverfront Planning Area

Croton Landing Park

This planning area is bounded by Route 9 to the north and east (see Figure 3) and includes the underwater lands along the Hudson River. As seen in the land use map, the predominant land uses are open space/recreation and transportation. Croton Point Park, a Westchester County- park, is the largest recreational site in the Village. A substantial portion of the land was the site of a landfill, which has been capped and restored to green space. Its location at a peninsula on the Hudson River allows for views for miles to the north and south. Also along this planning area are Senasqua Park and Croton Landing Park, two Village-owned parks, and the Croton Yacht Club. The 40 acre Brinton Brook Sanctuary, off of Furnace Dock Road is owned by the Audubon Society and is accessible for public recreational use. The recreational uses along the Hudson Riverfront/Senasqua Cove are highlighted in the aerial in Figure 4.

As shown in the land use map, a significant portion of the Hudson Riverfront planning area is industrial- or transportation-related. The 100-acre Croton-Harmon Metro-North Railroad Station and Harmon Yards is located adjacent to the Hudson River, just east of Croton Point Park. The station is the main switching location for north/south Metro-North and Amtrak trains running along the Hudson River and it is also the northern limit of electrification. The complex includes switching tracks, warehouses and maintenance facilities where Metro-North trains are sent for repair. The Village owns and operates the commuter parking facility adjacent to the station.



CROTON-ON-HUDSON LWRP

FIGURE 3: LAND USE AND PLANNING AREAS

CROTON-ON-HUDSON, NY

Source: Westchester GIS

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1: Croton-on-Hudson 9/11 Remembrance Memorial


2: Croton Landing Park pathway


3: Croton Landing Park small boat launch


4: Small boat launch at Croton Yacht Club


5: Croton Yacht Club


6: View south from pedestrian bridge


7: Senasqua Park


7: Sailing school at Senasqua Park


8: Pedestrian pathway


8: Senasqua Tunnel (pedestrian underpass to Municipal Pl.)


9: Public parking next to Half Moon Bay Marina


9: Pathway to Half Moon Bay Marina and Croton Point Park

FIGURE 4: RECREATIONAL USES ALONG HUDSON RIVER

Source: BFJ Planning, Google Earth

Due to the Croton-Harmon Station's location adjacent to a major interchange with Route 9, the area represents a highly visible segment of the community. The station, with its expansive parking and railyard facilities, is prominent visually on the skyline. It is the first sight to be seen by people entering the Village from the south along Route 9. Light pollution from the complex's light poles also directly affect views of the Hudson River and Croton Bay waterfronts in the evening.

Residential uses in the Hudson Riverfront area are found in two different areas. The Half Moon Bay condominium complex is situated on the waterfront just west of the train station and consists of 282 attached townhouses in 20 buildings with two club houses and a 173-slip marina. The Half Moon Bay Promenade is a path along the water's edge that connects Croton Point Park to Elliott Way.

Half Moon Bay Condominiums

There are few commercial buildings in the Hudson Riverfront area. On Croton Point Avenue, at the entrance to the railroad station, three buildings are used for retail and office purposes. Near the Senasqua Road exit from Route 9, the former Croton North Railroad Station, which is on Westchester County's National Register of Historic Places, is now privately owned and used for commercial purposes. There is also an industrial area just north of the Half Moon Bay condominiums.

The Upper Village/Harmon Planning Area

The Upper Village/Harmon planning area has evolved into the focal point of most civic activities. Almost all of Croton's village-scaled residences, schools, offices, commercial establishments, religious buildings and playgrounds are in this area, as are almost all of the public buildings. These consist of the Municipal Building, the Croton Free Library, firehouses, two public schools and the Bethel cemetery.

The majority of the commercial establishments within the Village can be found in three identifiable commercial areas within this planning area. The principal commercial area runs along South Riverside Avenue between Municipal Place and Croton Point Avenue. This commercial stretch has a variety of establishments including retail stores, offices, two banks, six gas stations, a car dealerships, a 10-store shopping center with a Shop-Rite anchor and several restaurants. In addition, there are two commercial enterprises on North Riverside Avenue that rely on being close to the waterfront - a boat dealership and repair shop and a small bait and tackle shop.

The area known as the Upper Village is the second-largest commercial area. The boundaries of the Upper Village extend roughly from the intersection of Van Wyck Street

and Old Post Road North to Grand Street and then to Route 129 (Maple Avenue). Old Post Road North/South, where it forms an intersection with Grand Street, is also part of the Upper Village commercial area. Retail stores, professional offices and restaurants are predominant in this area.

Most of the homes in this area are single-family residences situated on small lots of between 5,000 and 8,000 square feet. Although there are very few multifamily residences in Croton-on-Hudson, three of the largest exist within the Upper Village area - Bari Manor off Old Post Road South, Van Wyck Apartments on Grand Street, and Symphony Knoll/Mt. Airy Woods off of South Mount Airy Road. Bari Manor consists of three two-story buildings containing 82 rental apartments. Van Wyck Towers, built in 1929, is a six-story building with 35 rental apartments. Symphony Knoll/Mt. Airy Woods provide affordable 23 affordable housing units in four buildings. There are also several other multifamily residences scattered about the Center Village area, each containing from four to 10 units.

The Croton River Basin Planning Area

The Croton River Basin Planning Area encompasses the land that directly relates to the second major waterway in the Coastal Zone - the Croton River. From its inception at the Croton Dam to its confluence with the Hudson River at Croton Bay, the beauty of the River, with its wooded shoreline, fast-moving water and outcroppings of rock, provides unlimited opportunities for enjoyment by those residents who walk along its edge. Residents living along Truesdale, Morningside and Nordica Drives, bordering the Croton River, benefit from their views of its natural beauty. A number of parks can be found along the Croton River including Silver Lake Park; Paradise Island; Black Rock Park; Mayo's Landing and Van Cortlandt Manor, a private historical site. Black Rock Park is also the site of the Village well heads, the source of Croton's water supply. The recreational uses along Croton River are highlighted in the aerial in Figure 5.

The Village-owned beach and picnic area known as Silver Lake is a very popular swimming area for Village residents, especially in the late spring and early summer months when the Croton River is high and fast running. Often, by late July, however, the water level becomes too low for swimming. This swimming and picnic area is close to the main residential areas of the Village; and although at the base of the gorge the terrain is very steep, it is accessible to many residents. There is a trail that follows the edge of the River from Silver Lake to the northeast. Boat access to Silver Lake is precluded by strong water currents.

CROTON-ON-HUDSON LWRP

FIGURE 5: RECREATIONAL USES ALONG CROTON RIVER

CROTON-ON-HUDSON, NY

Source: BFJ Planning, Bing Maps

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The Carrie E. Tompkins Elementary School, owned by the Croton-Harmon School District, is another significant land use in the area. The school is buffered from the surrounding neighborhood by the Croton Gorge Area open space to the north and Firemans Park to the south.

As can be seen in the land use map, the majority of the land in this area is single-family residential. In the northeast portion of this area, large parcels of 1 acre or more can be found on Georgia Lane and along Mt. Airy Road between Grand Street and the Village boundary line. An area known as the "Trails," a hilly area with narrow roads that is bounded by Mt. Airy Road, Grand Street and Batten Road, has an unusual mixture of homes new and old, large and small, on varying size plots. Until 1931, the Trails were not part of the Village; this was originally a summer community and was independently managed by a private homeowners' association, the Mt. Airy Associates. The variety of homes and lot sizes in this area is partially a reflection of its independent past.

The North End Planning Area

The North End planning area of the Croton-on-Hudson Coastal Zone area is generally the area in the Village west of the Upper Village and north of Route 9. The area contains most of the undeveloped land in Croton-on-Hudson. It is generally very steep, is less densely populated and has only one major road (Route 9A-Albany Post Road and Old Post Road North) bisecting it in a north-south direction. Unlike the Hudson Riverfront and the Croton River Basin planning areas, the North End does not border directly on a major water body. In spite of this, its hilly topography in conjunction with generally large lot sizes and substantial open spaces, give it excellent visual access to the Hudson River.

Because there are few crossroads in the North End, residences tend to be on large plots of land adjacent to the main north-south road. Most are single-family residences. Along Route 9A, many of these residences are not visible as long driveways lead either west towards the Hudson or east, up into the open hilly spaces. Two long private roads in the North End, Prickly Pear Hill Road and Finney Farm Road, extend eastward into the hills from Albany Post Road and Old Post Road North. These steep roads provide access to a number of single-family residences which generally are large and secluded. A large portion of the residential properties in this portion of the Village were recently rezoned to a new RA-60 zone which has a minimum lot size of 60,000 sq. feet (1.5 acres).

Three high-density residential sites are also located in the North End. These sites are in contrast to the low-density pattern that generally prevails in the area. The Skyview Nursing Home, provides a residence for the elderly in need of nursing care. Scenic Ridge is a community consisting of 17 groups of attached single family dwelling units in groups of four to seven, totaling 97 units in all. Adjacent to Scenic Ridge is Amberlands, a large

apartment complex (more than 30 buildings of three stories with 20+ apartments each) which spans into the Town of Cortlandt.

The Brinton Brook Preserve, owned by the National Audubon Society, provides passive recreation opportunities through use of its trails. Spectacular views of the Hudson may be seen from this nature preserve high on the hills on the east side of Route 9A. There are also trails in use at the top of Prickly Pear Hill, although these trails are on private property. Hudson National Golf Course is another recreational amenity in the North End. The 260-acre private club opened in 1996 and is sited at one of the highest elevation points in Westchester County.

A tract of land in the North End that runs along the Village boundary line with the Town of Cortlandt is owned by Consolidated Edison. High tension lines from the Indian Point Nuclear Power plant run through this area, and no development plans are being considered for this property at this time.

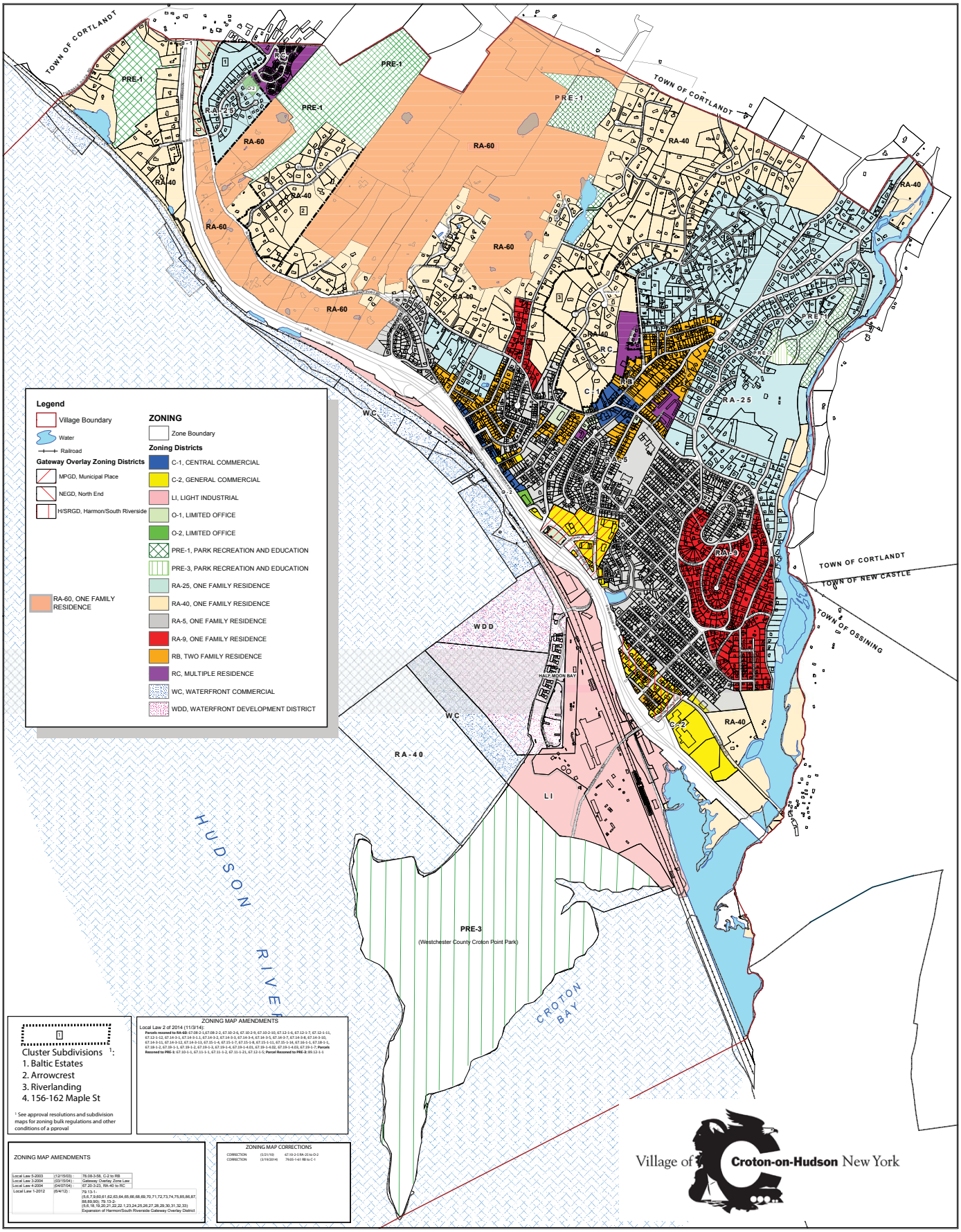
C. ZONING DISTRICTS

The Village covers a land area of 4.9 square miles, most of it zoned for residential use. The predominant non-residential uses consist of open space and park areas; commercial districts in the Upper Village and along North and South Riverside Avenues and Maple Street; and industrial/transportation areas associated with the Metro-North facilities, Several small office districts are in the Upper Village, North Riverside, the Municipal Place area, and at the north end of the Village. A description of the Village's zoning districts is summarized below and shown in Figure 6.

Residential Uses. Croton-on-Hudson's residential zoning reflects its historical pattern of development, which is typical of many villages: the highest density neighborhoods (those with more houses per acre of land) are situated closer to the commercial centers, with the density decreasing farther away from these centers. The neighborhoods situated closest to the Village's four commercial centers – Harmon, the Upper Village, North Riverside and the Municipal Place area – consist primarily of single family homes built on 5,000 and 9,375 square foot lots. These neighborhoods also contain the majority of the two- and multi-family residences in the Village. Moving away from the commercial centers, the lot sizes increase to 25,000 and 40,000 square foot lots.

Single Family Housing. Croton-on-Hudson has four single-family residential zoning districts: RA-5, RA-9, RA-25, RA-40 and RA-60. The districts range in density, permitting from homes built on 1/8th acre lots (RA-5) to homes on 1.5 acre lots (RA-60). The northern area of the Village is zoned primarily for RA-40 lots, with the exception of a small RA-25 district and an office district in the northwest corner of the Village.

Multi-family Residential. The Village has two zoning districts permitting multi-family residential: RB (two-family residences) and RC (multi-family residences). These districts are limited to the Upper Village and North Riverside Avenue. The WD district along the Hudson River between Croton Point and Senasqua Park also permits multi-family development. The Half Moon Bay condominium development is located in that area.



CROTON-ON-HUDSON LWRP

FIGURE 6: ZONING DISTRICTS

CROTON-ON-HUDSON, NY

Source: Croton-on-Hudson

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Commercial Centers. The Village has four commercial centers: the Upper Village, North Riverside, the Municipal Place area, and the South Riverside/Harmon shopping. These districts are zoned C-1 and C-2, for central commercial and general commercial uses respectively. C-1 commercial districts are found in the older commercial areas such as the Upper Village and North Riverside. This district allow for downtown uses such as retail, service oriented, offices, restaurants, dry cleaners, and theaters. C-2 districts allow -C1 uses along with the following uses by special permit: auto-related uses (service stations, gas stations, automobile sales); social clubs; animal hospitals; hotels; utility structures and residential uses on upper floors.

Office Districts. Most of the office space in Croton-on-Hudson consists of small-scale offices and home office use. The Village has five small office districts, found in the North End area of the Village (zoned O-1); North Riverside (O-2); the Municipal Place area (O-1); Route 9A/Grand Street (O-1); and South Riverside/Municipal Place (O-1). These office districts comprise approximately 0.5% of Village land. O-1 districts allow for single- and two-family residences, offices and day care centers. O-2 districts do not permit residential but allow for offices and some manufacturing uses.

Waterfront Commercial (WC) zoning was created to enhance waterfront areas for the purposes of recreation, conservation and development of aquatic resources, and commercial uses where appropriate. The Village's Hudson riverfront area, from the northwestern tip of the Village to the area just south of Senasqua Park is zoned WC. The land uses in this district include Senasqua Park, the Croton Yacht Club and Croton Landing Waterfront Park. The requirements of this zoning include a provision for public waterfront access.

Waterfront Development (WD) zoning is a riverfront development district that was created to facilitate the development of property along the Hudson River in a manner consistent with the Village's Master Plan (2003), Local Waterfront Revitalization Program (1992) and the Greenway Vision Plan. The WD district has provisions expand the use and public accessibility for purposes of recreation, leisure and year-round residence. Permitted uses include recreational facilities and residential uses. Uses permitted by special permits include restaurants, marinas, ferries and cultural uses such as theaters, bandshells and museums. WD zoning requires larger tracts of land to be developed as a single, unified and comprehensive project.

Parks Recreation and Education (PRE) districts were created in 1988 to preserve natural resources and other community resources. The district allows for public parks, recreational activities, schools and other educational facilities, nature preserves, bird and wildlife sanctuaries, and other similar uses. Several natural areas, including the Jane E. Lytle Arboretum, Kaplan's Pond, Croton Point Park and the Village owned land in the Croton Gorge have been recently designated PRE districts.

Industrial and Rail Transportation Uses. Industrial and rail transportation uses located in the L-I light industrial zone located along the Hudson River waterfront. In this district, the Croton Harmon railroad complex occupies approximately 100 acres, dominating the central area of the Hudson River Waterfront planning area. There is also an industrial area along Half Moon Bay Drive.

Gateway Districts. In addition to the general zoning districts there are "gateway districts" identified for several Croton-on-Hudson commercial areas. Gateways mark a sense of arrival, and connection to a community, and establish an image for the community. The three gateway districts are:

- Harmon/South Riverside (H/SRGD): The area is an important link to the train station via Croton Point Avenue and to the Harmon neighborhood. It also joins historic Van Cortlandt Manor to the south.
- Municipal Place (MPGD): The Municipal Place Shopping Area is an important entrance to the Village from Route 9. It connects to the Upper Village via Maple Street and to the surrounding neighborhoods.
- North End (NEGD): This area marks the entrance to the Village from the north along Routes 9 and 9A.

The primary purposes of designating these as gateway areas are to upgrade the image and function of commercial areas, define the entry into the Village, strengthen the overall visual identity of the Village, promote economic development and improve linkages to adjacent residential neighborhoods. The gateway districts includes special use, area and bulk regulations, and design regulations.

In the Harmon/South Riverside Gateway District area, mixed use buildings (i.e. retail on ground floor with residential units on upper floors) are allowed by special permit. Special area and bulk regulations and design guidelines apply specifically to mixed use buildings in this area.

D. WATER-DEPENDENT AND WATER-ENHANCED USES

Water-Dependent Uses

According to the Department of State (DOS), water-dependent uses refer to activities which can only be conducted on, in, over or adjacent to a water body because they require direct access to that water body and involve the use of the water as an integral part of the activity. Water-dependent uses in the waterfront area include the following:

Croton Point Park. The park offers a range of amenities including camping, fishing, beach/swimming areas, hiking, picnicking and play areas (see parks and recreation section). Road access is provided by Croton Point Avenue, which connects to Routes 9 and 9A.

Senasqua Park & the Croton Sailing School. Senasqua Park is a 4.5-acre Village-owned park used for boating, picnicking, and other civic activities. The boat marina adjacent to Senasqua Park, operates from May to mid-October. Sailing lessons are offered by the Croton Sailing School, a privately-owned businesses which operates on Village-owned land.

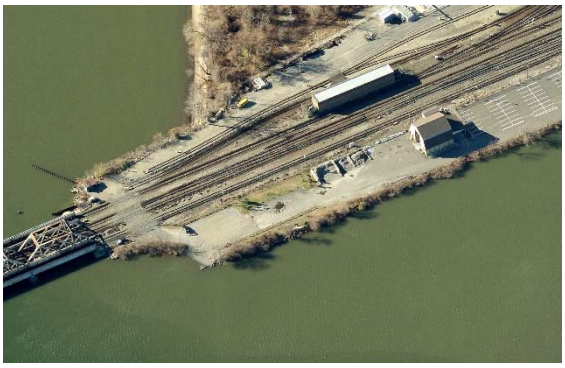
Senasqua Park

Croton Yacht Club. The Croton Yacht Club includes a modular building, a parking area, and several floating docks with slips for boats. The Village-owned site is leased to the Croton Yacht Club through the year 2034. As part of the lease, the Club has agreed to assist the Village by periodically removing sediment at the mouth of the Brook Street drainage culvert, performing seasonal maintenance work at Senasqua Boat Basin and providing docking for the Village's Police or Fire Department. The dock at the Club is available to pedestrians for recreation and fishing use, although locked gates and signs inhibit public use.

Croton Yacht Club

Echo Canoe Launch. Located behind the Village garage and salt shed (adjacent to the Croton Harmon Station Parking Area), this area provides a launching area primarily for canoes and kayaks and other small boats, as well as fishing and passive recreation. Kayak rentals and lessons are available at the site on a seasonal basis. Recent improvements to the boat launch, and the surrounding village owned

parking area the surrounding Village-owned land have been made to improve accessibility and use.



Echoe Canoe Launch

Silver Lake Park

Silver Lake: Located alongside the Croton River at the end of Truesdale Drive, this facility is open to village residents and their guests for swimming during the summer season. Permits or daily fees are required.

Paradise Island: This undeveloped 22-acre island in the Croton River is best accessed by canoe or kayak and is only available for passive recreation purposes.

Croton Landing Park: The park offers Hudson River views and a handicapped accessible path along the waterfront. The pedestrian bridge provides access to the park from the bottom of Brook Street on North Riverside Avenue. A boat ramp for small watercrafts is located in the parking lot. Creation of the park extended the Westchester County Riverwalk Trail one mile to the north from Senasqua Park. In addition to the riverfront trail, Croton Landing Park has picnic areas, a playing field, benches, public restroom facilities, parking and a 9/11 memorial.

Half Moon Bay Marina: The Half Moon Bay Marina adjacent to the Half Moon Bay Condominium has 173 boat slips and can accommodate boats up to 100-feet long. Boat slips are available for rent by the season, month or day when available. The entire marina is protected by a wave wall.

Black Rock Park: Located on Quaker Bridge Road along the Croton River, the park offers access to the Croton River for fishing and picnic space.

Water-Enhanced Uses

A water-enhanced use is defined by the DOS as one with no critical dependence on the waterfront, but whose profitability of use and enjoyment level of the users are increased significantly because the use is adjacent to or has visual access to the waterfront. Based on this definition, there are a number of water-enhanced uses in the

LWRP area in the areas adjacent to the Hudson and Croton Rivers. Because of Croton-on-Hudson's topography, many residences in the LWRP area have excellent views of one of the rivers.

The Half Moon Bay condominiums, located adjacent to the Half Moon Bay Marina, is a condominium that is enhanced by its location along the Hudson River. The development consists of 337 residential units in 20 buildings plus a clubhouse, a common building, and pedestrian trails. A public waterfront esplanade, restricted to Croton-on-Hudson residents, stretches the length of the development along the riverfront. Public parking is available at the gatehouse.

The Pierre Van Cortlandt Manor, owned and operated by Historic Hudson Valley (formerly Sleepy Hollow Restorations) is a water-enhanced use. This property fronts directly on the Croton River and is the site of the historic Pierre Van Cortlandt manor house dating from the time of Dutch control over the Hudson Valley. Tours are conducted of the house and grounds by Historic Hudson Valley. Picnicking spots are available.

There are also two commercial enterprises on North Riverside Avenue that rely on being close to the waterfront - a boat dealership and repair shop and a small bait and tackle shop.

E. UNDERUTILIZED, VACANT, OR DETERIORATED SITES

Most of the LWRP area is relatively built out; however there are a few remaining vacant or underutilized sites. Most of the development potential exists in the North End planning area of the Village, where there are a few remaining large tracts of open land. These and other vacant or underutilized sites are discussed in more detail below.

The Hudson Riverfront Planning Area

Most of the developable land in this section is currently utilized. There are a few scattered vacant parcels in the residential area west of Route 9 in the northernmost portion of the village. This area is zoned RA-40 (1-acre residential lots).

Croton River Basin Planning Area

Most of the developable land in this area is currently utilized. The vacant parcels are scattered throughout the single family neighborhoods which are zoned either RA-25 or RA-9.

Upper Village/Harmon Planning Area

Like the Hudson Riverfront and Croton River Basin, most of the developable land is currently utilized. Vacant parcels are scattered throughout the single family neighborhoods. There is a 2.4 acre vacant parcel at the intersection of Maple Street and Municipal Place, which is zoned for commercial use (C-2) and is in the Municipal Place Gateway Overlay Zoning District.

North End Planning Area

Several large tracts of open land and many smaller parcels are to be found in the North End. Its present low-density use (except in the extreme north part) and remaining large tracts of open land, mean that opportunities for development are real considerations. Most of this vacant land is situated on hilly terrain from which the Hudson River may be viewed. How and when the land in this area is eventually used will have an impact on the visual, environmental and economic character of the Village of Croton-on-Hudson and its Coastal Zone area. Although there are large areas of open land in the North End, development potential is somewhat limited due to the hilly, wooded, rocky nature of land in the area, combined with the lack of transportation infrastructure.

There are various tracts of privately owned which are currently in various stages of consideration. The Village is considering the rezoning of a parcel on 1 Baltic Place from residential to commercial. There are two vacant areas at the very northernmost area in Croton, along Route 9A, both owned by Baltic Estates, Inc. The 14 acre vacant area

south of Scenic Drive is zoned RA-25 for residential use. Two other noteworthy vacant areas include (1) 10.9 acres on North Highland Place across from Ackerman Court and 13.3 acres Mt Airy Road near the northern border of the Village. Both areas are zoned RA-40.

F. OPEN SPACE, PARKS AND RECREATIONAL RESOURCES


Croton Landing Park

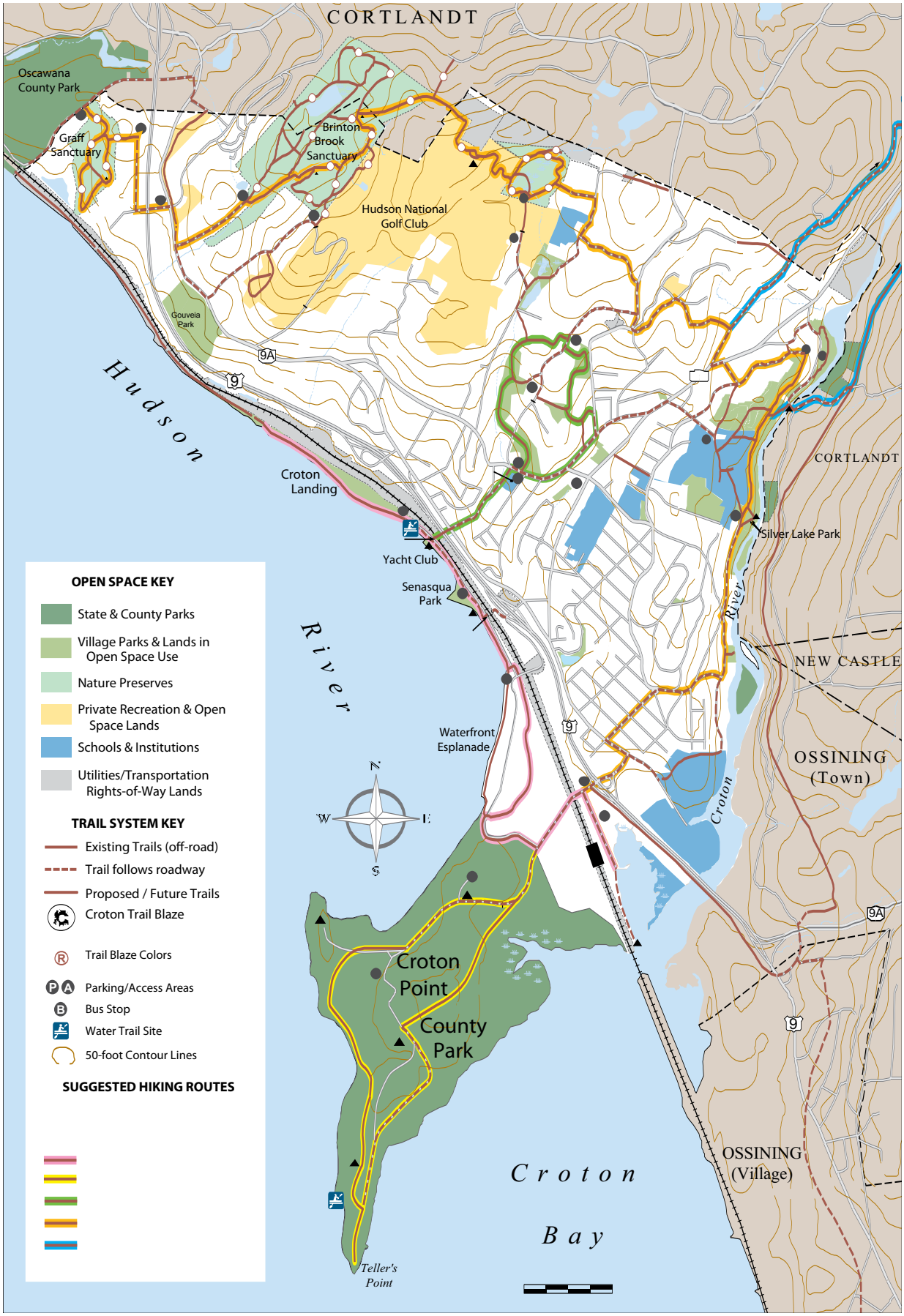
The extensive network of parks, trails and open space throughout Croton-on-Hudson takes up almost one-half (45%) of the Village's land area. The largest and most notable is Croton Point Park on the Hudson River waterfront. Although not all open space is available for public recreation or use (utility and transportation sites, privately owned vacant undeveloped lands and common space areas at residential developments), this extensive and varied network of open space contributes to the semi-rural character and open vistas of the Village (Figure 7). A list of each of the existing park and recreational facilities in the Village, including Village- and County-owned facilities, nature preserves and private recreation is below. Additional details about parks and opens spaces found along the waterfront are discussed in Section II-D: Water-Dependent and Water-Enhanced Uses.

Table 3: Open Space, Parks and Recreational Resources

Name and Location	Size (acres)	Special Features and Activities Offered	Ownership
Parks			
Dobbs Park (Maple St/Rte 129)	1.9	Baseball field, basketball court, playground	Village
Duck Pond Park (Bungalow Rd off S. Riverside Ave)	2.7	Baseball field, basketball court, Playground, ice skating on pond in winter	Village
Senasqua Park and Boat Basin (Elliott Way)	4.6	Boat launch ramp, movies and evening concerts during the summer, picnicking, windsurfing, playground, mooring and boat storage space, sailing lessons (Croton Sailing School)	Village
Silver Lake (Truesdale Dr)	13.5	Freshwater lake, swimming	Village
Sunset Park Playground (Sunset & Lexington Dr)	0.4	Playground	Village
Harrison Street Park (Harrison St)	0.3	Playground	Village
Black Rock Park (Quakerbridge Rd)	10.5	Fishing, trail access, picnicking, dog park	Village
Vassallo Park (Old Post Rd and Grand St)	1.1	Outdoor stage, open grass area	Village

Table 3 (continued): Open Space, Parks and Recreational Resources

PVC Tennis Court (Olcott Ave)	N/a	Three clay tennis courts	Village
Kaplan's Pond (Lounsbury Rd)	8.5	Small pond, wetland area and natural preserve	Village
Croton Landing Park (Elliott Way)	12.2	Passive recreation Boat launch and fishing	Village
Croton Bay Boat Launch	1.17	Boat launch and fishing	Village
Croton Point Park (Croton Point Ave)	503.8	Camping, fishing, children's play area hiking, concerts, craft shows, and guided walks held throughout the year	County
Paradise Island	22.2	Undeveloped island in croton river accessible by boat	County
David J. Manes Memorial Field		Multi-purpose ball field	Village
Preserves, Sanctuaries and Private Open Space			
Brinton Brook Sanctuary	84.9	Three miles of hiking trails	Audubon Society
Graff Sanctuary	27.9	Walking trails	Audubon Society
Jane E. Lytle Memorial Arboretum	20.4	Walking trails that connects to Village's Highland Trail, handicapped-accessible wetlands, boardwalk and outdoor classroom, loop trail system which connects to the Village's Highland Trail.	Village land managed by Croton Arboretum & Sanctuary
Croton Gorge Area	22	Walking trails	Village
Hudson National Golf Club	260	Golf club	Private
Van Cortlandt Manor		Tours of historic house and grounds, picknicking, seasonal events	Historic Hudson Valley
Croton Yacht Club (Elliott Way)		Private marina, fishing use	Village-owned, leased to Yacht club
Half Moon Bay Marina (Half Moon Bay Dr)		Private marina	Private



CROTON-ON-HUDSON LWRP

FIGURE 7: PARKS, OPEN SPACE AND TRAILS

CROTON-ON-HUDSON, NY

Source: Village of Croton-on-Hudson

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Croton Trail System

The Croton Trails Committee completed a Village Trailway Master Plan in 1993, establishing and mapping an interconnected Village-wide network of existing and proposed trails that link open space sites, and connect to the Old Croton Aqueduct Trailway that runs through Cortlandt and Ossining. Figure 7 shows existing trails, proposed trails, and access areas for vehicles and boats.

Senasqua Park

The Crossining is a one-mile paved path that crosses the Croton River, providing a bicycle/pedestrian connection between Croton and Ossining. It runs parallel to Route 9 between Croton Point Avenue and North Highland Avenue This route is part of the Westchester RiverWalk, a County-planned 51.5-mile pathway paralleling the Hudson River in Westchester. When completed, it will link village centers, historic sites, parks and river access points via a connection of trails, esplanades and boardwalks. In Croton-on-Hudson the Riverwalk trail is continuous from the Croton River and the Village of Ossining to the northern extent of Croton Landing Park. There is a missing link between Croton Landing Park and Oscawana Count Park in the Town of Cortlandt to the North. Access to the waterfront along this segment is limited by the Metro-North Railroad tracks which are located at the water's edge. While the Village is considering extending the RiverWalk trail along this segment, there are no plans in place or dedicated funds to complete the project.

RiverWalk Trail Signage

While most of the Village's Hudson River waterfront area is part of the Westchester County Riverwalk trail system and easily accessible to pedestrians, Village representatives pointed out a small but critical stretch of access along a very narrow section of Elliott Way that is difficult for pedestrians to traverse safely. This critical section is located between Senasqua Park and Croton Landing Park, the Village is evaluating a proposal to improve this 775 foot segment with pedestrian accommodations as well as shoreline stabilization measures.

Waterfront Access

Along the Hudson River, public access to the waterfront from upland areas is limited to a few locations. Vehicular access is provided at Municipal Place/Half Moon Bay Drive. Public parking is available at Half Moon Bay, Senasqua Park and Croton Landing Park. Croton Point Park is accessed via Croton Point Avenue.

Brook Street Pedestrian Bridge

Senasqua Tunnel

Pedestrian and bicycle access paths across the railroad tracks are provided at the Brook Street Pedestrian Bridge and at the Senasqua Tunnel at Municipal Place. The Brook Street Pedestrian Bridge was constructed by the New York State Department of Transportation (NYS DOT) as part of a project to eliminate the at-grade railroad crossing at Brook Street. The Senasqua Tunnel, which was once utilized for vehicular traffic, was refurbished in 2004 and designated for pedestrian and bicycle use only. Vehicle traffic was diverted to the newly constructed roadway from the Half Moon Bay Bridge running north to the Croton Yacht Club. The sidewalks over the Half Moon Bay Bridge also allow for pedestrian access from the river front trails into the rest of the Village. The Half Moon Bay development provides a public waterfront walkway which connects Croton Point Park to Senasqua Park. An easement for the walkway was included in the approval process to ensure continued public access. Public access along the walkway is constrained due to the narrowness of the walk, the number of spaces in the public parking lot, and the use of the area solely for passive recreation, mainly walking.

Public access to the Hudson River for boating activities is presently available at Senasqua Park, a small boat ramp in Croton Landing Park and the Echo Canoe Launch at the eastern end of the Croton-Harmon Station parking lot. Senasqua Park is available to Village residents for sailing boats, boat storage and picnicking. However, access to the park and parking space for boats, trailers and vehicles is extremely limited. The boat marina adjacent to Senasqua Park operates from May to mid-October. Mooring space is available by permit to residents and non-residents. The Croton Yacht Club, which operates on land leased from the Village, also provides a marina for boats.

Along the Croton River, public access to the waterfront is found at Silver Lake Park and Black Rock Park and Mayo's Landing. Silver Lake and Black Rock have parking facilities for Village residents. Silver Lake allows swimming when a lifeguard is present. Paradise Island, an undeveloped island in the River can be accessed by canoe or kayak.

G. HISTORIC STRUCTURES, SITES AND DISTRICTS

Historic Preservation

As discussed in Section 1A, the Croton-on-Hudson has a long and colorful history. The Hudson River was the impetus for its earliest settlements in the 1600s and industries including shipping and brick manufacturing. There are still many buildings dating back to the 19th century and earlier.

The Village has several properties which have been listed on the National or Westchester County registers of historic properties:

Van Cortlandt Manor. A National Historic Landmark, the Van Cortlandt Manor was developed in the 18th century on lands owned by the Van Cortlandt family. The Manor buildings include the stone manor house, an 18th-century tavern and a reconstructed tenant dwelling. The Manor is owned and operated by Historic Hudson Valley, and is open to the public as a working estate and museum, on five acres of land.

Croton North Railroad Station. The Croton North Station, constructed in the 1890s, is located on the west side of Route 9 south of Brook Street. The Station served as the second Metro-North railroad stop in Croton-on-Hudson until the mid-1900s. The site is listed on the National Register of Historic Places.

126 Old Post Road North. 126 Old Post Road was built in 1905 in the English Cotswald style. The fieldstone house was built from the same stone used in the construction of the Croton Dam. The house is one of a network of structures that were part of the former Wyndhurst Estate and is listed on Westchester County's inventory of historic places.

Baker House, 35 Old Post Road North. The Baker House was constructed in 1927 of the same material used in the Wyndhurst Estate houses. The house, listed on Westchester County's inventory of historic places, is constructed of the same stone used for the Croton Dam.

Bethel Chapel, Old Post Road South. Built in the late 1700s, the chapel was home to Croton-on-Hudson's Methodist congregation until it moved into the Asbury Church in 1883. The adjoining cemetery contains the graves of several Revolutionary War soldiers and Indians. The Chapel is on the National Register of Historic Places.

New Croton Dam. While this structure is in the Town of Cortlandt, and not the Village of Croton-on-Hudson, the structure is closely linked with the development of the Village. The dam was designed by the Aqueduct Commission of the City of New York

and has been owned and operated by the DEP since its completion in 1906. The structure features a waterfall-like spillway, a sprawling retaining wall and a stone bridge.

Heritage Areas

National Heritage Areas involve voluntary partnerships among federal, state and local governments rather than land acquisitions and regulation. Croton-on-Hudson is in the following Heritage Areas:

Hudson River Valley National Heritage Area. Croton-on-Hudson is part of the Hudson River Valley National Heritage Area which includes all of Albany, Orange, Rockland, Putnam, Ulster and Westchester counties and parts of Rensselaer, Columbia, Greene and Dutchess Counties. This designation acknowledges the scenic, historic and cultural resources of the area and encourages participating communities to work with the National Park Service to develop themes relating to such topics as the Revolutionary War, the Hudson River School of Art, the Industrial Revolution and patterns of rural landscape and agriculture.

American Heritage River. The Hudson River is one of 10 American Heritage Rivers designated by the United States Environmental Protection Agency. The designation supports economic, environmental, and historic preservation programs provided by federal agencies that support community's efforts to protect their rivers. The Natural Resources Conservation Service is this program's lead agency for the Hudson River.

Scenic Areas of Statewide Significance

The New York State Department of State has developed a program to identify Scenic Areas of Statewide Significance (SASS). The designation provides special protection to the landscape through review of projects requiring State or federal actions, including direct actions, permits or funding. In addition, municipalities can use their local land use authority to protect scenic resources including using the scenic areas narratives guidance in their LWRP.

Along the Village's Croton River waterfront, there is a designated Scenic Areas of Statewide Significance (SASS) for the Croton Gorge Unique Area. The Croton Gorge Unique Area consists of 21 acres and is located in the Town of Cortlandt along the boundary with Croton-on-Hudson. There are no designated trails is this area, however the property is immediately adjacent to the Old Croton Aqueduct Trail.

Historic Preservation Programs

Historic River Towns of Westchester (HRTW) is a consortium of 12 municipalities along the east bank of the Hudson River: Peekskill, Cortlandt, Buchanan, Croton-on-Hudson, Town and Village of Ossining, Briarcliff Manor, Sleepy Hollow, Tarrytown, Irvington, Dobbs Ferry, Hastings-on-Hudson, and Yonkers, as well as Historic Hudson Valley. These communities participate in joint activities to promote the historic and cultural heritage of the area.

Westchester County developed a Greenway Compact Plan that includes a regional economic development strategy for the HRTW that promotes tourism while incorporating protection of natural, cultural, and historic resources, main street revitalization, and increased access to the Hudson River. The Plan includes such projects as the Hudson RiverWalk, a promenade that will stretch from Yonkers to Cortlandt, and a Route 9 signage program to draw people to downtowns, historic sites, parks and trailways. The Hudson River Valley Greenway Communities Council adopted the Greenway Plan in June 2001. The Village of Croton-on-Hudson adopted the Plan in November 2001, making it the second one to be adopted in the 13-county Hudson River Valley region.

H. NATURAL FEATURES

a. Land Resources

Topography

Croton-on-Hudson's topography includes low-lying areas along the Hudson River, Route 9, and the railroad tracks, a fairly deep ravine along the Croton River and a plateau along its northern boundary that in some areas reaches elevations up to 500 to 600 feet within a mile of the Hudson River. This steep terrain has formed a series of ravines and the following watershed drainage areas within the Village (Figure 8 & Figure 9):

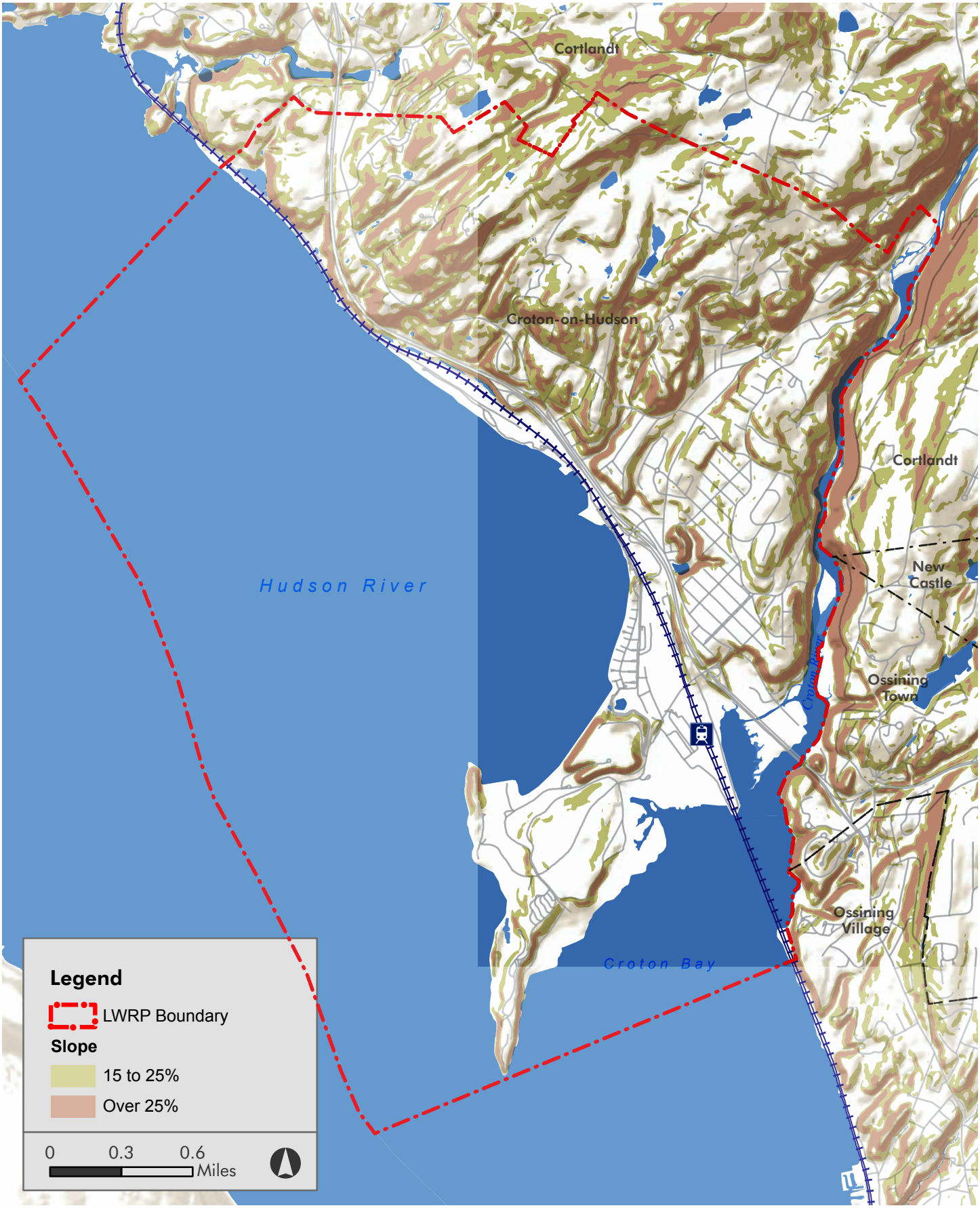
- Hudson River Basin: draining to the Hudson River to the west
- Croton Gorge Basin: draining to the Croton River and Bay to the south and east.
- Furnace Brook Basin: draining to the north where the drainage terrain is less steep and flows to lakes and streams, including the Furnace Brook and Lake in Cortlandt.

Croton-on-Hudson's topographical features also create dramatic views that orient most of the Village toward its two riverfronts: the steeper elevations in the northern section of the Village slope down to more level ground to the west along the Hudson and to the southern portion along the Croton River.

Soils and Geology

Croton-on-Hudson is located within a bedrock complex approximately 480 million years in age. Known as the "Manhattan prong," this series of metamorphic rocks extends from southwestern Connecticut and northern Westchester County, south to the southern tip of Manhattan Island.

Soils within the Village of Croton-on-Hudson are typical of those in Northern Westchester, due to similar bedrock structure and glacial activity. In general, the Village is composed of upland soils associations, with glacial outwash, and organic materials along the Hudson River shoreline. Most of its soils are glacial in nature, consisting primarily of till (soils containing rocks and pebbles of irregular size), finely sorted soils (pebbles and stones of regular size), and fine outwash sands. The shoreline of the Hudson River is a mixture of glacial soils, alluvial deposits, and organic materials and Croton Point was formed as a remnant of a glacial delta.



CROTON-ON-HUDSON LWRP

FIGURE 8: STEEP SLOPES

CROTON-ON-HUDSON, NY

Source: Westchester GIS

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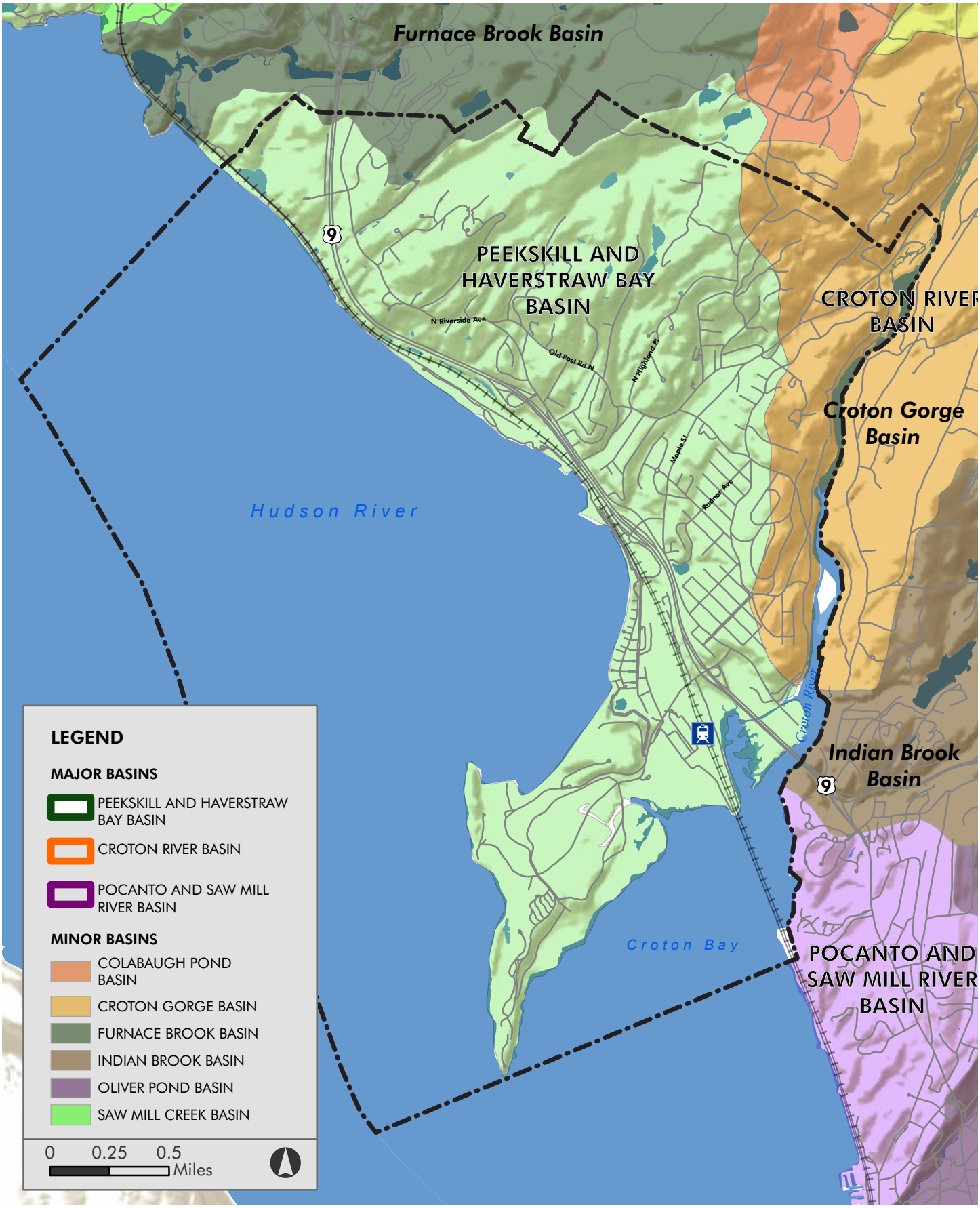

Furnace Brook Basin
PEEKSKILL AND HAVERSTRAW BAY BASIN
CROTON RIVER BASIN
Croton Gorge Basin
Indian Brook Basin
POCANTO AND SAW MILL RIVER BASIN
Hudson River
Croton Bay
Croton River
N Riverside Ave
Old Post Rd N
N Highland Pl
Maple St
Radnor Ave
9
LEGEND
MAJOR BASINS
PEEKSKILL AND HAVERSTRAW BAY BASIN
CROTON RIVER BASIN
POCANTO AND SAW MILL RIVER BASIN
MINOR BASINS
COLABAUGH POND BASIN
CROTON GORGE BASIN
FURNACE BROOK BASIN
INDIAN BROOK BASIN
OLIVER POND BASIN
SAW MILL CREEK BASIN
0 0.25 0.5
Miles

In general, depth to bedrock tends to increase as one goes downslope, leading to alluvial deposits that form the banks of the Croton and Hudson Rivers. Soil depths tend to be deeper along the Croton River ravine closer to the mouth of the Croton River. This is due to the collapse of the original Croton Dam during the mid-19th century, when dammed water broke free, rushing massive quantities of soil, sediment, trees, and even houses, downstream.

Due to irregularity of the bedrock, the soil cover in the Village runs from almost non-existent on tops of the hills to deep at the bottoms. Since the bedrock is irregular on the sloped surfaces, soil depths cannot be generalized. Without taking soil borings, trees can often be used as indicators of depth of soil. On steep slopes where few trees exist, obviously there is not sufficient soil to support them. Often the tree roots extend above the soil indicating that while there was sufficient cover for the tree's original tap roots, insufficient soil exists to allow all roots sufficient burial.

Given the irregular bedrock in the Village, trees and ground covering plants are crucial for slope stabilization. According to the Village's municipal code (Chapter 195), Erosion along steep slopes is a major issue for the Village, as this process includes the loss of topsoil, a valuable natural resource, which can result in the disturbance of habitats, degradation of the quality of surface water, alteration of drainage patterns, the gullying of land, obstruction of drainage structures and intensification of flooding. The unstable slopes in the Village can result "slumping," which produces cracks and gaps in sidewalks, retaining walls, and railroad ties; many Village roads show the results of frost heaving in the late winter and early spring.

Human activities as well as natural activities such as deer over-grazing have both contributed to a reduction in protective vegetative features along slopes.[2] It is the public policy of Croton-on-Hudson "to preserve, protect and conserve its steep slopes so as to maintain and protect the natural terrain and its vegetative features, preserve wetlands, water bodies and watercourses, prevent flooding, protect important scenic views and vistas, preserve areas of wildlife habitat, provide safe building sites and protect adjoining property by preventing surface erosion, creep and sudden slope failure."

[2] Croton-on-Hudson's Conservation Advisory Council Recommendations for Controlling the White-Tailed Deer Population, March 8, 2010

Environmental Remediation

Due to its previous industrial uses, several waterfront areas of Croton-on-Hudson have required environmental remediation. Three formerly polluted sites have been remediated. Croton Landing Park (former Seprieo Site) was remediated as part of the waterfront park development. Two other remediated federally-designated Superfund sites include the landfill at Croton Point and the PCB-contaminated lagoon at the Metro-North repair yard.

Croton Point Sanitary Landfill (Croton Point Park)

This site was operated as a County landfill from 1927 until 1986, and accepted both municipal and industrial wastes. In 1996, the 125-acre site was remediated and restored for use as a County Park. The footprint of the former landfill site is covered with grass and there are no buildings or structures on top. Remediation at the site is complete. Environmental monitoring is on-going to determine the effectiveness of the remediation and to ensure the protection of public health.[3]

Harmon Railroad Yard - Waste Water Area

Many years of Metro-North railroad repair yard operations resulted in the contamination of its wastewater treatment plant lagoon and pond system, the surface soils located adjacent to the lagoon, and components of the original Wastewater Treatment Plant for the facility. Remediation of these elements were undertaken and substantially completed by May 1996. Subsequent investigation and feasibility studies determined that the non-aqueous phase liquid (NAPL) located around the former wastewater treatment plant lagoon was the only remaining environmental media requiring remedial action. Remedial actions have reduced the NAPL, and since 2004, tests have not exceeded concentrations that would deem the NAPL as a hazardous waste. Remedial efforts are on-going to remove NAPL to the extent possible. [4]

[3] New York State Department of Environmental Conservation. Environmental Site Remediation Database: Croton Point Sanitary Landfill (Site Code 360001). http://www.dec.ny.gov/cfmx/extapps/derexternal/haz/results.cfm?startRecord=101&api=0

[4] New York State Department of Environmental Conservation. Environmental Site Remediation DatabaseHarmon Railroad Yard - Waste Water Area (Site Code 360010).

I. WATER RESOURCES

a. Tidal and Freshwater Wetlands

The water resources of the Village define much of its natural character: Hudson River and Croton Rivers and associated freshwater wetlands, the ponds at the north end of the Village and several smaller streams that run from the higher elevations to the lower rivers, and their wetlands. The Croton Water Control Commission reviews all construction within 120 feet of a water body (which includes wetlands). Wetland areas within the Village are located along Croton Bay, in the tidal flats and in a few areas in the northeast section of the Village (Figure 10).

b. Flood Hazard Areas

The Preliminary Flood Insurance Rate Map (FIRM) provided by the Federal Emergency Management Agency (FEMA) shows Special Flood Hazard Areas (SFHA) and the risk premium zones applicable to a community. Figure 11 shows the SFHA, with areas identified as being in the 100-year flood zone, which have a 1-percent chance of being inundated in any given year. The low-lying properties located within the SFHA include Croton Landing Park, the Croton Yacht Club, Senasqua Park, Croton Point Park, Van Cortlandt Manor and a significant portion of the Croton-Harmon Station and parking areas. The Village also has a DPW maintenance facility located adjacent to the station parking lot that is within the SFHA. Salt and other road maintenance material has leached from the facility into the Croton Bay. The Village is considering suitable locations to relocate the facility.

c. Water Quality

Groundwater Resources

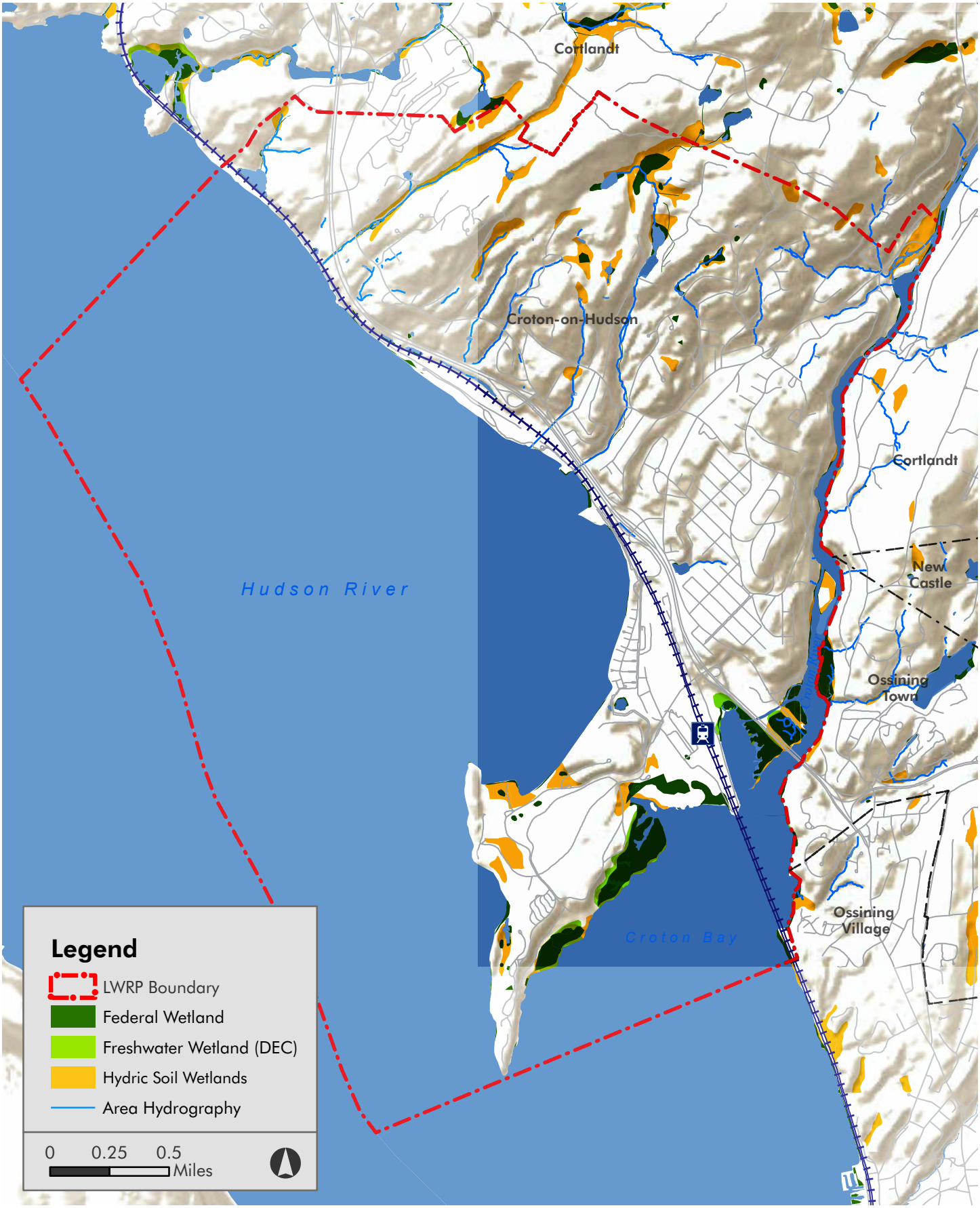
The Village is located immediately adjacent to the Croton and Kensico Watersheds of the Croton Aquifer System. The Croton River has a drainage area of 375 square miles; it is the predominant source of groundwater supply for the Croton-on-Hudson well system. The Village's wells tap into sand and gravel aquifers along the Croton Basin, just northeast of Black Rock Park; this groundwater provides a local source of clean water. Additional details about groundwater quality and water supply infrastructure is found in Section II-D-2.

Surface Water Resources

The waterbodies in the Village have different NYS DEC Surface Water Classifications. Class A surface waterbodies are associated with water suitable for drinking. The Croton River from the New Croton Dam to the Glendale Lake Tributary (adjacent to Black Rock Park) is the only Class A waterbody in the Village. The water at this location is tapped for the Village's water supply.

Class B waters are suitable for primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes. Class B waters in the Village are found along the Croton River from the Glendale Lake Tributary to the tidal portion at its mouth (near Van Cortlandt Manor). The Hudson River within the boundaries of Croton is also Classified B. Surface waters at Silver Lake Park are tested for bacterial contamination periodically and during the summer months when the park is open to swimming.

The remaining streams within the Village of Croton (one in the Prickly Pear Hill area, the second running parallel to Lounsbury Road, and the third running parallel to Beekman Street), all of which are tributaries to the Hudson River, are classified as C. Class C waters are suitable for fishing and fish propagation.



CROTON-ON-HUDSON LWRP

FIGURE 10: TIDAL AND FRESHWATER WETLANDS

CROTON-ON-HUDSON, NY

Source: Westchester GIS

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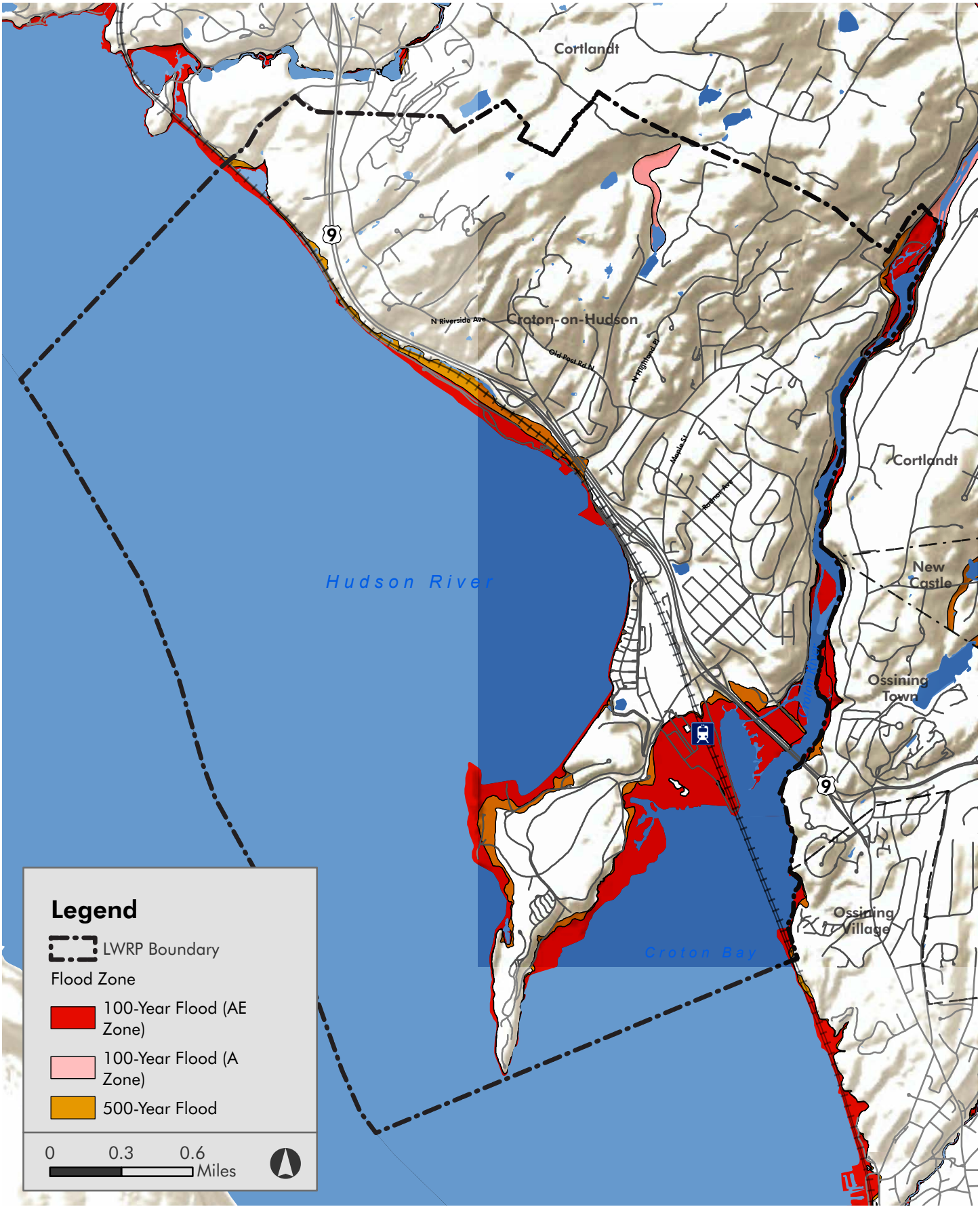

CROTON-ON-HUDSON LWRP FIGURE 11: FEMA SPECIAL FLOOD HAZARD AREAS (SFHAS)

CROTON-ON-HUDSON, NY

Source: Westchester GIS

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J. NATURAL RESOURCES AND HABITATS

Significant Fish and Wildlife Habitats

There are two NYSDOS-designated Significant Coastal Fish and Wildlife Habitats in the Village. One is the Croton River and Bay habitat. The Croton River is a relatively large 3.5-mile stream fed by the New York City watershed system at New Croton Dam and the New Croton Reservoir. The other is Haverstraw Bay located in the widest section of the Hudson River estuary. The Bay includes extensive shallow areas and is a place where the freshwater from the upper river mixes with the salt water from the Atlantic, producing a predominantly brackish water habitat. It is one of the most important fish and wildlife habitats in the Hudson River estuary.

Croton River and Bay Significant Fish and Wildlife Habitat[5]

Croton River

The Croton River and Bay fish and wildlife habitat includes an approximate one-mile segment of the river (within tidal reach of the Hudson) and an approximate 1,200-acre shallow bay and mudflat area south of Croton Point. The bay contains extensive beds of submergent aquatic vegetation. The Croton River is a relatively large, warmwater stream, with a drainage area of over 375 square miles, and an average annual discharge volume in excess of 500 cubic feet per second. The upper two-thirds of the stream is freshwater and the lower third is brackish due to the mixing of tidal inflows from the Hudson River. The freshwater section includes the Village watershed area with numerous wells supplying the Village with potable water.

During periods of State-declared drought emergency, the freshwater flow can be diverted out of the Croton River for municipal water supplies to a maintenance level in the Croton River of 12 inches. Therefore, the tidal portion of the Croton River is included in the habitat. In addition to flow diversions, Croton River and Bay have been subject to considerable habitat disturbance, including filling of wetlands for waste disposal at the Croton Point Landfill, discharges of stormwater runoff, industrial and residential development, and the presence of road and railroad crossings.

[5] NYS DOS Coastal Fish and Wildlife Assessment Form for Croton River and Bay Significant Fish and Wildlife Habitat. Accessed at: http://www.dos.ny.gov/opd/programs/consistency/habitats/hudsonriver/croton_river_and_bay_final.pdf

Croton River and Bay comprise one of the largest shallow bay areas in the lower Hudson River sheltered from strong currents and, to some extent, from prevailing winds. Although no unusual concentrations of any fish or wildlife have been documented in Croton River and Bay, it is a productive year-round habitat for resident fish species, such as largemouth bass, brown bullhead, carp, and panfish, and serves as a resting, foraging, and nursery area for anadromous species. As a result of the abundant fisheries resources and accessibility of the area, Croton River and Bay is very popular for recreational fishing; it is one of the recognized "hot spots" for striped bass in the Hudson River. In addition, these fish populations may be important for osprey, a New York State-threatened species, during migration. Locally significant numbers of waterfowl occur in the area during spring (March-April) and fall (September-November) migrations.

There is a popular trout fishery in the Croton River downstream of the New Croton Reservoir that NYSDEC stocks annually, as a policy, with rainbow and brook trout yearlings. Part of the stock has reached the New Croton Reservoir Dam downstream one mile, within the Village of Croton-on-Hudson.

Haverstraw Bay Significant Fish and Wildlife Habitat

The Haverstraw Bay fish and wildlife habitat encompasses the entire River over an approximate six-mile reach, in the widest section of the Hudson estuary. Haverstraw Bay has extensive shallow water areas which deepen to a dredged navigation channel in the western half of the bay. During much of the year, Haverstraw Bay is a place where freshwater from the upper River mixes with salt water from the Atlantic, producing a predominantly brackish water habitat. Habitat disturbances, such as dredging, filling, bulkheading, waste disposal and pollution from upland and in-river sources, have all been significant at some time during the recent history of this area.

Despite various disturbances, Haverstraw Bay is one of the most important fish and wildlife habitats in the Hudson River estuary. Haverstraw Bay regularly comprises a substantial part of the nursery area for striped bass, tomcod, and Atlantic sturgeon that are produced in the Hudson. Other anadromous species, such as American shad, blueback herring, and alewife, spawn in upstream freshwater areas, but move south and feed in this area before leaving the River in the fall. Haverstraw Bay is also an important nursery and feeding area within the Hudson for certain marine species, most notably bay anchovy, Atlantic menhaden, bluefish, weakfish, and blue claw crab. Depending on location of the salt front, a majority of the spawning and juvenile Atlantic sturgeon wintering in the Hudson may reside in Haverstraw Bay. A portion of the shortnose sturgeon population, a Federal endangered species, also winters in this area.

Lower Hudson River Estuary

Croton-on-Hudson is one of the many communities located along the Hudson River estuary, which has long been recognized as a valuable state and local resource, as well as an important part of the North Atlantic coastal environment. The Hudson River is regionally significant as a productive estuary and is one of only a few major tidal rivers on the North Atlantic coast of the United States. The lower Hudson supports regionally significant fish populations as well as populations of wintering and migratory birds that feed on the rich fish and benthic resources. This is the primary nursery and overwintering area for striped bass in the Hudson River estuary, and striped bass from the Hudson account for an impressive portion of the total North Atlantic population.

The estuary contains important spawning and nursery grounds for many commercially valuable fish and shellfish species as well as significant acreage of tidal freshwater wetlands within the State. These wetlands, along with the river's brackish tidal wetlands and stands of submerged aquatic vegetation, contribute essential nutrients which support the Hudson's complex web of life.

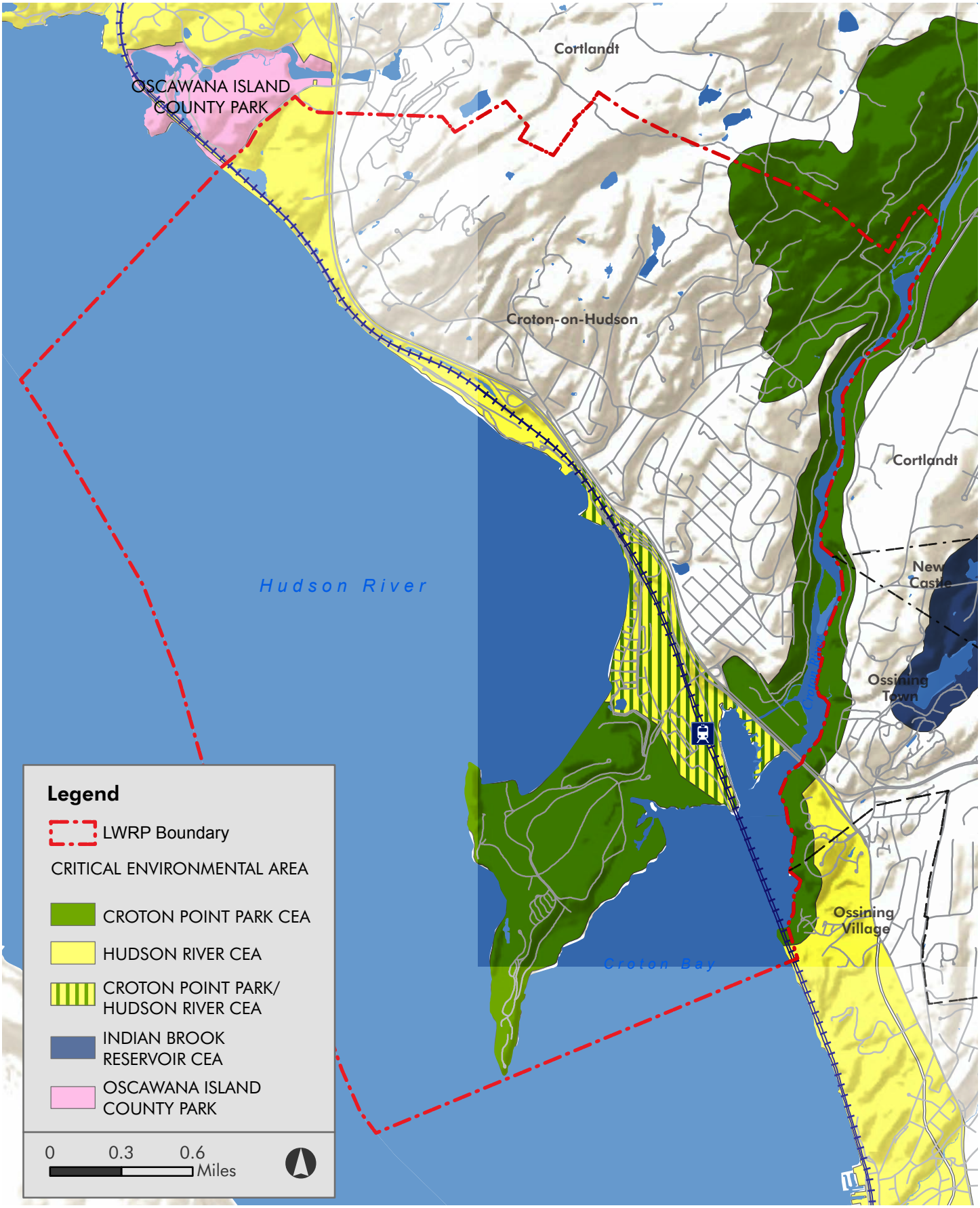
Critical Environmental Areas

Westchester County has designated two areas within Croton-on-Hudson as Critical Environmental Areas (CEAs): the Hudson River CEA and Croton Point Park CEA (see Figure 12). According to the County, these areas have exceptional or unique character due to their history, ecology, scenery, and recreational opportunities associated with the shoreline.

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 (e.g., 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 described in New York State's Environmental Quality Review Act (SEQRA), a CEA has special protection under SEQRA. Following designation, the potential impact of any Type I or Unlisted Action on the environmental characteristics of the CEA is a relevant area of environmental concern and must be evaluated in the determination of significance.



Source: Westchester GIS

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K. SCENIC RESOURCES AND IMPORTANT VISTAS

Within the Village, there are no officially designated views; however, in many areas, generally on higher elevations and from portions of Route 9, there are terrific views of the Hudson River and the Croton River and Bay. Within the Hudson Riverfront planning area, visual access to the Rivers and Bay is somewhat impaired by rock outcrops, railroad tracks, large and small railroad-related buildings and towers, and a large warehouse at Route 9 and Municipal Place. Not only is sighting of the Hudson River and Croton Bay impaired by the presence of the above-mentioned structures, but their industrial nature and, in some cases, dirty and deteriorated facades, further impairs scenic quality. There are, however, specific areas along Route 9 where there are unparalleled views of the western shore of the Hudson and Croton Point.

Croton Point Park and Senasqua Park are the only public locations on the Hudson Riverfront with panoramic views of the Hudson River, both north and south. However, to get to either park, one must travel across Route 9 and the railroad yards, which both negatively impact scenic vistas. When approaching Croton-on-Hudson from the south on Route 9, the railroad tracks, station and yards are the dominant sight along the Hudson River. When entering from the south while on a train, the sight that passengers see not only includes all the above mentioned, but also substantial debris along the railroad beds. The south end of the Croton Harmon station parking lot is used by the Village for temporary storage of road maintenance materials and has no organized layout. In addition, the tower lights recently by Metro-North installed to illuminate the station and parking lot are substantially contributing to light pollution. The presence of the railroad and its associated uses are expected to continue in the future. However, many opportunities exist within this constraint for cleanup and screening and for the reduction of light pollution.

Many property owners living on the high land that runs along South Riverside Avenue starting just south of the Duck Pond at Bungalow Road and running south have a wonderful view of the Hudson River. Although they have to also look at railroad tracks, the Harmon yards and the Shop-Rite Plaza, the view is still spectacular. There are also panoramic views from homes along North Riverside Avenue and on the bluffs above North Riverside Avenue.

L. INFRASTRUCTURE

a. Transportation

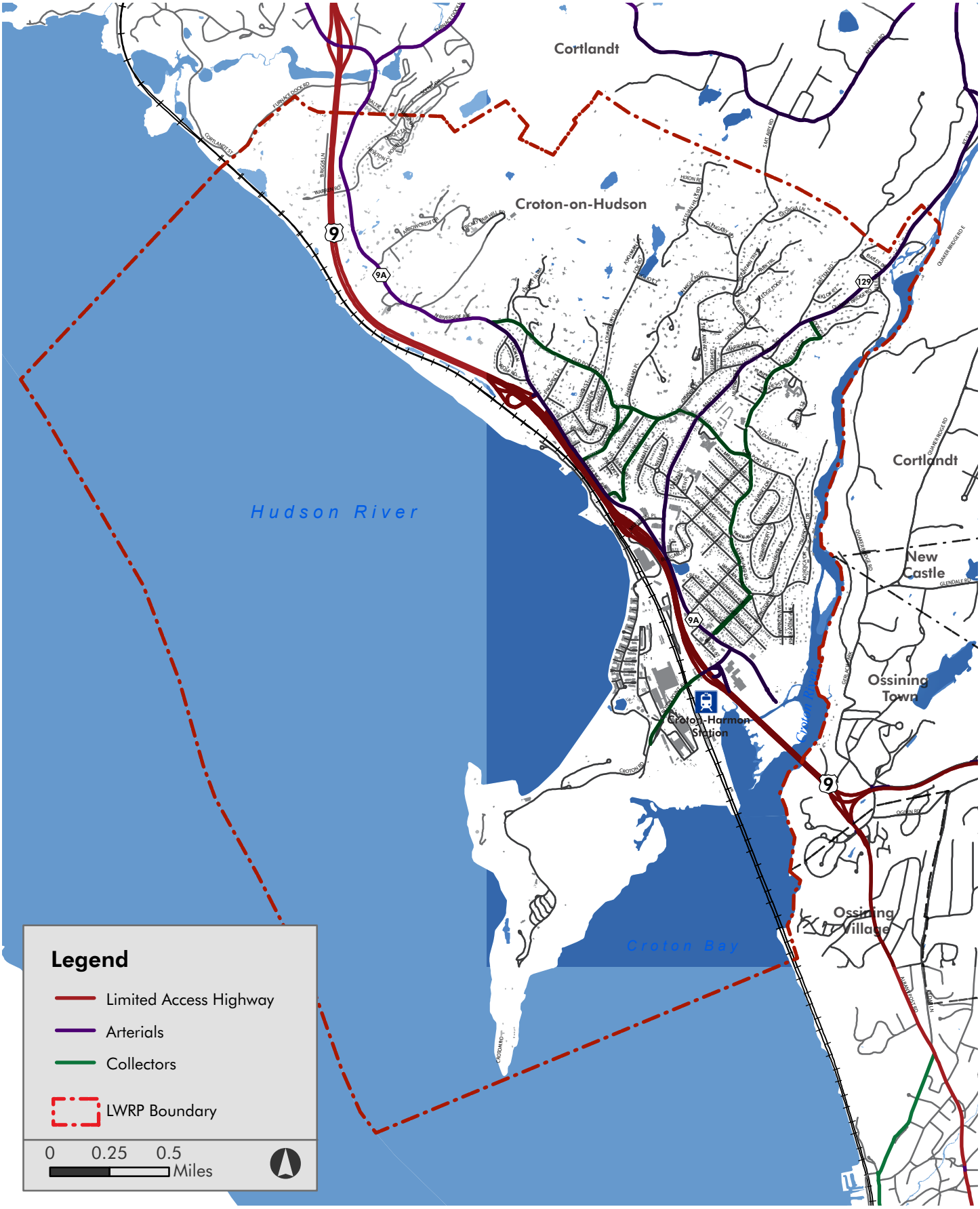
State Routes 9 and 9A are north-south travel corridors which pass through the Village of Croton-on-Hudson. While Route 9 is a four-lane highway with limited access, Route 9A is more of a minor arterial with numerous driveways and intersecting local roads. Roadways such as Route129, Old Post Road and Grand Street collect traffic from local streets in Croton's residential neighborhoods and channel it into arterials. Transportation infrastructure is shown in Figure 13.

Traffic flow and parking issues have within the Upper Village/Harmon area have become increasingly difficult problems. Additional commercial parking is needed in the Upper Village area, and parking may be needed in the Harmon area in the future if new development puts pressure on the existing parking supply. Many of the streets in this area are steep and narrow, particularly those in the "Trails" area, the streets around the Municipal Building and the streets near and bordering on the Croton River. Many houses along these streets were built without garages. As a result, residential parking on Center Village streets is common. On-street parking is common throughout this area, where small lots with minimal driveway space are not able to accommodate the demands of multi-car families.

Croton-Harmon Train Station

The Croton-Harmon railroad station at the south end of the Village is a regional rail transportation center, providing local commuter service to New York City via Metro-North, and service to points north including Albany, Buffalo, Toronto, and Montreal via Amtrak. Over 100 Metro-North trains stop daily at the Croton-Harmon Station en route to or returning from Midtown Manhattan's Grand Central Terminal. The commute between Croton-Harmon and Grand Central ranges from 45 to 70 minutes depending on the time of day. Due to the station's location adjacent to a major interchange with Route 9, the area represents a highly visible segment of the community.

The Croton-Harmon Railroad Station is the most heavily used station of all three Metro-North railroad lines. An estimated 2,860 commuters board trains at Croton-Harmon during peak AM commuting hours en route to Grand Central Terminal; almost 7,100 passengers board or disembark at Croton-Harmon each day. The majority of commuters are from Westchester municipalities (including Croton-on-Hudson, Ossining, Cortlandt Manor and Yorktown Heights), although commuters from Putnam, Dutchess and Orange Counties use the station as well.



CROTON-ON-HUDSON LWRP

FIGURE 13: TRANSPORTATION INFRASTRUCTURE

CROTON-ON-HUDSON, NY

Source: Westchester GIS

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Croton-Harmon Metro-North Railroad Station and Harmon Yards (Source: Bing Maps)

The parking facility is owned and operated by the Village of Croton-on-Hudson. The Village provides a 2,000-space commuter parking facility at the station, with 1,600 spaces reserved for monthly permit holders and 400 daily spaces. The majority (70%) of parking permit holders live outside of the Village.

Since the prior LWRP, Croton-on-Hudson has evaluated a number of alternatives to improve land surrounding the Metro-North train station to better serve future community needs; increase parking supply; improve vehicular, pedestrian, and bicycle access; increase revenue for the village; and improve the overall appearance and image of the train station hub. The Village is in the design stage of a project to provide safer accommodations in around the parking facility that better balance the needs of all users (vehicular, bicyclists and pedestrians) and provide effective vehicular mobility through the corridor during all periods of the day with appropriate traffic control measures. This objective will be accomplished through the construction of new sidewalks, re-delineation of the existing roadway to accommodate bike lanes, and installation of three new traffic signals and geometric improvements to key intersections. Funding is from a federal Transportation Enhancement grant, County funding and the Village's capital project fund.

In 2010, the Village completed a major construction project to alleviate the risk of tidal flooding in 5.3 acres on the lot adjacent to Croton Bay. There are approximately 600 spaces in this area. Due to past flooding and increased demand for train station parking, the Village conducted *a Parking Garage Feasibility Study* to analyze the potential development of structured parking at Croton-Harmon Station.[6] The study area included

[6] Village of Croton-on-Hudson – Parking Garage Feasibility Study Report, February 17, 2011. Timothy Haahs and Associates, Inc.

the entire parking lot area which has 2,036 spaces on 47 acres. As described in the report, the overall intent of the feasibility study was to evaluate alternatives that would increase parking capacity to meet future growth, free up portions of the lot for other uses, enhance the station environment and commuter experience by improving pedestrian, bicycle, and vehicular safety and traffic flow, and potentially serve as replacement parking should the flood repaired areas of the lot be impacted by tidal flooding in the future.

The study found that adequate parking capacity exists at Croton-Harmon Station for the near future. It recommends that the Village continue to monitor parking demand. When it eventually exceeds capacity, the Village should first consider developing the DPW garage site which is located within the confines of the train station parking lot. This would add 123 spaces. If future demand warrants additional parking, a structured parking facility could be added to increase total parking capacity. Developing the DPW garage would provide the village with an opportunity to relocate the facility outside of the 100-year floodplain. The Village is currently considering other suitable locations to relocate the facility.

Bus Service

The Village is served by Westchester County buses on Route 9A, Croton Point Avenue, Riverside Avenue, Benedict Boulevard, Cleveland Drive, Old Post Road South, and Maple Avenue. These buses provide transportation through the City of Peekskill to Cortlandt Town Center (the location of a regional shopping center), and White Plains, which is a major hub of the bus transportation system for the County.

b. Water and Sewer Infrastructure

Water Supply

Although Croton-on-Hudson is situated close to the Croton Aqueduct System and borders the Croton River, it does not tap into the reservoir system for its water. Instead, its water supply comes directly from sand and gravel aquifers pumped from three deep wells under the Croton River Basin, which are located in the northern portion of the Village, just south of the New Croton Dam. According to a 2004 report by Chazen Companies, in non-pumping conditions, the water table of the well fields is, generally, in equilibrium with the elevation of the river. Recharge to the system comes from sources such as precipitation, surface flow from the Croton River and groundwater flow from upland areas. Well water provides a very pure source of water because it requires only a minimum amount of treatment and avoids the potential problems with pollution run-off that are associated with surface water from the reservoir system. Groundwater pumped from the sand and gravel aquifer is treated with chlorine at the water treatment plant for disinfection purposes.

According to the Village's 2013 Annual Water Report, the water system (Figure 14) supplies approximately 8,060 people, in residences, business and industries through approximately 2,500 service connections. Most residents receive water from this system; however some residents use private wells.

The Village's three active wells are located on Route 129. The wells can produce up to 1.8 to 2 million gallons of water per day. During 2013, the daily average volume of water treated and pumped into the distribution system was slightly more than 1 million gallons per day. The automation of the well pumping system was completed in 2001. Water pumped from the wells is stored in a network of four reservoir tanks located throughout the Village: two tanks in the Mount Airy area, one on Hessian Hills Road and the fourth on the Hudson National Golf Course. The four tanks can hold a total of 2.3 million gallons of water. By tank, the capacity is as follows:

Table 4: Well Capacity (in gallons)

1. Upper North Highland:	1,250,000
2. North Highland underground:	400,000
3. Hessian Hill Road:	500,000
4. Hudson National Golf Course:	150,000
Total:	2,300,000

In 2014, all three wells were refurbished. Work included cleaning the wells, upgrading the pumps and other improvements to meet the regulations related to chlorine disinfection. The newly refurbished wells and pumps are expected to operate more efficiently and pump water at a greater capacity than what was previously possible. The Village is also

in the process of installing corrosion control systems to reduce the presence of lead and copper in the water supply.

The Village recently completed a significant water main relining and replacement project in the areas around the Harmon neighborhood, Wolf and Cook Lane and Munson and Loconto Streets. These areas experienced severe brown water problems due to the age of the water mains, some over 100 years old. The Village replaced or added 7,370 feet of new water mains and relined 24,100 feet of existing water mains for a total of 31,470 feet of water main improvements. The project also included the installation of 45 new or replacement fire hydrants and 133 new or replacement water valves.

Water Quality

The New York State Department of Health (NYS DOH) has completed a Source Water Assessment for the Village's water system. Based on available information, potential and actual threats to this drinking water source were evaluated. The State Source Water Assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells.

The Source Water Assessment has rated three of the wells as having a medium-high susceptibility to microbials. These ratings are due primarily to the fact that the wells are high-yielding wells, drawing from a possible unconfined aquifer, which is a shallow aquifer that occurs immediately below the ground surface and has no overlying protective layer to prevent contamination from potential sources. While these wells were rated as being susceptible to microbials, all water from the wells is disinfected prior to delivery to ensure that it meets New York State's drinking water standards for microbial contamination. The Village frequently monitors the water supply to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants.

The Village's Municipal Code establishes protective land use regulations for the watershed affecting well fields.[7] The Water Supply Protection Code defines the three zones in the watershed which affect the well heads and a degree of regulation and management is provided for each zone. The three-zone system is superimposed on existing land use zones, with the more restrictive requirements prevailing when the zones are in conflict. The three zones are defined as follows and are shown in Figure 15.

[7] Village of Croton-on-Hudson NY Water Supply Protection, Code of the Village of Croton-on-Hudson NY. Chapter 223: Water, Article II Water Supply Protection.

- Zone 1: the wellhead protection area, including the cone of influence.
- Zone 2: the recharge area of the aquifer.
- Zone 3: the watershed area tributary to the recharge area.

The health of the three-mile section of the Croton River between the New Croton Reservoir and the Hudson River is highly influenced by management of the New Croton Reservoir. Currently, water levels in the Croton River are regulated as part of the New York City (NYC) Croton Water Supply System, which supplies a portion of New York City's water through reservoirs and tunnels. Although flows in the Croton River can be naturally low due to climate and seasonal conditions, NYC DEP is required to maintain certain baseflow conditions in the river as part of their NYS DEC water withdrawal permit.

NYS DEC's draft streamflow standard (a candidate to include in surface water quality standards) proposes a process to arrive at aquatic baseflows for protecting aquatic life below impoundments. (See Appendix 1 for the draft standard.) Based on this proposed flow standard, the applicable minimum flow or the "conservation flow" for the lower Croton River is 0.5 cubic feet per second per square mile (cfsm) of watershed in "summer" (April through September) and 1.0 cfsm in 3 "winter" (October through March). These conservation flows are similar to minimum flows the US Fish and Wildlife Service recommends for New England waterways.[8]

The release schedule was originally designed to support seasonal use by anadromous fish species. According to a study conducted by the New York State Water Resources Institute at Cornell University, the schedule can sometimes lead to fluctuations in water temperatures, especially during the summer months when cool water is released for baseflow requirements from the bottom of the reservoir. In this instance, the conservation flow is composed of cold (50° F) water. With a little rain or a reduction in the amount NYC is withdrawing for water supply purposes, the reservoir can rise and spill warm (70°s to low 80°s F) water in volumes many times greater than the deep cold water minimum release. When this happens, Croton River water temperatures can fluctuate wildly by as much as 30° F in a matter of only a few hours or days, as the reservoir alternately pulses between not spilling and spilling.[9]

Some fluctuations are normal for a river, but extreme fluctuations can cause increased erosion of the stream banks, excessive silting and drastic temperature changes. This

[8] A Preliminary Assessment of Croton River Hydrologic Alterations below New Croton Reservoir. New York State Water Resources Institute at Cornell University

[9] A Preliminary Assessment of Croton River Hydrologic Alterations below New Croton Reservoir. New York State Water Resources Institute at Cornell University

severe variation in water temperature impacts the ecological processes downstream including fish and in-stream wildlife habitats. Data documenting ecological impacts of the New Croton Reservoir on the Croton River are sparse. The available data does demonstrate that the Croton River does experience fluctuations that could adversely affect the river's ecosystem. Additional studies are needed to determine how flow changes actually affect wildlife in the Croton River corridor.

A study conducted by the New York State Water Resources Institute, showed that during certain years, and during certain months of those years, the flow rate in the Croton River below the reservoir is only a fraction of what naturally should be observed in a watershed of this size. The extent to which the reduction in flow to the Croton River influences the water located in the aquifer is not completely known. While NYC DEP is required to maintain certain baseflow conditions, the conservation flow may not be sufficient to maintain water levels necessary to recharge and protect the aquifer, support fish and wildlife species as well as public recreation on the river. In addition to temperature fluctuations, a study of mandated base flows is needed to ensure New York City's Water Supply needs do not negatively the Croton River watershed downstream from the New Croton Dam.

New York City is in the process of reconstructing and upgrading certain parts of the New Croton Dam. The project will reconstruct the low-level outlet works, which provide critical operational and safety functions, including the management of the conservation flow to the Croton River and the capability to lower the reservoir level in the event of a dam safety emergency. These functions are limited by outdated and inoperable equipment. The project began in 2012 and is anticipated to be completed in the fall of 2015.[10]

Sewer Infrastructure

The Village is within the County's Ossining Sanitary Sewer District, which serves the central and southern areas of the Village (Figure 14). According to the Village Engineer, there is sufficient capacity in the system to serve Village residents. Individual septic systems are primarily located in the North End of the Village.

Most of the Village's sanitary sewer system was installed during the 1920s and 1930s, connecting existing houses to the sewer system. Subdivisions constructed more recently by private developers also have sewer connections, as the Village required private developers to install sanitary sewers. However, houses developed after the 1930s by

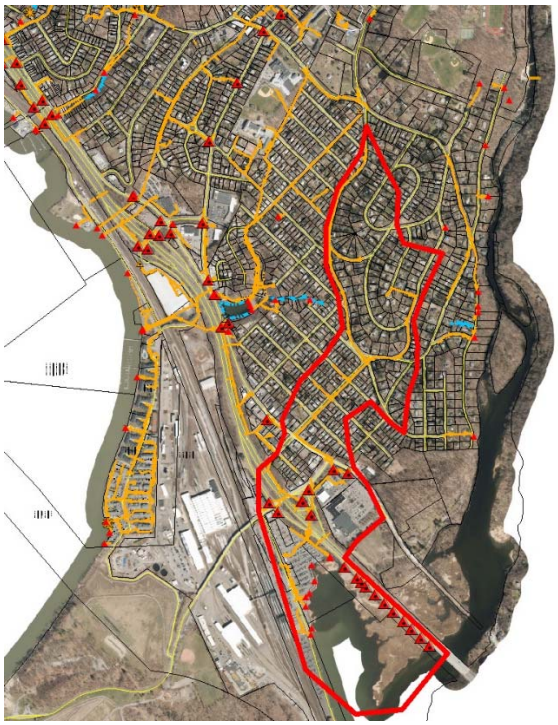
[10] Source: Letter from Paul D. Smith, NYC DEP to Mayor Leo Wiegman on October 31, 2011.

individual residents in the outlying areas of the Village on single lots were often not connected to the system. These homes are served by private septic systems.

Most of the Village's sewer lines are between 80 and 90 years old and are beginning to show signs of age. Some lines are cracking and need to be re-lined or replaced. There are periodic issues with these lines and the Village has focused efforts on manholes and sewer lines that have problems. The Village has also focused on upgrading sewer pump stations in in order to increase the reliability and safety of the stations as well as well as increase energy efficiency. The Phase I upgrade to the Nordica Sewage Pump station was completed in 2010 and the phase II improvements are underway.

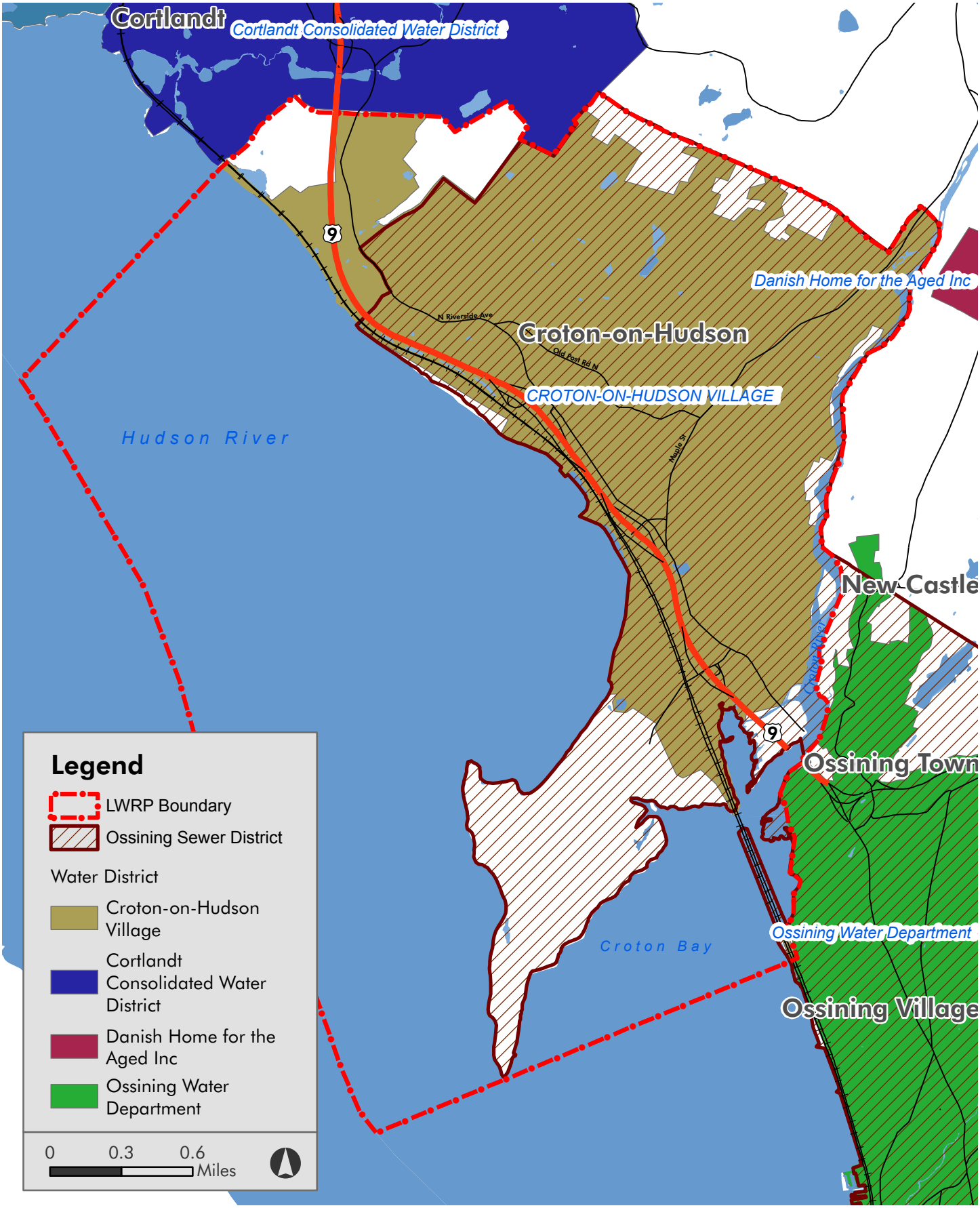
Stormwater Infrastructure

Storm water runoff presents an additional problem to the Village. The Village has taken a significant step in identifying problem areas by developing a map of the Village's stormwater system. In 2003, a Village-wide drainage study was performed by Dvirka & Bartilucci Consulting Engineers (D&B). The study identified 13 drainage basins and provided a brief analysis of each. Since the study was completed, work has been undertaken on many of the basins including the four given the highest priority – the Brook Street, High Street, Grand Street and Batten Road basins. The Brook Street Watershed improvements included the rebuilding of Kaplan's Pond so that it can be drained and utilized as a detention basin before large storm events. Storm drain pipes and catch basins were built along Batton Road to reduce flooding in that area. Storm drains in the Grand Street drainage basin were inspected, however no additional improvements are planned. A supplemental report completed in 2011 analyzed two problematic watersheds: Georgia Lane and the Wildwood Subdivision.



Approximate area draining directly into the Croton Bay

Another area of concern is the 170 acre stormwater drainage area that includes the residential area east of Cleveland Drive, the Shoprite shopping center, and the Route 9/9A right-of-way. Untreated stormwater from this drainage area is discharged directly into the Croton Bay, which detrimental to the health of the estuarine ecosystem. The outfall pipes at this location are maintained by the New York State Department of Transportation (NYS DOT).



CROTON-ON-HUDSON LWRP

FIGURE 14: WATER AND SEWER DISTRICTS

CROTON-ON-HUDSON, NY

Source: Westchester GIS

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SECTION III:
STATE AND LOCAL POLICIES

A. DEVELOPMENT POLICIES

Policy 1:

Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational and other compatible uses.

Policy 1A:

Existing planning and zoning documents should be periodically reviewed and amended, where necessary, to ensure development within the community is consistent with adopted goals and policies.

Policy 1B:

Redevelop and revitalize Village-owned land at the Metro-North train station, including the Village garage and bay area. Encourage integrated development of Village property to assure fulfillment of requirements relating to parking and accessory uses of Metro-North train station, while facilitating public access to the bay area and recreational use.

Policy 1C:

Every effort should be made by the Village to encourage the governmental agencies involved in the maintenance of the Croton Landfill and Metro-North properties to continue to monitor and maintain these sites.

Policy 1D:

Encourage restoration of deteriorating structures related to railroad use and assure appropriate maintenance and screening to reduce visual impact.

Policy 1E:

Encourage the appropriate re-use of the old sewage treatment plant site at the intersection of Route 9A and Municipal Place.

Explanation of Policy

The Village's waterfront is characterized by a significant amount of public open space and recreational use; however, such resources are constrained by limitations upon physical access to the waters of the Hudson and Croton Rivers. Although there are Village-owned parks and recreational areas on the Croton and Hudson Rivers' edges, access to these parks can be difficult and, at times, hazardous. Due to the limited amount of land with direct access to and from the rivers, opportunities for new water-

dependent developments are constrained. In addition, the railroad, associated structures and other transportation corridors virtually separate the Hudson and Croton Bay waterfronts from the rest of the Village. However, opportunities do exist for redevelopment and revitalization of Village-owned land within the coastal zone area.

The Village of Croton Comprehensive Plan was adopted in 2003. Since that time, development trends have changed, and natural and recreational resources have been altered. To ensure that the policies of the LWRP are consistent with a Comprehensive Plan for the Village, the existing plan must be reviewed and amended where necessary. The Village Board of Trustees, with input from the Village's Comprehensive Plan/Economic Development Committee, the Planning Board and other key stakeholders, would be responsible for amending the existing plan to facilitate consistency between the Comprehensive Plan and LWRP policies.

See also Policies 19, 24 and 25.

Specifically, the Village-owned land adjacent to the commuter parking lots at the Metro-North railroad station, the site of the Echo Canoe Launch, is an important recreational resource. Policy 1B encourages the continued improvement of this property so as to enhance public access to the Croton River and Bay and the Hudson River by maintenance and improvement as necessary of the boat ramp; exploring additional parking for the ramp; and enhancing walkways, benches, signage and wayfinding measures. In addition, the central Village garage facility should be relocated out of the 100-year floodplain, where it would be more appropriate for storage of bulk items and road maintenance and more efficient in terms of maintenance and operation. In addition, the Village should explore opportunities to improve the Village-owned commuter parking lots at the Metro-North railroad station, to improve circulation, ensure sufficient parking and reduce the stormwater impact through landscaping and similar measures.

Restoration and maintenance of railroad-related structures is also of prime importance. These structures present significant visual intrusions to the viewsheds of the Hudson River from many areas of and to the Village.

The Village has adopted a Park, Recreation and Education zoning district in order to designate certain underutilized Village-owned and quasi-public lands to be used for recreational and/or educational purposes. Designation of these sites within a PRE zone ensures continued access to the sites, not just for recreational opportunities, but also for educational opportunities such as museums, exhibits, etc. Sites that have been designated either PRE-1 or PRE-3 are Croton Point Park, Brinton Brook Sanctuary, the Graff Sanctuary, the Jane E. Lytle Memorial Arboretum, Kaplan's Pond and Village-owned open space in the Croton Gorge area. Other possible sites for designated include all

Village-designated parks, Van Cortlandt Manor, public schools, Village-owned open space and the Croton Free Library

Any public or private development action within the coastal zone area should use the following guidelines in determining the suitability of the action and its impact on the waterfront:

- Priority should be given to uses which are dependent on or enhanced by a location adjacent to the water;
- The action should enhance existing and anticipated uses;
- The action should improve the deteriorated condition of a site and, at a minimum, must not cause further deterioration;
- The action must lead to development which is compatible with the character of the area, with consideration given to scale, architectural style, density and intensity of use;
- The action should have the potential to improve the existing economic base of the community and, at a minimum, must not jeopardize this base;
- The action should improve adjacent and upland views of the water and, at a minimum, must not affect these views in an insensitive manner; and
- The action should have the potential to improve the opportunities for multiple uses of the site.

See also Policies 10, 19, 20, 21 and 22.

Policy 2:

Facilitate the siting of water dependent uses and facilities on or adjacent to coastal waters.

Policy 2A:

Expand restrictions on the use of power boats on the Hudson River and Croton River and Bay by further enforcing the parameters that regulate boat traffic such as speed, turbidity, safety, and mooring and sludge disposal. Such controls will further increase the compatibility of power boat use with other forms of recreation use within the Coastal Zone Area.

Policy 2B:

Encourage water-enhanced commercial uses where such uses complement water-dependent uses and do not result in displacement of such uses.

Explanation of Policy

A water-dependent use is one which requires a waterfront location in order to function. A water-enhanced use is defined as a use which has no critical dependence on a waterfront location; however, the use is more profitable and the enjoyment level of users is significantly greater by virtue of its location adjacent to the water.

To ensure that water-dependent uses can continue to be accommodated within the coastal zone area, the Village and agencies of New York State will avoid undertaking, funding or approving non-water-dependent uses when such uses would preempt the reasonably foreseeable development of water-dependent uses on the existing vacant waterfront parcels.

The following uses and facilities are considered desirable as water-dependent in the Village:

1. Uses which depe4nd on the utilization of resources found in coastal waters;

2. Recreational activities dependent on access to coastal waters;

3. Flood and erosion protection structures;

4. Scientific/educational activities, which, by their nature, require access to coastal waters; and

5. Support facilities necessary for successful functioning of permitted water-dependent uses. Though these uses must be near the given water-dependent use, they should, as much as possible, be sited inland from the water-dependent use rather than on the shore.

Water-dependent uses should be located so that they enhance, or at least do not detract from, the surrounding community, and so that the balance of uses is achieved and maintained. Consideration should also be given to such factors as the protection of nearby residential areas from odors, noise and traffic. Affirmative approaches should also be employed so that water-dependent uses and adjacent uses can serve to complement one another. Water-dependent uses must also be sited so as to avoid adverse impacts on the significant coastal resources.

Water-dependent recreational use at Silver Lake, Black Rock Park, Croton Point Park, Senasqua Park, Croton Landing Park, Echo Canoe Launch and the Croton Yacht Club should be maintained. In addition, the provision of public access to the water's edge and specifically to water-dependent uses at the Half Moon Bay site and at any other privately held sites should be enforced.

The location of the railroad lines virtually cuts off the Hudson River waterfront from the remainder of the Village. Although Metro-North is required under its charter to provide public access to the waterfront, such access is severely limited. Therefore, access to vacant waterfront parcels available for water-dependent uses is also limited. Priority should be given to water-enhanced or water-dependent uses which more directly complement the other goals for the coastal zone as expressed in this LWRP. Approval of any water-enhanced activity must be in accordance with local policies regarding scenic resources (Policy 25) and erosion (Policies 14-17).

Recreational use on the waterfront sites should be strictly monitored so as to ensure that such uses are compatible with existing forms of recreational use. Enforcement of regulations related to boat speed, turbidity, safety and mooring activities must be undertaken by the proper authorities. Such regulations are determined at the Federal, State and local level. Chapter 83 of the Village Code (Local Law #9 of 1977) regulates the use of power boats on the Croton River and Bay. Such regulations include limits on boat speed, mooring and discharge of waste into the Croton River and Bay. However, no such restrictions are in place regarding the use of boats within the Village's jurisdiction along the Hudson River. Recognizing that the Federal government regulates boat traffic in the navigable waters of the Hudson, the Village must also be prepared to initiate, adopt and enforce regulations for use of such recreational vessels within its jurisdiction on the Hudson. To accomplish this, the existing local law should be amended and submitted to the State for review.

Policy 3:

Encourage the development of the State's existing major ports of Albany, Buffalo, New York, Ogdensburg and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development which is essential to or in support of waterborne transportation of cargo and people.

The State coastal policy regarding the development of major ports is not applicable to Croton.

Policy 4:

Strengthen the base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime activity.

The State coastal policy regarding the strengthening of small harbors is not applicable to Croton. The State has found that this policy generally applies to communities with a mix of active traditional water-dependent uses such as commercial fishing, recreational boating and fishing, boat building and repair, as well as a resource base of natural amenities and historic buildings. While Croton's waterfront areas have some of these uses, the Village does not contain traditional working waterfront uses which are characteristic of smaller harbor areas.

Policy 5:

Encourage the location of development in areas where public services and facilities essential to such development are adequate, except when such development has special functional requirements or other characteristics which necessitate its location in other coastal areas.

Policy 5A:

When feasible, development within the Village should be directed within the current service area of existing water and sewer facilities or in close proximity to areas where distribution lines currently exist.

Explanation of Policy

Development, particularly large-scale development, in the coastal zone will be encouraged to locate within, contiguous to or in close proximity to, existing areas of concentrated development where infrastructure and public services are in place, and where topography, geology and other environmental conditions are suitable for and able to accommodate development. In evaluating each proposal, the scale and type of development will be assessed with respect to consistency with the present character of the community.

The above policies are intended to accomplish the following:

1. Strengthen existing residential, industrial and commercial centers, such as in the Upper Village and Harmon sections;

2. Increase the productivity of existing public services and moderate the need to provide costly new public services in outlying areas; and

3. Preserve open space.

Objective #3 is of particular importance in the coastal zone area due to the probable impact of development of the last remaining vacant parcels within the Village. Some of these parcels are important natural areas and have been identified as offering important views, and are enjoyed as such by the community. Pressure for development, particularly residential development, of these parcels must consider the impact on the infrastructure systems including the roadway network, water and sewage disposal systems, as well as the impact on wildlife habitats. Development must also consider policies related to the preservation of viewsheds and protection from flooding and erosion.

The following points shall be considered in assessing the adequacy of an area's infrastructure and public services:

a) Streets and highways servicing the proposed site can safely accommodate the peak traffic generated by the proposed land development. Traffic analysis of impacts from proposed development will be assessed during planning and environmental reviews. Any proposed development should include mitigation measures to reduce traffic impacts on existing Village streets. See Inventory and Analysis, Section D-1, for a discussion of Village roadways and the need for coordination of bus and train schedules to facilitate the use of public transportation.

b) Development's water supply (consumptive and firefighting) can be met by the existing water supply system.

c) The existing sewage disposal system can accommodate the wastes generated by the development.

d) Stormwater runoff from the proposed site can be accommodated by the on-site and/or off-site facilities.

e) Schools, police and fire protection and health and social services are adequate to meet the needs of the population expected to live, work, shop or conduct business in the areas as a result of the development.

It is recognized that certain forms of development may and/or should occur at locations which are not within or near areas of concentrated development. Such development can only occur if water supply and sewage disposal facilities are available.

This policy does not apply to water-dependent uses with site requirements not compatible with this policy, or when alternative sites are not available, or to uses and/or activities which because of public safety consideration should be located away from populous areas.

Policy 6:

Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

Policy 6A:

To expedite permit procedures, the Village shall coordinate all relevant local laws as information for applicants and/or make all local laws available to applicants proposing development activities.

Explanation of Policy

For specific types of development activities and in areas suitable for such development, State and Village agencies will make every effort to coordinate and synchronize existing permit procedures and regulatory programs, as long as the integrity of the regulations' objectives is not jeopardized. It is especially necessary to clearly articulate such requirements for development for sites along the upland area of the hills. These procedures and programs will be coordinated within each agency. Also, efforts will be made to ensure that each agency's procedures and programs are synchronized with other agencies' procedures at each level of government. Finally, regulatory programs and procedures will be coordinated and synchronized between levels of government, and, if necessary, legislative and/or programmatic changes will be recommended.

In order to expedite procedures for development applications, the Village shall provide to the applicant a package of all relevant laws, including ones recently adopted or amended. This will ensure that proposals are developed that would be consistent with the legal framework of the Village.

Legislative action taken by the Village includes the designation of the Waterfront Advisory Committee to review development proposals for consistency with the LWRP policies. This review is incorporated into the tasks of land use approval boards and commissions. The Planning Board, Zoning Board of Appeals, the Village Board, the Water Control Commission or other committees, as applicable and appropriate, shall review such proposals for consistency with the provisions of the Zoning Ordinance.

B. FISH AND WILDLIFE POLICIES

Policy 7:

Significant coastal fish and wildlife habitats will be protected, preserved, and, where practical, restored so as to maintain their viability as habitats.

Policy 7A:

The quality of the Croton River and Bay significant fish and wildlife habitat and Haverstraw Bay significant fish and wildlife habitat shall be protected and improved for conservation, economic, aesthetic, recreational, and other public uses and values. Its resources shall be protected from the threat of pollution, misuse, and mismanagement.

Policy 7B:

Materials that can degrade water quality and degrade or destroy the ecological system of the Croton River and Bay significant fish and wildlife habitat and the Haverstraw Bay significant fish and wildlife habitat shall not be disposed of or allowed to drain in, or on land within, the area of influence in the significant fish and wildlife habitats.

Policy 7C:

Storage of materials that can degrade water quality and degrade or destroy the ecological system of the Croton River and Bay significant fish and wildlife habitat or Haverstraw Bay significant fish and wildlife habitat shall not be permitted within the area of influence of the habitat unless best available technology is used to prevent adverse impacts to the habitat.

Policy 7D:

Restoration of degraded ecological elements of the Croton River and Bay and Haverstraw Bay significant fish and wildlife habitats and shorelands shall be included in any programs for cleanup of any adjacent toxic and hazardous waste sites.

Policy 7E:

Runoff from public and private parking lots and from storm sewer overflows shall be effectively channeled so as to prevent oil, grease, and other contaminants from polluting surface and ground water and impact to the significant fish and wildlife habitats.

Policy 7F:

Construction activity of any kind must not cause a measurable increase in erosion or flooding at the site of such activity, or impact other locations. Construction activity in the Croton River and Hudson River spawning areas shall be timed so that spawning of anadromous fish species and shellfish will not be adversely affected.

Policy 7G:

Such activities must not cause significant degradation of water quality or impact identified significant fish and wildlife habitats.

Policy 7H:

Habitat-related policies identified in the Indian Brook-Croton Gorge Watershed Conservation Action Plan should be considered in actions proposed for these areas.

Explanation of Policy

The Croton River and Bay and Haverstraw Bay are designated Significant Coastal Fish and Wildlife Habitats. See Inventory and Analysis, Section C-3, for a description of these habitats.

Habitat protection is recognized as fundamental to assuring the survival of fish and wildlife populations. Certain habitats are critical to the maintenance of a given population and, therefore, merit special protection.

Such habitats exhibit one or more of the following characteristics: (1) are essential to the survival of a large portion of a particular fish or wildlife population (e.g. feeding grounds, nursery areas); (2) support populations of rare and endangered species; (3) are found at a very low frequency within a coastal region; (4) support fish and wildlife populations having significant commercial and/or recreational value; and (5) would be difficult or impossible to replace.

A **habitat impairment test** must be met for any activity that is subject to consistency review under Federal and State laws, or under applicable local laws contained in an approved LWRP. If that proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific habitat impairment test that must be met is as follows:

> In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:
>
> - Destroy the habitat; or
> - Significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance or pollution of a designated area, or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by

changes in vegetation, substrate or hydrology, or by increases in runoff, erosion, sedimentation or pollutants.

Significant impairment is defined as reduction in vital resources (e.g. food, shelter, loving space) or change in environmental conditions (e.g. temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators or a significantly impaired habitat focus on ecological alterations and may include, but are not limited to, reduced carrying capacity, change in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The **tolerance range** of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species' population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of physical, biological and chemical parameters which should be considered as applying the habitat impairment test include, but are not limited to, the following:

1. Physical parameters, such as living space circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;

2. Biological parameters, such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and

3. Chemical parameters, such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity and pollutants (heavy metals, toxics and hazardous materials).

Significant coastal fish and wildlife habitats are evaluated, designated and mapped pursuant to the Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42). The New York State Department of Environmental Conservation (DEC) evaluates the significance of coastal fish and wildlife habitats, and following a

recommendation from the DEC, the Department of State designates and maps specific areas.

Activities in Croton River and Bay and Haverstraw Bay that would degrade water quality, increase turbidity or sedimentation, reduce flows, increase water temperatures or alter water salinities or temperature in the case of Haverstraw Bay would result in significant impairment of the habitat. Any physical alteration of the habitat, through dredging, filling or bulkheading, would result in a direct loss of valuable habitat area. Habitat disturbances would be most detrimental during fish spawning and incubation periods, which generally extend from April through August for most warmwater or anadromous species. Discharges of sewage or stormwater runoff containing sediments or chemical pollutants may result in significant adverse impacts on fish populations and must be prohibited. Similarly, spills of oil or other hazardous substances from industrial activity, and leachate of contaminated groundwater, constitute a potential threat to fish and wildlife in the bays.

Of particular concern in the Croton River and Bay major tributary system are the potential effects of upstream disturbances, including water withdrawals, impoundments, stream bed disturbances and effluent discharges. These are also concerns in Haverstraw Bay, as are hydrologic disturbances (water withdrawals). Establishment of minimum flow requirements for the Croton River up to the first impassable barrier to fish has had a significant beneficial effect on the area; however, under drought conditions, releases from the Croton Reservoir can be reduced to zero. Minimum flow requirements for the Croton River should be maintained up to the dam. See Policy 38A.

Existing areas of natural vegetation bordering Croton River and Bay and Haverstraw Bay should be maintained to provide bank cover, soil stabilization, perching sites and buffer areas. However, development of public access to the bay areas is desirable to ensure that adequate opportunities for compatible human uses of the fish and wildlife resources are available.

In addition, the Village and private owners of the parking lots at the Croton Harmon station should be required to control and filter runoff to prevent pollution of the Habitats. This includes efforts by the Village to determine an alternative location for the Department of Public Works facility currently located north of the Echo Canoe Launch.

See Policies 8, 25, 33, 34, 35, 37 and 44.

Policy 8:

Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub-lethal or lethal effect on those resources.

Explanation of Policy

Hazardous wastes are unwanted by-products of manufacturing processes and are generally characterized as being flammable, corrosive, reactive or toxic. More specifically, waste is defined in Environmental Conservation Law [§27-0901 (3)] as "waste or combination of wastes which because of its quantity, concentration or physical chemical or infectious characteristics may: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or otherwise managed." A list of hazardous wastes (6NYCRR Part 371) has been adopted by DEC.

The handling (storage, transport, treatment and disposal) of the materials included on this list is being strictly regulated in New York State to prevent their entry or introduction into the environment, particularly in the State's air, land and waters. The State enforces the Federal regulations (management strategies) with respect to the transportation and tracking of materials, control of interim storage areas and regulation of disposal sites. Such controls should effectively minimize possible contamination of and bio-accumulation in the State's coastal fish and wildlife resources at levels that cause mortality or create physiological and behavioral disorders.

Other pollutants are those conventional wastes, generated from point and nonpoint sources, that are not identified as hazardous wastes but are controlled through other State laws.

Debris and other construction or waste materials from the rail yards or other industries shall not be deposited in coastal areas where they may leach into groundwater supplies or directly affect wildlife resources.

In addition, the Village should facilitate upgrades to catch basins and outfalls as necessary, to address the issue of floatable debris in Croton River and Bay.

See Policies 7, 25, 30, 33, 34, 37, 40 and 44.

Policy 9:

Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources. Such efforts shall be made in a manner which ensures the protection of renewable fish and wildlife resources and considers other activities dependent on them.

Policy 9A:

Ensure continued recreational use and public access to the rivers through Village-owned land adjacent to the railroad parking lot, at Croton Point Park, at Senasqua and Croton Landing Parks, along the Croton River, and at the Croton yacht club. Efforts should be made to increase opportunities for public access and enjoyment in these areas.

Policy 9B:

Encourage passive recreational enjoyment of the wildlife in the designated significant fish and wildlife habitats, on the Audubon Society sanctuaries, Jane Lytle Arboretum, and on other public or private lands within the Village where wildlife habitats are located, as well as the protection of such resources.

Explanation of Policy

Any effort to increase recreational use of these resources will be made in a manner which ensures the protection of fish and wildlife resources and which takes into consideration other activities dependent on these resources. Also, such efforts must be done in accordance with existing State law and in keeping with sound resource management considerations. Such considerations include biology of the species, carrying capacity of the resource, public demand, costs and available technology.

Continued recreational areas at Croton Point Park, Senasqua Park, Croton Landing Park, Croton Yacht Club, Black Rock, Silver Lake and Paradise Island should be maintained (see Policy 21 for the types of amenities to be provided or maintained at such sites). The Village also encourages any effort to improve water quality which would enable the public to swim and fish in the coastal water.

Recreational opportunities in coastal water and its tributaries will depend on continued monitoring by DEC and the maintaining or upgrading of water quality classifications. Currently, Village tributaries to the Hudson range from Class B to Class C (see Inventory and Analysis, Section C-2). Recreational uses of coastal fish and wildlife resources include consumptive uses such as fishing and hunting, and non-consumptive uses such as wildlife photography, bird watching and nature study.

The following additional guidelines should be considered to determine the consistency of a proposed action with the above policy:

1. Consideration should be made as to whether an action will impede existing or future utilization of the State's recreational fish and wildlife resources.

2. Efforts to increase access to recreational fish and wildlife resources should not lead to over-utilization of that resource or case impairment of the habitat. Sometimes such impairment can be more subtle than actual physical damage to the habitat. For example, increased human presence can deter animals from using the habitat area.

3. The impacts of increasing access to recreational fish and wildlife resources should be determined on a case-by-case basis, consulting the significant habitat narrative for Croton River and Bay and Haverstraw Bay (see Policy 7) and/or conferring with a trained fish and wildlife specialist.

See also Policies 7, 19, 20, 21 and 31.

Policy 10:

Further develop commercial finfish, shellfish and crustacean resources in the coastal area by (1) encouraging the construction of new or improvement of existing on-shore commercial fishing facilities, (2) increasing marketing of the State's seafood products, and (3) maintaining adequate stocks and expanding aquaculture facilities. Such efforts shall be made in a manner which ensures the protection of renewable fish and wildlife resources and considers other activities dependent on them.

This policy does not apply to the Village at this time because there are no known or anticipated commercial fishing facilities located within the Village.

C. FLOODING AND EROSION POLICIES

Policy 11:

Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Policy 11A:

Erosion and sediment control measures shall be consistent with applicable Village laws.

Explanation of Policy

The entire River boundary of Croton-on-Hudson, including both the Hudson and Croton Rivers, is within designated floodplain areas. A number of the properties on the Hudson River are protected by bulkheads or riprap, including Croton Point Park, Senasqua Park, Croton Landing Park and the Croton Yacht Club. The properties fronting on the Croton River are unprotected. In addition, a vast amount of land within the Village consists of shallow soils with a high water table. As such, these properties are subject to flooding and erosion.

This policy is particularly important in the siting and construction of new buildings. To protect human lives and property from flooding and erosion, the Village of Croton-on-Hudson adopted Chapter 129, Flood Damage Prevention, of the Village Code (Local Law No. 2 of 2007) and Chapter 196, Stormwater, Drainage, Erosion and Water Pollution Control, of the Village Code (Local Law No. 3 of 2007). In addition, the Village adopted Chapter 195, Steep Slope Protection (Local Law No. 3 of 2008) to regulate the development and protection of steep slope areas. Any development within the Village must be consistent with these and any other applicable laws, as well as Federal guidelines relating to construction in floodplains.

In particular, the Village shall seek to address areas where existing drainage systems are known to contribute to erosion on steep slopes in the Croton Gorge areas, such as Mayo's Landing behind Tompkins Elementary Schools.

The disaster preparedness agency in Westchester County is the Office of Emergency Management. Significant damage caused by erosion and flooding occurred in the 1840s, when the Croton Dam broke and sediment filled the Croton River and Bay. More recently, substantial damage occurred during Tropical Storm Irene in 2011 and Hurricane Sandy in 2012.

Policy 12:

Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs. Primary dunes will be protected from all encroachments that could impair their natural protective capacity.

Policy 12A:

Every effort should be made to protect Croton Point, a natural protective barrier to Croton bay from activities or development that would increase erosion of or flooding of the point.

Explanation of Policy

Croton Point is an important natural protective feature which separates Croton River and Bay from the Hudson River. Croton Point helps safeguard the bay and the low tidal lands adjacent to it from flooding and erosion. Excavation around or on the Point, improperly designed structures, inadequate site planning or other actions which fail to recognize its fragile nature and high protective value, may lead to weakening or destruction of Croton Point, and should be avoided.

Policy 13:

The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty (30) years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Policy 13A:

Any bulkheads along the Hudson must be maintained in good condition and public and private landowners should be required to restore and maintain erosion control mechanisms along their river frontage which are designed for long-term stability.

Explanation of Policy

This policy is applicable along the entire length of the Village's waterfront along both the Croton and Hudson Rivers, where bulkheads have been constructed to protect the banks of the Rivers from erosion. Any reconstruction or repair of these bulkheads will be held to the 30-year standards of this policy. These standards should apply not only to public actions to repair deteriorated bulkheads but also to existing property owners who should be required to maintain and reconstruct the bulkhead along their water frontage,

and private developers who propose new development for properties with river frontage.

The Village should continue to inspect and repair the bulkheads along Village property periodically according to Best Management Practices.

Any proposed construction must comply with Best Management Practices of Policy 37 and the development principles of Policy 11.

Policy 14:

Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Explanation of Policy

Erosion and flooding are processes which occur naturally. However, by their actions, people can increase the severity and adverse effects of these processes, causing damage to, or loss of property, and endangering human lives. Those actions include: the use of erosion protective structures, such as groins, or the use of impermeable docks which block the littoral transport of sediment to adjacent shorelands, thus increasing their rate of recession; the failure to observe proper drainage or land restoration practices, thereby causing run-off and the erosion and weakening of shorelands; and the placing of structure in identified floodways so that the base flood level is increased, causing damage in otherwise hazard-free areas. This policy applies not only to construction of erosion protection structures, but to development and construction of any kind that could have a potential effect on erosion or flooding. When developing in the coastal area, best management practices should be undertaken in compliance with related local laws to mitigate flooding impacts. Stormwater runoff must be retained on-site, in detention ponds or through other measures, and allow discharge at rates which do no over-burden the existing system and exacerbate flooding of Village streets.

See also Policies 7 and 11.

Policy 15:

Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

Explanation of Policy

Coastal processes, including the movement of beach materials by water, and any mining, excavation or dredging in nearshore or offshore waters which changes the supply and net flow of such materials, can deprive shorelands of their natural regenerative powers. Such mining, excavation and dredging should be accomplished in a manner so as not to cause a reduction of supply and thus increase erosion of such shorelands or cause degradation of water quality which may impact designated significant habitats. Although the Village of Croton-on-Hudson coastline has few areas where beach materials accumulate, the actions that occur in Village water which may affect the accumulation of such material in communities north and south of it shall be monitored for such impacts.

See also Policy 7.

Policy 16:

Public funds shall only be used for erosion protective s1ructures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

Policy 16A:

Public funds shall be appropriated for the maintenance of public parks, trails, walkways and public access points.

Explanation of Policy

Public funds are used for a variety of purposes on the State's shorelines. It is assumed that the decisions regarding the expenditure of public funds will be prudent and cost-effective, not only with regard to erosion protection measures, but for development within the coastal zone area in general. This policy recognizes the public need for protection of human life and existing investment in development or new development which requires a location in proximity to the coastal area or in adjacent waters to be able to function. However, it also recognizes the adverse impacts of such activities and development on the rate of erosion and on natural protective features and requires that careful analysis be made of such benefits and long-term costs prior to expending public funds.

Policy 17:

Whenever possible, use non-structural measures to minimize damage to natural resources and property from flooding and erosion. Such measures shall include: (i) the setback of buildings and structures; (ii) the planting of vegetation and the installation of sand fencing and draining; (iii) the reshaping of bluffs; and (iv) the flood-proofing of buildings or their elevation above the base flood level.

Policy 17A:

Efforts to control erosion along the rivers and on the steep slopes inland shall be of a non-structural nature, wherever possible, to minimize the visual impact of structural measures.

Explanation of Policy

This policy shall apply to the planning, siting and design of proposed activities and development, including measures to protect existing activities and development. To ascertain consistency with the policy, it must be determined if any one or a combination of non-structural measures would afford the degree of protection appropriate both to the character and purpose of the activity or development, and to the potential hazard. If non-structural measures are determined to offer sufficient protection, then consistency with the policy would require the use of such measures whenever possible. Such non-structural measures should also be in accordance with the policies on the aesthetic value of the hillsides (see Policy 25). In determining whether or not non-structural measures to protect against erosion or flooding will afford the degree of protection appropriate, an analysis, including review of other materials such as plans or sketches of the activity or development of the site and of the alternative protection measures, must be prepared to allow an informed assessment to be made.

See also Policy 11.

D. GENERAL POLICY

Policy 18:

To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the State has established to protect valuable coastal resource areas.

Explanation of Policy

Proposed major actions may be undertaken in the coastal area if they will not significantly impair valuable coastal waters and resources, thus frustrating the achievement of the purposes of the safeguards which the State has established to protect those waters and resources. Proposed actions must take into account the social, economic and environmental interests of the State and its citizens in such matters that would affect natural resources, water levels and flows, shoreline damage and recreation.

The Village is a transportation hub within northern Westchester County. Route 9 is a major thoroughfare and the Croton-Harmon Station is a significant public transportation node. Therefore, vehicular and rail traffic is a significant factor in the determination of the quality of life for Village residents. Heavy traffic results in noise, air and water quality impacts that must be assessed regularly. Measures should be taken whenever possible to keep such impacts to a minimum.

E. PUBLIC ACCESS POLICIES

Policy 19:

Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities so that these resources and facilities may be fully utilized in accordance with reasonably anticipated public recreation needs and the protection of historic and natural resources. In providing such access, priority will be given to public beaches, boating facilities, fishing areas and waterfront parks.

Policy 19A:

Encourage the linkage of open space from upland areas to and along the Hudson and Croton Rivers in the form of a trail or walkway system.

Policy 19B:

Increase public access to areas that offer physical and visual connection to the Hudson River or Croton River and Bay.

Policy 19C:

Encourage the improvement of public transportation, when feasible, where water-dependent and water-enhanced recreation activities are located.

Policy 19D:

Improve and maintain access to Croton River and Bay at the Village-owned Echo Canoe Launch south of the Village parking lots at the Croton-Harmon Station.

Explanation of Policy

This policy calls for achieving balance among the following factors: the level of access to a resource or facility, the capacity of a resource or facility and the protection of natural resources. The imbalance among these factors is the most significant in the State's urban areas. Because this is often due to access-related problems, priority will be given to improving physical access to existing and potential coastal recreation sites. The particular water-related recreation resources and facilities which will receive priority for improved access are public beaches, boating facilities, fishing areas and waterfront parks. In addition, because of the greater competition for waterfront locations within urban areas, the Coastal Management Program will encourage mixed-used areas and multiple uses of facilities to improve access. Opportunities to link waterfront trails and other access opportunities to similar facilities and opportunities in communities to the north, south and east should be identified and pursued.

The following guidelines will be used in determining the consistency of a proposed action with this policy:

1. The existing access from adjacent or proximate public lands or facilities to public water-related recreation resources and facilities shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or proximate public lands or facilities to public water-related recreation resources and facilities be eliminated or decreased.

2. Any proposed project to increase public access to public water-related recreation resources and facilities shall be analyzed according to the following factors:

    a. The level of access to be provided should be in accord with estimated public use.

    b. The level of access to be provided shall not cause a degree of use which would exceed the biological or physical capability of the resource or facility.

3. State agencies will not undertake or will not fund any project which increases access to a water-related resource or facility that is not open to all members of the public.

4. In their plans and programs for increasing public access to public water-related resources and facilities, State agencies shall give priority in the following order to projects located: within the boundaries of the Federal-Aid Metropolitan Urban Area and served by public transportation; within the boundaries of the Federal-Aid Urban Metropolitan Area but not served by public transportation; outside the defined Urban Area boundary and served by public transportation; and outside the defined Urban Area boundary but not served by public transportation.

The following is an explanation of the terms used in the above guidelines:

a. Access – the ability and right of the public to reach and use public coastal lands and waters.

b. Public water-related recreation resources or facilities – all public lands or facilities that are suitable for passive or active recreation that require either water or a waterfront location or are enhanced by a water location.

c. Public lands or facilities – lands or facilities held by State or local government in fee simple or less-than-fee simple ownership and to which the public has access or could have access, including underwater lands and the foreshore.

d. A reduction in the level of public access – includes but is not limited to the following:

   i. The number of parking spaces at a public water-related recreation resource or facility is significantly reduced.

   ii. The service level of public transportation to a public water-related recreation resource or facility is significantly reduced.

   iii. Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines or similar linear facilities.

   iv. There are substantial increases in any of the following: already existing special fares (not including regular fares in any instance) of public transportation to a public water-related recreation resource or facility, except where the public body having jurisdiction over such fares determines that such substantial fare increases are necessary; and an analysis shows that such increases will significantly reduce usage by individuals or families with incomes below the State government-established poverty level.

e. An elimination of the possibility of increasing public access in the future includes, but is not limited to the following:

   i. Construction of public facilities which physically prevent the provision, except at great expense, of convenient public access to public water-related recreation resources and facilities.

   ii. Sale, lease or other transfer of public lands that could provide public access to a public water-related recreation resource or facility.

   iii. Construction of private facilities which physically prevent the provision of convenient public access to public lands and facilities.

At-grade crossings for public access to the Village's waterfront is severely limited due to the presence of the railroad, associated railroad structures and major transportation corridors (Route 9). To increase public access to the Croton and Hudson Rivers, this policy encourages the linkage of open spaces in the form of a trail or walkway system. Such a system would allow the public access to the waterfronts for both passive and active recreation. The Village would be responsible for development and maintenance of the trail system along its property, and private property owners would be responsible for that

part of the system along their parcels. If so desired, the Village and the private property owners may negotiate a contract to arrange for security and maintenance along the entire trail system. At this time, the Village negotiates public access with private landowners during the planning process.

In addition to pedestrian access via a trail system, the existing Metro-North tunnel to Senasqua Park and the Metro-North bridge to Croton Point Park should both be maintained and improved to provide two-way vehicular traffic. The bridge to Croton Point Park should also be improved to provide for pedestrian access. The County is responsible for the surface of the bridge, while Metro-North is responsible for the bridge structure. In addition, the pedestrian bridge to Senasqua Park at Brook Street and North Riverside Avenue should be maintained and improved as necessary.

Public access to Croton waterfront areas must be maintained at Senasqua Park, Croton Land Park, the Croton Yacht Club, Croton Point Park, Echo Canoe Launch, Paradise Island, Half Moon Bay, Silver Lake and Black Rock. Continued maintenance of the Duck Pond and the associated playing fields is important to keep this site as a viable recreational facility. The Duck Pond presents important year-round recreational opportunities to the residents of Croton-on-Hudson and should be properly maintained.

Policy 19C encourages the use of public transportation to areas where water-enhanced and water-dependent facilities are located. This is particularly important in Croton due to constrained parking at waterfront locations. New access structures (i.e. bridges) or larger parking areas are often inhibited by the lack of physical space, lack of adequate connections and the lack of public funds available for new construction. One area of opportunity lies with the land area adjacent both to Croton Landing Park and the existing CSX facility next to the railroad. The Village should coordinate with CSX to facilitate an expansion of the Croton Landing parking area, perhaps through a connection by CSX to the Village sewer system, which would make CSX's septic field area (currently in easement) available for park use. Pedestrian access is available in some areas, but the lack of safety precautions inhibits such access. Improved pedestrian paths could be provided at Echo Canoe Launch and at Black Rock, where the linkage to a Croton River Gorge Trail would mean the development of a footpath or sidewalk. In addition, over the longer-term, the Village should explore pedestrian linkages from Croton Landing Park to Oscawana County Park in Cortlandt, with a possible connection to the Graff Sanctuary in Croton.

Policy 20:

Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it should be

provided in a manner compatible with adjoining uses. Such lands shall be retained in public ownership.

Policy 20A:

Maintain access to the publicly owned foreshore for fishing and watercraft launch opportunities.

Explanation of Policy

Access addressed by this policy concerns pedestrians and vehicle access to the Village- and County-owned property along the water's edge and/or vantage points on lands immediately adjacent to the foreshore from which to view the Hudson and Croton Rivers and Croton Bay waterfronts. Since Village-owned land borders these areas, access for active and passive recreation should be encouraged and maintained.

Access addressed by this policy includes walking along the Village's waterfront and/or to a vantage point from which to view the waterfront. Other activities requiring access include bicycling, bird watching, photography, nature study and fishing.

For these activities, access can be provided by a coastal trails system, access across transportation facilities and the promotion of mixed- and multi-use development.

While such publicly owned lands referenced in the policy shall be retained in public ownership, traditional sales of easements on lands underwater to adjacent anchor property owners are consistent with this policy, provided such easements do not interfere with continued public use of the public lands on which the easement is granted (see Policy 19).

In those instances where current adjacent uses are not compatible with other policies in this LWRP, those adjacent uses shall not be used to determine the compatibility of a use of publicly owned land.

The following guidelines will be used in determining the consistency of a proposed action with this policy:

1. Existing access from adjacent or proximate public lands or facilities to existing public coastal lands and/or waters shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or nearby public lands or facilities to public coastal lands and/or waters be eliminated.

   The following is an explanation of the terms used in the above guidelines:

   a. (See definitions under Policy 19 of "access" and "public lands or facilities").

b. A reduction in the existing level of public access – includes but is not limited to the following:

   i. Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines or similar linear facilities.

   ii. Pedestrian access is diminished or blocked completely by public or private development.

c. An elimination of the possibility of increasing public access in the future – includes but is not limited to the following:

   i. Construction of public facilities which physically prevent the provision, except at great expense, of convenient public access to public water-related resources and facilities.

   ii. Sale, lease or other conveyance of public lands that could provide public access to public coastal lands and/or waters located directly along the coast of the Hudson River and the Croton River.

   iii. Construction of private facilities which physically prevent the provision of convenient public access to public coastal lands and/or waters from public lands and facilities.

2. The existing level of public access within public coastal lands or waters shall not be reduced or eliminated.

   a. A reduction in the existing level of public access – includes but is not limited to the following:

      i. Access is reduced or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines or similar linear facilities.

      ii. Access is reduced or blocked completely by any public developments.

3. Public access from the nearest public roadway to the shoreline and along the coast shall be provided by new land use or development, except where (a) it is inconsistent with public safety, or the protection of identified fragile coastal resources; (b) adequate access exists within one-half mile; of (c) agriculture would be adversely affected. Such access shall not be required to be open to

public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

4. Agencies will not undertake or fund any project which increases access to a water-related resource or facility that is not open to all members of the public.

5. Proposals for increased public access to coastal lands and waters shall be analyzed according to the level of access provided, and such level shall not cause a degree of use which would exceed the physical capability of the resource.

Policy 21:

Water dependent and water enhanced recreation will be encouraged and facilitated, and will be given priority over non-water related uses along the coast, provided it is consistent with the preservation and enhancement of other coastal resources and takes into account demand for such facilities. In facilitating such activities, priority shall be given to areas where access to the recreation opportunities of the coast can be provided by new or existing public transportation services and to those areas where the use of the shore is severely restricted by existing development.

Policy 21A:

Boating and fishing activities should be encouraged provided that they do not restrict other recreational opportunities and are undertaken in a manner compatible with existing water-dependent uses.

Explanation of Policy

Water-related recreation includes such obviously water-dependent activities as boating, swimming and fishing, as well as certain activities which are enhanced by a coastal location and increase the general public's access to the coast. Activities which increase the public's access to the coast include pedestrian and bicycle trails, picnic areas, scenic overlooks and passive recreation areas that take advantage of coastal scenery.

Provided the development of water-related recreation is consistent with the preservation and enhancement of such important coastal resources as fish and wildlife habitats, aesthetically significant areas and historic and cultural resources, and provided demand exists, water-related recreation development is to be increased and such uses shall have a higher priority than any non-coastal-dependent uses, including non-water-related recreation uses. In addition, water-dependent recreation uses shall have a higher priority

over water-enhanced recreation uses. Determining a priority among coastal dependent uses will require a case-by-case analysis. However, any use of Croton Point Park should be low-intensity due to its proximity to and potential impacts on the significant fish and wildlife habitats.

The siting or design of new public development in a manner which would result in a barrier to the recreational use of a major portion of a community's shore should be avoided as much as possible. The Village should continue to establish and improve riverfront trails for public use.

Boating and pedestrian facilities will, as appropriate, include parking, park-like surroundings, toilet facilities and pump-out facilities. There is a need for a better locational pattern of boating facilities to correct problems of overused, insufficient or improperly sited facilities. In addition, pedestrian and vehicular access to the waterfront should be provided. Detailed plans for such access will be reviewed during the planning process to ensure the scale and type of amenities are adequate for the projected use.

Because most of the shoreline is restricted by the railbed, the provision of adequate boating services to meet future demand must be encouraged by this LWRP. In addition, improvement to existing access areas over or under the railbed is also encouraged by this Policy. Opportunities for public boat launching are to be maintained and improved at the Croton Yacht Club, Croton Landing Park and Echo Canoe Launch. The siting of boating facilities must be consistent with preservation and enhancement of other coastal resources, with their capability to accommodate demand, and with the visual access Policies 24 and 25.

Potential conflicts and incompatible uses within the Hudson and Croton Rivers include non-power as opposed to power boat use, boat speed, location and ownership of mooring spaces, unsafe boat operators and residential or commercial use of the shoreline without the provision for public access. Resolutions of potential conflicts can be evaluated and mitigated during the planning and approval process for any proposed project. In addition, regulations restricting and regulating such uses are appropriate.

Public transportation facilities on land, such as shuttle bus services or County-sponsored services which currently provide access to the coastal area, should be expanded to provide access to public waterfront areas.

See also Policies 2, 4, 7, 8, 9, 22, 30, 31 and 34.

Policy 22:

Development when located adjacent to the shore will provide for water-related recreation, as a multiple use, whenever such recreational use is appropriate in light of reasonably anticipated demand for such activities and the primary purpose of the development.

Explanation of Policy

Many developments present practical opportunities for providing recreation facilities as an additional use of the site or facility. Therefore, whenever developments are located adjacent to the shore, they should to the fullest extent permitted by existing law provide for some form of water-related recreation use unless there are compelling reasons why any form of such recreation would not be compatible with the development, or a reasonable demand for public use cannot be foreseen.

The types of development which can generally provide water-related recreation as a multiple use include, but are not limited to:

- Parks
- Utility transmission rights-of-way
- Sewage treatment facilities
- Nature preserves
- Large residential subdivisions
- Office buildings

Appropriate recreation uses which do not require any substantial additional construction shall be provided at the expense of the project sponsor provided that the cost does not exceed 2% of the total project cost. In determining whether compelling reasons exist which would make inadvisable recreation as a multiple use, safety considerations should reflect a recognition that some risk is acceptable in the use of recreational facilities.

Whenever a proposed development would be consistent with CMP policies and the development could, through the provision of recreation and other multiple uses, significantly increase public use of the shore, then such development should be encouraged to locate adjacent to the shore (this situation would generally only apply within the more developed portions of urban areas).

Whenever developments are located adjacent to the shore, they should provide for some form of water-related or enhanced recreation use unless there are compelling reasons why such recreation would not be compatible with the development.

See also Policies 19 and 20.

F. HISTORIC AND SCENIC QUALITY POLICIES

Policy 23:

Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the nation.

Policy 23A:

Provide for the long-term maintenance of Village-owned memorials: the 9/11 Remembrance Memorial, the World War I Veterans Memorial and Veterans Corner.

Explanation of Policy

Policy 23 applies to properties that are presently or eventually designated for inclusion in the State and/or National Registers of Historic Places or the Westchester County Inventory of Historic Places, i.e. at this time Van Cortlandt Manor, the Croton North Railroad Station, 126 Old Post Road North (part of the former Wyndhurst Estate), the Baker House (35 Old Post Road North) and the Bethel Chapel.

Policy 23A provides for the ongoing care and maintenance of several Village-owned memorials which are important to the history of Croton, and which are part of public space valuable to the community.

Among the most valuable of the State's man-made resources are those structures or areas which are of historic, archeological or cultural significance. The protection of these structures must involve a recognition of their importance by all agencies.

Protection must include concern not just with specific sites but with areas of significance and with the area around specific sites. The policy is not to be construed as a passive mandate but must include efforts, when appropriate, to restore or revitalize through adaptive reuse. While the coastal management program is concerned with the preservation of all such resources within the coastal boundary, it will actively promote the preservation of historic and cultural resources which have a coastal relationship.

The structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture in the State, its communities or the nation comprise the following resources:

1. A resource, which is in a Federal or State park established, among other reasons, to protect and preserve the resource.

2. A resource on, nominated to be on or determined eligible to be on the National or State Registers of Historic Places.

3. A resource designated by the State Nature and Historic Preserve Trust.

4. An archaeological resource which is on the State Department of Education's inventory of archaeological sites.

5. A local landmark, park or locally designated historic district that is located within the boundary of an approved local waterfront revitalization program.

6. A resource that is a significant component of an Urban Cultural Park.

All efforts and plans to protect structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the Village, State or Nation should include the consideration and adoption of any techniques, measures or controls to prevent a significant adverse change. A significant adverse change includes but is not limited to:

1. Alteration of or addition to one or more of the architectural, structural, ornamental or functional features of a building, structure or site that is recognized by the State as being a historic, cultural or archaeological resource, or component thereof. Such features are defined as encompassing those found in the U.S. Department of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings and may include the style and general arrangement of the exterior of a structure and any original or historically significant interior features including type, color and texture of building materials; entry ways and doors; fenestration; lighting fixtures; roofing, sculpture and carving; steps; rails; fencing; windows; vents and other openings; grillwork; signs; canopies; and other appurtenant fixtures and, in addition all building, structures, outbuildings, walks, fences, steps, topographical features, earthworks, pavings and signs located on the designated resource property.

2. Demolition or removal in full or part of a building, structure or earthworks that is recognized by the State as a historic, cultural or archaeological resource or component thereof, including any appurtenant fixture associated with a building, structure or earthwork.

3. All proposed actions within 500 feet of the perimeter of the property boundary of the historic, cultural or archaeological resource and all actions within a historic district, that would be incompatible with the objective of preserving the quality and integrity of the resource. Primary considerations to be used in making judgments about compatibility should focus on the visual and locational relationship between the proposed action and the special character of the

historic, cultural or archaeological resource. Compatibility between the proposed action and the resource means that the architectural style, design, material, scape, proportion, composition, landscaping and related items of the new action must be in keeping with the character of the existing resources. Within historic districts, this would include infrastructure improvements such as street and sidewalk paving, street furniture and lighting.

This policy shall not be construed to prevent the construction, reconstruction, alteration or demolition of any building, structure, earthwork or component thereof of a recognized historic, cultural or archaeological resource which has been officially certified as being imminently dangerous to life or public health. Nor shall the policy be construed to prevent the ordinary maintenance, repair or proper restoration according to the U.S. Department of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. When construction involves the disturbance of soil, the State Office of Parks, Recreation and Historic Preservation will be consulted concerning the presence of archaeological resources before construction begins.

Policy 24:

Prevent impairment of scenic resources of statewide significance as identified on the coastal area map. Impairment shall include: (i) the irreversible modification of geologic forms, the destruction or removal of vegetation, the destruction, or removal of structures, whenever the geologic forms, vegetation or structures are significant to the scenic quality of an identified resource; and (ii) the addition of structures which because of siting or scale will reduce identified views or which because of scale, form, or materials will diminish the scenic quality of an identified resource.

This policy does not apply to the Village of Croton-on-Hudson because the NYS Coastal Area Map does not identify any resources within the Village as being scenic resources of Statewide significance.

Policy 25:

Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

Policy 25A:

Establish and protect identified public viewsheds of the Hudson River, including but not limited to the public views of the Hudson River from the western shoreline of the Village, and of the Croton River and Gorge.

Explanation of Policy

When considering an action in the coastal area, an assessment must be undertaken to evaluate the impact of the proposed action on the overall scenic quality of the coastal area. The following guidelines for siting new development should be used to achieve this policy, recognizing that each development situation is unique and that the guidelines will have to be applied accordingly:

- Siting structures and other development such as highways, power lines and signs back from shorelines or in other inconspicuous locations to maintain the attractive quality of the shoreline and to retain views to and from the shore;

- Clustering or orienting structures to retain views, save open space and provide visual organization to a development;

- Incorporating sound, existing structures (especially historic buildings) into the overall development scheme;

- Removing deteriorated and/or degrading elements;

- Maintaining or restoring the original land form, except when changes screen unattractive elements and/or add appropriate interest;

- Using appropriate materials, in addition to vegetation, to screen unattractive elements; and

- Using appropriate scales, forms and materials to ensure that buildings and other structures are compatible with and add interest to the landscape.

Although no scenic resources within Croton are identified as being of Statewide significance, the panoramic vista south from Croton Point meets the general criteria guidelines for State designation, including:

- High quality of visual components;

- High-quality landscape based on outstanding design elements, free of discordant features, and visual variety which also exhibits unity of components;

- Uniqueness;

- Very high public accessibility; and

- Public recognition as an area of great visual quality.

The Department of State has conducted a study of scenic resources in the Hudson River coastal area. The western end of Croton Point itself has been identified as distinctive, and the scenic character of the Point and its contribution to the view of Croton from the Hudson River and western shorelands is significant. The Point juts into the River, thus distinguishing Croton from other areas along the Hudson's eastern shoreline. The topography of the Point dramatizes the slope of the inland areas and enhances the views inland to the eastern portion of the Village. It also provides a natural barrier, which allows the water-dependent uses in Senasqua Cove and which have altered the views of the shoreline.

South Riverside Drive and the Route 9 corridor is also considered of local and regional significance because it allows unparalleled views of western shorelands from major thoroughfares. In order to protect these views, existing deteriorated structures west of the right-of-way should be improved, and aesthetic and physical amenities should be provided, including sound fences, vegetation or architectural screening and paining of facilities.

Due to the topography of the Village, vegetated slopes and undisturbed crestlines contribute to the scenic quality of Croton and should be preserved. As such, proposed development of these areas should be evaluated in terms of visual impact. In particular, care should be taken regarding development which would impact the viewshed of the Croton Gorge, River and Bay.

The Village adopted Local Law No. 3 of 2008, regulating the development of land containing steep slopes. The Local Law was enacted to further the Village's policy to preserve, protect and conserve its steep slopes so as to maintain and protect the natural terrain and its vegetative features; preserve wetlands, water bodies and watercourses; prevent flooding; protect important scenic views and vistas; preserve areas of wildlife habitat; provide safe building sites; and protect adjoining property by preventing surface erosion, creep and sudden slope failure. Toward this end, new non-exempted construction is to avoid areas that contain steep slopes (areas having a topographical gradient of 15% or greater [ratio of vertical distance to horizontal distance], with a minimum horizontal dimension of 10 feet, whether man-made or natural, and whether created by a retaining structure or not). The Planning Board, the Zoning Board of Appeals, the Village Board and the Water Control Commission will take this objective into consideration in reviewing and acting on any plans or applications submitted pursuant to the provisions of the Local Law.

Policy 26:

Conserve and protect agricultural lands in the State's coastal areas.

The State coastal policy regarding the protection of agricultural lands is not applicable to Croton.

G. ENERGY AND ICE MANAGEMENT POLICIES

Policy 27:

Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

Explanation of Policy

Any proposed expansion by Con Edison or proposed siting of other major energy facilities within the coastal zone boundary could have a potentially significant impact upon many other important values pertaining to the coastal area and must be assessed for consistency with Policies 18-25A in particular.

A determination of public need for energy is the first step in the process for siting any new facilities. The directives for determining this need are set forth in the New York State Energy Law. With respect to transmission lines, Article VII of the State's Public Service Law requires additional forecasts and establishes the basis for determining the compatibility of these facilities with the environment and the necessity for a shorefront location. With respect to electric generating facilities, environmental impacts associated with siting and construction will be considered by one or more State agencies, or, if in existence, an energy siting board. The policies derived from these proceedings are entirely consistent with the general coastal zone policies derived from other laws, particularly the regulations promulgated pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. That Act is used for the purposes of ensuring consistency with the State Coastal Management Program and this Local Waterfront Revitalization Program.

In consultation with the Village of Croton, the Department of State will comment on State Energy office policies and planning reports as may exist; present testimony for the record during relevant proceedings under State Law and use the State SEQR and DOS regulations to ensure that decisions on proposed energy facilities other than those certified under the Public Service Law (PSL) transmission facilities and steam generating plants which would impact the waterfront area are made consistent with the policies and purposes of the Local Waterfront Revitalization Program.

Any decisions regarding expansion of Con Edison facilities onto sites within the Village's coastal zone boundary area should be based on public energy needs, compatibility of such facilities with the environment and the facility's need for a waterfront location, and should be consistent with the policies of this LWRP.

Decisions regarding expansion and/or continued operation of Indian Point Nuclear Power Facility or the Westchester County Charles Point Resource Recovery Facility in Peekskill should be consistent with the policies of this LWRP.

Policy 28:

Ice management practices shall not damage significant fish and wildlife and their habitats, increase shoreline erosion or flooding, or interfere with the production of hydroelectric power.

Explanation of Policy

The Village of Croton-on-Hudson does not undertake any ice management practices within the Hudson or Croton Rivers. Any clearance of the navigation channel of the Hudson River is performed by the U.S. Coastal Guard. This policy would be of importance in the event that significant expansion of these activities was proposed which might adversely affect the Haverstraw Bay and Croton River and Bay Significant Fish and Wildlife Habitats.

Prior to approving any private ice management practice, including the use or installation of private mechanisms that prevent ice accumulation, i.e. bubblers, an assessment must be made of the potential effects of such actions upon the habitats, flood levels and rates of shoreline erosion damage.

Following such examination, adequate methods of avoidance or mitigation of such potential effects must be utilized if the proposed action is to be implemented.

Policy 29:

Encourage the development of energy resources on the Outer Continental Shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities.

The State coastal policy regarding the development of energy resources is not applicable to Croton.

H. WATER AND AIR RESOURCES POLICIES

Policy 30:

Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to State and national water quality standards.

Policy 30A:

Existing rail services and transportation-related facilities shall not dispose of any regulated materials in coastal waters until all such regulated materials have been tested by the State for conformance with water quality standards.

Policy 30B:

Storage and disposal of all regulated materials shall be monitored by the State to assure there will be no discharge or leaching of such materials into coastal waters.

Explanation of Policy

Municipal, industrial and commercial discharges include not only "end-of-the-pipe" discharges into surface and groundwater, but also plant site runoff, leaching, spillages, sludge and other waste disposal, and drainage from raw material storage sites. Also, the regulated industrial discharges are both those which directly empty into receiving coastal waters and those which pass through municipal treatment systems before reaching the State's waterways. Such "end-of-the-pipe" discharges are monitored and regulated by the NYS Department of Environmental Conservation SPDES program (State Pollution Discharge Elimination System), as well as by Federal law and the U.S. Department of Environmental Protection. Local vigilance must be exercised to ensure that such State and Federal regulations are adequately enforced. The Village Manager shall request that results of water quality tests by the New York State Department of Environmental Conservation be sent to the Village as a matter of routine. This information is extremely important for the Village since it historically had two Superfund sites (Croton Point Landfill and Metro-North Lagoon) known to have leached materials into coastal waters, and since it is the location of significant rail services and transportation-related facilities which have the potential to dispose of regulated materials in coastal waters.

See also Policies 7 and 10A.

Policy 31:

State coastal area policies and purposes of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while

modifying water quality standards; however, those waters already over-burdened with contaminants will be recognized as being a development constraint.

Policy 31A:

Clean water is desired and NYSDEC should continually monitor water quality in the Hudson River and Croton bay which have already been overburdened with pollutants. Recommendations for mitigation and upgrading water quality classifications cannot be determined without continual monitoring and testing of the waters.

Explanation of Policy

Pursuant to the Federal Clean Water Act of 1977 (PF 95-217), the State has classified its coastal and other waters in accordance with considerations of best usage in the interest of the public and has adopted water quality standards for each class of waters. These classifications and standards are reviewable at least every three years for possible revision or amendment.

For information regarding classification of Village water bodies, see Section C-2 of the Inventory and Analysis. Sources of upstream pollution include roadway grease and oils, salt, construction debris and other household wastes pumped into streams.

Policy 32:

Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

Explanation of Policy

Alternative systems include individual septic tanks and other subsurface disposal systems, dual systems, small systems serving clusters of households or commercial users and pressure vacuum sewers. These types of systems are often more cost effective in smaller, less densely populated communities and for which conventional facilities are too expensive. The Village is within the Westchester County Ossining Sanitary Sewer District. Sewage is collected in mains located in Village streets and then pumped to Ossining.

Certain areas of the Village are precluded from the use of individual septic systems due to the topography of the site or other natural conditions, as well as prohibitive costs. Private systems are primarily located in the Village's North End section.

The approval of any alternative subsurface disposal system should include a monitoring program to ensure groundwater supplies are not contaminated. Failing septics in densely populated areas makes this provision necessary.

Policy 33:

Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Policy 33A:

Improve existing Village stormwater discharge to control flow of pollutants from street and parking areas, etc. directly into the rivers and water bodies.

Explanation of Policy

Best management practices include both structural and non-structural methods of preventing or mitigating pollution caused by the discharge of stormwater runoff and combined sewer overflows into coastal waters.

The Village has separate stormwater and sewer systems. The stormwater is collected in catch basins and channeled into the Hudson River. All of the Village's sanitary sewage goes to the Ossining Sanitary Treatment Facility, a secondary sewage treatment facility, after which the sewage is discharged into the Hudson River.

See also Policies 8, 11, 11A and 37A.

Policy 34:

Discharge of waste into coastal waters from vessels will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

Policy 34A:

There shall be no discharge from moored structures or marine vessels.

Explanation of Policy

The discharge of sewage, garbage, rubbish and other solid and liquid materials from watercraft and marinas into the State's waters is regulated. Priority will be given to the enforcement of this Law in areas such as shellfish beds and other significant habitats, beaches and public water supply intakes, which need protection from contamination by vessel wastes. Specific effluent standards for marine toilets have been promulgated

by the Department of Environmental Conservation (6NYCRR, part 657). New marinas should provide pump-out facilities.

See Policies 7, 8, 25, 30, 35, 37 and 44.

Policy 35:

Dredging and dredge spoil disposal in coastal waters will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

Explanation of Policy

Dredging often proves to be essential for waterfront revitalization and development, maintaining navigation channels at sufficient depths, pollutant removal and meeting other coastal management needs. Such dredging projects, however, may adversely affect water quality, fish and wildlife habitats, wetlands and other important coastal resources. Often, these adverse effects can be minimized through careful design and timing of the dredging operation and proper siting of the dredge spoil disposal site. Dredging permits will be granted by the U.S. Army Corps of Engineers and the NYS Department of Environmental Conservation if it has been satisfactorily demonstrated that these anticipated adverse effects have been reduced to levels which satisfy State dredging permit standards set forth in regulations developed pursuant to the Environmental Conservation Law, (Articles 15, 24, 25 and 34), and are consistent with policies pertaining to the protection of coastal resources (State and Local Coastal Management Policies, 7, 15, 24, 26 and 44).

Article 15 is the Protection of Waters, Articles 24 and 25 are the Freshwater and Tidal Wetlands Act and the Coastal Erosion Hazard Areas Act, respectively. The Village would be notified by the Army Corps during the permit review process and by DOS during the consistency review process.

See also Policy 7.

Policy 36:

Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Explanation of Policy

The storage of hazardous materials, particularly on lands adjacent to the shoreline and within the floodplain of the Hudson and Croton Rivers, should be evaluated and designed to prevent inundation and subsequent contamination of coastal waters with such hazardous materials.

See Policy 8 for a definition of hazardous materials. See also Policies 7, 30, 35, 37, 39A and 44.

Policy 37:

Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.

Policy 37A:

Control of the development of hilltops, and steep slopes should be exerted in order to prevent erosion and minimize runoff and flooding from new construction.

Explanation of Policy

Best management practices will be used during the construction and operation of new land uses and incorporated into existing land uses to the maximum extent deemed practicable by the Village Engineer, and in accordance with all relevant Village laws and regulations. Construction activities will be reviewed and approved and operations conducted in accordance with the New York State Stormwater Design Manual (New York State Department of Environmental Conservation, most recent version including applicable updates or its successors) and the New York Standards and Specifications for Erosion and Sediment Control (Empire State Chapters of the Soil and Water Conservation Society, 2005, most recent version, including applicable updates, or its successors).

See also Policies 7, 8, 11, 25, 30, 33, 34 and 44.

Policy 38:

The quality and quantity of surface water and ground water supplies, will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Policy 38A:

Require the New York City Department of Environmental Protection to maintain the minimum conservation flow from the New Croton Dam at all times, in order to maintain and protect an adequate Village drinking water supply.

Explanation of Policy

The Village of Croton-on-Hudson depends on groundwater resources for its water supply. The predominant source of the groundwater supply for the Village is the Croton River. Any action which would have an impact on the quality or quantity of the Croton River as a source of drinking water must be thoroughly reviewed and appropriate mitigation measures undertaken.

Currently, water levels in the Croton River are regulated by the New York City Department of Environmental Protection (NYC DEP) as part of the Croton Water Supply System, which supplies a portion of New York City's water through reservoirs and tunnels. Although flows in the Croton River can be naturally low due to climate and seasonal conditions, NYC DEP is required to maintain certain baseflow conditions in the river as part of its NYS DEC water withdrawal permit.

The Village has Water Supply Protection rules and regulations, contained in Chapter 223 of the Village Code. These regulations define the wellhead protection area, recharge area and watershed tributary to the recharge area. The wellhead protection area, also known as "Zone 1," is defined as the area of the well field itself with a protective perimeter around each of the wells. The aquifer recharge area, also known as "Zone 2," is the land area where precipitation, snow and rain, percolates directly through the ground to an aquifer. The watershed tributary to the aquifer recharge area, also known as "Zone 3," is that land area which is the tributary surface from which the aquifer is replenished by runoff to the aquifer recharge area. Zones 1, 2 and 3 are designated on the map entitled, "Zones of Groundwater Protection, Croton-on-Hudson Well Field."

Policy 39:

The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural lands and scenic resources.

Policy 39A:

Require, upon Village request, rail transporters, producers, storers and disposers of hazardous material to inform the Village or allow Village access to records involving the transport, storage, treatment and disposal of hazardous materials.

Explanation of Policy

The definition of the terms "solid wastes" and "solid waste management facilities" are taken from New York's Solid Waste Management Act (Environmental Conservation Law, Article 27). Solid wastes include sludges from air or water pollution control facilities, demolition and construction debris and industrial and commercial wastes. Hazardous wastes are by-products of manufacturing processes generally characterized as being flammable, corrosive, reactive or toxic. More specifically, hazardous waste is defined in Environmental Conservation Law (Section 27-0901.3) as "waste or combination of wastes which because of its quantity, concentration or physical, chemical or infectious characteristics may: (a) cause or significantly contribute to an increase in mortality or an incr4ease in serious irreversible, or incapacitating illness; or (b) post a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or otherwise managed." 6NYCRR Part 371 lists hazardous wastes.

The transport of wastes along the railroad lines is of concern to the Village of Croton-on-Hudson, as is storage and use of such materials in other waterfront locations. The type and amount of material stored and transported through the rail yards and at other sites within the Village should be made available to the Village for those types and quantities of materials not covered under the Superfund Amendments and Reauthorization Act of 1986 (SARA). The Village Manager, the Village Board and the Croton Fire Department must be notified of materials in excess of quantities established under the SARA. SARA compliance must be achieved and maintained, and emergency plans enforced and continually updated.

Although a fundamental problem associated with the disposal and treatment of solid wastes is the contamination of water resources, other related problems may include atmospheric loading and degradation of scenic resources.

Policy 40:

Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to State water quality standards.

Explanation of Policy

A number of factors must be considered when reviewing a proposed site for facility construction. One of these factors is that the facility not discharge any effluent that will be unduly injurious to the propagation and protection of fish and wildlife, the industrial development of the State, the public health and public enjoyment of the receiving waters. The effects of thermal discharges on water quality and aquatic organisms will be considered by State agencies or, if applicable, a siting board when evaluating an applicant's request to construct a new steam electric generating facility.

See also Policies 7, 7, 38 and 44.

Policy 41:

Land use or development in the coastal area will not cause national or State air quality standards to be violated.

Explanation of Policy

Management guidelines and program decisions regarding land use or development within the Village's coastal area or any recommendation regarding the siting of industrial, energy, transportation or commercial facilities must incorporate an assessment of their compliance with the air quality requirements of the State Implementation Plan (SIP). The SIP embodies the requirements of the Clean Air Act and the minimum air quality control requirements applicable within the coastal zone area.

All air quality assessments and determination of minimum air quality control requirements must consider the unique locational situation of the Village with respect to the excessive idling of vehicular traffic at the train station and diesel-fueled rail traffic, as well as nearby point sources.

Policy 42:

Coastal management policies will be considered if the State reclassifies land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act.

Explanation of Policy

The policies of the State and the Village of Croton-on-Hudson LWRP concerned proposed land and water uses will be considered prior to any action to change

regulations which prevent significant deterioration of land classifications in coastal regions or adjacent areas. In addition, the Department of State will provide the Department of Environmental Conservation with recommendations for proposed prevention of significant deterioration of land classification designations based on State and local coastal management programs.

Policy 43:

Land use or development in the coastal area must not cause the generation of significant amounts of the acid rain precursors: nitrates and sulfates.

Policy 43A:

Encourage energy efficiency measures in municipal facilities and in both new and existing development.

Explanation of Policy

The New York Coastal Management Program incorporations the State's policies on acid rain. The Village's LWRP will assist in the State's efforts to control acid rain by encouraging the enhancement and continued viability of coastal fisheries, wildlife, scenic and water resources. Any industrial use allowed within the Village must not cause the generation of nitrates or sulfates. The Village Manager should be informed of the results of any monitoring program developed to assess rail vehicle emissions.

In addition, to further local and regional efforts to reduce greenhouse gas emissions, the Village will take appropriate steps to facilitate the use of energy efficiency measures in municipal facilities and equipment and in both new and existing development.

I. WETLAND POLICY

Policy 44:

Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Policy 44A:

Wetlands, water bodies and watercourses shall be protected by preventing damage from erosion or siltation, minimizing disturbance, preserving natural habitats and protecting against flood and pollution.

Explanation of Policy

Because all wetlands, water bodies and watercourses are presumed to be of importance, their protection, preservation and proper maintenance and use is essential to the health, safety, economic and general welfare of the citizens of the Village. Growth of population and attendant residential and commercial development and increasing demands upon natural resources have the potential of encroaching upon, despoiling, polluting or eliminating many of the wetlands, water bodies and watercourses of the Village, which if preserved constitute important physical, economic, social, historic, archaeologic, aesthetic, recreational and ecological assets to present and future residents of the Village. Wetlands provide important beneficial functions including natural flood and stormwater control, groundwater recharge, natural pollution treatment, erosion and sediment control, wildlife habitat creation, recreation, open space enhancement and educational and scientific opportunities.

Protection, preservation and proper maintenance and use of the Village's wetlands, water bodies and watercourses shall be provided by preventing damage from misuse and mismanagement, erosion or siltation; minimizing disturbance; preserving natural habitats; and protecting against flooding and pollution.

Both tidal and freshwater wetlands are located in the Village of Croton (see Figure 10). Freshwater wetlands include marshes, swamps, bogs and flats supporting aquatic and semi-aquatic vegetation and other wetlands so defined in Local Law No. 4 of 2007, Chapter 227 of the Village Code, and in the New York State Freshwater Wetlands Act and New York State Protection of Waters Act. Several wetland areas in Croton are designated by the NYS Department of Environmental Conservation; all are uppermarsh and are located within the Croton River and Bay Significant Coastal Fish and Wildlife Habitat. Wetlands maps prepared by the U.S. Fish and Wildlife Service as part of the National Wetlands Inventory program will also be consulted to identify any additional areas to which this policy applies.

Where thresholds for protection differ among the above-listed laws, the most restrictive conditions that will result in the highest level of protection for the resources shall apply.

No permits shall be issued for actions affecting tidal and freshwater wetlands unless the following conditions are met:

A. The action is found to be consistent with the legislative intent of Local Law No. 4 of 2007, or its successor;

B. There is no practicable alternative; and

C. The applicant has demonstrated that (a) the proposed activity is not adverse to the general health, safety, economic and general welfare of the residents of Croton or its neighboring communities; (b) the activity will not degrade the environment or result in any of the adverse impacts listed above; and (c) the applicant will otherwise suffer undue hardship if prevented from undertaking the proposed activity.

See Policies 7, 8, 25, 30, 34, 37 and Figure 10.

SECTION IV:
PROPOSED LAND USES AND PROJECTS

A. PROPOSED LAND AND WATER USES

There are no changes proposed to zoning in this LWRP; therefore, no major changes to land uses are anticipated to result from implementation of the LWRP. The focus of this LWRP is primarily on enhancing and improving the public recreation and water-access facilities in Croton, as well as addressing environmentally sensitive areas. One land use change recommended is a relocation of the Village's Department of Public Works (DPW) facility located north of the Echo Canoe Launch. This proposed project, described below, is intended to address issues related to the facility's current location within a floodplain.

Because there are no other anticipated changes in land use, the future land use in Croton can be expected to be largely similar to the existing land use map presented in Figure 4.

B. PROPOSED PROJECTS

The following section describes a set of site-specific and programmatic projects which will be or are being implemented to improve the Village's LWRP area. This section is not intended to anticipate all projects that would further the goals of the LWRP; other future projects may develop that could also improve the LWRP area. It is recognized that limited Village funding resources will require that projects be staged over many years and that outside financial assistance will also be required in the program implementation. All projects, regardless of whether initiated by a public or private entity, will be subject to all applicable Federal, State and local laws, and will require environmental review in conformance with the State Environmental Quality Review Act (SEQRA) and consistency with the policies and goals of this LWRP.

Croton River Basin Projects

1. Ensure Maintenance of New Croton Dam Conservation Flow

As discussed in Section II.D.2, the health of the three-mile section of the Croton River, between the Croton Reservoir and the tidal Hudson River, is highly influenced by hydrology and reduced summer flows resulting from the NYC water supply system. The Croton River's flows below the New Croton Reservoir are carefully managed by New York City's Department of Environmental Protection (NYC DEP), as part of its extensive water supply network. NYC DEP is required to maintain certain baseflow conditions in the River as part of its New York State Department of Environmental Conservation (NYS DEC) water withdrawal permit.

New Croton Dam

Maintaining river flows for nature below water supply reservoirs is inherently complicated, and requires a difficult balance between human demands and sustainable flows to conserve a river's ecological health.11 The extent to which the Croton River influences the water located in the aquifer is not completely known. Data documenting ecological impacts of the New Croton Reservoir on the Croton River are also sparse. As discussed in Section II,D.2, the flow rate in the Croton River below the reservoir is only a fraction of what naturally should be observed in a watershed of this size. It is not fully understood whether the conservation is sufficient to maintain water levels necessary to recharge and protect the aquifer, support fish and wildlife species as well as public recreation on the river. In addition, the highly variable temperature fluctuations of the releases can cause increased erosion of the stream banks, excessive silting and damage to fish and in-stream wildlife habitats. These severe temperature fluctuations occur more frequently in the summer months, when small constant charges of cool water from the bottom of the reservoir are overwhelmed by large spills of warmer water, typically during or after rain events.

A study of mandated base flows is needed to ensure the NYC's Water Supply needs do not negatively affect the Croton River watershed downstream from the New Croton

[11] *A Preliminary Assessment of Croton River Hydrologic Alterations below New Croton Reservoir*. New York State Water Resources Institute at Cornell University.

Dam. This would require additional investigation into the current demand on the Croton River water supply needs and the ecological implications inter-basin exports of water have on downstream ecological health. A possible outcome is the optimization of the current flow management regime to better support ecological processes downstream, while still maintaining water supply needs.

In addition, the Village should work with NYC DEP to improve inter-agency communication about the conservation flow. This is especially important during drought conditions, as DEP is not required to make releases from the New Croton reservoir during drought emergencies. The emergency reduction in flow is a discretionary action by DEP. The Village requests that DEP consider the impacts to the Village's drinking water supply, as well as to the ecological functions of the Croton River, before reducing the conservation flow to the River. Additionally, the Village requests to be notified beforehand of any reduction during a drought emergency.

This project relates to policies 7, 7A, 7B, 7H, 28, and 38A of the LWRP.

2. Address Drainage Systems that Lead to Erosion On Steep Slopes

Steep slopes along Croton Gorge

The objective of this project is to promote activities that will control soil erosion and sedimentation caused by stormwater runoff. These issues are most significant along the steep banks of the Croton River Gorge, where trees and other protective vegetation have been diminished due to development and human use combined with invasive species and wildlife (in particular, the browsing of white-tailed deer, which has decimated the forest understory of the entire 3.5-mile length of the Gorge). A significant amount of erosion also results from unstable stormwater outfalls that discharge untreated water directly onto the steep slopes. The high rate of erosion from these outfalls, combined with the loss of vegetation, has led to the structural instability of the slopes and increased sedimentation of the River. This sedimentation has been detrimental to stream quality and wildlife in the Croton River, which is NYS DOS-designated Significant Coastal Fish and Wildlife Habitat and also an important source of drinking water for the Village.

This project is supportive of the Indian Brook-Croton Gorge Watershed Conservation Action Plan, which identified a number of specific recommendations that address

erosion along the Croton River such as identifying and restoring severe areas of erosion.[12] In particular, the Village will seek to address areas where existing drainage systems are known to contribute to erosion on steep slopes in the Croton Gorge areas, such as near stormwater outfall pipes and at Mayo's Landing behind the Carrie E. Tompkins Elementary School.

Funding should be sought by the Village to pre-treat the stormwater prior to discharging it into the streams and waterbodies. Additionally, the Village can identify opportunities to improve vegetation and drainage swales in areas adjacent to roads. Municipal highway staff should be trained in proper methods of repair of the drainage areas.

Retaining tree cover and vegetation would benefit wildlife and reduce stormwater runoff throughout the watershed. The Village should develop a planting plan with appropriate native vegetation. Such plantings should be selected for shade tolerance and to be unattractive to deer. Such plantings might include[13]:

- Groundcovers such as Allegheny Pachysandra or Partridgeberry;
- Larger plants such as ferns, wild geranium or Solomon's plume; and
- Larger shrubs such as Maple Leaf Viburnum, Red Chokeberry or American Highbush Cranberry.

The Village should also consider adopting a program to incentivize private property owners to plant appropriate vegetation along steep slopes to stabilize the land and prevent further erosion.

This project relates to policies 5, 7, 7A, 7B, 7E, 7F, 7G 7H, 11, 12, 13, 14, 15, 16, 17, 17A, 30, 32, 33, 33A, 37, 37A and 38 of the LWRP.

3. Facilitate Upgrades to Catch Basins and Outfalls to Address Floatables in Croton Bay

The intent of this project is to control stormwater runoff discharges and other pollutants from entering Croton Bay. Protecting the ecological health of Croton Bay and River is a priority for the Village. The Croton River and Bay is a NYS DOS-designated Significant Coastal Fish and Wildlife Habitat, and the area has one of the largest shallow bay areas in the lower Hudson that is sheltered from strong currents and wind. The mouth of the

[12] Indian Brook-Croton Gorge Watershed Conservation Action Plan, Westchester County. January, 2008. Recommendations 9. Page 3-11.

[13] Recommendations on the Administration and Use of Mayo's Landing. Prepared for the Board of Trustees of the Village of Croton-on-Hudson by the Croton River Watershed Compact Committee. April, 2007.

Croton River is documented as a migratory fish hub used as a resting, foraging and nursery area. Portions of the River are stocked each year by the NYS DEC with trout.

Land adjacent to Croton Bay

Major areas of concern to the water quality of the Bay are the Shoprite shopping center on South Riverside Avenue, the Route 9/9A roadway and the Metro-North train station and repair yards. The stormwater system at the Shoprite shopping center feeds directly into a trunk line stretching from Clevelend Drive to Route 9/9A. This trunk line also collects stormwater from approximately 170 acres of land including the Route 9/9A roadway. The untreated stormwater is discharged directly into Croton Bay. The Village should work with the New York State Department of Transportation, which maintains outfalls on Route 9/9A, as well as property owners in the shopping center to reduce stormwater flows and improve catchment basins and on-site stormwater treatment.

The Village-owned and operated commuter parking facility adjacent to the Metro-North station is another source of pollutants into Croton Bay. Presently, all stormwater runoff from the parking facility discharges directly into Croton Bay through an outfall pipe at the southern end of the site. All of the outfalls are outfitted with catch basins and oil/water separators. Regular monitoring and maintenance of these outfall pipes by the Village is necessary. The Village has reported chronic flooding that impacts a portion of the eastern area of the lot, which abuts a wetland. When flooding occurs, Croton Bay is directly exposed to debris and trash, or “floatables” from the parking lot. The Bay is also exposed to wind-swept trash from the lot.

The Village can take a number of steps to reduce stormwater runoff and the amount of pollutants entering the aquatic ecosystem. First, catch basins can be improved, and the frequency of catch basin cleaning can be increased. A routine catch basin cleaning program should be developed and implemented by the Village. Street sweeping should also be conducted on a regular basis within the parking lot to reduce the risks to water quality. These recommendations are supported by the Indian Brook-Croton Gorge Watershed Conservation Action Plan.

Parking adjacent to wetlands and Croton Bay

The parking facility is currently overwhelmed by asphalt paving with rows of cars. There is minimal landscaping or greenery, and in certain areas, parking directly abuts wetland areas in the Croton Bay. The Village should consider implementing green infrastructure within the parking lot in order to capture runoff onsite and reduce sewer overflows. Green infrastructure generally refers to systems and practices that use or mimic natural processes to reuse stormwater or runoff on the site where it is generated. In the case of the parking facility, there are a number of opportunities to reduce runoff with landscaping and swales. In many cases, this can be done without the loss of parking, for example with a landscaped cap at the end of each parking row. Landscaping can also help to catch wind-swept debris from entering the bay. Utilizing porous asphalt will also reduce stormwater runoff volume and rate and the discharge of pollutants. Porous asphalt has been found to work well in cold climates, as the rapid drainage of the surface reduces the occurrence of freezing puddles and black ice. Melting snow and ice infiltrates directly into the pavement, facilitating faster melting.

The Croton Harmon Station Area Study (2007) also identified another option to reduce stormwater runoff and address the chronic flooding impacting the eastern area of the parking lot. The plan recommended new fill and re-grading for an approximate 2.5-acre portion of the site. In order to accommodate the spaces lost as a result of the landscaping improvements, it would be necessary to construct a new one-level, 200-space parking deck. The landscape improvements would include the planting of approximately 100 trees, the construction of parking bays and new landscaped medians.

A parking garage feasibility study conducted by Tim Haahs analyzed the potential development of structured parking at Croton-Harmon Station. The study found that a parking structure is not needed immediately because adequate parking capacity exists. The study recommended that when capacity is needed, the Village should first consider developing the DPW site which would add approximately 123 spaces.[14] The additional revenue generated by these spaces will financially support the associated development costs, the study found. The relocation of the DPW facility is discussed in Project #4. If warranted by future demand, structured parking may be considered to increase the

[14] Village of Croton-on-Hudson Parking Garage Feasibility Study Report. Tim Haahs. February, 2011.

total parking capacity at the station. Any parking improvements or changes shall be done in coordination with the Metropolitan Transportation Authority (MTA).

This project also supports the Indian Brook-Croton Gorge Watershed Conservation Action Plan's recommendation to restore degraded wetlands. As stated in that plan (Recommendation #5), many watershed wetlands have become dominated and degraded by invasive species. Funding should be sought to restore the wetlands, particularly the tidal wetlands located along the Route 9/9A corridor. Restoration of the wetlands would result in improved water quality and improved wildlife habitat, including vital fish habitat. The Village should utilize existing data available from the County and State as well as local data to identify and evaluate degraded wetlands. On-going monitoring should be a part of the restoration effort. The Westchester County Soil and Water Conservation District has an active aquatic habitat restoration program and can provide advice and assistance in this effort.

This project relates to policies 7, 7A, 7B,7C, 7D, 7E, 7F, 7G, 7H, 11, 12, 19, 24, 25, 30, 30A, 30B, 32, 33, 33A, 37, 44 and 44A of the LWRP.

4. Relocate Village DPW facility

The DPW operates a municipal garage and salt storage shed at the southern end of the Croton-Harmon Parking Lot. There is also an uncovered storage area for rocks and other construction materials which can leach directly into Croton Bay from the facility. The site is also at high risk to flooding, as it is located within the 100-year floodplain.

Proper containment of the salt and maintenance materials on-site is imperative to protect the adjacent wetlands and water quality in Croton Bay. The facility should have drainage and stormwater collection systems around the perimeter of storage areas to prevent salt and sediment loss to groundwater aquifers or nearby waterways. Maintenance of snow and ice removal should also be coordinated with the maintenance of the

DPW Facility

stormwater conveyance system (i.e. street sweeping and catch basin cleaning).[15]

There are many opportunities for the Village to clean up the facility and improve screening to reduce the degree of leaching. As a more permanent measure, the Village should relocate the facility to a more appropriate location. The Public Works Department is currently considering suitable locations for the relocation of the facility.

This project relates to policies 1, 1C, 5, 7, 7A, 7B, 7C, 7E, 7H, 11, 12, 19, 19D, 28, 30, 30A, 30B, 33, 33A, and 37 of the LWRP.

5. Improve Echo Canoe Launch and Village-Owned Land South of Metro-North Parking Areas

This small area off Croton Bay is used for small boat access (such as canoes, rowboats, dinghies and kayaks) and passive recreation including fishing. The development of this boat launch was a project featured in the Village's 1992 LWRP, and most of the improvements identified have been undertaken by the Village. The Echo Canoe Launch now has a parking area with signage, seating and a storage area for small watercraft. Kayak rentals and lessons are available at the site on a seasonal basis.

Echo Canoe Launch: Existing boat storage

This project supports the continued improvement of this recreational area to enhance public access to the Croton River and Bay and the Hudson River. Improvements would include maintenance and improvement as necessary of the boat ramp; exploring additional parking opportunities for the ramp; and enhancing walkways, benches, signage and wayfinding measures. The existing small boat storage facility is well utilized, and

Echoe Canoe Launch: Existing benches

[15] Indian Brook-Croton Gorge Watershed Conservation Action Plan, Westchester County. January, 2008. Page 3-9.

the Village should expand it to accommodate more boats. Additional native plantings along the water's edge would also help to protect and restore the surrounding estuarine ecosystem.

This project relates to policies 2, 2B, 7, 20, 20A, 21, 21A, 23 and 30 of the LWRP.

Hudson Riverfront Projects

6. Facilitate Access to the Hudson River Waterfront

A recurring comment from public input during this LWRP process and prior plans was the need to improve access to the Hudson River waterfront for vehicles, pedestrians and bicyclists. Although there have been some recent improvements such as the Brook Street pedestrian bridge, in general, access to the waterfront is limited, and unsafe in some locations. Vehicular access to Senasqua Park and Croton Landing Park is constrained to one road (Elliott Way) and parking facilities are reportedly heavily utilized, especially during summer weekends. The Village's ability to develop new access structures (i.e. bridges) or larger parking areas is inhibited by the lack of physical space, adequate connections and public funds available for new construction. This project identifies specific opportunities to increase waterfront access in a meaningful and achievable manner.

Narrow segment of Elliott Way

Since space for parking is limited directly along the waterfront, the Village should pursue options for additional parking in areas that have pedestrian links to the waterfront, such as along Riverside Avenue, Municipal Place and Brook Street near the pedestrian bridge. Another opportunity to expand parking along the waterfront exists at Croton Landing Park and the adjacent CSX facility next to the railroad. Currently, there are 50 parking spaces in Croton Landing Park. There is also a small gravel parking area adjacent to the boat launch in the park with space for about 15 cars, and there is space for 8 spaces under the pedestrian bridge ramp. The Village has conducted a preliminary study to expand the existing lot to the north of Croton Landing Park by 30-40 spaces. This expansion would occur over a drainage easement for the CSX septic field area. The Village should coordinate with CSX to connect the property to the Village sewer system to free up the easement area for parking use. There is also

additional CSX property adjacent to the railroad that does not appear to be heavily utilized. The Village should reach out to CSX to investigate the potential to lease or purchase some of the property for additional parking, if needed.

Pedestrian access is available in some areas, but the safety of such access should be improved. Enhanced pedestrian paths could be provided at Echo Canoe Launch and at Black Rock, where the linkage to a Croton River Gorge Trail would mean the development of a footpath or sidewalk.

The Village should improve pedestrian infrastructure between Senasqua Park and Croton Landing Park. While most of the Village's Hudson River waterfront area is part of the Westchester County RiverWalk trail system and easily accessible to pedestrians, Village representatives pointed out a small but critical stretch of road along Elliott Way between Senasqua Park and Croton Landing Park, which is difficult for pedestrians to traverse safely. This 775 foot segment or road is constrained by the Metro-North right-of-way and the Hudson River and there is no sidewalk or shoulder. Pedestrians and bicyclists have to share the road with motorists, an unsafe situation, especially on weekends when pedestrian and vehicular traffic to Croton Landing Park is at its peak.

This segment of Elliott Way is also directly adjacent to a portion of the waterfront that has experienced erosion. The Village is evaluating a proposal to improve pedestrian accommodations and shoreline stabilization measures at the 775-foot right-of-way. The project would require the widening of Elliott Way at two at-grade sections and an elevated section (340 feet). The widening would include other road, drainage and water main extension improvements. This initiative is also discussed in Project 7.

In addition, over the longer-term, the Village should explore pedestrian linkages from Croton Landing Park to Oscawana County Park in Cortlandt, with a possible connection to the Graff Sanctuary in Croton (see Project 9).

This project relates to policies 11, 12, 13, 14, 16, 17, 18, 19, 19A, 19B, 19C, 19D, 20 and 21 of the LWRP.

7. Improve Riprap along Hudson River between Senasqua Park and Croton Yacht Club

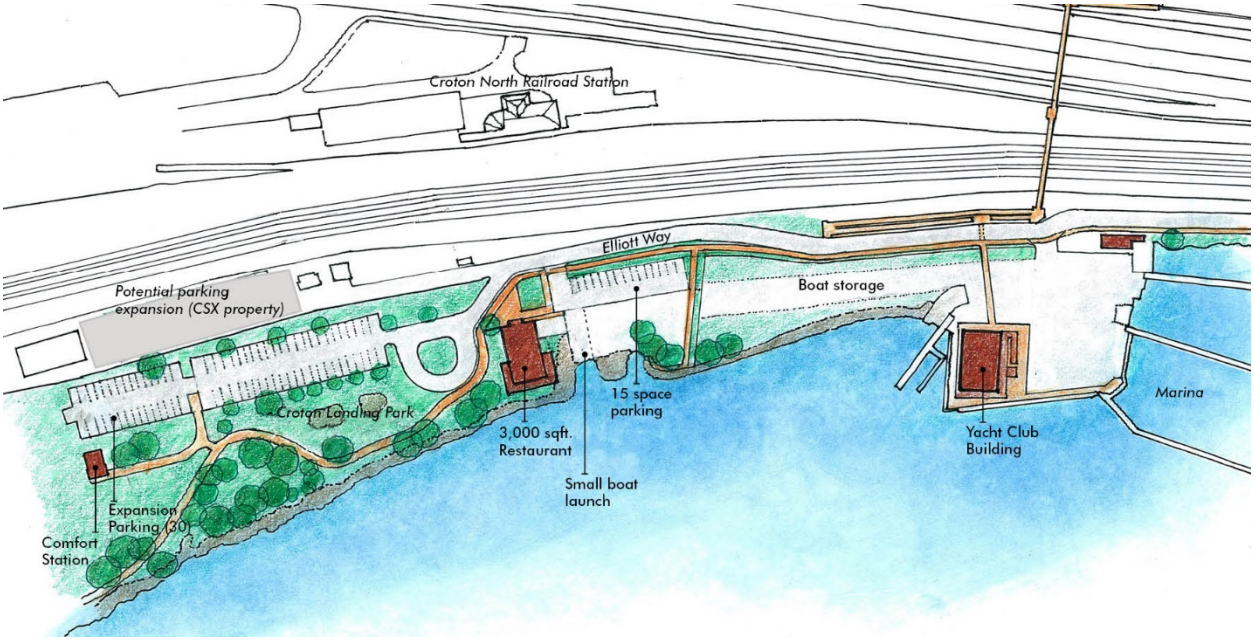
This Village has identified a segment of waterfront land adjacent to Elliott Way between Senasqua Park and the Croton Yacht Club which is unprotected by bulkheads or riprap and has experienced significant erosion. The erosion is a risk to the Elliott Way right of way and the Village is in the process of developing plans to stabilize the shoreline in conjunction with pedestrian improvements at this location. This project is discussed in further detail as part of Project 6.

8. Facilitate Croton Yacht Club/Croton Landing improvements

The concept of a waterfront restaurant, or another use at the southern end of Croton Landing Park, adjacent to the Croton Yacht Club, has been discussed by the Village for years. In 2001, the Village conducted a feasibility study of alternative uses for a 13.4-acre property which included the Croton Yacht Club (CYC) and Croton Landing Park. As part of the study, which included a community survey, respondents noted that a passive recreation area was desired; however a restaurant was a preferred use if any commercial development were to occur within Croton Landing Park. During the public outreach for this LWRP, there was no consensus as to whether a restaurant would be an appropriate use at/near Croton Landing Park. The purpose of this project is to evaluate the community's support for new uses in this location. This would entail continued engagement with community.

In 2011, the Village conducted a study to evaluate alternative development options for the CYC, which is located on Village-owned property. The study was prompted by the Village's need to replace the bulkhead at the site and also address their expiring lease with the Club. The bulkhead repair, which was subsequently completed by the Village, placed pressure on the need to increase revenue from existing or additional uses located on this key section of Croton's riverfront. The study identified revenue-producing uses to help the site remain financially sustainable. The study determined that the most viable location for a restaurant would be at the southern end of Croton Landing Park. The preferred location was in roughly the same spot proposed in the 2001 feasibility study. There is also a historical precedent as that location featured a bar and a restaurant prior to its conversion into a park. The graphic below illustrates the preferred conceptual site plan with the surrounding uses. Some important features of this plan include:

- A 3,000-square-foot restaurant;
- A landscaped pathway between the CYC and the boat launch to buffer the site and provide access to the water;
- An expanded parking lot in Croton Landing Park (30 spaces);
- A widened right-of-way with a sidewalk in front of the CYC; and
- An improved entrance at the CYC with a pathway to the pedestrian bridge



Conceptual location for waterfront restaurant (Source: Croton Yacht Club Site Evaluation Plan)

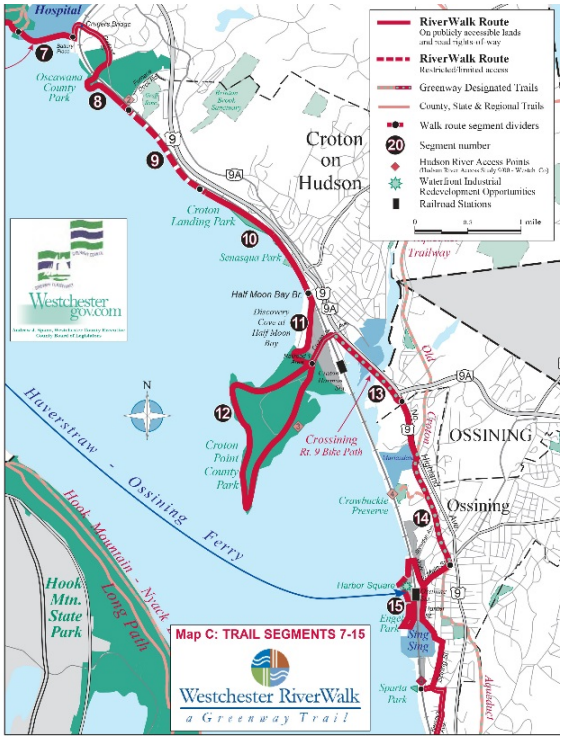
The study identified significant constraints to development on site. The site is in the 100-year floodplain as identified in the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM). The current FEMA advisory Base Flood Elevation Map changes show that if a restaurant were to be built, the first floor would have to be between 4 feet and 9 feet above the existing grade (depending on site selection). The high first floor elevation will have an impact on construction costs and design elements including aesthetics, access (ADA ramps; higher elevations require longer ramps), and obstruction of views. These elements would have to be discussed with the public if Village were to pursue a restaurant in this location.

Parking is also an issue as there is already insufficient on-site parking at Croton Landing Park to satisfy demand during busy hours. The Croton Yacht Club Site Evaluation Study conducted by the Village in 2013 estimated that approximately 70 spaces would be needed to satisfy peak demand for the park and a 3,000-square-foot restaurant. There are opportunities for shared parking, as the peak time for the restaurant would be at dinner when the park is used less frequently. However, during the day on the weekends, there may be a conflict. If the Village pursues this project, it should consider opportunities to increase parking in the vicinity, such as negotiating the use of CSX property, developing new parking along Brook Street or potentially requiring valet parking services. These opportunities should be discussed with the public as part of the public engagement process.

This project relates to policies 1, 11, 12, 18, 19, 20, 20A, 21 and 22 of the LWRP.

9. Implement segment of RiverWalk Trail from Croton Landing Park to Oscawana County Park

The Westchester County RiverWalk is a planned 46.6-mile pathway paralleling the Hudson that links village centers, historic sites, parks and river access points via a connection of trails, esplanades and boardwalks. It spans 14 municipalities in Westchester, from the Town of Cortlandt's border with Putnam County south to the City of Yonkers' border with New York City. The RiverWalk is part of the Hudson River Valley Greenway system. It has been developed through a series of projects constructed by the County, local municipalities and other entities, including private developers.



Westchester RiverWalk trail segments

According to the Hudson River Trailway Plan (2003), Westchester County has proposed a 1-mile trail along the Hudson River that would connect Croton Landing Park with Oscawana County Park in Cortlandt. This trail would fill a gap between the RiverWalk trails at these two parks. The trail's proposed route follows a strip of land situated along the Metro-North railroad right-of-way between the tracks and the Hudson. This path could utilize a dirt road alignment that is currently used by railroad maintenance workers and informally by fishermen.

This portion of the RiverWalk would require an agreement with Metro-North for use of the right-of-way. Additional site issues include the design of safety features and fencing to separate trail users from the railroad tracks, as well as special design treatment for narrow areas between tracks and water.

It is recognized that the Village has limited financial resources to support the development of a public waterfront walkway northward from Croton Landing Park. Outside financial assistance will be required to implement this program.

Village-wide Projects

10. Undertake management and capital improvement plan for Village parks, trails and open spaces

Black Rock Park

The Village's Recreation and Parks Department manages and maintains municipal parks and recreational facilities including Senasqua Park, Silver Lake Park, Croton Landing Park, Dobbs Park, Duck Pond Park, Sunset Park, Harrison Street Park, Vassallo Park, Black Rock Park, Firefighters Memorial Field, David J. Manes Memorial Field and Echo Canoe Launch. These parks represent a significant investment by the Village to provide a variety of enjoyable recreation and leisure opportunities for residents. Since the last plan was adopted, the Village has made substantial improvements and investments at Silver Lake Park, Black Rock Park, the Croton Gorge Walking Trail, Senasqua Park, Echo Canoe Boat Launch and Croton Landing Park. The Village has recently acquired the Gouveia Property at 1300 Albany Post Road and is considering options for public amenities at that site (see Project 11). While the Village has been committed to providing new places and experiences that add to the quality of life for its residents, it recognizes the need for a plan to protect, maintain and enhance its existing facilities to ensure they remain in good condition for the long-term.

This project supports the creation of a Maintenance and Capital Improvement Plan to address ongoing care and protection of existing parks, open spaces and trails. The goal would be to provide an action plan for regular maintenance and targeted capital improvements when needed. The maintenance program would evaluate annual labor, supply and equipment needs, and develop effective and efficient ways to keep park landscapes and facilities maintained and working properly. The Plan would be a guiding document for Village staff and also provide the general public with an understanding of the scope of work related to park and trail operations and maintenance.

The Parks Maintenance and Capital Improvement Plan would include the following elements for each park facility:

- Park general use and condition;

- Use, conditions and recommendations for facilities within the park (i.e., playground, recreational area, sidewalks, signage, lighting, trees, and trash receptacles);
- Equipment needs and/or park upgrades;
- Yearly management/maintenance needs and associated costs;
- A schedule for periodic surveys to evaluate maintenance; and
- A log for tracking park system and individual park maintenance activities.

The plan could also include an outreach component to solicit a public evaluation of park and trail maintenance. This could be done with an online survey or with comment/suggestion boxes placed in the parks. Public outreach could also be utilized to encourage community volunteer resources to assist in park beautification projects, e.g., rain gardens, restoration projects; invasive species control; and installation of signage, new playground structures, etc. These types of activities bring community members together, especially in neighborhood park settings, and can create a sense of ownership that will help ensure that the parks will remain in good condition as well as current with the needs of the community.

This project relates to policies 1, 9, 12, 18, 19, 23 and 23A of the LWRP.

11. Develop plan for future use of Gouveia Park

The purpose of this project is to create a conceptual plan that will examine how to best utilize the Gouveia property, a 15.63-acre site recently acquired by the Village. This well-maintained property, located at 1300 Albany Post Road, was donated to the Village by the Gouveia family on the condition that the future use of the property be limited for park, recreation and educational (PRE) type uses. As stated in the Term Sheet for use of the property, examples of acceptable uses are "trail systems, picnicking, music events and exhibits, environmental education, senior citizen and other club meetings. These are examples. Generally, uses would be ones that would benefit from the scenic views, natural light and serene atmosphere of the property." As a matter of record, the site's slopes and intermittent watercourses on the property, difficult sewer access and limited driveway access width to Albany Post Road collectively impose restrictions on the site's development for any non-park, recreation or educational use. The donation by the Gouveia family also included a $1 million gift to the Village to be used for the care and upkeep of the park.

The Gouveia site has varied topography, with an elevation change of approximately 140 feet within its boundaries. The northern portion of the site includes a number of features such as a park-like lawn, a single-family home, a storage building and a man-made pond. The home is well designed, well-maintained and modest in size. It is relatively unique, with its mid-century modern "all glass" main living floor providing sweeping views up and down the Hudson. The southern portion of the site is heavily forested and has some steep slopes.

The site is accessed by a driveway from Albany Post Road in its northeast corner. This driveway may need to be widened or reconfigured to accommodate two-way access to future park-related uses at the site. While not contemplated in the immediate future, the Village could undertake at some future time the addition of a small entrance for vehicles with a few parking spaces at the southeastern corner of the site. The grade of the site is more favorable there for vehicle access than at other points along the frontage with Albany Post Road.

Gouveia Park (residence and grounds)

With regard to potential uses at the site, there are numerous long-term possibilities. The Village is considering installing a trail on the property's southerly section, which would connect to an existing path from Brinton Brook Sanctuary and the Jane Lytle Arboretum that comes down Arrowcrest Road and ends directly across the street from the Gouveia property. The trail would provide a destination for walkers that culminates in forested views of the Hudson River to the west. This park improvement would require a minor investment by the Village and may be one of the few near-term uses at the site until the Village determines the best use for the property.

The northern portion of the property, with its gently sloping lawn, mature trees and views of the Hudson River, has the most potential to be utilized as a park space. The naturally sloped lawn is well suited for informal seating for artistic or cultural performance events. However, at this point, the Village has not made any plans for use of the outdoor area for outdoor events or long-term programming. The Village could collaborate with local

arts or cultural organizations, or experiment with a few event types and formats to find what might work best for the outdoor area in the long run.

The Village has also not made any plans for re-use of the indoor space in the single-family home. Some uses contemplated include:

- A site for the Village's archives,
- A Village community center,
- Office and meeting space for a nonprofit partner organization with an arts/culture/parks education mission, or
- Rentable space for conferences or special events complete with kitchen and bathroom facilities.

While all of these uses may be viable, the Village should conduct an outreach campaign to find out how residents feel the site should be utilized. Potential avenues for engagement include:

- Organized tours of the property for local citizens,
- Tours of property for local organizations for consideration of use and creation of community programs,
- Land use and environmental groups that can advise and offer grants for park projects, and
- Other organizations including civic, environmental, education and arts groups.

The Village should also conduct an analysis to ensure that the site remains financially sustainable and does not create a financial burden. If the Village cannot optimize use of the site or cost effectively program the site, the deed does allow the Village to enter into a partnership with or transfer the property to a like-minded nonprofit organization. In practical terms, this provides the Village a way of sharing any liabilities or costs in the future, should it wish or need to do so.

This project relates to policies 1 and 9 of the LWRP.

SECTION V:
TECHNIQUES FOR LOCAL IMPLEMENTATION OF THE PROGRAM

Section V is intended to identify the techniques by which implementation of the LWRP and the specific projects can be accomplished. It includes a discussion of existing local laws and regulations how they relate to LWRP policies, as well as the management structures to implement the LWRP. No changes to any local laws or regulations are proposed in this LWRP.

A. EXISTING LAWS AND REGULATIONS[16]

A. BOATS AND BOATING – CHAPTER 83

I. THIS CHAPTER OF THE VILLAGE CODE REGULATES THE SPEED, MOORING AND DISCHARGE OF WASTE FOR ALL MECHANICALLY OR ELECTRICALLY PROPELLED WATERCRAFT IN THE PORTION OF THE CROTON RIVER WITHIN THE VILLAGE AND NORTHEAST OF THE RAILROAD BRIDGE.

II. THIS ORDINANCE RELATES MOST CLOSELY TO LWRP POLICIES PERTAINING TO PUBLIC ACCESS AND WATER-RELATED RECREATION (POLICIES 19, 21 AND 22); FISH AND WILDLIFE (POLICIES 7, 7A, 7B AND 8); AND WATER AND AIR RESOURCES (POLICIES 30 AND 34).

B. BUILDING CONSTRUCTION – CHAPTER 86

i. This Ordinance provides the structure and procedures for the Village of Croton Building Department, responsible for administration and enforcement of all laws, ordinances, rules, regulations and orders applicable to the location, design, materials, construction, alteration, repair, equipment, maintenance, use, occupancy, removal and demolition of buildings and structures.

ii. The Ordinance is most closely associated with Policies 1 and 2, which concern development and redevelopment within the LWRP area.

b. Energy Conservation – Chapter 114

[16] Full text of all laws referenced herein may be found online at http://ecode360.com/CR0035?needHash=true.

i. This Chapter seeks to promote energy efficiency and renewable energy goals, reduce greenhouse gas emissions, mitigate the effect of global climate change and advance a clean energy economy. It establishes a program that will allow the Energy Improvement Corporation (EIC), a local development corporation acting on behalf of the Village, to make funds available for qualified property owners to make energy efficiency improvements.

ii. This Ordinance deals most closely with LWRP Policies 41, 42 and 43, pertaining to air quality.

c. Environmental Compliance – Chapter 115

i. This Chapter provides the ability for the Planning Board to retain an environmental compliance consultant to review subdivision, site plan and special permit applications to ensure that environmentally sensitive areas are protected during the course of construction and land development.

ii. The Ordinance relates most directly to Policies 1 and 2, which concern development and redevelopment within the LWRP area, but also relates to policies dealing with fish and wildlife habitats, historic and cultural resources, scenic resources, protective natural features, water and air resources and wetlands.

d. Environmental Review – Chapter 116

i. This Chapter of the Village Code implements the State Environmental Quality Review Act (SEQRA). It establishes procedures necessary to assure full review of environmental impacts of proposed actions, improvements and developments within Croton.

ii. This Chapter pertains to the majority of the policies included in the LWRP, especially those dealing with development issues and the protection of important man-made and natural resources.

e. Excavation, Filling and Topsoil Removal – Chapter 120

i. This Ordinance provides for the preservation and protection of Croton's natural topography and regulates and/or prohibits excavation, the removal of topsoil or other materials and the filling, draining, clearing, operating and using of land in any manner that may: create hazardous or dangerous conditions; impair the usefulness of the subject property or

surrounding properties; cause soil erosion which depletes the land of vegetative cover and other organic materials; diverts or causes water to collect on the property of others; interferes with any existing or planned drainage facilities; or causes excessive runoff.

ii. This Ordinance relates most closely with LWRP Policy 12, on protection of natural features, and Policy 15, on excavation in coastal waters. Both policies concern protection against or minimizing potential erosion and flood hazards.

f. Flood Damage Prevention – Chapter 129

i. This Chapter of the Village Code includes provisions designed to promote the public health, safety and general welfare and to minimize public and private losses due to flooding. It includes methods and provisions for restricting or prohibiting uses which are dangerous due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities; requiring that uses vulnerable to floods be protected at the time of initial construction; controlling the alteration of natural floodplain, stream channels and natural protective barriers; controlling filling, grading, dredging and other activities which may increase flood damage; preventing and/or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and qualifying for and maintaining participation in the National Flood Insurance Program.

ii. This Ordinance deals most closely with Policies 1 and 2, which relate to development and redevelopment activities in the waterfront area, and policies on flood and erosion hazards and related protective features including: Policy 11, siting structures to minimize damage; Policy 12, protection of natural protective features; Policy 14, preventing increases in flooding; Policy 15, control of alteration of coastal waters; and Policy 17, use of non-structural measures to minimize damage from flooding.

g. Parks and Recreation Areas – Chapter 168

i. This Ordinance regulates activities within and uses of all parks, playgrounds, beach or other recreation areas of the Village. The Ordinance includes provisions for the hours of use of parks, lists prohibited activities and provides for procedures and enforcement of regulations.

ii. Chapter 168 relates most directly with the LWRP policies pertaining to public access, recreation and the protection of fish and wildlife. More

specifically, Policies 19, 20 and 21, dealing with the protection, maintenance and expansion of recreation resources and the levels and types of access to them, and Policies 7, 8 and 9, concerning the protection of fish and wildlife resources from the introduction of hazardous wastes and other pollutants, and the expansion of recreational usage of fish and wildlife resources, respectively, are addressed by this Ordinance.

h. Sewers – Chapter 191

i. This Chapter provides for the proper disposal of sewage and wastewaters and the proper operation and maintenance of the public sewers, sewage treatment plant and other sewage works within the Village.

ii. The Ordinance deals most directly with the policies concerning protection and conservation of water resources, more specifically Policies 30, 33, 39 and 40, as well as Policy 8, which deals with the protection of fish and wildlife resources from hazardous wastes and other pollutants.

i. Sleep Slope Protection – Chapter 195

i. This Ordinance is intended to preserve, protect and conserve steep slope areas so as to maintain and protect the natural terrain and its vegetative features; preserve wetlands, water bodies and watercourses; prevent flooding; protect important scenic views and vistas; preserve areas of wildlife habitat; provide safe building sites; and protect adjoining property by preventing surface erosion, creep and sudden slop failure.

ii. Chapter 195 is most applicable to flood and erosion hazards Policies 12, on protection of natural features; 14, preventing increases in flooding; 15, control of alteration of coastal waters; and 17, use of non-structural measures to minimize damage from flooding. The Ordinance also relates to fish and wildlife policy 7, on protection of fish and wildlife habitats; historic and scenic resource Policy 25, on protection of natural and man-made resources which contribute to scenic quality; water and air resources Policy 33, on control of stormwater runoff; and wetlands Policy 44, on protection of wetlands.

j. Stormwater, Drainage, Erosion and Water Pollution Control – Chapter 196

i. This Chapter establishes minimum stormwater management requirements and controls to meet the requirements of the SPES permit process; minimize increases in stormwater runoff from land development activities in order to

reduce flooding, siltation, increases in stream temperature and stream bank erosion and to maintain the integrity of stream channels; minimize increases in pollution caused by stormwater runoff; minimize the total annual volume of stormwater runoff; and reduce stormwater runoff rates and volumes, soil erosion and non-point source pollution.

ii. The Chapter is most applicable to water and air resources Policies 33 and 37, on the control of stormwater runoff and combined sewer overflows and minimizing the discharge of excess nutrients, organics and eroded soils into coastal waters, respectively; as well as fish and wildlife Policy 8, on protection of fish and wildlife resources from hazardous waste and other pollutants. The Chapter also helps to implement Policies 18 and 25, safeguarding vital economic, social and environmental interests and protecting natural and man-made resources.

k. Trees – Chapter 208

i. This Ordinance promotes the planting and preservation of trees within Croton, to protect by health, safety and general welfare of the Village by providing shade, impeding soil erosion, aiding water absorption and retention, inhibiting excess runoff and flooding, enhancing air quality, offering a natural barrier to noise, providing a natural habitat for wildlife, providing screening, enhancing property values and adding to the aesthetic quality of the community.

ii. Chapter 208 pertains to the majority of the policies included in the LWRP, especially those dealing with significant wildlife habitats (Policies 7 and 8), scenic resources (Policy 24), protection of natural features (Policy 12), water and air resources (Policies 30, 31, 33, 26-28 and 40-43), wetlands (Policy 44) and erosion control (Policies 11, 13, 14, 16 and 17).

l. Waterfront Revitalization – Chapter 225

i. This Chapter provides a framework for agencies to consider the LWRP policies and purposes when reviewing applications for consistency with the LWRP. The Village is in the process of updating the chapter to revise the consistency review procedure.

ii. Chapter 225 is relevant to all LWRP policies applicable in Croton.

m. Wetlands – Chapter 227

i. This Chapter of the Village Code provides for the protection, preservation, property maintenance and use of wetlands, water bodies and watercourses in the Village by preventing damage from erosion or siltation, minimizing disturbance, preserving natural habitats and protecting against flooding and pollution of these water resources.

ii. This Ordinance deals most closely with Policy 44, preservation of wetlands.

n. Zoning – Chapter 230

i. The Village of Croton's Zoning Law regulates how land can be used, and at what intensity and under what conditions development can occur. The Zoning Law has been amended recently to implement recommendations of the Village's Comprehensive Plan, including the creation of a new RA-60 single-family residence district and the rezoning of several open space areas to the PRE (Parks, Recreation and Education) District.

ii. This Chapter deals most closely with Policies 1 and 2, which relate to development and redevelopment activities within the LWRP area.

B. MANAGEMENT STRUCTURE TO IMPLEMENT THE LWRP

1. The Board of Trustees shall be the lead agency and, together with the Village Manager of Croton, are responsible for overall management and coordination of the Local Waterfront Revitalization Program.

2. The review of proposed actions for consistency with the policies and provisions of the Village of Croton LWRP will be undertaken by the lead agency for an action, in accordance with the provisions of § 225 of the Village Code.

3. Implementation of the LWRP is to be accomplished through the previously identified projects, together with the review procedure established in § 225.

4. State and Federal agencies identified in Section VI will notify the Village Manager of the Village of Croton of proposed actions in or likely to affect the LWRP area. Such actions will be subject to the same consistency review as provided by the

Waterfront and Coastal Resources Act, the Federal Coastal Zone Management Act and their implementing regulations.

The implementation of the proposed projects identified in Section IV will require funding from a combination of public and private sources. These costs may include capital outlays, maintenance costs and, potentially in some cases, property acquisition. For many of the projects, costs are undetermined at this time. It is recognized that if the majority of the projects identified are implemented, they will be funding privately or supplemented by State and Federal funding. Where applicable, the Village will work diligently to secure funding through grants available through State and Federal program funds, as well as other grants and in-kind assistance from governmental entities, elected representatives, quasi-governmental organizations and private entities, to support implementation of the identified LWRP projects.

Ongoing management of the LWRP will not require outside sources of funding.

SECTION VI:
STATE AND FEDERAL ACTIVITIES LIKELY TO AFFECT IMPLEMENTATION OF THE LOCAL PROGRAM

State and federal actions will affect and be affected by implementation of the LWRP. Under State law and the U.S. Coastal Zone Management Act, certain State and federal actions within or affecting the local waterfront area must be "consistent" or "consistent to the maximum extent practicable" with the enforceable policies and purposes of the LWRP. This consistency requirement makes the LWRP a unique, intergovernmental mechanism for setting policy and making decisions and helps to prevent detrimental actions from occurring and future options from being needlessly foreclosed. At the same time, the active participation of State and federal agencies is also likely to be necessary to implement specific provisions of the LWRP.

The first part of this section identifies the actions and programs of State and Federal agencies which should be undertaken in a manner consistent with the LWRP. This is a generic list of actions and programs, as identified by the NYS Department of State; therefore, some of the actions and programs listed may not be relevant to this LWRP. Pursuant to the State Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), the Secretary of State individually and separately notifies affected State agencies of those agency actions and programs which are to be undertaken in a manner consistent with approved LWRPs. Similarly, Federal agency actions and programs subject to consistency requirements are identified in the manner prescribed by the U.S. Coastal Zone Management Act and its implementing regulations. The lists of State and Federal actions and programs included herein are informational only and do not represent or substitute for the required identification and notification procedures. The current official lists of actions subject to State and Federal consistency requirements may be obtained from the NYS Department of State.

The second part of this section is a more focused and descriptive list of State and Federal agency actions which are necessary to further implementation of the LWRP. It is recognized that a State or federal agency's ability to undertake such actions is subject to a variety of factors and considerations; that the consistency provisions referred to above, may not apply; and that the consistency requirements cannot be used to require a State or federal agency to undertake an action it could not undertake pursuant to other provisions of law. Reference should be made to Section IV and Section V, which also discuss State and Federal assistance needed to implement the LWRP.

A. STATE AND FEDERAL ACTIONS AND PROGRAMS WHICH SHOULD BE UNDERTAKEN IN A MANNER CONSISTENT WITH THE LWRP

1. STATE AGENCIES

OFFICE FOR THE AGING

1.00 Funding and/or approval programs for the establishment of new or expanded facilities providing various services for the elderly.

DEPARTMENT OF AGRICULTURE AND MARKETS

1.00 Agricultural Districts Program
2.00 Rural Development Program
3.00 Farm Worker Services Programs
4.00 Permit and approval programs:

4.01 Custom Slaughters/Processor Permit

4.02 Processing Plant License

4.03 Refrigerated Warehouse and/or Locker Plant License

5.00 Farmland Protection Grants from the Environmental Protection Fund

DIVISION OF ALCOHOLIC BEVERAGE CONTROL/ STATE LIQUOR AUTHORITY

1.00 Permit and Approval Programs:

1.01 Ball Park - Stadium License

1.02 Bottle Club License

1.03 Bottling Permits

1.04 Brewer's Licenses and Permits

1.05 Brewer's Retail Beer License

1.06 Catering Establishment Liquor License

1.07 Cider Producer's and Wholesaler's Licenses

1.08 Club Beer, Liquor, and Wine Licenses

1.09 Distiller's Licenses

1.10 Drug Store, Eating Place, and Grocery Store Beer Licenses

1.11 Farm Winery and Winery Licenses

1.12 Hotel Beer, Wine, and Liquor Licenses

1.13 Industrial Alcohol Manufacturer's Permits

1.14 Liquor Store License

1.15 On-Premises Liquor Licenses

1.16 Plenary Permit (Miscellaneous-Annual)

1.17 Summer Beer and Liquor Licenses

1.18 Tavern/Restaurant and Restaurant Wine Licenses

1.19 Vessel Beer and Liquor Licenses

1.20 Warehouse Permit

1.21 Wine Store License

1.22 Winter Beer and Liquor Licenses

1.23 Wholesale Beer, Wine, and Liquor Licenses

DIVISION OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES

1.00 Facilities, construction, rehabilitation, expansion, or demolition or the funding of such activities.

2.00 Permit and approval programs:

2.01 Certificate of approval (Substance Abuse Services Program)

3.00 Permit and approval:

3.01 Letter Approval for Certificate of Need

3.02 Operating Certificate (Alcoholism Facility)

3.03 Operating Certificate (Community Residence)

3.04 Operating Certificate (Outpatient Facility)

3.05 Operating Certificate (Sobering-Up Station)

COUNCIL ON THE ARTS

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Architecture and environmental arts program.

DEPARTMENT OF BANKING

1.00 Permit and approval programs:

1.01 Authorization Certificate (Bank Branch)

1.02 Authorization Certificate (Bank Change of Location)

1.03 Authorization Certificate (Bank Charter)

1.04 Authorization Certificate (Credit Union Change of Location)

1.05 Authorization Certificate (Credit Union Charter)

1.06 Authorization Certificate (Credit Union Station)

1.07 Authorization Certificate (Foreign Banking Corporation Change of Location)

1.08 Authorization Certificate (Foreign Banking Corporation Public Accommodations Office)

1.09 Authorization Certificate (Investment Company Branch)

1.10 Authorization Certificate (Investment Company Change of Location)

1.11 Authorization Certificate (Investment Company Charter)

1.12 Authorization Certificate (Licensed Lender Change of Location)

1.13 Authorization Certificate (Mutual Trust Company Charter)

1.14 Authorization Certificate (Private Banker Charter)

1.15 Authorization Certificate (Public Accommodation Office - Banks)

1.16 Authorization Certificate (Safe Deposit Company Branch)

1.17 Authorization Certificate (Safe Deposit Company Change of Location)

1.18 Authorization Certificate (Safe Deposit Company Charter)

1.19 Authorization Certificate (Savings Bank Charter)

1.20 Authorization Certificate (Savings Bank De Novo Branch Office)

1.21 Authorization Certificate (Savings Bank Public Accommodations Office)

1.22 Authorization Certificate (Savings and Loan Association Branch)

1.23 Authorization Certificate (Savings and Loan Association Change of Location)

1.24 Authorization Certificate (Savings and Loan Association Charter)

1.25 Authorization Certificate (Subsidiary Trust Company Charter)

1.26 Authorization Certificate (Trust Company Branch)

1.27 Authorization Certificate (Trust Company-Change of Location)

1.28 Authorization Certificate (Trust Company Charter)

1.29 Authorization Certificate (Trust Company Public Accommodations Office)

1.30 Authorization to Establish a Life Insurance Agency

1.31 License as a Licensed Lender

1.32 License for a Foreign Banking Corporation Branch

OFFICE OF CHILDREN AND FAMILY SERVICES

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Homeless Housing and Assistance Program.
3.00 Permit and approval programs:

3.01 Certificate of Incorporation (Adult Residential Care Facilities)

3.02 Operating Certificate (Children's Services)

3.03 Operating Certificate (Enriched Housing Program)

3.04 Operating Certificate (Home for Adults)

3.05 Operating Certificate (Proprietary Home)

3.06 Operating Certificate (Public Home)

3.07 Operating Certificate (Special Care Home)

3.08 Permit to Operate a Day Care Center

DEPARTMENT OF CORRECTIONAL SERVICES

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK

1.00 Financing of higher education and health care facilities.
2.00 Planning and design services assistance program.

EMPIRE STATE DEVELOPMENT/ EMPIRE STATE DEVELOPMENT CORPORATION

1.00 Preparation or revision of statewide or specific plans to address State economic development needs.
2.00 Allocation of the state tax-free bonding reserve.

EDUCATION DEPARTMENT

1.00 Facilities construction, rehabilitation, expansion, demolition or the funding of such activities.
2.00 Permit and approval programs:

2.01 Certification of Incorporation (Regents Charter)

2.02 Private Business School Registration

2.03 Private School License

2.04 Registered Manufacturer of Drugs and/or Devices

2.05 Registered Pharmacy Certificate

2.06 Registered Wholesale of Drugs and/or Devices

2.07 Registered Wholesaler-Re-packer of Drugs and/or Devices

2.08 Storekeeper's Certificate

3.00 Administration of Article 5, Section 233 of the Education Law regarding the removal of archaeological and paleontological objects under the waters of the State.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

1.00 Issuance of revenue bonds to finance pollution abatement modifications in power-generation facilities and various energy projects.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of lands under the jurisdiction of the Department.
2.00 Classification of Waters Program; classification of land areas under the Clean Air Act.
3.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
4.00 Financial assistance/grant programs:

4.01 Capital projects for limiting air pollution

4.02 Cleanup of toxic waste dumps

4.03 Flood control, beach erosion and other water resource projects

4.04 Operating aid to municipal wastewater treatment facilities

4.05 Resource recovery and solid waste management capital projects

4.06 Wastewater treatment facilities

5.00 Planning, construction, rehabilitation, expansion, demolition, or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.
6.00 Funding assistance for issuance of permits and other regulatory activities (New York City only).
7.00 Implementation of the Environmental Quality Bond Act of 1972, including:
(a) Water Quality Improvement Projects
(b) Land Preservation and Improvement Projects including Wetland Preservation and Restoration Projects, Unique Area Preservation Projects, Metropolitan Parks Projects, Open Space Preservation Projects and Waterways Projects.
8.00 Marine Finfish and Shellfish Programs.
9.00 New York Harbor Drift Removal Project.

10.00 Permit and approval programs:

Air Resources

10.01 Certificate of Approval for Air Pollution Episode Action Plan

10.02 Certificate of Compliance for Tax Relief - Air Pollution Control Facility

10.03 Certificate to Operate: Stationary Combustion Installation; Incinerator; Process, Exhaust or Ventilation System

10.04 Permit for Burial of Radioactive Material

10.05 Permit for Discharge of Radioactive Material to Sanitary Sewer

10.06 Permit for Restricted Burning

10.07 Permit to Construct: a Stationary Combustion Installation; Incinerator; Indirect Source of Air Contamination; Process, Exhaust or Ventilation System

Construction Management

10.08 Approval of Plans and Specifications for Wastewater Treatment Facilities

Fish and Wildlife

10.09 Certificate to Possess and Sell Hatchery Trout in New York State

10.10 Commercial Inland Fisheries Licenses

10.11 Fishing Preserve License

10.12 Fur Breeder's License

10.13 Game Dealer's License

10.14 Licenses to Breed Domestic Game Animals

10.15 License to Possess and Sell Live Game

10.16 Permit to Import, Transport and/or Export under Section 184.1 (11- 0511)

10.17 Permit to Raise and Sell Trout

10.18 Private Bass Hatchery Permit

10.19 Shooting Preserve Licenses

10.20 Taxidermy License

10.21 Permit - Article 15, (Protection of Water) - Dredge or Deposit Material in a Waterway

10.22 Permit - Article 15, (Protection of Water) - Stream Bed or Bank Disturbances

10.23 Permit - Article 24, (Freshwater Wetlands)

Hazardous Substances

10.24 Permit to Use Chemicals for the Control or Elimination of Aquatic Insects

10.25 Permit to Use Chemicals for the Control or Elimination of Aquatic Vegetation

10.26 Permit to Use Chemicals for the Control or Extermination of Undesirable Fish

Lands and Forest

10.27 Certificate of Environmental Safety (Liquid Natural Gas and Liquid Petroleum Gas)

10.28 Floating Object Permit

10.29 Marine Regatta Permit

10.30 Navigation Aid Permit

Marine Resources

10.31 Digger's Permit (Shellfish)

10.32 License of Menhaden Fishing Vessel

10.33 License for Non-Resident Food Fishing Vessel

10.34 Non-Resident Lobster Permit

10.35 Marine Hatchery and/or Off-Bottom Culture Shellfish Permits

10.36 Permits to Take Blue-Claw Crabs

10.37 Permit to Use Pond or Trap Net

10.38 Resident Commercial Lobster Permit

10.39 Shellfish Bed Permit

10.40 Shellfish Shipper's Permits

10.41 Special Permit to Take Surf Clams from Waters other than the Atlantic Ocean

10.42 Permit - Article 25, (Tidal Wetlands)

Mineral Resources

10.43 Mining Permit

10.44 Permit to Plug and Abandon (a non-commercial, oil, gas or solution mining well)

10.45 Underground Storage Permit (Gas)

10.46 Well Drilling Permit (Oil, Gas, and Solution Salt Mining)

Solid Wastes

10.47 Permit to Construct and/or Operate a Solid Waste Management Facility

10.48 Septic Tank Cleaner and Industrial Waste Collector Permit

Water Resources

10.49 Approval of Plans for Wastewater Disposal Systems

10.50 Certificate of Approval of Realty Subdivision Plans

10.51 Certificate of Compliance (Industrial Wastewater Treatment Facility)

10.52 Letters of Certification for Major Onshore Petroleum Facility Oil Spill Prevention and Control Plan

10.53 Permit - Article 36, (Construction in Flood Hazard Areas)

10.54 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas

10.55 State Pollutant Discharge Elimination System (SPDES) Permit

10.56 Approval - Drainage Improvement District

10.57 Approval - Water (Diversions for) Power

10.58 Approval of Well System and Permit to Operate

10.59 Permit - Article 15, (Protection of Water) - Dam

10.60 Permit - Article 15, Title 15 (Water Supply)

10.61 River Improvement District Approvals

10.62 River Regulatory District Approvals

10.63 Well Drilling Certificate of Registration

10.64 401 Water Quality Certification

11.00 Preparation and revision of Air Pollution State Implementation Plan.
12.00 Preparation and revision of Continuous Executive Program Plan.
13.00 Preparation and revision of Statewide Environmental Plan.
14.00 Protection of Natural and Man-made Beauty Program.
15.00 Urban Fisheries Program.
16.00 Urban Forestry Program.
17.00 Urban Wildlife Program.

ENVIRONMENTAL FACILITIES CORPORATION

1.00 Financing program for pollution control facilities for industrial firms and small businesses.

FACILITIES DEVELOPMENT CORPORATION

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

OFFICE OF GENERAL SERVICES

1.00 Administration of the Public Lands Law for acquisition and disposition of lands, grants of land, grants of easement and issuance of licenses for land underwater, including for residential docks over 5,000 square feet and all commercial docks, issuance of licenses for removal of materials from lands under water, and oil and gas leases for exploration and development.
2.00 Administration of Article 4-B, Public Buildings Law, in regard to the protection and management of State historic and cultural properties and State uses of buildings of historic, architectural or cultural significance.
3.00 Facilities construction, rehabilitation, expansion, or demolition.

GREENWAY HERITAGE CONSERVANCY FOR THE HUDSON RIVER VALLEY (regional agency)

1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of lands under the jurisdiction of the Conservancy.
2.00 Financial assistance/grant programs
3.00 Model Greenway Program
4.00 Greenway Trail Activities

DEPARTMENT OF HEALTH

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Permit and approval programs:

2.01 Approval of Completed Works for Public Water Supply Improvements

2.02 Approval of Plans for Public Water Supply Improvements.

2.03 Certificate of Need (Health Related Facility - except Hospitals)

2.04 Certificate of Need (Hospitals)

2.05 Operating Certificate (Diagnostic and Treatment Center)

2.06 Operating Certificate (Health Related Facility)

2.07 Operating Certificate (Hospice)

2.08 Operating Certificate (Hospital)

2.09 Operating Certificate (Nursing Home)

2.10 Permit to Operate a Children's Overnight or Day Camp

2.11 Permit to Operate a Migrant Labor Camp

2.12 Permit to Operate as a Retail Frozen Dessert Manufacturer

2.13 Permit to Operate a Service Food Establishment

2.14 Permit to Operate a Temporary Residence/Mass Gathering

2.15 Permit to Operate or Maintain a Swimming Pool or Public Bathing Beach

2.16 Permit to Operate Sanitary Facilities for Realty Subdivisions

2.17 Shared Health Facility Registration Certificate

DIVISION OF HOMES AND COMMUNITY RENEWAL and its subsidiaries and affiliates

1.00 Facilities construction, rehabilitation, expansion, or demolition.
2.00 Financial assistance/grant programs:

2.01 Federal Housing Assistance Payments Programs (Section 8 Programs)

2.02 Housing Development Fund Programs

2.03 Neighborhood Preservation Companies Program

2.04 Public Housing Programs

2.05 Rural Initiatives Grant Program

2.06 Rural Preservation Companies Program

2.07 Rural Rental Assistance Program

2.08 Special Needs Demonstration Projects

2.09 Urban Initiatives Grant Program

2.10 Urban Renewal Programs

3.00 Preparation and implementation of plans to address housing and community renewal needs.

HOUSING FINANCE AGENCY

1.00 Funding programs for the construction, rehabilitation, or expansion of facilities.
2.00 Affordable Housing Corporation

HUDSON RIVER VALLEY GREENWAY COMMUNITIES COUNCIL (regional agency)

1.00 Greenway Planning and Review
2.00 Greenway Compact Activities
3.00 Financial Assistance/Grants Program
4.00 Greenway Trail Activities

JOB DEVELOPMENT AUTHORITY

1.00 Financing assistance programs for commercial and industrial facilities.

MEDICAL CARE FACILITIES FINANCING AGENCY

1.00 Financing of medical care facilities.

OFFICE OF MENTAL HEALTH

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Permit and approval programs:

2.01 Operating Certificate (Community Residence)

2.02 Operating Certificate (Family Care Homes)

2.03 Operating Certificate (Inpatient Facility)

2.04 Operating Certificate (Outpatient Facility)

OFFICE FOR PEOPLE WITH DEVELOPMENTAL DISABILITIES

1.00 Facilities construction, rehabilitation, expansion, or demolition, or the funding of such activities.
2.00 Permit and approval programs:

2.01 Establishment and Construction Prior Approval

2.02 Operating Certificate Community Residence

2.03 Outpatient Facility Operating Certificate

METROPOLITAN TRANSPORTATION AUTHORITY (regional agency)

1.00 Facilities construction, rehabilitation, expansion, or demolition, or the funding of such activities.
2.00 Increases in special fares for transportation services to public water-related recreation resources.

DIVISION OF MILITARY AND NAVAL AFFAIRS

1.00 Preparation and implementation of the State Disaster Preparedness Plan.

NATURAL HERITAGE TRUST

1.00 Funding program for natural heritage institutions.

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION (including Regional State Park Commission)

1.00 Acquisition, disposition, lease, grant of easement or other activities related to the management of land under the jurisdiction of the Office.
2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
3.00 Funding program for recreational boating, safety and enforcement.
4.00 Funding program for State and local historic preservation projects.
5.00 Land and Water Conservation Fund programs.
6.00 Nomination of properties to the Federal and/or State Register of Historic Places.
7.00 Permit and approval programs:

7.01 Floating Objects Permit

7.02 Marine Regatta Permit

7.03 Navigation Aide Permit

7.04 Posting of Signs Outside State Parks

8.00 Preparation and revision of the Statewide Comprehensive Outdoor Recreation Plan and the Statewide Comprehensive Historic Preservation Plan and other plans for public access, recreation, historic preservation or related purposes.
9.00 Recreation services program.
10.00 Urban Cultural Parks Program.
11.00 Planning, construction, rehabilitation, expansion, demolition, or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.

POWER AUTHORITY OF THE STATE OF NEW YORK

1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Authority.
2.00 Facilities construction, rehabilitation, expansion, or demolition.

NEW YORK STATE SCIENCE AND TECHNOLOGY FOUNDATION

1.00 Corporation for Innovation Development Program.
2.00 Center for Advanced Technology Program.

DEPARTMENT OF STATE

1.00 Appalachian Regional Development Program.
2.00 Coastal Management Program.
  2.01 Planning, construction, rehabilitation, expansion, demolition, or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.
3.00 Community Services Block Grant Program.
4.00 Permit and approval programs:

  4.01 Billiard Room License

  4.02 Cemetery Operator

  4.03 Uniform Fire Prevention and Building Code

STATE UNIVERSITY CONSTRUCTION FUND

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

STATE UNIVERSITY OF NEW YORK

1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the University.
2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DEPARTMENT OF TRANSPORTATION

1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Department.
2.00 Construction, rehabilitation, expansion, or demolition of facilities, including, but not limited to:
  (a) Highways and parkways
  (b) Bridges on the State highways system

(c) Highway and parkway maintenance facilities
(d) Rail facilities

3.00 Financial assistance/grant programs:

3.01 Funding programs for construction/reconstruction and reconditioning/preservation of municipal streets and highways (excluding routine maintenance and minor rehabilitation)

3.02 Funding programs for development of the ports of Albany, Buffalo, Oswego, Ogdensburg, and New York

3.03 Funding programs for rehabilitation and replacement of municipal bridges

3.04 Subsidies program for marginal branchlines abandoned by Conrail

3.05 Subsidies program for passenger rail service

3.06 Financial assistance to local governments for transportation enhancement activities.

4.00 Permits and approval programs:

4.01 Approval of applications for airport improvements (construction projects)

4.02 Approval of municipal applications for Section 18 Rural and Small Urban Transit Assistance Grants (construction projects)

4.03 Approval of municipal or regional transportation authority applications for funds for design, construction and rehabilitation of omnibus maintenance and storage facilities

4.04 Approval of municipal or regional transportation authority applications for funds for design and construction of rapid transit facilities

4.05 Certificate of Convenience and Necessity to Operate a Railroad

4.06 Highway Work Permits

4.07 License to Operate Major Petroleum Facilities

4.08 Outdoor Advertising Permit (for off-premises advertising signs adjacent to interstate and primary highway)

4.09 Real Property Division Permit for Use of State-Owned Property

5.00 Preparation or revision of the Statewide Master Plan for Transportation and subarea or special plans and studies related to the transportation needs of the State.

6.00 Water Operation and Maintenance Program--Activities related to the containment of petroleum spills and development of an emergency oil-spill control network.

URBAN DEVELOPMENT CORPORATION and its subsidiaries and affiliates

1.00 Acquisition, disposition, lease, grant of easement or other activities related to the management of land under the jurisdiction of the Corporation.
2.00 Planning, development, financing, construction, major renovation or expansion of commercial, industrial, and civic facilities and the provision of technical assistance or financing for such activities, including, but not limited to, actions under its discretionary economic development programs such as the following:
(a) Tax-Exempt Financing Program
(b) Lease Collateral Program
(c) Lease Financial Program
(d) Targeted Investment Program
(e) Industrial Buildings Recycling Program
(f) Administration of special projects.
3.00 Administration of State-funded capital grant programs.

DIVISION OF YOUTH

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding or approval of such activities.

2. FEDERAL AGENCIES

DIRECT FEDERAL ACTIVITIES AND DEVELOPMENT PROJECTS

DEPARTMENT OF COMMERCE

National Marine Fisheries Services

1.00 Fisheries Management Plans

DEPARTMENT OF DEFENSE

Army Corps of Engineers

1.00 Proposed authorizations for dredging, channel improvements, break-waters, other navigational works, or erosion control structures, beach replenishment,

dams or flood control works, ice management practices and activities, and other projects with potential to impact coastal lands and waters.
2.00 Land acquisition for spoil disposal or other purposes.
3.00 Selection of open water disposal sites.

Army, Navy and Air Force

4.00 Location, design, and acquisition of new or expanded defense installations (active or reserve status, including associated housing, transportation or other facilities).
5.00 Plans, procedures and facilities for landing or storage use zones.
6.00 Establishment of impact, compatibility or restricted use zones.

DEPARTMENT OF ENERGY

1.00 Prohibition orders.

GENERAL SERVICES ADMINISTRATION

1.00 Acquisition, location and design of proposed Federal Government property or buildings, whether leased or owned by the Federal Government.
2.00 Disposition of Federal surplus lands and structures.

DEPARTMENT OF INTERIOR

Fish and Wildlife Service

1.00 Management of National Wildlife refuges and proposed acquisitions.

Mineral Management Service

2.00 OCS lease sale activities including tract selection, lease sale stipulations, etc.

National Park Service

3.00 National Park and Seashore management and proposed acquisitions.

DEPARTMENT OF TRANSPORTATION

Amtrak, Conrail

1.00 Expansions, curtailments, new construction, upgrading or abandonments or railroad facilities or services, in or affecting the State's coastal area.

Federal Aviation Administration

2.00 Location and design, construction, maintenance, and demolition of Federal aids to air navigation.

Federal Highway Administration

3.00 Highway construction.

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

1.00 Location and design, construction or enlargement of Coast Guard stations, bases, and lighthouses.
2.00 Location, placement or removal of navigation devices which are not part of the routine operations under the Aids to Navigation Program (ATON).
3.00 Expansion, abandonment, designation or anchorages, lightening areas or shipping lanes and ice management practices and activities.

FEDERAL LICENSES AND PERMITS

DEPARTMENT OF DEFENSE

Army Corps of Engineers

1.00 Construction of dams, dikes or ditches across navigable waters, or obstruction or alteration of navigable waters required under Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403).
2.00 Establishment of harbor lines pursuant to Section 11 of the Rivers and Harbors Act of 1899 (33 U.S.C. 404, 405).
3.00 3.00 Occupation of seawall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the U.S. pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408).
4.00 4.00 Approval of plans for improvements made at private expense under Corps supervision pursuant to the Rivers and Harbors Act of 1902 (33 U.S.C. 565).
5.00 5.00 Disposal of dredged spoils into the waters of the U.S., pursuant to the Clean Water Act, Section 404, (33 U.S.C. 1344).
6.00 6.00 All actions for which permits are required pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
7.00 7.00 Construction of artificial islands and fixed structures in Long Island Sound pursuant to Section 4(f) of the River and Harbors Act of 1912 (33 U.S.C.).

DEPARTMENT OF ENERGY

Economic Regulatory Commission

1.00 Regulation of gas pipelines, and licensing of import or export of natural gas pursuant to the Natural Gas Act (15 U.S.C. 717) and the Energy Reorganization Act of 1974.
2.00 Exemptions from prohibition orders. Federal Energy Regulatory Commission
3.00 Licenses for non-Federal hydroelectric projects and primary transmission lines under Sections 3(11), 4(e) and 15 of the Federal Power Act (16 U.S.C. 796(11), 797(11) and 808).
4.00 Orders for interconnection of electric transmission facilities under Section 202(b) of the Federal Power Act (15 U.S.C. 824a(b)).
5.00 Certificates for the construction and operation of interstate natural gas pipeline facilities, including both pipelines and terminal facilities under Section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)).
6.00 Permission and approval for the abandonment of natural gas pipeline facilities under Section 7(b) of the Natural Gas Act (15 U.S.C. 717f(b)).

ENVIRONMENTAL PROTECTION AGENCY

1.00 NPDES permits and other permits for Federal installations, discharges in contiguous zones and ocean waters, sludge runoff and aquaculture permits pursuant to Section 401, 402, 403, 405, and 318 of the Federal Water Pollution Control Act of 1972 (33 U.S.C. 1341, 1342, 1343, and 1328).
2.00 Permits pursuant to the Resources Recovery and Conservation Act of 1976.
3.00 Permits pursuant to the underground injection control program under Section 1424 of the Safe Water Drinking Water Act (42 U.S.C. 300h-c).
4.00 Permits pursuant to the Clean Air Act of 1976 (42 U.S.C. 1857).

DEPARTMENT OF INTERIOR

Fish and Wildlife Services

1.00 Endangered species permits pursuant to the Endangered Species Act (16 U.S.C. 153(a).

Bureau of Ocean Energy Management Regulation and Enforcement

2.00 Permits to drill, rights of use and easements for construction and maintenance of pipelines, gathering and flow lines and associated structures pursuant to 43 U.S.C. 1334, exploration and development plans, and any other permits or

authorizations granted for activities described in detail in OCS exploration, development, and production plans.

3.00 Permits required for pipelines crossing federal lands, including OCS lands, and associated activities pursuant to the OCS Lands Act (43 U.S.C. 1334) and 43 U.S.C. 931 (c) and 20 U.S.C. 185.

NUCLEAR REGULATORY COMMISSION

1.00 Licensing and certification of the siting, construction and operation of nuclear power plants pursuant to Atomic Energy Act of 1954, Title II of the Energy Reorganization Act of 1974 and the National Environmental Policy Act of 1969.

SURFACE TRANSPORTATION BOARD

1.00 Authority to abandon railway lines (to the extent that the abandonment involves removal of trackage and disposition of right-of-way); authority to construct railroads; authority to construct coal slurry pipelines.

DEPARTMENT OF TRANSPORTATION

Coast Guard

1.00 Construction or modification of bridges, causeways or pipelines over navigable waters pursuant to 49 U.S.C. 1455.

2.00 Permits for Deepwater Ports pursuant to the Deepwater Ports Act of 1974 (33 U.S.C. 1501).

Federal Aviation Administration

3.00 Permits and licenses for construction, operation or alteration of airports.

FEDERAL ASSISTANCE*

DEPARTMENT OF AGRICULTURE

10.068 Rural Clean Water Program

10.409 Irrigation, Drainage, and Other Soil and Water Conservation Loans

10.410 Low to Moderate Income Housing Loans

10.411 Rural Housing Site Loans

10.413 Recreation Facility Loans

10.414 Resource Conservation and Development Loans

10.415 Rural Renting Housing Loans

10.416 Soil and Water Loans

10.418 Water and Waste Disposal Systems for Rural Communities

10.422 Business and Industrial Loans

10.424 Industrial Development Grants

10.426 Area Development Assistance Planning Grants

10.429 Above Moderate Income Housing Loans

10.430 Energy Impacted Area Development Assistance Program

10.901 Resource Conservation and Development

10.902 Soil and Water Conservation

10.904 Watershed Protection and Flood Prevention

10.906 River Basin Surveys and Investigations

DEPARTMENT OF COMMERCE

11.300 Economic Development - Grants and Loans for Public Works and Development Facilities

11.301 Economic Development - Business Development Assistance

11.302 Economic Development - Support for Planning Organizations

11.304 Economic Development - State and Local Economic Development Planning

11.305 Economic Development - State and Local Economic Development Planning

11.307 Special Economic Development and Adjustment Assistance Program - Long Term Economic Deterioration

11.308 Grants to States for Supplemental and Basic Funding of Titles I, II, III, IV, and V Activities

11.405 Anadromous and Great Lakes Fisheries Conservation

11.407 Commercial Fisheries Research and Development

11.417 Sea Grant Support

11.427 Fisheries Development and Utilization - Research and Demonstration Grants and Cooperative Agreements Program

11.501 Development and Promotion of Ports and Inter-modal Transportation

11.509 Development and Promotion of Domestic Waterborne Transport Systems

COMMUNITY SERVICES ADMINISTRATION

49.002 Community Action

49.011 Community Economic Development

49.013 State Economic Opportunity Offices

49.017 Rural Development Loan Fund

49.018 Housing and Community Development (Rural Housing)

ENVIRONMENTAL PROTECTION AGENCY

66.001 Air Pollution Control Program Grants

66.418 Construction Grants for Wastewater Treatment Works

66.426 Water Pollution Control - State and Areawide Water Quality Management Planning Agency

66.451 Solid and Hazardous Waste Management Program Support Grants

66.452 Solid Waste Management Demonstration Grants

66.600 Environmental Protection Consolidated Grants Program Support Comprehensive Environmental Response, Compensation and Liability (Super Fund)

GENERAL SERVICES ADMINISTRATION

39.002 Disposal of Federal Surplus Real Property

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

14.112 Mortgage Insurance - Construction or Substantial Rehabilitation of Condominium Projects

14.115 Mortgage Insurance - Development of Sales Type Cooperative Projects

14.117 Mortgage Insurance - Homes

14.124 Mortgage Insurance - Investor Sponsored Cooperative Housing

14.125 Mortgage Insurance - Land Development and New Communities

14.126 Mortgage Insurance - Management Type Cooperative Projects

14.127 Mortgage Insurance - Mobile Home Parks

14.218 Community Development Block Grants/Entitlement Grants

14.219 Community Development Block Grants/Small Cities Program

14.221 Urban Development Action Grants

14.223 Indian Community Development Block Grant Program

DEPARTMENT OF INTERIOR

15.400 Outdoor Recreation - Acquisition, Development and Planning

15.402 Outdoor Recreation - Technical Assistance

15.403 Disposal of Federal Surplus Real Property for Parks, Recreation, and Historic Monuments

15.411 Historic Preservation Grants-in-Aid

15.417 Urban Park and Recreation Recovery Program

15.600 Anadromous Fish Conservation

15.605 Fish Restoration

15.611 Wildlife Restoration

15.613 Marine Mammal Grant Program

15.802 Minerals Discovery Loan Program

15.950 National Water Research and Development Program

15.951 Water Resources Research and Technology - Assistance to State Institutes

15.952 Water Research and Technology - Matching Funds to State Institutes

SMALL BUSINESS ADMINISTRATION

59.012 Small Business Loans

59.013 State and Local Development Company Loans

59.024 Water Pollution Control Loans

59.025 Air Pollution Control Loans

59.031 Small Business Pollution Control Financing Guarantee

DEPARTMENT OF TRANSPORTATION

20.102 Airport Development Aid Program

20.103 Airport Planning Grant Program

20.205 Highway Research, Planning, and Construction

20.309 Railroad Rehabilitation and Improvement - Guarantee of Obligations

20.310 Railroad Rehabilitation and Improvement - Redeemable Preference Shares

20.506 Urban Mass Transportation Demonstration Grants

20.509 Public Transportation for Rural and Small Urban Areas

* Numbers refer to the Catalog of Federal Domestic Assistance Programs, 1980 and its two subsequent updates.

B. FEDERAL AND STATE ACTIONS AND PROGRAMS NECESSARY TO FURTHER THE LWRP

1. FEDERAL ACTIONS AND PROGRAMS

a. Department of Defense, Army Corps of Engineers

Riprap improvements along the Hudson River would require a U.S. Army Corps of Engineers permit. This Federal agency is involved in any action involving the Hudson River.

b. Department of the Interior, National Park Service

Provision of funding under the Land and Water Conservation Fund Program.

2. STATE ACTIONS AND PROGRAMS

a. NYS Office of General Services

Prior to any development occurring in the water or on the immediate waterfront, OGS should be consulted for a determination of the State's interest in underwater or formerly underwater lands and for authorization to use and occupy these lands.

b. NYS Department of Environmental Conservation

Any improvements along the Croton River and Bay would require approval from the DEC, since most of the Croton River and all of Croton Bay are classified as “B” streams, suitable for primary recreation, but not for use as a water supply source.

DEC should continually supply water quality monitoring results to the Village.

c. NYS Office of Parks, Recreation and Historic Preservation

Any proposed linkage of shoreline public parks should be designed and constructed with the cooperation and assistance of the State Council of Parks, Recreation and Historic Preservation. This trail system would eventually link with

other local trails to become part of a greenway system along the entire span of the eastern side of the Hudson River throughout Westchester County.

d. NYS Department of Commerce

Any action or provision of funds for the development or promotion of tourism-related activities or development.

e. NYS Department of State

Provision of funding for the implementation of the Local Waterfront Revitalization Program.

f. NYS Department of Transportation

Coordination of potential future waterfront access improvements as they may affect Route 9 and Route 9A.

3. REGIONAL AUTHORITIES

a. Metropolitan Transportation Authority

Coordination of future improvements to the Croton Harmon Station parking lot to improve stormwater management and aesthetic quality.

4. OTHER ENTITIES

a. CSX

Coordination of potential connection to Village sewer system to free up the area occupied by a drainage easement for the CSX septic field area, and of the potential to lease of purchase unutilized portions of the CSX property for Village use.

SECTION VII:
CONSULTATION WITH OTHER AFFECTED REDERAL, STATE, REGIONAL AND LOCAL AGENCIES

A. DURING PREPARATION OF THE LWRP, THE FOLLOWING AGENCIES WERE CONSULTED FOR AGENCY- OR DEPARTMENT-SPECIFIC INFORMATION NECESSARY TO ACCURATELY PREPARE THE DOCUMENT. LWRP

Federal Consultation

No direct Federal consultation has taken place at this time.

State Agency Consultation

New York State Department of State

Local/Regional Consultation

Village of Croton-on-Hudson Planning Board
Village of Croton-on-Hudson Board of Trustees
Village of Croton-on-Hudson Village Manager
Village of Croton-on-Hudson Engineering Department
Village of Croton-on-Hudson Waterfront Advisory Committee
Westchester County Department of Planning

B. REVIEW OF DRAFT LWRP BY STATE, FEDERAL AND LOCAL AGENCIES

The Draft LWRP was reviewed and accepted by the Village Board of Trustees and forwarded to the NYS Department of State (DOS). The DOS then initiated a 60-day review of the Draft LWRP pursuant to the NYS Waterfront Revitalization of Coastal and Inland Waterways Act. Copies of the LWRP were distributed by DOS to all potentially affected State and Federal agencies, Westchester County, adjacent waterfront municipalities and other interested organizations. Comments were reviewed by the Village and DOS, and resultant changes were made to the LWRP.

[To complete this section upon completion of DOS review process.]

SECTION VIII:
OBTAINING LOCAL COMMITMENT

A. PUBLIC OUTREACH

This Local Waterfront Revitalization Program (LWRP) was prepared in partnership with the New York State Department of State (DOS) and in accordance with regulations established by the DOS. The DOS initiated a review of the Draft LWRP by potentially affected State, Federal and local agencies to identify, and avoid, conflicts with existing projects, programs and policies.

In addition, the Village undertook efforts to gain public input and comment on the LWRP. The LWRP Advisory Committee held two public workshops (see Appendix for workshop summaries) and a public hearing on the Draft LWRP, and the Draft LWRP was made available on the Village's website.

B. LWRP PROCESS

In late 2014, the Village of Croton-on-Hudson retained BFJ Planning consultant to prepare an update to its 1992 LWRP. In early 2015, the Village appointed an LWRP Advisory Committee to guide the update process, consisting of the Mayor, the Village Manager, the Village Engineer, the Planning Board Secretary and representatives of the Board of Trustees, the Planning Board and the Waterfront Advisory Committee,

The Advisory Committee met regularly throughout the LWRP update process, on January 30, March 3, April 8, May 15, June 19 and XX XX, 2015. The Village also hosted two public workshops and a public hearing to solicit community feedback and present the Draft LWRP.

This LWRP update has been prepared by the Village's planning consultant, BFJ Planning, with technical assistance from the Advisory Committee and Village staff.

Revisions to the Draft LWRP were prepared and reviewed by the Advisory Committee based on comments by the DOS and the public. The Final LWRP was reviewed by the Village Board of Trustees for adoption.

The Final LWRP was adopted by the Village Board of Trustees.