

Village of Croton-on-Hudson Local Waterfront Revitalization Program

Adopted:

Village of Croton-on-Hudson Board of Trustees, March 16, 1992

Approved:

NYS Secretary of State Gail S. Shaffer, June 15, 1992

Concurred:

U.S. Office of Ocean and Coastal Resource Management, August 17, 1992



STATE OF NEW YORK
DEPARTMENT OF STATE
ALBANY, N.Y. 12231-0001

GAIL S. SHAFFER
SECRETARY OF STATE

JUN. 15 1992

Honorable Robert W. Elliott
Mayor
Village of Croton-on-Hudson
P.O. Box 249
Municipal Bldg.
Croton-on-Hudson, NY 10520

Dear Mayor Elliott:

It is with great pleasure that I inform you that, pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act, I have approved the Local Waterfront Revitalization Program (LWRP) prepared by the Village of Croton-on-Hudson. The Village of Croton-on-Hudson is to be commended for its thoughtful and energetic response to opportunities presented along its waterfront.

I will notify State agencies shortly that I have approved the LWRP and will provide them with a list of their activities which must be undertaken in a manner consistent to the maximum extent practicable with the LWRP.

Again, I would like to commend the Village for its efforts in developing the LWRP and look forward to working with you in the years to come as you endeavor to revitalize your waterfront.

Sincerely,

A handwritten signature in black ink, appearing to read "Gail S. Shaffer", written in a cursive style.

Gail S. Shaffer

GSS:gn

VILLAGE BOARD OF TRUSTEES
VILLAGE OF CROTON-ON-HUDSON
RESOLUTION TO AMEND THE SUBMISSION
TO THE SECRETARY OF STATE
REGARDING THE LOCAL WATERFRONT REVITALIZATION PROGRAM

WHEREAS, the Village of Croton-on-Hudson Board of Trustees adopted the Croton-on-Hudson Local Waterfront Revitalization Program (LWRP) on March 16, 1992; and

WHEREAS, the Village of Croton-on-Hudson Board of Trustees adopted the Consistency Review Law, Local Law No. 2 of 1992, creating the management structure for implementing the LWRP; and

WHEREAS, the Village of Croton-on-Hudson Board of Trustees submitted the LWRP and the Consistency Review Law to the Secretary of State for approval; and

WHEREAS, the Secretary of State has not yet acted on the Village's submission; and

WHEREAS, the description of the management structure in Section V. of the LWRP does not conform with the management structure created by the Consistency Review Law; and

WHEREAS, the Village wishes to make a technical change to conform the description of the management structure in the LWRP to that of the Consistency Review Law and in all other respects ratifies the LWRP document adopted by resolution on March 16, 1992; and

WHEREAS, the Village has already complied with the requirements of the State Environmental Quality Review Act regarding the adoption of the LWRP and the Consistency Review Law;

NOW THEREFORE BE IT RESOLVED, that the Village hereby

a) deletes the description entitled "Consistency Review Procedures" on pages V-9 and V-10 of the LWRP;

b) adds the new pages V-9a, V-9b, V-9c and V-9d to replace the deleted text;

c) submits the revisions to the Secretary of State for approval.

TABLE OF CONTENTS

<u>SECTION</u>		<u>PAGE</u>
	EXECUTIVE SUMMARY	
I	BOUNDARY DESCRIPTION	I-3
II	INVENTORY AND ANALYSIS	II-1
	Overview	II-3
	A. Existing Land Use	II-4
	Hudson River Section	II-9
	The Center Village.	II-12
	The North End Section	II-16
	B. Hazardous Wastes	II-18
	C. Water Quality	II-20
	D. Water Supply and Sewer Services	II-20
	E. Recreation	II-21
	F. Public Access	II-23
	G. Scenic Quality	II-24
	H. Development Constraints	II-25
	Significant Fish and Wildlife Habitats	II-26
	Geology	II-29
	Floodplain	II-36
	Wetland	II-36
	I. Historic Resources	II-36
	J. Highways/Roads/Mass Transportation	II-38
	K. Air Quality	II-40
	Appendix	II-43
	Croton River and Bay Habitat	II-45
	Haverstraw Bay Habitat	II-51
III	STATE AND LOCAL POLICIES	III-1
	Development Policies	III-3
	Fish and Wildlife Policies	III-10
	Flooding and Erosion Policies	III-17
	Public Access Policies	III-24
	Energy and Ice Management Policies	III-39
	Water and Air Resources Policies	III-41
IV	PROPOSED LAND AND WATER USES AND PROPOSED PROJECTS	IV-1
V	IDENTIFICATION OF TECHNIQUES FOR LOCAL IMPLEMENTATION OF THE PROGRAM	V-1
	Section A - Existing Laws	V-3
	Section B - New Laws	V-6
	Section C - Consistency Review Procedures	V-8

VI	IDENTIFYING STATE AND FEDERAL ACTIONS AND PROGRAMS LIKELY TO AFFECT IMPLEMENTATION OF THE LOCAL PROGRAM	VI-1
	Section A - State Actions to be Reviewed for Consistency with LWRP	VI-3
	Direct Federal Activities and Development Projects	VI-17
	Federal Licenses and Permits	VI-19
	Federal Assistance	VI-22
	Section B - Federal and State Actions and Programs Necessary to Further the Implementation of the LWRP	VI-25
VII	CONSULTATION WITH OTHER AFFECTED FEDERAL, STATE, REGIONAL AND LOCAL AGENCIES	VII-1
VIII	OBTAINING LOCAL COMMITMENT	VIII-1

LIST OF FIGURES

<u>Map No.</u>		<u>Page</u>
1	Regional Setting	I-5
2	Coastal Zone Boundary	I-7
3	Coastal Zone Sections and Land Use Details	II-5
4	Existing Land & Water Uses	II-7
5	Zoning Map	in back pocket
6	Development Considerations	II-27
7	Croton River and Bay Significant Habitat	Inventory Appendix, II-45
8	Haverstraw Bay Significant Habitat	Inventory Appendix, II-51
9	Proposed Projects	IV-5
9a	Proposed Land Use	IV-7
10	Croton River Gorge Trail	IV-9

LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1	Air Quality Levels in Westchester County	II-43
2	General Flow Chart for SEQR and LWRP Review	V-10
3	Project Consistency Matrix	V-12
3a	Local Law Consistency Matrix	V-12

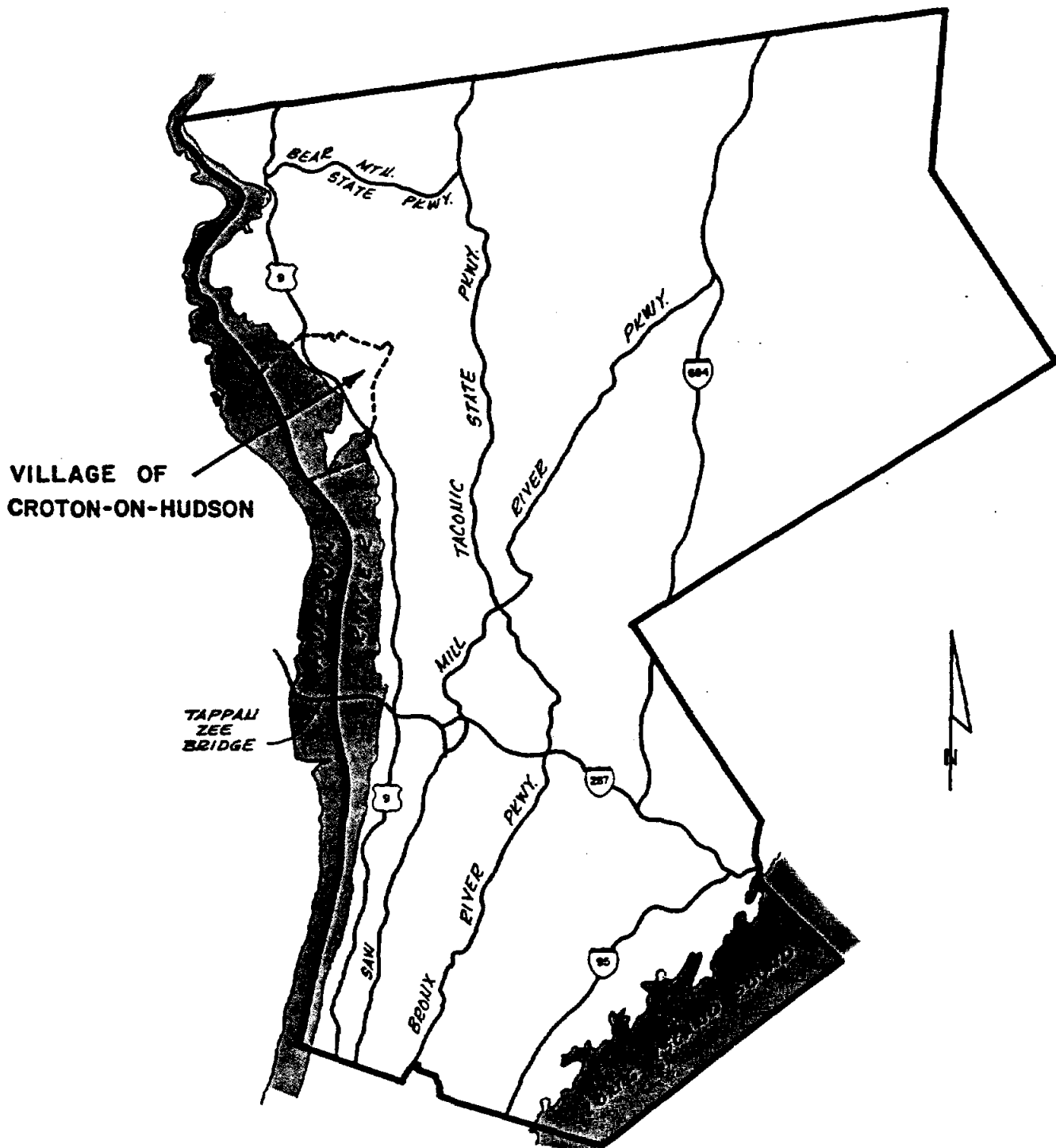
SECTION I
BOUNDARY DESCRIPTION

BOUNDARY DESCRIPTION

The Village of Croton-on-Hudson is located in Westchester County, New York (see Figure 1, Regional Setting) and borders the eastern side of the Hudson River surrounded on the north and east by the Town of Cortlandt, on the southeast by the Town of New Castle, and on the south by the Town of Ossining. The Village, which is 4.5 square miles in size, extends approximately 71,280 feet along the Hudson River shoreline, including approximately 18,500 feet along the Croton River to the Croton Bay. The western boundary of the Village extends to the middle of the Hudson River and is coincident with the boundary of Westchester County.

The inland boundary of the coastal zone is the eastern 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 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, Coastal Zone Boundary). 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 River.

WESTCHESTER COUNTY



MATTHEW D.
RUDIKOFF
ASSOCIATES,
INC.

VILLAGE OF CROTON-ON-HUDSON

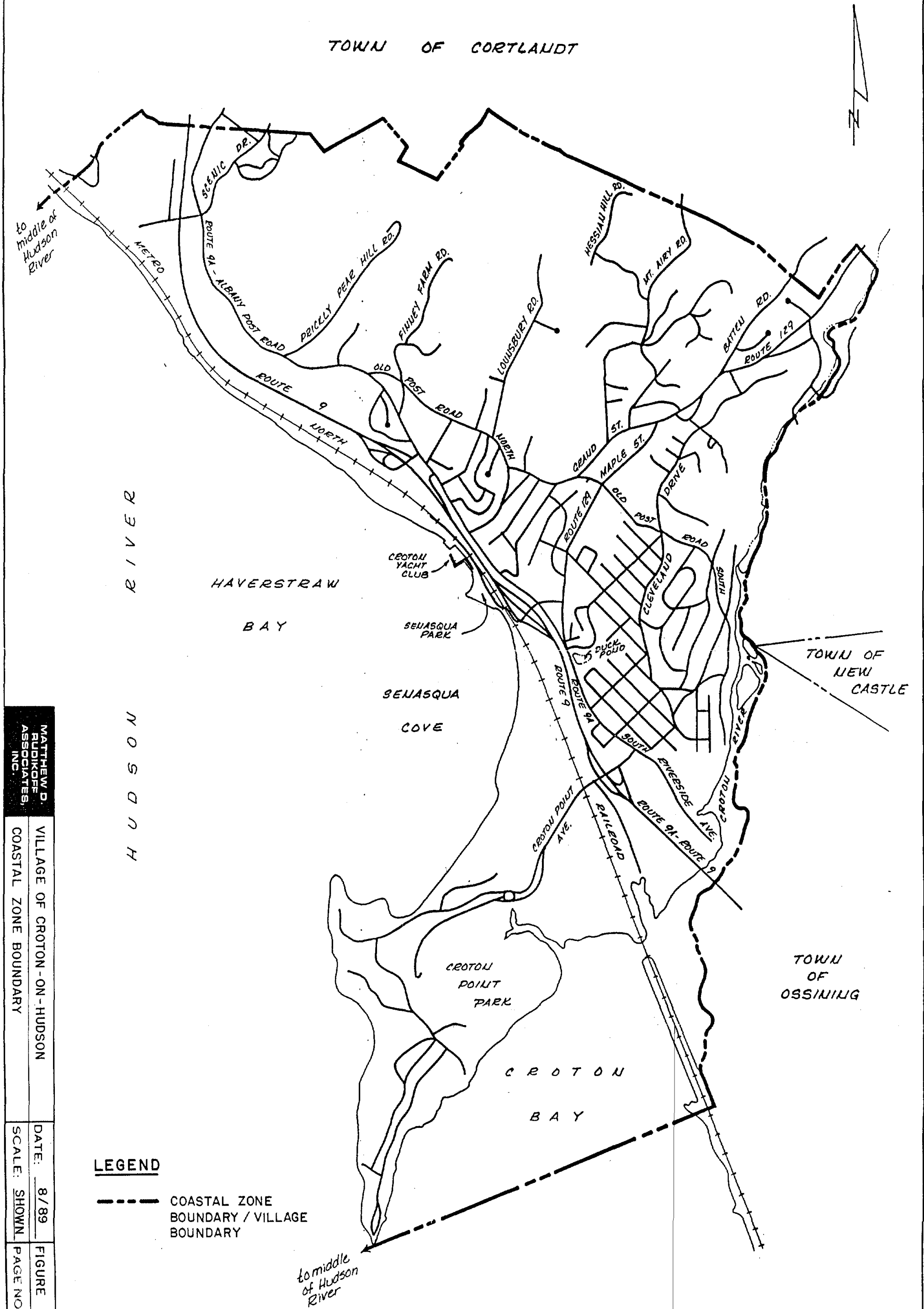
REGIONAL SETTING

DATE: 8/89

SCALE: SHOWN

FIGURE 1

TOWN OF CORTLANDT



LEGEND

----- COASTAL ZONE
BOUNDARY / VILLAGE
BOUNDARY

0 1/2
SCALE IN MILES

MATTHEW D. RUDIKOFF ASSOCIATES, INC.	VILLAGE OF CROTON-ON-HUDSON COASTAL ZONE BOUNDARY	DATE: 8/89	FIGURE 2
		SCALE: SHOWN	PAGE NO. 1-3

SECTION II
INVENTORY AND ANALYSIS

OVERVIEW

The Village of Croton-on-Hudson is located on the eastern side of the Hudson River approximately 40 miles to the north of Manhattan. The Village, covering 4.5 square miles, is in the Town of Cortlandt in the northwestern portion of the County of Westchester.

The boundaries of the Village of Croton-on-Hudson form a somewhat triangular shape. The middle of the Hudson River, running in a North-South direction, forms one side of the triangle. The Hudson River then intersects with the mouth of the Croton River which flows to this point from a north easterly direction. The Croton River forms the second side of the triangle. The third side is an artificially drawn line running from the Village boundary line at the Croton River in a north westerly direction back to the Hudson River. This line separates the Village of Croton-on-Hudson from the Town of Cortlandt.

The portion of the Village line which is not bounded by either the Hudson River or the Croton River is generally of a hilly and wooded nature. These hills slope naturally toward one or the other Rivers which has the effect of orienting the entire Village toward the waterways that form most of its boundary. Many buildings that are situated on the hills in the Village face either the Croton River or the Hudson River in order to take advantage of the magnificent views afforded by Croton's unique location.

Along the Croton River to the east, fast-running water is viewed down steep banks to the River's edge. Large outcroppings of rocks and a wooded shoreline is typical of the entire coastal zone boundary formed by this River. Looking west across the Hudson, the panorama of Haverstraw Bay and the hills of the upper Palisades provide the visual focus.

The population of Croton-on-Hudson in 1980 was 6,889. Over the past 30 years the population has fluctuated as shown below:

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>
1950	4,837	
1960	6,812	20.4
1970	7,523	10.4
1980	6,889	-8.4
1990	7,018	1.8

Source: US Department of Commerce, Bureau of Census.

Pressures for development of both a residential and commercial nature have been increasing in Northern Westchester in the past several years. These pressures, which have already directly affected Croton-on-Hudson both by proposals and projects within and outside of the Village, are expected to continue in the future.

Currently, there are conventional single-family subdivisions and high density residential developments totaling approximately 617 units which are in various stages of review or are already under construction in Croton. Additional proposals for development can be expected for the few remaining large parcels of open land that exist within the coastal zone area. The Village of Croton-on-Hudson is also being seriously affected by the traffic and demand for commuter parking generated by large-scale residential developments outside its boundary to the north and south. The effects of these developmental pressures create several major issues for the future of Croton-on-Hudson which include environmental concerns, visual impacts, quality of life, traffic, historic preservation and public access to the waterways. Village residents and officials have increasingly expressed concerns about the possible detrimental effects current and proposed future developments will have on the Village.

For purposes of best describing the results of the inventory of current land and water uses, the Croton-on-Hudson coastal zone area has been divided into three sections (see Figure 3). Each section has one or more particular characteristics which give it a special identity and to a large extent defines its current land and water use. Of course, as with all arbitrary distinctions, there is some overlap of these special characteristics between the three sections. Figure 3 also includes some land use details referred to in the text.

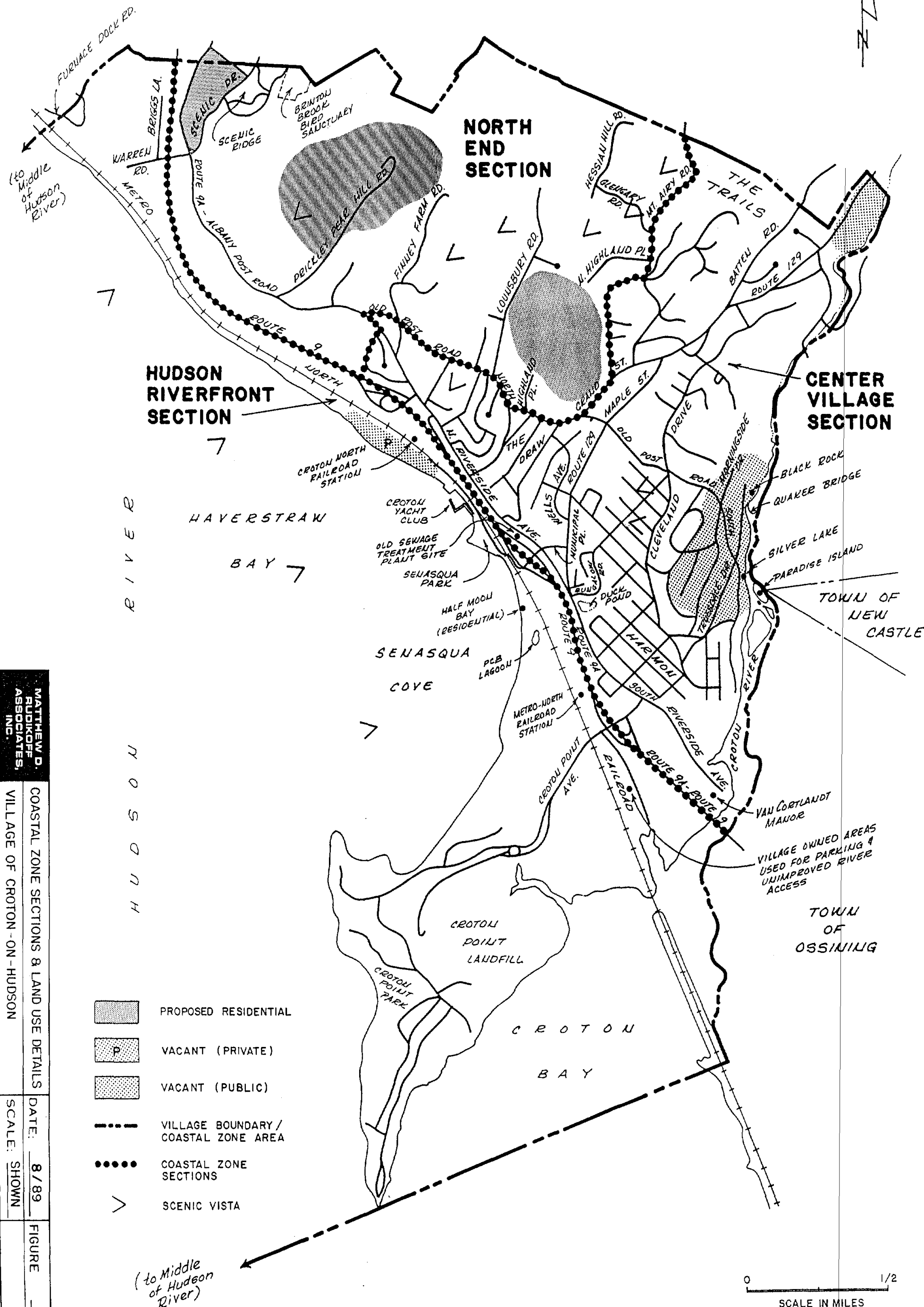
Figure 4 which follows, present Existing Land and Water Uses within the coastal zone. Figure 4 is an updated version of the state's land use map of the Village. Figure 5 (in the back pocket) is the official existing zoning map for the Village.

A. EXISTING LAND USE

1.0 The Hudson Riverfront Section

This section of the Village is bounded on the west by the Hudson River, on the east by Route 9, on the south by the Croton River at the Village's southern boundary, and at the north by the Village's northern boundary along Furnace Dock Road (see Figure 3). It stretches in a north-south direction along the water's edge to the tip of Croton Point Park, around the edge of Croton Bay and back to Route 9. A very small peninsula of land, extending north from Ossining and consisting mainly of railroad beds, is also included in this section. The overwhelming characteristic of this section is its direct frontage on the Hudson River. This advantageous position has made it highly susceptible to development pressures.

TOWN OF CORTLANDT



MATTHEW D. RUDIKOFF ASSOCIATES, INC.	COASTAL ZONE SECTIONS & LAND USE DETAILS		DATE: 8/89	FIGURE 3
	VILLAGE OF CROTON-ON-HUDSON		SCALE: SHOWN	

SOURCE: "Existing Land & Water Uses, New York State Coastal Management Program, Base Maps WC-5 & WC-6, 7/78, Revised 12/88
Updated 1988 by Waterfront Revitalization Committee

Updated 1988 by Waterfront Revitalization Committee

2.0 The Center Village Section

This section of Croton-on-Hudson has two chief characteristics. It encompasses the second major waterway in the coastal zone - the Croton River. It also contains the majority of the residences and commercial establishments which exist in the Village. Developmental pressures are less severe in this section than in the other two because of the lack of available privately held land.

The Center Village section is bounded by Route 9 to the west (see Figure 3). The intersection of Route 9 with the Croton River is the southernmost point of this section. The line extends along the Croton River in a northeast direction to the Village boundary line. From this point, the Center Village section extends northwest along the boundary line to Mt. Airy Road, along Mt. Airy in a southwest direction to Grand Street, along Old Post Road North to its intersection with Route 9A (N. Riverside Avenue), south on Route 9A to Wolf Road and then along an arbitrary line to Route 9.

3.0 The North End Section

The North End section of the Croton-on-Hudson coastal zone area is steeper, less densely populated and contains the last remaining large parcels of undeveloped land in the village. As such, it is under the same developmental pressure as is the Hudson Riverfront section.

The North End is bounded on the west by Route 9. From the point at which Route 9 meets the northern boundary line of the Village, this section follows the Village boundary line in an easterly direction to Mt. Airy Road. From this point the border of this section runs along Mt. Airy Road to Grand Street, to Old Post Road North, to North Riverside Avenue, to Wolf Lane and along an arbitrary line back to Route 9.

1.0 Hudson Riverfront Section

1.1 Residential

Two areas of the Hudson Riverfront section are currently in residential use. At the extreme north end of this section on Furnace Dock Road, Warren Road and Briggs Lane, a small group of single family homes exist - approximately 35 in number. Most are on lots of at least 1 acre which is the current zoning of this area (RA-40). Some smaller properties in this area pre-exist the current zoning or were made smaller when Route 9 was built. The single family homes on these three streets surround approximately 40 acres of wooded land owned by the National Audubon Society.

Near the southern end of this section directly on the water's edge, construction of a high-density condominium development is currently being completed. Known as Half Moon Bay (formerly the River Club), this project was constructed on a site rezoned RDU

(Riverfront Development Use) and consists of 120 attached townhouses. Development plans include a 300 slip marina and public restaurant. A public walkway along the River was included in the development plans at the urging of Village officials and residents.

1.2 Commercial Use

There are few commercial buildings in the Hudson Riverfront section. On Croton Point Avenue, at the entrance to the railroad station, two buildings are used for retail and office purposes.

Near the Senasqua Road exit from Route 9, the former Croton North Station is now privately owned and used for commercial purposes.

The boundaries of the Hudson Riverfront section bisect the commercial areas of the Village. Therefore, other commercial buildings exist and are located adjacent to the boundaries of this section.

1.3 Industrial Use

The predominant land use in the Hudson Riverfront section, aside from recreational areas at Croton Point Park and Senasqua Park, is industrial or transportation-related. The Metro North railroad, which occupies approximately 100 acres, dominates the central area in this section with numerous switching tracks and the Harmon railroad yards. Croton-on-Hudson is the major switching location for north/south Metro-North and Amtrak trains running along the Hudson River. The Harmon railroad yard is also where Metro North trains are sent for repair. This same industrial area also contains a large warehouse, formerly owned and used by Georgia-Pacific, but now leased by Metro North.

The Croton-Harmon railroad station is the chief transportation site in the entire Croton-on-Hudson coastal zone area and indeed in the surrounding area of Westchester County. The station is located adjacent to the Hudson River, just to the east of Croton Point Park. It is the first sight to be seen by people entering the Village from the south along Route 9. A large expanse of public and private commuter parking is associated with this station.

Other transportation-related use includes the NYS Route 9 and right-of-way which comprise a significant portion of land in the Riverfront Section.

1.4 Public Buildings

There are no public buildings (municipal buildings, schools) located in the Hudson Riverfront section.

1.5 Recreation

Croton Point Park, a Westchester County owned park, is the largest recreational site in Croton-on-Hudson. It is located at the south end of the Hudson Riverfront section on a point extending out into the Hudson River. Croton Point is visible from many miles to the north and south along the Hudson River.

Also within the Hudson Riverfront Section is Senasqua Park, a Village-owned park and the Croton Yacht Club. The Yacht Club site is owned by the Village and leased to the Yacht Club. The current lease expires in 1992. Approximately 40 acres off of Furnace Dock Road is owned by the Audubon Society and available for public recreational use. See Section E for a complete description of recreation resources.

1.6 Vacant and Disused

Two publicly-owned vacant sites exist in the area between the Harmon railroad yards and tracks to the west and Croton Point Park to the east. In addition, as mentioned in Section B: Hazardous Wastes, the large County-owned Croton landfill site in the middle of Croton Point Park is considered as currently "disused".

Along the northern part of the Hudson Riverfront section, directly on the water's edge, there is a narrow stretch of privately-owned vacant land of approximately 18 acres. This site was previously in industrial use. Various proposals have been made to develop it for high density residential purposes although no proposals are currently active. Access to this piece of land is extremely difficult because the railroad tracks separate it from all streets and highways.

1.7 Analysis of Existing Land Uses in the Hudson Riverfront Section

Land use in the Hudson Riverfront section is predominantly of an industrial and railroad-related nature. A growing residential presence is beginning to be felt here with the construction of the Half Moon Bay housing development. In spite of this section's ideal location on the eastern shore of the Hudson River, its current water-related uses are limited and mainly seasonal in nature.

At this section's northern end, north of Senasqua Park and the Croton Yacht Club on the Hudson River, a stretch of 18 privately owned acres exist in an undeveloped state. Since this is the last remaining large parcel of open land actually on the River, every effort should be made to ensure that future proposals for it include substantial opportunities for public access to the Hudson. These opportunities might include both walking and bicycle paths, nature trails, a bandstand, picnicking and beach areas. At the same time all proposals for land use in the Hudson Riverfront section must avoid uses that would have deleterious effects on the natural habitats of fish and wildlife or become visual eyesores along the River.

2.0 The Center Village

2.1 Residential

This portion of the Croton-on-Hudson coastal zone area is where the majority of Croton's residential housing exists. Most of the homes are single family residences situated on small lots. In the extreme northeast portion of this Center Village section, a new development on Georgia Lane consists of about 20 homes on lots of 1 acre or more. Large parcels of 1 acre or more are also to be found along Mt. Airy Road between its Grand Street connection 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, is an unusual mixture of old, new, rustic, contemporary, large and small homes on varying size plots. Until 1931, the Trails were not part of the Village of Croton-on-Hudson. It 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.

Single family homes in this area range in age from those built in the middle to late 1800s to new homes. The area to the east of Maple Avenue (Route 129) and bounded by South Riverside Avenue is frequently referred to as "Harmon." This area was initially developed by Tom Harmon as a residential area for railroad employees. Most of the homes were built between 1920 and the early 1960s. Like the Trails, Harmon also existed as a separate entity from Croton at one time (see History).

Although there are very few multi-family residences in Croton-on-Hudson, two of the largest exist within the Center Village section - Bari Manor, off Old Post Road South, and Van Wyck Towers on Grand Street. 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. There are also several other multi-family residences scattered about the Center Village section -each containing from four to ten units.

2.2 Commercial

Just as most of the residences in the Village are located in the Center Village section, so also are most commercial establishments. Within this section, three identifiable commercial areas have emerged.

The principal commercial area runs along South Riverside Avenue from Municipal Place in the north to its end in the south, just past Croton Point Avenue. Along this stretch can be found many varieties of commercial establishments. In addition to retail stores and offices, there are two banks, six gas stations, two car dealerships, a 10-store

shopping center with a Shop-Rite anchor and several restaurants. In addition, along North Riverside Avenue, there are two commercial enterprises 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, where it forms an intersection with Grand Street, is also part of the Upper Village commercial area. Retail stores, doctors' and lawyers' offices and restaurants are predominant in this area. There are no gas stations or garages in the Upper Village.

An area known as the Lower Village runs along the east side of North Riverside Avenue from Prospect Avenue in the north to Municipal Place in the south. The lower Village has a large number of commercial establishments. Small retail stores, offices, a car dealership, a masonic hall, an auto repair shop and a boat dealer are located in this area.

There are no buildings on the west side of North Riverside Avenue in this area as it fronts directly on Route 9. In the past however, this area was the major commercial section of the Village.

A few other commercial sites are scattered throughout the Center Village section. These consist mainly of doctors' and real estate offices.

2.3 Industrial

There are no industrial uses in the Center Village section.

2.4 Public Buildings

Almost all of the public buildings that exist within the Croton-on-Hudson coastal zone are to be found in the Center Village section. These consist of the municipal building, firehouses, library, three public schools and the Bethel cemetery.

2.5 Recreation

Several sites in the Center Village section have recreational uses. These include a number of small public parks, playing grounds behind Carrie E. Tompkins Elementary School and Dobbs Park on Maple Avenue. Also in this Center Village Section are Duck Pond, a number of islands within the Croton River, including Paradise Island and Silver Lake, and Van Cortlandt Manor, a private historical site. See Section E for a description of these recreation areas.

2.6 Vacant and Disused

Along the Croton River, southeast from the Village boundary line to the Village-owned land at Silver Lake Park, there is a long stretch of Village owned land that is vacant. This land is directly on the Croton River. One part of this stretch is known as Black Rock. Black Rock was turned over to the Village by Westchester County in 1979 with the stipulation that within five years of the agreement the Village would develop the area for use as a municipal park and recreational area. Although no such development has occurred to date, the Village is considering plans to develop it for passive recreation use. Tenants living in substandard houses at Black Rock have been evicted, and the structures demolished. This waterfront area now remains mostly vacant. Black Rock is also the site of the Village well heads -the source of Croton's water supply.

The Village of Croton-on-Hudson and the school district also own some additional vacant land inland from the Croton River and northeast of the Carrie E. Tompkins Elementary School.

Privately owned parcels of vacant land also exist in the Trails area and along Batten Road. These parcels range in size from one-half acre to several acres.

Between Grand Street and Wells Avenue, along Beekman Avenue, there are many privately-owned lots that until recently were undeveloped. This area, known as "the Draw," has been developed with single-family houses. The 65 homes are being constructed on lots approximately 50 feet by 100 feet in size. However, the drainage systems and sedimentation control mechanisms implemented during construction of these residences resulted in certain flooding and sedimentation problems. Zoning in this area is RA-5, single-family residential, 5000 square feet.

The old Village sewage treatment plant site is located in the Center Village section. The site, approximately 1.5 acres in size, is located between Route 9 and South Riverside Drive, just north of Municipal Place. The site presents a unique opportunity for the development of commercial, cultural or recreational uses. The site has been sold and plans submitted for an office building. Located near major intersections, the site provides for good vehicular access. Any development of this site must be compatible with the character of the area, with consideration given to scale, architectural style, density, and intensity of use.

2.7 Analysis of Existing Land Uses in the Center Village Section

The Center Village section constitutes the core of the Village of Croton-on-Hudson, both residentially and commercially. With the additional aspect of the recreational opportunities provided by the Croton River, the Center Village section has evolved into the focal point of most Village-related activities.

The Croton River is the predominant natural resource in this section. 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 on the Croton River, benefit from their views of its natural beauty.

Almost all of Croton's "neighborhood" residences, schools, offices, commercial establishments, religious buildings, and playgrounds are in this section. The Croton Free Library and the Croton-on-Hudson Municipal Building are also located here. Because the Center Village section is buffered somewhat by the Hudson River Section and the North End Section of the coastal zone area, it has been able to retain many aspects associated with a more rural village. This is still true in spite of the large amount of development occurring both north and south of the Village of Croton-on-Hudson. Nevertheless pressures are mounting to make changes in the Center Village section that would alter this valuable rustic characteristic of Croton.

Traffic flow and parking within the Center Village section have become increasingly difficult problems. Many of the streets in this section are steep and narrow, particularly those streets 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 section where small lots with minimal driveway space are not able to accommodate the demands of multi-car families. This combination of narrow streets and on-street parking is likely to be further exacerbated with the construction of new residences and expansion of local businesses.

The desire to create housing in the Village of Croton-on-Hudson has not only spawned proposals for expensive new developments but also proposals for affordable housing. Since new construction is very costly and the amount of available land is limited, accessory apartments have been suggested as a possible solution to this problem in the Center Village section. While this would take advantage of an already existing stock of housing in the Center Village, it would also have the effect of increasing the density of the section. Current zoning regulations provide for accessory apartments to be permitted under certain conditions where the owner is over 55 and the apartment is to be used for family members. Proposals to modify these restrictions on accessory apartments must take into consideration the accompanying increased density, the current parking and traffic problems, the results of the water study, the impact on the Village sewer system, and the preservation of the neighborhood atmosphere of this section of the Village.

3.0 The North End Section

3.1 Residential

The section of the coastal zone area referred to as the North End contains most of the undeveloped land in Croton-on-Hudson. The North End section is generally very steep with only a single major road (Route 9A-Albany Post Road and Old Post Road North) bisecting it in a north-south direction. There are very few cross roads. As a result of these factors, the residences in the North-End 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. A few streets in the North End section, including the east side of Old Post Road, Lounsbury Road, Highland Place and North Highland Place, Glengary Road, and Hessian Hills Road, have single-family residences and resemble neighborhoods when viewed from the road.

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.

Two high density residential sites are also located in the North End section of the Village. These sites are in contrast to the generally low-density that prevails in the area. One, the Skyview Nursing Home, provides a residence for the elderly in need of nursing care. A development known as Scenic Ridge is the second site of high density residential use in the North End. Built approximately ten years ago, Scenic Ridge is a community consisting of 17 groups of attached single family dwelling units in groups of four to seven totalling 97 units in all.

Located at the extreme northern end of the Village, Scenic Ridge is adjacent to Amberlands, a large apartment complex (31 buildings of three-stories with 24 apartments each) built by the same developer in the Town of Cortlandt. Together, these residential developments form an extremely high density residential area.

3.2 Commercial

There are very few commercial uses of land in the North End Section. The primary exceptions are the ten to fifteen small stores, restaurants and offices that run along the north side of Grand Street. Near the northern Village boundary, there are also three former homes being used as small offices, one small corporate office building (the Hendry Corp.) and a fruit and vegetable market.

3.3 Public Buildings

There are no public buildings in the North End Section.

3.4 Recreation

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 located on private property.

3.5 Vacant and Disused

Several large tracts of open land and many smaller parcels are to be found in the North End section of the Croton-on-Hudson coastal zone area. These are the last large remaining open spaces in the Village. Most of this vacant land is situated on hilly terrain from which the Hudson River may be viewed.

These tracts of open land are all privately owned and plans for developing them are currently in various stages of consideration. The owner of a 260 acre tract, accessible from Prickly Pear Hill Road, Finney Farm Road and Fox Road, has submitted an application to create a golf course and country club. Under the existing zoning of RA-40, membership clubs are allowed if a special permit is granted by the Village Board of Trustees. A 60 acre tract of land just north of the proposed golf course has no active application at this time, but informal discussions about development of a residential subdivision have been held. These proposals, together with the ongoing construction of residences on the last remaining small parcels of land in this section, bring to a head certain issues and problems that demand the Village's attention.

Thirty-three acres of land at the very northernmost area in Croton, along Route 9A, owned by Baltic Estates, Inc., is also vacant. Fourteen acres of it to the south of Scenic Drive is zoned RA-25 for residential use. The remaining 19 acres, north of Scenic Drive and East of Route 9A, are zoned O-3 for limited office use. Litigation challenging application of current zoning provisions to these parcels is pending.

A tract of land in the North End section 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.

3.6 Analysis of Existing Land Use in the North End Section

Unlike the Hudson Riverfront section and the Center Village section, the North End section does not border directly on either the Hudson or Croton Rivers. In spite of this,

its hilly topography in conjunction with generally large lot sizes and substantial open spaces, give it incomparable visual access to the Hudson River.

The existence of some large areas of open land in this section has brought the same development pressures as in the other sections of the Village. Although the North End section shares the same problems and concerns as the other sections - traffic, water, visual access, environmental preservation, etc., the single major land use issue in the North End section is the fate of the last remaining large open spaces in the Village.

The hilly, wooded, rocky nature of land in this area, combined with the lack of connecting east-west streets, make traffic considerations important here. Route 9A (Albany Post Road), running on a north-south line through this section, is the single roadway to which all traffic from east-west streets must flow. Road capacity and safety must be considered when plans to increase the density of this area are examined.

Current zoning of most available land in the North End section is RA-40 (1 acre). One large tract of approximately 33 acres is zoned for commercial (RA 25) and limited office (O-3). This tract of open land is just south of the Scenic Ridge townhouse development and is owned by the same developer. Considerations for the development of this property as zoned will have to include all the normal environmental concerns as well as the problem of drawing additional traffic into the area from outside the Village. Development of this site will also have to address the potential problem of adding to the commercial and residential sprawl that is spreading into the Village along Route 9A from the north.

Many opportunities are present for the Village in the North End section. Its present low density use (except in the extreme north part) and remaining large tracts of open land, mean that opportunities for real decisions exist here. How and when the land in this section 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.

B. HAZARDOUS WASTES

The Village of Croton-on-Hudson has two sites listed on the State's List of Inactive Hazardous Waste Sites or "Category 2" hazardous wastes sites. These sites include the 288 acre Croton Landfill within Croton Point Park, and the lagoon located on the Metro-North property, west of the railroad tracks.

The landfill has been closed since June 1986, however, the need for cleanup and closing of the site has not been resolved. Studies of the site are underway to examine leachate seepage and associated environmental degradation. In November 1988, Westchester County officials and New York State Department of Environmental Conservation resolved legal difficulties that have delayed progress towards cleanup and restoration of the landfill. The agreement, signed by both parties, would allow the County to collect 75 percent of the cost of restoration and closure of

the site from NYS Environmental Quality Bond Act money. The total cost of restoration at the time was estimated to be \$24 million and take approximately five years. The County Board of Legislators and the State have now approved the agreement. However, final closure plans are at least a couple of years away and must await results of additional studies. In the meantime, signs have been posted on the perimeter of the site regarding its classification as an Inactive Hazardous Waste Site.

Currently there are three issues being addressed with respect to Croton Point Park and Landfill. The landfill site is under the authority of the Westchester County Department of Solid Waste. Plans for future use are being considered by that agency. The parkland is under the authority of the County Office of Parks and Recreation. The closure of the landfill is under the direction and supervision of NYSDEC and EPA and remediation is the subject of litigation and a negotiated settlement. A portion of such settlement was the dedication of 180 acres of Croton Point Park for use as an estuarine research center under the auspices of the Hudson River Fisherman's Association. The only role of the Village of Croton in the development of future land uses in the Park is an advisor to the Estuarine Research Center Committee. However, the Village is willing to participate as a member of any official body established for determining the future plans for Croton Point Park, including clean-up measures.

The Metro-North Lagoon has been used in the past as a dumping area for railroad-related wastes, including high amounts of PCBs and other ground contaminants.

In both the above cases, serious concerns have been raised about the levels of contamination to be found at these sites and the degree to which their toxicity is affecting the surrounding area. These concerns include ground water contamination, identifying the toxic substances at the sites, the "life" of these substances, their presences in runoff into the Hudson River and Croton River and Bay, soil contamination, their effect on fish and wildlife in the area, their release into the air, and their long term effects on residents living near these sites.

The conditions of the Croton landfill and at the toxic lagoon on the Metro North property present very difficult problems for Croton-on-Hudson and have a significant bearing on the revitalization of the entire designated coastal zone area by detracting from Croton's ability to maximize its prized waterfront resources. Clean up operations and closing of the landfill will be performed by the County under the direction and supervision of the Federal government. At present the future useability of the land and the water quality at and near the Croton landfill are in question.

The County is considering various land use proposals for the site. The issue of concern for the Village is whether, because of the hazardous conditions of the landfill, there should be any development on the site. The goal of the Village is to participate in negotiations and discussions of the future use of the site and in the planning process. The Village of Croton-on-Hudson has no legal authority in the execution of the cleanup; and, yet, the landfill constitutes a substantial negative presence in the Village. Although the Village has zoned the land RA40, single family residence, which also allows agriculture and nurseries, municipal buildings, places

of worship and schools, medical facilities, utilities, membership clubs, non-profit historic and landmark sites open to the public, 180 acres of the County-owned Croton Point Park have been dedicated for use as an estuarine research center.

C. WATER QUALITY

Within the Village of Croton-on-Hudson there are no surface waters assigned an A classification under the State's Environmental Conservation Law (ECL). The best usage of Class A water is as a source of water supply for drinking, culinary or food processing purposes and any other usages.

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. The only Class B waters in the Village are near the northern border of the Village in the Hessian Hill area and are tributaries to the stream which runs parallel to Lounsbury Road and eventually into the Hudson River. The Croton River is also classified as Class B from the northern border of the Village to its mouth. The Hudson River within the boundaries of Croton is also Classified B.

The remaining three 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, were classified as Class D for the last several years, but are now Class C. Class C waters are suitable for fishing and fish propagation.

The Westchester County Department of Health currently tests the water quality of a number of surface water bodies within the County. These tests are being conducted to provide a database on acid rain parameters, as well as to assess the potential for use of these water sources for emergency water supply for the County. The six Cortlandt sites currently being tested by the DOH include: Marden Pond, Peterson Pond, Kaplan's Pond, Peekskill Hollow Brook, Lake Cortlandt and Lake Hollowbrook. According to the Westchester County Department of Health, Division of Water Quality, use of these sites for emergency water supply is not likely for some time.

It should be noted that swimming at the beach at Croton Point has been periodically prohibited by the Westchester County Board of Health due to high fecal coliform levels from inadequate sewage treatment and illegal disposal of wastes from boats. This last occurred in the summer of 1988. See also Policy 34 regarding the provision of pump-out facilities at new marinas.

D. WATER SUPPLY AND SEWER SERVICES

Water is supplied to most Village properties by a Village-owned water supply.

In an attempt to identify whether or not its water supply could support the demands of additional development, the Village retained Geraghty & Miller, Inc. to study the Village's water supply. The results of this study concluded that the Croton River is the predominant water source

pumped from the Village well fields, which are located in the Center Village section. Under normal, non-drought conditions, five high-capacity wells located at the existing Village well locations can provide 5.5 million gallons per day (mgd) of water on a continuing basis. Under normal conditions, five high-capacity wells that are more evenly distributed than the existing well locations can provide 6 mgd on a continuing basis. Under normal conditions, 3 wells (including one new high-capacity well in the upper part of the well field) can provide 5 mgd on a continuing basis and under severe drought conditions, assuming no flow in Croton River and no other sources of recharge of the aquifer, the well field has 41 days of water at a pumping rate of 1.3 mgd and 16 days of water at 2.6 mgd. Currently, the Village wells pump 1.0 to 1.25 mgd.

The study recommended taking two upper-field wells out of service and replacing them with one deep-diameter production well in the upper part of the well field. In drilling this new well, the report recommended penetrating the bedrock for future use of ground water resources. Installation of a higher capacity pump in one of the wells was also recommended to increase yield capacity. In addition, a water-level measuring program to monitor the impact of drawdown on the aquifer was recommended.

The Village is within the County's Ossining Sanitary Sewer District. The District serves the central and southern areas of the Village. 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 section of the Village.

Storm water runoff presents an additional problem to the Village. Plans locating the Village storm sewers are currently unavailable. However, the Village recognizes the desirability of having these plans drawn up when it is financially feasible to do so.

Village water and sewer are not available in a substantial portion of the North End section. Water for the Scenic Ridge complex is presently supplied by the Montrose Water District by agreement with the Village of Croton-on-Hudson. Unlike the ground water supply used by the rest of the Village, this water is classified as corrosive. Any proposed development of the open land in this area will have to address the necessity of providing water and sewage disposal, as well as to assess the impact on existing water sources to ensure that there will be no resultant depletion or degradation of quality. The Village Department of Public Works is considering relocating the Village garage and maintenance supply yards to one site. Salt and other road maintenance material has leached into the Croton Bay from the garage maintenance supply yard location in the Village-owned area south of the parking area at the Croton Harmon Railroad Station. The Public Works Department has withdrawn its interest in County-owned land south of the Croton Park Bridge for the garage site. Consideration is now being given to the Georgia Pacific Building at the end of Municipal Place.

E. RECREATION

There are a number of recreational areas within the Village (See Figure 3), the largest and most notable is Croton Point Park.

Croton Point Park provides facilities for swimming, boating, picnicking and camping. A pool is available, but no beach swimming is allowed due to polluted waters. There are also fields which can be used for ball playing. For many years this park has been the site of the annual Clearwater Revival. In 1988, Clearwater discontinued use of the site for its annual festival because of the health dangers that are feared may be present as a result of the proximity of the site to the Croton landfill.

Two other recreational sites exist along the Hudson River waterfront, Senasqua Park, a Village-owned park used for boating and picnicking, and the Croton Yacht Club. Recreational facilities at Senasqua Park include picnic tables, benches, playground equipment, restrooms, mooring slips, and a small beach area. The Croton Yacht Club site is also Village-owned and is leased to the Yacht Club through the year 1992 for \$1,800 per year plus 60 percent of the gross revenue from boat storage above the first \$4,000. The dock at the Club is available to pedestrians for recreation and fishing use, although locked gates and signs inhibit public use.

There are some concerns among the current boat users at Senasqua Park and the Croton Yacht Club that there will be an incompatibility between the predominant sailboat use and the probable large motor boats to be used at Half Moon Bay. Motor boat channels as designated on the Half Moon Bay marina site plan may make it difficult for sailboats to come into and out of Senasqua Park. In addition, wakes and cross wakes from motor boats can have an adverse affect on the ability of sailboats to get out into the River and also on their mooring. The introduction of such a large marina into the waterfront area where none had existed before raises the need for specific local laws and/or zoning regulations to govern the situation.

At the north end of the Village, off Furnace Dock Road, is Brinton Brook Preserve, a 40 acre tract of land owned by the Audubon Society. Paths are available throughout the preserve for passive recreation purposes by the public. Although the area possesses a serene beauty, visitors to the site are few in number and garbage dumping on the paths and adjacent roadways inhibit its use and enjoyment.

The Pierre Van Cortlandt Manor, owned and operated by Historic Hudson Valley (formerly Sleepy Hollow Restorations) is located at the end of South Riverside Avenue. 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.

Further up the Croton River, at the point where it narrows, four small islands, including Paradise Island, are owned by the County of Westchester. These islands are available only for passive recreation purposes and are accessible only by boat via Croton Bay.

Even further up the Croton River is the Village-owned beach and picnic area known locally as Silver Lake. Although the beach is small and the picnic areas are not well maintained, in the late spring and early summer months when the Croton River is high and fast running, this is a very popular swimming area for Village residents. 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. The trail is currently a cleared path used by bicyclists, joggers and walkers. However, since it is also a mapped street, there have been proposals to pave the trail for use as an actual Village street. However, recent proposals for the trail include its designation as a PRE zone (see page III-4). Boat access to Silver Lake is precluded by strong water currents.

Several other small Village-owned parks are scattered throughout the center of the Village. Many have either playground equipment of a minor nature and/or a ball playing field. Two of the largest are the recreation fields behind Carrie E. Tompkins Elementary School and Dobbs Park on Maple Avenue. The ball fields behind the school are in heavy use year-round for baseball, soccer and little league games. Parking spaces at both the school fields and parks are in short supply.

A small park at the Duck Pond also has a ball field for little league games. In the past, when frozen in the winter, the pond has been used for ice skating by residents. In the warmer months, Duck Pond has been home to many resident ducks and geese. Due to siltation deposition from feeder streams and weed growth, dredging of the pond became necessary in 1986. Deposition of organic materials from the feeder streams continues to be a problem for the aquatic life in the pond. To improve the oxygen circulation and reduce plant growth, the Village has installed an aerator. Although over \$100,000 has already been spent on the Pond, a continual maintenance program is necessary to ensure the pond remains a viable recreational resource for Village residents. There are also a number of trails at the top of Prickly Pear Hill. Public use of these trails are limited however, since this property is privately-owned. The Village will pursue the provision of easements throughout this private property for the public use of the trail system.

The Indian Point transmission line corridor is informally used for recreation, but its use is not encouraged by Con Edison.

F. PUBLIC ACCESS

Other than Croton Point Park, with access over a one-way bridge through the railroad yards, and Senasqua Park, with access either across the railroad track or through a one-way tunnel under the tracks, almost no public access is possible along the entire Hudson River shoreline within Croton's boundaries. The bridge to Croton Point Park is in disrepair and requires complete reconstruction. Estimates for the new construction range from \$10 to \$12 million. Metro North is responsible for the bridge structure and uprights, and the County is responsible for maintenance of the road surface.

The Half Moon Bay development will provide a public walkway which, when completed, will be a minimum of six feet of pavement and a minimum of eight feet of graded landscape and will extend north to Senasqua Park. An easement for the walkway was included in the approval process to ensure continued public access. Public access along the walkway will however, be 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, the Croton Yacht Club, and from a small, natural boat ramp at the end of the railroad parking lot into Croton Bay. 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. Access to Senasqua Park is via the Route 9 south exit and then north on a narrow road through a one-lane tunnel. The tunnel is owned by Metro North and should be enlarged and painted, if possible. Access is also available by crossing the railroad tracks in front of the Croton Yacht Club, adjacent to Senasqua Park to the north. The Croton Yacht Club, located north of and adjacent to Senasqua Park, also provides boating access to the Hudson. The Yacht Club land is leased from the Village. The docks at the Croton Yacht Club are available to Croton residents for recreation and fishing, provided these uses do not interfere with the Yacht Club's use of the premises. However, public access is discouraged by the use of no trespassing signs on the Club's gates. A small, unimproved boat ramp into Croton Bay is located at the south end of the Croton-Harmon railroad parking lot. The gates in this area should continue to remain open.

Several acres of Village-owned open land in the Center Village exist along the Croton River and may provide for public access if improved. This is in addition to the park sites at Silver Lake and Black Rock. In its present undeveloped state, this land preserves the natural and scenic environment along the Croton River. It also provides the Village of Croton-on-Hudson with substantial opportunities for increasing public access and recreational opportunities along one of its waterfront boundaries. See Chapter A for a description of Black Rock.

No provisions for public access have been made concerning other Hudson River or Croton River properties. Any development proposals for these properties will be reviewed during the planning process and public access to the waterfront will be considered. Such access could be a condition for approval of a special permit use and a Multiple Development Use.

G. SCENIC QUALITY

Visual access to both the Hudson River and Croton River and Bay is possible mainly from the other sections of the Village which are generally on a higher elevation and from portions of Route 9. Within the Hudson Riverfront section itself, 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 section with spectacular views of the Hudson River, both north and south. However, getting to both parks is a visual nightmare requiring a trip either through a tunnel or across a dilapidated bridge, through unsightly railroad yards. Requests to Metro North to make improvements in all these areas have generally met with very few positive results. The Croton landfill in Croton Point Park is also an unsightly element in this area marring visual access to the Hudson River and constituting a possible health hazard to Park visitors and employees.

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 Croton 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. 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.

Along South Riverside Avenue from Shop-Rite Plaza at the south end to its intersection with Route 129 to the north, the proliferation of commercial establishments has taken on a negative visual appearance. The great variety of buildings in this area have become, in many cases, shabby and dilapidated. Insufficient parking for customers and residents, exposed garbage containers, and countless cars in need of repair or being saved for parts all contribute to the unsightly appearance of this area. The Village does have a junkyard law and the provisions of this law are enforced by the Village Code Enforcement Officer.

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.

Along North Riverside Avenue and on the bluffs above North Riverside Avenue there are also many homes whose views of the Hudson River are equally spectacular.

Along Route 9, the major inland focus are the wooded hills of the North End section. While a number of homes already exist in this area, mainly on one or more acres, the wooded nature of the hills to a large extent conceals their presence. On the other hand, entering Croton from the north on Route 9 or Route 9A, the view of the Amberlands apartment complex (just outside of the Village) followed immediately by the Scenic Ridge townhouse complex is an overwhelming sight. One must first pass these very high density developments to reach the hilly wooded areas seen so readily from the south.

H. DEVELOPMENT CONSTRAINTS

The coastal zone area is characterized by varied topography and environmental constraints. The Development Constraints Figure (Figure 6) identifies those areas in the Village that are environmentally sensitive, such as State-designated wetlands and State classified Significant Habitats. The following text describes the significant habitats, geology, floodplain and wetland areas of the Village.

1.0 Significant Fish and Wildlife Habitats

Croton River and Bay and Haverstraw Bay, both bordering the Village, are areas identified by NYSDEC and NYSDOS as Significant Fish and Wildlife Habitats. Full descriptions and maps of the Habitats are appended to Section II of this LWRP.

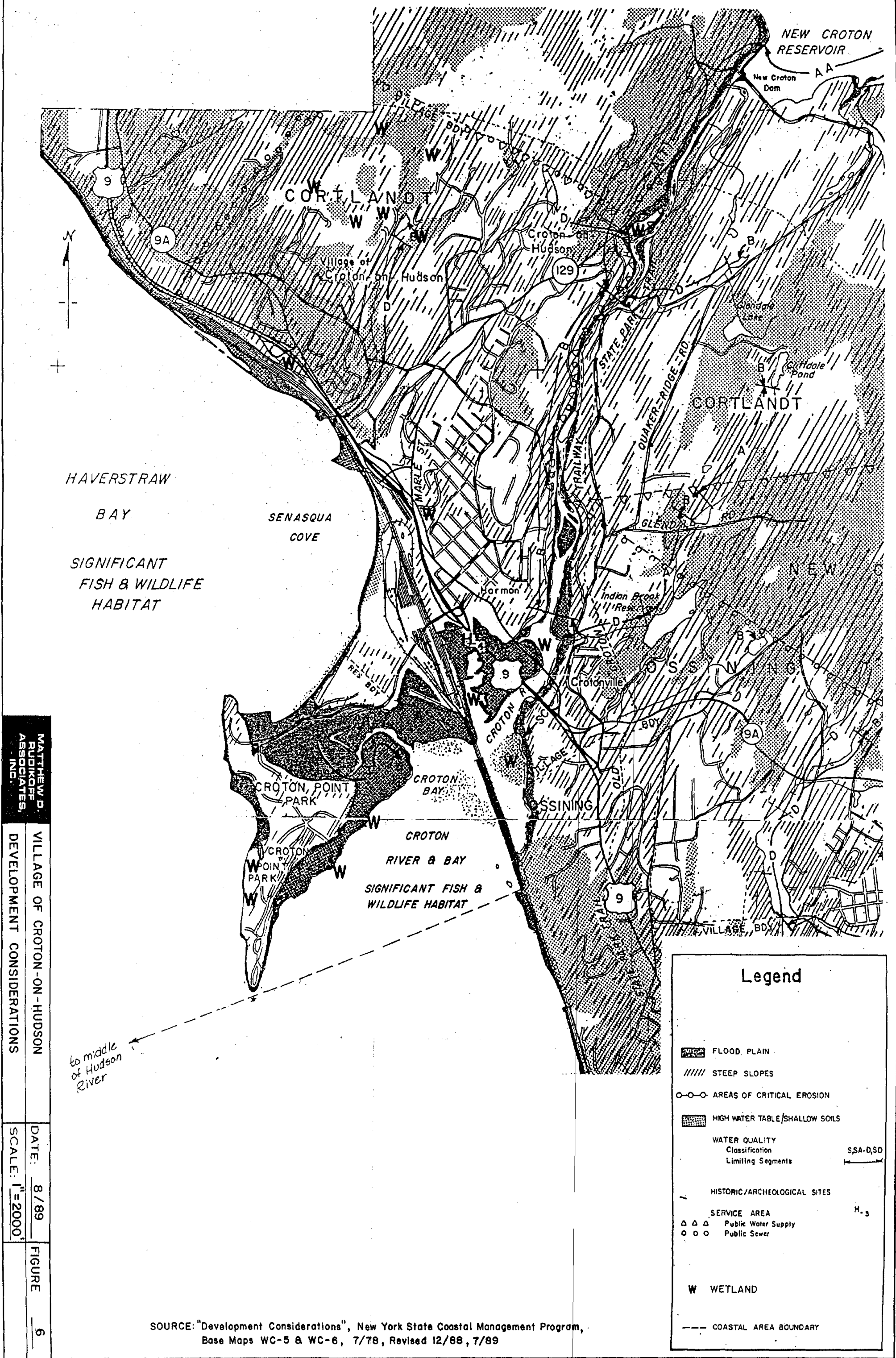
1.1 Croton River and Bay

1.11 Habitat Description:

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. 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.

1.12 Fish and Wildlife Values:

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 NYS 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 850 rainbow and 250 brook trout yearlings. Part of the stock has reached the New Croton Reservoir Dam downstream 1.0 miles, within the Village of Croton-on-Hudson.

1.2 Haverstraw Bay

1.21 Habitat Description:

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.

1.22 Fish and Wildlife Values:

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.

2.0 Geology

Croton is located in an area that is part of a regional basement (or bedrock) complex called the Manhattan prong. This series of metamorphic rocks extends from the Peekskill area to the southern tip of Manhattan. The complex is bounded on the west by the Hudson River, and associates with the Taconic Prong to the east. The Manhattan Prong and the Taconic Prong are segments of the Appalachian Highlands.

Croton Point is a glacial-alluvial feature formed by the deposition of sediments where local glacial streams dropped their sediments when entering the Pleistocene (or ice age) feature known as Lake Hudson.

The age of the sedimentary rocks that became the Manhattan Prong is approximately 480 million years. The metamorphic events that formed the Manhattan series (and there is still discussion regarding how many metamorphic events occurred), have been dated by isotope studies of the Manhattan Schist to have occurred 360 million years ago.

Over the 360 million years since the formation of the Manhattan series, many events of deposition and erosion have occurred. Each of these cycles require many millions of years, and, at various times, the current bedrock surface has been exposed, subject to further erosion, and once again subject to deposition. The geologic history of the area is documented quite well, and as orogenic events caused the land masses to rise and fall, the Manhattan series was many hundreds of feet below younger rock formations at the bottom of the ocean, only to have the continental margin upthrust again, re-eroded, become part of an ancient coastal plain, lifted and eroded again, and eventually be sculpted into its current configuration.

The fracture systems and faults have played an important role in the morphology of this region, since these features, due to their fracture zones and generally weakened lithic structures become paths of least resistance for down cutting streams. Though the fault systems displayed on the map plate seem extensive, the majority of smaller faults are not shown. The geology of many of the smaller streambeds in Croton, such as the one north of High Street, and the one south of Prickly Pear Road (though both beds have been altered by human activity), probably follow small fault structures in the same manner that the Hudson and Croton Rivers follow larger ones.

Though Westchester has been subjected to only minor earthquake incidents in recorded history, this might not be the case in the future. Over the last few decades, attention has been drawn to the west coast, where the edges of the North American continental, and the Pacific oceanic plates are grinding past each other along the San Andreas fault. This attention is due to the earthquakes and the associated destruction that have occurred, and from the scientific perspective, due to the clear model that the San Andreas provides in support of the theory of plate tectonics. In the case of the Atlantic coast, earthquake activity has been minimal, since most movement has been at the mid-Atlantic ridge. The North American coastal plate is moving westward with half of the Atlantic oceanic plate as the ridge expands, slowly widening the Atlantic Ocean, in the same manner that the Pacific is narrowing. Therefore, the continental plate boundary is not the location of movement on the east coast.

At a symposium on earthquakes and construction given by the New York Academy of Sciences during March, 1988, the potential for east coast earthquakes was discussed in depth. Companies that build tank farms, refineries, pipelines and other complex

structures that would be damaged by earthquakes, must build their facilities to current earthquake standards, which, on the east coast, are still less stringent than on the west coast. However, the two worst earthquakes in recorded American history occurred in Missouri and in the Appalachians (which contain the Manhattan prong). Current thinking suggests that due to the fault structure in the region, it might be wise to upgrade earthquake structural requirements.

The Hudson River is estimated to have found its current channel approximately 10-15 million years ago. It is believed that the three major area fault systems, and the location of weaker more easily eroded rock systems and fracture zones facilitated the development of the Hudson's channel during that period. As the continental land mass rose, the water had to cut deeper to achieve sea level. Since water always follows the easiest course, the features mentioned allowed the flowing river to quickly establish and down cut its channel.

Over the last 1.5 million years, a series of glacial events brought the Croton area to its current configuration, including formalizing the Hudson's current course and Croton Point. While most people believe that there was only one glacier, there were four periods of glaciation during the Pleistocene period, and each period entailed numerous advances and retreats of the continental ice sheets. In fact, there is some evidence that our current era is still in the retreat phase of an inter-glacial period. Some authorities believe that in the near future (geologic near future, that is), the continental ice sheets will again advance.

Glaciers act like giant bulldozers, sculpting and gouging surface features and bedrock with cycles of advance and retreat, and remove, transport, and deposit vast quantities of eroded material. The most recent period of glaciation, the Wisconsinian, vacated the Croton area 12-15,000 years ago. During glacial advances, sea level was 350-400 feet lower than it is today due to the water contained in the ice sheets. This lowering of sea level naturally led to accelerated down cutting by streams and other watercourses. Glacial melt water was always leaving the foot of the glacier, and the glacier acted as the head, or source, of many streams, some of which have survived in the Croton area. When glaciers retreat they usually leave moraines, or piled up sediments behind. Moraines are sediment pushed forward by the ice sheet and left in place when the glacier retreats. As water flows through the moraine, sediments are carried by the water and sorted, or deposited due to size and mass.

After glacial retreat, the huge quantities of melt waters form vast lakes. The Great Lakes are surviving examples of this activity. One, Lake Hudson, was the swollen lower reaches of the Hudson River. Sediments found on Croton Point indicate that the Point existed as a glacial delta, formed by runoff from the glacial streams dumping their sediment as they entered Lake Hudson. The sediments also indicate that Lake Hudson's water level was approximately 100 feet higher than the water level of the current Hudson River.

2.1 Morphology

Essentially, the majority of Croton slopes downward from the Prickly Pear, Mt. Green, and Mt. Airy complexes towards the Hudson and Croton Rivers. The topography also slopes down from these peaks in an easterly direction, but that portion lies essentially out of the Village boundaries.

The Village's high points, and the majority of exposed Croton bedrock, is Manhattan Schist. As discussed previously, the Manhattan Schist and the Fordham Gneiss are closely related species, and both products of dynamic metamorphism. Though they are very similar mineralogically, the gneiss is more highly metamorphosed than the schist. Both rocks contain mica, feldspar, and quartz, and these minerals all can be observed in the structure with the naked eye or with a small lens. The schist, due to the large quantities of mica present has a "glittery" appearance on a fresh surface, and is the material most of the stone walls in the area are constructed of. The silvery color of the schist is diagnostic, and upon close examination, seems to be foliated or layered. This layering is a result of the mica, which is a flat silicate mineral aligning in parallel planes during metamorphosis. On closer examination, many garnets can be seen on a fresh surface. The schist sometimes has a reddish appearance due to the oxidation of the iron in the garnets. Outcrops of schist can be seen throughout the Village, and can easily be identified from a passing car.

Often, small areas of gneiss can be seen on outcrops of schist. The gneiss appears as a layer cake pattern with alternating bands of dark and light. The separation of the light and dark minerals is a result of a higher level of metamorphism. When the gneiss-like pattern is seen on a schist boulder or outcrop, it is usually due to higher temperatures and pressures in that localized region during formation. When seen on schist outcrops, the bands are often highly folded, again, due to the pressures of the metamorphism. Massive gneiss outcrops are not as common as the schist in the Village, though there is an outcrop on Prickly Pear Hill. The outcrops are often highly fractured as a result of faulting or fracturing. Outcrops in Croton Gorge display some intrusions, and the outcrop downslope from the entrance to the Croton Gorge Park on Route 129 has a very clear vein of intrusive quartzite exposed.

The Inwood Marble is much in evidence in the Village, and comprises the low or flatter areas. The marble is the material that the inmates used to break with sledge hammers at Sing Penitentiary in Ossining. In fact, most of the 19th century buildings at Sing were built in Inwood Marble. The marble is composed of calcite and dolomite that has been metamorphized. A fresh surface of the marble presents a white, sometimes slightly grayish, crystalline surface. An excellent outcrop of the marble can be found at the intersection of Grand Street and Route 129 in the Village. The marble is much more susceptible to erosion than the schist or gneiss, and is usually the bedrock underlying valleys and flatter areas. The depth of soil over the marble tends to be greater than over the schist and gneiss.

In general, depth to bedrock tends to increase as one goes downslope, leading to the alluvial deposits that form the banks of the Hudson and Croton Rivers. When examining the Croton River, it must be remembered that the channel south of the Croton dam is much smaller than when the River flowed freely. Also, due to the collapse of the original dam during construction in the mid-nineteenth century, many thousands of tons of in-place sediment were dragged from the river channel to the mouth of the river.

During the short violent period after the dam failed, the dammed water broke free of restraint, taking sediment, trees, and houses downstream. When the waters lost their energy in the Croton estuary and dumped the debris, the lower Croton was barred from ever carrying river traffic again. The sandbars clearly visible from the railroad tracks west and south of the railroad bridge are evidence of this event. Also, when the water is low, the trees dragged down with the rushing waters are still visible in Croton Bay, where they've rested for over 130 years.

Aside from these features, almost all other visible components are glacial in origin. Glacial erratics, or boulders left in place as the glacier melted, are all over the Village. Most of the erratics are local in origin since they are mostly schist or gneiss. There are some erratics of granite that were dragged from the New England uplands and left by the glaciers. Glacial striations or drag marks are clearly visible cut into the schist outcrops on Prickly Pear Hill and other locations. These striae were formed as the foot of the glacier moved over the bedrock on top of the hill, and cut the lines with the sediments frozen into the bottom of the ice sheet.

Remains of glacial kettles, kettle ponds, and eskers are present in the Croton area. A kettle forms when a large block of ice is left behind by the glacier, and slowly melts, forming a large depression in the ground. If conditions are favorable to recharge the melt water with ground water, a pond remains. Eskers were streams of running water at the bottom on the glacier. When the glacier melts, only the esker's sediment remains as a low snakelike ridge.

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.

Most of Croton's soils are glacial in nature, and are based on either till (soil containing rocks and pebbles of irregular size), finely sorted (pebbles and stones of regular size), or fine outwash sands. Layered outwash sands can be seen in the cut at the corner of Riverside Avenue and Brook Street. Due to construction, the hillside on the north side of the street was excavated to create room to park construction equipment. In the face

of the cut can be seen till, and also very fine layered sands, representing seasonal cycles during the glacial period. Soil and sand deposits of this type are typical of the Village's lower elevations. The shoreline of the Hudson River is a mixture of glacial soils, alluvial deposits, and organic materials. As mentioned, Croton Point contains evidence of a glacial delta. This material was found in core samples from the undisturbed section of the Point. In general, the geology and soils of the Point are beyond analysis, due to the massive dumping and other disruptive activities that have occurred there since the early 20th century.

Since the bedrock in Croton is irregular, trees and ground covering plants are critical for slope stabilization. Croton is on the move, and is moving gradually downslope towards the Hudson River. Sidewalks, retaining walls, and railroad tie walls all over the Village are also on the move, and cracks and gaps are the result of "slumping", a common event on unstable slopes. Many of the Village's roads become roller coaster landscapes in the late winter and early spring as freeze/thaw cycles cause frost heaving. Frost heaving is caused when ground water trapped close to the surface between the road surface and the bedrock freezes, forcing the pavement to rise or fall.

2.2 Soils

Soils are differentiated by groups and associations. Each soil type is named and given a diagnostic description. Nature rarely follows specific descriptions, so depending on the soil, it may best be described by a combination of names.

For the purposes of this report, only the main soil groups and their associations have been referenced. Soil groups are distinguished by clay content, drainage, extent of the horizons (layers) conductivity, percolation rates, and other data. Most of northern Westchester's soils share the same basic affiliations, and as previously explained, this is due to similar bedrock structure and glacial activity.

Also, some of the soil map numbers refer to more than one association, and the proper association can only be chosen by on site examination. The soil map associations of non-conforming groups are usually irregular in shape and very small in area. These factors make a complete narrative description of the Village's soil structure an impossible task.

In general, the major soil associations in the Village are:

HINCKLEY SERIES - #'s 101, 141

Deep, excessively drained soils on terraces, outwash plains, deltas, eskers, and other glacial associations. Usually dark loamy sand with lower horizons composed of stratified sand and gravel.

CHARLTON SERIES - #'s 22, 63-75-70, 110-120

Very deep, well drained upland soils formed in glacial till derived from schist and gneiss. Very stony loam surface. Lower horizons are stratified friable sandy loam.

CHATFIELD SERIES - #'s 70-71, 120-130

Moderately deep, excessively drained upland soils. Usually formed in glacial till, dark brown loamy surface, and lighter loamy lower horizons.

CARLISLE SERIES - #'s 101, 105

Very deep, poorly drained, formed in woody areas, bogs, wetlands, and other depressional features. Glacially associated, surface is black muck, lower horizons are brown muck.

SUN SERIES - #'s 25, 27, 101, 141

Deep, poorly drained upland soils formed in glacial till. Usually dark loam surface, lower horizons mottled gravelly sandy loam.

HOLLIS SERIES - #'s 71, 130

Shallow, well to excessively drained upland soils. Thin gray/brown surface layer, lower horizon usually till directly overlying schist and gneiss bedrock.

PALME SERIES - #'s 102, 103 104, 105

Very poorly drained soils formed in moraines, till plains, and other terminal glacial features. Black muck overlying gray loam. Usually found in wetland areas.

SUTTON SERIES - #'s 68, 104

Deep, moderately well drained soils on uplands, formed in glacial till. Generally dark sandy loam surface, lower horizons lighter sand or gravelly loam.

POMPTON SERIES - #'s 140

Deep, moderately well drained coarse soils of uplands and outwash plains. Very fine sandy loam surface, lower horizons gravelly sandy loam.

As stated, these are the major groups. How they are interpreted and how they are assigned must also be taken into context with topographic slope. In an area like Croton where slope is a major consideration, many of these soil groups become unstable as slope increases. To determine the soil and conditions on a particular location, slope data must be interpreted along with the soil horizon to determine how well suited a particular site is for drainage, foundations, septic systems, etc. This information is discussed for each soil group on the data sheets. If a particular location is best described by more than one soil group, actual tests as described previously may be required to establish the association that is closest, and then the remaining data may be interpreted for the intended use.

In general, the Village is composed of upland associations, glacial outwash, and organic materials along the Hudson River shoreline. From north to south, the Hudson River waterfront is a combination of Palme/Carlisle/Sun with Sutton and Hinckley associations. The Croton River bank areas are mostly Charlton associations up to the dam, though the south side of the Croton has different soil groups.

The highly developed lower Village area is almost exclusively Pompton, with Charlton and Palme associations.

The upper Village, Prickly Pear, etc., are almost all Charlton, with some Sun and Chatfield associations.

3.0 Floodplain

The areas adjacent to Croton River and Bay and along the shoreline of the Hudson River are considered to be within floodplain areas of the Village. These low-lying areas adjacent to water bodies are at the lowest elevation within the Village. The floodplain is considered to contain the land nine feet above the elevation of the Hudson River.

4.0 Wetland

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. See Figure 6 for wetland locations. Wetlands designated by the Department of Environmental Conservation are H-3, H-4, H-5, H-6. All are upper marsh and are located within the Croton River and Bay Significant Coastal Fish and Wildlife Habitat (See Section # 1.1) for a description.

I. HISTORIC RESOURCES

The Village of Croton-on-Hudson has a long and colorful history. When Henry Hudson sailed up the river which now bears his name in 1609, he passed one of the principal villages of the Kitchawane Indians on Croton Point, or Senasqua as they called it, where the Kitchawanes often gathered to perform ceremonial dances and bury their dead.

In 1677 Stephanis Van Cortlandt, the son of a wealthy Dutch merchant and the first native born mayor of New York City, was granted a license to create a manor which grew to stretch from the Hudson to the Connecticut border. A trading post was established at the mouth of the Croton River which is presently part of the Van Cortlandt Manor house. The Village of Croton was part of the vast Van Cortlandt Manor estate, and was originally known as Croton Landing. The riverfront was the main focus of activity in the region, and the Landing was used by farmers and merchants to transport their goods to New York for sale.

Croton was involved in numerous battles and skirmishes during the Revolutionary War, and Ben Franklin stopped at the Van Cortlandt Manor in 1776 on his journey to Canada in search of an ally. One especially notable incident occurred in September of 1780 when the British sloop Vulture lay at anchor off Croton Point awaiting British Major John Andre. Andre was ashore meeting with the infamous American General Benedict Arnold, and the two were conspiring for the surrender of West Point, which Arnold commanded and which was the key to the American military position in the Central Hudson.

While Andre and Arnold were meeting, patriots from the post in Verplank brought a cannon to Croton Point and fired on the Vulture. The ship sustained considerable damage and when the tide rose moved down river. Major Andre was forced to seek escape on land and was captured in Tarrytown two days later, foiling the plans to capture West Point.

After the Revolutionary War, the linking of local roads created a continuous roadway from New York City to Albany. Weekly stage coach service was established on the Albany Post Road in 1784. The ferry house at Van Cortlandt Manor provided refreshment and lodging for stagecoach travelers, as well as a meeting place for local residents.

During the nineteenth century, farming, shipping, and making flour and bricks were Croton's principal industries. In the early days there was a flour mill and a wire mill on the Croton River and a brickyard on the Hudson. By 1849 two railroad tracks had been laid through the middle of the business section along the Hudson. An 1860 map shows 3 brickyards, 3 general stores, 3 churches, a school house, a post office, and about 65 dwellings located mostly along what are now Riverside Avenue, Brook Street, Grand Street and Old Post Road. The area was incorporated as the Village of Croton-on-Hudson in 1898.

The need for a clean and reliable water supply for the growing City of New York led to the construction of the Croton Aqueduct and the first Croton Dam in 1841. The original earth and masonry dam was almost finished when a heavy snow and rainfall caused it to give way on January 7, 1841. The resulting flood took with it everything in its path and left silt which closed the mouth of the Croton River for shipping forever. The present Croton Dam, built of stone, was completed in January of 1907. All over Croton one can find homes, churches, and foundations built with stone from the excavation done in connection with the Dam's construction.

Croton's life as a railroad town dates from 1913, when the Harmon yards and shops were put into operation. The principal reason for the selection of the Croton Point by the New York Central Railroad as the site of its new steam engine terminal and rail yards appears to have been the availability of land. Most of the site was purchased from Clifford Harmon, a real estate developer who stipulated in the deed that the station at the point where engines were to be changed would always bear his name. Harmon then chartered special trains from New York to Croton for prospective lot purchasers. He wished to develop the present Harmon area as a "complete community of rural charm" for artists, writers and musicians. His efforts were not completely successful, but Harmon did become a quiet residential section of one family houses owned by people who worked on the railroad or commuted to jobs in New York. The growth of the Harmon development after World War II led to its annexation to Croton in 1931, the same time at which the Mt. Airy section became a part of the Village.

During the period that Harmon was being developed, a group of people began coming to the Mt. Airy section who were radical in their political thinking and free in their lifestyles. Many were writers, editors and artists, and for a time Mt. Airy became a place to spend weekends from some of the bohemian residents of Greenwich Village.

On Croton Point, a small community developed around a brickyard which operated until 1915 when supply of clay was exhausted. Judge Decker of Croton leased the beach area around 1900 and started the Croton Point Club. Bungalows were built for use in summer. In May of 1923 the Hudson River Development Club opened Croton Point Park which featured dancing, swimming and other amusements. In 1924 the Westchester Park Commission bought 500 acres on Croton Point, 70 of which were set aside for a dump.

All of the particulars of Croton's history are too numerous to detail here. Some of the other highlights of the historic resources of Croton include the presence of the famous Nikko Inn, a weekend rendezvous of early film stars; Stevenson Estates, originally a "retreat" for well known actresses and heiresses; the Bethel Chapel, built in 1780 and restored in 1936, in whose cemetery can be found the graves of several Indians and Revolutionary soldiers; and the quaint residences and remains of a concrete barn on Finney Farm, which was originally a quarantine station for imported cattle and a place to test new farm implements and techniques.

There are two designated historic sites in the Village of Croton-on-Hudson. Sites listed on the National or State Registers of Historic Places are guaranteed certain protections under National and State Historic Preservation Acts, respectively. All actions within immediate vicinity of historic sites are considered Type 1 actions under the State Environmental Quality Review Act.

The two historic sites within the Village that are listed on the National Register include the Pierre Van Cortlandt Manor House and the Croton North Railroad Station.

J. HIGHWAYS/ROADS/MASS 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 Route 129, Old Post Road and Grand Street collect traffic from local streets in Croton's residential neighborhoods and channel it into arterials.

Unlike other sections of Westchester County, the northwest area of the County in which Croton is located is not served by a major north-south or east-west interstate highway such as I-684 or I-287 and does not have the same level or intensity of development that has occurred along portions of these interstates. However, increased housing construction and density in northern Westchester, along with commercial real estate development in other areas of the County is nonetheless causing a significant dilemma with regard to the adequacy of existing transportation facilities.

In 1987, the Westchester Department of Planning issued a regional report on the development potential and traffic analysis of the Route 9/9A corridor. This report cited a January 1986 Department of Planning estimate that the population of the northern county grew by a factor of 8.3 percent between 1980 and 1986. The countywide rate of population increase, on the other hand, was only 2.3 percent during the same period. From 1976 to 1986, the average increase in traffic volumes in the Route 9/9A corridor was in the range of 30 percent.

The above-mentioned report also cited New York State Department of Transportation (DOT) reports showing that the greatest volume of traffic in this area was carried on the approximate one mile segment of roadway where Route 9 and Route 9A share the same alignment. This segment extends from immediately north of the Route 9/9A interchange in the Crotonville section of the Town of Ossining to the Route 9 interchange with Croton Point Avenue, the exit for the Croton Harmon Railroad Station. This stretch of road is just north of a section of Route 9A referred to as "Killer Hill" in Ossining- a 1.6 mile section of steep, curving incline where Route 9A joins Route 9 just before entering the Village of Croton. Since 1983 there have been more than 350 accidents along this section of roadway. In response, the DOT has completed planning, grading and alignment changes. Several traffic warning sign improvements have already been made, including a flashing warning sign at Stormytown Road. However, there are no plans or foreseeable means to increase the roads' capacity, and rush hour tie-ups engendered by both the steep grade and traffic signals further to the south on Routes 9 and 9A will continue to be a fact of life in this area for the indefinite future.

The Croton-Harmon train station, served by the Hudson Line of the Metro-North commuter railroad, provides direct public transportation to Grand Central Station in midtown Manhattan in under fifty minutes. The station building in Croton has undergone renovations which modernized and made it handicap accessible.

The typical rush hour train, to and from Croton, consists of six cars with a total seated capacity of 650-700 passengers. The daily number of New York City bound passengers boarding at the Croton-Harmon station is currently around 3,800 people, with about 2,750 boarding during the morning peak hours and the remainder using off-peak service.

Extensive commuter parking facilities at the station include a municipally owned paved lot and a privately owned unpaved lot. The municipally owned lot includes spaces for Village residents and non-residents with parking permits.

Total occupancy of the municipal parking lots is 100 percent. As of November 1991, there is a waiting list of approximately 125 people wishing to acquire non-resident permits and an additional waiting list to obtain monthly spaces in the private lot. Village residents are granted monthly parking permits as of right. Although Half Moon Bay residents will have access to the station via a shuttle bus provided by the development, it is difficult to predict how many residents will actually use it.

At the present time the Croton Department of Public Works garage is located within the confines of the train station. The Village is considering relocating the garage and road supplies to the Georgia Pacific Building at the end of Municipal Place.

The availability of station parking (which is in short supply throughout the northwest portion of Westchester County), the lack of rail service in the neighboring and growing Town of Yorktown, and the ease of its express transportation schedule combine to make Croton a regional rail transportation center. The presence of the Croton Harmon station contributes to the aforementioned traffic congestion on Routes 9 and 9A.

In addition, the traffic problem in the immediate area of the train station is exacerbated by the dilapidated Croton Point Bridge, which connects the Metro-North train yards and employee parking with Croton Point Avenue and over which traffic can travel only one direction at a time. A member of the Croton police force must be present at the entrance to the station each day during both morning and evening rush hours in order to regulate the flow of traffic into and out of the station, back and forth over the bridge, on and off Route 9 from the north and south, and out of the metered lot on the north side of Croton Point Avenue.

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 Jefferson Valley (the location of a regional shopping center), Mount Kisco and White Plains, which is a major hub of the bus transportation system for the County. However, bus-to-bus and bus-to-train schedules are not always compatible, making transfers difficult and time-consuming. The County should review bus and train schedules and consider alternative routing and scheduling to facilitate the use of public transportation.

K. AIR QUALITY

The NYS Department of Environmental Conservation (NYSDEC) maintains air quality monitoring stations throughout the State. Westchester County is considered to be part of the Metropolitan Air Quality Control Region which also includes Rockland, Nassau and Suffolk Counties, as well as New York City. The monitoring stations closest to the Village of Croton are Ossining, Mamaroneck, Mt. Vernon, and White Plains. There are no monitoring stations in Rockland County, whose air quality would directly indicate conditions in Croton.

The recorded air quality levels for 1985-87 and applicable standards are shown on Table 1, on the next page. In order to get a more complete picture, it is necessary to look at the Metropolitan Region as a whole.

The following is a summary of 1987 data for the Region:

Recorded Air Quality Levels for 1985 - 1987

<u>Parameter</u>	<u>Sites</u>	<u>No. of Sites In Compliance</u>	<u>No. of Sites Exceeding AAQS</u>	<u>Regional Average</u>
Sulfur Dioxide	13	13	0	0.014 mg/m ³
Total Suspended Particulates	21	21	0	50.2 ug/m ³
Carbon Monoxide	7	3	4	2.8 ug/m ³
Ozone	6	0	6	0.022 mg/m ³
Nitrogen Dioxide	4	4	0	0.40 mg.m ³
Lead	7	7	0	0.08 ug/m ³

Thus, air quality in the region is in compliance with Ambient Air Quality standards except for the parameters of ozone and carbon monoxide. Exceedances can be attributed to motor vehicle traffic, particularly in Manhattan and Long Island locations.

According to NYSDEC, there are no point source emissions of concern to the Village of Croton-on-Hudson. However, certain conditions exist within the Village that can contribute to the degradation of the air quality. These conditions include idling automobile traffic at Village intersections, a major arterial highway that is often congested, a Superfund site (the County Landfill) that emits methane, another Superfund site (the Metro-North PCB Lagoon) and nearby storage tanks that volatilize and emit hydrocarbons and the location of the major switching station for Metro-North and Amtrak diesel trains. Emissions from these sources, coupled with the differences in elevation within the Village, and emissions from nearby power and garbage plants may result in an air quality problem. There is a need to establish a monitoring station within the Village to quantify these air quality concerns.

TABLE I
Air Quality Levels in Westchester County

<u>PARAMETERS</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>AAQS</u>
Total Suspended Particulates (Annual Geometric Mean) -				
Mt. Vernon	44 mg/m ³	37 mg/m ³	40 mg/m ³	75 mg/m ³
Ossining	37 mg/m ³	34 mg/m ³	50 mg/m ³	65 mg/m ³
Lead (Annual Geometric Mean) -				
Mamaroneck	0.17 mg/m ³	0.09 mg/m ³	0.06 mg/m ³	1.5 mg/m ³
Ozone (One Hour Average) -				
White Plains			0.143 mg/m ³	0.12 mg/m ³

Source: New York State Air Quality Report - Ambient Air Monitoring System. NYS Department of Environmental Conservation, Division of Air, Annual Report 1987.

INVENTORY AND ANALYSIS
APPENDIX

Croton River and Bay Habitat
Haverstraw Bay Habitat

COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area: Croton River and Bay

Designated: November 15, 1987

County: Westchester

Town(s): Cortlandt, Ossining

7½' Quadrangle(s): Haverstraw, NY; Ossining, NY

Score Criterion

- 12 Ecosystem Rarity (ER)
 A major tributary and sheltered bay of the lower Hudson River, but
 rarity reduced by human disturbance; geometric mean: $(9 \times 16)^{\frac{1}{2}} = 12$.
- 0 Species Vulnerability (SV)
 No endangered, threatened or special concern species reside in the
 area.
- 9 Human Use (HU)
 A popular recreational fishing area; one of the recognized "hot
 spots" for striped bass in the lower Hudson River.
- 0 Population Level (PL)
 No unusual concentrations of any fish or wildlife species occur in
 the area.
- 1.2 Replaceability (R)
 Irreplaceable.

$$\begin{aligned}\text{SIGNIFICANCE VALUE} &= [(ER + SV + HU + PL) \times R] \\ &= 25\end{aligned}$$

SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS PROGRAM
A PART OF THE NEW YORK COASTAL MANAGEMENT PROGRAM

BACKGROUND

New York State's Coastal Management Program (CMP) includes a total of 44 policies which are applicable to development and use proposals within or affecting the State's coastal area. Any activity that is subject to review under Federal or State laws, or under applicable local laws contained in an approved local waterfront revitalization program will be judged for its consistency with these policies.

Once a determination is made that the proposed action is subject to consistency review, a specific policy aimed at the protection of fish and wildlife resources of statewide significance applies. The specific policy statement is as follows: "Significant coastal fish and wildlife habitats will be protected, preserved, and, where practical, restored so as to maintain their viability as habitats." 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. Although designated habitat areas are delineated on the coastal area map, the applicability of this policy does not depend on the specific location of the habitat, but on the determination that the proposed action is subject to consistency review.

Significant coastal fish and wildlife habitats are evaluated, designated and mapped under the authority of the Coastal Management Program's enabling legislation, the Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42). These designations are subsequently incorporated in the Coastal Management Program under authority provided by the Federal Coastal Zone Management Act.

This narrative, along with its accompanying map, constitutes a record of the basis for this significant coastal fish and wildlife habitat's designation and provides specific information regarding the fish and wildlife resources that depend on this area. General information is also provided to assist in evaluating impacts of proposed activities on parameters which are essential to the habitat's values. This information is to be used in conjunction with the habitat impairment test found in the impact assessment section to determine whether the proposed activities are consistent with the significant coastal habitats policy.

DESIGNATED HABITAT: CROTON RIVER AND BAY

HABITAT DESCRIPTION:

Croton River and Bay is located on the east side of the Hudson River, in the Villages of Croton-on-Hudson and Ossining, in the Towns of Cortlandt and Ossining, Westchester County (7.5' Quadrangles: Haverstraw, N.Y.; and Ossining, N.Y.).

The 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 entire freshwater flow, except for periods of spilling, is diverted out of the Croton River for municipal water supplies. 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, discharges of stormwater runoff, industrial and residential development, and the presence of road and railroad crossings.

FISH AND WILDLIFE VALUES:

Despite significant habitat alterations affecting the area, tidal portions of Croton River and Bay remain important as fish and wildlife habitats in the lower Hudson Valley. Croton River and Bay comprise one of the largest shallow bay areas in the lower river that is sheltered from strong river currents, and to some extent, from prevailing winds. Consequently the area provides favorable habitat conditions for a variety of anadromous and resident warmwater fish species. Use of the area by anadromous species, such as alewife and blueback herring, may be significantly increased if minimum flow requirements were established for the Croton River. 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 (T) during migration. Locally significant numbers of waterfowl may also occur in the area during spring (March - April) and fall (September - November) migrations, but the extent of this use is not well documented.

IMPACT ASSESSMENT:

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 local waterfront revitalization program. If the 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 increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes 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 parameters which should be considered in 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).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

Any activity that would substantially degrade water quality, increase turbidity or sedimentation, reduce flows, or increase water temperatures in Croton River and 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 July for most warmwater species. Discharges of sewage or stormwater runoff containing sediments or chemical pollutants may result in significant adverse impacts on fish populations.

Similarly, spills of oil or other hazardous substances, and leachate of contaminated groundwater, constitute a potential threat to fish and wildlife in the bay. Of particular concern in this major tributary system are the potential effects of upstream disturbances, including water withdrawals, impoundments, stream bed disturbances, and effluent discharges. 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 draught conditions, releases from the New Croton Reservoir can be reduced to zero.

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

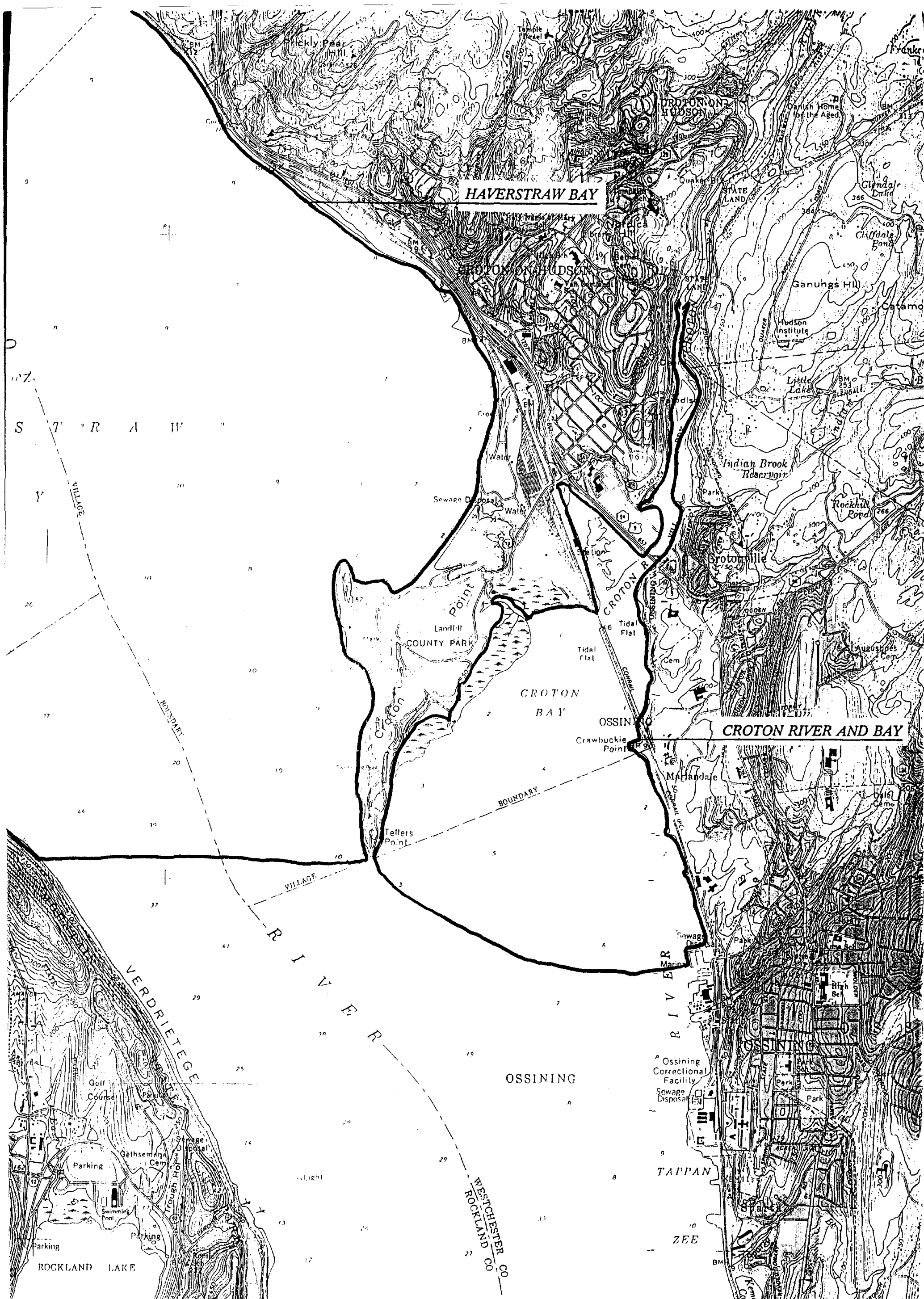
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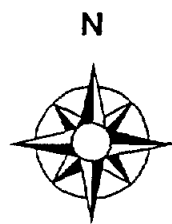


SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Croton River and Bay / Haverstraw Bay (in part)

New York State Department of State Division of Coastal Resources and Waterfront Revitalization

Miles



Prepared by T. Hart and G. Capobianco September 1990

COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area: Haverstraw Bay

Designated: November 15, 1987

County(ies): Rockland; Westchester

Town(s): Clarkstown, Haverstraw, Stony Point; Cortlandt

7½' Quadrangle(s): Haverstraw, NY; NOAA Chart No. 12343

Score Criterion

40 Ecosystem Rarity (ER)

The most extensive area of shallow estuarine habitat in the lower Hudson River (and in New York State), but rarity reduced by human disturbances; geometric mean: $(25 \times 64)^{\frac{1}{2}} = 40$.

36 Species Vulnerability (SV)

Shortnose sturgeon (E) regularly occur in the area.

38 Human Use (HU)

The area contributes to recreational and commercial fisheries throughout the northeastern U.S.;
additive division: $25 + 25/2 = 38$

25 Population Level (PL)

A major spawning, nursery, and wintering area for various estuarine fish species; population levels unusual in the northeastern U.S.

1.2 Replaceability (R)

Irreplaceable.

SIGNIFICANCE VALUE = $[(ER + SV + HU + PL) \times R]$

= 166

SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS PROGRAM
A PART OF THE NEW YORK COASTAL MANAGEMENT PROGRAM

BACKGROUND

New York State's Coastal Management Program (CMP) includes a total of 44 policies which are applicable to development and use proposals within or affecting the State's coastal area. Any activity that is subject to review under Federal or State laws, or under applicable local laws contained in an approved local waterfront revitalization program will be judged for its consistency with these policies.

Once a determination is made that the proposed action is subject to consistency review, a specific policy aimed at the protection of fish and wildlife resources of statewide significance applies. The specific policy statement is as follows: "Significant coastal fish and wildlife habitats will be protected, preserved, and, where practical, restored so as to maintain their viability as habitats." 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. Although designated habitat areas are delineated on the coastal area map, the applicability of this policy does not depend on the specific location of the habitat, but on the determination that the proposed action is subject to consistency review.

Significant coastal fish and wildlife habitats are evaluated, designated and mapped under the authority of the Coastal Management Program's enabling legislation, the Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42). These designations are subsequently incorporated in the Coastal Management Program under authority provided by the Federal Coastal Zone Management Act.

This narrative, along with its accompanying map, constitutes a record of the basis for this significant coastal fish and wildlife habitat's designation and provides specific information regarding the fish and wildlife resources that depend on this area. General information is also provided to assist in evaluating impacts of proposed activities on parameters which are essential to the habitat's values. This information is to be used in conjunction with the habitat impairment test found in the impact assessment section to determine whether the proposed activities are consistent with the significant coastal habitats policy.

DESIGNATED HABITAT: HAVERSTRAW BAY

HABITAT DESCRIPTION:

Haverstraw Bay extends approximately six miles on the Hudson River, from Stony Point to Croton Point, in the Towns of Stony Point, Haverstraw, and Clarkstown, in Rockland County, and the Town of Cortlandt, in Westchester County (7.5' Quadrangle: Haverstraw, N.Y.; NOAA Chart No. 12343).

The fish and wildlife habitat encompasses the entire river over this approximate six mile reach, which is the widest section of the Hudson estuary. Haverstraw Bay has extensive shallow areas (less than 15 feet deep at mean low water) which deepen to a navigation channel (which is dredged to maintain a depth of about 35 feet) in the western half of the area. During much of the year, this area is the place where freshwater from the upper river mixes with salt water from the Atlantic, producing a predominantly brackish water habitats, with salinities varying from 0-10 ppt. The land area surrounding Haverstraw Bay supports a variety of land uses, including industrial, commercial, residential, and recreational developments, although much undeveloped forestland also remains.

Habitat disturbances, such as dredging, shoreline filling and 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.

FISH AND WILDLIFE VALUES:

Despite various habitat disturbances, Haverstraw Bay possesses a combination of physical and biological characteristics that make it one of the most important fish and wildlife habitats in the Hudson River estuary. The regular occurrence of brackish water over extensive areas of shallow bottom creates highly favorable (if not essential) conditions for biological productivity within the estuary, including submergent vegetation, phytoplankton and zooplankton, aquatic invertebrates, and many fish species.

Although the location of the salt front varies annually (and seasonally), Haverstraw Bay regularly comprises a substantial part of the nursery area for striped bass, American shad, white perch, tomcod, and Atlantic sturgeon that are produced in the Hudson. Other anadromous species, such as blueback herring and alewife, spawn in upstream freshwater areas, but move south and concentrate in this area before leaving the river in the fall.

Haverstraw Bay is also a major nursery and feeding area for certain marine species, most notably bay anchovy, Atlantic menhaden, and blue claw crab. Depending on location of the salt front, a majority of the spawning and wintering populations of Atlantic sturgeon in the Hudson may reside in Haverstraw Bay. Shortnose sturgeon (E) usually winter in this area as well. Significant numbers of waterfowl may occur in Haverstraw Bay during spring (March-April) and fall (September-November) migrations, but the extent of this use is not well documented.

Haverstraw Bay is a critical habitat for most estuarine-dependent fisheries originating from the Hudson River. This area contributes directly to the production of in-river and ocean populations of food, game, and forage fish species. Consequently, commercial and recreational fisheries throughout the North Atlantic depend on, or benefit from, these biological inputs from the Hudson River estuary.

IMPACT ASSESSMENT:

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 local waterfront revitalization program. If the 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.

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

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

Any activity that would substantially degrade water quality, increase turbidity or sedimentation, or alter water salinities or temperatures in Haverstraw Bay would result in significant impairment of the habitat. Any physical modification of the habitat or adjacent wetlands, 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 early developmental periods, which generally extend from April through August for most anadromous species using the area. Discharges of sewage or stormwater runoff containing sediments or chemical pollutants may result in significant adverse impacts on fish populations. Similarly, spills of oil or other hazardous substances, and leachate of contaminated groundwater, constitute a potential threat to fish and wildlife in the bay. Of particular concern in this major estuarine system are the potential effects of hydrologic disturbances, and effluent discharges. Existing areas of natural vegetation bordering Haverstraw Bay should be maintained to provide soil stabilization and buffer areas.

KNOWLEDGEABLE CONTACTS:

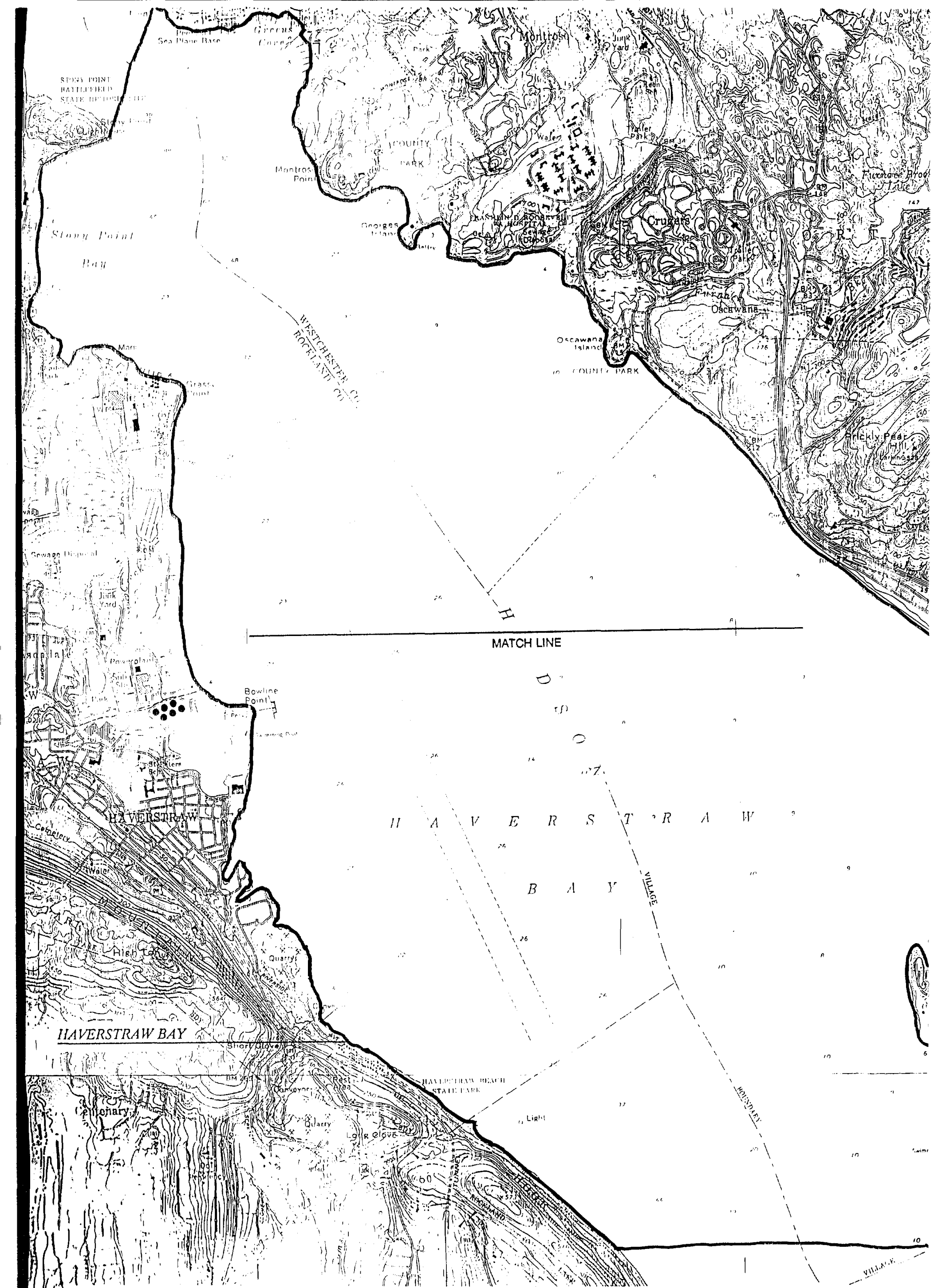
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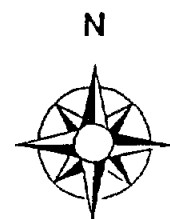
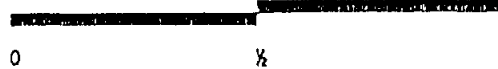


SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

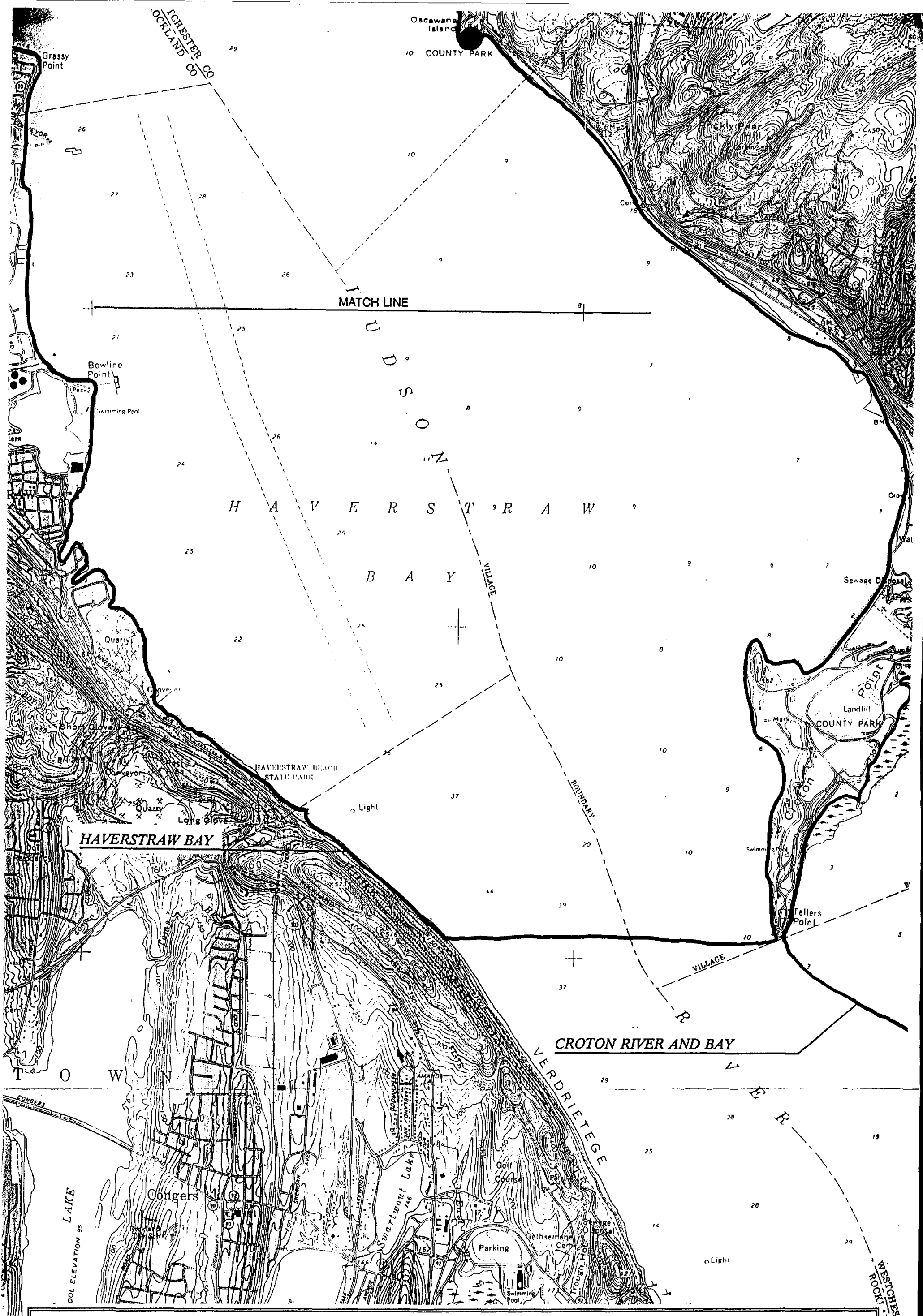
Haverstraw Bay (In part)

New York State Department of State Division of Coastal Resources and Waterfront Revitalization

Miles



Prepared by T. Hart and G. Capobianco September 1990



SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Haverstraw Bay (In part) / Croton River and Bay (In part)

New York State Department of State Division of Coastal Resources and Waterfront Revitalization

Miles



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SECTION III
STATE AND LOCAL POLICIES

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 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 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 BAY AREA AND RECREATIONAL USE.**
- POLICY 1C** **EVERY EFFORT SHOULD BE MADE BY THE MUNICIPALITY TO ENCOURAGE THE MUTUAL COOPERATION AND EXCHANGE OF INFORMATION BETWEEN GOVERNMENTAL AGENCIES INVOLVED IN CLEAN-UP OF THE CROTON LANDFILL AND METRO-NORTH LAGOON IN ORDER TO DEVELOP COMMERCIAL USE OF RESOURCES FOUND IN THE COASTAL AREA.**
- POLICY 1D** **REQUIRE RESTORATION OF DETERIORATING STRUCTURES RELATED TO RAILROAD USE AND ASSURE APPROPRIATE MAINTENANCE AND SCREENING TO REDUCE VISUAL IMPACT.**
- POLICY 1E** **DEVELOP 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 extreme limitations upon physical access to the waters of the Hudson and the Croton Rivers. Although there are Village-owned parks, recreational areas on the Croton and Hudson Rivers' edges, access to these parks is both foreboding 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 Village. However, opportunities do exist for redevelopment and revitalization of Village owned land within the coastal zone area.

The Master Plan for the Village was adopted in 1977. Since that time, development trends have changed and natural resources have been altered. To ensure that the policies of the LWRP are consistent with a Master Plan for the Village, the existing plan must be reviewed and amended where necessary. The Village Planning Board would be responsible for amending the existing plan to facilitate consistency between the Master 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 is an important recreational resource. Policy 1A encourages the redevelopment of this property in a more orderly manner so as to provide public access to Croton River and Bay and the Hudson River by improving the boat ramp, as well as locating additional parking for the railroad station. In addition, the central Village garage facility should be located where it would be more appropriate for storage of bulk items and road maintenance supplies and more efficient in terms of maintenance and operation.

Restoration of railroad related structures is also of prime importance. Many of the railroad structures have begun to deteriorate. The 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 (PRE) floating 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 would ensure continued access to the sites, not just for recreational opportunities, but also for educational opportunities such as museums, exhibits etc. Possible sites for designation include: Croton Point Park, Senasqua Park, Van Cortlandt Manor, Brinton Brook Sanctuary, Audubon Property on Hudson River, Croton River Trail, Duck Pond, Dobbs Park, School Playing Fields, Park Behind Elliot's, Sunset Park, Harrison Street Park, Silver Lake, Black Rock, Croton Volunteer Fireman's Memorial Field, Carrie E. Tompkins Elementary School, Pierre Van Cortlandt Middle School, Croton Harmon High School, Village land behind Gerstein Street and Quaker Bridge Road, Brook Street property, Village dock and Yacht Club property, the four islands in the Croton River, and Croton Free Library. Although Croton Point Park is considered a significant recreational area, any development within the park, particularly on the landfill, must be carefully reviewed due to past uses of the site and its designation as a hazardous waste site. Any 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 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;
- The action should have the potential to improve the opportunities for multiple uses of the site.

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

Explanation of Policy

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 depend on the utilization of resources found in coastal waters;
2. recreational activities dependent on access to coastal waters;

3. flood and erosion protective structures;
4. scientific/educational activities, which by their nature, require access to coastal waters;
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 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 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. See Inventory and Analysis Section E for a discussion of the compatibility of waterfront uses and navigational problems. 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, Croton Point Park, Senasqua Park, 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 existing 18 acre privately held vacant parcel located north of Croton Yacht Club, may best be considered for water-dependent uses. Any development proposal for this site should incorporate provisions for public access and recreational use of the waterfront.

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 compliment the other goals for the coastal zone as expressed in this LWRP. Restoration of the Village's hazardous wastes sites, Croton Point Landfill and the Metro North PCB Lagoon, is required prior to encouraging further use or facilities on or adjacent to coastal waters. 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. The Village has, in place, Local Law #9 of 1977 a law which 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 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 must be amended and submitted to the State for review.

POLICY 3 THE STATE COASTAL POLICY REGARDING THE DEVELOPMENT OF MAJOR PORTS IS NOT APPLICABLE TO CROTON.

POLICY 4 THE STATE COASTAL POLICY REGARDING THE STRENGTHENING OF SMALL HARBORS IS NOT APPLICABLE TO CROTON.

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.

POLICY 5B THE EXTENSION OF WATER AND SEWER DISTRIBUTION LINES BEYOND AREAS CURRENTLY SERVED SHOULD BE UNDERTAKEN CAUTIOUSLY AND WITH PRUDENT REGARD FOR VILLAGE WATER RESOURCES AND THE PRESERVATION OF ENVIRONMENTAL VALUES IN UNDEVELOPED AREAS.

POLICY 5C LIMIT PROPOSED DEVELOPMENT WITHIN THOSE PORTIONS OF THE COASTAL ZONE BOUNDARY AREA, WHERE TRAFFIC IMPACTS SUCH AS SITE DISTANCE AND CARRYING CAPACITY OF THE ROADWAYS ARE RESTRICTED, PARTICULARLY ALONG ROUTE 9A, ALBANY POST ROAD AND ROUTE 129.

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 Center Village section;
2. Increase the productivity of existing public services and moderate the need to provide costly new public services in outlying areas;
3. Preserve open space.

Objective No. 3 is of particular importance in the coastal zone area due to the probable impact of development of the last remaining large vacant parcels within the Village. These parcels are important natural areas and have been identified as offering visually important vistas 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 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 J, 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 fire fighting) can be met by the existing water supply system;
- c. 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; and

- 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.

There is a recognized need for a detailed traffic study for the Village of Croton-on-Hudson. Such data collection and analysis, and subsequent mitigation measures should be prepared and incorporated into the Master Planning process. Results of the study would become part of the basic studies for the Master Plan and would be considered in recommendations for future development.

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 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 INTO A DEVELOPMENT PACKAGE 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 should include the designation of a consistency review committee to review development proposals for consistency with the LWRP policies. This review may be incorporated into the tasks of existing committees. The Planning Board, Zoning Board, the Village Board, the Water Control Commission, or other existing committees shall review such proposals for consistency with the provisions of the Zoning Ordinance.

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 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 SHALL BE TIMED SO THAT SPAWNING OF ANADROMOUS FISH SPECIES AND SHELLFISH WILL NOT BE ADVERSELY AFFECTED.**

POLICY 7G **SUCH ACTIVITIES MUST NOT CAUSE DEGRADATION OF WATER QUALITY OR IMPACT IDENTIFIED SIGNIFICANT FISH AND WILDLIFE HABITATS.**

Explanation of Policy

The Croton River and Bay and Haverstraw Bay are designated Significant Coastal Fish and Wildlife Habitats.

See Inventory and Analysis, Section H and Inventory and Analysis Appendix for description of 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:

- o are essential to the survival of a large portion of a particular fish or wildlife population (e.g. feeding grounds, nursery areas);
- o support populations of rare and endangered species;

- o are found at a very low frequency within a coastal region;
- o support fish and wildlife populations having significant commercial and/or recreational value; and
- o 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 local waterfront revitalization program. 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 increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of 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 in 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 and 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.

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.

Clean-up of the two Type 2 Superfund sites, Croton Landfill and the Metro-North Lagoon, are under the preview of the U.S. Environmental Protection Agency. Every effort should be made to require a hastened cleanup of these sites and restoration of the significant habitats and shorelands which border them. The Village should be consulted with and provide authorization for all actions regarding cleanup and restoration of these sites.

In addition, efforts should be made to have the Village remove the road maintenance materials located at the southern end of the Croton Harmon parking lot. The Village and the 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.

See Policies 8, 25, 33, 34, 35, 37, 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 SUBLETHAL 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 effect wildlife resources.

See Policies 7, 25, 30, 33, 34, 37, 40, 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 METRO-NORTH PARKING LOT, AT CROTON POINT PARK AND AT SENASQUA PARK, ALONG THE CROTON RIVER, AND AT THE CROTON YACHT CLUB. EFFORTS SHOULD BE MADE TO ENCOURAGE RECREATIONAL USE OF THE FISH AND WILDLIFE RESOURCES FOUND IN THESE AREAS BY INCREASING THE OPPORTUNITIES FOR PUBLIC ACCESS AND ENJOYMENT.**

POLICY 9B **ENCOURAGE PASSIVE RECREATIONAL ENJOYMENT OF THE WILDLIFE IN THE DESIGNATED SIGNIFICANT FISH AND WILDLIFE HABITATS, ON THE AUDUBON SOCIETY SANCTUARIES, ON OTHER PUBLIC OR PRIVATE LANDS WITHIN THE VILLAGE, WHERE WILDLIFE HABITATS ARE LOCATED. ENCOURAGE THE RECREATIONAL USE OF AREAS WHERE SUCH RESOURCES ARE FOUND, 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 Yacht Club, Black Rock, Silver Lake, Paradise Island and other now vacant Village-owned land along the Croton

River should be maintained (see also 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 waters and in its tributaries will depend on continued monitoring by NYSDEC and the upgrading of water quality classifications. Currently, Village tributaries to the Hudson are proposed for upgrading from Class D to Class C (See Inventory and Analysis, Section C). 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 cause 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 biologist.

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

POLICY 10 FURTHER DEVELOP COMMERCIAL FINFISH, SHELLFISH AND CRUSTACEAN RESOURCES IN THE COASTAL AREA BY ENCOURAGING THE CONSTRUCTION OF NEW OR IMPROVEMENT OF EXISTING ON-SHORE COMMERCIAL FISHING FACILITIES, INCREASING MARKETING OF THE STATE'S SEAFOOD PRODUCTS, 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.

Explanation of Policy

At the present time NYSDEC has banned commercial fishing, except the commercial fishing of American Shad, blue crab, Atlantic Sturgeon, and bait fish, based on elevated levels of Polychlorinated Biphenyl (PCB) found in the coastal waters. However, there are, according to DEC, several licensed commercial fisherman who live and fish around Croton. The Village of Croton-on-Hudson encourages cooperation between the County, State, and Federal governmental agencies and landowners to expedite the clean-up of the sites responsible for leaching hazardous waste materials into local waters of the Hudson River, Croton Bay, and Haverstraw Bay, particularly from Croton Point Landfill, Metro North PCB Lagoon, and nearby power generating facilities. The Village should be consulted with and provide authorization for all actions relating to the planning or management of any or all hazardous waste at any location within the Village's boundaries.

See also Policies 7, 8, 36, 38, 39

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 UNDERTAKEN IN ORDER TO SAFEGUARD PERSONS, PROTECT PROPERTY, PREVENT DAMAGE TO THE ENVIRONMENT, AND PROMOTE THE PUBLIC WELFARE BY GUIDING, REGULATING, AND CONTROLLING THE DESIGN, CONSTRUCTION, USE AND MAINTENANCE OF ANY DEVELOPMENT OR OTHER ACTIVITY WHICH DISTURBS OR BREAKS THE TOPSOIL OR RESULTS IN EARTH MOVEMENT.

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 including Croton Point Park, Senasqua 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 (see Inventory and Analysis Figure 6). As such, these properties are subject to flooding and erosion.

To protect human lives and property from flooding and erosion, the Village of Croton-on-Hudson adopted Local Law No. 11 of 1988, the "Erosion and Sediment Control Law." The

objective of Local Law No. 11 is to control soil erosion and sedimentation caused by development activities within the Village, including development activities in connection with a single structure or building on a single lot. Measures taken to control erosion and sedimentation shall be adequate to ensure the sediment is not transported from a site by a storm event of ten-year frequency or less.

The following principles shall apply to all development activities:

1. Selection of erosion and sedimentation control measures shall be in accordance with Best Management Practices as stated in Policy 37;
2. Adjacent properties shall be protected from sediment deposition;
3. Development shall reflect the topography of the soils so as to create the least potential for erosion;
4. Natural vegetation shall be retained wherever possible;
5. Denuded areas and soil stockpiles must be stabilized within 15 days after final grade is reached;
6. Sediment basins shall be installed and maintained to remove sediment from runoff waters during construction;
7. Sediment trapping basin must be constructed in the first step in grading;
8. Waterways and outlets must be stabilized;
9. Stormwater inlets shall be protected from sediment-laden water;
10. Construction vehicles shall be kept out of watercourses and other controlled areas;
11. Runoff during and after construction shall be maintained at pre-development levels;
12. Underground utility construction shall not result in more than 500 feet of opened trench at one time, cause excavated material to be placed uphill of trenches and shall include dewatering devices;
13. Construction access routes shall minimize the transport of sediment onto paved surfaces;
14. All temporary erosion and sediment control measures shall be disposed of within 30 days of final site stabilization;
15. All temporary and permanent erosion and sediment control practices must be maintained and repaired as needed;
16. Aesthetics shall be considered in the design of erosion control facilities; and
17. Where the approving agency determines that an applicant's erosion and sediment control plan requires review, the applicant shall submit the plan to the Westchester County Soil and Water Conservation District and such review shall be at the expense of the applicant.

This policy is particularly important in the siting and construction of new buildings. All new development must conform to the regulations of the Erosion and Sediment Control Law and to Federal guidelines relating to construction in floodplains. Existing non-conforming structures within designated structural hazard areas shall be permitted to be minimally enlarged after site plan approval in accordance with Local Law No. 11.

The Village adopted Local Law No. 6 of 1989, Regulating the Development of Land Containing Steep Slopes. The Local Law was enacted to establish appropriate safeguards and standards to

meet the particular problems associated with development of steep slope areas and to ensure proper and orderly development and not adversely affect the site or adjoining area as a result of water runoff, disruption of natural plant and tree growth or soil movement not only during the time of construction but also thereafter, and further to provide for a safe means of ingress and egress of vehicular and pedestrian traffic to and within the site and to furnish required access of emergency vehicles thereto. Toward this end, new construction is to avoid areas that contain steep slopes (areas with an average slope of or greater than 15% as measured from the vertical rise of two foot contours in a 30 foot horizontal length), and existing vegetation in such areas is not disturbed. The Planning Board, the Zoning Board, and the Village Engineer will take this objective into consideration in reviewing and acting on any plans or applications submitted pursuant to the provisions of the Local Law. This Local Law will also help protect important scenic views and vistas.

The disaster preparedness agency in Westchester County is the Office of Civil Defense. The only significant damage caused by erosion and flooding occurred in the 1840s when the Croton Dam broke and sediment filled the Croton River and Bay.

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. Any final closure or remediation plans for the Croton Point Landfill must include mitigation measures which address these concerns.

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 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 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 thirty 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 waterfrontage, 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 (Eleven).

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 those 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 structures 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, and allow discharge at rates which do not over-burden the existing system and exacerbate flooding of village streets.

See also Policy 7 related to Significant Fish and Wildlife Habitats and Policy 11 related to the recently adopted Erosion and Sediment Control Law.

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 which 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 STRUCTURES 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 YEARLY MAINTENANCE OF SENASQUA PARK UNTIL SUCH TIME THAT IS DETERMINED THAT EXPENDITURE OF FUNDS OUTWEIGHS THE COST OF ACQUIRING, CONSTRUCTING AND MAINTAINING A SIMILAR PUBLIC PARK ON CROTON'S WATERFRONT.**

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 regards to erosion protection measures, but for development within the coastal zone area in general. This policy recognizes the public need for the 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.

Maintenance costs for erosion protection at Senasqua Park are expended annually by the Village. This policy recognizes that those costs are required to be expended on that basis in order to protect human life and continued use of the public park. However, there may be other appropriate waterfront parcels available to the Village for development of a public park. The expenditure of funds for the protection of Senasqua Park from erosion should be continued until such time that the expenditure outweighs the cost of acquiring, and developing a similar park at another location. This policy does not, however, suggest that use of Senasqua Park be discontinued without the development of a replacement park at a similar location within the Village.

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 RISING FROM AREAS INLAND SHALL BE OF A NON-STRUCTURAL NATURE, WHEREVER POSSIBLE, IN CONSIDERATION OF THE VISUAL IMPACT OF STRUCTURAL MEASURES. THE RETENTION OR PLANTING OF VEGETATIVE COVERS WILL BE PREFERRED TO 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 related to the recently adopted Erosion and Sediment Control Law for regulations regarding flood damage prevention.

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.

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 ALONG THE HUDSON AND CROTON RIVERS IN THE FORM OF A TRAIL OR WALKWAY SYSTEM. SUCH SYSTEMS SHOULD BE PROVIDED ALONG UNDEVELOPED AND UNDERUTILIZED LAND AS WELL AS ALONG PREVIOUSLY DEVELOPED LAND.**
- POLICY 19B** **INCREASE PHYSICAL ACCESS TO AREAS THAT HAVE SPECIFIC VALUE FOR THEIR PHYSICAL AND VISUAL ACCESS TO THE HUDSON RIVER OR CROTON RIVER AND BAY.**
- POLICY 19C** **ENCOURAGE THE EXPANSION OF PUBLIC TRANSPORTATION, WHEN FEASIBLE, TO AREAS WITHIN THE COASTAL ZONE AREA WHERE WATER DEPENDENT AND WATER ENHANCED RECREATION ACTIVITIES ARE LOCATED.**
- POLICY 19D** **INCREASE ACCESS TO CROTON RIVER AND BAY AT THE VILLAGE-OWNED LAND SOUTH OF THE VILLAGE PARKING LOTS AT THE CROTON-HARMON STATION.**
- POLICY 19E** **MAINTAIN THE TRAIL, WHICH PROVIDES ACCESS TO THE CROTON RIVER WATERFRONT, IN ITS CURRENT UNDEVELOPED CONDITION AS A PEDESTRIAN WALKWAY.**

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 use areas and multiple use 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 Metropolitan Urban 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 recreations resources or facilities - all public lands or facilities that are suitable for passive or active recreation that requires either water or a waterfront location or is 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 existing level of public access - includes but is not limited to the following:
 - (1) The number of parking spaces at a public water-related recreation resource or facility is significantly reduced.
 - (2) The service level of public transportation to a public water-related recreation resources or facility is significantly reduced.
 - (3) 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.
 - (4) There are substantial increases in 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:
 - (1) 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.
 - (2) Sale, lease, or other transfer of public lands that could provide public access to a public water-related recreation resource or facility.
 - (3) 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, as well as pedestrian access. The County is responsible for the surface of the bridge while Metro-North is responsible for the bridge structure.

Public access to Croton Waterfront areas must be maintained at Senasqua Park, Croton Yacht Club, Croton Point Park, 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 public recreational facility. The Duck Pond presents important year-round recreational opportunities to the residents of Croton-on-Hudson and should be properly maintained.

Another site to be improved for greater public access would be the Village-owned land south of the railroad parking lots. There is currently an unimproved earthen boat ramp at the site but access to the ramp and into the Bay is hampered by debris and road maintenance supplies stored on the site by the Village Department of Public Works (see also Policy 9A). The gates in this area should continue to remain open. In addition, the "Trail", which runs along the Croton River and provides access to the Croton River waterfront, should be maintained in a natural condition as a pedestrian walkway. If improved for vehicular access, the "Trail" should provide for pedestrian access. As indicated in the Inventory and Analysis, the "Trail" is an unimproved Village-owned mapped street that is currently used by joggers, bicyclists and the public for recreational purposes.

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 the lack of available parking at waterfront locations. New access structures (i.e. bridges) or larger parking areas are inhibited by the lack of physical space, lack of adequate connections, and the lack of public funds available for new construction. Pedestrian access is available in some areas, but the lack of safety precautions inhibit such access. Improvements to the Village-owned areas south of the Croton-Harmon Station would include a new boat ramp, lighting and landscaping. Pedestrian paths could also be provided. This is also true at Black Rock where the linkage to a Croton River Gorge Trail would mean the development of a footpath or sidewalk.

**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.**

Explanation of Policy

Access addressed by this policy concerns pedestrian and vehicular 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, birdwatching, 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 public 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:
 - (1) 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.

- (2) 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:
 - (1) Construction of public facilities which physically prevent the provision, except at great expense, of convenient public access to public water-related resources and facilities.
 - (2) 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.
 - (3) 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:
 - (1) Access is reduced or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.
 - (2) 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; or (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 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 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, 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 major portion of a community's shore should be avoided as much as possible. The Village should consider establishing a riverfront trail for public use.

Boating and pedestrian facilities will, as appropriate, include parking, park-like surroundings, toilet facilities, and pumpout 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 Program. 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 encouraged and expanded at the Croton Yacht Club and at the end of the Village parking area south of Metro-North. 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 River is discussed in the Inventory and Analysis, Section E. Such uses 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 uses and parameter as situations warrant 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, 19, 22, 30, 31, 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 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 building

Appropriate recreation uses which do not require any substantial additional construction shall be provided at the expense of the project sponsor provided the cost does not exceed 2% of 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 Policy 19 and 20.

POLICY 23 PROTECT, ENHANCE AND RESTORE STRUCTURES, DISTRICTS, AREAS OF SITES THAT ARE OF SIGNIFICANCE IN THE HISTORY, ARCHITECTURE, ARCHAEOLOGY OR CULTURE OF THE STATE, ITS COMMUNITIES, OR THE NATION.

Explanation of Policy

The following explanation of Policy 23 applies only to properties that are presently or eventually designated for inclusion in the State and/or National Registers of Historic Places, i.e. at this time only Van Cortlandt Manor and the Croton North Station.

Among the most valuable of the State's man-made resources are those structures or areas which are of historic, archaeological, 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 effective 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 of 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, paving 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, archeological, cultural, or archeological 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, scale, 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.

Explanation of Policy

The NYS Coastal Area Map does not identify any resources within the Village of Croton-on-Hudson as being scenic resources of Statewide significance.

When considering a proposed action, agencies shall first determine whether the action could affect a scenic resource of Statewide significance. This determination would involve: (a) a review of the coastal area map to ascertain if it shows an identified scenic resource which could be affected by the proposed action, and (b) a review of the types of activities proposed to determine if they would be likely to impair the scenic beauty of an identified source.

The following siting and facility-related guidelines are to be used to achieve this policy, recognizing that each development situation is unique and that the guidelines will have to be applied accordingly. Guidelines include:

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

The panoramic vista south from Croton Point meets the general criteria guidelines for State designation including:

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

- ° Very high public accessibility
- ° Public recognition as an area of great visual quality

- 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** **PROTECT LOCAL SCENIC RESOURCES BY PREVENTING: (i) THE IRREVERSIBLE MODIFICATION OF GEOLOGIC FORMS, THE DESTRUCTION OR REMOVAL OF VEGETATION OR WETLANDS, 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 SCALE WILL REDUCE IDENTIFIED VIEWS OR WHICH BECAUSE OF SCALE, FORM, OR MATERIALS WILL DIMINISH THE SCENIC QUALITY OF AN IDENTIFIED RESOURCE.**
- POLICY 25B** **SECURE THE DESIGNATION OF THE PANORAMIC VIEWS FROM CROTON POINT AS A SCENIC AREA OF STATEWIDE SIGNIFICANCE.**
- POLICY 25C** **SECURE THE DESIGNATION OF ROUTES 9 AND 129 WITHIN THE CROTON BOUNDARIES AS A SCENIC ROAD. ENSURE DEVELOPMENTS ON OR ADJACENT TO ROUTE 9 DO NOT IMPAIR SCENIC RESOURCES OR VIEWS OF OR FROM THE HUDSON AND CROTON RIVERS.**
- POLICY 25D** **ESTABLISH AND PROTECT IDENTIFIED VIEWSHEDS WHICH PROVIDE VISUAL ACCESS TO THE HUDSON RIVER, INCLUDING BUT NOT LIMITED TO THE VIEWS OF THE HUDSON RIVER FROM THE WESTERN SHORELINE OF THE VILLAGE, AND FROM PRICKLY PEAR HILL, LOUNSBURY HILL, AND RIVER LANDING. IN ADDITION, PROTECT VIEWSHEDS TO 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. Activities which could impair or further degrade scenic quality are identified in the previous policy and are reiterated again here.

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 itself 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 upland 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. Guidelines for siting new development, found in Policy 24, should be used in evaluating any development proposals on Croton Point for consistency with this policy.

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, but not limited to, sound fences, vegetation or architectural screening, and painting of facilities.

The significant scenic views available from Route 9 west across the River and across the Croton Bay warrant its designation as a Scenic Road. The NYS Scenic Road Program identifies scenic roads deemed worthy of designation under Article 49 of the Environmental Conservation Law. The scenic road designation can serve to protect sensitive resources under such decision procedures as SEQRA, NEPA and laws governing the siting of electrical generating and transmission facilities. In addition, the designation can help reinforce local perception of scenic quality inspiring local government to institute protective measures.

Due to the topography of the Village, views of the Hudson River from Prickly Pear Hill and Lounsbury Hill and views of these areas from the Hudson River should be considered significant. These areas are currently undeveloped and represent the last remaining, large, undeveloped parcels within 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 addition, care should be taken regarding development which would impact the viewshed of the Croton Gorge, River and Bay.

The Village adopted Local Law No. 6 of 1989, Regulating the Development of Land Containing Steep Slopes. The Local Law was enacted to establish appropriate safeguards and standards to meet the particular problems associated with development of steep slope areas and to ensure proper and orderly development and not adversely affect the site or adjoining area as a result of water runoff, disruption of natural plant and tree growth or soil movement not only during the time of construction but also thereafter, and further to provide for a safe means of ingress and egress of vehicular and pedestrian traffic to and within the site and to furnish required access of emergency vehicles thereto. Toward this end, new construction is to avoid areas that contain steep slopes (areas with an average slope of or greater than 15% as measured from the vertical

rise of two foot contours in a 30 foot horizontal length), and existing vegetation in such areas is not disturbed. The Planning Board, the Zoning Board, 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. This Local Law will also help protect important scenic views and vistas.

The Village of Croton, in 1979, established a program for preserving and improving the visual environment of Croton by establishing a Visual Environmental Board (VEB) which was to identify and prepare a list of natural and man-made features within the Village that enhance the visual environment. The VEB was to report annually to the Village Board on the state of the visual environment. In 1981 and 1985, the VEB published reports. This VEB may be the appropriate board to analyze and survey the Route 9 corridor and submit a nomination to the NYSDEC for designation as a Scenic Road.

**POLICY 26 THE STATE COASTAL POLICY REGARDING THE PROTECTION
OF AGRICULTURAL LANDS IS NOT APPLICABLE TO CROTON**

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 18-25 in particular.

Demand for energy in New York will increase, although at a rate slower than previously predicted. The State expects to meet these energy demands through a combination of conservation measures; traditional and alternative technologies; and use of various fuels, including coal, in greater proportion.

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 the waterfront plan.

Decisions regarding expansion and/or continued operation of Indian Point Nuclear Power Facility or the Charles Point Plant in Peekskill should be consistent with the policies of the waterfront plan.

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.

POLICY 28A ICE MANAGEMENT PRACTICES MUST CONSIDER SHORT AND LONG TERM IMPACTS ON THE CROTON RIVER AND BAY AND HAVERSTRAW BAY SIGNIFICANT FISH AND WILDLIFE HABITATS.

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

POLICY 29 THE STATE COASTAL POLICY REGARDING THE DEVELOPMENT OF ENERGY RESOURCES IS NOT APPLICABLE TO CROTON.

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 ANY MATERIALS IN COASTAL WATERS UNTIL SUCH MATERIALS HAVE BEEN TESTED BY THE STATE FOR CONFORMANCE WITH WATER QUALITY STANDARDS.

POLICY 30B STORAGE AND DISPOSAL OF ALL MATERIALS SHALL BE MONITORED BY THE STATE TO ASSURE THERE WILL BE NO DISCHARGE OR LEACHING OF 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. Such requests and

any responses should also be sent to the Village Board. This information is extremely important for the Village since it has, within its boundaries, two Superfund sites (Croton Point Landfill and Metro North Lagoon) known to have leached materials into coastal waters. This land is thus considered a high-risk area for water quality contamination.

See Also Policies 7, 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 (PL 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 reclassification of Village streams, see Section C of the Inventory and Analysis. Sources of upstream pollution include roadway grease and oils, salt, construction debris and other household wastes dumped into streams. The Village tributaries to the Hudson River are proposed for upgrading from Class D to Class C. Such upgrading should be done to improve habitat conditions and support recreational uses.

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, other natural conditions, as well as prohibitive costs. According to the Village Engineer, 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 septic systems 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 ENCOURAGE NEW DEVELOPMENTS TO RETAIN STORMWATER RUNOFF ON SITE SO AS TO NOT INCREASE FLOWS WITHIN THE EXISTING SYSTEM OR TO IMPROVE EXISTING STORMWATER RUNOFF SYSTEMS SO THAT RUNOFF FROM SUCH DEVELOPMENTS DOES NOT ADVERSELY IMPACT COASTAL WATERS.

POLICY 33B IMPROVE EXISTING VILLAGE STORMWATER DISCHARGE TO CONTROL FLOW OF POLLUTANTS FROM STREET AND PARKING AREAS, ETC. DIRECTLY IN THE RIVERS.

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 the 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, which after treatment is then discharged into the Hudson River.

See also Policies 11 and 11A, Policy 37B and Best Management Practices.

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, DUE TO SHAPE OF COVE
AND LACK OF TIDAL FLUSHING.**

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 shell fish beds and other significant habitats, beaches, and public water supply intakes, which need protection from contamination by vessels 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, 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 US Army Corps of Engineers and 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 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 definition of hazardous materials. See also Policies 7, 30, 35, 37, 39A 39B, 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 **STANDARDS AND SPECIFICATIONS FOR THE CONTROL OF NON-POINT SOURCE DISCHARGE AS SET FORTH IN WESTCHESTER COUNTY'S BEST MANAGEMENT PRACTICE MANUAL OR OTHER RECOGNIZED REFERENCE SHALL BE UTILIZED DURING DEVELOPMENT OF ANY SITE.**

POLICY 37B **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. Construction activities will be reviewed and approved and operations conducted in accordance with the standards set forth in the Westchester County best management practices manual entitled "Construction Related Activities: Standards and Specifications," published November, 1979 or the best available technology which would incorporate such

standards and specifications shall be enforced. The general guidelines which underlie the standards here cited, and which this policy requires to be compiled with, are as follows:

1. The construction site, or facilities, should fit the land, particularly with regard to its limitations.
2. Natural ground contours should be followed as closely as possible and grading minimized.
3. Areas of steep slopes, where high cuts and fills may be required, should be avoided.
4. Extreme care should be exercised in areas adjacent to natural watercourses and in location artificial drainageways so that their final gradient and resultant discharge velocity will not create additional erosion problems.
5. Natural protective vegetation should remain undisturbed if at all possible; otherwise plantings should compensate for the disturbance.
6. The amount of time that disturbed ground surfaces are exposed to the energy of rainfall and runoff water should be "severely" limited.
7. Runoff from upper watershed lands which would contribute runoff to areas subject to erosion should be diverted.
8. The velocity of the runoff water on all areas subject to erosion should be reduced below that which would cause erosion.
9. A ground cover should be applied sufficient to restrain erosion on that portion of the disturbed area undergoing no further active disturbance.
10. Runoff from a site should be collected and detained in sediment basins to trap all materials which would otherwise be transported from the site. Runoff detained in such basins will be released at a controlled rate to limit downstream erosion.
11. Provision should be made for permanent protection of downstream banks and channels from the erosive effects of increased velocity and volume of runoff resulting from facilities constructed.
12. The angle for graded slopes and fills should be limited to an angle no greater than that which can be retained by vegetative cover or other erosion control devices or structures.
13. The length as well as the angle of graded slopes should be minimized to reduce the erosive velocity of runoff water.

14. Rather than merely minimize damage, the opportunity should be taken to improve site conditions wherever practicable.
15. Runoff during and after construction shall be maintained at pre-development levels.
16. Where the approving agency determines that an applicant's erosion and sediment control plan requires review, the applicant shall submit the plan to the Westchester County Soil and Water Conservation District and such review shall be at the expense of the applicant.

See Policies 7, 8, 11, 25, 30, 33, 34, 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.**

Explanation of Policy

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

The Geraghty & Miller, Inc. report (August 1988) was prepared to determine the availability of ground water resources at the Croton well field. The report found that five high-capacity wells located in the area of the existing Village wells could more than double the water supply to the Village. The report recommendations are provided in the Inventory and Analysis Section D.

In addition, the Village has Water Supply Protection Rules and Regulations. This Law defines the wellhead protection area, recharge area and watershed tributary to the recharge area. The wellhead protection area is defined as the minimum area within 200 feet of the well and cone of influence. The aquifer recharge area is the land area where precipitation percolated directly through the ground to an aquifer. The watershed tributary to the aquifer recharge area is that land which is the tributary surface from which the aquifer is replenished by runoff to the aquifer recharge area.

Stormwater runoff presents an additional problem to the Village. Plans locating the Village storm sewers are currently unavailable. However, the village recognizes the desirability of having these plans drawn up when it is financially feasible to do so.

- 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 TRANSPORTERS, PRODUCERS AND STORERS OF HAZARDOUS MATERIAL TO INFORM THE PUBLIC OR ALLOW PUBLIC ACCESS TO RECORDS INVOLVING THE TRANSPORT, STORAGE, TREATMENT AND DISPOSAL OF HAZARDOUS MATERIALS. THIS IS OF PARTICULAR CONCERN WITH RESPECT TO RAIL TRANSPORT OF SUCH MATERIALS, STORAGE OF IDENTIFIED MATERIALS ON RAILROAD PROPERTY AND USES IN THE WATERFRONT AREA INVOLVED IN THE TREATMENT, STORAGE AND DISPOSAL OF SUCH MATERIALS.**
- POLICY 39B** **IN ACCORDANCE WITH TITLE III, SECTION 302, EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW OF THE 1986 SUPERFUND REAUTHORIZATION ACT, THE LOCAL EMERGENCY PLANNING COMMITTEE AND THE CROTON FIRE DEPARTMENT SHALL BE NOTIFIED IF HAZARDOUS SUBSTANCES EXCEED THE ESTABLISHED THRESHOLD PLANNING QUANTITY.**

Explanation of Policy

The definition of the terms "solid wastes" and "solid wastes 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: (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 which improperly treated, stored, transported, disposed or otherwise managed." A list of hazardous wastes (NYCRR Part 366) has been adopted by DEC (6NYCRR part 371). Examples of solid waste management facilities include resource recovery facilities, sanitary landfills and solid waste reduction facilities.

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 public for those types and quantities of materials not covered under the SARA of 1986. The local emergency planning committee, in this case the Village Board, and the local 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, 8, 38, 44.

POLICY 41 LAND USE OR DEVELOPMENT IN THE COASTAL AREA WILL NOT CAUSE NATIONAL OR STATE AIR QUALITY STANDARDS TO BE VIOLATED.

POLICY 41A A NYSDEC POINT-SOURCE AIR MONITORING STATION SHOULD BE ESTABLISHED WITHIN THE VILLAGE OF CROTON-ON-HUDSON.

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.

The closest NYSDEC monitoring stations to Croton are in Ossining, Mount Vernon, White Plains and Mamaroneck. Monitoring at these locations does not indicate quantities that exceed air quality standards except for ozone and carbon monoxide (see Section II, Inventory and Analysis, pages 43 and 44). Due to Croton's location and conditions and use within the Village, it is appropriate for NYSDEC to establish an air monitoring station within the Village.

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 concerning 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 THE USE OF SHUTTLE BUS SERVICE TO THE TRAIN STATION, THEREBY DECREASING DEPENDENCY ON THE AUTOMOBILE USE AND REDUCE THE GENERATION OF ACID RAIN PRECURSORS.

POLICY 43B ENCOURAGE THE USE OF LOW SULPHUR FOSSIL FUELS FOR RAIL VEHICLES AND ENCOURAGE THE DEVELOPMENT OF A MONITORING PROGRAM TO ASSESS RAIL VEHICLE ENGINES EMISSIONS.

Explanation of Policy

The New York State Coastal Management Program incorporates 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 formally request Metro North use low sulphur fossil fuels for the diesel engine and be informed of the results of any monitoring program developed to assess rail vehicle emissions.

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, waterbodies, 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, waterbodies, 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, waterbodies 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 6).

Freshwater wetlands include marshes, swamps, bogs, and flats supporting aquatic and semi-aquatic vegetation and other wetlands so defined in Local Law Number 4 of 1988, Protection of Wetlands, Waterbodies and Watercourses, and in the New York State Freshwater Wetlands

Act and protection of Waters Act. Wetlands in Croton designated by the NYS Department of Environmental Conservation are H-3, H-4, H-5 and H-6. 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 #4, Protection of Wetlands, Waterbodies, and Watercourses;
- 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 6.

SECTION IV
PROPOSED LAND AND WATER USES
AND PROPOSED PROJECTS

PROPOSED LAND AND WATER USES AND PROPOSED PROJECTS

The proposed land and water uses of this LWRP translate the policies into a land use plan for the coastal zone area, in this case the entire Village of Croton-on-Hudson. The topography of the Village and the presence of significant habitats etc. impose development considerations within the Village. Such development considerations are presented in Figure 6. Proposed Projects are presented on Figure 9 and Proposed Land Uses on Figure 9a.

A. Proposed Land and Water Uses

The land uses proposed in the projects identified in Section B would be permitted under the current zoning ordinance. In order to determine the allowable uses on vacant parcels, the existing zoning map (Figure 5) should be reviewed with Figure 4. The Village Zoning Map would however, have to be amended if sites identified in Section III, Policy 1 are designated Park, Recreation and Education (PRE) zones as permitted by local law.

B. Proposed Projects

As a result of developing this LWRP, seven projects are proposed which are designed to 1) link waterfront parks and recreational areas thereby improving public accessibility, 2) increase recreational facilities within the Village and improve access to the waterfront areas, 3) redevelop or restore underutilized coastal area lands and improve the parking situation at the Croton-Harmon rail station, 4) assess the air quality of the Croton area, 5) study the stormwater system of the Village, 6) protect scenic views of and to the Village, 7) study the traffic and roadway conditions within the Village, and 8) facilitate the planning process within the Village by updating the Village's Master Plan for consistency with the LWRP and development goals for the Village. Table 3 in Section V provides a matrix that shows the consistency of each project with the LWRP policies.

Below is a description and cost estimate for each project.

1. Croton River Gorge Trail

This project would result in a walking trail along the Croton River from Silver Lake to Black Rock. The intent of the project is to link the existing parks and recreation. The most significant aspect of creating this trail would be to increase public accessibility and enjoyment of these areas and the views they provide. This project is consistent with Policies 1,4,5,6,9,16-22, and 25 of the LWRP.

Some redevelopment activities should occur at Silver Lake including the repaving of the parking lot, reconstruction of stairs, and restoration of the picnic areas.

The Village would be expected to continue to "build-up" the beach area each year. The Village annually deposits 50 cubic yards of sand at Silver Lake.

Development activities at Black Rock would include stabilization of the shoreline south to Quaker Bridge, demolition of any vacant deteriorating structures including the lifeguard station, the placement of picnic tables, benches, etc. for public use, and general landscaping and maintenance of the area where structures once stood.

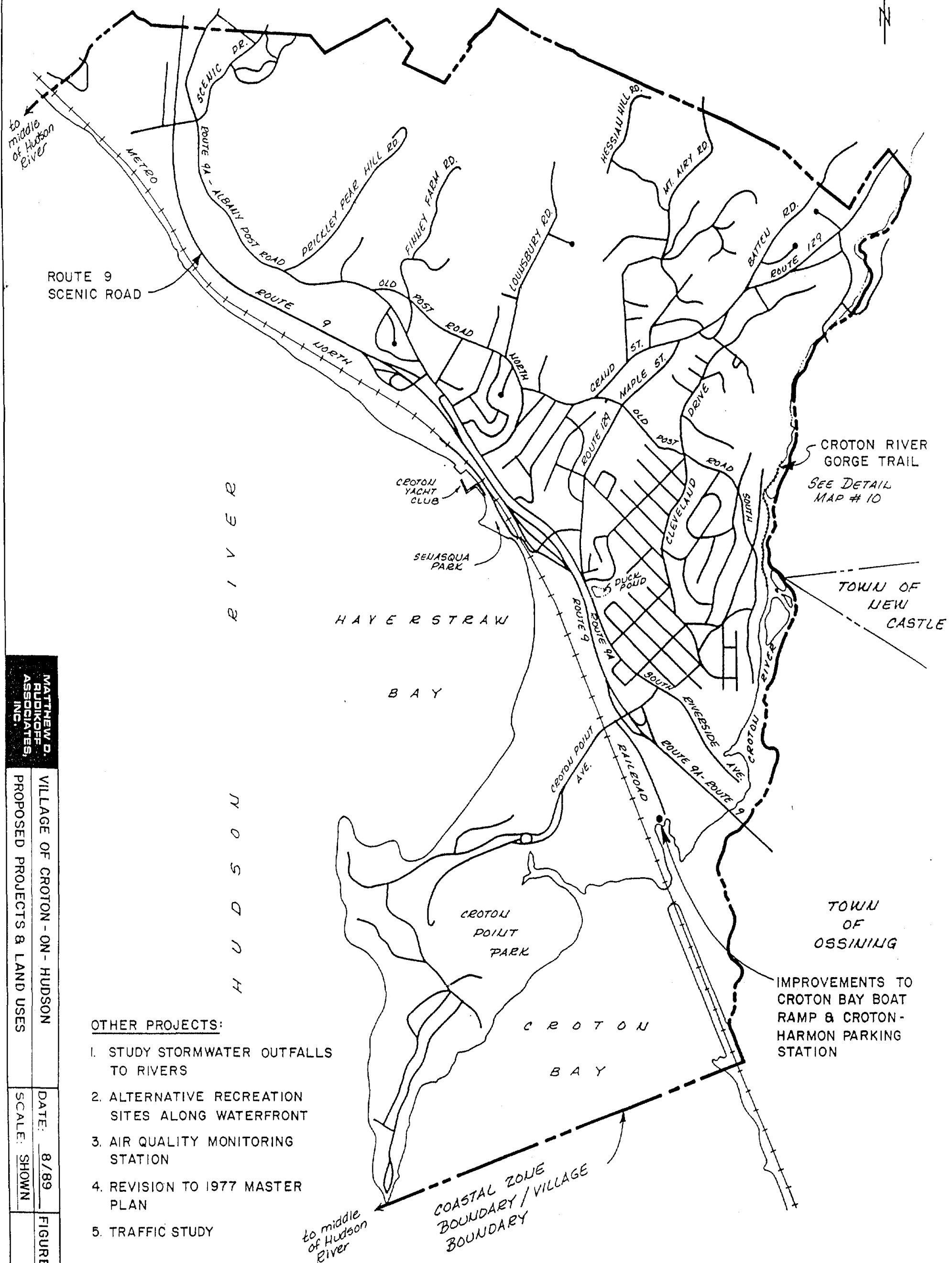
An important feature of this project would be the de-mapping of the "Trail". The "Trail" is currently an unimproved Village-owned mapped or paper street that runs, in some locations, directly parallel to the Croton River. This project would include use of a section of the "Trail" as part of the designed walkway for recreational activities. If however, the Trail is designated a PRE zone as proposed, this legislative act of de-mapping would not be necessary.

The Village would be responsible for initiating the de-mapping of the street, if necessary, or designating it a PRE zone thus making it available for public recreational use. This would ensure that the area is not developed for vehicular access. A private consultant, most likely a planning and/or landscape architecture firm, would be responsible for designing the walking trail including improvements at Black Rock, with the Department of Parks and Recreation and the Department of Public Works providing and maintaining any structures such as benches, picnic tables and trash receptacles. The Village Police Department would be responsible for coordinating security along the trail system.

Cost Estimate

The cost of designing the trail system could be approximately \$40,000-\$60,000. Implementation and construction costs would be additional. The Police Department would be responsible for coordinating security along the walkway. This could be achieved by re-routing an existing car patrol through the walkway. Therefore, the design of the walkway should be wide enough, approximately 8 feet, to allow access by emergency vehicles. The Village would remain responsible for continued maintenance of the entire trail system. Annual maintenance costs are estimated to range from \$8,000 to \$10,000.

TOWN OF CORTLANDT



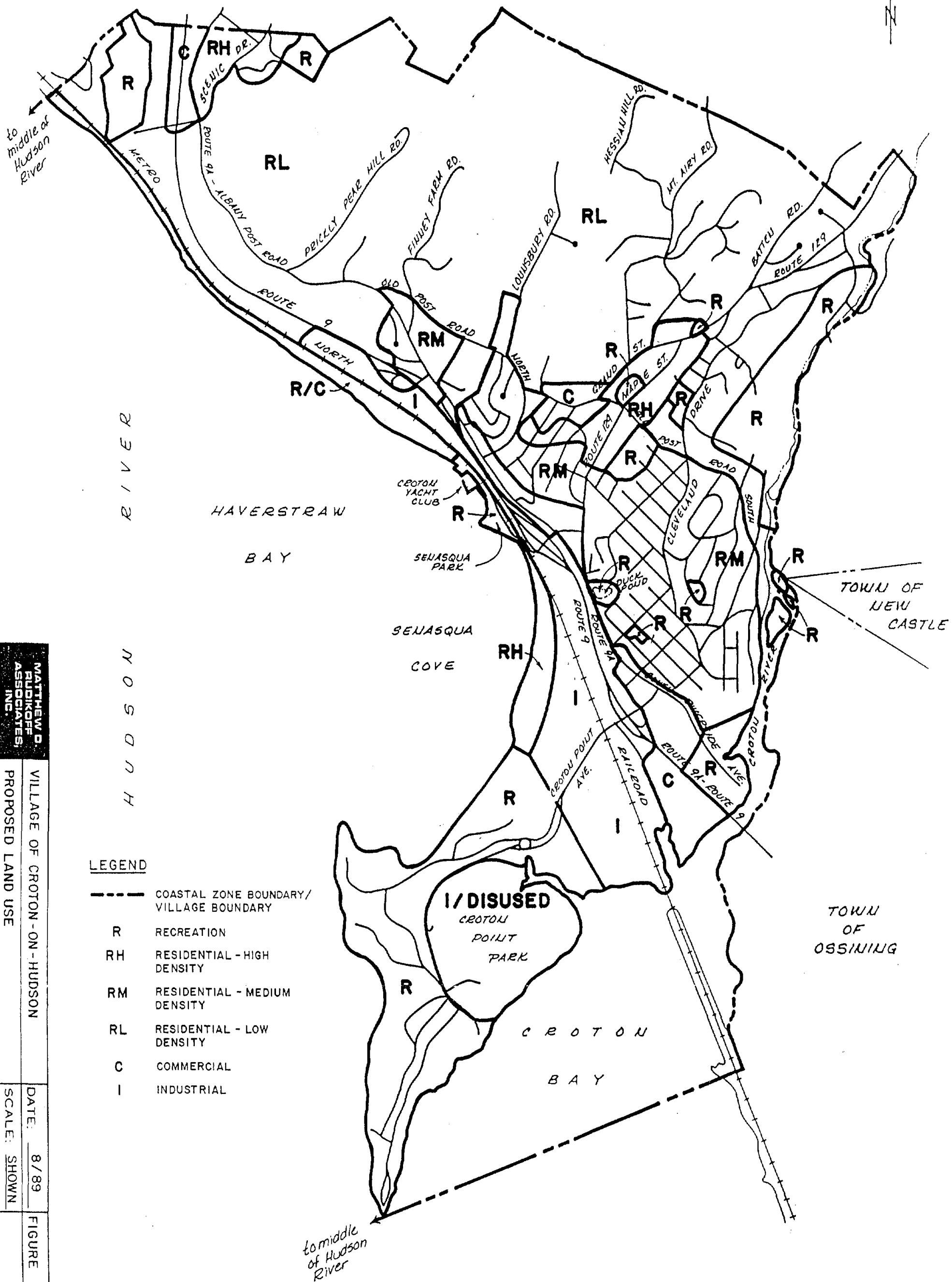
OTHER PROJECTS:

- 1. STUDY STORMWATER OUTFALLS TO RIVERS
- 2. ALTERNATIVE RECREATION SITES ALONG WATERFRONT
- 3. AIR QUALITY MONITORING STATION
- 4. REVISION TO 1977 MASTER PLAN
- 5. TRAFFIC STUDY

MATTHEW D. RUDIKOFF ASSOCIATES, INC.	VILLAGE OF CROTON - ON - HUDSON	
	DATE: 8/89	FIGURE: 9
PROPOSED PROJECTS & LAND USES		SCALE: SHOWN

0 1/2
SCALE IN MILES

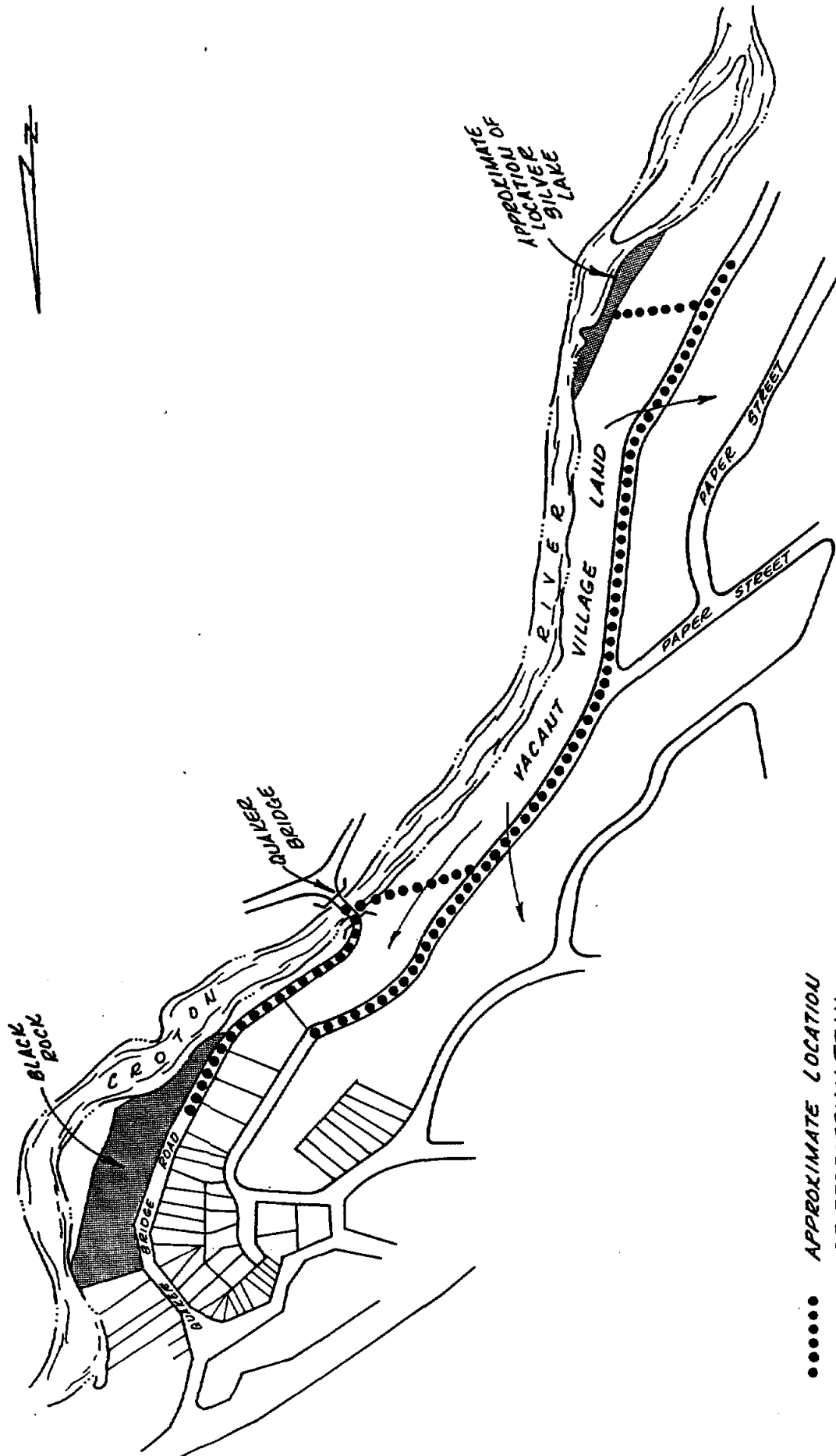
TOWN OF CORTLANDT



- LEGEND**
- COASTAL ZONE BOUNDARY/
VILLAGE BOUNDARY
 - R RECREATION
 - RH RESIDENTIAL - HIGH
DENSITY
 - RM RESIDENTIAL - MEDIUM
DENSITY
 - RL RESIDENTIAL - LOW
DENSITY
 - C COMMERCIAL
 - I INDUSTRIAL

MATTHEW D. RUDKOPF ASSOCIATES, INC.	VILLAGE OF CROTON-ON-HUDSON		DATE: 8/89	FIGURE 9d
	PROPOSED LAND USE		SCALE: SHOWN	

0 1/2
SCALE IN MILES



..... APPROXIMATE LOCATION
 OF PEDESTRIAN TRAIL
 PAPER STREET - DESIGNATED ON
 VILLAGE MAP, BUT,
 UNIMPROVED

There are minimal costs involved in de-mapping the "Trail" or designating it a PRE zone. This could be accomplished through a legislative action by the Board of Trustees.

2. Investigate Alternative Sites for Village-owned Recreational Areas along the Waterfront.

The purpose of this project would be to investigate other waterfront parcels which could be obtained and revitalized/developed for use as public recreational sites.

The Village would have to initiate these procedures by negotiating with property owners for the sale of a parcel. In order to do this, the Village would have to have the property assessed by an independent appraiser. The Village Board of Trustees would begin negotiations once the fair market value, which is based on current zoning, has been established.

The premise behind the expenditure of public funds for acquisition of this land is that, in the long run, acquisition and improvement of any property for recreational purposes may cost less than annual expenditure of funds required for the stabilization of Senasqua Park. According to the Village Department of Parks and Recreation, aside from capital improvement programs already undertaken, annual expenditures for the maintenance of Senasqua Park total approximately \$20,000. However, this expenditure is almost entirely recouped through the sale of mooring spots in the Cove. Even if the Village chooses to continue to maintain Senasqua Park as a public recreational area, any new waterfront site acquired by the Village should also be made available for public use.

Should the Village be unable to reach an agreement for acquisition of waterfront property, other methods of acquisition should be investigated. Should this occur, the Village would consult with their attorney as to the legal procedures available. In any case, the fair market value of a property would have to be determined and paid to the property owner.

Once the Village has acquired a site, the Engineering, Recreation and Public Works Department, and various advisory councils, should be consulted for the development of a park. Improvements to the land would include 1) parking, 2) public restroom facilities, 3) sailboat moorings, 4) recreational structures or areas such as picnic areas, basketball courts, benches, and platform tennis courts, etc., 5) landscaping plans, and 6) safety plan. This project is consistent with Policies 1,2,4,5,6,9,11-22,25,34,39.

Cost Estimate

The cost of improving a waterfront site for public recreational use could range from \$250,000 to \$750,000. The cost of acquisition cannot be estimated until sites are identified.

The design and construction of the park would be undertaken by a private consultant under the supervision of the Village Engineer. Continual maintenance of the park would be the responsibility of the Department of Parks and Recreation with assistance from the Department of Public Works. The Police Department would be responsible for patrolling the area and enforcing any restrictions.

3. Improvements to Croton Bay Boat Ramp and Village Lands South of the Village Parking Areas at Metro-North (The Croton-Harmon Station).

This project would result in a conceptual development plan for public access and recreational use of the Village owned land south of the parking areas at the Croton-Harmon station. The site currently has an unimproved natural access into Croton Bay, and the rest of the area is unimproved and is currently being used as a holding area for the Department of Public Works road materials (salt, sand, gravel and road supplies). Currently, the Village has entered into an agreement with Industrial Refuse Systems, Inc. to take the large brush and bulk items collected by the Village.

Although actual design of the recreational area would be the responsibility of the Village, this project will describe the physical improvements necessary for the site in order to facilitate its recreational use by Village residents and the general public. This project relates to Policies 1,2,4-9,11-22,25,28,34,39,44 of the LWRP.

The improvement plan would be developed in two phases. Phase I would include stabilization of the shoreline near the boat launch. Such actions would require NYSDEC permits. Stabilizing the shoreline is critical if other recreational activities are developed on the shoreline and the site is made available for public use. Such stabilization could include the use of rip rap along the entire shoreline.

Phase II would include more specific activities designed to increase public access and recreational opportunities at the site. These activities include:

- a. Construction of a permanent small concrete craft launch ramp. This activity directly relates to public access for recreational purposes. Currently the launch is approximately eight feet wide.
- b. Improvements to railroad bridge to provide minimal clearance for boats.

- c. Removal of the locked gate and improvements to direct vehicular and pedestrian access. This would involve the planting of appropriate vegetation and the design of ingress and egress points for both automobiles and pedestrians. The area is not currently improved for such access.
- d. A seeding and landscaping plan would have to be developed for the site. This should include a pedestrian trail along the water's edge and the design of appropriate areas for sitting, picnicking, and passive recreational use.
- e. Another physical improvement would have to be the organization of a parking area for the park in conjunction with parking for the railroad. Parking requirements would be met as established in the ordinance for a recreational use. This area would be located adjacent to the end of the parking area for the railroad station. Appropriate signage would have to be installed and monitoring of the spaces reserved for the park would have to be undertaken to ensure that railroad users do not infringe on the spaces allocated for park use. This enforcement would be the responsibility of the Village Police Department. On the other hand, the Village may want to consider shared parking between railroad commuters and park visitors. There is a recognized need for additional parking at the train station. Currently, there are 550 non-residents on the waiting list to acquire a parking permit. Shared-parking may be appropriate in this case since the peak commuter parking needs occur during the time park use is off-peak. When peak parking is needed, i.e. on the weekends, there is a reduced need for parking for commuters. The Village Board would determine if shared-parking is reasonable or if separate parking spaces as required by the law should be designated.
- f. An integral part of developing an improvement plan would be to establish a safety plan which would include provisions for installing barriers to block off the tracks from the area of public use, as well as the installation of adequate lighting and public patrols. The design and location of lighting could be included as part of the overall landscaping plan. Continual maintenance of the park would be the responsibility of the Department of Parks and Recreation. Providing increased police protection would have to be coordinated with the Village Police Department.

The development of an improvement plan would allow many people to use the site for both active and passive recreation. The activities would encourage the use of the site, as well as correct some existing hazardous conditions including erosion of the shoreline. In addition, if the Village

garage is relocated, more parking spaces could be made available for sale, thus increasing revenues and fostering improvements to the visual environment around the station.

Cost Estimate

The cost of undertaking this project is divided into three phases, stabilization of the shoreline, physical improvements to the site, and operation and maintenance costs. The cost estimates are divided into the following phases consistent with the construction and design plans: 1) the cost of stabilizing the shoreline could range between \$100,000 and \$500,000 and would require an Army Corps of Engineers permit, 2) the cost of hiring a private consultant for the planning and landscaping of the area is estimated to range between \$20,000 and \$35,000 and must include parking space construction costs at \$500 to \$1,000 per space, and 3) additional ongoing costs which could be \$8,000 to \$10,000 and would be incurred by the Department of Parks and Recreation and Public Works and Police Departments for annual operation and maintenance. Thus, the total project cost is estimated to be \$200,000 to \$600,000.

Financial assistance for the development of this site may be available from NYSDEC and the possibility of joint development will be pursued by the Village.

4. Establishment of an Air Quality Monitoring Station in the Village.

This project would result in the establishment of NYSDEC air quality monitoring station within the Village.

Although NYSDEC does not recognize any point source emissions of concern to the Village, there are conditions within and around the Village that may contribute to the degradation of air quality. These conditions include idling automobile traffic at Village intersections particularly during railroad rush hours, a major arterial highway that is often congested, one Superfund site (the County Landfill) that emits methane and another that emits hydrocarbons (PCB Lagoon), and the location of the major switching station for Metro-North and Amtrak diesel trains. Emissions from these sources, coupled with the differences in elevation within the Village, and the proximity of Indian Point Nuclear Power Plant and Charles Point Garbage Plant may result in an air quality problem. For this reason, the establishment of an air monitoring station is appropriate. This project is consistent with Policies 2,5,6,10,21,27,30,39-43.

Cost Estimate

The costs involved in getting NYSDEC to establish an air quality monitoring station in the Village would be administrative in nature costs and would most

probably be incorporated into the existing administrative budget of the office of the Village Manager. The Village Manager would be responsible for initiating and maintaining correspondence with the DEC.

5. Study of Village Stormwater System

This project would result in a complete inventory of the Village's stormwater collection and outfall/disposal system. Once the entire system has been inventoried, an analysis should be performed on many, if not all discharge points, to determine the presence of toxic or hazardous material. There are serious concerns regarding the materials which collect in the stormwater system and are discharged directly into the coastal waters without treatment. This project is consistent with Policies 2,15,16,18,30-33,36-38.

This project would entail working closely with the Village Engineer to review records and survey the Village to locate all culverts, basins, and end-of-pipe discharges. Once the inventory has been completed, end of pipe discharge locations would be randomly sampled to determine if the discharge contained any toxic or hazardous materials which could degrade the quality of the coastal waters. If such discharge is identified, measures would have to be taken or enforced to mitigate and eventually eliminate the discharge of such pollutants.

Cost Estimate

The cost of this study could range between \$35,000 and \$100,000 depending on how much actual field verification was required to complete the inventory. The study would have to be conducted by a private engineering firm with supervision from the Village Engineer. The study would result in recommendations for improvement of the existing system to control the discharge of untreated stormwater in the coastal waters. The costs associated with each recommendation or mitigative action, cannot be determined at this time and will be generated as the recommendations are formed.

6. Designation of Route 9, within the boundaries of Croton, as a NYS Scenic Road.

The intent of the NYS Scenic Roads Program is to assist in protecting, preserving and enhancing the scenic resources of New York State. Highways are considered a significant cultural feature in the landscape of the State and provide important visual and physical access to that landscape. In order to protect, preserve, and enhance scenic roads, local governments may exercise their option to participate in the intergovernmental Scenic Roads Program.

This project would consist of following NYSDEC's nomination procedures with the intent of having Route 9 within the boundaries of the Village designated a

Scenic Road by the Commissioner of NYSDEC. NYSDEC procedures consist of the following:

- a) Step One: Forming a nominating group to collect the necessary data
- b) Step Two: Take a preliminary tour of the road
- c) Step Three: Preparing a narrative description of the predominant cultural, historic, and natural features of the local landscape
- d) Step Four: Having volunteers survey the road using the system provided in NYSDEC's manual
- e) Step Five: Compiling the Nomination File which consists of nominated roads together with survey information and a resolution of support. All files must be sent to NYSDEC.

NYSDEC would then review the file and assess the road corridor. Three criteria used in assessing the road corridor are: 1) road condition, 2) regional attributes, and 3) local support. NYSDEC then makes a recommendation on the candidate road (in this case, Route 9).

The Village Board could designate a nominating group who would be responsible for fulfilling the procedural requirements listed above. After designation by NYSDEC, a management plan should be prepared by the Village (and approved by NYSDEC) which will ensure protection of the resources on which the scenic road designation is based. The plan would include action plans for short- and long-term responses to development pressures, a description of the legal authorities and methods that would be used to implement the program, and a schedule for its adoption and implementation. This project is consistent with Policies 5,6,11,17-20,23,24,25,27,39.

The following is excerpted from Organization and Delegation Memorandum #85-37 Department Policy and Procedures for Statewide Scenic Roads Program, NYSDEC, 1985, and explains NYSDOT's role when a community participates in the Scenic Roads Program. This information is extremely appropriate in this case since the road in question is a NYSDOT arterial highway.

"The New York State Department of Transportation (DOT) has the ability to affect the scenic qualities of corridors traversed by State highways. DOT will apply, within the limits of budgetary constraints, Design and Maintenance procedures that are consistent with the Scenic Road designation with the following understandings:

- a) DOT has the authority and responsibility for management of the highway right-of-way of all State highways designated by Scenic Roads.
- b) Proposed guidelines for suggested design and maintenance practices along scenic roads must be submitted to DOT for approval.
- c) DOT will provide NYSDEC with reports and plans on major projects for review and comment, within DOT project development and design processes and will seek early NYSDEC input. There will be no separate review process established for the highways designated as Scenic Roads.
- d) A Scenic Roads designation shall not preclude DOT from designing and constructing necessary highway safety improvements.

It recognizes that the actions of other State agencies may positively or negatively affect the scenic quality of designated highway corridors. NYSDEC will encourage other State agencies and authorities, including the Department of Commerce, Department of State, Office of Parks, Recreation and Historic Preservation, and the Department of Motor Vehicles, to take actions that are consistent with the character of the Scenic Road."

The Scenic Road designation is re-evaluated every four years by NYSDEC to determine if the road still meets the criteria for designation. If not, it can be eliminated from the Scenic Roads Program. However, NYSDEC will attempt to identify those agencies responsible for allowing degradation of the scenic road corridor and encourage correction of any problem.

Cost Estimate

The costs involved in implementing this project would be relatively minor in that the procedural requirements for nomination can be undertaken by a committee of volunteers. Village staff could be of assistance in the copying and/or typing of necessary forms. Based on the above, this project is estimated to cost up to \$1,000 depending on the amount of staff time allocated to assist the committee and the costs involved in printing the forms and narrative as required.

7. Preparation of a Traffic and Roadway Conditions Study.

This project would result in a study of the roadway capacities within the Village and levels of service at critical Village intersections in order to recommend improvements to facilitate vehicular movements. Data collection would include traffic counts on major Village roadways, as well as analysis of the geometrics of the roadways and critical intersections. Counts are utilized in determining

levels of service and then appropriate mitigation measures or improvements would be recommended to bring the roadway/intersections back to an acceptable operating condition.

This study would be incorporated into the Master Planning Process and should help guide future land use decisions within the Village.

Cost Estimate

The Village would have to contract for such a traffic study with a private consulting firm since expertise in the traffic engineering field is required. Cooperation between Village staff and the professional traffic engineer would be required in terms of data collection. However, the study would likely be under the direct supervision of the Village Board or Planning Board. The cost of such a study could range from \$25,000 to \$50,000 depending on the detail required. The study would result in recommendations for improvements to the roadway network. The costs associated with each recommendation cannot be determined at this time and will be generated in recommendations we formed.

8. Preparation of Amendments to 1977 Master Plan to Ensure Consistency with the LWRP.

This project would involve review of the 1977 Master Plan of the Village to determine if amendments are necessary to update the plan and make it consistent with the policies of the LWRP.

Included in the process of updating the Master Plan would be the preparation of basic studies or background information on the natural and human environment of the Village. Such studies include soils and geologic analysis, demographic, infrastructure and traffic analysis. The Village should utilize the traffic study results to guide future land use decisions.

This project is consistent with almost all of the LWRP policies as it will guide development within the Village and will ensure development is consistent with the policies of the LWRP, as is required.

The Master Plan was adopted by the Village Planning Board in 1977. Since then, there have been amendments to the Zoning Law that are not reflected in the Master Plan. These amendments include the following laws adopted in 1988: Park, Recreation and Education District Law, Protection of Wetlands, Water Bodies and Watercourses Law, and the Erosion and Sediment Control Law and the Water Supply Protection Rules and Regulations and Steep Slope Development Regulations adopted in 1989. In addition, the Plan should respond to concerns regarding the two Superfund sites within the coastal zone area and the impact of

the location of these sites on coastal waters. The Plan should also specify identified locally important viewsheds that should be maintained. It does appear that the 1977 plan can be readily updated and reviewed for consistency with the policies of the LWRP. Recommendations for changes to the Land Use Plan and Zoning Map would be the implementation techniques of the Master or Comprehensive Plan process.

The 1977 plan would serve as the basis for review and development of a Comprehensive Plan for the Village. Amendments to the 1977 Plan, as well as the addition of new information and natural resource information, would be necessary to update the Plan. In effect, this project would ensure that the planning and development guidelines and documents for the Village are consistent.

Cost Estimate

Village Law maintains that preparation of the Master Plan is the responsibility of the Planning Board. If the review of the 1977 Master Plan and the preparation of amendments were conducted by a committee of Village volunteers, or by the Planning Board, the cost of this project would be limited to actual printing costs and any legal fees associated with the preparation of local laws to amend the Zoning Law. This estimate, without legal costs, could cost up to \$10,000.

The Village could also contract with a private consulting firm to assist a committee of volunteers or the Planning Board, as appropriate, in the review and preparation of an update. If this is the case, the estimate could range from \$30,000 to \$60,000 depending on the amount of additional research necessary to complete the plan.

SECTION V

IDENTIFICATION OF TECHNIQUES FOR LOCAL IMPLEMENTATION OF THE PROGRAM

IDENTIFICATION OF 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. A discussion of existing local laws and regulations and an assessment of whether they implement the LWRP is contained in Section A. New laws and amendments are identified in Section B.

A. EXISTING LAWS

The policies stated in the Village of Croton-on-Hudson Draft Local Waterfront Revitalization Program have been compared with provisions of existing Zoning Law, Zoning Map and Subdivision Regulations.

Analysis of Zoning Map/Zoning Districts (Articles II and II)

Existing zoning along the Hudson Riverfront section of the Village includes WC (Waterfront Commercial), LI (Light Industrial), and RA-40 (One Family Residence) districts. The location of the Waterfront Commercial District facilitates the siting of water-dependent uses near the Hudson River, which is consistent with LWRP Policies 1, 2, and 4. Croton Point is currently zoned RA-40, residential 4,000 square foot, but has been designated as a site appropriate for the PRE designation (See Policy 1).

The Waterfront Commercial Zone provides for marinas, subject to the issuance of a special permit, and other recreational and commercial facilities, as well as provide for commercial fishing activity which would be consistent with LWRP Policies 1, 2, and 4. The mix of zoning districts in the Hudson Riverfront area can feasibly provide for mixed-use development, which is encouraged by the Draft LWRP, Policies 4, 21, and 22. The Village owns approximately 24 acres of land underwater, primarily around Senasqua Park. This land is zoned WC.

The Center Village area provides for a wide range of low to high density residential uses, as well as commercial and office uses. Higher residential densities in this area will also concentrate development around existing utilities and services consistent with Policy 5. Residential densities in this area range from RA-40 to multi-family residential.

Further development within the Village permitted under existing zoning may create impacts as viewed from Croton Point Park, Croton Bay and the Hudson River and may conflict with Policies 1, 18, 23, 24 and 25 regarding scenic and visual protection of the waterfront area. Many of the commercial zoning districts are located along Riverside Avenue, which will provide a complement to Waterfront Commercial uses in this area and yet be readily accessible to residents living in the Center Village area.

The North End section of the Village is zoned primarily for lower density residential use, RA-40 and there is an Office District (O-2) located along Riverside Avenue. Because of the grade differential within the Village, this portion of the Village can be viewed from Senasqua Cove and the Hudson River. These lower intensity uses have less impact on the visual quality of this area. Development in this area should address Policies 24 and 25 regarding scenic features.

Analysis of Zoning Law

Waterfront Commercial (WC District), Section 3.11

Although the description in the Zoning Law does not specifically identify commercial fishing as a use, the outline of permitted and special permit uses allows commercial fishing facilities, including docks, repair, and retail sales. Commercial fishing, as well as numerous other uses listed in the WC District would address Policy 2 regarding the siting of water-dependent uses and Policy 10 regarding commercial fishing. Additionally, the WC District would provide for public access to the waterfront in two ways:

- o Requiring a dry land right-of-way or easement provided for free public access
- o Permits private residential, commercial, or other developments to provide commercial, recreational activities and other services where the public would have visible and active access to the waterfront.

As such, these provisions address Policies 19, 20 and 22 regarding public access.

Mixed Use District: (MDU) (Sections 3.13)

The MDU District provides for mixed-use development both on the waterfront and in other portions of the Village where such districts may be located:

- o MDU (Multiple Development Use)

Mixed-uses could provide a strengthening of the economic base of the waterfront area. A mixed-use district might include traditional uses such as commercial fishing or waterfront recreational uses combined with residential use. Location of the MDU should address Policy 5 regarding development near existing utilities and services. Appropriate design and landscaping of MDU district developments could significantly address Policies 24 and 25 regarding visual integrity of the waterfront area.

Other Implementation Techniques within Existing Zoning Law

Numerous provisions for public access are indicated in the Zoning Law. Other than in the mixed-use districts, the following districts also provide for public access:

- o LI (Light Industrial) District
- o WC (Waterfront Commercial) District
- o PRE (Park Recreation and Education) District, although not currently designated on the Zoning Map

A landscaped buffer area is required in the LI District. Wide buffer areas are included along any lot line adjacent to a residential zone or buffer or along other lot lines. Buffering and landscaping enhances the visual quality of development in this district and is consistent with Policy 25.

The various districts, especially Waterfront Commercial, and mixed- use development districts address Policy 1 in many aspects since they provide for a variety of use and revitalization of existing buildings and vacant land.

Section 3.14.4 describes the objectives and goals of granting special permits which address the quality of development on a site-specific basis. These goals ensure that a special permit use will provide:

- o a layout which is accessible and creates no significant traffic hazards,
- o a development compatible with the orderly development of other uses allowed in the zoning district,
- o zoning district structures, site layout and landscaping which complements existing uses in that area of the Village, and
- o preservation of the site's natural resources.

Accordingly, the requirements of a special permit can be used to address LWRP Policies 18 and 25 regarding natural, man-made and visual resources. Numerous policies relating to protection of natural resources and site development would be addressed subsequent site plan review under Article X.

Section 5.6 of the Zoning Law provides performance standards which address smoke, noise, liquid and solid wastes, vibration, odors, glare and other nuisances. These standards should serve to protect the integrity of a development on the land which it is situated. They will also protect adjacent lands, adjacent waterfront and wildlife areas. As such, they address Policies 4, 7, 8, 9, 11, 24, 25, 39, 40, 41, 43 and 44, which are concerned with natural and scenic resources.

Other Village Laws

Local Law No. 9 contains restrictions on the use of power boats in Croton River. Passed in 1977, this law prohibits the operation of boats in the River in excess of 5 nautical miles per hour or the operation of any boat on the River so as to create a wake. In addition, the law prohibits the mooring of boats, unless operated by persons owning property along the River, as well as prohibiting the discharge of sewage, garbage and other waste material in the River. This law is consistent with Policies 7, 8, 9, 19, 20, 21, 30, and 34.

The Village's Subdivision Regulations also contain requirements for the provision of recreation land, proper drainage and erosion control, traffic generation and street layout, and landscaping or tree plantings. The Subdivision Regulations are consistent with Policies 1, 2, 5, 6, 7, 8, 11, 12, 13, 14, 17, 19, 22, 32, 33, 38, 41, and 43. Additionally, the required length and steps of review provide for consideration of characteristics of each development as it relates to the entire LWRP.

B. NEW LAWS

Below is a description of recently passed, proposed and suggested Village laws and regulations that would further address the policies of the LWRP beyond the scope of the existing Zoning Law, Zoning Map and existing regulations.

Recently Passed Village Laws

Law No. 11 entitled to "Erosion and Sediment Control" was passed in 1988. This Law addresses numerous policies in the LWRP which address protection of waterbodies and drainage entering adjacent lands. Specifically, this Law is to safeguard persons, protect property, prevent damage of the environment and promote public welfare by guiding, regulating, and controlling the design, construction, use and maintenance of any development or other activity which disturbs or breaks the topsoil or results in the movement of earth on land situated in the Village. The policies which are addressed by this Law are 3, 7, 11, 12, 13, 14, 17 and 37. Further regulations and specifications should be provided to address management of stormwater drainage to accompany these regulations.

Another recently passed law addresses the protection of wetlands, waterbodies, and watercourses and would also address many of the policies noted above and also Policies 30, 31, 33, 34, 35, and 36. The Wetlands, Waterbodies, and Watercourses Protection Law provides for the designation and protection of wetlands and other waterbodies, and regulations regarding levels of development, setbacks, vegetation, and reclamation.

The Village Law creating the PRE (Park, Recreation and Education) District supports Policies 1, 19, 20 and 22 regarding public access. This Law is designed to provide for public parks, recreational activities, schools and other educational facilities, nature preserves, land and wildlife sanctuaries and similar uses by designating sites a PRE zone and identifying permitted uses.

Potential areas to be designated as PRE Districts are listed in reference to Policy 1G of the LWRP.

Local Law No. 5 of 1989, Approving Water Supply Protection Rules and Regulations is intended to protect and preserve the purity and quality of the Village's ground water and establishes protective land use regulations for the watershed affecting the well field.

This Local Law promotes Policies 5, 12, 23, 24, 25, 34, 38, and 39 and is generally applicable to all policies regarding development and the provision of potable water.

Local Law No. 6 of 1989, Regulating the Development of Land Containing Steep Slopes was designed to establish safety standards to meet when constructing in areas where the average slope is greater than 15 %. This Law is consistent with Policies 5, 11, 12, 13, 14, 17, 23, 24, 25, 33, and 34.

Suggested Areas for New Regulation

By the adoption of the LWRP, the Village commits itself to the policy that new regulations and master plan amendments shall be consistent with the goals and policies of the local program.

1. Recently adopted NYS Navigation Law Legislation (February 13, 1989) gave authorization for the Village of Croton-on-Hudson to adopt, amend and enforce local laws, rules and regulations with respect to restricting and regulating the manner of construction and location of boathouses and docks in any waters within or bounding the Village to a distance of 1500 feet from the shoreline. The Village should prepare a Harbor Management Plan and legislation which would regulate such construction and location of docks or boathouses within the Hudson and Croton Rivers. Local legislation (Local Law No. 9 of 1977) is in place regarding the use of power boats in the Croton River. Amendments to Local Law No. 9 may still be necessary regarding the use of boats once water-borne. These laws serve to increase the compatibility between the types and usage of recreational vehicles in the coastal waters, as well as give the locality regulatory authority over development activities related to boating uses along the water's edge.
2. The existing Village Master Plan, prepared by 1977, should be amended and updated to be consistent with other planning documents and current conditions within the Village.
3. Public access should continue to be incorporated in the RA-40 zoning district. These could be included in the RA-40 zoning district and in the subdivision regulations for developments along the Hudson and Croton Rivers. In addition, the provision of public access on properties zoned MDU should be encouraged. If necessary, the Village could make such a provision a condition of approval. Special permit approval could also be made contingent on the provision of public access. All development proposals will be reviewed during the planning process for availability and accessibility of pedestrian and vehicular access to the waterfront. Development of these regulations would address

Policies 19 and 22 and other policies relating to public access and preservation of scenic areas.

4. Provisions for flood protection should be included in Village regulations. These should address any floodplain areas along the Hudson and Croton Rivers and associated tributaries and wetlands. These provisions would address Policies 11, 12 and 14 regarding erosion and flood hazard. Floodplain protection would address hazards to existing and proposed development and natural features along these shorelines.
5. The Village will, at some point in the future, consider whether to propose additional properties for inclusion in the National or State Registers of Historic Places, but will do so only with the prior written consent of the owners of such properties.
6. All non-residential districts and mixed-use development districts should include provisions for buffering and landscaping, as appropriate. Buffering and landscaping regulations would address a development's boundary along the shoreline and along residential districts. Regulations should not be so stringent to create visual obstruction from view of the waterfront. Buffering would not only serve to address policies regarding the visual integrity of the area such as Policy 25, but would also address erosion and sedimentation policies as a secondary effect.

C. CONSISTENCY REVIEW PROCEDURES

The Village has completed its approval of the LWRP by establishing a consistency law that assigns responsibility for consistency determinations to all Village agencies. "Agency" means any board, agency, department, office, other body or officer of the Village of Croton-on-Hudson.

- (1) Whenever a proposed action is located in the Coastal Area, the local agency, prior to approving, funding or undertaking the action, must make a determination that it is consistent with the policy standards and conditions set forth in the Local Waterfront Revitalization Program (LWRP) of the Village of Croton-on-Hudson. No action in the Local Waterfront Area shall be approved, funded or undertaken without such a determination.
- (2) An Environmental Assessment Form (EAF) and Coastal Assessment Form (CAF) shall be completed prior to the approval or funding of an action to be located in the coastal area. Whenever a Village agency receives an application it shall, within three (3) days, refer such application to the Waterfront Advisory Committee (WAC). This referral shall occur as early as possible in the case of a direct action.
- (3) The WAC shall, within fourteen (14) days of receipt of such application, consider the consistency of the action with the policies contained within the adopted LWRP and make a Preliminary Consistency Recommendation.

WAC's preliminary recommendation of consistency indicates that the action is not consistent, the WAC may work with the applicant or the agency to identify measures which would make the action consistent.

- (4) The WAC shall have twenty (20) days to make its final recommendation of consistency to the agency after either a negative declaration under SEQRA or after the notice of completion of the DEIS. Failure by the WAC to make a recommendation upon a referral within the allotted time period shall not preclude the lead agency, Village Board or Zoning Board of Appeals from making a consistency determination for the action.
- (5) The Lead Agency shall make its determination of consistency based on the EAF, CAF, WAC recommendations if received, and any other pertinent information available. No determination shall be made before the end of time permitted the WAC for recommendations. Actions substantially hindering LWRP policy standards and conditions shall not be undertaken, unless there are no reasonable alternatives, adverse impacts are minimized or the result is of overriding public benefit.

Other Actions

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. Such requests and any responses should also be sent to the Village Board. This information is extremely important for the Village since it has, within its boundaries, two Superfund sites (Croton Point Landfill and Metro North Lagoon) known to have leached materials into coastal waters. This land is thus considered a high-risk area for water quality contamination.

Another action the Village could undertake would involve review of the existing leasing arrangement between the Village and the Croton Yacht Club to determine if alternative arrangements could yield more revenue which could be dedicated for improvements to public recreational facilities. The current lease is for \$1,800 per year plus 60 percent of the gross revenue from boat storage above the first \$4,000. The lease expires in 1992.

The Village will also participate in the planning process to ensure public access easements are provided across private property. Such negotiations could also be accomplished through a third party or private land trust.

TABLE 2

GENERAL FLOW CHART FOR SEQR AND LWRP REVIEW

SEQR- State Environmental Quality Review
LWRP- Local Waterfront Revitalization Plan
WAC- Waterfront Advisory Committee
EAF- Environmental Assessment Form
CAR- Coastal Assessment Form
DEIS- Draft Environmental Impact Statement

Action Proposed

SEQR: A Village agency receives an application for a Type 1 or Unlisted Action.

SEQR: Lead Agency is established.

LWRP: The Village agency has three (3) days to refer the CAF/EAF to the WAC after the establishment of the Lead Agency.

LWRP: The WAC has fourteen (14) days from receipt of the CAF/EAF to make a Preliminary Consistency Recommendation and provide advice on any additional information that may be needed for consistency review.

SEQR: Determination of Significance

SEQR: Negative Declaration or Conditioned Negative

LWRP: WAC has 20 calendar days after filing of a declaration to submit a written Recommendation of Consistency.

LWRP: Lead Agency, Village Board (if Lead Agency is other than a Village agency), or ZBA (if action involves a use or area variance and is Type 1 or Unlisted), shall issue a Determination of Consistency within 10 days of receipt of the WAC's Recommendation of Consistency.

SEQR: Positive Declaration

LWRP: WAC participates in public review and comment period. WAC has 20 calendar days after the Notice of Completion of the DEIS to submit a Recommendation of Consistency.

LWRP: Lead Agency, Village Board (if Lead Agency is other than a Village agency), or ZBA (if action involves a use or area variance and is Type 1 or Unlisted), shall issue a Determination of Consistency when it issues its findings statement or within 10 days of receipt of the WAC's Recommendation of Consistency.

TABLE 3

PROJECT CONSISTENCY TABLE

PROJECT	POLICIES WHICH ARE CONSISTENT
Croton Gorge Trail	1, 5, 6, 9, 16-22, 25
Alternative Recreation Sites	1, 2, 5, 6, 9, 11-14, 16-22, 25, 34, 39
Croton Bay/Boat Ramp Improvements	1, 2, 5-9, 11-22, 25, 28, 34, 39
Air Quality Station	2, 5, 6, 10, 21, 27, 30, 39-43
Study of Stormwater System	2, 5-16, 18, 30-33, 36-38
Route 9 Scenic Road	5, 6, 11, 17-20, 23-25, 27, 39
Traffic Study	1, 2, 5, 9, 16, 19, 20, 21, 22, 41, 43
Amend Master Plan	1, 2, 5-9, 11-25, 27, 30, 32, 33, 44

TABLE 3a

POLICY IMPLEMENTATION TABLE

LOCAL LAW	POLICIES WHICH ARE IMPLEMENTED
PRE	1, 19, 20, 21, 22
Power Boat Regulations	2, 7, 8, 10, 19, 20, 21, 41
Erosion and Sediment Control	2, 4, 5, 10, 11, 12, 13, 14, 15, 16, 17, 23, 24, 25, 35, 37
Restricting Development on Steep Slopes	5, 11, 12, 13, 14, 17, 23, 24, 25, 33, 34
Water Supply Protection Rules and Regulations	5, 12, 23, 24, 25, 34, 38, 39
Protection of Wetlands, Waterbodies, and Watercourses	4, 5, 7, 8, 9, 11, 12, 13, 14, 16, 17, 23, 24, 25, 30, 31, 32, 33, 36, 37, 38, 39, 44

SECTION VI

IDENTIFYING STATE AND FEDERAL ACTIONS AND PROGRAMS 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 can not 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 CONSISTENT WITH THE LWRP

1. State Actions

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 programs.
- 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

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 License
 - 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 ALCOHOL ABUSE

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval program:
 - 2.01 Letter Approval for Certificate of Need
 - 2.02 Operating Certificate (Alcoholism Facility)
 - 2.03 Operating Certificate - Community Residence
 - 2.04 Operating Certificate (Outpatient Facility)
 - 2.05 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

NEW YORK STATE BRIDGE AUTHORITY [regional agency]

- 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.

DEPARTMENT OF COMMERCE

- 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.

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.

EDUCATION DEPARTMENT

- 1.00 Facilities construction, rehabilitation, expansion, demolition, or the funding of such activities.
- 2.00 Permit and approval program:
 - 2.01 Certificate 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 Wholesaler of Drugs and/or Devices
 - 2.07 Registered Wholesaler-Repacker of Drugs and/or Devices
 - 2.08 Storekeeper's Certificate

ENERGY PLANNING BOARD AND ENERGY OFFICE

- 1.00 Preparation and revision of the State Energy Master Plan.

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 Clear Air Act.
- 3.00 Facilities construction, rehabilitation, expansion, 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 Funding assistance for issuance of permits and other regulatory activities (New York City only).
- 6.00 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.
- 7.00 Marine Finfish and Shellfish Programs.
- 8.00 New York Harbor Drift Removal Project.
- 9.00 Permit and approval programs:
 - Air Resources
 - 9.01 Certificate of Approval for Air Pollution Episode Action Plan
 - 9.02 Certificate of Compliance for Tax Relief - Air Pollution Control Facility
 - 9.03 Certificate to Operate: Stationary Combustion Installation; Incinerator; Process, Exhaust or Ventilation System
 - 9.04 Permit for Burial of Radioactive Material
 - 9.05 Permit for Discharge of Radioactive Material to Sanitary Sewer
 - 9.06 Permit for Restricted Burning
 - 9.07 Permit to Construct: a Stationary Combustion Installation; Incinerator; Indirect Source of Air Contamination; Process, Exhaust or Ventilation System
 - Construction Management
 - 9.08 Approval of Plans and Specifications for Wastewater Treatment Facilities
 - Fish and Wildlife
 - 9.09 Certificate to Possess and Sell Hatchery Trout in New York State
 - 9.10 Commercial Inland Fisheries Licenses
 - 9.11 Fishing Preserve License
 - 9.12 Fur Breeder's License
 - 9.13 Game Dealer's License
 - 9.14 Licenses to Breed Domestic Game Animals
 - 9.15 License to Possess and Sell Live Game
 - 9.16 Permit to Import, Transport and/or Export under Section 184.1 (11-0511)

- 9.17 Permit to Raise and Sell Trout
- 9.18 Private Bass Hatchery Permit
- 9.19 Shooting Preserve Licenses
- 9.20 Taxidermy License
- Lands and Forest
- 9.21 Certificate of Environmental Safety (Liquid Natural Gas and Liquid Petroleum Gas)
- 9.22 Floating Object Permit
- 9.23 Marine Regatta Permit
- 9.25 Navigation Aid Permit
- 9.27 Permit to Use Chemicals for the Control or Elimination of Aquatic Insects
- 9.28 Permit to Use Chemicals for the Control or Elimination of Aquatic Vegetation
- 9.29 Permit to Use Chemicals for the Control or Extermination of Undesirable Fish
- Marine Resources
- 9.32 Digger's Permit (Shellfish)
- 9.33 License of Menhaden Fishing Vessel
- 9.34 License for Non-Resident Food Fishing Vessel
- 9.35 Non-Resident Lobster Permit
- 9.36 Marine Hatchery and/or Off-Bottom Culture Shellfish Permits
- 9.37 Permits to Take Blue-Claw Crabs
- 9.38 Permit to Use Pond or Trap Net
- 9.39 Resident Commercial Lobster Permit
- 9.40 Shellfish Bed Permit
- 9.41 Shellfish Shipper's Permits
- 9.42 Special Permit to Take Surf Clams from Waters Other Than the Atlantic Ocean
- Mineral Resources
- 9.24 Mining Permit
- 9.26 Permit to Plug and Abandon (a non-commercial oil, gas or solution mining well)
- 9.30 Underground Storage Permit (Gas)
- 9.31 Well Drilling Permit (Oil, Gas, and Solution Salt Mining)
- Regulatory Affairs
- 9.43 Approval - Drainage Improvement District
- 9.44 Approval - Water (Diversion for) Power
- 9.45 Approval of Well System and Permit to Operate
- 9.46 Permit - Article 15, (Protection of Water) - Dam
- 9.47 Permit - Article 15, (Protection of Water) - Dock, Pier or Wharf

- 9.48 Permit - Article 15, (Protection of Water) - Dredge or Deposit Material in a Waterway
- 9.49 Permit - Article 15, (Protection of Water) - Stream Bed or Bank Disturbances
- 9.50 Permit - Article 15, Title 15 (Water Supply)
- 9.51 Permit - Article 24, (Freshwater Wetlands)
- 9.52 Permit - Article 25, (Tidal Wetlands)
- 9.53 River Improvements District approvals
- 9.54 River Regulatory District approvals
- 9.55 Well Drilling Certificate of Registration
- Solid Wastes
- 9.56 Permit to Construct and/or Operate a Solid Waste Management Facility
- 9.57 Septic Tank Cleaner and Industrial Waste Collector Permit
- Water Resources
- 9.58 Approval of Plans for Wastewater Disposal Systems
- 9.59 Certificate of Approval of Realty Subdivision Plans
- 9.60 Certificate of Compliance (Industrial Wastewater Treatment Facility)
- 9.61 Letters of Certification for Major Onshore Petroleum Facility Oil Spill Prevention and Control Plan
- 9.62 Permit - Article 36, (Construction in Flood Hazard Areas)
- 9.63 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
- 9.64 Permit Granted (for Use of State Maintained Flood Control Land)
- 9.65 State Pollutant Discharge Elimination System (SPDES) Permit
- 9.66 401 Water Quality Certification
- 10.0 Preparation and Revision of Air Pollution State Implementation Plan.
- 11.0 Preparation and Revision of Continuous Executive Program Plan.
- 12.0 Preparation and revision of Statewide Environmental Plan.
- 13.0 Protection of Natural and Man-made Beauty Program.
- 14.0 Urban Fisheries Program.
- 15.0 Urban Forestry Program.
- 16.0 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 and grants or easement of land under water, 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.

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 Subdivision
- 2.17 Shared Health Facility Registration Certificate

DIVISION OF HOUSING 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.

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 OF MENTAL RETARDATION AND DEVELOPMENT 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 or facilities.

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 Commissions)

- 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 or 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 Preservation 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 programs.
- 10.0 Urban Cultural Parks Program.

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 SOCIAL 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 STATE

- 1.00 Appalachian Regional Development Program.
- 2.00 Coastal Management Program.
- 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.

DIVISION OF 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)

NEW YORK STATE THRUWAY AUTHORITY

- 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.
- 3.00 Permit and approval programs:
 - 3.01 Advertising Device Permit
 - 3.02 Approval to Transport Radioactive Waste
 - 3.03 Occupancy

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 systems
 - (c) Highway and parkway maintenance facilities
 - (d) Barge Canal
 - (e) 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
- 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 Permits for Use and Occupancy of N.Y. State Canal Lands [except Regional Permits (Snow Dumping)]
- 4.10 Real Property Division Permit for Use of State-Owned Property
- 5.00 Preparation or revision of the Statewide Master Plan for Transportation and sub-area 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 and other activities related to the management of land under the jurisdiction of the Corporation.
- 2.00 Construction, rehabilitation, expansion, or demolition of residential, commercial, industrial, and civic facilities and the funding of such activities, including but not limited to actions under the following programs:
 - (a) Tax-Exempt Financing Program
 - (b) Lease Collateral Program
 - (c) Lease Financial Program
 - (d) Targeted Investment Program
 - (e) Industrial Buildings Recycling Program

DIVISION OF YOUTH

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

2. Federal Actions

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, breakwaters, 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, upgradings or abandonments of railroad facilities or services, in or affecting the State's coastal area.

- Coast Guard

2.00 Location and design, construction or enlargement of Coast Guard stations, bases, and lighthouses.

3.00 Location, placement or removal of navigation devices which are not part of the routine operations under the Aids to Navigation Program (ATON).

4.00 Expansion, abandonment, designation or anchorages, lightering areas or shipping lanes and ice management practices and activities.

- Federal Aviation Administration

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

- Federal Highway Administration

6.00 Highway construction.

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 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 Approval of plans for improvements made at private expense under USACE supervision pursuant to the Rivers and Harbors Act of 1902 (33 U.S.C. 565).
- 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 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 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 of 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 Section 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 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)).

- Mineral Management Service

- 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.

INTERSTATE COMMERCE COMMISSION

- 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.

NUCLEAR REGULATORY COMMISSION

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

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	Resources Conservation and Development Loans
10.415	Rural Rental Housing Loans
10.416	Soil and Water Loans
10.418	Water and Waste Disposal Systems for Rural Communities
10.419	Watershed Protection and Flood Prevention Loans
10.422	Business and Industrial Loans
10.423	Community Facilities Loans
10.424	Industrial Development Grants
10.426	Area Development Assistance Planning Grants
10.429	Above Moderate Income Housing Loans
10.430	Energy Impact Area Development Assistance Program

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

10.904	Watershed Protection and Flood Prevention
10.901	Resource Conservation and Development
10.902	Soil and Water Conservation
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 Intermodal Transportation
- 11.509 Development and Promotion of Domestic Waterborne Transport Systems

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 Housing
- 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

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 - Redeemable Preference Shares
- 20.506 Urban Mass Transportation Demonstration Grants
- 20.509 Public Transportation for Rural and Small Urban Areas

GENERAL SERVICES ADMINISTRATION

- 39.002 Disposal of Federal Surplus Real Property

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)

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

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 Planning Agency
- 66.452 Solid Waste Management Demonstration Grants
- 66.600 Environmental Protection Consolidated Grants Program Support Comprehensive Environmental Response, Compensation and Liability (Super Fund)

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

1. US Army Corps of Engineers

- a. The dredging and stabilization of the Hudson River shoreline would require a US Army Corps of Engineers permit. This federal agency is involved in any action involving the Hudson River.

2. Conrail

- a. Cooperation of the Consolidated Rail Corporation and henceforth, Metro-North, is essential to the provision of public access, i.e. granting of public access easements and the maintenance of the water quality of the Croton River and Bay and the Hudson River.

3. Metro-North

- a. Improving the scenic quality of the visual access to Croton River and Bay and the Hudson River requires painting and/or refinishing existing deteriorated railroad-related structures and tunnels by painting and providing adequate buffering or screening around structures. Metro-North should incorporate clean-up, i.e., painting and screening of these structures into their maintenance program or cooperate with local agencies in the maintenance of views to the Rivers.
- b. Use of low sulphur fossil fuels to decrease air quality emissions.

4. NYS Office of Parks, Recreation and Historic Preservation

- a. Any proposed linkage of shoreline public parks should be designed and constructed with the cooperation and assistance of the Taconic State Park Commission. This trail system would eventually link with other local trails to become part of a greenway system along the entire spans of the eastern side of the Hudson River throughout Westchester County.

5. NYS Department of Environmental Conservation

- a. Any improvements along the Croton River and Bay would require approval from the DEC since the Croton River and Bay are classified as "B" streams, suitable for primary recreation, but not for use as a water supply source.
- b. DEC should continually supply water quality monitoring results to the Village.

- c. Establishment of NYSDEC air quality monitoring station within Croton to determine the level of ambient air quality standards and if contraventions of such standards have occurred.
- d. Communication with the Village should be encouraged regarding future land use decisions on Croton Point Park.

6. NYS Department of Transportation

Scenic Roads designated under Article 49 of the Environmental Conservation Law and which are under the jurisdiction of the State DOT should be maintained and managed in accordance with their scenic character. Adoption by the DOT of Scenic Roads, Maintenance and Management Guidelines would help ensure the continued scenic quality of the highway right-of-way.

7. NYS Office of General Services

Prior to any development 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 lands.

SECTION VII

CONSULTATION WITH OTHER AFFECTED FEDERAL, STATE, REGIONAL AND LOCAL AGENCIES

CONSULTATION WITH OTHER AFFECTED FEDERAL, 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.

Federal Consultations

No direct Federal consultation has taken place at this time.

State Agency Consultations

New York State Department of State
New York State Department of Environmental Conservation
New York State Department of Parks, Recreation, Historic Preservation

Local/Regional Consultations

Village of Croton-on-Hudson Planning Board
Village of Croton-on-Hudson Moratorium Committee
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 Department of Public Works
Village of Croton-on-Hudson Department of Parks and Recreation
Westchester County Department of Planning
Westchester County Department of Health

- B. Review of Draft LWRP by State, Federal and Local Agencies

The Draft LWRP (with DEIS) 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/DEIS pursuant to the NYS Waterfront Revitalization of Coastal and Inland Waterways Act. Copies of the Draft LWRP and DEIS 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, which are detailed in the Final Environmental Impact Statement.

SECTION VIII
OBTAINING LOCAL COMMITMENT

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With the exception of the 1970-71 season, when the average rainfall was 1,000 mm, the annual rainfall was in the range 1,200-1,400 mm. The annual rainfall was 1,200 mm in 1970-71, 1,300 mm in 1971-72, 1,400 mm in 1972-73, 1,300 mm in 1973-74, 1,200 mm in 1974-75, 1,300 mm in 1975-76, 1,400 mm in 1976-77, 1,300 mm in 1977-78, 1,200 mm in 1978-79, 1,300 mm in 1979-80, 1,400 mm in 1980-81, 1,300 mm in 1981-82, 1,200 mm in 1982-83, 1,300 mm in 1983-84, 1,400 mm in 1984-85, 1,300 mm in 1985-86, 1,200 mm in 1986-87, 1,300 mm in 1987-88, 1,400 mm in 1988-89, 1,300 mm in 1989-90, 1,200 mm in 1990-91, 1,300 mm in 1991-92, 1,400 mm in 1992-93, 1,300 mm in 1993-94, 1,200 mm in 1994-95, 1,300 mm in 1995-96, 1,400 mm in 1996-97, 1,300 mm in 1997-98, 1,200 mm in 1998-99, 1,300 mm in 1999-00, 1,400 mm in 2000-01, 1,300 mm in 2001-02, 1,200 mm in 2002-03, 1,300 mm in 2003-04, 1,400 mm in 2004-05, 1,300 mm in 2005-06, 1,200 mm in 2006-07, 1,300 mm in 2007-08, 1,400 mm in 2008-09, 1,300 mm in 2009-10, 1,200 mm in 2010-11, 1,300 mm in 2011-12, 1,400 mm in 2012-13, 1,300 mm in 2013-14, 1,200 mm in 2014-15, 1,300 mm in 2015-16, 1,400 mm in 2016-17, 1,300 mm in 2017-18, 1,200 mm in 2018-19, 1,300 mm in 2019-20, 1,400 mm in 2020-21, 1,300 mm in 2021-22, 1,200 mm in 2022-23, 1,300 mm in 2023-24, 1,400 mm in 2024-25, 1,300 mm in 2025-26, 1,200 mm in 2026-27, 1,300 mm in 2027-28, 1,400 mm in 2028-29, 1,300 mm in 2029-30, 1,200 mm in 2030-31, 1,300 mm in 2031-32, 1,400 mm in 2032-33, 1,300 mm in 2033-34, 1,200 mm in 2034-35, 1,300 mm in 2035-36, 1,400 mm in 2036-37, 1,300 mm in 2037-38, 1,200 mm in 2038-39, 1,300 mm in 2039-40, 1,400 mm in 2040-41, 1,300 mm in 2041-42, 1,200 mm in 2042-43, 1,300 mm in 2043-44, 1,400 mm in 2044-45, 1,300 mm in 2045-46, 1,200 mm in 2046-47, 1,300 mm in 2047-48, 1,400 mm in 2048-49, 1,300 mm in 2049-50, 1,200 mm in 2050-51, 1,300 mm in 2051-52, 1,400 mm in 2052-53, 1,300 mm in 2053-54, 1,200 mm in 2054-55, 1,300 mm in 2055-56, 1,400 mm in 2056-57, 1,300 mm in 2057-58, 1,200 mm in 2058-59, 1,300 mm in 2059-60, 1,400 mm in 2060-61, 1,300 mm in 2061-62, 1,200 mm in 2062-63, 1,300 mm in 2063-64, 1,400 mm in 2064-65, 1,300 mm in 2065-66, 1,200 mm in 2066-67, 1,300 mm in 2067-68, 1,400 mm in 2068-69, 1,300 mm in 2069-70, 1,200 mm in 2070-71, 1,300 mm in 2071-72, 1,400 mm in 2072-73, 1,300 mm in 2073-74, 1,200 mm in 2074-75, 1,300 mm in 2075-76, 1,400 mm in 2076-77, 1,300 mm in 2077-78, 1,200 mm in 2078-79, 1,300 mm in 2079-80, 1,400 mm in 2080-81, 1,300 mm in 2081-82, 1,200 mm in 2082-83, 1,300 mm in 2083-84, 1,400 mm in 2084-85, 1,300 mm in 2085-86, 1,200 mm in 2086-87, 1,300 mm in 2087-88, 1,400 mm in 2088-89, 1,300 mm in 2089-90, 1,200 mm in 2090-91, 1,300 mm in 2091-92, 1,400 mm in 2092-93, 1,300 mm in 2093-94, 1,200 mm in 2094-95, 1,300 mm in 2095-96, 1,400 mm in 2096-97, 1,300 mm in 2097-98, 1,200 mm in 2098-99, 1,300 mm in 2099-00, 1,400 mm in 2100-01, 1,300 mm in 2101-02, 1,200 mm in 2102-03, 1,300 mm in 2103-04, 1,400 mm in 2104-05, 1,300 mm in 2105-06, 1,200 mm in 2106-07, 1,300 mm in 2107-08, 1,400 mm in 2108-09, 1,300 mm in 2109-10, 1,200 mm in 2110-11, 1,300 mm in 2111-12, 1,400 mm in 2112-13, 1,300 mm in 2113-14, 1,200 mm in 2114-15, 1,300 mm in 2115-16, 1,400 mm in 2116-17, 1,300 mm in 2117-18, 1,200 mm in 2118-19, 1,300 mm in 2119-20, 1,400 mm in 2120-21, 1,300 mm in 2121-22, 1,200 mm in 2122-23, 1,300 mm in 2123-24, 1,400 mm in 2124-25, 1,300 mm in 2125-26, 1,200 mm in 2126-27, 1,300 mm in 2127-28, 1,400 mm in 2128-29, 1,300 mm in 2129-30, 1,200 mm in 2130-31, 1,300 mm in 2131-32, 1,400 mm in 2132-33, 1,300 mm in 2133-34, 1,200 mm in 2134-35, 1,300 mm in 2135-36, 1,400 mm in 2136-37, 1,300 mm in 2137-38, 1,200 mm in 2138-39, 1,300 mm in 2139-40, 1,400 mm in 2140-41, 1,300 mm in 2141-42, 1,200 mm in 2142-43, 1,300 mm in 2143-44, 1,400 mm in 2144-45, 1,300 mm in 2145-46, 1,200 mm in 2146-47, 1,300 mm in 2147-48, 1,400 mm in 2148-49, 1,300 mm in 2149-50, 1,200 mm in 2150-51, 1,300 mm in 2151-52, 1,400 mm in 2152-53, 1,300 mm in 2153-54, 1,200 mm in 2154-55, 1,300 mm in 2155-56, 1,400 mm in 2156-57, 1,300 mm in 2157-58, 1,200 mm in 2158-59, 1,300 mm in 2159-60, 1,400 mm in 2160-61, 1,300 mm in 2161-62, 1,200 mm in 2162-63, 1,300 mm in 2163-64, 1,400 mm in 2164-65, 1,300 mm in 2165-66, 1,200 mm in 2166-67, 1,300 mm in 2167-68, 1,400 mm in 2168-69, 1,300 mm in 2169-70, 1,200 mm in 2170-71, 1,300 mm in 2171-72, 1,400 mm in 2172-73, 1,300 mm in 2173-74, 1,200 mm in 2174-75, 1,300 mm in 2175-76, 1,400 mm in 2176-77, 1,300 mm in 2177-78, 1,200 mm in 2178-79, 1,300 mm in 2179-80, 1,400 mm in 2180-81, 1,300 mm in 2181-82, 1,200 mm in 2182-83, 1,300 mm in 2183-84, 1,400 mm in 2184-85, 1,300 mm in 2185-86, 1,200 mm in 2186-87, 1,300 mm in 2187-88, 1,400 mm in 2188-89, 1,300 mm in 2189-90, 1,200 mm in 2190-91, 1,300 mm in 2191-92, 1,400 mm in 2192-93, 1,300 mm in 2193-94, 1,200 mm in 2194-95, 1,300 mm in 2195-96, 1,400 mm in 2196-97, 1,300 mm in 2197-98, 1,200 mm in 2198-99, 1,300 mm in 2199-00, 1,400 mm in 2200-01, 1,300 mm in 2201-02, 1,200 mm in 2202-03, 1,300 mm in 2203-04, 1,400 mm in 2204-05, 1,300 mm in 2205-06, 1,200 mm in 2206-07, 1,300 mm in 220

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OBTAINING LOCAL COMMITMENT

An important aspect of developing a Local Waterfront Revitalization Program is ensuring the support and cooperation of all agencies that will be affected by the Program. The Department of State requires that these agencies be consulted during preparation of the plan and that such consideration be included in the program document.

During development of the Waterfront Program, the Waterfront Revitalization Committee has sought the advice, comments and cooperation of a number of local, regional, State and federal agencies.

Local Commitment

The Waterfront Revitalization Committee, a Committee composed of concerned citizens interested in the waterfront area, has insured that those agencies that may be affected by the implementation of the program were actively involved in its development.

The Village of Croton-on-Hudson, on January 11, 1988 declared a moratorium on residential and commercial development in order to complete revisions to the Zoning Ordinance and prepare new local laws aimed at protecting the natural environment of the Village. During the moratorium, the Moratorium Committee drafted the following local laws:

- Historic Preservation Local Law
- Parks, Recreation, Education District Local Law (PRE)
- Erosion and Sediment Control Local Law
- Steep Slope Local Law
- Water Supply Protection Rules and Regulations Local Law
- Protection of Wetlands, Waterbodies and Watercourses Local Law

Of these proposed local laws, three were enacted into law during the moratorium. These include the PRE Local Law, Erosion and Sediment Control Local Law, and the Protection of Wetlands, Waterbodies and Watercourses Local Law. Recently, the Village adopted Laws regarding development on Steep Slopes and Water Supply Rules and Regulations. The Draft LWRP reinforces the need for such legislation and emphasizes the commitment of the Village to addressing local coastal area concerns to ensure protection of the Croton environment.

In 1988, the Village retained Matthew D. Rudikoff Associates, Inc. as consultants to work with the Waterfront Revitalization Committee to help complete the Local Waterfront Revitalization Program. In order to assure local commitment the public was involved in the following ways:

1. A committee of concerned citizens was appointed in 1987 to prepare the LWRP. This committee, named the Waterfront Revitalization Committee (WRC), met regularly and drafted the initial version of Section II, Inventory and Analysis.

2. The WRC met with the Mayor, Village Manager, and other Village representatives at appropriate intervals during development of the draft LWRP.
3. The WRC kept elected officials and interested groups informed on an on-going basis through correspondence and personal communication.
4. Local news media has been and will be provided with background information on the LWRP to form the basis for news articles and editorials.
5. An informational public hearing was held on August 7, 1989, for public review of the draft LWRP-DEIS.
6. The SEQR process including adequate time for public comment on the DEIS was carefully followed.

Revisions to the Draft LWRP were prepared and reviewed by the WRC based on comments by NYSDOS and the public. The final LWRP was reviewed by the Village Board of Trustees for adoption.

The Final LWRP and EIS were adopted by the Village Board of Trustees.