

Proposal 12

Site: Turtle Cove, Bronx

Map Number: 24

Project: Restore Tidal Flushing - Bank Regrading

Type: Restoration-Functional

Proposed By: NYC Parks

Description: Tidal flushing will be restored through bank regrading and breaching an old dike near Glover's rock. Salt marsh vegetation will be planted to accelerate establishment.

Turtle Cove is rimmed by a band of salt marsh bordered by Phragmites, evidence of mosquito control ditching earlier in the century. The upland forest contains uncommon swamp white oak and persimmon. Sesame grass, rare in New York State, dominates a small meadow on the east side of the cove. Regrading to reestablish salt marsh will provide extensive habitat for intertidal species and the wildlife who depend on them.

Estimated Cost: \$500,000

Proposal 13

Site: Jamaica Bay /

Map Number:

Project: Artificial Reef

Type: Replacement-Reef

Proposed By: DEC Division of Marine Resources

Description: Placing an artificial reef in an area of Jamaica Bay where the water is relatively deep would provide habitat for recreational fish species which prefer a rocky/hard bottom.

Further evaluation of possible sites needs to be done.

Estimated Cost: Not Given

Proposal 14

Site: Jamaica Bay, Bronx, Staten Island

Map Number:

Project: Phragmites Management

Type: Restoration-Habitat Alteration

Proposed By: DEC Division of Marine Resources

Description: Restoring tidal flow and replacing *Phragmites* dominated habitat with *Spartina alterniflora*, high marsh, and shrub species will increase ecological productivity in these areas. This project will enhance habitat for a variety of biota including birds, marine vertebrates and

invertebrates. The benefits are an increase in all of the functions and values of wetlands and vegetated buffers such as pollutant filtering and primary productivity.

This project would involve selecting areas currently dominated by *Phragmites* and attempt to eradicate or limit the spread of this nuisance species. Activities would include physical alteration of the existing contours and the removal of plant stock. Fencing of these areas would be required to prevent future illegal filling once the area has been restored.

Estimated Cost: \$650,000 for five acres

Fill Removal and Disposal	3 ft fill X 5 acres @ \$5/yd ³	\$211,000
Fencing--Labor	50 days @ \$100/day	\$5,000
Fencing--Materials	5,000 feet @ \$11/foot	\$55,000
Warning Signs and Posts	30 signs @ \$81/each	\$2,430
Obstruction Removal	10 days @ \$2,000/day	\$20,000
Plant Material		
Grass Seeds	250,000 ft ² @ \$15/five lbs	
		\$62,500
Small Shrubs	500 shrubs @ \$25/each	\$12,500
Small Trees	500 trees @ \$25/each	\$12,500
Fertilizer	7,500 lbs @ \$7/25 lbs	\$2,100
<i>Spartina</i> Transplants		\$100,000
Labor for Planting		\$163,350
		<hr/> <hr/>
		\$646,380

Proposal 15

Site: Ranger Road Bulkhead and Navy Pier

Map Number: 8

Project: Restore Fishing Access

Type: Restoration-Use/Access Enhancement

Proposed By: DEC Division of Marine Resources, Gateway National Recreation Area

Description: This project involves rehabilitation of a bulkhead adjacent to the old Navy Pier and the Pier itself, at Floyd Bennett Field. Recreational fishing is limited in Jamaica Bay, this project addresses this deficiency. Site is in the Gateway National Recreation Area and so would need US Parks cooperation. This is one of three similar projects proposed. [See Proposals 24, 25]

Estimated Cost: \$1,000,000

Proposal 16

Site: Jamaica Bay

Project: Restore Fishing Access

Type: Restoration-Use/Access Enhancement

Proposed By: New York City Department of Environmental Protection

Description: The New York City Department of City Planning is completing a comprehensive look at the needs for recreational fishing enhancement in the Bay area and has determined that more area is needed to restore and enhance the recreational use of Jamaica Bay. A number of sites are being considered, with varying capital expenditures needed. When this study is available, some of the projects may be appropriate for consideration.

Estimated Cost: Variable

Proposal 17

Site: Broad Channel

Map Number: 10

Project: Restore Interpretive Kiosk and Bathroom

Type: Restoration-Use/Access Enhancement

Proposed By: DEC Division of Marine Resources

Description: This project site is an area popular for fishing in Broad Channel and involves restoration of an interpretive center/kiosk and a bathroom. Recreational fishing is limited in Jamaica Bay, this project addresses this deficiency. Site is in the Gateway National Recreation Area and so would need US Parks cooperation. This is one of three similar projects proposed.

[See Proposals 23, 24]

Estimated Cost: \$74,000

Proposal 18

Site: Kennedy Airport Runway Extension at JoCo Marsh

Map Number: 11

Project: Install Culverts to Restore Tidal Flow

Type: Restoration

Proposed By: DEC Division of Marine Resources

Description: The Kennedy Airport runway extension effectively interrupts tidal flow for a significant part of Jamaica Bay. Placing culverts underneath the runway extension would restore this flow, better flushing a portion of the bay. Since the part of the bay in question is adjacent to the airport making it likely to be contaminated, and has been subject to extensive dredging in the past, the effects of adding culverts is not intuitively obvious and would require further study.

This project is a candidate for an ISTEA Enhancement Grant.

Estimated Cost: Not Given.

Proposal 19

Site: Jamaica Bay

Project: Access Enhancement/Control

Type: Restoration-Use/Access Enhancement

Proposed By: DEC Division of Marine Resources

Description: A major problem throughout Jamaica Bay is a lack of control on access to sensitive areas. The problems caused by this include illegal dumping (fill, toxic substances, garbage) and vehicular recreational traffic on fragile lands.

A comprehensive plan needs to be developed to address access problems. A list of appropriate access limiting strategies (guardrail, fences, etc.) needs to be developed along with a list of sites where implementation of these strategies is essential. In addition, increasing the number of controlled and appropriate access sites may help alleviate undesirable access.

Estimated Cost: Not Given.

Proposal 20

Site: Far Rockaway

Map Number: 12

Project: Piping Plover / Least Terns

Type: Restoration-Use/Access Enhancement

Proposed By: DEC Division of Fish and Wildlife

Description: The piping plover and least tern are both listed as New York State Endangered Species. The endangered status of these two species is largely due to increased human disturbance and habitat loss. Plovers and terns nest predominantly in areas of wide sand beaches and vegetated dunes.

DEC staff have identified nesting sites of plovers and terns on Far Rockaway. The project proposed is to design site specific activities (signs, fencing, etc.) for each site so as to protect the nesting adults and young.

Estimated Cost: Not Given.

Proposal 21

Site: JFK Airport and other Jamaica Bay Sites

Project: Upland Sand Piper

Type: Replacement-Upland Habitat

Proposed By: DEC Division of Fish and Wildlife

Description: The upland sand piper is identified as a species of special concern by the State of New York. The species is found in short-grass fields, old pastures, and plains. Habitat alterations, such as conversion of grasslands to residential developments, have had an adverse impact on this species. Currently, the species persists in area that still maintain the necessary habitat requirements. This species has been a confirmed breeder at JFK Airport for several years.

Several sites may be appropriate for this project. In addition, grasslands habitat might be created on portions of the closed landfills. The project will determine if grassland species, such as the grassland sand piper, can be attracted to and establish on these restored habitats.

Estimated Cost: Not given.

Proposal 22

Site: Unspecified

Project: Enhancement of Public Access and Educational Materials

Type: Restoration-Use/Access Enhancement

Proposed By: Gateway National Recreation Area

Description: Improvements may be made to access trails for wildlife watching, interpretive nature trails, and the Jamaica Bay Wildlife Refuge educational programs and materials. The goal is to channel use of Jamaica Bay toward more compatible and controlled activities.

Estimated Cost: Not Given.

Proposal 23

Site: LILCO Property

Map Number: 13

Project: Purchase Parcel to Consolidate Holdings

Type: Acquisition-Purchase

Proposed By: NYC Department of Environmental Protection

Description: This property is Block 16166 lots 110, 177 (Queens) roughly bounded by Beach Channel Drive, Rockaway Blvd., Beach 108th Street and an extension of Beach 113 Street with some frontage on the water. This property abuts NYC DEP facilities and is adjacent to City Board of Education, Parks, and DGS properties.

Estimated Cost: Not Given.

Proposal 24

Site: Hook Creek

Map Number: 6

Project: Inter-Agency Transfer / Park Designation

Type: Acquisition-Transfer

Proposed By: Buffer the Bay Revisited-XIV

Description: A largely city-owned and extensive wetland is in need of full recognition and protection. The Hook Creek wetlands and immediately adjacent undeveloped uplands, whether private or city-owned, should be protected either through interagency transfer or acquisition and should receive official park designation.

Estimated Cost: Inter-Agency Transfer

Proposal 25

Site: Dubos Point

Map Number: 14

Project: Purchase Land

Type: Acquisition-Transfer

Proposed By: Buffer the Bay Revisited-X

Description: After the initial *Buffer the Bay* Report (1987) Dubos Point became the Dubos Point Wildlife Refuge, with the transfer of city land from NYC Housing Authority and Division of Real Property to the Parks Department and the acquisition of some private land. Additional private and city-owned lands should be acquired as buffer for the refuge and for Sommerville Basin.

Estimated Cost: Unknown

Proposal 26

Site: Paerdegat Basin

Map Number: 15

Project: Transfer Land to Parks and Protect

Type: Acquisition-Transfer

Proposed By: Buffer the Bay Revisited-II

Description: Beyond the natural wetland immediately north of Joseph Thomas McGuire Park, which is expected to be transferred to NYC Department of Parks and Recreation, the future of open space at Paerdegat Basin is uncertain. Alternative plans for the site are being investigated by

NYC DEP and the Economic Development Corporation. Protection and consolidation of all wetlands and adjacent undeveloped uplands at Paerdegat Basin are a high priority.

Estimated Cost: Inter-Agency Transfer

Proposal 27

Site: Hendrix Creek

Map Number: 16

Project: Inter-Agency Transfer

Type: Acquisition-Transfer

Proposed By: Buffer the Bay Revisited-IV

Description: The remaining shoreline open space at Hendrix Creek has been modified by filling and channelization but a rim of *Phragmites* wetland and mudflats persists. DEP facilities occupy much of the northern and western bank of the creek. Attention should be given to the protection and reclamation of the Hendrix Creek shoreline, in coordination with potential protective measures at the contiguous Vandalia Dunes area to the east.

Estimated Cost: Inter-Agency Transfer

Proposal 28

Site: Vandalia Dunes

Map Number: 17

Project: Purchase Land - Limit Development

Type: Acquisition

Proposed By: Buffer the Bay Revisited-V

Description: Extensive sand-filled uplands, which have been proposed as an urban renewal site, hold significant promise for restoration as a natural area, linking Buffer the Bay sites and inlets at Spring Creek and Hendrix Creek and in close proximity to the parklands of Fresh Creek and Gateway National Recreation Area. Represents a significant grassland habitat resource because of its large size, 230 acres, of which 120 acres is grassland or sandy dune. This property is under extreme development pressure.

Estimated Cost: Not Given.

Proposal 29

Site: Beach 90th Street

Map Number: 18

Project: Acquire Parcel

Type: Acquisition

Proposed By: Buffer the Bay Revisited-VII

NYC DEP and the Economic Development Corporation. Protection and consolidation of all wetlands and adjacent undeveloped uplands at Paerdegat Basin are a high priority.

Estimated Cost: Inter-Agency Transfer

Proposal 27

Site: Hendrix Creek

Map Number: 16

Project: Inter-Agency Transfer

Type: Acquisition-Transfer

Proposed By: Buffer the Bay Revisited-IV

Description: The remaining shoreline open space at Hendrix Creek has been modified by filling and channelization but a rim of *Phragmites* wetland and mudflats persists. DEP facilities occupy much of the northern and western bank of the creek. Attention should be given to the protection and reclamation of the Hendrix Creek shoreline, in coordination with potential protective measures at the contiguous Vandalia Dunes area to the east.

Estimated Cost: Inter-Agency Transfer

Proposal 28

Site: Vandalia Dunes

Map Number: 17

Project: Purchase Land - Limit Development

Type: Acquisition

Proposed By: Buffer the Bay Revisited-V

Description: Extensive sand-filled uplands, which have been proposed as an urban renewal site, hold significant promise for restoration as a natural area, linking Buffer the Bay sites and inlets at Spring Creek and Hendrix Creek and in close proximity to the parklands of Fresh Creek and Gateway National Recreation Area. Represents a significant grassland habitat resource because of its large size, 230 acres, of which 120 acres is grassland or sandy dune. This property is under extreme development pressure.

Estimated Cost: Not Given.

Proposal 29

Site: Beach 90th Street

Map Number: 18

Project: Acquire Parcel

Type: Acquisition

Proposed By: Buffer the Bay Revisited-VII

Proposal 33

Site: Norton Peninsula

Map Number: 22

Project: Transfer and/or Open Space Easements and Acquisition

Type: Acquisition

Proposed By: Buffer the Bay Revisited-XII

Description: Despite fragmentation patterns of ownership and jurisdiction, the perimeter of Norton Peninsula and adjacent shorelines harbor potential open space under HPD plans for the Edgemere Urban Renewal Area.

Estimated Cost: Not Given.

Proposal 34

Site: Jamaica Bay

Project: Plant Submerged Aquatic Vegetation

Type: Restoration

Proposed By: DEC Division of Marine Resources

Description: Submerged aquatic vegetation such as eel grass once existed in Jamaica Bay. These plants provide an important habitat because..... These plants do not survive well in the current environmental status of the Bay. They suffer in the presence of high turbidity, Restoration requires the presence of existing habitat to expand upon. The lack thereof in Jamaica Bay makes restoration at this time very difficult. This type of project may have to wait until the water quality of Jamaica Bay improves sufficiently.

Estimated Cost: Not Given.

Proposal 35

Site: Grassy Bay, Jamaica Bay

Map Number: 35

Project: Rehabilitate Dredging Site

Type: Restoration

Proposed By: DEC Division of Marine Resources

Description: Grassy Bay was dredged to provide material to fill wetlands for a portion of JFK Airport. The bottom is largely "dead," supporting little in the way of plant or animal life and highly contaminated with a variety of toxic substances. Several proposals have been made to "cap" the toxic sediments, sealing them off and then raising the level of the bottom to provide a shallow habitat for plants and animals. Due to the nature of the problem other funds may be available for this projects including those from the Port Authority, Army Corps of Engineers, and

NYC DEP Watershed Plan. The status of these options should be determined before proceeding.
Estimated Cost: Not Given.

Proposal 36

Site: Seagirt Ave., Jamaica Bay

Map Number: 36

Project: Purchase Parcels Containing Tidal Wetlands

Type: Acquisition-Purchase

Proposed By: New York City Department of Environmental Protection

Description: This area is bounded by Seagirt Blvd., Seagirt Ave., Beach 9th Street, and the roadway leading to the Atlantic Beach bridge (Doughty Blvd.?). This tidal wetland area contains open water with Spartina islands and fringes. It is used by many birds such as egrets and kingfishers. Other than some weedy invasion of the upland edge there is little human disturbance.

Estimated Cost: Not Given.

Proposal 37

Site: Palmer's Inlet, Eastchester Bay

Map Number: 27

Project: Purchase of Parcels to Protect Access to Historic Fish Weir

Type: Acquisition-Purchase

Proposed By: New York City Department of Environmental Protection

Description: This area is a natural sheltered inlet of Eastchester Bay which contains salt marsh, rocky shoreline, and open water. At the mouth of the creek, visible at low tide is an historic Indian fish weir. The upland area around the inlet is developed with single family residences except for the prominent land form which juts out into the Bay on the north side of the Inlet. This vacant parcel, which includes a mapped but unbuilt street, is privately owned. It is vegetated with trees, shrubs, and grasses and affords an extraordinary view of the Eastchester Bay to Long Island Sound. Along with the New York City street ownership and an abutting sewer easement, purchase of the property would consolidate public ownership of this natural area.

Estimated Cost: Not Given.

Proposal 38

Site: Pugsley Creek, Eastchester Bay

Map Number: 28

Project: Purchase of Parcels or Easements to Consolidate Holdings

Type: Acquisition-Purchase, Easement

Proposed By: New York City Department of Environmental Protection

Description: Pugsley Creek is an intertidal inlet of the East River just south of Westchester Creek and the Whitestone Bridge. The majority of the shoreline supports intertidal marsh with several areas of high marsh dominated by *Spartina patens* and *Salicornia*. The upland areas are vegetated with a range of meadow areas, shrub, and thickets with some dense wooded area. Wading bird use is high. Local environmental groups have carried out numerous vegetation restoration programs and clean-up efforts. there is a large, privately held parcel, formerly part of the YMCA which fragments the continuous Department of Parks holdings around the Creek. the purchase of this parcel or the establishment of a conservation easement would consolidate the wetlands area and management.

Estimated Cost: Not Given.

Proposal 39

Site: City Island, Eastchester Bay

Map Number: 29

Project: Purchase of Land Parcels

Type: Acquisition-Purchase

Proposed By: New York City Department of Environmental Protection

Description: From the western end of Ditmars Street to Tier Street, between Hunter Avenue to 100 feet from the western coast is a special example of an intertidal marsh with an upland and transition zone. Approximately 16 acres of wooded and shrub/thicket are grades down to a thriving salt marsh which is frequently used by many shore birds. This area is bounded by publicly woned shoreline and two street ends. It is the largest undeveloped space in the tightly packed marine island community.

Estimated Cost: Not Given.

Proposal 40

Site: Harbor Herons & CSX Railline, Staten Island

Map Number: 30

Project: Purchase of Parcels

Type: Acquisition-Purchase

Proposed By: NYC Audubon Society

Description: Purchase of land parcels with on-site restoration. More information needed on this proposal.

Estimated Cost: Not Given.

Proposal 41

Site: Pelham Bay Park, Bronx

Map Number: 24

Project: Removal of concrete from shoreline

Type: Restoration

Proposed By: NYC Audubon Society

Description: Removal of concrete from the shoreline restoring it to its natural rocky state and general restoration of landscape in southern zone of Pelham Bay Park

Estimated Cost: Not Given

Proposal 42

Site: Pelham Bay Park and Ferry Pt. Park

Map Number: 24

Project: Grasslands Management

Type: Restoration-Habitat Alteration

Proposed By: NYC Audubon Society

Description: Management of grasslands habitat in the uplands adjacent to the shore and wetlands.

Estimated Cost: Not Given.

Proposal 43

Site: Greenwich Property, Bayswater Park

Map Number: 33

Project: Intern Center

Type: Restoration-Use/Access

Proposed By: NYC Audubon Society

Description: Build and outfit a center for a staff of student interns working on restoration and research projects.

Estimated Cost: Not Given.

Proposal 44

Site: All Three Areas

Project: Research/Educational Boat

Type: Restoration-Use/Access Enhancement

Proposed By: NYC Audubon Society

Description: This proposal entails the purchase of a boat and then outfitting it for educational and scientific purposes.

Estimated Cost: Not Given.

Proposal 45

Site: Breezy Point, Jamaica Bay

Map Number: 34

Project: Gull Control

Type: Restoration-Habitat Alteration

Proposed By: US Fish and Wildlife Service (Chuck Merckel)

Contingent Upon: Cooperation with Gateway National Recreation Area

Description: Gull populations have greatly expanded their historic range and abundance in response to increased food sources that man has inadvertently provided at municipal landfills and other locations. Both Black-backed Gulls and Herring Gulls have established nesting colonies on Breezy Point, which are continuing to expand. It is likely this territorial expansion was initially associated with the increase in food abundance at nearby landfills. These gull populations appear to be continuing their expansion despite the closure of local landfills. These gull colonies have apparently come into territorial conflict with Piping Plover nesting sites (and possibly with other species such as skimmer and terns). Since these gulls are known predators on the nests and young of these species their presence may be limiting the success of the local Piping Plover population which has experienced a recent decline (Piping Plover are a Federal threatened species).

The Service recommends that action be taken to manage the gull colonies on Breezy Point. The colonies should be displaced or eradicated in a manner so as not to interfere with the safety or breeding success of the Plovers or other breeding species of the area. The program should be conducted in conjunction with Proposal 20 which seeks to enhance the survivability of both Plovers and Terns. Monitoring of the success of this remedial measure should be included in the final proposal.

The National Park Service is already implementing gull management in this area, if additional funds or coordination of effort is needed, JBDA monies may be appropriate.

Estimated Cost: Dependent on management method chosen

Proposal 46

Site: Jamaica Bay

Project: Rockaway/Gateway Greenway

Type: Restoration-Use/Access Enhancement

Proposed By: NYS Department of Environmental Conservation

Description: To provide matching funds for a project funded through an ISTEAs enhancement grant. The total amount is \$1.25 million, with \$950,000 coming from Federal sources and \$300,000 from the Jamaica Bay Damages Account. This project involves the "design and construction of a Class 1 bike/pedestrian path on Cross Bay Blv. from 165th Street to the Cross Bay Blvd. Bridge and provide for signage and striping of the entire 20 miles of the Rockaway/Gateway Greenway." The Rockaway/Gateway Greenway is a proposed "urban greenway linking Gateway National Recreation Area's Brooklyn and Queens units with a bicycle/pedestrian path, providing both recreational and utilitarian uses."

Note: Quoted material from the Rockaway/Greenway Advisory Board Meeting of August 1993.

Estimated Cost: \$300,000

Proposal 47

Site: Various Sites in Jamaica Bay

Project: Restore Upland Grasslands

Type: Restoration-Habitat

Proposed By: NYS DEC

Description: Several sites were originally suggested as possible mitigation sites for the habitat which would be destroyed by the Gateway Estates project. The sites include Marine Park East, Spring Creek Park, Floyd Bennett Field, and JFK West.

Estimated Cost: N/A

Proposal 48

Site: Bronx River

Project: Expansion of Water Quality Monitoring

Type: Restoration-Use/Access

Proposed By: Bronx River Restoration Project

Description: Expansion of the current water quality monitoring program to include sampling for nitrates, phosphates, and coliform count, and to initiate sampling of riverbed sediment and sampling for benthic macroinvertebrates. Covered in the cost would be training of local Bronx youth in these scientific techniques.

Bronx River Restoration has technical assistance for these projects available through and Urban Resource Partnership (URP) contract from the US Department of Agriculture. Funds from the Jamaica Bay Damages Account will be used to implement the projects. All of these projects can be initiated starting in 1994 and continuing in 1995.

Estimated Cost: \$25,000

Proposal 49

Site: Bronx River

Project: Shoreline Habitat Restoration for Soil Conservation

Type: Restoration-Habitat Restoration

Proposed By: Bronx River Restoration Project

Description: Planting for soil conservation along the river, including removal of intrusive exotic plants and replacement with native species; survey and mapping of plant life along the river; wetlands restoration in the estuarine section of the river; stabilization of eroding riverbanks. Covered in the cost would be expansion of the current Conservation Program with Bronx youth to help implement these projects.

Bronx River Restoration has technical assistance for these projects available through and Urban Resource Partnership (URP) contract from the US Department of Agriculture. Funds from the Jamaica Bay Damages Account will be used to implement the projects. All of these projects can be initiated starting in 1994 and continuing in 1995.

Estimated Cost: \$45,000

Proposal 50

Site: Bronx

Project: Expand Community Education and Outreach Programs

Type: Restoration-Use/Access

Proposed By: Bronx River Restoration Project

Description: Expand current community education and outreach programs for people of all ages, including environmental education with youth, to reach a larger number of people and more Bronx neighborhoods.

Bronx River Restoration has technical assistance for these projects available through and Urban Resource Partnership (URP) contract from the US Department of Agriculture. Funds from the Jamaica Bay Damages Account will be used to implement the projects. All of these projects can be initiated starting in 1994 and continuing in 1995.

Estimated Cost: \$25,000

Proposal 51

Site: Paw-Paw Woods

Map Number: 23

Project: Land Purchase

Type: Acquisition-Purchase

Proposed By: NYC Parks

Description: Paw-Paw Woods is in close proximity to Butler Manor located at the southwest corner of Hylan Blvd. on Page Avenue. Paw-Paw Woods contains the finest example of rare coastal oak barren containing white, black, red, and pin oak in addition to uncommon post, chestnut, blackjack, scrub oaks, and rare hybridized species including Quercus Rudkini and Quercus heterophylla (Bartram's Oak). The site also contains State endangered species such as bleeding heart (G5, S1), willow oak (G5, S1), and paw-paw (G5, S2), and a glorious hibiscus pond.

Estimated Cost: Not given.

Proposal (Blank Proposal Form)

Site:

Map Number:

Project:

Type:

Proposed By:

Description:

Estimated Cost: