

USE AND PRESERVATION STUDY
FOR THE
LOWER CROTON RIVER

Prepared for the
Four Municipalities Most Concerned
by the Open Space Institute

June 1972

TABLE OF CONTENTS

FOREWORD by Robert Boyle

	Pages
I. INTRODUCTION	1 - 3
Origin, Objectives and Summary of Study	
II. KEY FACTS ABOUT THE LOWER CROTON	4 - 10
III. GETTING A YEAR AROUND WATER FLOW	11 - 14
Action Priority #1	
IV. SECURING SCENIC EASEMENTS	15 - 21
Action Priority #2	
V. PERMANENT PROTECTION FOR RIVERFRONT LANDS NOW IN MUNICIPAL OWNERSHIP	22
Action Priority #3	
VI. CLEAN-UP AND DEVELOPMENT OF LAND ON CROTONVILLE SIDE OF RIVER	23 - 25
Action Priority #4	
VII. STUDY PROGRAM FOR PARADISE ISLAND	26
Action Priority #5	
VIII. STUDY PROGRAM FOR BLACK ROCK	27
Action Priority #6	
IX. STUDY PROGRAM FOR SILVER LAKE PARK	28
Action Priority #7	
X. RECOMMENDED ORGANIZATIONAL STEPS	29 - 31

FOREWORD

by Robert Boyle
Author of THE HUDSON RIVER
A Natural and Unnatural History

Some years ago, the English poet Laurie Lee wrote: "It seems impossible to write about a river without calling at times on terms of the simplest symbolism. For the river is an archetype covering much that is fundamental in human experience and aspiration. It is the flow of time, the stream of consciousness, the blood of earth, the milk of man, the very cycle of life in its endless motion between land, sea and sky."

Lee was writing about the Thames, but his words fit the Lower Croton River. The lower Croton is a gem, and we must save it.

The New York that the Dutch settled more than 300 years ago was Eden. With the passage of time, much has been laid waste. Here and there are precious fragments of our natural heritage, and of all of them the lower Croton stands in the front rank. The little river valley is of immense interest to geologists, botanists, ornithologists and marine biologists. It also has great attraction for the public, be a person interested in canoeing, swimming, fishing or just seeking out the unspoiled. My primary interest is fishing, and I would prefer to fish the lower Croton than any other river I know. I don't say this as a Croton chauvinist, but because it is the truth. As John Lane, a New York City schoolteacher and striped bass fisherman, put it one evening this spring, "The Croton rates A with four stars to the tenth power."

As this report makes clear, the number one action priority for the river is getting a year round flow of water. This is key. As of now, we have a great river in the spring and dry mudholes in the summer above the tidal limits.

With an assured flow of water, swimming and canoeing would be much enhanced. It is rather difficult to paddle over bare rocks or take a swan dive into dry sand. An assured flow of water would also increase biological productivity that would add to human enjoyment. As of now, beneficial aquatic insects, such as mayflies, stoneflies and dragonflies, either are sparse or lacking because there is not sufficient flow in the summer to permit them to live underwater as nymphs. A healthy dragonfly population would do much to keep down mosquitos which, by contrast, can thrive in present conditions. A year round flow of water would also help restore the lower Croton, from the tide limit up to the dam, as a trout stream.

In sum, water for the Croton is essential, and we should take the necessary steps to obtain it. In a world where more is being wrecked than saved, we can at least locally reverse the trend, to the benefit of the river, ourselves and those who follow after.

I.

INTRODUCTION

Origin, Objectives and Summary of Study

During the past quarter century the Lower Croton River has been the subject of much serious concern often including meetings, reports and studies under the auspices of various groups and individuals. That's because more and more people in the area around the river - especially in the two towns and two incorporated villages whose lands are traversed by the river - have recognized its unique ecological significance, its recreational and natural resource importance and its exceptional scenic beauty.

In this connection, special tribute must be paid to the Cortlandt Conservation Association - a great many of whose members live in the incorporated village of Croton-on-Hudson - for its consistent efforts over many years to protect and enhance the river. Their work and many contacts made by them has been of great help in the preparation of this study.

The origin or basic idea for doing an action oriented study sponsored by the four municipalities with significant land along the river came from Joel Gingold who is a resident of the village, a member of the Cortlandt Conservation Association and Chairman of the Cortlandt Conservation Advisory Council, an official municipal agency. Thanks to his efforts all four municipal governments voted to share in support of this study and its objectives.

The value of official sponsorship by these four municipalities (namely: the Towns of Cortlandt and Ossining, and the Incorporated Villages of Croton-on-Hudson and Ossining) is apparent in the following summary of the study's main objectives.

It is essential to point out that this is not to be an in-depth ecological survey of the 3 1/2 miles of the river and its banks. Neither does it pretend to do anything more than lightly sketch the river's history geology, vegetation and animal life or the demographic characteristics of the area's present and future population.

Essentially, the report is focused on the following series of seven action-oriented objectives all of which are designed to protect the environmental benefits of the river and to develop its potential for serving the active and passive recreational needs of the four municipalities who have made this report possible.

Just as important as the definition of these high priority objectives is the report's concluding section which offers practical suggestions for organizational and operational steps needed to make sure an effective program is mounted and maintained to assure a continuing effort for the use and preservation of the river.

SUMMARY OF THE STUDY OBJECTIVES

1. A research, legal and political action program designed to get the guarantee of a constant minimum flow of water from the New York City owned Croton Reservoir. (legal action program already underway)
2. An action program to secure scenic or conservation easements in perpetuity from landowners along the river. The dedication of development rights would probably be to the County, the State, the Nature Conservancy or a comparably solid national conservation organization.

3. An action program to provide permanent legal assurance that lands now preserved under municipal ownership for active or passive recreation and/or scenic open space will not be used in the future for any other purpose.
(Legal research now underway)
4. An action program for a clean-up of the land just north of the old Route 9 bridgehead on the east side of the river (town of Ossining) and possible development in that general area of a facility for small boat launching, fishing, picnic supplies and refreshments.
5. A study program for development of the 5-acre Paradise Island recently acquired by the Village of Croton-on-Hudson.
6. A study program to encourage the acquisition and development of the privately owned Black Rock swimming area as some kind of community facility, possibly to include the development of a second beach on the east bank (Town of Cortlandt).
7. A study program for a modest expansion and development of the Silver Lake Park facilities on both sides of the river including the long strip of woodland above and north of the beach area for hiking and nature study.

II

KEY FACTS ABOUT THE LOWER CROTON

The Lower Croton River (so designated herein to clearly distinguish it from other sections of river above the Croton Lake Reservoir area) extends from the New Croton Dam (completed in 1906) to the river's confluence with the Hudson River at the Penn Central Railroad bridge - a distance of about 3 1/2 miles.

In spite of its shortness this is one of the most beautiful and unusual watercourses in the entire metropolitan region. Beautiful, because of its spectacular waterfall origin when the Croton Dam is overflowing, its deep gorge areas where ancient pines, hemlocks and hardwoods have flourished undisturbed for scores of years, its islands, rapids and estuarine marshlands which provide habitat for a wide variety of fresh and salt water biological communities.

We searched for a way to convey some of the charm, excitement and color of this amazing stretch of river. Best idea we came up with was to quote liberally from Robert Boyle's book, THE HUDSON RIVER, and we think the passages that follow are like several personal visits to the Croton River during the various seasons of the year.

"The Croton is unique. Thanks to the hand of man, it is now, in its lower reaches, only three and a half miles long. Unlike other tributaries, the lower Croton receives tidal salt water from the Hudson for a length of about a mile, and thus marine creatures, such as barnacles, blue crabs, mud crabs, and grass shrimp, are able to move into the Croton River and mingle with freshwater animals. The Croton is sort of a mini-estuary, a mini-Hudson, but with the important difference that it is much cleaner than the Hudson, and so what is obscured from sight by turbidity in the main river may be clearly observed in the Croton. And there are some unusual sights to see.

As intended by nature in post-glacial times, the Croton originally drained a watershed of 375 square miles in Westchester Putnam, and Dutchess counties and a small sliver of western Connecticut. The unimpeded Croton ran with such volume that some early sailors are said to have mistaken it for the main stream of the Hudson. In 1842, the Croton was dammed six miles above its mouth to provide drinking water for Manhattan. This dam, only sixty feet high, checked part of the flow, which was diverted to Manhattan through the Croton Aqueduct, which parallels the Hudson down to Yonkers and serves nowadays as a trail for hikers. The dam blocked fishes from moving up the Croton, but water continued to pour into the lower Croton the year round, and the river remained viable in its final six-mile run to the Hudson. According to Everett Garrison of Ossining, who comes from old Hudson Valley Dutch stock and who makes what some anglers deem the finest split-bamboo fly rods in the world, this six-mile length of the lower Croton was one of the finest native brook trout streams in all North America. But the thirst of New York City grew and in 1906 the huge New Croton Dam was finished. The New Croton Dam is three and a half miles upstream from the mouth of the Croton. It is 153 feet high, and instead of merely checking part of the flow, it chokes it off completely during the summer months. As a result of construction of the dam, the native brook trout were unable to survive, for much of the lower Croton dries up and the few holding pools that remain simmer in the summer sun. The old check dam built in 1842 lies buried in the enlarged and deepened reservoir near the Taconic Parkway bridge.

Even so, the Croton River comes to life each spring. In March, the level of the Croton Reservoir slowly begins to rise behind the Croton Dam, and suddenly water begins to thunder into the barren Croton below. The torrent bends trees that have taken root in the dry riverbed, and hundreds of carp that have sought refuge in the holding pools are battered to death on rocks and cast up on shore. The Croton roars over small dams, bounces over rapids, and glides through deep holes with waters almost as clear as those in the headwaters of the Hudson. It makes a run through

a magnificent granite gorge lined with hemlocks, curves around a couple of islands, and then enters the Hudson at the marsh by the Penn Central bridge. Smelt and alewives running up the Hudson to spawn detect the outpouring of fresh water and swim up the Croton. In late March and early April, I like to hold onto a hemlock growing on a rock ledge and look down at the fishes swarming upstream. The alewives gather in a pool below the rapids, heading into the strong current. Suddenly several of them will dash forward and throw themselves into the white water. If they fail, they try again and again until they make it. They are so numerous that I have scrambled down the slope and caught them with my hands. Alewives do not need to feed on their spawning run. Their bodies are rich with fat stored at sea, but I have seen them chase tiny, silver-bodied flies and spoons, and someday perhaps I succeed in catching them; I have hooked them only accidentally. All during April, alewives continue to jam into the Croton, and their pilgrimage soon attracts striped bass that have been slumbering on the bottom of the Hudson. Sometime in mid-April, stripers move into the Croton. Ravenous, they gorge themselves on the alewives, swallowing them whole. The bass chase the herring in towards shore, they attack from underneath in the pools, they surge after them in the rapids. A pool in the Croton is sometimes alive with swirling bass seeking their prey. I used to think the Hudson striper was a somewhat lazy fish, rather like a kingly easy going lion, taking what fortune and the current swept it ways with a minimum of exertion. But this is not the case in the Croton. After a long winter sleep, the bass are in a frenzy and few obstacles seem to stop them. I have seen them in the white flume of the small dam at Black Rock on the Croton, swimming broadside to the current as easily and gracefully as terns in a high wind. Occasionally, a striper will arch its back, and with little effort vault the flume and swim upstream. Indeed, stripers go all the way to foot of the New Croton Dam

* * *

In late June or July, depending on the amount of runoff, water ceases flowing over the Croton Dam, and stretches of the Croton begin to dry up completely. The stripers retreat down to the tidal Croton, but not all of them make it. I once saw a five-pounder covered with fungus, probably brought about by injury in an attempt to escape, slowly dying in the pool below the foot of the Croton Dam. It swam aimlessly in two feet of water, ignoring streamers and jigs cast its way.

As summer continues, the holding pools shrink in size. The Croton is dying. In the fall, I often visit the river. There is the sad spectacle of beleaguered fish penned in small pools, but a walk along

the dry bed is not without interest. I can see where the force of water in ages past has thrust huge boulders downstream and sculpted rocks into bizarre shapes. Rattling around among the bare ribs of the river, I study the holes where bass lie in the spring, and on occasion I find an old lure caught on a rock or stuck in the side of a log.

Of course, the tidal Croton never dries up. Water sloshes back and forth from the Hudson, and fishes move in and out with the tide. Up until the 1920s, weakfish (*Cynoscion regalis*) used to come up the Hudson as far as the mouth of the Croton. Nowadays weakfish are very scarce even on the coast of Long Island and New Jersey. It appears that commercial fishermen working North Carolina waters have been taking baby weakfish as part of their catch of "industrial" fish to be ground up for fertilizer or catfood, and thus weakfish do not get a chance to grow and move north along the coast. Similarly, the spot (*Leiostomus xanthurus*), once a very popular fish in the Hudson, has not been seen in fifteen or twenty years. In fact, they are seldom found north of Norfolk, Virginia. In the Hudson Valley, where many people hold by tradition, spot are commonly called "Lafayettes," because there is said to have been a great run of them up the river when General Lafayette visited New York in 1824.

The marsh at the mouth of the Croton has been disfigured over the years. Part of it has been filled in for the new Route 9 bridge, and other acreage has succumbed for the Harmon railroad station parking lot. Then there are squishy deposits of oil from the Penn Central pipe in the bottom muds. Until ten or fifteen years ago, bald eagles still nested on the Ossining shore of the marsh. In fact, the nearby estate of the late Captain Joseph Patterson, publisher of the New York Daily News was called Eagle Park. The principal vegetation of the marsh is cattail (*Typha latifolia*) and common reed (*Phragmites communis*), neither particularly rich in food but both useful in stabilizing wetlands, absorbing runoff, and providing shelter for wildlife. In the tidal sloughs there are fiddler crabs (*Uca minax*), and so far as I have been able to determine, the Croton marsh marks the furthest penetration of this species up the Hudson. There are muskrats, mink and snapping turtles, and birds often seen include the kingfisher (*Megaceryle alcyon*) and the great blue heron (*Ardea herodias*). For the past few years, anywhere from a half dozen to a dozen mute swans (*Cynus olor*) have frequented the marsh, and I dread the day when they venture into the Central Oil slick. They are often taken for the whistling swan (*Olor columbianus*) a rare bird in the region. This whistling swam in native to North America, while the mute swan is an importation from Europe first introduced into the Hudson Valley in 1910, probably as an ornamental bird for estate ponds. The mute swans stay as long as possible through the winter. In the cold weather, they have a knack for finding open water at spring holes in marshes or near the abutments of the Tappan Zee Bridge. In the fall, there are flights of ducks and geese near the mouth of the Croton, and they often settle down in the river."

The river provides a variety of recreational facilities with a considerable potential for expansion.

At the foot of the New Croton Dam the county-owned park area is becoming more and more popular for passive recreation at all seasons.

Downstream about 3/4 of a mile is the northern edge of the Black Rock swimming facility - a privately owned and operated club with a membership of about 200 families. Black Rock includes a sand beach about fifty (50) feet deep and 400 to 500 feet long, dressing rooms, snack bar and a generous parking area.

About 1 1/4 miles farther downstream is Silver Lake Park - a recreation area owned and operated by the Village of Croton-on-Hudson for its residents. In addition to beach facilities and parking space the park includes about 20 acres along the west bank of the Croton River Gorge. This strip has a trail and can be used by the village schools for environmental and ecological study.

South of the Silver Lake Park area is a narrow cut where the river runs over a rock fall which produces rapids when the dam is overflowing. This marks the northern limits of the river for small boats.

Perhaps 1/4 mile below this rock cut are three islands. One, much larger than the other two, is the 5-acre Paradise Island recently acquired by the Village. It is a beautiful island, heavily wooded and already used by day campers and occasionally for overnight camping.

From Paradise Island down to the new Route 9 bridge constitutes the lower third of the river. Much of this area is in marshland of which a considerable portion is already in protective hands. It is the river's prime fishing area with striped bass in the spring and early summer being the major attraction. It is also the area which deserves very special attention in order to provide needed facilities for fisherman and at the same time improve the appearance of the shoreline especially on the eastern shore.

Rough estimates of the potential per season public use of the various active and passive recreation areas from the Cornell Dam to the Hudson are:

Croton Dam Park	
Year round	32,000
Black Rock Club	
Summer (Dec. Day to 9/15)	15,000
Other	1,000
Silver Lake Park	
Summer	20,000
Other Seasons	5,000
Paradise Island	
Summer	Estimated use
Other Seasons	not yet possible
Below Paradise Island	
Water fishing	5,000
Without facilities	2,000

Even a casual analysis of the foregoing "use statistics" indicates that the Croton River is not the kind of a natural area to get heavy use...not in terms of the large recreation areas, like Mohansic State Park, Blue Mountain Reservation, Baird State Park, etc. But there is no doubt it will become more and more popular. Word-of-mouth advertising generated by its almost fanatical devotees along with the country's rapidly increasing population will take care of that. The general aim of this study is to maintain as much as possible of the river's natural beauty while providing active and passive recreation facilities for the area's residents.

III

ACTION PRIORITY #1

GETTING A GUARANTEED YEAR AROUND WATER FLOW FOR THE LOWER CROTON RIVER

Optimum public use of the Lower Croton River for area residents and permanent protection of its natural resource advantages as well as its scenic beauty - depend to a large extent on the ability of the four municipalities involved in this study to negotiate with New York City and secure a guaranteed daily water flow for the river for the period from June 15 to October 15 each year.

Ever since the completion of the New Croton Dam in 1906 the Lower Croton River has frequently been without a constant minimum supply of water. Indeed, during the long drought of 1962-1967 it had almost no water even in the spring.

Generally the spring flow stops by the middle of June. Then, during the hot summer months of July, August, and most of September there is no release of water just when it is most needed not only by humans but also by a wide range of plant and animal life.

In 1971, Dr. Edward Buckley of the Boyce-Thompson Institute for Plant Research began a three-year study of the vegetation in the river's estuarine marshes. Here's what Dr. Buckley has to say about the effect of the "no flow" water periods on the estuary's amazing range of biological communities.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, Inc.

1086 NORTH BROADWAY

YONKERS, N. Y. 10701

GEORGE L. McNEW
DIRECTOR

June 15, 1972

TO WHOM IT MAY CONCERN:

A request has been made for a statement regarding detrimental effects of the "no flow" periods in the Croton River.

I am the project leader for a staff of four scientists and six assistants at the Boyce Thompson Institute for Plant Research, Inc., 1086 North Broadway, Yonkers, New York 10701. We have a three year renewable grant from the Rockefeller Foundation to develop an Ecological Zoning Plan for the Hudson River estuary south of Poughkeepsie. This is a "compartment model" of biological communities in the estuary to define their significance in the assimilation of sewage nutrients, the detoxification of pollutants and the support of marine, estuarine and fresh water biological resources.

Estuaries are significant to many marine and fresh water species (including commercial species) because a small, but essential, early portion of their life cycle must be completed in brackish water. During this April, May and June we have been recording the movement of many species from the marine environment and from the fresh water environment as they move to what we refer to as the "bulls eye" of the estuary, that region of approximately 1/4 ocean salinity. In the Hudson River estuary, the "bulls eye" centers around Croton Point. The range of the "bulls eye" for most species extends from Hastings, N. Y. to Peekskill, while for some organisms that require very low salinity (e.g. the well publicized striped bass), the nursery extends to Newburgh and beyond.

The Croton River is by nature an estuary off an estuary. During the spring, while the dam overflows, the river contains a large estuarine population which is unduly limited by food because the supporting biological community is poorly developed (as explained below). Nonetheless, it is filled with young organisms because the habitat is excellent (centrally located in the "bulls eye" with a salinity gradient down to fresh water toward the dam). Because the river is shallow, the tidal effect moves the salinity gradient back and forth appreciably but the estuarine organisms move with it either by some form of swimming or by selecting appropriate tidal currents. However, when the fresh water flow stops, the shallow estuary, ^{with in} (in) a few tidal cycles, is converted to a bay with salinity comparable to that of the Hudson River at Croton. For certain organisms this is satisfactory, while for those still demanding low salinity it is lethal.

The transition to "no flow" for the fresh water organisms near the Croton dam is even more drastic. The biological communities that develop in the upper river in the spring are oriented to life in a river, and are mostly organisms that hang on and catch what goes by. Suddenly they are on dry land or living in ponds for which they are poorly suited and die. Pond organisms become established but only the pioneer species because the next river flow washes many of them out into the Hudson.

June 15, 1972

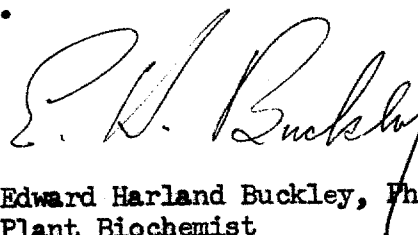
Significant biological communities are complex, interdependent and self correcting. They are stable communities capable of withstanding the environmental stress of urban and industrial areas. They take years to form in a river, a pond, an estuary, or a bay, but they can not form in a habitat that continually changes.

We do not know, nor does anyone else know, the relative significance of the Croton River upon Croton, Harmon and Ossining, upon the Hudson River estuary or upon the metropolitan area in terms of water resources compared to water detoxification, nutrient uptake, water purification, water oxygenation, marine resources, sport fishing, aesthetics, village property values, recreation, etc. Water supply is the only parameter that has been measured so comparison is impossible. However, since metering of water is not required in many areas, the value of water supply is not taken as seriously as it should be.

Currently we are seeking research funds from RANN (research applied to national needs) of the National Science Foundation to investigate such parameters throughout the Hudson Basin cooperatively on a multi-disciplinary, multi-institutional basis. These studies would include evaluations of the Croton River. However, at this time, such studies are merely in the planning stage.

In the interim, common sense dictates that the only stable habitat that can be maintained within the configuration of that river bed is the estuarine habitat. Therefore, if the potential of the "bulls eye" region of the Hudson is to be developed for biological systems that maintain water quality and aesthetics, possibly saving billions of dollars in tertiary sewage treatment facilities (construction of secondary treatment plants alone will cost over 3 billion for the Hudson River estuary), then a continuous flow of fresh water is required to maintain a salt gradient. We can not state the minimum flow required although it would not be a difficult judgement to make. An actual cost-benefit analysis of value obtained per unit of water flow would be expensive and premature at this stage since the interrelationships between the many components or zones of the Hudson River estuary would have to be understood first.

There is a unique role that the Croton River estuary might have to play. We are all aware of the environmental stress that is placed upon organisms in the Hudson. The Croton estuary could be a constant source of restocking to maintain the diversity of organisms needed to keep the biological system balanced, functioning for us and aesthetically acceptable. Also in the event of a major oil spill or other impact, the protected Croton River estuary could act as the primary restocking area for the lower Hudson; but it could do so only if it were maintained as an estuary rather than as a part of Croton Bay and if arrangements were made in advance to cope with such an emergency by increasing the flow at the dam during incoming tides to provide adequate protection throughout the crisis period. No other estuary off the Hudson could serve this function (due to location relative to salinity), and no other estuary is so perfectly protected by a large reserve of excellent water. This rates very serious consideration analogous to an insurance premium as we make plans to widen the navigation channel for larger tankers and plan to tap the Hudson near Poughkeepsie for the New York City and Long Island water supply. It must be remembered that the estuarine biology is an integrated unit which will work for us or against us depending upon the conditions we leave or provide as long as the biological community has access to energy in the form of sunlight and/or organic input.



Edward Harland Buckley, Ph. D.
Plant Biochemist

Certainly the river is at its worst during "no-flow" drought periods. The readily apparent effects are over-used water in the public swimming areas, dried mud where there should be water, odoriferous tidal flats that would otherwise be kept fresher with a constant water flow, too often dead fish stranded in dried up stream areas, and perhaps most serious of all seepage from a few river-front septic systems that would not be significant when there is at least a minimal flow of water in the river. Not apparent, but equally or even more serious, is the damage done to various biological communities on the river's shores that depend on water for their very existence.

There is no doubt that both the governments and the residents of the municipalities involved realize how important it is for New York City to be careful in the husbandry of its water supplies. But there must be very significant doubts about the city's decision to pay no attention to the rights of downstream landowners - including municipal governments responsible for publicly used facilities - to have the minimal supply of water required for health and environmental protection, in any but long periods (more than two years) of drought.

Legal Assistance Available

There is a hope that the city's new Department of Water Resources will be influenced by the current emphasis on environmental protection plus the fact that not one or two but four municipalities are involved - and will be willing to negotiate on the water supply problem.

To direct such negotiations and be equipped with whatever legal research as may be necessary to support basic water flow demands, we have searched for and found an able attorney, Mr. C. Stewart Dickert, with offices in Mount Kisco, New York, who is not only willing but happy to work on this project. He is familiar with the river and belongs to the Croton Watershed Chapter of the well-known fishermen's organization, "Trout Unlimited." If it should be necessary to go to court to secure a minimum guaranteed flow from the New Croton Reservoir then Mr. Dickert would have to receive a fee but has agreed to keep it as low as possible. It is hoped that all of the municipalities involved will agree to share in these moderate legal costs if they should become necessary. One town official already has indicated the probability of his town sharing.

Recommended Information Processes

In order to properly reinforce the effort to obtain a guaranteed daily flow of water through negotiation with the City of New York - even though it is backed with a strong and well researched legal position - it is essential that the cooperating municipalities take certain steps to develop sympathy and support from carefully selected government officials.

1. Get the town boards or village trustees to pass a resolution that establishes the municipalities' support of a guaranteed minimum daily water flow in June, July, and August except in periods of prolonged drought when the reservoir is down to less than 60% of capacity.
2. All landowners on either side of the river should be asked to sign a petition calling upon the City of New York for a guaranteed water flow as stated in (1) above.

3. Copies of the passed resolutions and the signed petitions together with a letter requesting their support for the basic proposition should be circulated to the following county officers:

- a. The County Executive
- b. The County Planning Commission
- c. The Commissioner of Parks and Recreation
- d. The area's County legislators

and to the following N. Y. State Officers:

- a. The Governor
- b. State Senator Gordon
- c. Two assemblymen (if the incumbent is defeated)
- d. Commissioner Henry Diamond of the Dept. of Environmental Conservation
- e. Any others that may be important.

4. Copies of the resolutions, petitions and of any letters of support received from the County or State Officers should be sent to:

- a. Environmental Protection Administration - Chief Administrator Jerome Kretchmer
- b. Commissioner - Department of Water Resources - Martin Lang
- c. Mayor Lindsay
- d. Any other relevant N. Y. City administrative officers

IV

ACTION PRIORITY #2

SECURING SCENIC EASEMENTS FROM PRIVATE LANDOWNERS

While it would be most helpful to have some kind of uniform zoning law for the river enacted by the four municipalities involved in the study, realism indicates that this is not apt to happen. The next best solution to permanent protection of the land immediately adjacent to the river is through conservation or scenic easements. This means getting landowners on both sides of the river to agree to permanently dedicate their right to develop a strip of their land nearest the river to a unit of government: town, incorporated village, county or state. Such an easement would be permanent and "run with the land." It would not affect the landowners' other rights. He could sell, lease or give the land to anyone. His property taxes on the land under easement would be reduced by the difference in value between the land with and without the easement. Furthermore, he could deduct the appraised value of the land as a gift in figuring his taxable income for IRS.

At least one landowner with significant acreage on the river has indicated his willingness to put a scenic easement on his land. There is no doubt that many others would follow if properly educated and intelligently contacted.

It would be most reassuring if similar easements were granted by all municipal owners of waterfront land with whatever special exceptions they might deem necessary.

The organization of a vigorous, all-landowner, scenic easement campaign is essential if we are to succeed in getting current landowners to dedicate development rights on part of their land. Such a campaign should include:

- a. A basic mailing to all riverfront landowners designed to explain and sell.
- b. Phone call follow-ups for appointments.
- c. In some cases small group "selling" sessions.
- d. Recognition publicity for easement donors.
- e. Possibly some kind of permanent recognition plaque or plaques along the river's shore.

A SAMPLE EASEMENT AND COVENANT FOLLOW:

A MODEL "STREAM EASEMENT" PROPOSED BY THE OPEN SPACE INSTITUTE

This indenture, made this _____ day of _____, 19____
by and between _____ residing at _____
_____, party of the first part, and

of _____
party of the second part

W I T N E S S E T H :

WHEREAS, the party of the first part is the owner of premises adjacent to and bordering on the Lower Croton River in the Town of Westchester County, New York, described in Schedule A hereto annexed hereinafter referred to as "the Premises," and

WHEREAS, the party of the first part and other owners of land adjacent to and bordering upon the said Croton River desire to preserve, maintain and enhance the natural beauty, vegetation, wild life and other natural and scenic resources of the area and to protect the area from future urban development, and

WHEREAS, Section 247 of the General Municipal Law of New York provides for the acquisition by any county, city, town or village of interests or rights in real property for the preservation of open spaces, including the acquisition of any development right, easement, covenant or other contractual right with respect to land within such municipality to achieve the purposes therein set forth;

NOW, THEREFORE, in consideration of One Dollar and other good and valuable consideration paid by the party of the second part to the party of the first part, the receipt of which is hereby acknowledged, the party of the first part does hereby grant, transfer and convey to the party of the second part, a scenic and conservation easement with respect to the Premises, to have and to hold said easement, right and interest with respect to the Premises unto the party of the second part, its successors and assigns forever, for the benefit of the public, reserving to the party of the first part, his heirs, personal representatives and assigns, the exclusive right of occupancy and use of the Premises, subject to conditions, covenants and agreements hereinafter set forth, which shall constitute a servitude upon and with respect to the Premises.

The party of the first part, on behalf of himself, his heirs, personal representatives and assigns, covenants and agrees as follows:

1. The Premises will forever be kept open and free of all buildings or other structures, including any billboards or other advertising signs, except as hereinafter set forth.
2. No sewage, industrial waste or other objectionable or offensive material or refuse shall be permitted to be discharged into _____ river from the Premises, nor shall any portion of the Premises bordering said river be used for leeching or for a sewage disposal field, and no dumping or burning of refuse shall be permitted on the premises.

3. No dam shall be constructed in any part of the Croton River within or abutting the Premises.
4. The natural resources of the Premises shall remain undisturbed and to this end no top soil, sand, gravel, rock or minerals shall be excavated or removed therefrom, and nothing shall be permitted to occur on the Premises which would contribute to the erosion of the land, and no commercial lumbering operations shall be permitted on the Premises, and no trees shall be cut or removed, and no other plants or vegetation shall be destroyed or removed, except for the removal of such dead, diseased or decayed trees or vegetation which may be required for conservation of scenic purposes.
5. No building or structure on the Premises nor any part of the Premises shall be used for the conduct of any dangerous, offensive, or noxious trading, business or occupational nor for any use that would constitute a nuisance if it occurred in a residential area.
6. No roadway nor any facility of any public utility other than existing roadways and public utility facilities shall be permitted to be constructed or installed on the Premises, and no existing roadway or public utility facility shall be enlarged or extended on the Premises.
7. No hunting or trapping shall be permitted on the Premises.

The party of the first part reserves the right to maintain, repair, and improve and to replace and reconstruct any existing buildings, structures, roadways or other facilities now existing on the Premises without, however, enlarging or extending any of them. The party of the first part further reserves the right of the exclusive use of the Premises and all buildings, structures and facilities thereon insofar as such use is not inconsistent with the covenants and agreements hereinabove set forth, and the party of the first part may exclude the general public or any person or persons from the use of the Premises.

The party of the second part agrees that while the valuation placed upon the Premises for real estate tax purposes must, in accordance with Section 247 of the General Municipal Law, take into account the limitation on the future use of the land, nevertheless, if, at any time, the Premises shall be condemned by the party of the second part or by any municipality or state or governmental body, then the easement hereby granted shall terminate and all rights and interests in the Premises hereby granted shall revert to the party of the first part, his heirs, personal representatives or assigns, so that as of the time of such condemnation the Premises shall not be subject to the limitation of such easement.

The party of the second part hereby accepts the foregoing grant of easement and the parties hereto agree that the covenants, agreements, conditions and restrictions hereinabove set forth shall in all respects be binding upon the parties hereto, their heirs, personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the party of the first part has duly executed this agreement, and the party of the second part has caused this agreement to be executed on its behalf by its duly authorized officer and its corporate seal to be hereunto affixed, the day and year first above written.

By _____

W I T N E S S E T H :

NOW, THEREFORE, the parties hereto for and in consideration of the mutual covenants herein set forth, each on behalf of himself, his heirs, executors, administrators, successors, and assigns agree with the others and with their respective heirs, executors, administrators, successors, and assigns that the following shall be covenants running with the land described in Appendix A attached hereto and hereby made a part hereof, and that the same shall be enforceable by the parties hereto and each of them and by their respective heirs, executors, administrators, successors and assigns and any of them and by any other owners (and by the successors in title of such owners) of land adjacent to and abutting upon the Bantam River who have heretofore entered or may hereafter enter into covenants in whole or in part identical with or similar to those hereinafter contained, in regard to so much of such land as lies within _____ feet of the nearer bank of said Bantam River bounding said property (or if said property is on both sides of said river, then within _____ feet of each of said banks):

No sewage, industrial waste, or other objectionable or offensive material shall be dumped or discharged into said river upon, over or from such land, in so far as the owner thereof can control the same, nor shall said area be used for leaching or for any sewage disposal field;

No billboards or other outdoor advertising signs shall be erected thereon;

No topsoil shall be removed therefrom;

No commercial lumbering operations shall be conducted thereon;

No sand, gravel, or other minerals shall be excavated therefrom;

No pig pens, slaughter houses, or other structures for the conduct of activities that would be considered a nuisance if conducted in a residential area shall be erected thereon;

No trees shall be cut thereon unless dead, diseased, or decayed or for the better landscaping of the area, or for the improvement of the existing growth;

No roadways shall be constructed, nor shall any existing roadway be substantially altered;

No consent shall be given to the installation or extension of any public utility facilities;

No buildings of any description shall be erected thereon;

There shall be no dumping or burning of refuse thereon;

There shall be no hunting or trapping thereon;

There shall be no stripping of the land in such a way as to contribute to the erosion thereof.

ACTION PRIORITY #3

PERMANENT LEGAL PROTECTION FOR RIVERFRONT
LANDS NOW IN MUNICIPAL OWNERSHIP

One of the questions that often besets those involved in the problems of environmental protection is the one concerning that can be done to make sure - i.e. permanently sure - that municipally owned land which is now used for parks, ball fields, botanical gardens, nature sanctuaries and, in some cases, just simple but beautiful open space is not later on used by the municipalities for public service buildings such as the highway department or sold off in whole or in part for industrial, commercial or residential development and the proceeds applied to some conservation-oriented purpose.

The "in perpetuity" conservation or scenic easement is one answer as previously pointed out. The other is to press the Town Board (or other key municipal board) to pass a resolution guaranteeing that any municipally owned land on or near the river which is now in its natural state will remain that way except for such structures or landscaping as will enhance its natural resource or amenity advantages.

VI.

ACTION PRIORITY #4

CLEAN-UP AND POSSIBLE DEVELOPMENT OF LAND NORTH
OF OLD ROUTE NINE BRIDGEHEAD ON CROTONVILLE SIDE OF RIVER

Up to now most of the concern for the river has been with areas and facilities above Paradise Island. Yet the part of the river that is most used - not just during the summer months but throughout the year - is the portion between the Penn Central Railroad Bridge and the aforementioned island. This the favored area for small boat fisherman. Prior to the Spring of this year (1972) many of the boats were launched from the old bridgehead on the Croton Village side of the river. However, after the agreement (which made it possible for the Village to acquire the 5-acre Paradise Island_ the Van Cortlandt Manor Restoration property - which now owns the lower portion of the old Route 9 concrete highways as well as the old bridgehead - has closed the old road and the bridgehead pending its demolition and subsequent restoration of the entire area to its natural state as a part of the river's estuarine marsh area.

Thus the subject area on the Crotonville or Ossining side of the river becomes important for two reason:

1. Because the present clearly visible miscellany of junk, old trucks, old concrete, brick and other rubble should be cleaned up as soon and as completely as possible.
2. Because somewhere along the shore in the stretch from the old eastern bridgehead to a point 250 to 300 yards to the north it is hoped there could be found a suitable site for a small boat launching facility, car parking and a refreshment stand, all

mainly for the benefit of Croton River fishermen...whose numbers are bound to increase with each passing year.

According to Ossining Town Supervisor, Mr. Van Suetendael, it is possible that the Town of Ossining might be able to get the roadway of old Route 9 and the old Route 9 bridgehead on the east side of the River from New York State its present owner without cost. Such a transfer is especially likely when the state knows that the site would be used as public recreation facility when developed as a boat launching station for the Croton River fishermen. Certainly such a project would be supported by the Compact's four municipalities and by such sportsmen's organizations as Theodore Gordon Fly Fishermen's Association, Hudson River Fishermen's Association and Trout Unlimited.

Development as a launching site would involve moderate expenditures as would maintenance and management during those months of the year when the facility would be in operation. It is suggested that the Park and Recreation Departments of the four Compact municipalities should get together to work out recommendations as to how costs and revenues (from launching fees) might be shared by the participating municipalities - possibly with the help from the sportsmen organizations mentioned above.

Bob Boyle, author of the book, THE HUDSON RIVER, and of the foreword to this report, is probably the Croton River's most active supporter, ardent fisherman and enthusiastic booster. He has come up with many suggestions for the improvement and protection of the river including one that is especially relevant to the operation of the proposed boat launching site. Here's Bob's idea:

Bob suggests that serious consideration be given by the Compact municipalities to engaging a well qualified man as a sort of River Warden or as they are called in England, KEEPER OF THE RIVER. The river warden job would be to patrol the river, check on pollution sources, control abstreperous conduct or littering, unauthorized fire making, use of power boats and assist in the operation of the proposed launching site.

VII.

ACTION PRIORITY #5

A STUDY PROGRAM FOR THE USE AND DEVELOPMENT OF PARADISE ISLAND

This spring the Village of Croton-on-Hudson was able to acquire Paradise Island (5 acres above water and approximately 8.5 acres below water). This is a most important and welcome addition to the village's land holdings along and in the Croton River. As long as Paradise Island was privately owned there was always the chance that it might be developed for residential use...especially if a tie-in could be effected with the existing sewer system or the proposed expanded system for the area.

It is our understanding that the Village Department of Parks and Recreation already has a plan for limited use for hiking, nature study, and possibly day or even overnight camping. In any event, the consensus of opinion seems to indicate that any changes in public use for the Island should be carefully planned and not put into effect until studies have been made of current use policies.

VIII.

ACTION PRIORITY #6

A STUDY PROGRAM TO ENCOURAGE NEW USE AND DEVELOPMENT OF THE PRIVATELY OWNED BLACK ROCK ACREAGE

For twenty years the privately owned Black Rock Beach and Swimming Club has been in operation. Currently, it has about 200 members - most of them holding family memberships involving anywhere from two to six children per family. Thus, with members and their children plus members' guests, the weekly attendance in season will vary from 1000 to 2000. Most of the members live within three miles of Black Rock.

The Black Rock property has been offered to the Village of Croton-on-Hudson at various times over the past ten years at prices reputed to be from \$200,000 to \$500,000. It seems the price goes up with each offering.

Neither the Village of Croton nor the Town of Cortlandt show much interest in making any counter offers nor do either of them show any interest in an attempt to acquire the property through public referendum.

We recommend that a serious effort be made to either:

1. Acquire the property and develop it as a regional recreation center or
2. Try to find some corporate operator who could find a way to use the property without destroying its natural resource values.

IX.

ACTION PRIORITY #7

A STUDY PROGRAM FOR THE FUTURE EXPANSION AND
DEVELOPMENT OF BOTH SIDES OF THE RIVER AT SILVER LAKE PARK

Conversations with officials of Croton Village indicate there is, at the present time, little interest in expanding or developing Silver Lake. It is therefore suggested that this particular study program be deferred until such time as there is a real need for some kind of expansion or development work along the river at this point.

It is possible that some kind of program could be worked out for development of the trail along and above the river for nature and ecological study under the direction of the Croton school system and with help from ECOS, a program for expanding environmental education through cooperation among students, teachers and various community resources. The ECOS program is operated by the Putnam-Westchester Board of Cooperative Educational Services.

X.

RECOMMENDED ORGANIZATIONAL AND OPERATIONAL
STEPS FOR IMPLEMENTATION OF THE HIGH PRIORITY OBJECTIVES

As stated in the opening pages it is most fortunate that this report is jointly sponsored by all four of the municipalities through which the Croton flows en route to its confluence with the Hudson at Croton Bay. Fortunate, because there is already a practical nucleus for the kind of steering committee which seems essential if the report's recommended action programs are to be studied, evaluated, and when agreed upon implemented.

Preliminary discussions with representatives of the compact group indicate that a steering committee - whose suggested composition follows - would be effective and agreeable to all concerned:

One representative of the CAC (or equivalent conservation body) from each municipality	Total 4
One representative of the Town Government from each municipality	Total 4
One writer and/or public relations expert	Total 1
One naturalist, preferably one already experienced in working with high school field workers	Total 1
One lawyer NOT a resident of any of the four municipalities	Total 1
One member of the Cortlandt Conservation Association who has long been associated with the effort to preserve and enhance the river	Total <u>1</u>
	TOTAL 12

This steering committee would be in effect the Croton River Compact. It would meet six times a year - more often if a majority of the members asked for a special meeting.

Its purposes would be:

1. To act as a review board to determine the specific action steps to be implemented on any of the priorities indicated in the report (or for any other priorities that may develop).
2. To act as the coordinating body whenever an action step calls for municipal approval, action-cooperation or appropriation.
3. To approve the preparation, distribution and funding of educational material concerning the Croton River Compact programs. This would include brochures, releases to the press, slides, slide-films, radio and possibly even T.V. as the program develops.

Structure

For each meeting the chairmanship of the CRC could be rotated among the members who are officials of the four municipal governments in the Compact. It is suggested that after four such rotations the CRC may want to elect a chairman to serve for one or two years.

One half of the membership plus one (seven) would be considered a quorum.

Mr. Gabe Frayne, Chairman of the Croton-on-Hudson Planning Board has suggested that the Steering Committee be established with the clear understanding that its life is to be limited to one or two

years. It is his feeling that it will be easier to get good members and that they will work harder if the Steering Committee has this temporary character clearly established. Obviously, if the committee is doing a good job it can be continued after its agreed upon termination date.

ADDENDUM

A recent inventory has been made of all landowners with river frontage in all four municipalities.

Copies of these lists are available to municipal officials in each of the municipalities. Just phone or write Mr. Joel Gingold
55 Nordica Drive
Croton-on-Hudson, N.Y.
10520