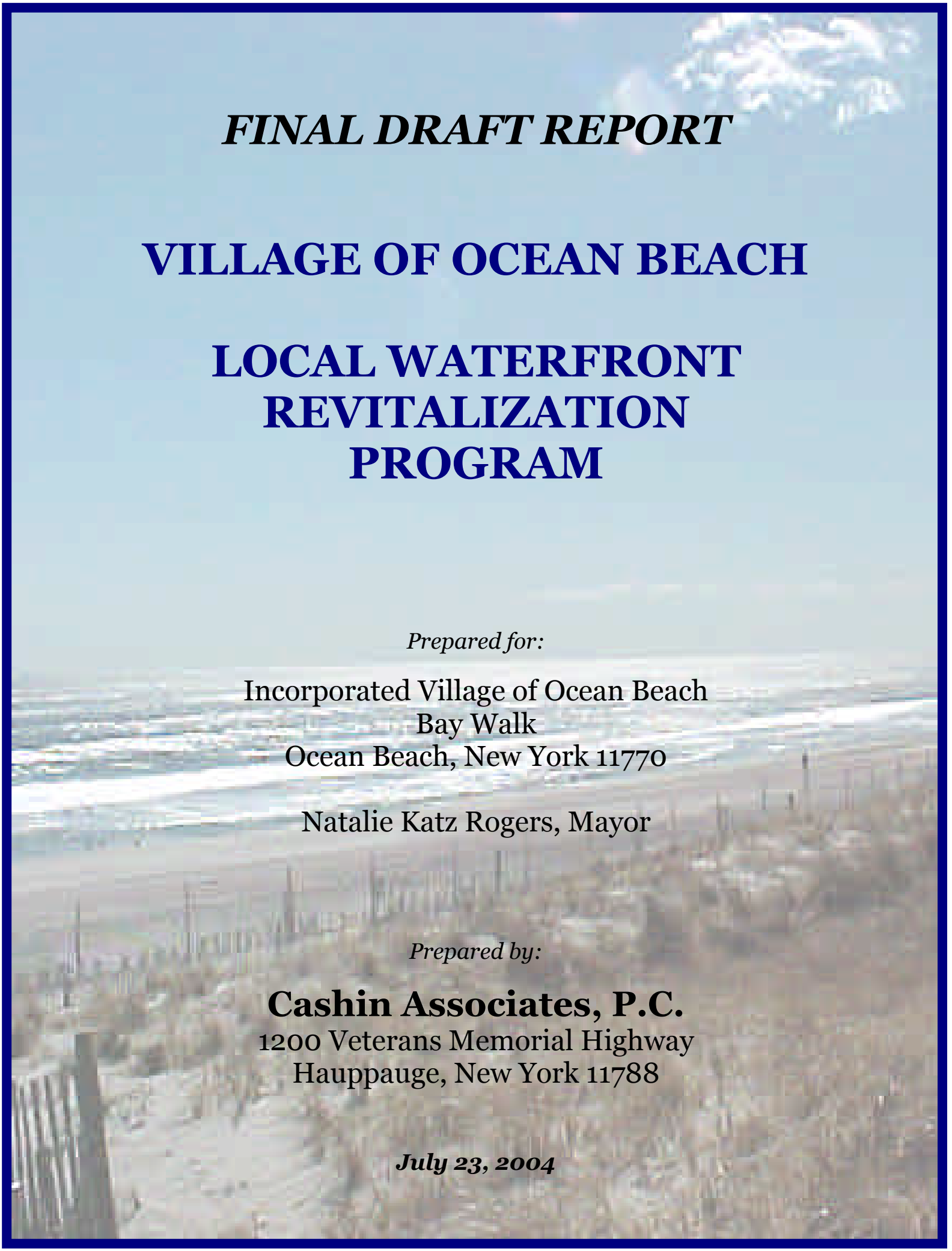

FINAL DRAFT REPORT

VILLAGE OF OCEAN BEACH

LOCAL WATERFRONT REVITALIZATION PROGRAM

Prepared for:

Incorporated Village of Ocean Beach
Bay Walk
Ocean Beach, New York 11770

Natalie Katz Rogers, Mayor

Prepared by:

Cashin Associates, P.C.
1200 Veterans Memorial Highway
Hauppauge, New York 11788

July 23, 2004

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JULY 23, 2004

This report was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

FINAL DRAFT REPORT
Village of Ocean Beach
Local Waterfront Revitalization Program

July 23, 2004

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Section I

Local Waterfront Revitalization Area Boundary

SECTION I
LOCAL WATERFRONT REVITALIZATION AREA BOUNDARY

In 1981, the New York State Legislature enacted the Waterfront Revitalization and Coastal Resources Act (Article 42 of the Executive Law) to implement the State Coastal Management Program (CMP) at the State level. The CMP and Article 42 establish a balanced approach for managing development and providing for the protection of resources within the State's designated coastal area by encouraging local municipalities to prepare Local Waterfront Revitalization Programs (LWRPs). An LWRP may expand the coastal boundary to include additional areas would benefit from being included in the coastal area.

1.1 NEW YORK STATE COASTAL MANAGEMENT PROGRAM BOUNDARY

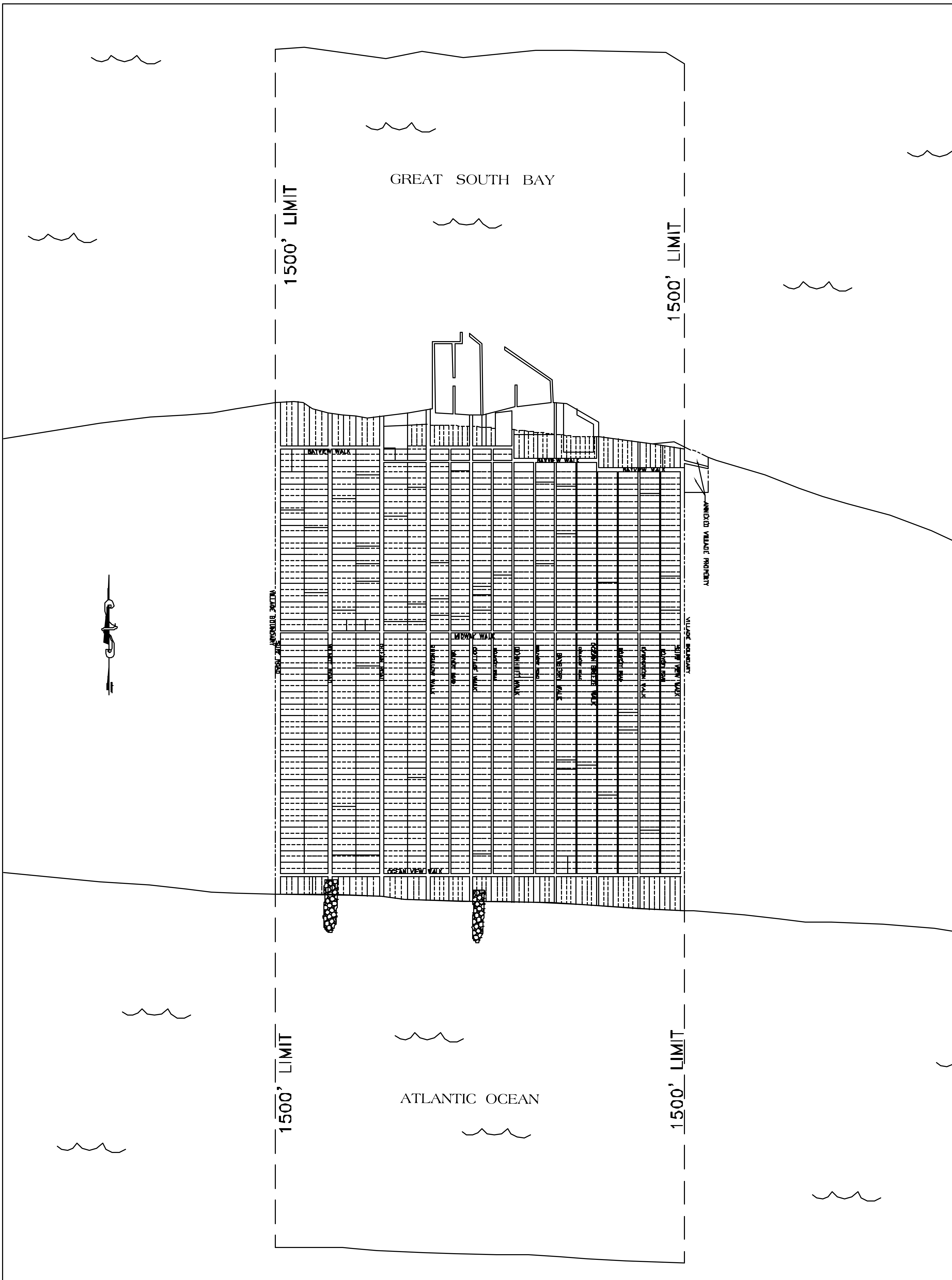
The existing New York State coastal area boundary encompasses the entire upland area of the Incorporated Village of Ocean Beach. In general the Village's corporate boundary follows the mean high water line on both the ocean and bay sides.

The existing New York State coastal area also encompasses all of the area within Great South Bay (and including a portion of the south shore of the Long Island mainland), and the area within the Atlantic Ocean out to the three-mile territorial limit.

1.2 PROPOSED CHANGES TO THE CMP BOUNDARY

No changes to the State coastal area boundary are proposed.

As illustrated in Map 1, the Local Waterfront Revitalization Area for the Village of Ocean Beach includes the entire upland area of the Village, as well as the water area in both Great South Bay and the Atlantic Ocean up to 1,500 feet seaward of the mean high water line. Within this water surface area, the Village has the authority to regulate the use, speed, operation, anchorage and mooring of vessels, pursuant to Section 46-a of the New York State Navigation Law. These coastal waters also are part of Fire Island National Seashore and are within the jurisdiction of the National Park Service, as is the entire upland area of the Village (see Section 2.2.7 for further discussion).



FINAL DRAFT

MAP 1
VILLAGE OF OCEAN BEACH
LOCAL WATERFRONT REVITALIZATION PROGRAM
BOUNDARY MAP
JULY 2004

200 0 200 400 600
Scale: 1" = 400'

Cashin Associates, P.C.
ENGINEERING · PLANNING · CONSTRUCTION MANAGEMENT

Section II

Inventory and Analysis

SECTION II

INVENTORY AND ANALYSIS OF RESOURCES

2.1 ORIENTATION AND COMMUNITY PROFILE

The Village of Ocean Beach is located on Fire Island, in the Town of Islip, Suffolk County, New York. The community began as two separate hamlets, Ocean Beach and Stay-a-While Beach Estates, which were subdivided into small lots in the early 1900s. These two hamlets were incorporated into the Village of Ocean Beach in 1921. The study area for this LWRP includes the entire geographic area situated within the corporate boundaries of the Village of Ocean Beach, as well as the adjacent waters of Great South Bay to the north and the Atlantic Ocean to the south.

The original boundaries of the Village, at the time of its incorporation in 1921, spanned from Surf Road to the west and Surfview Walk to the east, and between the ocean to the bay. In 1992, the Village purchased additional property immediately to the east of Surfview Walk, comprising two parcels of vacant land on either side on Bayview Walk. The southerly parcel contains a one-story frame house which was unoccupied at the time of acquisition. The northerly parcel has approximately 109 feet of frontage on the bay. In 1995, the Village of Ocean Beach requested, and the Islip Town Board consented, to the Village's annexation of this property. The Village Board of Trustees finalized the annexation by resolution in June 1995.

The Village of Ocean Beach, presently encompasses a total upland area of approximately 78 acres. The Atlantic Ocean shoreline of the Village is approximately 1,750 feet in length, while the bay-side shoreline is approximately 2,100 feet in length. The barrier island in the Village is approximately 2,000 feet in width.

The topography within the community ranges from flat to gently sloping with a well-stabilized, vegetated coastal dune and retaining wall located on the south side of the Village, along Ocean View Walk, just inland of the Atlantic beach. The crest of this primary dune system represents the point of highest elevation within the Village. The coastline and dunes are dynamic features which are continuously undergoing morphological adjustment and migration due to the erosive and depositional forces of wind and water. The Village holds an annual Dune Day which is devoted to projects that protect, preserve and enhance the structural integrity of the coastal dune system and the capacity of this feature to provide storm and flood protection. Dune Day has included community projects such as dune grass restoration and has been instrumental in sustaining the stability and integrity of the dune system, which is critical to protecting life and public and private property from severe storms. Dune "walk-over" stairways, which have been constructed at the ends of eight of the ten north-to-south walkways in the Village (i.e., all except Evergreen Walk and Dehnhoff Walk), facilitate public access to the Atlantic shoreline and prevent the occurrence of pedestrian disturbances to the dune system and its stabilizing vegetation.

The Village fronts on both Great South Bay to the north and the Atlantic Ocean to the south. The physical characteristics of these two water bodies and shorelines are very different. Great South Bay is a semi-enclosed, shallow embayment or estuary, which is relatively well-protected from wave action during storms. The bay experiences somewhat restricted tidal flushing due to its limited connections to the sea, the nearest being Fire Island Inlet located approximately five miles to the west and Moriches Inlet located more than 20 miles to the east. As a result, pollutants discharged to the bay can remain for extended periods of time before being flushed out to sea. The limited tidal exchange also promotes the settling of sediment particles and associated pollutants into the bay-bottom sediments.

Because of its protected nature and its location adjacent to dense development along the south shore of the Long Island mainland, Great South Bay supports a variety of fairly intensive water-dependent uses. The Village's Great South Bay shoreline is developed with a number of such uses and related facilities, including the Village Marina, a ferry basin, freight dock, Boat House, a small bay-side bathing beach, recreational area including tennis and a basketball courts, small open-space (non-developed) areas, fishing area, wagon park (for transporting supplies and commodities from the freight and ferry off-loading areas), institutional/governmental offices, public facilities, and limited commercial retail development. These facilities are essential for transport of people and freight to and from the Village, and for the Village's overall quality of life, recreational opportunities, and economic viability.

The Village of Ocean Beach has been subject to periodic flooding, related to its position between the bay and ocean, in conjunction with the presence of a high groundwater table, relatively flat topography and resulting poor drainage. Unusually high tides, strong winds, and major storm events or some combination of these factors can result in saturated soils, exacerbate poor runoff conditions, and lead to flooding. Severe waves during major storms can cause coastal erosion and physical damage to waterfront structures.

Outside of the small area of recreational and commercial development on the bay-side, the Village of Ocean Beach consists almost exclusively of high density, single-family detached residential properties. The average lot size is less than 6,000 square feet. These areas are primarily zoned R-4 Residence.

The ferry basin and Village Marina, tennis courts and outdoor basketball court, bay swimming area, Boat House, police station, wagon park, and attendant structures are included within the Bay Recreational District (BRD). Adjacent and immediately to the south of the BRD is the Village's Commercial (C) District, which comprises properties located near and parallel to the bay shoreline, extending eastward from the center of the Village to Surf View Walk and westward to Ocean Road. This zoning district comprises a variety of commercial uses, including grocery stores, restaurants, taverns, small shops, the Village Green, and a mix of institutional uses.

The shoreline beach and dune system along the Village's ocean frontage comprise the "Dune District" (DD). This zoning district includes the area extending from the mean low tide line of the Atlantic Ocean to a point 40 feet landward of the crest of the primary dune. In areas where the primary dune has been breached, the northern limit of the Dune District is delineated at a distance of 40 feet inland from an imaginary line drawn between the existing dune crest to the east and west. The Dune District was developed in conjunction with the recommendations of the *General Management Plan of the Fire Island National Seashore* and has been established with the primary purpose of protecting the public's health, safety, and welfare in relation to potential hazards from storms and the protection afforded by the primary dune system. It is recognized that the dune is in long-term retreat and that the Village will have to work cooperatively with New York State and federal agencies in the future to address this issue.

The Village is essentially fully developed at the present time. There remain only a few scattered parcels of sufficient size and satisfactory physical conditions to be considered buildable under the Village's zoning requirements.

2.1.1 HISTORIC DEVELOPMENT

The first humans on Fire Island were Native Americans, who traveled to the barrier beach from the Long Island mainland for shellfishing, fishing, and hunting. No prehistoric sites have been uncovered on Fire Island.

The Dongan Patent of 1686 conveyed the mainland of Long Island to the respective towns, but failed to address the land comprising Fire Island and the underwater lands in the bay. Subsequently, William "Tangier" Smith claimed ownership of Fire Island, Great South Bay, and Moriches Bay, as well portions of the adjacent Long Island "mainland". In total, Tangier Smith's lands covered approximately 40,000 acres. Tangier Smith was active in colonial government, holding a number of positions of authority, including commander of the Suffolk militia, a member of Provincial Council, Associate Justice and then Chief Justice of the Supreme Court of New York, and briefly held the position of Acting Governor.

Tangier Smith died in 1705, leaving his estate to his heirs including his eldest son, Henry, who inherited the western half of Fire Island. Henry had dreamed of subdividing the land and conveying these properties both through private sale and transfer to his heirs, but the provisions of his father's will precluded this. In 1779, Henry's great-grandson, also named Henry, inherited his great-grandfather's land. However, since the younger Henry wanted to continue his ties with the Province of Nova Scotia, he was not interested in retaining the land. In 1789, the property was sold to twenty yeomen who held the property in common and utilized the land for the grazing of livestock.

Although the general settlement of Fire Island did not occur until the second half of the 19th century, this area was used prior to that time to access important natural resources. In

particular, whaling was commonly undertaken from the beach until about 1750, when whales no longer ventured close to shore. By the late 1700s, Fire Island had acquired a reputation as a dangerous place, inhabited by pirates.

Controversy about the ownership of the land discouraged settlement of Fire Island until the late 1800s. In 1845, David Sammis began acquiring shares of land on Fire Island. Although Sammis was able to acquire several shares, records pertaining to subdivisions and land transfers were lost, many shareholders had passed away, and their heirs were unknown. By this time, however, Sammis had assembled a total of 120 acres on western Fire Island, where he established a hotel. Through time, land disputes arose between Sammis and individuals utilizing the surrounding lands as pasture. The land disputes continued to escalate, and in 1871, the case of *Green versus Sammis* was filed by people who questioned the legality of Sammis' title to land. The "Great Partition of 1878" was promulgated as the basis for the eventual settlement of this dispute, which allowed Sammis to develop his Surf Hotel resort and also allowed development of lots for summer homes. Although further lawsuits disputing land ownership on Fire Island continued through 1923, the courts invariably dismissed these cases on the grounds that any claims to the land should have been made before 1878.

In 1908, a land speculator named John A. Wilbur acquired a large tract of land on Fire Island, including the majority of what would eventually become the Incorporated Village of Ocean Beach, in order to create a resort community. Wilbur divided the land into approximately 1,000 lots, which were sold over the course of five years, primarily to residents of Brooklyn. In 1912, a small adjacent community at the west end of the present-day Village (at Ocean, Wilmot and Surf Roads), known as "Stay-a-While Beach Estates" was developed by the heirs of Wilmot M. Smith. These two communities were merged in 1921 into what is known today as the Village of Ocean Beach. As an Incorporated Village, Ocean Beach became empowered with the authority to establish its own local governing body, including a mayor and four trustees, a Village court, and its own fire, police, water, sewage, and public works departments.

The Fire Island National Seashore Act was adopted in 1964, creating the Fire Island National Seashore (FINS). FINS's jurisdiction comprises a total of 26 miles of the 32 mile-long Fire Island barrier, and in some places extends a distance of up to 4,000 feet into Great South Bay (but only 1,500 feet adjacent to the Village of Ocean Beach's bay shoreline), and 1,000 feet into the Atlantic Ocean. The primary purpose for the creation of FINS was to provide a regulatory framework for managing the rich, unique, and critical natural resources of Fire Island, and the adjacent bay and ocean. The impending threat of the construction of a highway along the spine of the island, along the model of Ocean Parkway on Jones Island to the west of Fire Island Inlet, galvanized the community to support the establishment of FINS.

According to data in the *2000 Long Island Population Survey* published in the Long Island Power Authority (LIPA), the estimated year-round population of Ocean Beach on January 1, 2000 was 161 persons. As a beach community, the Village's population increases significantly in the summer. In 1990, it was estimated that the Village's summer population increased to a

maximum of approximately 2,500 residents, while day-trip visitors peaked at 12,000 during that period.

2.2 NATURAL RESOURCES

2.2.1 SURFACE GEOLOGY AND TOPOGRAPHY

A. Geological and Topographic Setting

A number of geologic formations underlie the Fire Island barrier system. These consist primarily of igneous and metamorphic basement rock, which is overlain by unconsolidated sedimentary strata, including a cap of glacial deposits which have been reworked by recent action of wind and water.

The igneous/metamorphic bedrock is estimated to be of Precambrian to Upper Paleozoic age, and forms the foundation for Long Island's layered sedimentary deposits. Over the course of millions of years the crystalline rock surface was exposed to weathering and erosion. These processes continued until approximately 130 million years ago when, during the Cretaceous Period, a shallow sea covered the area, resulting in the deposition of sands, silts, and clay. These variably textured sedimentary layers were deposited to form what is known today as the Lloyd Sand and Clay Members of the Raritan Formation. The Lloyd Sand member consists of fine to coarse sand and gravel, interspersed with thick layers of clay and silt which overly the weathered bedrock. The Raritan Clay sits atop this sand/gravel stratum.

Overlying the Raritan Formation is the Cretaceous-aged Magothy Formation. The Magothy geologic formation consists primarily of undifferentiated glacial till (heterogeneous mixture of clay, sand, boulders and rock fragments) and glacial outwash (stratified and semi-stratified sand and gravel).

Above the Magothy Formation are glacial sediments. These materials include both poorly sorted glacial till and moraines deposited directly from the glacier, and well-sorted and layered outwash sediments deposited from glacial meltwater. The result of glacial processes is a variety of landforms, including terminal moraines, rolling ground moraine, glacial mounds, kettles, and glacial outwash plains. As the Wisconsin Glacier melted and receded to the north, sea level began to rise. The waves, tides, and long-shore currents that accompanied sea level rise reworked the glacial sediments to form various recent landforms, including Fire Island and the rest of the barrier beach system on the south shore of Long Island.

The barrier beach complex on which the Village of Ocean Beach is situated is dynamic, consisting of beaches, dunes, wetlands and back-barrier flats which were formed by and are still changing due to the action of wind, waves, rising sea level, tides and currents in the time since the glacier last retreated from this area. The dimensions, location and overall morphology of the

barrier island and associated features undergo constant readjustment, reworking, and reconfiguration as a result of energetic coastal processes. Addressing shoreline change caused by natural coastal processes is a long-term issue of critical importance for the Village.

Currently, a well-stabilized primary dune system is situated adjacent to and parallel with the Atlantic coastline. This dune is maintained by the continuous efforts of the Village and its residents. Aside from the oceanfront dune system, the Village's terrain is flat to gently sloping.

No streams or surface water bodies are present within the upland area of the Village. However, wetland-like conditions occur in areas where the high groundwater table lies close to the land surface.

B. Soils

The taxonomy and characteristics of the Village's soils and surface sediment deposits have been identified by the *Soil Survey of Suffolk County, New York* prepared by the United States Department of Agriculture (USDA, 1975). The USDA has identified these soils and unconsolidated sediment as consisting mainly of dune-land sediments (Du) and beach deposits (Bc). These materials are composed of unconsolidated sands and gravels of glacial origin, which have developed a thin veneer of soil in most areas and have been exposed to the effects of physical and chemical processes which have ultimately formed the Village's beaches and dunes.

According to the *Soil Survey*, dune-land deposits generally consist of well-sorted, well-rounded mature wind-blown sands composed primarily of the mineral quartz. These sands are very limited in their fertility due to insufficient soil development, low organic and nutrient content, and high permeability which affects the sand's water-holding capacity during dry periods. Despite these limitations, dune deposits can support a limited number of adapted plant species, such as dune grass, which contribute to the stabilization of dunes and other sandy areas

Beaches consist of sand, gravel and cobbles that are eroded, transported, and deposited from waves, swash, backwash, and currents that are augmented by tidal cycle. Beach-land is identified along the Atlantic Ocean coastline extending from mean sea level to the seaward toe of the coastal dunes.

In addition to the two soil types discussed above, Fire Island contains hydric muck soils, which characteristically form in back barrier tidal flats and fringing marshlands. However, most of the bay-side shoreline in the Village of Ocean Beach has been bulkheaded or otherwise structurally stabilized and developed, and the natural features in this area have been largely disturbed or eliminated.

2.2.2 SURFACE WATER RESOURCES

The Atlantic Ocean and Great South Bay make a dominating contribution to the Village's overall character. These coastal water bodies sustain recreational activities (e.g, swimming, fishing, boating, beach walks, etc.) which play an important role in the community's quality of life, but also pose the most significant threat to the Village's long-term future in terms of potential flooding and erosion.

The following subsections discuss various aspects of the Village's surface water resources, including an overall description of the surface water resources in the Village, applicable water quality standards and related criteria, existing water quality conditions in the LWRA, and stormwater and non-point source pollution. Information regarding waterway usage by vessels is considered in Section 2.3.7.

A. Surface Waters in the Village Coastal Area

Fresh Surface Waters

The Village contains a number of low-lying areas with poor natural drainage which are susceptible to periodic flooding and the temporary retention of standing water. However, permanent freshwater ponds, streams, and significantly large freshwater wetland areas are not present in the Village, due to the high permeability of its sandy soils.

Saline Surface Waters

The Village of Ocean Beach is framed by saline coastal waters to the north and south. The two bordering water bodies, Great South Bay and the Atlantic Ocean, are quite distinct from one another in their physical characteristics.

Great South Bay comprises a subsection of the 173-square mile Long Island South Shore Estuary system, which is the largest shallow estuarine bay in the State of New York. A number of streams carry freshwater flow from the Long Island mainland into the bay, including Connetquot River which is located almost directly to the north across the bay from Ocean Beach. This is balanced against the input of saltwater from the ocean, primarily through Fire Island Inlet located approximately five miles to the west. The mixing of seawater introduced into the bay via the inlets and freshwater discharged from the land surface is a defining characteristic of estuaries like Great South Bay.

The mean tidal range in Great South Bay in the vicinity of Ocean Beach is less than one foot. The range is approximately 0.61 foot (7.3 inches) at West Fire Island and 0.70 foot (8.4 inches) at Point O' Woods.

Great South Bay is a shallow water body, with depths in the area between the Village of Ocean Beach and the Long Island mainland generally not exceeding 10 feet at mean low tide. The East

Channel is the primary vessel access route to the Fire Island communities in the Town of Islip. This channel is situated to the north of Fire Island, and to the south of West Fire Island and East Fire Island and their surrounding shoals. Depths in East Channel in the vicinity of Ocean Beach exceed 15 feet at mean low water. At its eastern end, East Channel connects to the central portion of Great South Bay. To the west, East Channel links to Fire Island Inlet and West Channel.

Because of the lack of a formal roadway linkage to the mainland, the majority of travel to and from the Village, as well as the delivery of commodities and removal of wastes, occurs over the waters of Great South Bay, via ferry, water taxi, and similar modes of transportation. The ferry terminal, which is centrally located on the Village's bayfront, provides the primary linkage between the Village and the Long Island mainland. The northerly terminal for this ferry is located on Penataquit Creek, at the end of Maple Avenue, in Bay Shore.

Great South Bay has suffered declining water quality as a result of the urbanization of Long Island and associated non-point pollution. Elevated levels of coliform bacteria stemming from stormwater runoff, discharge of wastewater from vessels, sewage effluent, wild and domesticated animal wastes (especially from waterfowl) have resulted in the closure of thousands of acres of shellfish beds, especially in the immediate vicinity of the developed shoreline. In addition, the loss of coastal wetlands and fringing upland habitats resulting from development and the structural stabilization of the shoreline has reduced the bay's biological productivity and has compromised feeding, nursing, spawning, and cover for coastal fish and wildlife.

The south side of the Village of Ocean Beach fronts directly on the Atlantic Ocean. This interface is an essential element of the Village's character, serving as the primary scenic backdrop which contributes to the Village's aesthetic appeal and providing the main resource for recreational enjoyment. However, the ocean also poses the biggest threat to the Village, with the potential for significant damage to occur due to surge and wave impacts during a major storm.

The predominant active use of the waters of the Atlantic Ocean by Village residents and visitors is ocean bathing, water-related sports, and recreational activities on the beach. The ocean also provides vistas that greatly enhance passive recreational pursuits, such as walking.

Because of high-energy waves and tides, even during periods of relative calm, the Atlantic Ocean enjoys excellent water quality. Any contaminants that are discharged to the ocean from the adjacent upland are rapidly dispersed.

The bathymetric profile of the shoreline on the Village's ocean side includes a gently-sloping platform within about 1,000 feet of the shore, which gradually deepens to approximately 12 feet below mean low water. Proceeding further offshore, the bottom depth increases rapidly to approximately 18 feet, and thereafter descends somewhat more gradually.

B. Applicable Water Quality Standards And Related Criteria

Water quality is monitored in Suffolk County coastal waters on a regular basis by the New York State Department of Environmental Conservation (NYSDEC) Bureau of Shellfisheries and the Suffolk County Department of Health Services (SCDHS) Office of Ecology. NYSDEC's monitoring program has been directed at delineating those coastal waters that are suitable for the harvesting of shellfish for human consumption, as defined in terms of measured coliform levels and potential coliform releases from certain uses (such as sewage treatment plants, marinas, anchorages, and mooring areas). The SCDHS primarily has been concerned with ensuring that the waters off public bathing beaches meet public health requirements, also based on coliform bacteria concentrations.

New York State Shellfish Harvesting Criteria

New York State (in 6 NYCRR, Part 701.20) classifies waters on the basis of best intended use. Waters that are identified for the harvesting of shellfish for market purposes are classified as "SA", which signifies the highest level of water quality. In order to be certified as a shellfish harvesting area, the median total coliform level for any series of samples must be no greater than 70 MPN/100 ml (where MPN/100 ml is the most probable number of organisms per 100 milliliters of water sample, according to the standard methodology for coliform testing).

An SA classification is not always indicative of actual water quality conditions. Certain water bodies that have been classified SA consistently fail to meet the SA coliform standards. In these cases, the SA designation is used by the State to set discharge standards aimed at improving water quality, with the ultimate goal being that conformance with the SA criteria will eventually be attained and the area of certified shellfish beds will be expanded. Portions of Great South Bay are included among those coastal waters that have not been able to meet SA criteria consistently and, thus, have been closed both seasonally and year-round to shellfish harvesting. The waters adjacent to Ocean Beach's bay shoreline have been subject to seasonal shellfishing closures, during the period from May 15 through September 30. This particular closure area encompasses an expanse of water extending along the bay shoreline from Atlantique to Ocean Bay Park, to a distance of at least 1,500 feet bayward from the shoreline. The closure of shellfish beds in this area, which includes the waters directly off the Village of Ocean Beach within the LWRA, is primarily attributed to the presence of coliform bacteria and associated pathogenic microorganisms stemming from urbanization and polluted stormwater runoff and groundwater flow.

Point Source Discharge Standards

Point source discharges to surface waters in New York State are regulated by the State Pollution Discharge Elimination System (SPDES) permit program, which sets specific water

quality standards and establishes a compliance schedule for each regulated discharge. The Village operates a small wastewater treatment facility which provides secondary treatment to the municipal sewage generated within the Village and discharges the treated effluent to the Bay. The outfall is located off the northeast corner of the Village. The discharge from this outfall is regulated under the SPDES program. The operation of the Village's sewage collection and treatment system is discussed in detail in Section 2.3.6.B.

Suffolk County Bathing Beach Criteria

When the fecal coliform level of the waters at any bathing beach exceeds acceptable limits, the beach is closed for swimming. The New York State standard for waters to qualify for an SB classification, in which primary contact recreation (including swimming and bathing) is the best intended use, requires that: the monthly median total coliform level be between 70 and 2400 MPN/100 ml; no more than 20 percent of the samples can exceed 5000 MPN/100 ml total coliforms; and the monthly geometric mean fecal coliform level cannot exceed 200 MPN/100 ml for a minimum of five samples. The Village's bathing beaches, on both the ocean and bay sides, have not been subject to recent closure due to excessive bacterial concentrations.

C. Existing Water Quality Conditions

The range of activities for which a given body of surface water can be used is dependent on the level of contamination within the water column and the bottom sediments. The presence of certain contaminants above specified levels will preclude the use of a water body for certain activities that require a high level of water quality, particularly shellfish harvesting and swimming.

Water quality is measured in terms of a large number of variables, including the presence of micro-organisms (e.g., total coliform and fecal coliform bacteria, viruses, etc.), nutrients (e.g., nitrogen, phosphorus, etc.), organic compounds (e.g., polychlorinated biphenals, polyaromatic hydrocarbons, solvents, industrial chemicals, pesticides, herbicides, etc.), and inorganic constituents (e.g., metals). The levels of bacterial contamination are generally the most important water quality factor in estuarine waters. Fecal coliforms originate in the intestinal tracts of warm-blooded animals. Although fecal coliform are not harmful, *per se*, they can serve as indicators of the presence of more hazardous and difficult to identify, pathogenic bacteria and viruses which can cause a variety of illnesses (e.g., gastroenteritis, dysentery, hepatitis, cholera, typhoid, and others). Consequently, the presence of elevated fecal coliforms in surface waters is a widely used indicator for the likely presence of pathogenic micro-organisms that are often associated with human and animal wastes.

Nutrient concentrations are also of concern, especially where elevated nutrient loadings lead to increased phytoplankton growth. After these microscopic plants die and sink to the bottom, the subsequent decay of accumulated organic matter by naturally occurring microorganisms can cause depressed oxygen concentrations which results in a condition commonly known as "hypoxia". The South Shore Estuary has exhibited seasonal hypoxia due to elevated levels of

nutrients and the consumption of oxygen from the aforementioned process termed "cultural eutrophication". Hypoxia has been identified to be especially problematic along the South Shore Estuary's northerly shore and at the mouths of the freshwater tributaries. The *Long Island South Shore Estuary Reserve Comprehensive Management Plan* (April 2001) recognizes that several water quality issues currently impact the area's waters including, among others, nutrient loading, cultural eutrophication, and the development of hypoxic conditions. The plan offers a number of broad recommendations which provide a framework for combating these water quality concerns.

Contamination by metals and organic compounds is often a problem in industrialized coastal areas. Pesticide, herbicide, and fertilizers loadings to surface waters are most often associated with agricultural activities and residential and commercial landscaping efforts where large amounts of fertilizers and pesticides might be applied. Most metals precipitate out of suspension in stagnant waters and some organic chemicals have an affinity to bind to soil particles or volatilize and, therefore, do not exist in a free state within the water column. Consequently, metals and organic compounds are most often found in elevated concentrations in the bottom sediments of poorly flushed urbanized water bodies.

Many contaminants, including metals and organic compounds, tend to accumulate in the fatty tissues of aquatic animals. Thus, these substances "bioaccumulate", such that the concentration in the affected animals is greater than the ambient concentration in the environment. Additionally, the contaminants tend to become "biomagnified" in animals that are higher up on the food chain, such that the top predators typically have much higher levels of tissue contaminants than herbivores and lower tier predators.

Contaminants that adversely affect surface water quality can originate from a myriad of sources. These sources can be grouped into two general categories: non-point sources and point sources. A point source is any input that emanates from a discrete, easily identifiable location, such as a pipe outfall. A non-point source is a diffuse input over a large area, such as "sheet" runoff derived directly from precipitation or groundwater inflow. The distinction between these two categories is not always obvious. Stormwater runoff, for example, may start as a non-point source originating from a large area. However, if runoff is collected and discharged to receiving waters via an outfall pipe, this can be considered to be a point source.
The principal sources of bacterial loading to surface waters generally include: stormwater runoff, groundwater underflow, wastes from waterfowl, failing septic systems or leaking sewer mains, poorly treated wastewater effluent, and wastewater discharges from boats. According to the *Long Island South Shore Estuary Reserve Comprehensive Management Plan*: "Nonpoint source pollution poses potential hazards to human health, causes the periodic cbsures of bathing beaches, and has forced the closure of approximately 34,643 acres of hard clams in the [South Shore Estuary] Reserve. The study further found that "[a]t least five reports, the first dating from 1978— the *208 Areawide Waste Treatment Study, Long Island Segment of the Nationwide Urban Runoff Program, Nonpoint Source Handbook, Nonpoint Water Quality Strategy for Nassau County, and Suffolk County Water Quality Strategy*—concluded that

nonpoint source pollution was a priority concern and that, in particular, polluted stormwater runoff was the primary source." Despite the development of a wide variety of strategies by these studies to address non-point stormwater concerns, the programs and initiatives have not yet been fully effectuated.

Fecal wastes from waterfowl and other wildlife populations can contribute significantly to the overall coliform levels. This problem can be exacerbated by recreational feeding of waterfowl, resulting in increased population levels at certain locations and interrupted seasonal migratory patterns.

Waste discharges from vessels also contribute to pollution, especially in areas that have restricted flushing. The waters on the Village's bay side are heavily used for recreational boating on a seasonal basis. In cases where a significant number of occupied vessels are confined to a restricted area, such as a marina basin, the discharge of sanitary wastes into the surrounding water will elevate coliform levels.

Presently there are no private or municipally-owned and operated marine sanitation pumpout stations in the Village of Ocean Beach. Efforts should be made to include such equipment in any substantial project to improve recreational vessel facilities in the Village. A number of vessel waste pumpout stations are located throughout eastern Great South Bay. Most of these facilities are located on the Long Island mainland (e.g., Anchorage Marine, Lindenhurst; Babylon Marine, Inc.; Bay Shore Marina; Captree State Park, Babylon; Coastal Yacht Marina, Bay Shore; Delmarine, Inc., Amityville; East Islip Marin; Morgan's Swan River Marina, Patchogue; Patchogue Marine, Inc.; Surfside 3 Marina, Lindenhurst; Timber Point County Marina, Great River; and West Sayville Boat Basin) and, therefore, are not conveniently available to boaters in Ocean Beach. The nearest pumpout facility, on Fire Island, is located at Atlantique Marina, less than one mile to the west of the Village.

The Village's municipal wastewater treatment plant discharges secondary-treated effluent directly into Great South Bay from an outfall located approximately 200 feet offshore near the northeast corner of the Village. The plant, to which all of the homes and commercial and institutional buildings in the Village are connected, has a design capacity to process wastewater at a rate of 0.5 million gallons per day (MGD). During the summer, the sewage flow averages approximately 0.44 MGD. Although, this suggests that the wastewater facility has the capacity to treat an additional 60,000 gallons per day in the summer, infiltration of groundwater into deteriorated sewer piping mains causes the plant to operate at or near capacity during the summer season. Flows decrease greatly during the off-season, due to the significant decline in the resident population and activity at local businesses. See Section 2.3.6.B for further discussion of the Village's sewage treatment operations.

In addition to the contaminant sources discussed above, unauthorized or accidental releases of hazardous materials from industrial and commercial facilities, such as vessel fueling facilities, will

degrade water quality in coastal waters. The Village of Ocean Beach currently does not have a public fuel dispensing facility within its jurisdiction.

D. Stormwater and Non-Point Source Pollution

A number of factors, including those listed below, are important in contributing to the high level of coastal water contamination caused by surface runoff from lands within the Great South Bay watershed, including the Village of Ocean Beach.

In many cases, runoff flows via stormwater outfalls directly to surface waters, receiving little or no filtering of contaminants prior to discharge.

The Village of Ocean Beach is extensively developed. Essentially 100 percent of the precipitation onto paved surfaces becomes runoff (minus a small amount lost through evaporation), which is approximately three to four times higher than the runoff rate for areas covered with native vegetation. The removal of native vegetation in order to construct buildings and pavement is a common consequence of residential and commercial development. The filling and grading of low-lying areas and the construction of impervious surfaces (i.e., roofs, concrete walkways, etc.) restrict the infiltration of precipitation in some areas and may cause water to accumulate in other low-lying areas or significantly increasing the rate of runoff.

2.2.3 GROUNDWATER RESOURCES

The entire Village of Ocean Beach is situated within Hydrogeologic Zone VII, as delineated and defined by the Long Island Regional Planning Board's *Long Island Comprehensive Waste Treatment Management Plan* (1978), also know as the 208 Study. This area is considered to be within the south shore shallow flow system, in which the groundwater primarily moves laterally to the north and south from the central axis of the barrier island. There may even be some degree of upward flow as the groundwater discharges to the surface water bodies. A significant proportion of the precipitation into Zone VII runs off into the Great South Bay system. The fraction of precipitation entering the groundwater has not been accurately determined, but appears to vary locally from 0 to 50 percent.

The Village of Ocean Beach operates and maintains its own municipal drinking water system, which is served by three functional wells located immediately west of Cottage Walk and north of the primary dune on the south side of the community. These wells extend to a depth of approximately 450 feet. The Village's potable water supply system is discussed in detail in Section 2.3.6.A.

2.2.4 WETLAND ECOLOGY

Wetlands in New York State are classified as either tidal or freshwater, based on soil conditions, hydrology, and botanical indicators. The type of vegetation is largely determined by salinity and the length of time the soil remains saturated. That is, different plant species have varying degrees of tolerance to certain environmental conditions; those that thrive in wetland areas have unique adaptations to the particular physical and chemical conditions at hand. The depth of water and the predominance of certain vegetative indicator species distinguish different types and classes of wetlands.

A. Tidal Wetlands

Tidal wetlands constitute one of the most biologically productive natural ecosystems. They serve as nurseries for fish and shellfish, are vital to marine food production, and provide valuable wildlife habitat. Tidal wetlands also serve several other functions including flood and storm control, pollutant removal and ecosystem cleansing, and control of sedimentation.

Tidal wetlands have been inventoried and mapped by NYSDEC on 1974 aerial photographs. Tidal wetland boundaries were officially adopted in 1977 when the State's Tidal Wetlands Regulations (6 NYCRR Part 606, adopted pursuant to Article 25 of the Environmental Conservation Law) went into effect.

The area immediately adjacent to the Great South Bay shoreline of the Village of Ocean Beach is designated "SM" (coastal shoals, bars and mudflats) on NYSDEC tidal wetlands inventory maps. This zone includes areas that are exposed at low tide or covered by water to a maximum depth of one foot, and typically not vegetated by smooth cordgrass (Spartina alterniflora). The SM zone extends for a distance of approximately 300 to 400 feet from the Village's bay-side shoreline.

Beyond the SM zone on the Village's bay side, and in the area extending offshore on the ocean side, lies the littoral zone, which is designated as LZ on NYSDEC inventory maps. This is a zone of open water which includes shallow bay bottoms with a maximum depth of six feet measured from mean low water elevation. This is a highly productive zone of great value to waterfowl, fisheries and shellfish.

The NYSDEC inventory maps do not identify any areas in the Village of Ocean Beach that contain vegetated tidal wetlands, such as intertidal marsh or high marsh (salt meadow). In their natural state, barrier beaches such as Fire Island characteristically contain marsh lands along the back-barrier or bayward side. However, marshes are absent from the northern shoreline of Ocean Beach because land development and the installation of shorefront stabilization structures (e.g., bulkheads and revetments) resulted in the removal of these natural features long ago.

B. Freshwater Wetlands

Pursuant to the 1975 passage of the Freshwater Wetlands Act (Article 24 of the Environmental Conservation Law) NYSDEC inventoried freshwater wetlands. As originally adopted, the regulations controlled activities in all designated freshwater wetlands greater than 12.4 acres in size. With the passage of "Interim Permit" procedures in February of 1984, NYSDEC assumed regulatory authority over freshwater wetlands of less than 12.4 acres in size that were of unusual local importance. NYSDEC updated the 1975 freshwater wetland inventory maps to include these significant wetlands.

The Village of Ocean Beach does not contain any areas that are identified as freshwater wetlands on the NYSDEC inventory maps. Therefore, the New York State Freshwater Wetland regulations do not apply in the Village. However, the federal government also has the authority to regulate wetlands, pursuant to Section 404 of the Clean Water Act. The U.S. Army Corps of Engineers is the agency given the primary regulatory authority in this process. The determination as to whether a given area is subject to federal regulation as a wetland is based on the presence or absence of three wetland characteristics — wetland soils, wetlands hydrology, and wetlands vegetation — as determined in the field based on the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1987). Only areas that meet all three of these criteria are classified as federal jurisdictional wetlands. There is no minimum threshold with respect to the size of a wetland that is subject to federal regulation; therefore, all wetland areas, no matter how small, theoretically are governed by federal law.

There are a number of small, low-lying, poorly drained areas in the Village that are susceptible to regular flooding. These areas could be subject to federal wetland regulation under Section 404. A determination of the applicability of these requirements would have to be made on a case-by-case basis.

2.2.5 UPLAND ECOLOGY

Much of the native vegetation within the Village of Ocean Beach has been removed by development activities. The Village has, nevertheless, retained some of its native species. Species that are considered indigenous to Fire Island can be categorized into several unique community types based on the location of their occurrence, including: ocean beach; dune/swale; and maritime forest.

Plant species that have been found to be associated with these community classifications on Fire Island are as follows:

Ocean Beach — sea rocket (*Cakile edentula*) and American beachgrass (*Ammophila breviligulata*)

Dune/Swale — American beachgrass, beach plum (*Prunus maritima*), bayberry (*Myrica pennsylvanica*), poison ivy (*Rhus radicans*), bearberry (*Arctostaphylos sp.*), beach

heather (*Hudsonia tomentosa*), seaside goldenrod (*Solidago sempervirens*), and Virginia creeper (*Parthenocissus quinquefolia*)

Maritime Forest — red cedar (*Juniperus virginiana*), pitch pine (*Pinus rigida*), wild black cherry (*Prunus serotina*), winged sumac (*Rhus copallina*), winterberry holly (*Ilex verticillata*), include American Holly (*Ilex opaca*), sassafras (*Sassafras albidum*), shadbush (*Amelanchier sp.*), highbush blueberry (*Vaccinium sp.*), poison ivy, briar (*Smilex sp.*), Virginia creeper, and grape (*Vitis sp.*).

The influence of introduced ornamental plant species is readily apparent throughout the Village, especially along the woodland edges, disturbed areas, and within residential neighborhoods. Aggressive and adaptive ornamental tree species — such as Norway maple, tree-of-heaven, ash, catalpa, princess-tree and weeping willow — have invaded clearings within the developed areas and along shorefronts, and dominate the canopy. Native shrub species including mountain laurel, highbush blueberry, arrowwood, and chokeberry, have been replaced by a wide variety of ornamental landscaping shrubs and groundcovers in a large portion of the residential area within the Village. However, pockets of native vegetation still remain scattered throughout this area, and the Village Environmental Commission has vigorously sought local legislation that provides some protection to this resource, in the form of tree-clearing regulations and/or open space preservation.

The Village undertakes a regular program of dune restoration, which includes the artificial placement of dune grass plugs. These efforts are aimed at augmenting the vegetative cover on the dunes, so as to enhance the protective function served by these features with respect to the erosive power of storm surge and waves.

Fire Island supports a varied community of wildlife, especially in the wilderness area. Wildlife in the developed communities, such as Ocean Beach, is significantly less diverse, as species that are tolerant of proximity to humans become more abundant and more reclusive species disappear altogether.

The bird fauna of Fire Island, in particular, is extremely diverse, both throughout the year and during the spring and fall migration periods. More than 330 species of birds have been recorded on Fire Island, accounting for approximately one-third of all the avian species found in North America. The percentage of these species that occur in the Village of Ocean Beach is not known.

Mammals are another well-represented group of wildlife on Fire Island. White-tailed deer, red fox, gray squirrel, eastern cottontail rabbit, racoon, masked shrew, and long-tailed weasel are abundant.

Populations of white-tailed deer on Fire Island have exploded due to the lack of natural predators and the absence of effective programs to control this species. Residents of Ocean Beach and

other Fire Island communities have adapted fairly well to the presence of deer within developed areas. For example, landscaping plans often consist of plant species that are not appealing to deer, or else barriers have been erected to prevent deer from foraging on plants they otherwise would include in their diets. Starting in 1995, one other innovative method that has been used in the effort to control deer populations on Fire Island is contraception to reduce the generation of offspring. An immuno-contraceptive compound, porcine zona pellucida (PZP, which is derived from the protein that surrounds pig eggs), is delivered to mature female deer via darts. PZP prompts the treated animals to produce antibodies which prevent their eggs from being fertilized. Deer censuses conducted in the PZP study area have shown that this method has reduced populations by 50 percent over the seven-year period since its inception (see the National Park Service's web site for further discussion of this issue, at www.nps.gov/fiis/deerpeople/deer.html).

Coinciding with the large white-tailed deer populations on Fire Island is the problematic deer tick and the potential for the transmission of Lyme disease to humans. Although this condition currently is effectively treated in early stages with antibiotics, and a vaccine recently became available to prevent infection, the potential still exists for the symptoms to go unnoticed or to be mis-diagnosed. If a prolonged period after infection transpires without proper treatment, permanent effects usually result, including possible neurological and joint problems.

2.2.6 NEW YORK STATE DESIGNATED SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

The area directly to the north of the Village of Ocean Beach, including the Village's 1,500-foot area of extra-territorial jurisdiction under Section 46-a of the New York State Navigation Law, lies within the New York State-designated Great South Bay-West Significant Coastal Fish and Wildlife Habitat. This designation is incorporated into the State Coastal Management Program, and provides special protection for important natural resources during the permitting process at the State and federal level.

The following description is based on the habitat narrative prepared by the Department of State in 1987, which is planned for updating in the future.

Location and Habitat Description

Great South Bay-West is located along the south shore of Long Island, north of Fire Island, in the Towns of Babylon and Islip, Suffolk County. The entire fish and wildlife habitat is an approximate 32,000-acre area, generally defined by the mean high water elevation on the north and south sides, by the Gilgo Boat cut on the west, and by the Islip-Brookhaven town line to the east. Great South Bay-West includes extensive areas of undeveloped salt marsh, tidal flats, dredge spoil islands, and a variety of open-water areas.

Water depths in this area are generally less than six feet at mean low water, except in Fire Island Inlet and in some dredged navigation channels. Tidal fluctuations in the bay average approximately 1.4 feet at the western end and approximately 4.1 feet at the inlet. The bay is bordered on the north and east by dense residential and commercial development, including extensive marina and harbor facilities, which support a thriving recreational boating industry. The remainder of the area is bordered by State parklands, open water, and low density residential development on Fire Island.

Fish and Wildlife Values

Great South Bay-West comprises approximately one-half of the largest protected, shallow, coastal bay area in New York State. A tremendous diversity of fish and wildlife species occur in this vast wetlands area. Many species of migratory birds nest among the salt marshes and spoil islands in Great South Bay-West. In recent years, common terns (State-listed threatened) have been confirmed nesting on Elder Island, Seganus Thatch, on a marsh island north of Gilgo Beach and on the southeastern end of Captree Island. An estimated 315 breeding pairs of common terns were observed in Great South Bay-West in 1985 and 340 pairs in 1984, with the largest concentrations in both years located at Seganus Thatch. Least terns (State-listed endangered) nested on Nazerus Island (a large spoil island east of Cedar Island) in 1982 and 1983, but were absent in 1984 and 1985. Approximately 65 pairs of least terns nested there in 1983. Other bird species which nest in Great South Bay-West include Canada goose, herring gull, great black-backed gull, American oystercatcher, black skimmer, black duck, mallard, gadwall, willet, Virginia rail, clapper rail, marsh wren, sharp-tailed sparrow, and seaside sparrow. Several heronries have been located on islands in Great South Bay-West, including Gilgo Island, Sexton Island, Seganus Thatch, and an unnamed spoil island southwest of Nezeras Island. Species nesting in these areas include great egret, snowy egret, yellow-crowned night heron, black-crowned night heron, green-backed heron, little blue heron, tri-colored heron, and glossy ibis, with the largest concentrations in 1984 on the island southwest of Nezeras Island. Several pairs of northern harrier (State-listed threatened) have been confirmed nesting in the northeastern end of Gilgo State Park, between Cedar Island and Oak Island. The locality of one of the largest areas of unditched salt marsh on Long Island; it is the only area in New York State where black rails (State-listed species of special concern) have been regularly found, and is the only documented breeding location for soras on Long Island. Northern harriers and short-eared owls (State-listed species of special concern) are common winter residents of the marshes in Great South Bay-West.

The vast salt marshes, intertidal flats, and shallows in this area provide valuable feeding areas for birds throughout the year, including species nesting in the area and large concentrations of shorebirds during migration. In addition, Great South Bay-West is one of the most important waterfowl wintering areas (November through March) on Long Island, especially for brant and scaup. Mid-winter aerial surveys of waterfowl abundance for the ten-year period 1975-1984 indicate average concentrations of over 2,900 birds in the bay each year, including approximately

1,400 scaup (12,000 in peak year), and 330 black ducks (900 in peak year), along with lesser numbers of Canada goose, goldeneye, red-breasted merganser, mallard, oldsquaw, and bufflehead. Based on these surveys, it appears that Great South Bay-West supports one of the largest wintering waterfowl concentrations in New York State. Waterfowl use of the bay during winter is influenced in part by the extent of ice cover each year. Generally, brant and geese feed in open water areas through mid-winter, while later in the spring (prior to migration), the birds feed extensively in the salt marshes. Concentrations of waterfowl also occur in the area during spring and fall migrations (March through April and October through November, respectively). Nearly all of Great South Bay-West is open to the public for waterfowl hunting, and the area supports regionally significant hunting pressure.

In addition to having significant bird concentrations, Great South Bay-West is an extremely productive area for marine finfish, shellfish, and other wildlife. Much of this productivity is directly attributable to the salt marshes and tidal flats within the area. Great South Bay-West serves as a major nursery and feeding area (April through November, generally) for bluefish, winter flounder, summer flounder, kingfish, tautog, scup, blue claw crab, and forage fish species such as Atlantic silverside, mummichog, striped killifish, northern pipefish, and sticklebacks. A total of 56 fish species were collected during an intensive survey of Great South Bay in 1981. Fire Island Inlet is an especially significant component of the habitat; as a corridor for fish migrations, as a source for the exchange and circulation of bay waters, and as an area where feeding by many fish and wildlife species is concentrated. As a result of the abundant fisheries resources in the bay (summer flounder especially), Great South Bay-West receives heavy recreational fishing pressure, of statewide significance. Commercial bait fisheries have been established in shoal areas near Fire Island Inlet. The entire bay area is inhabited by hard clams, and the islands along the south shore support soft clams and ribbed mussels. Most of the bay waters are certified for shellfishing, resulting in a commercial and recreational harvest of statewide significance. Clam Pond, on the north shore of Fire island, also contains a population of bay scallops which have been reduced to the area. Diamondback terrapin (State-listed species of special concern)resides among the salt marsh islands in the bay, and utilize sandy areas along the shore for egg-laying.

Impact Assessment

Any activity that would substantially degrade the water quality in Great South Bay-West would adversely affect the biological productivity of this area. All species of fish and wildlife would be affected by water pollution, such as chemical contamination (including food chain effects), oil spills, excessive turbidity, and waste disposal. It is essential that high water quality be maintained in this area, through control of sewage discharges from recreational boats and upland sources. Alteration of tidal patterns in Great South Bay-West, by modification of inlet configurations or other means, would have major impacts on the fish and wildlife communities present. Excavation of new navigation channels in the bay should be minimized. Dredging to maintain existing boat channels (including the inlet) should be scheduled in late summer and fall to minimize potential impacts on aquatic organisms, and to allow for spoil disposal when wildlife

populations are least sensitive to disturbance. Elimination of salt marsh and intertidal areas, through excavation or filling, would result in a direct loss of valuable habitat area. Unregulated dredge spoil disposal in this area would be detrimental, but such activities may be designed to maintain or improve the habitat for certain species of wildlife. Nesting birds inhabiting the marshes and islands of Great South Bay-West are highly vulnerable to disturbance by humans from mid-April through July. Recreational activities (e.g., boat landing, picnicking) in the vicinity of bird-nesting areas should be minimized during this period, through the use of annual posting or fencing. Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development (i.e., natural beach, tidal flat, or salt marsh), may result in the loss of productive areas which support the fish and wildlife resources of Great South Bay-West.

2.2.7 FIRE ISLAND NATIONAL SEASHORE

The unique natural resources of Fire Island and its adjacent wetlands and coastal waters, and the need to provide for enhanced protection of these resources, are reflected at the national level by the establishment of Fire Island National Seashore (FINS) by the U.S. Congress in September 1964 under the Fire Island National Seashore Act. The act states, in part, that the intent of this legislation was "for the purpose of conserving and preserving for the use of future generations certain relatively unspoiled and undeveloped beaches, dunes, and other natural features within Suffolk County, New York, which possess high values to the nation as examples of unspoiled areas of great natural beauty in close proximity to large concentrations of urban population...".

The area within FINS encompasses 26 miles of Fire Island's 32-mile length, excluding Robert Moses State Park at the barrier's western end. The FINS boundary extends a variable distance northward into Great South Bay (approximately 1,500 to 2,000 feet adjacent to the Village of Ocean Beach) and 1,000 feet southward into the Atlantic Ocean. Besides Fire Island, some 25 smaller islands in Great South Bay are contained within FINS, including East and West Fire Island to the west of Ocean Beach.

FINS covers a total of approximately 19,500 acres (about 30.5 square miles), roughly a third of which is federally-owned, with the remainder being non-federal land. Within the non-federally-owned area are lands owned by other government entities (New York State, Suffolk County, Towns of Islip and Brookhaven, and villages), as well as privately-owned properties within 17 distinct communities on Fire Island.

The mission statement for FINS, as set forth in the *Strategic Plan* (revised November 2000) written by the National Park Service (NPS), U.S. Department of the Interior, which administers the national seashore, is:

> "The National Park Service is committed to preserving Fire Island National Seashore's cultural and natural resources, its values of maritime and American history, barrier island dynamics and ecology, biodiversity, and recreational and educational opportunities to Fire

Island National Seashore's visitors in this natural and cultural setting close to densely populated urban and suburban areas, and to maintaining and exemplifying the policies of the National Park Service."

The mission statement concisely synthesizes the management goals of the NPS as being focused on natural resource preservation. However, the NPS's *Fire Island General Management Plan* (1978) also recognizes that:

"Fire Island National Seashore does not exist as an isolated entity, rather it is located within the nation's largest urbanized area, and cooperative planning between local public and governmental authorities is required to ensure that mutually compatible goals are achieved."

The NPS assumes an active role in the management of the entire area within the FINS boundary, including the private communities, and holds that:

"Proper land-use controls and related regulations within the communities of Fire Island are necessary for the long-term preservation of the resource, thereby requiring National Park Service involvement in community zoning activities, as intended by the 1964 Fire Island National Seashore Act." (from the *General Management Plan*)

The NPS manages FINS in order to achieve the following general objectives, as stated in the *General Management Plan*, pursuant to its legislated mandate and other management documents:

- "To preserve the natural and cultural resources within administrative boundaries.
- To permit hunting, fishing, and shellfishing within boundaries in accordance with U.S. and New York State laws.
- To provide for public access, use, and enjoyment.
- To work with the communities within the park to mutually achieve the goals of both the park and the residents."

The 17 communities situated within the park boundaries constitute a separate management unit of FINS, which are governed by the following additional objective:

- "To establish direct federal involvement with local government jurisdictions in a cooperative effort to provide appropriate land uses within the exempted communities of the national seashore." (from the *General Management Plan*)

The practical impetus behind the establishment of FINS in 1964 was the advancement of a proposal to construct a roadway along the spine of Fire Island, similar to Ocean Parkway on

Jones Island to the west. The creation of FINS, which was brought about largely through the efforts of the residents of the Fire Island communities, effectively terminated consideration of a parkway on Fire Island. However, this action also resulted in the introduction of an additional layer of governmental review, at the federal level, for development projects and a wide range of other human activities within the boundaries of the national seashore.

The communities on Fire Island, including the Village of Ocean Beach, are subject to NPS regulations. Although, as noted above, the NPS's planning objectives include local involvement in the decision-making process, the Service has consistently staked a strong position in favor of resource preservation. At times, this position has been at odds with the objectives of property owners and local officials, including those in the Village of Ocean Beach, which has been a significant source of frustration.

The NPS has approval authority for land development projects within FINS, and has consistently objected to the construction of bulkheading on the bay and homes in the dune district along the oceanfront. The NPS has allowed repair of pre-existing "grandfathered" development in the dune district, but not the expansion of such structures or restoration when damage exceeds 50 percent of fair market value. The NPS has concluded that approximately 90 percent of the homes on Fire Island are not in the dune area, and pose no threat to the island's integrity.

The NPS regulates vehicle travel within FINS, by means of a permit system, pursuant to the requirements of the Code of Federal Regulations. All vehicles other than police vehicles must have a permit in order to be legally operated on seashore lands. These permits have been notoriously difficult to secure, consistent with provisions of the *General Management Plan* calling for limitations on all categories of permits. This policy can be especially problematic for residents and others traveling to and from Fire Island during the off-season, when the ferry schedule is very limited. These circumstances also have greatly increased the cost of public and private construction projects in the Village, since material transport typically must occur by ferry due to the difficulty contractors encounter in securing vehicle access permits. Furthermore, such projects generally are undertaken during the off-season, in order to minimize conflicts with the summer period of peak activities, which results in additional expenses because of the constraints of the ferry operations at that time of year.

2.2.8 FLOODING AND EROSION

Due to its close association with coastal waters to the north and south, and its low topographic relief, the Village of Ocean Beach is susceptible to flooding and erosion. Coastal storms are the primary agent of flooding and erosion in the Village, and are of particular concern with respect to the stability of the protective beach and dunes along the Atlantic shorefront, which has profound implications for the long-term welfare of the entire Village. Flooding also occurs at some interior locations in the Village because of poor stormwater drainage.

A. Summary of Flooding and Erosion History in the Village

The Village of Ocean Beach, like all of Fire Island, has been subject to active and ongoing erosion, especially along the oceanfront, and episodic flooding caused primarily by the inundation of coastal waters from both the bay and ocean. Erosional losses have been especially severe at the western end of the Village. This is evidenced by the fact that Ocean View Walk originally extended the entire east-to-west width of the Village, with full row of lots to the south of this walkway. However, the entire western half of Ocean View Walk has been lost to shoreline recession, such that this walkway now terminates at Cottage Walk. Several lots that had been situated to the north of Ocean View Walk also have been eroded away by the advancing ocean at the extreme western end of the Village. Currently there are only five developed lots on the south side of Ocean View Walk.

Since the late 1970s, the Village has been impacted by five major winter storms and four major hurricanes. The cumulative damages incurred over this time have totaled more than $5 million, accounted for almost entirely by incidents during the period between the mid-1980s and 1993. The major storms that occurred during that period include: March 1984 northeast coastal storm, Hurricane Gloria (1985), Hurricane Bob (1991), 1991 Halloween Storm, December 1992 northeast coastal storm, and Blizzard of March 1993.

Weather conditions have been relatively quiet since 1993. However, erosion of the Village's oceanfront beach in between the two groins (i.e., the rock "jetties" extending perpendicular to the shoreline at Cottage Walk and Wilmot Road) has continued on a nearly continuous basis during this time period, according to an investigation conducted by Michael S. Bruno (*Coastal Erosion Analysis: Village of Ocean Beach, Suffolk County, New York*; April 29, 1999), with the eroded beach material apparently being deposited in an off-shore bar located slightly to the west of the westerly groin. A northeast coastal storm in October 1996 resulted in some damages in the Village; and an Atlantic hurricane in October 1998 resulted in severe erosion along the segment of ocean shoreline adjacent to the Village's water supply well field, even though that storm never made landfall on Long Island. The Village performed emergency activities to arrest erosion in this area, which consisted of the installation of "geotubes" as discussed further in Section 2.2.8.C below.

B. Natural Protective Features

The south side of the Village, along the Atlantic Ocean, has experienced coastal erosion and in the past, and is susceptible to future erosion due to surge and waves during major storms. This shorefront serves a critical role in protecting the substantial public and private investment in development throughout the Village.

The primary protection against flooding and erosion on the ocean-side of the Village is provided by "natural protective features", which include the nearshore and intertidal zone (i.e., extending seaward from the high tide line), the berm of the beach (i.e., the area between the high tide line

and the toe of the primary dunes), and the dune system. These features form a continuous line of protection along the Village's entire frontage on the Atlantic Ocean.

The primary dunes are carefully maintained by the Village, with the assistance of volunteers during annual dune planting events. Snow fencing has been installed in an effort to trap wind-blown sand. Dune walk-overs are provided at the southerly terminus of eight of the ten north-south walkways in the Village, thereby providing convenient access to the beach and discouraging illegal trespassing onto the dunes.

The Village also periodically has undertaken "beach scraping" along the Atlantic shorefront, under a permit from NYSDEC, in an effort to bolster the protective capability of the beach. In beach scraping, a thin layer of sand is excavated from the lower portion of the beach and this material is transferred to the upper portion of the beach, typically at the toe of the existing dune.

Development of the bay-side of the Village many decades ago resulted in the loss of wetland areas that previously were present along that shorefront. Consequently, there are no significant areas of marsh or other natural protective features, except for the tidal flat areas that lie just offshore.

C. Man-Made Shoreline Conditions

In response to the threat of coastal flooding and erosion, man-made alterations have occurred along both shorelines of the Village of Ocean Beach. On the south side, the situation is highly dynamic and complex, and a number of measures have been implemented to address this issue. The Village's northerly shoreline is essentially fully bulkheaded, both for municipal and private purposes, except for the small beach area (approximately 20 feet in length) at the end of Surf Road, to the west of the Village Marina.

In addition to the previously mentioned efforts to augment the natural protective characteristics of the Atlantic shorefront (by means of dune planting, placement of snow fencing, beach scraping, etc.), structural shore protection has been installed along the Village's Atlantic shoreline. A pair of rubble-mound/concrete groins were constructed between 1969 and 1970, at the end of Wilmot Road and just east of Cottage Walk, in order to mitigate chronic beach erosion. The groins extend to a length of roughly 200 feet and are situated approximately 650 feet apart. The materials used in the construction of the two groins include two-ton and five-ton concrete armor "sta-pods" and stone. The western groin is constructed of two parallel rows of five-ton sta-pods within the surf zone and seaward, and two parallel rows of two-ton sta-pods on the beach, with stone used to fill the middle of the entire length. The eastern groin is constructed of sta-pods along its seaward half and is composed of stone on the landward side.

Groins are built perpendicular to a shoreline, and extend outward into the sea, in order to intercept sand carried by long-shore currents (littoral drift) traveling parallel to the shoreline. The direction of this sand flow is tied to the long-term average angle of wave approach to the

shoreline, which is toward the west along the Atlantic coast of Fire Island. Overall, groins have had mixed success in reducing erosion and trapping sediment, and often have resulted in reduced sediment supplies and erosion of down-drift locations.

The integrity of the eastern (Cottage Walk) groin has deteriorated over time, resulting in accelerated coastal erosion. The Village has sought permits to reconstruct the groins, but has not received favorable consideration from the involved regulatory agencies. Consequently, the long-term prospects for the maintenance of these structures are uncertain.

The physical deterioration of the groins over time, and the resulting decrease in their effectiveness in trapping sand, has prompted the Village to explore other alternatives for addressing the chronic beach erosion problem that is threatening residential structures and the community's potable water supply wells. This led to the installation of a pair of stacked, sand-filled geotextile tubes ("geotubes") along the landward side of the groin compartment at the toe of the primary dune, an emergency project that was complete in early 1999.

As discussed previously, in association with development of the land along the Village's bay-side waterfront, natural wetland vegetation that previously occurred at this location has been removed and replaced with man-made, protective structures or armoring. These structures are mostly in the form of timber or sheet-pile bulkheads. Although these structures provide some protection from wave action, their primary purpose is to partition uplands from the water and to retain the earth (often composed of fill) in place on the upland side. While these devices serve to ensure a stable and secure shoreline along the length of the structure, they sometimes can compromise the stability of unprotected shoreline to either side, as wave and current energy is deflected away and concentrated on adjacent areas.

D. FEMA Flood Zones

The Village of Ocean Beach in its entirety is situated within an area that been designated by the Federal Emergency Management Agency (FEMA) as being susceptible to potential flood damage resulting from the movement of adjacent coastal waters onto the land surface during severe storm events, such as northeast storms ("nor'easters") and hurricanes. FEMA has prepared Flood Insurance Rate Maps (FIRMs) to delineate such flood-prone areas, and has classified flood zones into several general categories, based on the degree of susceptibility to potential flood damage. These flood zones define the limit of 100-year flooding within the Village (where the 100-year flood has a probability of occurring once in every 100 years, or a one percent probability in any given year), as summarized below:

Zone VE: encompasses the land area that would be inundated by water to a specified depth (termed the "base flood elevation") and would be subject to breaking waves of three feet or greater in height during the 100-year storm.

Zone AE: encompasses the land area that would be inundated by water to a specified depth (i.e., the base flood elevation) during the 100-year storm, but would not be subject to significant wave action.

The flood plain within the LWRA is illustrated in Map 4, and summarized as follows:

Zone VE occurs as a continuous band across the entire east-to-west width of the Village, extending inland from the Atlantic Ocean shoreline a distance of approximately 500 feet.

Zone AE occurs as a continuous band across the entire east-to-west width of the Village, extending northward from Zone AE all the way to the Great South Bay shoreline.

E. Coastal Storm Surge Elevations

Within the Village of Ocean Beach, the base flood elevation (defined as the floodwater elevation that would occur during the 100-year flooding event) has been calculated by FEMA to be 13 feet in the immediate vicinity of the Atlantic Ocean shoreline, while the remainder of Zone VE has a base flood elevation of 12 feet. Base flood elevation in Zone AE incrementally decreases northward, from 11 feet in the area immediately adjoining Zone VE, to 6 feet along the bay shore.

Based on modeling undertaken by the U.S. Army Corps of Engineers, in cooperation with FEMA, projected hurricane surge elevations within the vicinity of the Village of Ocean Beach have been calculated as follows:

at Atlantique Beach (approximately one mile west of Ocean Beach) — ranging from 6.8 feet for a category 1 storm (wind speed 74 to 95 mph) to 19.8 feet for a category 4 storm (wind speed 131 to 155 mph);

at Fire Island Pines (approximately five miles east of Ocean Beach) — ranging from 6.5 feet for a category 1 storm to 19.1 feet for a category 4 storm; and

in central Great South Bay, at a point approximately two miles north of Ocean Beach — ranging from 2.9 feet for a category 1 storm to 19.3 feet for a category 4 storm.

F. Flood Mitigation Planning

In 1999, the Ocean Beach Village Board of Trustees adopted a Comprehensive All-Hazards Code, which addresses mitigation planning for flooding and various other hazards. The All-Hazards Code is incorporated into Chapter 164 of the Village Code (Zoning), and is discussed further in Section 5.1 of this LWRP.

The Village of Ocean Beach has initiated a program, administered and partially funded by FEMA, which provides grant monies to raise homes above the base flood elevation, so as to decrease the susceptibility of these structures to future flood damage. Starting with initial project meetings in 1998, the Village has been very active and successful in this program, securing $2 million for the elevation of 37 homes. The first phase of this project involved the expenditure of $242,000 to raise three houses. The second phase is ongoing, and involves $1 million expended to raise 25 houses. A number of homeowners who decided not to apply during the initial round of funding now see the benefits of the program and have expressed a desire to be included on the list for future funding opportunities. The Village has hired an engineer/administrator, who is responsible for overseeing the program, from construction to reimbursement. The administrator's compensation is included in the grant funding.

2.2.9 SCENIC RESOURCES

Visual quality is largely subjective by nature, and therefore, requires a description of the major elements or features which, together, make up the local scenery. Ultimately, however, it is the individual viewer who determines whether or not an area is aesthetically pleasing. The visual quality of the coastal area is a significant resource which plays a vital part in attracting people to the waterfront. The scenic qualities and values of coastal resources enhance the user's experience. Maintaining the visual quality of these coastal resources is, therefore, a priority. Although no scenic resources of State-wide importance have been identified in the Village, the aesthetic significance of the existing visual resources in this clearly cannot be understated

The Ocean Beach's Great South Bay and Atlantic Ocean shorelines offer spectacular views, which contribute significantly to the desirability of the Village for residential dwellings and recreational pursuits. Considerable public access is provided to viewing locations, in the form of docks, piers, walkways, dune cross-over stairways, and the beaches themselves. Protection of these vistas is of critical importance to the perpetuation of the Village's quality of life.

The built-up environment within the Village also possesses significant aesthetic character. The architectural styling of the residential dwellings, the quaint and compact business, and the focus of community activities at the water (i.e., in the Bayfront Recreation and Business Districts) are typical of a traditional classic beach community. The relatively small size of most of the individual buildings and the widespread use of natural building materials, evocative of the original bungalow-style residential construction of the early 1900s, contribute strongly to the Village's identity. The pedestrian-oriented transportation network in the Village also is important in this regard.

The visual quality of the Village's business district is adversely affected to a certain degree by the lack of consistent facade treatment. There has been discussion regarding the possible institution of an architectural review process to address this issue, but no action has been taken to date. The Planning Board is in the process of reviewing its prior proposal for architectural

review, focusing primarily on the commercial district and addressing the reconstruction of existing buildings.

The Village has also recently considered a draft property maintenance law. Although no action has been taken relative to this issue, there is still concern that continuing poor maintenance of some highly visible buildings is detracting from the overall aesthetic quality of the Village.

A specific concern has been identified with regard to the updating and reconstruction of buildings using materials that are not in keeping with the Village's traditional architecture, especially the use of plastic siding on building exteriors. Presently, only a few houses have such siding, and the consensus is that further use of this material would not be in keeping with the character of existing development in the Village. Other restoration projects involving more modern designs have been able to integrate effectively into the Village where colors and detailing are compatible with the styles of the early 1900s which characterize the community.

The existing public lighting system in the Village is believed by many residents to generate an excessive level of illumination which negatively affects the Village's rustic setting. The Village has initiated an ongoing, multi-phase light replacement project to address this issue.

Electrical distribution in the Village is provided by means of overhead lines, which are widely perceived as detracting for the Village's aesthetic quality. This issue is discussed further in Section 2.3.6.E.

2.3 LAND AND WATER USES, AND ZONING

2.3.1 EXISTING LAND USE

As shown in Map 2, the Village of Ocean Beach primarily is developed with single-family detached residential dwellings at a fairly high density. A variety of commercial, municipal, water transportation, and social/recreational land uses are located on the north side of the Village along Great South Bay. To the south of the primary dune line is the public bathing beach on the Atlantic Ocean.

The Village's 78-acre area contains approximately 600 homes and businesses. This translates to an approximate average lot size of less than 6,000 square feet, or 7.7 homes and businesses per acre.

The Village of Ocean Beach is the most commercially-developed community on Fire Island. However, there has not been any new commercial development in the Village in the past 20 years. In fact, there is one less commercial establishment than there had been previously.

Achieving an appropriate balance of commercial development in a community that is predominantly residential has been one of the major challenges facing Ocean Beach. This topic has been subject to heated debate, and is among the most controversial issues for the Village and its residents. However, this situation, entailing a basic divergence of opinion among stakeholders with different interests, is fairly common on Long Island and elsewhere. Wherever two or more contrasting uses adjoin or lie in close one proximity to one another, the potential exists for conflict. In this case, many Ocean Beach residents see that the peaceful enjoyment of their properties has become impaired by the high level of activity that occurs in the Village's business district during certain time periods on summer weekends. The complaints include inordinate noise and the spillover of patrons from the business district, mostly visitors from outside the community, into adjacent residential areas.

It should be pointed out that the issues described above are not entirely a matter of conflict between commercial uses versus residential uses. Even among the homeowners, as many as one-third rent out their houses either seasonally or monthly, which brings in a significant influx of people who generally do not posses as high a level of community interest and concern as occurs with owner occupancy. Additionally, complaints arising from excessive noise on residential properties have not been uncommon. However, the juxtaposition of activities on commercial and residential properties has been particularly polarizing for the community, and merits special attention.

At the Mayor's urging, the Advisory Committee for the LWRP included representation on all sides of the debate between commercial interests and residential interests. Despite the apparent polarization of views on this issue, the Committee expressed unanimous consensus that "the Village's business district becomes very crowded with people on weekend nights during the summer" and that in general, "actions that would further increase the number of people congregating in the business district during those time periods would be undesirable, and would not be in the general best interests of the Village." Although questions were raised as to the specific time frame for which this problem actually exists, indicating that further refinement is needed, it is clear that some common ground has been established for developing meaningful actions to address the issue. In fact, certain measures already have been implemented to moderate the crowds in the Village during the time periods of primary concern. These include the following measures, adopted via resolution by the Village Board of Trustees in the fall of 2001, which were implemented for the summer of 2002:

> The lateral ferry is prohibited from docking in the Village of Ocean Beach after 10:00 p.m. on Fridays, Saturdays, and holidays. This curtails late-night traffic from neighboring communities.
>
> Water taxis are prohibited from making drop-offs after midnight and pick-ups after 2:00 a.m. on weekends. These terms have been incorporated into the Village's new licensing agreements with the water taxi operators, which are executed on an annual basis.

The Board of Trustees has indicated that it will continue to monitor the situation closely, and will make further revisions as appropriate. The Board hopes this action will receive a positive result.

In an effort of address noise, which has been identified as the most significant problem faced by residents whose homes are located near the downtown area, the Village's police patrols for violations of the Village noise ordinance, and the issuance of summonses as warranted, were increased toward the end of the summer of 2001, which was further enhanced in 2002, and will continue thereafter.

The Village has initiated investigation into the possibility of establishing a Business Improvement District (BID). A BID committee was established, and the first few steps of a complicated process were completed, including the creation of a BID map. However, the process has stalled at the petition phase. The establishment of a BID requires signatures representing 51 percent of the ad valorem commercial tax base. Although the Village has not yet been able to exceed this threshold, the process is still continuing.

A. Water-Dependent and Water-Enhanced Uses

Water-dependent uses contribute significantly to the long-term economic vitality and public enjoyment of coastal areas. A water-dependent use is a use that requires a location on, or directly adjacent to, the water in order to function or exist. A water-enhanced use does not require a location on or adjacent to the water in order to function or exist; however, the enjoyment level of the users would be increased if such a use were located adjacent to, or had visual access to, the waterfront. Restaurants and hotels are examples of water-enhanced uses.

As noted previously, the bay shoreline of the Village of Ocean Beach consists of a mix of uses, some of which are water-dependent, including the ferry terminal and Village Marina. The restaurants that front on the bay are generally considered to be water-enhanced uses; however, these establishments exhibit a certain degree of water-dependency since they each provide a small amount of dockage for patrons (approximately 30 slips at Matthew's Restaurant, and five to six slips each at Island Mermaid Restaurant and Hideaway Restaurant). The Village also contains a number of hotels, which provide lodging for visitors which mostly is available only between May through September or October; these seasonal accommodations are available at Cleggs Hotel, Houser Hotel on the Bay, and Place in the Sun. The Seasons Bed and Breakfast is the only hotel in Ocean Beach that is open year-round.

Ferry Terminal

The ferry terminal is a vital facility, providing the primary means of access to the Village of Ocean Beach for people and freight, as well as for mass evacuation in the event of an emergency (e.g., hurricane). Accurate information is not available regarding the flow of people through the Ocean Beach ferry terminal. Although the ferry operator compiles ticket sales and

passenger counts on a daily basis, these data cannot be readily segregated among the various communities served by the ferry.

The "Boat House" portion of the ferry terminal building is utilized for Village Board meetings, public meetings, and youth and resident activities. However, the condition of this facility has deteriorated over the years, as maintenance has not kept pace with the effects of the harsh coastal environment. Rehabilitation or reconstruction of the ferry terminal is needed in order to ensure continued access. The pilings of the ferry terminal have deteriorated due to the effects of 65 years of salt water exposure. Therefore, under any plan for this facility, the pilings have to be replaced. Additionally, the building will have to be elevated, pursuant to current FEMA requirements.

The Village of Ocean Beach was approved for a $243,000 grant from the New York State Department of Transportation Ferry Boat Discretionary Fund. However, this award lapsed because the Village was unsuccessful in acquiring additional funding needed to undertake the project. A new application was submitted for a $950,000 grant from the Ferry Boat Discretionary Fund for fiscal year 2004, which would be combined a $25,000 grant that NYSDEC has awarded for project design. It is estimated that the total project cost will be between approximately $1.2 and $1.7 million.

The requirement to elevate the ferry terminal above base flood level will necessitate the integration of the project into the surrounding area, by means of ramping and other related work. The implications of the project should be thought all the way through to avoid unforeseen but avoidable secondary problems. The number of stories (one or two) for the new facility has not been determined. The current plan is to design the new pilings to accommodate two stories in case this is called for in the final plan.

The Village of Ocean Beach always has been oriented primarily to pedestrian travel. Consequently, wagons have become an essential mode of transport for materials to and from the ferry terminal. A wagon park located adjacent to the ferry terminal provides secure storage for residents' wagons. However, this facility was developed many years ago, and the size and number of wagons has increased over the years, such that the current space is overcrowded.

Village Marina

The Village Marina is governed by a ten-year capital improvement program. The first year of the program, involving 108 feet of dock rehabilitation, is in progress.

The Village has obtained from NYSDEC a four-year permit (expiring in June 2006) to undertake maintenance dredging of the Village Marina basins to a depth of six feet below mean low water, with the dredged material to be placed on the bay beach to the west of the Marina and also to be used in rebuilding and stabilizing the dune near the Village pump station. In addition, a special

permit for this work has been received from the National Park Service. However, as of March 14, 2003, the Village still was awaiting a permit from the Army Corps of Engineers.

Several years ago, available boat slips were plentiful at the Village Marina. Seeking revenue, the Village opened use of this facility to neighboring communities. In recent years, however, the demand for seasonal boat slips within the Village marina has exceeded availability. Early in the year 2001, after due consideration, the Village decided to develop new rules and regulations and to adjust the rental priority order and current dockage fee schedule to address this issue. These new fees and regulations were established in order to meet the escalating expenses associated with maintenance and repairs of dockage and to ensure their primary availability to Ocean Beach property owners and renters, respectively.

Currently, the level of demand for space at the Village Marina indicates that there may be a need for additional dockage capacity. However, a detailed study is needed to verify whether expansion of this facility is warranted and, if so, how such expansion would be best accommodated. The issue of the clientele for new slips (i.e., residents versus transients) will be resolved if and when it is determined that the need exists for a marina expansion.

B. Underutilized, Deteriorated, and Abandoned Sites

Based on current lot area requirements, physical and environmental constraints to development, and an assessment of the availability of vacant land within Ocean Beach, it is evident that the Village has very little potential for new development. Only an estimated one-half to one percent of the total number of properties in private ownership remain undeveloped at this time.

The Village owns several undeveloped parcels to the south of Ocean View Walk, along the Atlantic shoreline and primary dune system, as well as a few small parcels dispersed along the bay shoreline, including a recently annexed property in the northeast corner of the Village, the Village Green, two small adjacent parcels located at the bay swimming area to the immediate west of the Village Marina, and portions of the six remaining "delivery lanes" located east of Bungalow Walk. The Village offered to sell delivery lane property to abutting land owners at a cost of $5.00 per square foot, which was considered to be the fair market value of the land in the spring of 2000, with the admonition that adjustments for inflation may occur subsequent to the March 31, 2001 deadline. Under this arrangement, the Village provides a quit claim deed and deed description to the purchaser; while survey costs, and legal and filing fees are the responsibility of the purchaser. The transferred lane parcels are be encumbered by an easement which would prevent future development.

The eight-foot width of the delivery lane is split equally between the abutting property owners to either side, such that each is eligible to receive four feet of the lane along the entire width of his/her parcel. Purchase of a portion of delivery lane is beneficial in some instances where land owners need additional space in order to comply with rear yard setback requirements for proposed structures, for increasing floor area ratio allowances, or for legalizing existing

structures that do not currently comply with zoning requirements. The proceeds to the Village from the sale of the delivery lane parcels have been earmarked for partial financing of a comprehensive multi-year refurbishment program for the concrete walks traversing the community.

The Village was quite successful at selling portions of the delivery lanes formerly located west of Bungalow Walk. As of March 5, 2003, 150 delivery lane parcels have been transferred into private ownership, out of a total of 395 such parcels that have been offered for sale.

Also, identified within the Village are two vacant, federally-owned parcels. These parcels include one in the southwestern corner of the Village and another along the Atlantic Shoreline, northeast of the easternmost groin.

There are a small number of isolated, vacant private properties within the interior of the Village.

The Village-owned Community House is considered to be an underutilized resource. The Village has targeted this facility for a project to update its antiquated systems and physical condition, which is intended to augment utilization and restore the historic prominence of the Community House as a focus of Village activities.

There are no other significantly underutilized, deteriorated, or abandoned properties within the Village of Ocean Beach.

2.3.2 SURFACE WATER USES

Existing surface water uses in the nearshore area of the Village of Ocean Beach are illustrated in Map 2.

A. Vessel Facilities

Use of the surface waters in and adjacent to Ocean Beach consists primarily of recreational boating and fishing, and transportation of passengers and freight to and from the Village via ferry.

The Village's bay shorefront contains a ferry terminal, freight dock, water taxi service, and Village Marina. The Village does not have designated mooring or anchorage areas, private marinas, boat yards, yacht clubs, dry rack storage areas, cranes, or any marine commercial facilities of this type.

The ferry terminal comprises the primary point of access to the Village of Ocean Beach. The ferry terminal is owned by the Village, but is operated by a private entity, Fire Island Ferries, which has an exclusive ten-year lease extending until December 31, 2010. The ferry runs frequently during the summer months and on a greatly restricted schedule in the winter.

The ferry terminal consists of an enclosed basin, which lies to the east of the terminal building and dock. The terminal building has been identified for a major capital project, which is in the early planning stages (see Section 2.3.1.A).

The Village Marina is heavily utilized during the boating season. Over the past four years, the marina has operated at full capacity. This facility contains 128 vessel slips (110 seasonal and 18 transient), in addition to 16 pads for personal watercraft (PWCs, also commonly referred to as "jet skis"). The maximum vessel size that can be berthed at this location is 35 feet. The Village marina is equipped with water; however, electricity is not available. The Village has no cranes, boat yards, dry boat storage racks, boat yards, wastewater pump-out facilities, fueling stations, lifts or cranes, or boat repair services. The use of houseboats or any vessels for overnight lodging is prohibited in the Village of Ocean Beach.

In addition to the dockage provided at the Village marina, three bay-side restaurants provide slips for patrons: Island Mermaid Restaurant, Matthew's Restaurant, and Hideaway Restaurant.

Water taxi service is available in Ocean Beach. This service operates under individual licensing agreements with the Village, for a term of one year, with passenger transfers occurring at the Village Marina.

2.3.3 ZONING

As shown in Map 3, there are four zoning districts within the Incorporated Village of Ocean Beach. These zoning districts are defined in Chapter 164 of the Village Code, and summarized as follows:

> Residence District (R-4) — This is the dominant zoning district in the Village of Ocean Beach, comprising approximately 80.1 percent of the total area in the Village, extending from the Dune District along the Village's south shore to the bay shoreline at the northeast and northwest corners of the Village. Permitted principle uses in this district are single-family detached dwellings. Uses allowed by special permit include public utilities, community buildings, places of worship, historical or memorial monuments, extensions of non-conforming buildings, doctor or dentist offices that are part of a residence, municipal uses, apartments, and receiving or transmission towers. The minimum lot requirement is 4,000 square feet.
>
> The R-4 District contains a number of operating commercial uses, most of which lie directly outside the Village's Business District. These are legal non-conforming uses, which either predate the current zoning (and have been "grandfathered-in") or are covered by special use permits.

Business District (C) — This district comprises approximately 5.4 percent of the area in the Village, occupying a contiguous swath of land along Bayview Walk at the north end of the Village. The C district extends to the shoreline between Evergreen Walk and Bayview Walk, immediately to the east of the ferry terminal. No uses are permitted as-of-right in the C zone. Uses which are allowed by special permit include uses permitted in the R-4 district, retail stores that sell goods and services in support of community living, professional offices, solar energy systems and equipment, receiving or transmission towers, and existing residential rental rooms. The Zoning Code pertaining to the C district (under §164-33) specifically prohibits the construction, expansion, conversion or alteration of the following uses: apartments, multiple dwellings, apartment hotels, showers, lockers, changing rooms, guest houses, boardinghouses, lodging houses, boatels, hotels, swimming pools and other similar water-intensive uses, eating and drinking establishments, discotheques, dance halls, cabarets, manufacturing or industrial uses which dangerous or harmful to people and property, retail stores above the ground floor, and other uses which are not expressly permitted.

The Village Zoning Code, at §164-31, recognizes the need to achieve a suitable balance between the overall residential character of the Village and the Village's long-standing commercial district, as follows:

> "The Board of Trustees of the Village of Ocean Beach finds that commercial development in the village should provide necessary conveniences and services to the residents of the village. Consistent with the General Management Plan for the Fire Island National Seashore and the Village Comprehensive Plan and mindful of protecting the viability of existing businesses, preserving and protecting the residential character and appearance of the Business District, the Board of Trustees hereby enacts regulations designed to control the proliferation of business inconsistent with the objectives of the Village and the National Seashore, to allow the proper development and redevelopment of businesses which provide necessary public services and are consistent with a predominantly residential community."

Bayfront Recreation District (BRD) — This district comprises approximately 5.2 percent of the area in the Village, including the area within the Village Marina basin and the ferry basin. The BRD district was established "..to regulate ownership and control of property situate and lying in a certain area immediately adjacent to the Great South Bay, for the recreational use, quiet enjoyment, public health, safety and welfare of the residents of the village." (§164-80) Construction, expansion, conversion or alteration of commercial uses is prohibited in the BRD district.

Oceanfront Dune District (DD) — This district comprises approximately 9.3 percent of the area in the Village, extending along the full east-to-west width of the Village's oceanfront as far south as the mean low tide mark. The northerly limit of the DD zone is a line 40 feet north of the crest of the primary dune, which corresponds to the dune

district boundary set forth by the NPS. Presently, Ocean View Walk forms the northern limit of the DD zone at the east end (east of Dehnhoff Walk). West of this point, the DD zone extends northward across Ocean View Walk by a distance of as much as 150 feet. The only new uses permitted in the DD zone are elevated pedestrian dune walkways and fencing designed to hold the sand in place on the dune. Expansion of existing uses in this district is prohibited.

In addition to the provisions of the Village Zoning Code, all development in the Village is governed by the provisions of the *General Management Plan* for Fire Island National Seashore. Accordingly, all development (as well as many other activities) in the Village requires a special permit from the National Park Service, which administers the Seashore on behalf of the U.S. Department of the Interior, as discussed in Section 2.2.7.

Pursuant to the enabling legislation for Fire Island National Seashore, regulations were established to provide federal standards for local zoning in order to protect and conserve Fire Island. All local ordinances for Fire Island must conform to these standards, as set forth in Section 28 of 36 CFR. These standards are intended to:

1) promote the protection and development of the land within the Seashore, for the purposes of the Fire Island National Seashore Act (the Act), by means of size, location, or use limitations or restrictions on commercial, residential, or other structures with the objective of controlling population density and protecting the island''s natural resources;

2) limit development and use of land to single-family homes, to prohibit development and use of multiple family homes, and to prohibit the conversion of structures to multiple family homes;

3) prohibit commercial or industrial uses initiated after September 11, 1964 or the expansion of existing commercial or industrial uses on any property within the Seashore which is inconsistent with the Federal standards and approved local ordinances or the purposes of the Act, is likely to cause a significant harm to the resources of the Seashore or will not provide a service to Fire Island;

4) recognize that the zoning authorities have the primary responsibility for zoning enforcement within the Seashore;

5) provide that private property within the Community Development District may be retained by its owner as long as it is maintained in accordance with approved local ordinances and the Federal standards;

6) provide that, within the Seashore District, private "improved property"' may be retained by its owner as long as it is maintained in accordance with approved local ordinances, and the Federal standards;

7) provide that, in the Dune District, private undeveloped property, if otherwise subject to condemnation, may be retained by its owner as long as it is maintained in its natural state; and

8) provide a mechanism for the Superintendent to inform landowners and the zoning authority if a use or development will be inconsistent with the Federal standards or the purposes of the Act and may subject the property to condemnation, subject to available funds.

There are three federally-designated districts within the Seashore:

1) the Community Development District, which encompasses the 17 communities, including the Village of Ocean Beach;

2) the Seashore District, which comprises all portions of the lands and waters within the boundary of the Seashore that are not included in the Community Development District, with the exception of the headquarters facilities at Patchogue and the William Floyd Estate at Mastic; and

3) the Dune District, which extends from the mean high water line to 40 feet landward of the primary natural high dune crest, as defined on map overlays maintained in the Office of the Superintendent of the Seashore. The Dune District overlaps portions of the Community Development District and the Seashore District.

The local Zoning Code of the Incorporated Village of Ocean Beach is consistent with the federal zoning standards for Fire Island National Seashore.

2.3.4 PUBLIC ACCESS AND RECREATION

A. Public Recreational Resources and Open Space

Overview of Recreational Resources

The residential population of the Village of Ocean Beach undergoes a significant seasonal cycle, with the summertime population expanding by a factor of more than 15 compared to the number of year-round residents. As such, public recreational resources are of vital importance to the character and appeal of the Village. These resources focus mainly on warm-weather activities, especially those related to the adjacent waters of the ocean and bay. A concentration of active and passive recreational facilities is present in the Bayfront Recreation District (BRD). The Village's public beach on the ocean also provides an important resource, principally for passive recreational pursuits such as sunbathing and swimming.

Pursuant to a court order issued to conclude a prolonged litigation process, the Village recently constructed public restrooms at Cottage and Ocean View Walks, in the vicinity of the public bathing beach on the ocean. These new facilities, constructed using federal grant monies, are open during beach hours when lifeguards are on duty. Public restroom facilities also are located at the Community House and Boat House, on the bay side of the Village.

The BRD zone lies to the north of Bayview Walk, between Ocean Road and Ocean Breeze Walk. Uses supported in this area include boating (docking and vessel access), fishing, swimming, strolling, sight-seeing, photography, basketball, tennis, and playground activities. The ferry terminal also lies in this area.

Ocean Beach Youth Group Building and Ocean Beach Community House

The Ocean Beach Youth Group Building ("Windswept") and the Ocean Beach Community House provide a variety of recreational, social and cultural activities to serve the community. Funding from the Village covers maintenance of these two buildings. Activities and programs are operated separately by a number of different entities.

The private, not-for-profit Ocean Beach Youth Group (OBYG) program is based at Windswept, which is located at the northwest corner of Ocean Road and Bayview Walk. This program provides counselors who instruct the Village's contingent of children (as well as youths from neighboring barrier communities) in sports, fishing, swimming, sailing and boating instruction, cooking, arts and crafts, and sports, as well as participation in a variety of theatrical productions, trips, and special activities. In 2003, the OBYG served more than 300 campers. The facilities at Windswept have deteriorated over the years and are no longer considered to be adequate to serve the needs of the program. The OBYG's Board of Directors is developing a business plan to identify and implement improvements.

The Ocean Beach Community House, located at the northeast corner of Bungalow Walk and Bayview Walk, is the headquarters of the Ocean Beach Historical Society and the Village Justice Court Office. The Historical Society, which is an independently chartered not-for-profit organization, exhibits Village memorabilia, including photographs, scrap books, and a computerized archival information base.

The Community House also is used for movie showings and dances. These activities occur though lease arrangements with the Village.

As noted previously, the Community House has suffered from inadequate maintenance, but is targeted for restoration.

Public Access to the Waterfront

Several elevated walkways cross over the primary dune to provide convenient pedestrian access to the oceanfront, while preventing deterioration to the dune system that results from direct foot traffic in this fragile area. A cut through the primary dune at the terminus of Cottage Walk was eliminated many years ago, so that presently there is no location in the Village for vehicles to cross the dune line.

One of the dune cross-over points, at Surf View Walk, has been designed for handicapped accessibility. While the possibility of developing additional handicapped-accessible dune cross-overs and viewing platforms has been considered, concerns have been raised about costs that would be associated with frequent damage to these structures due to storms and erosion.

The existing "west walk", situated between Ocean Road and the west end of the ferry terminal, was described as being very popular means of public access to the Village's bay-side waterfront. Usage of this amenity possibly could be enhanced by extending the shorefront walkway further to the east. However, the property to the east of the existing walkway is privately owned, and some type of arrangement (e.g., purchase, lease, partnership, etc.) would have to be reached in order to allow its use for public access. Expansion of pedestrian access in this area could be undertaken independently of a potentially more controversial marina expansion project, but it would be necessary to engage the public actively in the decision-making process so that they are properly informed of the exact nature of the action.

The Village currently lacks a public launching area for small, non-motorized vessels (e.g., canoes, kayaks, sunfish sailboats, etc.), and has indicated that the establishment of this type of facility is a high priority. The Village's bay beach, situated directly to the west of the Village Marina, was identified as the most promising location for a public small boat launching ramp. However, any such project would have to be tied into the overall improvement of the bay beach, a project whose fate presently is not know because of uncertainty regarding the scope of work that will be permitted by NYSDEC and the U.S. Army Corps of Engineers.

The Village is seeking approvals to perform dredging to enhance the bay beach. In undertaking this project, the Village's first priority will be the creation of a suitable swimming area, through the establishment of a graduated beach profile. Provision of small boat access at this location will be of secondary importance.

The construction of storage racks was identified as an important element of the Village's plan to enhance facilities for the operation of small boats. In order to provide a level of convenience that will ensure their use, any new storage racks would have to placed in close proximity to the launching location. The Windswept property, which is located just west of the bay beach, was identified as a possible site for the installation of public racks for small boat storage. This property is owned by the Village and leased to the not-for-profit Ocean Beach Youth Group. Consultation with the lessee will be necessary prior to the site being used for public facilities.

Open Space Resources

Development density in the Village of Ocean Beach is approaching the maximum build-out capacity allowed under lot area requirements of the Zoning Code, and limited open spaces remain. Currently, there are less than ten acres of undeveloped land within the Village. These parcels consist of both publicly and privately-owned parcels which are widely distributed throughout the community. The largest contiguous area of open space occurs on the south side of the Village, along the primary dune and ocean beach, consisting of a string of separate tax lots that are under various ownership (i.e., Village, County, Federal government, and private interests). These limited areas of open space in the Village serve as habitat for wildlife, provide areas for excess flood waters and runoff to collect and infiltrate into the ground, contribute to the aesthetics and small-community neighborhood character of the Village, and provide "islands" of green space in an otherwise densely developed area.

The coastal waters of the bay and ocean provide vast areas of open space directly adjacent to the Village, which serve for the passive visual enjoyment of shore-bound viewers, as well as for those engaged in water-related recreational activities. In addition, a small vacant parcel owned by the Village is located in the northeast corner of the study area, near the wastewater treatment facility.

Located in the Commercial district, the Village Green and Commons contain one of the largest undeveloped tracts within the Village. Surrounding this area are the Post Office, the Village municipal offices, retail stores and shops, the Community House, the Historical Society, Village Courts, public restrooms, and drinking and eating establishments. Most of these structures have second-story rooms, which are utilized for both rentals and seasonal staff. The Green and Commons significantly enhance the appearance of the area by breaking up the mass of concrete and buildings in the commercial district and providing an island of greenery which makes for a more visually appealing commercial environment.

The Village developed a Village Green Restoration/Reconstruction Plan (March 21, 2000), which defines a comprehensive program of recommended landscaping and physical improvements and amenities for this area, and has recently invested money received from the Suffolk County Downtown Revitalization Program to effectuate some of these improvements. The program has provided $10,000 for lighting and landscaping improvements, of which $3,000 was invested in the purchase and planting of vegetation in the Village Green. The Village also received $5,000 from NYSDEC's Urban and Community Forestry Program for landscaping improvements. Nevertheless, additional funds are still needed to fully implement the Village Green Plan.

Vacant parcels situated in the interior portions of the Village consist primarily of small, dispersed, privately-owned tax lots that offer little in the way of passive open space, greenways, significant recreational opportunities, or large or contiguous blocks of open space.

B. Community Association Recreational Resources

The Ocean Beach Association does not have facilities or common resources for its members. Meetings of the association are held periodically, both in the Village (using Village-owned facilities, such as the Boat House and the Community House) and in New York City to disseminate information. Historically, the Ocean Beach Association had owned a significant area of common lands. However, these lands were transferred to the Village shortly after incorporation in 1921.

C. Public Trust Doctrine and Underwater Land Ownership

The underwater land in Great South Bay adjacent to the Village's shoreline, seaward of the mean high water line, is owned by the Town of Islip. The Village Marina basin and the basin for the ferry terminal lie within the Village of Ocean Beach, and the underwater lands contained therein are shown on the Suffolk County tax maps as being owned by the Village of Ocean Beach; however, Village records indicate that at least a portion of this underwater land area actually is owned by the Town of Islip and leased by the Village.

On the ocean side, the underwater lands, seaward of the Village boundary, are subject to the concurrent jurisdiction of the State of New York and the National Park Service. This underwater land is owned by the State; however, the Park Service has been granted use and occupancy rights in perpetuity, out to a distance of 1,000 feet from the shoreline and extending laterally along the entire 26-mile length of Fire Island National Seashore.

Early European settlers on Long Island obtained deeds from Native American tribes, and land patents from colonial Dutch, and later English, governors. In 1664, under English colonial rule, Charles II of England granted to the Duke of York absolute control of lands that stretched from northern Maine to Delaware including all of Long Island. Imposition of English rule over the colonies of the "New World" included the Town of Islip as it existed at that time, including underwater lands.

Unlike the other Long Island Towns, the Town of Islip was not created by a colonial patent. The lands within what was to become the upland portion of the Town of Islip had been the subject of previous private land patents, which conferred ownership interest to a number of individuals (including William Nicoll, Andrew Gibb, Stephan Van Courtlandt, Richard and Thomas Willett, and John Mowbray), but did not create a municipal corporation. As discussed in Section 2.1.1, the underwater lands that presently lie within the Town of Islip, in additional to all of Fire Island, were originally claimed by William "Tangier" Smith.

In 1710, the colonial legislature of New York created Islip Town in roughly its present-day configuration, including the underwater lands. The Town boundary between Islip and Brookhaven in Great South Bay is unusual in the that Town of Brookhaven owns the underwater lands in the area of the bay lying offshore of the Town of Islip between Bayport to the east and Nicoll Point to the west. Within the bay, the Islip-Brookhaven town line extends due north from

the easterly boundary of the unincorporated community of Seaview, which adjoins the Village of Ocean Beach to the east, and intersects the shoreline of the mainland (at the mean high water line) just east of Nicoll Point.

The original concept of the Public Trust Doctrine, as defined under English common law, dictates that certain lands and waters were vitally important to the public for the purposes of fishing and navigation, and that these areas should be retained for use by the public. The public trust in the State of New York refers to those underwater lands, including the foreshore landward to the high tide line that are influenced by the ebbing and flowing of the tide. Subsequently, additional rights became incorporated into the Public Trust Doctrine, including the rights to swim in these waters and to pass along the shoreline for the purpose of enjoying the scenic resources. These public rights are balanced with the littoral/ riparian rights of private waterfront landowners who may access these waters. This public right, or the "jus publicum" has now been recognized in New York State and many other States as superior to the rights of private individuals, or the "jus privatum".

Notwithstanding the mandate of the Public Trust Doctrine, some underwater lands have been lawfully transferred from States to private individuals who own abutting uplands for "commercial purposes" or for their "beneficial enjoyment". Nonetheless, these conveyances of fee title ownership must be consistent with the best public use and is not contrary to the public welfare. Although the transfer of underwater lands by states to private individuals are constrained by a requirement for "exceptional circumstances" deemed to be consistent with the public trust doctrine, Towns have greater latitude to transfer these lands not only to abutting upland owners but to anyone, as long as the transfer of lands does not affect the public's interest in the remaining publically owned lands. Any conveyances that results in injury to the public good or proves to be inconsistent with the best public use, may be revoked.

A number of lawsuits have been filed at the state level which have sought clarification to public trust/private property land ownership conflicts and issues. In short, these cases have elaborated on a number of issues including the boundaries of those areas held in the public trust. The area held in trust for public use, passage, and navigation is not fixed and is subject to interpretation by a means determined by local custom. Natural and artificial coastal process that cause erosion, accretion, and submergence, as well as tidal cycles, affect the boundary of the land held in the public ownership, by altering the location of the high tide mark and resulting n adjustment of the area of land ownership (unless filling was initiated by a land owner who served to benefit from such filling).

The State of New York, in recognizing the colonial Patents given to the Town of Islip, granted to the Town Trustees the duty and obligation of enforcing the trust doctrine on lands titled in their name in trust for the people of Islip. During colonial times, the English view was that lands which were subject to the ebb and flow of the tide were public trust lands.

The public right of access to Public Trust lands and waters, is one of "lateral access". That is, there is no public right to cross private property to reach public waters or the lands beneath them through "perpendicular access". In New York, as in all states, the public's rights are to lateral access along the foreshore between the mean high water (MHW) and the low water lines during low tide and access to the surface waters covering such underwater lands. Such access is afforded primarily through the Village's beaches.

In some instances the public is unable to walk along the foreshore simply because there is none. Years ago the shoreline along the bay side of Ocean Beach was bulkheaded and adjacent waters were dredged to facilitate the growing desire and need for recreational boating. These structures have resulted in the loss of segments of the foreshore, thereby eliminating the ability of the public to walk along the land between the MHW and the low water line.

2.3.5 HISTORIC RESOURCES

The Village of Ocean Beach does not currently contain a designated historic district. No individual buildings, structures, landmarks or places within the Village are listed on the National or State Registers, or have been otherwise officially designated as having historic significance. No Village historic preservation law is in effect identifying historic resources of local significance. Since development on Fire Island didn't really begin to take hold until early in the 20th Century, the Village does not have the history of some other Long Island communities, primarily on the mainland. The Village Historical Society provides a computerized archival data base and, photographs and scrap books that are available for public viewing.

In the late 1970s, the Suffolk County Division of Historic Resources conducted an architectural field survey on Fire Island, including Ocean Beach. However, the Village has not been successful in its effort to obtain a copy report generated by this survey. The most recent request was submitted in August 2002. However, the Village does want to maintain its distinct cottage-resort community character, which has defined the historic character of the Village since the 1920s.

2.3.6 INFRASTRUCTURE

A. <u>Public Water Supply</u>

The Village of Ocean Beach manages and operates its own municipal public drinking water facility which furnishes potable drinking water throughout the community. The water supply system originated in 1915, with the construction of the first water tank and distribution piping. Major portions of this original system still are in place.

Typical winter water demand in the Village during the winter months is approximately 100,000 gallons per day (gpd). During the height of the summer season, typical water demand increases to 550,000 gpd. Based on the water flow at the Village's sewage treatment plant, the Village

engineer estimates that approximately ten percent of the flow is lost through leakage, which is considered acceptable by industry standards.

The water supply in Ocean Beach is considered to be of high quality. However, the raw water has exhibited elevated levels of iron which, although not hazardous to human health, can impart an undesirable taste or cause staining of bathroom fixtures and laundered clothing, and could limit flow capacity due to iron build-up on the inner surface of the supply piping. In order to address this concern, treatment is provided in the form of the addition of an iron sequestering agent to the raw water. The Village Water Department also undertakes annual flushing of the water supply system to remove iron deposits. Additional treatment of the water supply entails the introduction of lime to stabilize the pH and chlorine for disinfection to ensure the delivery of water that is free from pathogenic microorganisms.

The public water supply system consists of three functional wells, a treatment facility, and distribution system. The water supply wells are located adjacent to the Village's Atlantic Ocean shoreline, at Cottage Walk. Two of these wells (i.e., #2 and #3) serve as the primary source of potable water supply for the Village. Well #2 has a pumping capacity of 800 gallons per minute (gpm); this well was installed in 1962, with a ten-inch casing, to a depth of 450 feet. Well #3 has a pumping capacity of 1,000 gpm; this well was installed in 1988, with a twelve-inch casing, also to a depth of 450 feet. Wells #2 and #3 have consistently yielded a suitable supply of potable water, and no significant water shortages, water quality problems, or saltwater intrusion has been reported to date. The third well (#1), which is the oldest and smallest of the three, is tested regularly and maintained in reserve, and could be tapped for water supply if the need arose.

The Village's water mains are mostly composed of cast iron piping, which generally is corroded but stable. A 12-inch main composed of PVC piping was installed within the past ten years, which has improved water distribution.

An Atlantic hurricane in October 1998 created a breach in the sand bar that lies offshore from the Village of Ocean Beach, which in turn has caused severe erosion at the segment of shoreline adjacent to the Village's water supply well field. Even though the hurricane never reached Long Island, the consequent erosion resulted in retreat of the dune scarp line to within 40 feet of the water distribution piping and approximately 65 feet from well # 2. The Village has performed emergency activities to arrest the erosion being experienced and is pursuing funding sources for relocation of the wells.

The Village has initiated a five-year capital plan for the maintenance of the water tower and improvements to the delivery system. The first year project work included painting of the water tower and replacement of 880 feet of water main along the ocean to create a loop in the system. The components of the water delivery system will be placed into GIS mapping, which will facilitate maintenance and other activities.

The Village also maintains 35 hydrants throughout the community. These hydrants have been replaced as necessary, based on the occurrence of hydrant failures or leaks. All existing hydrants are reported to be in good condition.

B. Wastewater Disposal

The Village of Ocean Beach operates and manages its own wastewater treatment system, which handles all sewage generated within buildings in the Village. The Town of Islip established Ocean Beach as a sewer district prior to its incorporation as a village in 1921. The sewage disposal system installed at that time was the only one on Long Island east of Jamaica.

The Village of Ocean Beach wastewater treatment plant provides secondary treatment to collected wastewater through a multi-phased process, which includes: the addition of polymers to promote the coagulation of solids; discharge to the system's two primary settling tanks for the removal of solids; and final disinfection by means of contact chlorination. The wastewater is circulated through carbon towers during the summer, when waste flows are highest, in order to enhance treatment. The facility discharges the treated effluent through an outfall pipe located approximately 200 feet off shore in Great South Bay, near the northeast corner of the Village. The effluent discharge is regulated under the State Pollution Discharge Elimination System permit program which is administered by NYSDEC. The sludge generated by the treatment process is stored on-site in a holding tank until being shipped for disposal to the Bergen Point Wastewater Facility, located on the south shore of the Long Island mainland.

The Village has completed an engineering analysis of the treatment plant and, on the basis of the findings of that analysis, has initiated a five-year capital plan for plant maintenance and a full engineering evaluation of the total system. The ongoing capital improvement program consists mostly of the replacement of system components that have deteriorated due to age.

The sewer mains are composed of clay piping, which were first installed in about 1914. Some of this piping has collapsed. Once these lines break, deterioration accelerates as tree roots grow rapidly into the nutrient-rich breaches. Problems related to deficiencies of the sewage collection system have been known for a long time. However, the magnitude of these problems has been exacerbated in recent years due to increased flows which have resulted from a growing year-round population and a general increase in the usage of houses that still serve as vacation homes (e.g., from weekend to full-week occupancy).

The Village recognizes the need for a systematic program of sewer pipe replacement, ideally on a street-by-street basis. It is estimated that completion of this program throughout the Village would take a total of ten years, at an approximate cost that can be as high as $2 million per street.

Addressing deficiencies to the sewage collection system is a high priority, because of public health and quality-of-life concerns related to system failures. The Village has been performing

spot repairs as specific problems arise. The problems are not universal throughout the system; some areas are more severely affected than others.

C. Roadways, Traffic Circulation, Parking and Public Transportation

The Village of Ocean Beach primarily is a pedestrian-based community. The present-day street/walkway system consists of a grid network of concrete pedestrian walkways. The original system of walkways was constructed with wood, but these were replaced by concrete in the 1920s.

Ten walkways run in a north-to-south direction, one walkway (Midway Walk) runs through the center of the Village from east to west, and additional east-west walkways lie near the bay (Bayview Walk) and ocean (Ocean View Walk). The walkways generally are sufficiently wide to accommodate single-file vehicular traffic.

Use of the walkways is restricted to pedestrians and hand-pulled wagons, golf carts, and bicyclists under certain restrictions set forth in the Village Code. Although motor vehicles are generally prohibited, permits may be issued by the Village when their use is determined to be essential, with solid waste removal service and construction contractors being two of the uses that most commonly are granted permits.

Vehicular access to the Village is available only by four-wheel-drive vehicle along the Atlantic shoreline. All such motor vehicle access to the beach is regulated through a permit process which requires authorization from the Village of Ocean Beach, the Town of Islip, and FINS.

Recently, the Village eased restrictions on the operation of bicycles, allowing for bicycle riding during summer weekdays, but retaining the ban on bicycles during summer weekends (previously, bicycles were prohibited throughout the summer). A special committee has been formed to address this topic.

Bicycle storage racks also are in short supply in the Village. This deficiency is especially apparent at the Ferry Terminal and the playground, which are popular destinations for bicycle riders. The lack of adequate rack space often has prompted riders to secure their bicycles, illegally, to public and privately-owned fences.

The Village has initiated a five-year capital program at a total cost of approximately $1.5 million to upgrade and refurbish its walkway system. This project is directed largely at reducing a persistent flooding problem on the walkways. Some walkways already have been completed (i.e., Wilmont Road north of Midway and Midway west of Bungalow Walk). Future projects have been prioritized based on the severity of flooding and the degree to which the walkways provide critical access (e.g., access to firehouse and other publicly accessible facilities have a high priority). The Village is seeking grant funding in an application to NYSDOT, which would cover 80 percent of the cost of the remaining work.

The Village has established a gross weight limit of 8,600 pounds for vehicles operating on Village roadways/walkways. Fire trucks are exempt from this requirement. However, a significant percentage of trucks that travel in the Village exceed the four-ton limit. This situation, along with other factors (e.g., high groundwater elevations), has accelerated the deterioration of the concrete in the walkways, especially with respect to cracking of the edges of the slabs. This progressive damage to the walkways has resulted in the Village being subject to costly litigation as a result of alleged trip-and-fall incidents.

Enforcement of the vehicle weight limit is problematic, since the Village does not possess nor have access to a vehicle scale. As part of its vehicle permit application process, the Village verifies that the unloaded vehicle weight does not exceed the limit. However, many trucks carry heavy loads (e.g., solid wastes, construction materials, demolition debris in roll-off containers, etc.), which cause the gross weight to exceed 8,000 pounds, sometimes by a substantial margin.

The Village recognizes that it would not be desirable or practical to ban truck traffic on its roadways, since these vehicles provide essential services to the Village and its residents.

The walkway refurbishment project calls for a new layer of reinforced concrete on top of the existing walkways, rather than demolition of existing walkways. It is possible that this reinforcement will alleviate deterioration of the concrete roadways/walkways. However, the Village will continue to monitor the situation. If it is found that the strengthened slabs continue to be susceptible to truck-induced damage, further action may be required. The establishment of an additional fee for commercial vehicles, with the proceeds used to undertake roadway/walkway maintenance, is one possible measure that was discussed by the LWRP Advisory Committee.

D. Storm Drainage Systems

Stormwater drainage in the Village of Ocean Beach occurs almost entirely via surface flow of runoff and natural infiltration. There is minimal stormwater drainage infrastructures in place.

Although the types of sandy soils that dominate in the Village generally are highly permeable, certain physical conditions tend to retard infiltration. In particular, the Village's minimal topographic relief and a high groundwater table cause puddling of stormwater at certain locations, especially along some segments of the concrete walkway system. As discussed previously, the Village is undertaking a program of capital improvements that entails the raising of the walkways, which will mitigate the flooding problem by allowing stormwater to drain more efficiently from the areas of pavement to the surrounding pervious lands.

E. Other Utilities

In the Village of Ocean Beach, like most of the Long Island's older communities, the distribution of electricity (and certain other utilities, such as telephone and cable television) occurs via overhead lines strung on utility poles, which is widely perceived as detracting from the Village's aesthetic quality. Furthermore, downed power lines resulting from harsh weather conditions have been a recurring safety problem for Village residents and businesses. The Village has long sought the underground placement of utility lines. Generally high groundwater levels have been cited by utility service providers in the past as a factor that would impede this type of project. However, the Village is not aware that a site-specific engineering study has been performed to assess the feasibility of burying the electrical lines in Ocean Beach.

Buildings in the Village of Ocean Beach are heated via electricity, exchangeable propane tanks, or fuel oil, which transit through the freight dock at the ferry basin. No natural gas is available.

2.3.7 VESSEL USAGE OF WATERWAYS WITHIN THE VILLAGE COASTAL AREA

Although, the Village Police Department patrols Ocean Beach's interior and shorelines, and the Village has established regulations for navigation and vessel use of the adjoining off-shore waters, the Town of Islip and the Marine Patrol of the Suffolk County Police Department have primary direct responsibility for overseeing vessel operation along Ocean Beach's shorelines within Great South Bay. Town and Village regulations specifically addressing vessel usage within the coastal area are discussed in Section 5 of the LWRP.

The area of most significant vessel activity occurs along the bay shore on the northern side of the Village, where the Village Marina, ferry and water taxi service, freight dock, and private commercial slips (associated with several restaurants) are located. These facilities are discussed in more detail in Section 2.3.2.A.

The Village of Ocean Beach has the extra-territorial authority to regulate the over-water use and mooring of vessels upon the waters within 1,500 feet of the Village shoreline, on both the bay and ocean side, under Section 46-a of the New York State Navigation Law. This gives the Village the capacity to regulate mooring and anchoring, vessel speed, the use of personal watercraft (commonly known by the trade name "jetski"), and recreational activities such as water skiing and wind surfing within those offshore areas.

The Village has no officially designated areas for moorings or anchorages. The Village Code expressly prohibits mooring or cruising within 250 feet of the bay shoreline and the operation of vessels, other than hand-operated boats, within 1,500 feet of swimmers in the Atlantic Ocean. Although Great South Bay is a relatively shallow estuarine system, the West, North and Range Channels of the bay contain sufficient depth to accommodate the draft of larger boats such as the Fire Island ferries, which provide year-round service to Ocean Beach for passengers and freight deliveries.

The National Park Service (NPS) has issued a system-wide ban against the operation of personal watercraft, including FINS, in which the Village of Ocean Beach is situated. Implementation of this ban was temporarily deferred, while the NPS considered input from the public regarding this issue. To facilitate such comment, the NPS developed a series of four policy options for personal watercraft in FINS, one of which is implementation of the proposed ban.

The Village recognizes the impacts that are associated with personal watercraft use, especially with respect to noise, which have translated into significant public opposition to these vessels. However, it was also noted that a small segment of the community's population engages in personal watercraft operation, which has been based at the 16 PWC pads at the Village Marina. These spaces have been fully rented in recent years, and there has been a request for additional spaces. The Village has reviewed the four policy alternatives identified by the NPS for personal watercraft operation in FINS. During a Board of Trustees meeting in December 2001, the Village adopted as its official position on this matter an alternative which would allow the continued operation of personal watercraft throughout the waters of FINS in the same manner as occurred before the ban was adopted. The evaluation period ended on April 22, 2002, at which time the NPS determined to retain the ban on personal watercraft, which action is binding upon the Village.

Waterway hazards and obstructions within the navigable waters of Great South Bay include, shoals, bars, and small islands within or in close proximity to navigation channels, and the general shallow depths within the Great South Bay, outside the main navigation channels. With the exception of two primary navigation channels which lead from the Long Island mainland to the Ocean Beach shoreline, the Great South Bay is a shallow estuary. The West Channel trends in a southerly direction from Great Cove along the Bay Shore shoreline, until terminating at or near Ocean Beach and points west. Use of the North and Range Channels provides an alternative route. Like the West Channel, the North Channel begins at Great Cove and trends in an easterly direction before turning south toward Fire Island and Ocean Beach (Range Channel).

Although shoals, tidal flats, shallow water, and a series of small islands may result in hazards or obstructions to navigation within the Great South Bay, the area of the bay within the Village's LWRP boundaries is relatively unencumbered. Maintenance dredging of the Village Marina basins is planned. Permits for this work already have been obtained from NYSDEC and the National Park Service; however, as of March 14, 2003, the U.S. Army Corps of Engineers permit application was still pending.

2.3.8 COMMERCIAL AND RECREATIONAL SHELLFISH HARVESTING AND FINFISHING

A. Commercial Fishing

Great South Bay is very productive finfish and shellfish habitat. However, no commercial fishing operations are based in the Village of Ocean Beach.

B. Recreational Fishing

Recreational fishing occurs within the waters of Great South Bay and Atlantic Ocean off the Village of Ocean Beach. Aside from an established recreational fishing area located on the northwest end of the dock at the Village Marina, there are no other formalized locations for shore-based fishing. However, there are a number of community access points and beach areas that may be used by surf casters. Fishing also occurs from the recreational boats of Village residents and visitors.

Great South Bay provides feeding, breeding and/or nursery habitat for a variety of finfish species. This includes the following species:

Fish that spawn in Great South Bay — winter flounder (*Pseudopleuronectes americanus*), weakfish (*Cynoscion regalis*), scup (*Stenotomus chrysops*), blackfish (or tautog, *Tautoga onitis*), cunner (*Tautogolabrus adspersus*), northern puffer (*Sphoeroides maculatus*), common mummichog (*Fundulus heteroclitus*), striped killifish (or striped mummichog, *Fundulus majalis*), sheepshead minnow (*Cyprindon variegatus*), Atlantic silversides (*Menidia menidia*), fourspine stickleback (*Apeltes quadracus*), threespine stickleback (*Gasterosteus aculeatus*), northern pipefish (*Syngnathus fuscus*), oyster toadfish (*Opsanus tau*), and bay anchovy (*Anchoa mitchilli*)

Fish that spawn in the Atlantic Ocean in the vicinity of Great South Bay — Atlantic menhaden (*Brevoortia tyrannus*), bluefish (*Pomatomus saltatrix*), summer flounder (*Paralichthys dentatus*), black sea bass (*Centropristis striata*), and American sand lance (*Ammodytes americanus*)

Fish that spawn in freshwater — striped bass (*Morone saxatilis*)

A large number of rare finfish are collected in Great South Bay from time to time; however, these represent expatriates of primarily southern species, which do not rely on the bay for vital habitat, and do not contribute significantly to the area's recreational finfishery.

Recreational fishing, primarily from private boats, accounts for the largest share of overall landings from Great South Bay, with winter and summer flounder comprising the majority of the catch.

In addition to finfish, a variety of shellfish and crustaceans inhabit the bay and coastal areas within the LWRA. In the Great South Bay, these include: hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), bay scallops (*Argopecten irradians*), blue mussels (*Mytilus edulis*), and blue crab (*Callinectes sapidus*). In the nearshore/littoral areas of the Atlantic Ocean, American lobster (*Homarus americanus*), hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), and Atlantic surf clams (*Spisula solidissima*) occur. Recreational shellfishing requires a permit which can be obtained only by Town of Islip residents from the Town Clerk for a small fee. Clams, oysters, and blue mussels are the primary species of shellfish sought by local recreational fishermen.

2.4 SUMMARY OF ISSUES AND OPPORTUNITIES

The issues and opportunities to be addressed by this LWRP were discussed during a series of meetings of the Village's LWRP Advisory Committee that were held on October 27 and December 1, 2001 (see Section VIII). The discussion that occurred regarding these issues and opportunities was summarized in official minutes that were accepted by the Advisory Committee, as set forth below, with minor revisions as appropriate to update certain information:

1. House elevations

   This is a federal program, administered through FEMA, which provides grant monies to raise homes above the base flood elevation, so as to decrease the susceptibility of these structures to future flood damage. Starting with initial project meetings in 1998, the Village has been very active and successful in this program, securing $2 million for the elevation of 37 homes. The first phase of this project involves the expenditure of $1 million within two years for 25 homes.

   A number of homeowners who decided not to apply during the first round of the program now see the benefits of the program and have expressed a desire to be included on the list for the next round of funding.

   The Village has hired an administrator, who is responsible for overseeing the program, from construction to reimbursement. The administrator's compensation is included in the grant funding.

   It was indicated that the pace of pay-outs under the program has been slower than desired. Often, there has been a significant lag between the expenditure of personal funds by the involved homeowners and the receipt of reimbursement from FEMA. The Village stated that reimbursement should have a quicker turnaround in the future, because the system has been refined from the initial "practice run" with the first three houses.

2. Concrete walkways

The Village has initiated a five-year capital program at a total cost of approximately $1.5 million. This project should reduce persistent flooding on walkways throughout the Village.

Some walkways already have been completed (i.e., Wilmont Road north of Midway and Midway west of Bungalow Walk). Future projects have been prioritized based on the severity of flooding and the degree to which the walkways provide critical access (e.g., access to firehouse and other publicly accessible facilities). The Village is seeking grant funding in an application to NYSDOT, which will cover 80 percent of the cost of the remaining work.

It was indicated that by having completed the project design and the first phase of construction for this project, the Village would have a competitive advantage over others who might seek such grant funding for capital improvements. CA concurred with this position.

The project design calls for a new layer of concrete on top of the existing walkways, rather than demolition of existing walkways.

3. Water Delivery System

The Village has initiated a five-year capital plan for the maintenance of the water tower and improvements to the delivery system. The first year project work includes painting of the water tower and replacement of 880 feet of water main along the ocean to create a loop in the system. The components of the water delivery system will be placed into GIS mapping, which will facilitate keeping track of everything.

The Village reported that the water mains, composed of metal, generally are corroded but stable.

Much of the discussion of issues related to the Village's water system was undertaken in combination with the sewer system, as summarized under agenda item #4 below.

4. Sanitary Sewer System

The Village has completed an engineering analysis of the treatment plant and, on the basis of the findings of that analysis, has initiated a five-year capital plan for plant maintenance (mostly consisting of improvements to replace system components that have deteriorated due to age) and a full engineering evaluation of the total system.

The sewer mains are composed of clay piping, which were first installed in about 1914. Some of this piping has collapsed. Once these lines break, deterioration accelerates as tree roots grow rapidly into the nutrient-rich breaches.

Addressing deficiencies to the sewage collection system is a high priority, because of quality-of-life concerns related to system failures. The Village has been performing spot repairs as specific problems arise. The problems are not universal throughout the system; some areas are more severely affected than others.

Problems related to deficiencies of the sewage collection system have been known for a long time. However, the magnitude of these problems has been exacerbated recently due to increased flows which have resulted from a growing year-round population and a general increase in the usage of houses that still serve as vacation homes (e.g., from weekend to full-week occupancy).

There should be a systematic program of sewer pipe replacement, ideally on a street-by-street basis. It is estimated that completion of this program throughout the Village would take a total of ten years, at an approximate cost that can be as high as $2 million per street.

The sewer lines all have gravity flow, so that it will be necessary to maintain proper grades in any pipe replacement work.

Overhead utility lines are present in some areas where sewer mains are located. Special measures may be required in these areas to accommodate repairs to the sewer lines while still maintaining utility service.

It also will be necessary to clear existing vegetation to gain access to sewer lines. This includes sections of the Village to the east of Bungalow Walk where "delivery lane" rights-of-way are present behind the houses, and sections to the east of Bungalow Walk where the rear property lines of the housing lots directly abut one another.

In some areas, sewer mains and water mains lie side-by-side. Because of current regulations which call for a greater separation distance between these two types of piping, it will be necessary to relocate the water lines in the affected areas before the sewer lines are replaced.

The engineering analysis and GIS mapping project that have been (or shortly will be) approved by the Board of Trustees will provide critical baseline information that is required in order to formulate a systematic capital improvement program for both the sewer and water systems which addresses the logistical problems and issues outlined above. The results of this analysis and the GIS mapping should be available in time to allow the information to be included in the LWRP.

The Village has been conducting preliminary investigations of potential sources of funding for capital improvements to the water and sewer systems. As with the walkway elevation program, the Village believes that the completion of the design and initial construction phases of the project will provide the Village with a competitive advantage in procuring grant monies.

5. Ferry Boat Terminal

NYSDEC has awarded the Village a $25,000 grant for project design costs to renovate the ferry terminal building. The Village was awarded a $243,000 construction grant from the NYSDOT Ferry Boat Discretionary Fund; however, this grant award has remained unspent because the amount of funding required from the Village would make the project unfeasible. The Village now is seeking an additional grant from the same source, to provide a total of $950,000, which it is believed will provide sufficient outside funding toward the full project cost, estimated at between approximately $1.2 and $1.7 million.

The pilings of the ferry terminal have deteriorated due to the effects of 65 years of salt water exposure. Therefore, under any plan for this facility, the pilings have to be replaced. Additionally, the building will have to be elevated, pursuant to current FEMA requirements.

Unless the Village acts quickly on this project with the funding it already has received, the insurance on the building will lapse. The insurer will not renew a policy that provides reimbursement for a flood-prone structure when the funding is on-hand to correct the problem.

The requirement to elevate the building above base flood level will necessitate the integration of the project into the surrounding area, by means of ramping and other related work. The implications of the project should be thought all the way through to avoid unforeseen but avoidable secondary problems.

The number of stories (one or two) for the new facility has not been determined. The current plan is to design the new pilings to accommodate two stories in case this is called for in the final plan. It was suggested that there be an evaluation of the relative costs to construct a second story at this time, even if this additional space is not immediately needed and is left as an unfinished shell. This information would allow an informed decision that could help to avoid unnecessary additional costs which would be incurred if a one-story building were initially constructed but space needs in the not-too-distant future require the extra floor area that would be provided by a second story.

6. Marina

This facility is governed by a ten-year capital improvement program. The first year of the program, involving 108 feet of dock rehabilitation, is in progress. The Village has a current

permit from the Army Corps of Engineers (which is valid through April 2009) for maintenance dredging of the marina basin, and is awaiting final approval of the permit renewal from NYSDEC.

The question was raised: is there a reasonable plan for additional docking facilities in the Village? This prompted discussion as to whether any new docking facilities would serve Village residents or transients. It was resolved that the LWRP would only identify areas that may be appropriate for expansion, if it is determined that additional facilities are needed in the future. The issue of the clientele for new slips would have to be resolved if and when it is determined that the need exists for a marina expansion, but would not be addressed in the LWRP.

During the discussion regarding the marina, the possible expansion of pedestrian access along the bay-side waterfront also was addressed. The existing "west walk" was described as being very popular, and usage of this amenity possibly could be enhanced by extending the shorefront walkway further to the east. However, the property to the east of the existing walkway is privately owned, and some type of arrangement (e.g., purchase, lease, partnership, etc.) would have to be reached in order to allow its use for public access. Expansion of pedestrian access in this area could be undertaken independently of a potentially more controversial marina expansion project, but it would be necessary to engage the public actively in the decision-making process so that they are properly informed of the exact nature of the action.

7. Dune Management

NYSDEC issued a consent order which allowed the Village to install "geotubes" in the vicinity of the public water supply building and to begin the process of rebuilding the groins, with the stipulation that the "geotubes" be removed when the beach setting is restored. At the present time, the consent order is being redefined, outside of the Village's control, to retain the "geotubes" and delete reconstruction of the groins.

It was decided that the LWRP should not contain specific recommendations regarding the "geotubes" or groin restoration.

The LWRP should allow for regular beach scraping, at a frequency of twice per year when conditions are favorable. This method of erosion control has received favorable consideration from NYSDEC. This activity requires the timely issuance of permits from NYSDEC.

There was discussion regarding the possible use of sand dredged from the bay-side navigation channel, as an emergency measure, to protect the ocean dunes. (However, it has been indicated that NYSDEC, which has regulatory approval authority over this type of activity, would not likely be favorably inclined toward such a proposal).

The LWRP policies should contain a general statement to the effect that the Village will undertake any and all actions with respect to dune management as are necessary to protect the health, safety and welfare of its residents. The LWRP can include a list of the types of actions that may satisfy this policy under varying sets of circumstances, including measures (e.g., creation of artificial reefs on the ocean-side and reconstruction of the groins) that should be given due consideration in the event of extraordinary dune loss resulting from a particularly severe storm. However, the language of the policy statement should leave the Village's options open.

It is important that the LWRP address erosion issues on the bay side, as well as on the oceanfront.

8. Bay Beach

At the time of the Advisory Committee's discussion, the Village was seeking permits to undertake dredging to create a graduated water depth for the bay-side bathing beach and to provide sand replenishment to enhance the adjacent playground area. Subsequently, the requisite approvals for this action were obtained from NYSDEC, the Army Corps of Engineers and the National Park Service, and the project has been completed.

With restoration of the bay beach, it may be necessary to undertake annual replenishment to maintain the beach.

It was determined that this project should provide a full-size beach that is capable of accommodating all bathers, including small children and seniors, by means of shallow depths which facilitate wading.

9. Street Lighting

The LWRP should recommend that street lighting be improved throughout the Village. New lighting should reflect the rural setting of the Village, and should eliminate the excessive light pollution caused by some existing fixtures.

10. Community House Renovation

This important resource is not utilized to its fullest capacity and is continuing to deteriorate due to inadequate maintenance.

The ultimate goal of this project should be to restore Community House to its historic prominence as a focus of community activities in the Village.

As a first step in the restoration process, a comprehensive engineering analysis is needed. This analysis should document all engineering deficiencies and deteriorated conditions, and should establish a phased program of capital improvements based on priority needs.

The restoration program for the Community House should consists of two components: a plan for the physical renovations, and a comprehensive facility use plan.

The Village should investigate sources of funding for the restoration work, including the Columbia University preservation program.

The facility use plan should accommodate youth group activities.

11. Pedestrian Access to the Village's Waterfront

CA opened discussion of this topic by cautioning the Committee that "public access" can take many forms, and includes passive access that is targeted to the recreational enjoyment of community residents.

An existing promenade extends along the bay side of the Village, between Ocean Road at the west end and the ferry terminal at the east end. There has been recent discussion among interested parties regarding the possibility of extending this walkway further to the east, across the frontage of commercial properties which adjoin the ferry terminal. Concerns were raised that such a project could only occur if the land for the extended promenade was in Village ownership. However, a number of mechanisms were identified which would allow this type of project to proceed, including: negotiated sale, condemnation, easement, and joint public-private venture. Further investigation would be needed in order to determine whether such action would be in the Village's best interests and, if so, which implementation option should be pursued.

The Committee agreed that there is adequate access to the Village's oceanfront beach, via a series of dune crossover structures. However, at that time, all of these structures consisted of stairways, which did not allow for wheelchair access. After discussion, it was decided that the Village would examine all of the existing dune crossovers to determine which of these structures would lend itself most readily to retrofitting with the ramp(s) necessary to provide wheelchair access. It was determined that some form of handicapped access to the oceanfront should be provided, even if only to allow wheelchairs physical access to the top of the dune in order to gain visual access. Subsequently, in November 2002, a wheelchair access ramp was installed by the Village.

The concept of a bridge across the mouth of the ferry terminal was mentioned as a possible way to create a "gateway" to the Village. However, this type of project may not be practical, because extensive ramps would be needed to provide the requisite handicapped access in a manner that does not hinder the passage of ferry boats into the docking basin. It

was suggested that perhaps some other type of structure could be conceived to serve as a suitable "gateway" feature.

Bicycle access also was discussed. Recently, the Village eased restrictions on the operation of bicycles, allowing for bicycle riding during summer weekdays, but retaining the ban on bicycles during summer weekends (previously, bicycles were prohibited throughout the summer). Further input will be provided from a special committee which has been formed to address this topic, whose report is anticipated in the early spring.

12. Vehicular Traffic Within the Village

The Village has established a gross weight limit of 8,000 pounds for vehicles operating on Village roadways/walkways. Fire trucks are exempt from this requirement.

A significant percentage of trucks that travel in the Village exceed the four-ton limit, which has accelerated the deterioration of the concrete, especially with respect to cracking of the edges of the slabs. This progressive damage to the walkways has resulted in the Village being subject to costly litigation as a result of alleged trip-and-fall incidents.

It was noted that excessive vehicle weight was only one of a number of factors that has contributed to this problem. High groundwater elevations and other environmental conditions also are involved.

Enforcement of the vehicle weight limit is problematic, since the Village does not possess nor have access to a vehicle scale. As part of its vehicle permit application process, the Village verifies that the unloaded vehicle weight does not exceed the limit. However, many trucks carry heavy loads (e.g., solid wastes, construction materials, demolition debris in roll-off containers, etc.), which cause the gross weight to exceed 8,000 pounds, sometimes by a substantial margin.

The Village recognizes that it would not be desirable or practical to ban truck traffic on its roadways, since these vehicles provide essential services to the Village and its residents.

As discussed at the October 27 meeting, the Village's ongoing roadway/walkway maintenance program involves the placement of a layer of reinforced concrete over the existing concrete slabs. It is possible that this reinforcement will alleviate deterioration of the concrete roadways/walkways, which would render the issue moot. However, the Village will continue to monitor the situation. If it is found that the strengthened slabs continue to be susceptible to truck-induced damage, further action may be required. The establishment of an additional fee for commercial vehicles, with the proceeds used to undertake roadway/walkway maintenance, is one possible measure that was discussed.

13. Vessel Operations

Fire Island Ferries operates under an exclusive ten-year lease which extends until December 31, 2010. The water taxi companies that serve Ocean Beach operate under individual licensing agreements with the Village, for a term of one year.

The National Park Service (NPS) has issued a system-wide ban against the operation of personal watercraft (commonly known by the trade name "jetski"), which includes Fire Island National Seashore (FINS) in which the Village of Ocean Beach is situated. The National Park Service has advised the Village that personal watercraft use will be allowed in FINS on a limited basis, pending the publication of final regulations in the *Federal Register*, which is expected to occur in July 2003 and will be binding upon the Village.

The Village recognizes the impacts that are associated with personal watercraft use, especially with respect to noise, which have translated into significant public opposition to these vessels. However, it was also noted that a small segment of the community's population engages in personal watercraft operation, which has been based at the 14 "jetski pads" at the Village Marina. These spaces have been fully rented in recent years, and there has been a request for additional spaces.

The Village currently lacks a public launching area for small, non-motorized vessels (e.g., canoes, kayaks, sunfish, etc.), and has indicated that the establishment of this type of facility is a high priority. The Village's bay beach, situated directly to the west of the Village Marina, was identified as the most promising location for a public small boat launching ramp. However, any such project would have to be tied into the overall improvement of the bay beach, a project whose fate presently is not known because of uncertainty regarding the scope of work that will be permitted by the New York State Department of Environmental Conservation (NYSDEC).

At that time, the Village was seeking approvals to undertake dredging to enhance the bay beach. In undertaking this project, which was completed in the spring of 2003, the Village's first priority was the creation of a suitable swimming area, through the establishment of a graduated beach profile. Provision of small boat access at this location will be of secondary importance.

The northern end of Surf Road, at the northwest corner of the Village, was identified as another possible location for small boat access. This site lacks bulkheading, and previously had been used for this purpose. However, one Committee member noted that this area has tricky currents.

The construction of storage racks was identified as another important element of the Village's plan to enhance facilities for the operation of small boats. In order to provide a level of convenience that will ensure their use, any new storage racks will have to placed in close proximity to the launching location.

It was stated that the Village should charge a fee for the use of any public small boat storage facilities, and that effective policing and monitoring of these racks will be necessary.

The Windswept property, which is located just west of the bay beach, was identified as a possible site for the installation of public racks for small boat storage. This property is owned by the Village and leased to a not-for-profit organization for the operation of a youth program. Consultation with the lessee will be necessary prior to the site being used for public facilities.

14. Protection of Ecological Resources and Open Space

Discussion on this topic was brief, and centered on tree protection in the Village. Currently the Village's Environmental Committee is working on formulating a recommended policy relative to this matter.

It was pointed out that most, if not all, of the larger trees present in the Village are introduced, and have been planted for landscaping on private properties.

15. Conflicts and Inconsistencies Arising from Multi-agency Jurisdiction of Activities in the Village

Many of the people in the room expressed frustration with the level of regulation to which the Village of Ocean Beach is subjected, which includes tight oversight at both the State level (primarily by the Department of Environmental Conservation, NYSDEC) and the federal level (primarily by the NPS). It is of particular concern that the policies and decisions of these two involved regulatory entities can be inconsistent with one another, which makes project planning especially problematic.

The fact that the Village is situated in FINS results in an additional layer of federal regulation which has a great effect on activities that can occur in the Village. However, the need to obtain permits from NYSDEC for most activities along both shorelines was identified as the greatest impediment to implementing various projects in the Village.

Several Committee members expressed their belief that a number of other East Coast states have better coordination among the various involved agencies, including New Jersey, Delaware, North Carolina, and Florida.

The Committee stated that the LWRP should stress the critical importance to the Village of protecting the oceanfront.

16. Main Street Facade Review — This item was taken out of order from what was listed in the agenda.

There has been discussion in the Village regarding the possible establishment of an Architectural Review Board. However, no action has been taken on this matter due to concerns that the decision-making process would be too subjective, which would leave the Village open to litigation.

The Planning Board drafted an architectural review law, and submitted its recommendation to the Board of Trustees. This law could be implemented by the existing Planning Board, without the creation of a separate Architectural Review Board.

The Village Board recently considered a draft property maintenance law. However, this proposal was tabled without action, and there is no specific schedule for taking up this matter again.

The consensus of the LWRP Advisory Committee was that action is needed to implement some form of architectural review in the Village. It is believed that architectural review probably should focus first on commercial buildings, and should address the reconstruction of existing buildings. The Mayor proposed that the Planning Board "resurrect" and resubmit its prior recommendation to the Board of Trustees, revised as appropriate.

A specific concern regarding building exteriors is the use of plastic siding. Presently, only a few houses have such siding, and the consensus is that further use of this material anywhere in the Village should be prevented.

It may be easier to achieve consensus regarding the specific requirements for facade improvements (e.g., materials, architectural styling, etc.) if grant money is procured which is tied into specific facade improvement requirements. CA has completed preliminary research on the availability of grant monies for facade improvements, which indicates that there are a few programs for which the Village of Ocean Beach may be eligible. The Village Administrator requested that CA submit a proposal to complete this research and follow through with applications for grant funding.

17. Appropriate Balance Between Commercial Activity and Other Uses

CA initiated the discussion by pointing out that everyone in the room knows that this is a hot-button issue; and, in fact, it may be the most difficult issue facing the Village. This is no different than many other communities that are wrestling with this issue.

CA asked if anyone in the room disagreed with the following statement: "The Village's business district becomes very crowded with people on weekend nights during the summer." No dissent was expressed.

CA followed up by asking if anyone disagreed with the following statement: "Actions that would increase the number of people congregating in the business district during those time

periods would be undesirable, and would not be in the general best interests of the Village." Again, no overall dissent was expressed. However, questions were raised as to the time frame for which this policy would apply, and whether the term "weekend nights" was too broad. This indicates that further refinement of the statement may be needed in order to incorporate it into a local policy for the Village of Ocean Beach LWRP.

The Village Board of Trustees pointed out that it has recognized the problem with crowds on summer weekends, and has taken certain actions (via resolutions at the last board meeting) to alleviate the problem. These actions, which were implemented in the summer of 2002, include:

C. The lateral ferry is prohibited from docking in the Village of Ocean Beach after 10:00 p.m. on Fridays, Saturdays, and holidays. This will curtail late-night traffic from neighboring communities.

D. Water taxis are prohibited from making drop-offs after midnight and pick-ups after 2:00 a.m. These terms have been incorporated into the Village's new licensing agreements with the water taxi operators, which are executed on an annual basis.

The Board of Trustees indicated that it will continue to monitor the situation, and would make further revisions as appropriate.

It was indicated that noise is the biggest problem faced by residents whose homes are located near the downtown area. The Village patrols for violations of the Village noise ordinance, and issues summonses as warranted. This activity was "ratcheted up" toward the end of the summer of 2001, which will be carried over to next year and thereafter.

The Village of Ocean Beach is the most commercially-developed community on Fire Island. However, it is necessary to reach a "happy medium" between commercial activity and residential uses in the Village.

It was pointed out that there has not been any new commercial development in the Village in the past 20 years. In fact, there is one less commercial establishment than there had been previously.

It was suggested that the appropriate balance would be "no further commercialization". However, this was seen by some as being too restrictive if it precludes the re-occupancy of vacant storefronts. It was pointed out that the rules for FINS prohibit the expansion of businesses in the Village.

18. Other Issues

A Village-issued permit is required for any house that is used for rental purposes. Village records indicate that the number of rental units has been declining over recent years, from approximately 150 three years ago to 108 this year.

A new law targets rental houses for stronger oversight. If any such house receives two code violations (e.g., noise violation, excessive occupancy, etc.), the rental permit can be revoked.

There appeared to be a consensus that "tourist destination" was not an appropriate label for the Village of Ocean Beach. However, there was debate about whether the term "tourist" was being applied too widely. Some objected that group renters should not be categorized as "tourists", since many people who are now long-time homeowners first were exposed to the Village of Ocean Beach via group rental houses.

The actions discussed above pertain to people who are "external to the Village". It was noted that there also are problems with certain homeowners, particularly with respect to noise.

The Village recently looked into the possibility of establishing a Business Improvement District (BID). A BID committee was established, and the first few steps of a complicated process were completed, including the creation of a BID map. However, the process stalled at the petition phase. The establishment of a BID requires signatures representing 51 percent of the commercial tax base. The Village was not able to exceed that threshold.

GREAT SOUTH BAY

COMMUNITY HOUSE

WINDSWEPT

BAY BEACH

VILLAGE MARINA

VILLAGE HALL

TENNIS COURTS

BASKETBALL COURTS

WAGON PARK

BOATHOUSE/FERRY TERMINAL

VILLAGE MARINA

REFUSE BARGE LOADING AREA

PLAYGROUND

BAYVIEW WALK

VILLAGE GREEN

BAYVIEW WALK

BAYVIEW WALK

ANNEXED VILLAGE PROPERTY

SEWAGE TREATMENT AND WATER TREATMENT FACILITY

VILLAGE BOUNDARY

SURF ROAD

WILMOT ROAD

OCEAN ROAD

BUNGALOW WALK

DELIVERY ROAD

MIDWAY WALK

COTTAGE WALK

DELIVERY ROAD

DEHNHOFF WALK

DELIVERY ROAD

BAYBERRY WALK

OCEAN BREEZE WALK

DELIVERY ROAD

DELIVERY ROAD

EVERGREEN WALK

SURF VIEW WALK

DELIVERY ROAD

OCEAN VIEW WALK

PUBLIC BATHING BEACH

WEST GROIN

EAST GROIN

VILLAGE MAINTENANCE FACILITY
PUBLIC WATER SUPPLY WELLS
PUBLIC BATHROOMS

ATLANTIC OCEAN

OVERPASS

OVERPASS / RAMP

VILLAGE BOUNDARY

PUBLIC PARKLAND AND OPEN SPACE

RESIDENTIAL

GENERAL COMMERCIAL

MIXED COMMERCIAL AND RESIDENTIAL

MARINE COMMERCIAL

INSTITUTIONAL

VACANT PRIVATE LAND

100 0 100 200 300

Scale: 1" = 200'

Cashin Associates, P.C.
ENGINEERING - PLANNING - CONSTRUCTION MANAGEMENT
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FINAL DRAFT

MAP 2
VILLAGE OF OCEAN BEACH

LOCAL WATERFRONT REVITALIZATION PROGRAM

EXISTING LAND USE

JULY 2004

GREAT SOUTH BAY

GENERAL VESSEL USE AREA

GENERAL VESSEL USE AREA

BRD

BRD

C

C

R-4

R-4

BAYVIEW WALK

BAYVIEW WALK

BAYVIEW WALK

ANNEXED VILLAGE PROPERTY

VILLAGE BOUNDARY

R-4

R-4

R-4

MIDWAY WALK

SURF VIEW WALK

DELIVERY ROAD

EVERGREEN WALK

DELIVERY ROAD

OCEAN BREEZE WALK

DELIVERY ROAD

BAYBERRY WALK

DELIVERY ROAD

DEHNHOFF WALK

DELIVERY ROAD

COTTAGE WALK

DELIVERY ROAD

BUNGALOW WALK

DELIVERY ROAD

OCEAN ROAD

WILMOT ROAD

SURF ROAD

VILLAGE BOUNDARY

OCEAN VIEW WALK

DD

SWIMMING AREA

ATLANTIC OCEAN

VILLAGE BOUNDARY

100 0 100 200 300

Scale: 1" = 200'

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FINAL DRAFT

MAP 3
VILLAGE OF OCEAN BEACH
LOCAL WATERFRONT REVITALIZATION PROGRAM
EXISTING ZONING
JULY 2004

GREAT SOUTH BAY

ONLY NON-BULKHEADED SECTION OF BAYFRONT SHORELINE

BAYVIEW WALK

BAYVIEW WALK

BAYVIEW WALK

ANNEXED VILLAGE PROPERTY

VILLAGE BOUNDARY

SURF VIEW WALK

DELIVERY ROAD

EVERGREEN WALK

DELIVERY ROAD

OCEAN BREEZE WALK

DELIVERY ROAD

BAYBERRY WALK

DELIVERY ROAD

DEHNHOFF WALK

DELIVERY ROAD

COTTAGE WALK

MIDWAY WALK

DELIVERY ROAD

BUNGALOW WALK

OCEAN ROAD

WILMOT ROAD

SURF ROAD

VILLAGE BOUNDARY

OCEAN VIEW WALK

WEST GROIN

EAST GROIN

ATLANTIC OCEAN

100 0 100 200 300

Scale: 1" = 200'

APPROXIMATE LOCATION OF OCEANFRONT DUNE

SHOALS, BARS AND MUDFLATS

COASTAL EROSION HAZARD AREA LINE

HARDENED SHORELINE (I.E., BULKHEADING)

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FINAL DRAFT

MAP 4
VILLAGE OF OCEAN BEACH
LOCAL WATERFRONT REVITALIZATION PROGRAM
ENVIRONMENTAL FEATURES
JULY 2004

Section III

Local Waterfront Revitalization Program Policies

SECTION III
LOCAL WATERFRONT REVITALIZATION PROGRAM POLICIES

3.1 OVERVIEW

This section of LWRP presents the coastal management policies that shall apply to the Village of Ocean Beach Local Waterfront Revitalization Area (LWRA). These local policies follow the 13 amended policies that were issued by the New York State Department of State (NYSDOS) in June 1996, which have been refined from the original 44 State Coastal Policies. The main policy statements have been retained verbatim from the NYSDOS policy document. The sub-policies and policy explanations have been modified and expanded to reflect the unique conditions in the Village of Ocean Beach, and new sub-policies have been added as appropriate to address issues of special local importance.

The local policies for the Village of Ocean Beach are organized under four headings: developed coast policies, natural coast policies, public coast policies, and working coast policies.

General Policy

Policy 1 Foster a pattern of development in the Village of Ocean Beach coastal area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a coastal location, and minimizes adverse effects of development.

Economic Development Policies

Policy 2 Protect water-dependent uses, promote siting of new water-dependent uses in suitable locations, and support efficient harbor operation.

Policy 3 Protect agricultural lands.

Policy 4 Promote sustainable use of fish and wildlife resources.

Waterfront Natural Resources Policies

Policy 5 Protect and restore ecological resources, including significant fish and wildlife habitats, wetlands, and rare ecological communities.

Policy 6 Protect and improve water resources.

Policy 7 Minimize loss of life, structures, and natural resources from flooding and erosion.

General Environmental Policies

Policy 8 Protect and improve air quality.

Policy 9 Promote appropriate use and development of energy and mineral resources.

Policy 10 Minimize environmental degradation from solid waste and hazardous substances and waste.

Recreation and Cultural Policies

Policy 11 Improve public access to and use of public lands and waters.

Policy 12 Enhance visual quality and protect outstanding scenic resources.

Policy 13 Preserve historic resources.

3.2 GENERAL POLICY

Policy 1 Foster a pattern of development in the Village of Ocean Beach coastal area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a coastal location, and minimizes adverse effects of development.

The character of Ocean Beach is defined by the pattern of land development. The Village mostly consists of high density residential development. A significant commercial district, the largest on fire Island, consisting of shops, restaurants, hotels, and other businesses, is located on the bay-side. Various public and community facilities (e.g., sewage treatment and water supply systems, ferry terminal, Village Marina, community house, recreational and maintenance facilities, etc.) are found at various locations throughout the Village, primarily on the bay-side.

Ocean Beach is a year-round community which experiences a significant increase in residents during the summer. The number of daily visitors to the Village during the peak of the summer season can be five times the number of seasonal residents.

The Village is essentially fully developed at the present time, and the primary open space area comprises the oceanfront beach and dune. The limited acreage of open space in the Village lends

special significance to this area, which provides ecological, scenic, recreational, and economic benefits to Village residents.

When storm damage occurs, at some point it will be necessary to get equipment in for demolition and reconstruction. For this reason lot line setbacks, road access, and easements should be maintained and building size should be limited.

Policy 1 will be implemented by the proposed improvements to the Village's water distribution and sanitary waste collection and treatment systems (maintenance of vital infrastructure), proposed restoration of the Community House and Windswept facility, proposed facade review and property maintenance investigations, proposed Business Improvement District, and continued monitoring of activities in the Business District.

1.1 Concentrate development and redevelopment in order to revitalize deteriorated and underutilized areas and strengthen the traditional waterfront focus of the Village.

The Village of Ocean Beach already is essentially fully developed, with very few remaining parcels of vacant land. Therefore, the focus of this policy is on redevelopment, rather than new development, including the restoration of the Community House and Windswept facilities.

New development should be located where infrastructure is adequate or can be upgraded to accommodate such development.

The following planning principles should be used to guide investment and preparation of development strategies and plans:

- Scale development to be appropriate to the setting.
- Design development to highlight existing resources, such as local history and important natural and man-made features, in order to reinforce community identity.
- Design the waterfront as a focus for activity that draws people to the coast.
- Balance community needs and market demands in making development choices.
- Recognize environmental constraints as limiting development.
- Restore environmental quality to degraded areas wherever practicable.

All development and uses should recognize the unique qualities of a coastal location by:

- designing buildings and development sites so as to optimize the beneficial use of the coastal location and associated coastal resources;
- minimizing consumption of waterfront lands and potential adverse impacts on natural resources;
- limiting the alteration of segments of natural shoreline;
- incorporating recreational activities, public access, open space, or related amenities, as appropriate to the use, to enhance the site and the surrounding community, and to increase visual and physical access to the coast;
- attracting people to the coast, as appropriate to the use;

- ensuring that design and siting of uses and structures complements the surrounding community and landscape;
- using indigenous plants as components of landscape design to improve habitat and water quality, and to lessen water demand; and
- reinforcing community identity by highlighting local history and important natural and man-made features.

1.2 Protect stable residential areas.

Residential homes comprise the predominant land use in the Village, and it is the intent of this policy to maintain stable residential areas and allow for continued compatible residential and supporting development in and adjacent to such areas. Continued monitoring of activities in the Village's business district will implement this policy.

Avoid actions that would increase the number of people congregating in the Village's commercial district during periods of peak activity during the late night hours of summer weekends and holidays. Such actions would be undesirable, since they would adversely impact residents' peaceful enjoyment of their properties, and would not be in the general best interests of the Village.

Continue to seek effective solutions to reduce conflicts between the Village's residential uses and activities occurring within the Village's business district. Recent actions by the Board of Trustees, such as the imposition of restrictions on the operation of the lateral ferry and water taxis during the late night hours of summer weekends and holidays, are expected to moderate the magnitude of the crowds in the Village during those peak periods. The Board of Trustees shall continue to monitor the situation and implement additional measures as appropriate to advance the goal of reducing conflicts between the Village's residential and commercial uses.

1.3 Maintain and enhance natural areas, recreation facilities, and open space.

The intent of this policy is to protect natural areas, recreational facilities, and open space, which serve a crucial role in the quality of life that is enjoyed by Village residents and the recreational experience that is available to visitors.

Avoid loss of economic, environmental, and aesthetic values associated with natural areas, recreational facilities, and open space.

Maintain natural, recreational, and open space values including those associated with beach clubs and community association facilities.

1.4 Minimize adverse impacts of new development and redevelopment.

It is expected that land use in the Village of Ocean Beach will evolve over time, as is generally true in most communities. To a certain degree, such change should be welcomed, since it maintains economic vitality. However, in order for such benefits to be meaningful on a community-wide basis, it is critically important to ensure that new development and redevelopment occurs in a manner that does not cause significant impacts to existing development.

Minimize potential adverse environmental, economic and land use impacts that would result from proposed development by applying the following standards:

- Avoid introduction of discordant features which would detract from the community by ensuring that new development and redevelopment is consistent with existing mass and distribution of structures, scale, intensity of use, architectural style, land use pattern, and other indicators of community character.

- Mitigate adverse impacts among existing incompatible uses by avoiding expansion of conflicting uses, promoting mixed-use development approaches which that reduce potential for conflict, mitigating potential conflicts by segregating incompatible uses, and providing buffers, or using other design measures to reduce conflict between incompatible uses.

- Protect the surrounding community from adverse impacts due to substantial introductions of or increases in odors, noise or traffic.

- Integrate the Village waterfront with inland areas by providing physical linkages between the waterfront and inland areas, matching new uses to community needs, particularly as related to demographic characteristics, and limiting actions that would preclude access to the waterfront.

Minimize the potential for adverse impacts from types of development that individually may not result in a significant adverse environmental impact, but when taken together could lead to or induce subsequent significant adverse impacts.

3.3 ECONOMIC DEVELOPMENT POLICIES

Policy 2 Protect water-dependent uses, promote siting of new water-dependent uses in suitable locations, and support efficient harbor operation.

The character and appeal of the Village of Ocean Beach is strongly influenced by its coastal setting. A critical component of the established character of the Village is its water-dependent uses. A water-dependent use is one which requires a location on the waterfront in order to be viable, such as a marina, yacht club, boatyard, or coastal recreational facility (e.g., beach, boat ramp, fishing pier, waterfront parkland, etc.). Thus, in a very real sense, any action that diminishes

the viability of water-dependent uses also reduces the community's connection to the water and, consequently, generally should be avoided.

The intent of this policy is to protect existing water-dependent commercial, industrial, and recreational uses and to promote their future siting in accordance with the reasonably expected demand for such uses. It is also the intent of this policy to foster orderly water use management to address the problems of conflict, congestion, and competition for space in the use of surface waters and underwater lands.

Policy 2 will be implemented by proposed improvements to the ferry boat terminal, Village Marina, and Wagon Park.

2.1 Protect existing water-dependent uses.

The water-dependent uses in the Village of Ocean Beach include the ferry terminal and the Village Marina. Because a waterfront location is a prerequisite for any water-dependent use, such uses should be given priority over non-water-dependent uses for siting along the shoreline. Any actions that would displace, or otherwise significantly impact or interfere with existing, functional water-dependent uses, should be avoided. Caution should be exercised, however, to ensure that the overall intensity of water-dependent uses is maintained at an appropriate level, so as to suitably complement the other uses in the Village and not to adversely alter the character of the area. An over-intensification of water-dependent uses along the Ocean Beach shoreline would significantly alter the character of the community and, therefore, would not be desirable.

Provide suitable incentives to promote the continued viability of existing water-dependent uses in the Village.

2.2 Promote the siting of desirable new water-dependent uses, and expansion of existing water-dependent uses, at suitable locations.

In general, new water-dependent uses, should be located within areas that already contain concentrations of water-dependent commercial and/or recreational uses, and essential support facilities. A new water-dependent use should not be located in an undeveloped area unless there is a demonstrated demand for the use, there is a lack of suitable sites within a nearby developed area, the use has unique siting requirements that necessitate a particular site in an undeveloped area, the use is small-scale and has the principal purpose of providing access to a waterway, and the use is consistent with the character of the area.

Adverse impacts resulting from new and expanded water-dependent uses should be minimized by siting such uses where:

- the need for dredging is minimized;

- water-side and land-side access, as well as upland space for parking and other facilities, is adequate;
- the necessary infrastructure exists or is easily accessible, including adequate shoreline stabilization structures, roads, water supply, and public bathroom facilities; and
- the proposed new or expended use is compatible with surface water quality classifications.

New or expanded marinas also should:

- not encroach upon existing navigation channels, fairways, or channel buffer areas; and
- avoid or minimize adverse impacts to natural resources and existing neighborhoods.

Locations that exhibit important natural resource values, such as wetlands and fish and wildlife habitats, should be avoided in siting new or expanded water-dependent uses.

2.3 Provide sufficient infrastructure for water-dependent uses.

Protect and maintain existing public and private navigation lanes and channels at depths consistent with the needs of water-dependent uses.

Use suitable dredged material for beach nourishment, dune reconstruction, or other beneficial uses.

Avoid shore and water surface uses that would impede navigation.

2.4 Encourage appropriate non-water dependent uses in the waterfront area to support and improve the economic viability of water-dependent uses.

Water-enhanced uses do not require a location on or adjacent to the shoreline in order to function, but can add to public enjoyment and use of the water's edge, if properly designed and sited. Water-enhanced uses include restaurants, where clientele can enjoy waterfront vistas while dining. There are several restaurants on the Village's bay frontage (some of which serve a water-dependent function since they offer dockage for patrons). Such uses should be encouraged where they are compatible with surrounding development and make beneficial use of their coastal location by:

- attracting people to or near the waterfront and providing opportunities for access that is oriented to the coast,
- providing public views to or from the water,
- not interfering with the viability or operation of water-dependent uses, and
- not causing significant adverse impacts to community character and surrounding land and water resources.

Uses that are not water-dependent or water-enhanced can be included as part of an integrated, mixed-use development plan for the waterfront, provided that said uses:

- are not sited directly on the water's edge or over the water,
- do not displace existing, functional water-dependent or water-enhanced uses, and
- are not incorporated into a development plan in lieu of appropriate, viable water-dependent and water-enhanced uses.

A use should be avoided on the waterfront if it:

- results in unnecessary and avoidable loss of coastal resources or access to coastal resources,
- ignores the coastal setting through inappropriate design or orientation (e.g., a building that faces away from the waterfront or blocks views of the water from significant public vantage points), or
- does not, by its nature, derive economic benefit from a waterfront location.

2.5 Promote the efficient management of surface waters and underwater lands.

Surface waters are an important resource, which serve multiple purposes, including both commercial and recreational uses. Lack of effective water use management contributes to congestion and competition for space within harbors, surface waters, and underwater lands. As a result, natural resources can be degraded and communities are not able to take advantage of tourism and economic growth opportunities. The purpose of this policy is to ensure the equitable allocation of limited surface water resources for the optimal benefit of all uses. The proposed new Harbor Management Law will implement this policy.

Marinas, in-water structures, and surface water uses should not encroach upon navigation channels and fairways.

Uses that are not water-dependent, such as private decks and platforms, should not be allowed on or over surface waters. An over-water structure of this type may be considered for approval if said structure provides access to the general public.

Various water use zones should be established for uses such as docks, moorings, navigation channels, turning basins, and any special recreational use areas (bathing, water skiing, etc.).

The establishment of future water use zones and the siting of in-water structures should be undertaken in a manner that minimizes potential impacts on sensitive resources, such as wetlands and habitat areas.

Use of personal watercraft (commonly referred to by the trade name "Jetski") should be controlled within 1,500 feet of the Village shoreline to minimize environmental impacts.

Policy 3 Protect agricultural lands.

This policy is not applicable to the Village of Ocean Beach, which lacks agricultural land.

Policy 4 Promote sustainable use of fish and wildlife resources.

The living marine resources of the Great South Bay and Atlantic Ocean play an important role in the local and regional social and economic well-being. Commercial products provide high-protein food sources to consumers and are distributed throughout the state and nation, and to expanding international markets. In addition to the food value of local living marine resources, they have economic significance in the commercial development of value-added food stuffs, pharmaceuticals, cosmetics, and oils. These same resources provide recreational experiences and important accompanying economic activity.

Continued use of the living resources from the marine waters adjacent to the Village of Ocean Beach depends on maintaining long-term health and abundance of fishery populations and their habitats, and on ensuring that the resources are sustained in usable abundance and diversity for future generations. This requires the State's active management of marine fisheries, protection and conservation of habitat, restoration of habitats in areas where they have been degraded, and maintenance of water quality at a level that will foster occurrence and abundance of living marine resources. Allocation and use of the available resources: must be consistent with the restoration and maintenance of healthy stocks and habitats; and must maximize the benefits of resource use so as to provide valuable recreational experiences and viable business opportunities for commercial and recreational fisheries.

4.1 Ensure the long-term maintenance and health of living marine resources.

Ensure that commercial and recreational uses of living marine resources are managed in a manner that: results in sustained usable abundance and diversity of the marine resource; does not interfere with population and habitat maintenance and restoration efforts; uses best available scientific information in managing the resources; and minimizes waste and reduces discard mortality of marine fishery resources.

Ensure that the management of the state's trans-boundary and migratory species is consistent with interstate, state-federal, and inter-jurisdictional management plans.

Protect, manage, and restore sustainable populations of indigenous fish, wildlife species, and other living marine resources.

Foster occurrence and abundance of marine resources by: protecting spawning grounds, habitats, and water quality; and enhancing and restoring fish and shellfish habitat, particularly for anadromous fish, oysters, and hard clams.

4.2 Provide for commercial and recreational use of coastal fisheries.

Promote programs to enhance and restore shellfish populations.

Maximize the benefits of marine resource use so as to provide a valuable recreational resource experience and viable business opportunities for commercial and recreational fisheries.

Where fishery conservation and management plans require actions that would result in resource allocation impacts, ensure equitable distribution of impacts among user groups, giving priority to existing fisheries in the state.

Protect the public health and the marketability of marine and fishery resources by maintaining and improving water quality.

Provide adequate infrastructure to meet recreational needs including appropriate fishing piers, dockage, parking, and livery services.

Conduct research to address information gaps regarding the environmental factors and management methods for shellfish populations, so as to mitigate potential adverse impacts to these populations related to harvesting activities.

3.4 WATERFRONT NATURAL RESOURCES POLICIES

Policy 5 Protect and restore ecological resources, including significant fish and wildlife habitats, wetlands, and rare ecological communities.

The ecosystem in the Great South Bay and Atlantic Ocean consists of physical (non-living) components, biological (living) components, and their interactions. The physical components include environmental factors such as water, soils, geology, energy, and contaminants. The biological components include the aquatic plants and animals, and all other living things that inhabit the coastal area and utilize its resources for survival and propagation.

Certain natural resources that are important for their contribution to the quality and biological diversity of the coastal ecosystem have been specifically identified by the state for protection. These natural resources include: regulated tidal and freshwater wetlands; designated Significant Coastal Fish and Wildlife Habitats; and rare, threatened, and endangered species. In addition to specifically identified discrete natural resources, the quality of the coastal ecosystem also depends on more common, broadly distributed natural resources, such as the extent of forest cover, the population of overwintering songbirds, and the health and stability of benthic communities. These more common natural resources collectively affect the quality and biological diversity of the ocean and estuary ecosystems.

Policy 5 will be implemented by enhanced public education programs.

5.1 Protect Significant Coastal Fish and Wildlife Habitats.

Significant Coastal Fish and Wildlife Habitats have been identified by the Department of Environmental Conservation and designated by the Secretary of State as being critical to the maintenance or re-establishment of species of fish and wildlife in the coastal zone. These areas must be protected for the habitat values they provide and to avoid permanent adverse changes to the coastal ecosystem.

Uses or activities should be avoided that would:

A. destroy habitat values through direct physical alteration, disturbance, or pollution, or the indirect effects of actions which would result in a loss of habitat; or
B. significantly impair the viability of a habitat beyond the tolerance range of fish and wildlife species through:
    1. degradation of existing habitat elements,
    2. change in environmental conditions,
    3. functional loss of habitat values, or
    4. adverse alteration of physical, biological, or chemical characteristics.

Where destruction or significant impairment of habitat values cannot be avoided, potential impacts of land use or development should be minimized through appropriate mitigation. Mitigation measures which are likely to result in the least environmentally-damaging alternative include:

A. avoidance of potential adverse impacts, including:
    1. avoiding ecologically sensitive areas
    2. scheduling activities to avoid vulnerable periods in life cycles and to avoid creating unfavorable environmental conditions
    3. preventing fragmentation of intact habitat areas
B. minimization of unavoidable potential adverse impacts, including:
    1. reducing the scale or intensity of the use or development
    2. designing projects to result in the least amount of potential adverse impact
    3. choosing alternative actions or methods that would lessen the potential impact
C. specific measures that are designed to protect habitat values from impacts that cannot be sufficiently avoided or minimized to prevent habitat destruction or significant habitat impairment
D. specific protective measures included in the individual narratives for each designated Significant Coastal Fish and Wildlife Habitat area

The area directly to the north of the Village of Ocean Beach, including the Village's 1,500-foot area of extra-territorial jurisdiction under Section 46-a of the New York State Navigation Law,

lies within the New York State-designated Great South Bay-West Significant Coastal Fish and Wildlife Habitat. The characteristics of this area is described in the Inventory and Analysis (Section 2) of this LWRP. The specific requirements for protecting natural resources, as set forth in the Impact Assessment portion of the Project Descriptions compiled by NYSDOS, that are relevant to this LWRP include the following:

- high water quality should be maintained, through prohibition of discharges from recreational boats and control of discharges from upland sources;
- Efforts should be made to include vessel waste pumpout equipment as part of any substantial project to improve recreational vessel facilities in the Village.
- excavation of new navigation channels should be minimized;
- dredging to maintain existing boat channels should be conducted in the late summer and fall to minimize potential impacts to aquatic organisms, and to allow for the disposal of dredged material when wildlife populations are least sensitive to disturbance;
- elimination of wetlands would result in the direct loss of valuable habitat;
- unregulated dredged material disposal would be detrimental , but may be designed to maintain or improve habitat for certain wildlife species; and
- construction of shoreline structures (e.g., docks, piers, bulkheads, revetments, etc.) in areas not previously disturbed by development (i.e., natural salt marsh, tidal flats, or littoral areas) may result in the loss of productive areas which support the fish and wildlife of the bay.

5.2 Support the restoration of Significant Coastal Fish and Wildlife Habitats wherever possible so as to foster their continued existence as natural, self-regulating systems.

Measures that can be undertaken to restore significant habitats include:

A. reconstructing lost physical conditions to maximize habitat values,
B. adjusting adversely altered chemical characteristics to emulate natural conditions, and
C. manipulating biological characteristics to emulate natural conditions through re-introduction of indigenous flora and fauna

5.3 Protect and restore ecological communities within the Village of Ocean Beach.

Concerns have arisen in the Village of Ocean Beach regarding the spread of non-native landscaping plants, and the associated displacement of the Village's native flora. This policy is intended to mitigate this situation by prompting a shift toward more natural plant species, thereby enhancing the quality of the Village's ecological communities.

Avoid development projects that would result in a significant adverse change to the ecological system of the Village.

Maintain and establish contiguous areas of wetlands, open space, and ecological communities.

Avoid further fragmentation of ecological communities and maintain corridors between ecological communities. Maintain structural and functional relationships between natural ecological communities to provide for self-sustaining systems.

Promote public education and awareness programs in order to enhance environmental stewardship by Village residents.

Maintain values associated with natural ecological communities.

Retain and expand indigenous plant populations.

Avoid permanent adverse change to ecological processes.

Reduce or eliminate adverse ecological impacts of existing development to the greatest extent practical.

Mitigate ecological impacts of new development.

5.4 Implement suitable habitat restoration/enhancement projects in those areas identified as being at risk or vulnerable to the impacts of new development and/or redevelopment projects.

In any case where potential impacts to important ecological communities cannot be avoided for a new development or redevelopment project, compensatory mitigation should be implemented in the form of suitable habitat restoration or enhancement.

5.5 Protect and, to the extent practicable, restore existing tidal and freshwater wetlands.

Wetlands are an important ecological resource that should be protected from actual and potential impacts related to existing and future development. This includes avoiding the direct loss of wetland area due to excavation or the placement of fill in existing wetlands, maintaining adequate buffers between wetlands and adjacent uses and areas of development, and complying with the requirements of State and local wetland regulations.

In addition, the following actions also are recommended:

- restore degraded wetlands wherever practical, in an effort to enhance their ecological function and natural resource value; and
- promote the implementation of best management practices for all development or redevelopment projects within the Village, to minimize impacts to wetlands.

5.6 Undertake mosquito control programs in a manner that does not result in significant adverse impacts to ecological resources.

Increased publicity recently has been given to the occurrence of mosquito-borne diseases in coastal areas in the Northeast region. Consequently, mosquito control is an important concern to the residents of Ocean Beach, due to the occurrence of extensive wetland areas within the Village and, especially, in adjacent areas. However, care must be taken to identify control strategies that provide effective reduction of mosquito populations, while also ensuring that significant adverse impacts to important ecological resources are avoided.

Policy 6 Protect and improve water resources.

The purpose of this policy is to protect the quality and quantity of water in the Village of Ocean Beach. Water quality considerations include both point source and non-point source pollution management, and require a strategy that both manages new sources of pollution and remediates existing sources. The primary quantity consideration is the maintenance of an adequate supply of potable water for the Village.

The coastal waters of Great South Bay adjacent to the Village of Ocean Beach are part of the South Shore Estuary Reserve (SSER), which is a interconnected system of lagoons lying behind the barrier beach on the south shore of Long Island. The SSER extends from the Hempstead bay complex on the west, through Great South Bay, Narrow Bay and Moriches Bay adjacent to the LWRA, and to Shinnecock Bay to the east. The SSER *Interim Report* (1998) concludes that the major sources of water pollution are non-point in origin, derived from developed upland areas. The *Interim Report* identifies two primary types of pollutants affecting south shore waters, pathogens and nutrients, and makes several recommendations to improve the water quality in this area, including: abate and control non-point source pollution; refine water quality improvement strategies; estimate total loading of non-point sources of pollution in relation to point sources; and undertake research regarding system-wide ecological consequences of the presence of toxic substances, human pathogens, excessive nutrients and low dissolved oxygen levels. The management of coastal waters in the LWRA should follow these strategies.

Consistency with the SSER's water quality protection and improvement policies will render numerous benefits to the LWRA. It is widely understood that the lack of adequate water quality controls can result in profound, negative, and wide-ranging direct effects on ecological resources. High levels of toxic materials in coastal waters will adversely impact most aquatic organisms, and at an extreme will cause mortality. Excess nitrogen discharges will prompt consumption of dissolved oxygen, which is detrimental to aquatic life, particularly less mobile species that live on the bottom. Additionally, effective control of certain types of contaminants in coastal waters also can have positive economic implications. For example, reduction of pathogen concentrations can increase the availability of shellfish resources for harvest. However, a somewhat less apparent, but no less important, effect is the enhancement of human enjoyment of coastal water resources: cleaner water and the resulting increase in wildlife diversity and abundance is more aesthetically appealing.

Policy 6 will be implemented by improvements to the Village's sanitary waste collection and disposal systems, and enhanced public education programs.

6.1 Prevent direct and indirect discharges to coastal waters that would cause or contribute to contravention of water quality standards and targets.

Point sources include discrete, well-defined discharges, such as outfall pipes, sluiceways, stream channels, and the like. Point sources, especially sewage outfalls, can be significant contributors of contamination to coastal waters. The purpose of this policy is to control and, to the extent practicable, reduce point-source discharges from the upland area in the Village of Ocean Beach to Great South Bay and the Atlantic Ocean.

Point source discharges should be avoided or mitigated, and land and water uses should be managed, so as to avoid any action that would:

A. exceed applicable effluent limitations, or
B. cause or contribute to contravention of water quality classification and use standards, or
C. materially adversely affect the water quality of receiving waters.

Reduce impairments caused by existing contaminated sediment, and prevent the introduction of new contaminated sediment into coastal waters.

Protect the water quality of LWRA coastal waters from adverse impacts associated with excavation, fill, dredging, and disposal of dredge materials.

Limit the individual impacts associated with development to prevent cumulative water quality impacts that would lead to a failure to meet water quality standards.

To the extent practicable, retrofit existing stormwater drainage systems with treatment capabilities to provide the removal of contaminants prior to discharge to coastal waters.

Protect water quality based on physical factors (pH, dissolved oxygen, dissolved solids, nutrients, odor, color, and turbidity), health factors (pathogens, chemical contaminants, and toxicity), and aesthetic factors (oils, floatables, refuse, and suspended solids).

Ensure that the Village's sewage collection and treatment facilities operate efficiently and effectively. Undertake system improvements and upgrades as necessary to effectuate this policy.

6.2 Minimize non-point pollution of coastal waters and manage activities causing non-point pollution.

Non-point contamination is derived from widely dispersed, indistinct sources, such as stormwater runoff from the upland surface. Non-point sources comprise the largest input to coastal waters on a region-wide basis. The purpose of this policy is to control and, to the extent practicable, reduce non-point discharges from the upland area in the Village of Ocean Beach to Great South Bay and the Atlantic Ocean.

Protect water quality by ensuring that new development includes the following measures:

A. protect areas that provide important water quality benefits, especially wetlands and buffer areas, and
B. maintain the natural characteristics of drainage systems, and
C. protect of areas that are particularly susceptible to erosion and sediment loss, and
D. prevent the direct discharge of stormwater to coastal waters, and
E. provide suitable treatment to all stormwater discharges to coastal waters, and
F. wherever practical, restore natural drainage patterns, and
G. wherever practical, restore wetlands in order to improve the overall water quality within the LWRA.

In order to enhance coastal water quality further, existing developments should be retrofitted with the measures outlined above, to the extent practicable.

Minimize non-point pollution of coastal waters using the following approaches, which are presented in order of priority:

A. As a first priority, avoid non-point pollution by limiting non-point sources. This can be accomplished by the following measures:
    1. reduce or eliminate the introduction of materials which may contribute to non-point pollution;
    2. avoid activities that would increase off-site stormwater runoff and transport of pollutants;
    3. control and manage stormwater runoff to:
        a. minimize transport of pollutants, and
        b. on sites where degraded stormwater runoff conditions exist, restore such sites to emulate natural stormwater runoff conditions, or
        c. achieve no net increase of runoff where unimpaired stormwater runoff conditions exist;
    4. retain or establish vegetation to maintain or provide:
        a. soil stabilization, and
        b. filtering capacity in riparian and littoral zones;
    5. preserve natural hydrologic conditions through the following actions:

a. maintain natural surface water flow characteristics,
b. retain natural watercourses and drainage systems where present,
c. where natural drainage systems are absent or incapable of handling the anticipated runoff demands:
   - develop open vegetated drainage systems as the preferred approach and design these systems to include long and indirect flow paths and to decrease peak runoff flows, and
   - use closed drainage systems only where site constraints and stormwater flow demands make open water systems infeasible.

B. As a second-level priority, reduce pollutant loads to coastal waters by managing unavoidable non-point sources and use appropriate best management practices as determined on the basis of site characteristics, design standards, operational conditions, and maintenance programs. Best management practices shall be promoted for: new construction projects (including both private and publicly-sponsored projects); construction of new roads; expansion of existing roads; landscaping; shoreline restoration projects; and any other project that is determined to have the potential for adversely affecting the water quality of the LWRA's water bodies.

6.3 Reduce non-point pollution using management measures that are targeted to the specific land use and pollution source categories that apply to the LWRA.

This policy is intended to provide more specific guidance for the control of non-point contaminants within the LWRA. These management measures are to be applied within the context of the prioritized approach of avoidance, reduction, and management presented in the previous policy section, consistent with the standards presented in *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (U.S. EPA, 840-B-92-002).

A. In urban/suburban settings, such as the Village of Ocean Beach, the following policies shall be applied:

1. For new development, manage runoff so that the total suspended solids load delivered to receiving waters is no greater than pre-development loadings.
2. For site development, avoid or mitigate activities that increase erosion or the volume or velocity of stormwater runoff.
3. For construction sites, reduce erosion and retain sediment on site, and limit and control the use of chemicals and nutrient sources.
4. For new on-site sewage disposal systems, ensure that siting, design, maintenance, and operation prevent discharge of pollutants to adjacent surface waters.
5. Plan, site, and design roadways to manage erosion and sediment loss, and limit disturbance of land and vegetation.
6. Plan, site, and design bridges to protect ecosystems.

7. For roadways and bridges, minimize the runoff of contaminants to coastal waters, to the extent practical.

B. For marinas and similar facilities, the following policies shall be applied:

1. Site and design marinas and similar facilities such that tides and/or currents will aid in the flushing of the site or renew its water regularly.
2. Assess water quality impacts as part of facility siting and design. Avoid siting new marinas and similar facilities in Class SA waters.
3. Manage stormwater runoff, discharge of hazardous substances, and solid wastes to minimize adverse impacts to coastal waters.

C. With respect to floatables (i.e., water-borne debris) and litter, the following policies shall be applied:

1. Prohibit all direct or indirect discharges of refuse or litter into coastal waters or upon public lands contiguous to and within 100 feet of coastal waters.
2. Limit entry of floatables to surface waters through containment and prevention of litter.
3. Remove and dispose floatables and litter from surface waters and shorelines.
4. Implement pollution prevention and education programs to reduce the discharge of floatables and litter into storm drains.

6.4 Protect and conserve the quality and quantity of potable water.

Prevent contamination of potable waters by limiting discharges of pollutants so as to maintain water quality according to water quality classification, and limiting land use practices which are likely to contribute to contravention of groundwater quality classifications for potable water supplies.

Prevent depletion of existing potable water supplies by limiting saltwater intrusion in aquifers and estuaries, through conservation methods or restrictions on water supply use and withdrawals, and by allowing for recharge of potable aquifers.

Limit cumulative impact of development on groundwater recharge areas to ensure replenishment of potable groundwater supplies.

Policy 7 Minimize loss of life and damage to structures and natural resources from flooding and erosion.

Flooding and erosion are two closely associated but distinct problems in coastal areas, such as the Village of Ocean Beach. Both problems relate to damages that are incurred primarily during major storm events. In the context of this policy, flooding pertains mainly to damages that result to structures and other development features (e.g., roadways, utilities, and other infrastructure). Erosion refers to the loss of upland area due to sediment removal by the action of storm waves and surge, which can increase the susceptibility of development to flooding and wave action. The primary purpose of this policy is to set standards that minimize the adverse effects suffered by humans and their property, and natural resources, as a result of flooding and erosion.

Both the ocean and bay shorelines of the Village have been subject to the damaging effects of flooding and coastal erosion. As compared to the shoreline of the Atlantic Ocean, the Great South Bay is relatively well-protected from large destructive wave action generated during severe coastal storms. Nevertheless, the entire Village is situated within the 100-year floodplain, and can experience inundation from both the ocean and the bay during severe coastal storms.

Flooding - The land area in the Village of Ocean Beach is characterized by minimal topographic relief, and is situated within the 100-year coastal flood plain as delineated by the Federal Emergency Management Agency (FEMA). According to this designation, the entire Village is susceptible to flooding during major storm events. Areas directly along the ocean shoreline are situated in zone VE, whereby they would experience wave impacts during the 100-year storm, in addition to still-water flooding.

The majority of the dwellings in the Village were constructed prior to the promulgation of the FEMA flood mitigation requirements. Consequently, these houses mostly do not provide adequate elevation or flood-proofing to avert flooding during the 100-year storm, nor do most of the houses in zone VE possess the structural features specified by FEMA that are designed to resist wave impacts. New development and substantial modification of existing structures require compliance with the applicable FEMA standards, which reduces, but does not entirely eliminate, the potential for storm damage. However, flood damage susceptibility remains a significant concern with respect to pre-existing structures that do not conform with these standards.

The Village has initiated a program that uses Federal monies to elevate existing houses that have not been constructed in accordance with FEMA flood damage prevention standards. Because the per-house cost for this type of project is substantial, only a limited number of properties have been addressed to date, or are anticipated to be addressed in the upcoming round of work. A long-term commitment will be necessary to achieve the goal of substantially reducing the flood susceptibility of Ocean Beach on a Village-wide basis.

Erosion - The primary concern relative to erosion in the Village of Ocean Beach is ensuring the integrity of the natural protective features (i.e., nearshore area, beach, and dune) on the oceanfront. These features provide the only available buffer for absorbing the energy of ocean waves and surge. Significant loss of sand from these features would pose a threat of catastrophic damage to the many millions of dollars of public and private improvements within the Village.

Policy 7 will be implemented by the Village's ongoing dune management and house elevation programs, proposed walkway elevation program, proposed improvements to the ferry boat terminal, proposed flooding and erosion study, improved inter-agency coordination, sand management plan, and enhanced public education programs.

7.1 Minimize potential adverse impacts due to flooding and erosion hazards by using the following management measures for shoreline protection, which are presented in order of priority:

A. To the maximum extent practicable, minimize potential loss and damage by locating development and structures away from flooding and erosion hazards. The following standards advance this policy:

1. Avoid developing new structures and uses in the Dune District, in accordance with State and federal policy, or reconstruction of existing structures damaged by 41 percent or more of their market value, in areas which are likely to be exposed to hazards unless:
   a. the structure or use functionally requires a location on the coast or in coastal waters, or
   b. the new development would be located in an area of substantial public investment.

5. Locate new structures which are not functionally dependent on a location on or in coastal waters, are not in areas of substantial public investment, or do not reinforce the role of a developed working waterfront, as far away from flooding and erosion hazards as possible. To effectuate this policy, new development is not permitted in natural protective feature areas (nearshore areas, beaches, bluffs, primary dunes, and wetlands as defined under 6 NYCRR Part 505), except as specifically allowed under the relevant portions of 6 NYCRR 505.8.
6. Reduce recurring flood damage to existing development by raising structures in place, to attain a first-floor height that exceeds the base flood elevation. Investigate other measures that would decrease susceptibility of existing structures to flooding, and pursue the implementation of those measures that are consistent with the other policies, goals and objectives of this LWRP.
7. Where practical, moving existing structures and development which are exposed to hazards away from the hazard is preferred over maintaining such structures

and development in place. Moving existing structures from flood-prone areas in the LWRA to new locations should be effected on a voluntary basis only.

8. Provide public infrastructure in or near identified VE zones, structural hazard areas, or natural protective features only if the infrastructure:
   a. will not promote new development or expansion of existing development in these areas, and
   b. is designed in a manner which will not impair protective capacities of natural protective features, and
   c. is designed to avoid or withstand damage from flooding and erosion.

B. As the second level of priority for minimizing flooding and erosion hazards in cases where development cannot be sited outside of hazard areas, use non-structural, vegetative measures that have a reasonable probability of successfully controlling flooding and erosion, based on site-specific shoreline characteristics such as exposure, geometry, and sediment composition. Protect those portions of the shoreline that currently are vegetated. Promote the revegetation of those areas of the shoreline that are at risk of erosion.

C. In cases where vegetative measures are not effective, enhance existing natural protective features and use non-structural measures that have a reasonable probability of managing erosion. In particular, enhance the protective capabilities of beaches by using fill, artificial nourishment, disposal of suitable dredged material, or by restoring coastal processes. Beach nourishment projects should conform to the following standards:

   1. use only clean sand compatible with native beach sand at the disposal site, and
   2. design criteria for enhancing the protective capabilities of beaches should not exceed the level necessary to achieve protection from a 30-year storm, except where there is an overriding public benefit.

D. Use hard structural erosion protection measures for control of erosion only under the following conditions:

   1. Avoidance of the hazard is not appropriate because a structure is: functionally dependent on a location on or in coastal waters; or located in an area of extensive public investment.
   2. Vegetative approaches to controlling erosion are not effective.
   3. Enhancement of natural protective features would not prove practical in providing erosion protection.
   4. Construction of a hard structure is the only practical design consideration and is essential to protecting the principal use.
   5. The proposed hard structural erosion protection measures are:
      a. limited to the minimum scale necessary, and

b. based on sound engineering practices

6. Appropriate vegetative methods have been included in the project design and implementation to enhance the overall effectiveness of the project.
7. Adequate mitigation is provided and maintained to ensure that there is no adverse impact to adjacent property, natural coastal processes or natural resources and, if undertaken by a private property owner, does not incur significant direct or indirect public costs.

7.2 Preserve and restore natural protective features.

Prevent development in natural protective features (i.e., nearshore areas, beaches, primary dunes, etc.), except development as specifically allowed in 6 NYCRR Part 505.8.

Maximize the protective capabilities of natural protective features by:

A. avoiding alteration or interference with shorelines in a natural condition
B. augmenting the protective function of existing natural protective features, through actions such as beach scraping and natural dune enhancement
C. restoring the condition of impaired natural protective features, wherever practical
D. using practical vegetative approaches to stabilize natural shoreline features
E. managing activities to limit damage to the protective capacities of the natural shoreline
F. undertaking actions to reverse damage that has diminished the protective capacities of the natural shoreline
G. providing relevant signage or other educational or interpretive material to increase public awareness of the importance of natural protective features, including signage and enforcement to discourage foot traffic on the oceanfront dune
H. continuing to sponsor community participation in events such as the planting of dune grass during the Village's annual "Dune Day" and other measures which are directed at preserving and enhancing natural protective features

Minimize interference with natural coastal processes.

A. Provide for the natural supply and movement of unconsolidated materials and for water and wind transport.
B. Limit intrusion of new structures into coastal waters that interfere with littoral transport of sediment.
C. Limited interference with coastal processes may be allowed where the principal purpose of the new structure is to:
   1. simulate natural processes where existing structures have impaired them, or
   2. provide necessary public benefits for flooding and erosion protection, or
   3. provide for the efficient operation of water-dependent uses.
D. In any case where such limited interference occurs, appropriate mitigation shall be implemented in order to ensure that there is no adverse impact to adjacent property or

to natural coastal processes and natural resources. Any action undertaken by private property owners shall not incur significant direct or indirect public costs.

7.3 Protect public lands and public trust lands and use of these lands when undertaking all erosion or flood control projects.

Retain ownership of public trust lands which have become upland areas due to fill or accretion resulting from erosion control projects.

Avoid losses or likely losses of public trust lands or use of these lands, including public access along the shore, which can be reasonably attributed to or anticipated to result from erosion protection structures.

Mitigate unavoidable impacts on adjacent property, natural coastal processes and natural resources, and on public trust lands and their use.

7.4 Manage navigation infrastructure to limit adverse impacts on coastal processes.

Design channel construction and maintenance projects to protect and enhance natural protective features and prevent the destabilization of adjacent areas by:

A. using adequate dredging setbacks from established channel edges
B. establishing finished slopes at stable gradients, considering sediment characteristics, hydrologic conditions, and other relevant variables
C. locating channels away from erodible features, where feasible
D. preventing adverse alteration of hydrologic conditions
E. including by-passing methods, where appropriate, to maintain navigability and reduce frequency of dredging

Use clean dredged material for beach nourishment whenever the grain size of the dredged material is the same as or slightly larger than the grain size of the potential recipient beach.

7.5 Ensure that expenditure of public funds for projects to mitigate flooding and erosion problems results in a public benefit.

Give priority in expenditure of public funds to actions that:

A. protect public health and safety;
B. mitigate flooding and erosion problems caused by previous human intervention;
C. protect areas of intensive development; and
D. protect substantial public investment in land, infrastructure, and facilities.

Factors to be used in determining public benefit attributable to the proposed flood or erosion control measure include:

A. economic benefits derived from protection of public infrastructure and investment and protection of water-dependent commerce;
B. protection of significant natural resources and maintenance or restoration of coastal processes;
C. preservation of the integrity of natural protective features;
D. extent of public infrastructure investment; and
E. extent of existing or potential public use.

Actions that will implement this policy include the Village's ongoing dune management and house elevation programs, proposed walkway elevation program, proposed improvements to ferry boat terminal, and recommended flooding and erosion protection study.

7.6 Consider sea level rise when siting and designing projects involving substantial public expenditures.

Projects should be sited at a sufficient distance from the current shoreline to prevent flooding and erosion damages related to anticipated long-term rise in sea level over the expected project life.

7.7 Continue to pursue appropriate flood and erosion mitigation grants offered by FEMA and other government agencies which may be available to the Village of Ocean Beach, so as to reduce the susceptibility of development to flooding and erosion hazards.

As noted previously, a large proportion of the development in the Village of Ocean Beach predates the enactment of the construction standards promulgated by FEMA to mitigate flooding and erosion hazards. Such older construction generally does not conform to current FEMA requirements and, therefore, remains more vulnerable to storm damage than newer structures. In order to reduce the level of hazard to which existing development in the Ocean Beach is exposed, it is recommended that the Village, with the support and cooperation of the affected community, continue to seek grant funding that may be available from FEMA and other government agencies to retrofit present structures with more effective flooding and erosion mitigation measures.

7.8 Avoid the issuance of variances from FEMA structural design requirements for new construction and substantial improvements to existing structures.

The FEMA standards for building construction in the flood plain have been designed specifically to minimize potential damages resulting from severe storm events. The issuance of variances from these regulations is contrary to this LWRP's overall policy goal to "minimize loss of life, structures and natural resources from flooding and erosion". Therefore, such variances should be entertained only under special circumstances, and not as a matter of normal procedure, even in the case where the development in the area surrounding any given proposed project site does not conform to FEMA requirements.

7.9 Protect the integrity of the primary dune.

The primary dune is Ocean Beach's line of last defense against powerful storm waves and surge from the Atlantic Ocean. Maintaining a dune of adequate dimensions is critical to protecting the Village from the devastating effects of an overwash or breach. Therefore, the Village should fully explore its options and should undertake all appropriate actions with respect to dune management as are necessary to protect the health, safety and welfare of its residents. The annual community dune planting event and regular beach scraping are measures that the Village has undertaken on a regular basis over the years, and should be carried on in the future as long as they continue to prove effective. If dune preservation and enhancement efforts are seen to fall short of the level of protection needed to safeguard the Village and its residents, and especially in the event of extraordinary dune loss resulting from a particularly severe storm, due consideration should be given to any and all practicable flooding and erosion mitigation alternatives, including offshore measures.

7.10 Protect the integrity of Fire Island, so as to ensure its continued function as a effective barrier against flooding and erosion for the Long Island mainland.

Barrier landforms that protect significant public investment or natural resources should be maintained by means of soft structural protection methods, so as to conform with the natural coastal processes. This objective should be effected by using clean, compatible dredged material, when feasible, for beach nourishment, dune enhancement, offshore bar building, and/or back-barrier marsh creation projects.

Continuation or the restoration of coastal processes, including washovers, breaches, and inlet migration, should be encouraged where it:

1. restores natural sediment movement patterns that enhance the barrier; and

2. does not impair densely developed areas.

3.5 GENERAL ENVIRONMENTAL POLICIES

Policy 8 Protect and improve air quality.

This policy provides for protection of the Village of Ocean Beach from air pollution generated within the Village or from outside sources that may adversely affect the Village.

8.1 Control or abate existing air pollution and prevent new air pollution.

Limit pollution resulting from new or existing stationary air contamination sources, consistent with applicable standards, plans, and requirements.

Restrict emissions of air contaminants to the outdoor atmosphere which are potentially injurious or unreasonably interfere with enjoyment of life or property.

Limit pollution resulting from vessel operation.

8.2 Limit discharges of atmospheric radioactive material to a level that is as low as practicable.

8.3 Limit sources of atmospheric deposition in adjacent coastal waters, particularly from nitrogen sources.

Policy 9 Promote appropriate use and development of energy and mineral resources.

The purpose of this policy is to promote the conservation of energy resources, to encourage the use of alternative energy sources, to set standards to ensure maximum efficiency and minimum environmental impacts when siting energy facilities, and to set standards to minimize the impact of fuel storage facilities and mineral extraction activities.

Energy costs on Long Island are among the highest in the nation. The region faces the prospect of ever-increasing fuel prices and potential energy shortages due to its dependence on imported petroleum for electric generation and home heating. Strong reliance on motor vehicle transportation also contributes to Long Island's dependency on imported petroleum; however, this is not an issue in the village of Ocean Beach, in which pedestrian travel is the primary mode of transportation.

Energy efficiency in transportation and site design, and efficiency in energy generation are the most effective means for reducing energy demand. The goals of energy policy should be directed at increasing energy efficiency, so as to reduce the need for new energy-generation facilities that may have an adverse impact on coastal waters. In addition to impacts associated with new facilities, the potential impacts of oil and gas extraction and storage, and mineral extraction must be considered.

9.1 Conserve energy resources

Promote and maintain energy-efficient modes of transportation, including inter-modal facilities, waterborne cargo and passenger transportation, mass transit, and alternative forms of transportation

Plan and construct sites using energy-efficient design.

Improve energy-generating efficiency through design upgrades of existing facilities.

9.2 Promote alternative energy sources that are self-sustaining, including solar and wind-powered energy generation.

In siting solar and wind-powered facilities: avoid interference with coastal resources, including migratory birds, and coastal processes; and minimize visual impacts.

9.3 Ensure maximum efficiency and minimum adverse environmental impact when siting energy-generating facilities.

The Village of Ocean Beach presently does not contain a major energy-generating facility, and is not considered to be an appropriate location for such a use due to the existing land use pattern (i.e., almost fully developed, primarily with residential uses and a small business district), and significant environmental constraints (important ecological resources, high groundwater table, etc.).

9.4 Minimize adverse impacts from fuel storage facilities.

The Village of Ocean Beach does not presently contain a regional petroleum reserve facility, and is not considered to be an appropriate location for such a use, due to the aforementioned land use and environmental constraints.

Protect natural resources by preparing and complying with an approved oil spill contingency plan.

Site and operate liquified petroleum gas storage and transfer facilities in a manner that ensures public safety.

9.5 Minimize adverse impacts associated with mineral exaction.

The Village of Ocean Beach does not presently support commercial mineral extraction operations, and is not considered to be an appropriate location for such a use, due to the aforementioned land use and environmental constraints.

Limit subaqueous sand and gravel extraction to activities necessary for navigation or erosion control.

Policy 10 Minimize environmental degradation from solid waste and hazardous substances and wastes.

The disposal of solid waste is a major issue on Long Island. Many existing municipal and private facilities are at or above capacity, and some are producing leachates which degrade both surface waters and groundwater aquifers (although no such disposal facilities are present in the Village of Ocean Beach). A variety of substances, ranging from improperly disposed household hazardous wastes to industrial waste dumps, may pose immediate problems and can preclude or delay appropriate reuse of coastal lands. Smaller and more incremental solid waste problems arise from littering.

The intent of this policy is to establish standards for the proper control and management of wastes and hazardous materials, in order to safeguard the residents of the Ocean Beach from the sources of contamination and to protect the Village's natural and coastal resources from degradation. These standards pertain to: requirements for minimizing potential exposures during the handling, storage, and transportation of solid waste; New York State management priorities for the reduction, reuse, and disposal of solid wastes; prevention of environmental degradation resulting from discharges of toxic substances; protocols for spill cleanup; and criteria for the siting of solid and hazardous waste facilities.

The Village of Ocean Beach does not presently contain a solid waste management facility, and is not considered to be an appropriate location for such a use

Policy 10 will be implemented by enhanced public education programs.

10.1 Manage solid waste to protect public health and control pollution.

Plan for proper and effective solid waste disposal prior to undertaking major development or activities that will generate solid waste.

Manage solid waste in accordance with the following solid waste management priorities:

A. Reduce the amount of solid waste generated.
B. Reuse material for the purpose for which it was originally intended or recycle material that cannot be reused.
C. Use land burial or other approved methods to dispose solid waste that is not being reused or recycled.

Prevent the discharge of solid waste into the environment by using proper handling, storage, and transportation practices.

10.2 Manage hazardous wastes to protect health and control pollution.

Manage hazardous waste in accordance with the following priorities:

A. Eliminate or reduce the generation of hazardous waste to maximum extent practical.
B. Recover, reuse, or recycle remaining hazardous wastes to the maximum extent practical.
C. Use detoxification, treatment, or destruction technologies to dispose hazardous waste that cannot be reduced, reused, or recycled.
D. Use land disposal as a management method of last resort.

Ensure maximum public safety through proper treatment, storage, and disposal of industrial hazardous waste.

Remediate inactive hazardous waste disposal sites. The proposed or anticipated future use of any such site should determine the appropriate level of remediation.

10.3 Protect the environment from degradation due to toxic pollutants and substances hazardous to the environment and public health.

Prevent the release of substances that would have a deleterious effect on fish and wildlife resources.

Prevent environmental degradation due to persistent toxic pollutants by: limiting discharge of bioaccumulative substances, avoiding resuspension of toxic pollutants and hazardous substances and waste, and avoiding reentry of bioaccumulative substances into the food chain from existing sources.

Prevent and control environmental pollution due to radioactive materials.

Protect public health, public and private property, and fish and wildlife resources from inappropriate use of pesticides.

Take appropriate action to correct all unregulated releases of substances hazardous to the environment.

Promote public awareness and education regarding the deleterious effects of toxic substances commonly used by homeowners for lawn and garden care and for general maintenance of home and auto. In particular, such public education programs should include proper handling and disposal guidelines for toxic substances.

10.4 Prevent and remediate discharges of petroleum products.

Minimize adverse impacts from potential oil spills through the appropriate siting of petroleum offshore loading facilities.

Maintain and implement adequate plans for prevention and control of petroleum discharges in-place at any petroleum-related facility.

Prevent discharge of petroleum products by following approved handling and storage, and facility design and maintenance principles.

Clean up and remove any petroleum discharge, giving first priority to eliminating human safety hazards and minimizing environmental damage by: responding quickly to contain petroleum spills, and containing discharges immediately after discovery.

Recover and recycle petroleum discharges using the best available practices.

To the extent practicable, incorporate best management practices into the proposed improvements to the Village Marina in order to mitigate potential impacts from petroleum products used in vessel operations.

3.6 RECREATIONAL AND CULTURAL POLICIES

Policy 11 Improve public access to and use of public lands and waters.

The Village of Ocean Beach has frontage on both the Atlantic Ocean and Great South Bay totaling approximately 4,000 feet in length. The availability of access to these shorelines is an important public amenity which plays a vital role in the life of the community. Besides facilities that allow people to engage in physical access to the water for activities such as boating, fishing and swimming, the coastalsetting and natural resources of the Ocean Beach can be further appreciated through the establishment of visual and scenic corridors. As such, the LWRP also addresses the issue of visual access to the waterfront from designated areas within the Village.

The Village of Ocean Beach is a pedestrian community, with bicycles providing an increasingly popular secondary mode of transportation. Implementing the LWRP's public access policy requires actions that facilitate and ensure these methods of travel throughout the Village, both internally and along the two shorelines, and actions that maintain and enhance the linkages among these three areas.

Continuous pedestrian access is available to the public along the entire oceanfront beach, connecting to the adjoining communities of Corneille Estates to the west and Seaview to the east. Elevated

pedestrian passage over the primary dune is available at the southerly terminus of most of the north-south walkways in the Village.

Continuous public access is not available to the shoreline of Great South Bay in Ocean Beach, due primary to the presence of private property along the waterfront to the east of the ferry terminal. However, there still are ample opportunities for public access via the existing "west walk" which extends along the bulkhead of the ferry basin and the Village Marina, as well as at the northerly termini of the walkways that lie outside this area.

This policy has been formulated to address inadequacies and impairments to suitable public access and recreation at the Village's waterfront, by means of measures to ensure that use of existing access sites and facilities is optimized in order to accommodate existing demand and projected future demand. It also is the goal of this policy to take appropriate advantage of available opportunities to provide additional visual and physical public access to the waterfront.

Policy 11 will be implemented by the following actions: ongoing walkway elevation and maintenance program, proposed improvements to ferry boat terminal, proposed improvements to the Village Marina, proposed bay beach improvement, proposed improvements in handicapped access to the ocean, proposed restoration of the Community House and Windswept facility, proposed Village Green beautification, possible extension of promenade on bayfront, improved bicycle access, improved access for small boats, additional bicycle racks, and proposed improvements to Wagon Park.

11.1 Promote appropriate and adequate physical public access and recreation throughout the Village of Ocean Beach.

Provide a level and type of public access and recreational use that takes into account proximity to population centers, public demand, natural resource sensitivity, accessibility, compatibility with on-site and adjacent land uses, and needs of special groups (e.g., proposed improvements to handicapped access to the oceanfront).

Wherever feasible, promote water-related recreational uses on publicly-owned waterfront lands. Feasibility shall be assessed on the basis of natural resource sensitivity, accessibility, compatibility with on-site and adjacent land uses, and other relevant factors.

Provide convenient, well defined physical access to and along the coast for water-related recreation.

Protect and maintain existing public access and water-related recreation facilities by:

A. preventing physical deterioration of facilities due to overuse or lack of maintenance; and

B. preventing any on-site or adjacent development project or activity from directly or indirectly impairing physicalaccess and recreation, or adversely affecting the quality of the access or recreational facilities; and
C. protecting and maintaining established access and recreation facilities; and
D. protecting and maintaining the infrastructure that supports public access and water-related recreational facilities.

Restore, enhance and improve existing points of public access to the shoreline that may be in disrepair or inadequate for current or anticipated use by the public (e.g., proposed improvements to the Village's bay beach, the ferry boat terminal, and the Windswept facility).

Provide additional physical public access and recreation facilities at public sites throughout the coastal area by:

A. promoting acquisition of additional public park lands to meet existing and anticipated future public access and recreation needs; and
B. providing for public access and recreation facilities on non-park public waterfront lands as a secondary use; and
C. providing for appropriate public access at streets terminating at the shoreline; and
D. in any action involving the transfer of interest in publicly-owned lands immediately adjacent to the shore, retaining a level public interest in these lands that will be adequate to preserve the opportunity for public access and recreation.

Promote the use of public easements and pedestrian cross-access agreements with the owners of private land, as necessary, to extend public access along the waterfront.

Implement suitable improvements at publicly-owned waterfront sites in order to enhance physical access to the water and public enjoyment derived therefrom.

Include physical public access and/or water-related recreation facilities as part of any development project that is likely to limit the public's use and enjoyment of public coastal lands and waters.

Restrict public access and water-related recreation on public lands only where such access is determined to be incompatible with public safety or the protection of important natural resources.

Facilitate pedestrian travel throughout the Village.

Facilitate bicycle use at appropriate times and locations within the Village.

Provide incentives to encourage private development to include public access and/or water-related recreation facilities.

Ensure that access to the general public is provided at any location where State and/or Federal funds are used to acquire, develop, or improve recreational facilities.

Promote the acquisition of additional properties for public use that would support and augment the access available at existing public lands.

Manage vacant, publicly-owned parcels in a manner that provides a suitable balance between natural resource protection and public access. Wherever feasible, provide for an appropriate level of public access on such lands.

Promote, restore, expand and/or continue to maintain public swimming areas, and identify new areas that are suitable for public swimming.

11.2 Assure public access to public trust lands and navigable waters.

Limit grants, leases, easements, permits or lesser interest in public underwater lands, in accordance with an assessment of potential adverse impacts of the proposed use, structure, or facility on public interest in public lands under water. Use the following factors in assessing potential adverse impact of any such action:

A. environmental impact; and
B. values for natural resource management, public recreation, and commerce; and
C. size, character, and effect of the transfer in relation to neighboring uses; and
D. potential for interference with navigation, public uses of waterways, and riparian rights; and
E. effect of the transfer on the natural resources associated with the lands; and
F. water-dependent nature of the use; and
G. adverse economic impact on existing commercial enterprises; and
H. consistency with the public interest for purposes of navigation and commerce, fishing, bathing, and access to navigable waters and the need of the owners of private property to safeguard development.

Limit the transfer of interest in public trust lands to the minimum necessary to achieve project objectives.

Retain a public interest in underwater lands, which will be adequate to preserve public access, recreation opportunities, and other public trust purposes.

Consider grants in fee of underwater lands only in exceptional circumstances.

Private uses, structures, or facilities on underwater lands are limited to those circumstances where ownership of the underwater lands or riparian interest has been legally validated either

through proof of ownership of the underwater lands or adjacent riparian parcel, or by assignment of riparian interest by the riparian owner.

Avoid substantial loss of public interest in public trust lands by assessing the cumulative impact of individual conveyances of grants, easements, and leases of public trust lands.

Resume and re-establish public trust interests in existing grants which are no longer being exercised according to terms of the grant, or where the use is not in conformity with the public trust doctrine.

Provide free and substantially unobstructed passage to the public along public trust shorelands.

Interference with the opportunity for public passage along the shoreline should be limited to the minimum extent necessary to gain access from the upland to the water.

Where public access along public trust shorelands is substantially impeded, provide suitable and effective passage around impedances through adjacent upland easements or other mitigation.

Require that perpendicular access to public trust lands be provided on all publicly-owned upland properties on the waterfront, whenever compatible with the principal use of the public upland.

Provide for free and unobstructed public use of all navigable waters below the line of mean high water for navigation, recreation, and other public trust purposes, including the incidental rights of public anchoring. Piers, docking facilities, and catwalks must not result in an unnecessary interference with navigation and the use of public trust lands. Alternatives to long piers or docks include the use of dinghies to reach moored boats and mooring in nearby marina facilities. Dredging generally is not considered an acceptable means of accommodating deeper vessel draft closer to the shore, except where such dredging is undertaken at an existing facility which serves the public benefit.

Obstruction of public use, including navigation, may be allowed in navigable waters only:

A. for water-dependent uses involving navigation and commerce which require structures or activities in water as part of the use; or
B. for commercial recreational boating facilities, provided that the loss of navigable waters and use of underwater lands is offset by sufficient public benefits; or
C. in order to gain reasonable access to navigable waters from riparian lands.

Where obstruction of navigable waters and underwater lands is justified, said obstruction shall be limited:

A. so that it does not interfere with commercial navigation - the right of commercial navigation is superior to all other uses on navigable waters and may not be obstructed; and
B. to the minimum degree necessary to attain access to navigable waters, where "minimum" shall be defined in terms of the following factors:
    1. the extent of the use's dependence on access to navigable waters,
    2. the range of tidal water level fluctuation,
    3. the size and nature of the body of water,
    4. the nature of public use of the adjacent waters,
    5. the traditional means of access used by surrounding similar uses, and
    6. whether or not alternative means to gain access are available; and
C. by the extent and characteristics of the developable adjacent upland area and its ability to support in-water development for the water-dependent use; and
D. by the potential adverse effects on natural resources and their uses; and
E. by the potential adverse effects on public safety.

Structures extending beyond the minimum necessary for access to navigable waters can impair public trust interests and open space values associated with the water's surface. Such structures may be allowed only in the following circumstances:

A. when necessary for practical and convenient operation of water-dependent industry or commerce, and provided that obstruction of commercial navigation does not result; or
B. for commercial recreational boating facilities provided that:
    1. the loss of navigable waters and use of underwater lands is offset by sufficient public benefit, and
    2. obstruction of commercial navigation does not result; or
C. when the principal purpose of the structure is necessary:
    1. to provide public access for recreational uses, or
    2. for improvements for navigation, or
    3. for protection from coastal hazards, or
    4. for essential public transportation or infrastructure facilities.

11.3 Provide access and recreation that is compatible with natural resource values.

Provide appropriate access and associated recreational activity that will avoid potential adverse impacts to natural resources. Use the following factors in determining the potential for adverse environmental effects:

A. intensity of the associated recreational, scientific, or educational activity
B. level of likely disturbance associated with the proposed activity. The following types of access or associated activities are listed in decreasing order of potential for disturbance:
    1. motorized activities
    2. active, non-motorized activities, including water-dependent and water-related uses

3. passive activities
4. avoidance of the area

C. sensitivity of the natural resources involved and the extent of the ecological benefits associated with avoidance of the area

Limit public access and recreational activities where uncontrolled public use would lead to impairment of natural resources. Appropriate application of the following actions would advance this policy:

A. establish suitable seasonal limitations on access and recreation in order to minimize adverse impacts on fish and wildlife species during sensitive time periods;
B. establish an effective stewardship program directed at controlling anticipated adverse impacts before providing public access;
C. limit or prohibit physical public access to those areas whose principal natural resource values are based on the lack of human disturbance; and
D. provide educational, interpretive, research, and passive uses of natural resources through appropriate design and control of public access and recreation.

Provide public access for activities involving the direct use of fish and wildlife resources, including fishing and hunting, only if that level of access would not result in a loss of resources necessary to continue supporting these uses.

Provide access using methods and structures that maintain and protect open space areas associated with natural resources. Determine the extent of visual and physical impairment caused by access structures extending through these open space areas based on:

A. the value of the open space, as indicated by unfragmented size or mass of the wetland or other natural resources, distance to navigable water, and wetland value; and
B. the size, length, and design of proposed structures.

11.4 Preserve visual access from public lands to coastal lands and waters. Where appropriate and feasible, enhance existing public facilities and provide new opportunities for the viewing of scenic resources within and adjacent to the Village of Ocean Beach.

Promote the designation of scenic corridors within the Village to coincide with designated pedestrian/bicycle corridors along the shoreline, public waterfront lands, publicly-accessible road ends, and similar locations that provide physical public access to the shoreline.

Avoid the loss of existing visual access to scenic resources by:

A. limiting physical blockage caused by development or human activities due to the scale, design, location, or type structures or facilities; and

B. protecting existing view corridors provided by roadways and other public areas leading to the coast; and
C. protecting visual access to open space areas associated with natural resources; and
D. providing for view corridors to the coast in those locations where new structures would block views of the coast from inland public vantage points; and
E. using structural design and building siting techniques to preserve visual access and minimize obstruction of views; and
F. considering a reduction of screening requirements where site conditions, including vegetative cover or natural protective features, block potential views.

Wherever feasible, in cases where new development blocks visual access from inland public vantage points, provide public visual access from suitable locations on the development site. As an alternative, provide for additional and comparable visual access at nearby locations if physical access cannot be provided on-site.

Policy 12: Enhance visual quality and protect outstanding scenic resources.

The visual quality of the coastal zone in the Village of Ocean Beach is a major component of the overall character of the area. The Village contains a variety of natural visual attributes, including the estuarine waters of Great South Bay, a complex land and water interface on the bay side, and a dynamic beach and dune system on the ocean side. The public has a strong appreciation of the coastal environment and character of the landscape, and fully recognizes that these features make an important contribution to the desirability of this community as a place to live and recreate.

The intent of this policy is to protect and enhance the overall visual quality of the Village of Ocean Beach and recognized scenic resources within the area. This policy will be implemented by the proposed restoration of the Community House and the Windswept facility, proposed street lighting improvements, proposed Village Green beautification, proposed facade review and property maintenance investigations, and proposed placement of utility lines underground.

12.1 Protect and improve visual quality.

Protect scenic values that are based on the quality of natural resources within the Village. The following measures are useful in protecting natural scenic values:

A. maintain or restore original landforms, except where altered landforms provide useful screening or contribute to scenic quality; and
B. avoid structures or activities that introduce visual interruptions to natural landscapes including:
   - introduction of intrusive artificial light sources,
   - fragmentation of and structural intrusion into open space areas, and
   - changes to the continuity and configuration of natural shorelines and associated vegetation.

Preserve those vacant parcels that are identified as contributing significantly to the visual quality of the Village.

Promote the use of vegetative buffers around developed areas to preserve the visual character of adjacent natural areas and to minimize the impact of development on the overall visual appeal of the Village.

Enhance the existing scenic characteristics of the Village by minimizing introduction of discordant features.

Restore deteriorated visual elements and remove degraded elements.

Preserve and augment existing vegetation to enhance scenic quality.

Group or cluster development to maximize the extent of contiguous open space.

Recognize water-dependent uses as important additions to the visual interest of the Village. Provide adequate maintenance to the structures and facilities of water-dependent uses, so as to minimize visual impacts.

Promote the designation of scenic corridors public rights-of-way that provide vistas to the water.

Promote the use of native plant species in landscape designs during the site plan review process for non-residential uses proposed in the Village, so as to provide visual continuity and consistency with the natural setting of the area.

Encourage the creation of design standards and performance standards for new development (i.e., buildings, structures, roads) that coincide with the objectives of maintaining or enhancing the visual quality of the Village.

Promote the preservation and enhancement of the visual quality of the shoreline in order to maintain and improve waterside views.

Promote the preservation or enhancement of aesthetic quality as a performance standard, based on criteria that address the importance of the community character and coastal environment, and that address visual access and aesthetics from both land-side and water-side perspectives.

Implement actions to enhance property maintenance and mitigate visually blighted properties.

12.2 Protect the aesthetic values associated with recognized areas of high scenic quality.

Protect the contributing scenic values associated with any area that has been officially designated as scenic area either through local or statewide action.

Prevent the impairment of scenic components that contribute to high scenic quality in such areas.

12.3 Improve street lighting throughout the Village.

New street lighting in the Village lighting should reflect the rural setting of the Village, and should eliminate the excessive light pollution caused by some of the existing fixtures.

Policy 13: Preserve historic resources.

The intent of this policy is to preserve the cottage-beach resort character of the Village of Ocean Beach.

This policy will be implemented by the proposed facade review investigation.

13.1 Maximize preservation and retention of the Village's cottage-beach resort character.

Preserve the cottage-beach resort character of the resources by protecting the materials and features, or by making repairs using appropriate measures.

Relocate a cottage-beach resort resource only when it cannot be preserved in place and:

A. the resource is imperiled by a proposed activity which has no viable alternative or by surrounding conditions which are likely to result in degradation or inadequate maintenance of the resource; and
B. the resource cannot be adapted for use on the existing site in a manner that would result in preservation of the resource; and
C. a suitable site for relocation is available; and
D. it is technically and economically feasible to move the resource.

Allow for the demolition of a cottage-beach resort resource only when:

A. the resource cannot be adapted for use on the existing site in a manner that would result in preservation of the resource; and
B. it is not feasible to protect the resource through relocation; and
C. the resource has been officially certified as being imminently dangerous to life or public health.

Document in detail the character-defining elements of a cottage-beach resort resource in its original context prior to the relocation or demolition of the resource.

Avoid potential adverse impacts of development proximate to cottage-beach resort resources by:

A. designing the development to a size, scale, proportion, and mass, and with a spatial relationship that are compatible with the cottage-beach resort resource; and
B. designing and constructing the development using materials, features, forms, details, textures, and colors that are compatible with similar features of the resource.

Protect adjacent resources that contribute to cottage-beach resort resources.

Provide for the efficient, compatible use of cottage-beach resort resources by means of the following measures:

A. foster uses that maximize retention of the cottage-beach resort character of the resource:
    1. to the extent practicable, use the resource as it was historically used, so as best to achieve retention of cottage-beach resort character; or
    2. if the resource cannot be used as it was historically used, adapt a use to the resource that maximizes retention of character-defining materials and features.

B. Minimize alterations to the resource, in order to preserve and retain its cottage-beach resort character, by the following measures:
    1. Minimize potential negative impacts on the resource's character due to necessary updates in systems to meet health and safety code requirements or to conserve energy.
    2. Make alterations to the resource only as needed to ensure its continued use and provided that adverse impact on the resource is minimized. In order to minimize adverse impact on the resource, alterations should not obscure, destroy, or radically change character-defining spaces, materials, features, or finishes. Alterations may include selective removal of features that are not historic elements of the resource and its setting and that detract from the overall cottage-beach resort character of the resource.
    3. Construct new additions only after it is determined that an exterior addition is the only viable means of assuring continued use of the resource.
    4. In constructing new additions, use appropriate design and construction to minimize adverse impact on the resource's character. Adverse impacts can minimized in new additions and the integrity of the resource can be preserved by:
        a. using compatible design in the new addition, relative to the original materials, forms and details, size, scale and proportion, and massing of the resource; and

b. constructing new additions in a manner that, if removed in the future, the essential form and integrity of the cottage-beach resort resource and its setting would not be impaired.

Minimize the potential adverse cumulative impacts on cottage-beach resort resources caused by a series of otherwise minor interventions.

Minimize impacts on any cottage-beach resort resource which is a member of a group of related resources that may be adversely impacted by the loss or diminution of any one of the members of the group.

Minimize potential impacts to cottage-beach resort resources caused by development in adjacent areas.

13.2 Protect and enhance resources that are significant to the coastal culture of the south shore waters and the Village of Ocean Beach.

Prevent unauthorized collection of artifacts from shipwrecks.

Preserve and enhance navigational structures by providing long-term protection through the least degree of intervention necessary to preserve the structure. Consider extensive shoreline stabilization only if relocation of navigational structure is not feasible.

13.3 Increase public awareness of the historical resources of the South Shore waters and the cottage-beach resort resources of the Village of Ocean Beach.

Promote public awareness of the cottage-beach resort resources present in the Village. This can be accomplished through a number of measures, including:

- the installation of signs that convey information regarding local resources
- information kiosks in the business district to provide information regarding the heritage of the Village of Ocean Beach and Fire Island.

Section IV

Proposed Land and Water Uses and Proposed Projects

SECTION IV
PROPOSED LAND AND WATER USES
AND PROPOSED PROJECTS

4.1 PROPOSED LAND USES

The Village of Ocean Beach consists of several well-defined land use areas, as delineated by the Village zoning map. The majority of the Village, more than four-fifths of its total area, contains single-family houses on small lots. The remaining area is approximately evenly divided among the business district, bayfront recreation district, and undeveloped open space. The business district contains a mix of commercial uses at the north end of the Village, in the vicinity of the ferry terminal. The bayfront recreation district contains the ferry terminal, Village Marina, and various municipal and recreational facilities. Undeveloped open space in the Village is concentrated primarily along the oceanfront, within the Dune District. In general, these are long-established uses in the Village, and shall be retained, as shown in Map 5.

4.2 PROPOSED HARBOR MANAGEMENT PLAN

4.2.1 Introduction

Article 42 of the New York State Executive Law, Section 922 – Waterfront Revitalization of Coastal Areas and Inland Waterways – authorizes local governments to prepare a Harbor Management Plan (HMP) as part of their Local Waterfront Revitalization Program (LWRP). In the course of preparing an LWRP, the Village of Ocean Beach recognized the need to manage water activities in areas adjacent to the Local Waterfront Revitalization Area (LWRA) proposed in their program. To that end, the Village has integrated a HMP within the LWRP. As outlined below, the HMP addresses conflict, congestion, and competition for space in the use of surface waters and underwater lands and identifies various alternatives for the optimum use of the waterfront and adjacent water surfaces. LWRP Section II identifies those areas within the LWRA that are recognized as important Village resources; LWRP Section III contains policies which provide specific guidance for the HMP area; LWRP Section IV (i.e., this section) and Section V recommend specific planning principles, capital projects, local laws, and other actions for implementing the policies, based on key harbor management issues concerning surface water use in the Village which are summarized in Subsection 2.4; and LWRP Section VI identifies the authorities of various New York State agencies.

As previously described in Section I (Waterfront Revitalization Area Boundary) and Section II (Inventory and Analysis), specifically Subsection 2.2.2, the Village of Ocean Beach is located on a barrier island, with the Atlantic Ocean on one side and Great South Bay on the other and is part of the Fire Island National Seashore. The Village does not have what is considered to be a traditional harbor, but does have harbor- and water-dependent uses and activities along its waterfronts which

need to be considered in the Ocean Beach Local Waterfront Revitalization Program/Harbor Management Plan.

The Village's Atlantic Ocean shoreline is approximately 1,750 feet in length and has a topography which gently slopes from Ocean View Walk to the ocean along a vegetated and well-stabilized coastal dune. In order to facilitate public access to the ocean, a series of dune walkovers have been constructed. The land/water interface is an essential element of the Village's character, serving as the scenic backdrop for recreational activity including swimming, water related sports, and beach activities. However, the Atlantic Ocean also poses the largest threat to the Village of Ocean Beach due to the danger of flooding and erosion. The Village residents are aware of the situation, which is demonstrable by a 1981 addition to the Village Code which reads, "over the last 20 years the area has been impacted by five major blizzards and winter storms, four major northeast coastal storms and four major hurricanes, in addition to numerous local severe storm events which greatly exceeds the predicted average by over 400%"[1]

Great South Bay is a shallow, estuarine water body between the south shore of the Long Island mainland and Fire Island. The Village of Ocean Beach has approximately 2,100 linear feet of shoreline on the bay, which is relatively shallow and is protected by the barrier island against the direct impact of strong ocean waves during storms. The bay's nearest connection to the sea is Fire Island Inlet, located five miles to the west of the Village, resulting in locally restricted tidal flushing and the associated accumulation bay-bottom sediments and sediment-bound pollutants.

The waters surrounding Ocean Beach have an SA classification, which indicates that the best intended use is for shellfish harvesting for human consumption, as well as swimming and other primary contact recreational activities. However, the bay has suffered a decline in water quality as a result of the urbanization of Long Island and the associated non-point source pollution. Elevated levels of pathogens carried by stormwater runoff, discharges of vessel waste, sewage effluent and animal waste have resulted in the closure of shellfish beds and reduced the productivity of coastal wetlands and habitats. The waters adjacent to the bay shoreline of Ocean Beach are seasonally closed to shellfish harvesting during the period between May 15 and September 30. None of the Village's beaches on either shore have been subject to closure due to bacterial contamination in the recent past.

The Village's Great South Bay shoreline, because of its protected nature and location across from the heavily developed south shore of Long Island, supports a variety of water-dependent uses. These include: the Village Marina, a ferry basin, a freight dock, a boat house, a bathing beach, a recreational area with tennis courts and basketball courts, a fishing area, a wagon park, government/institutional offices, public facilities, and the Village's limited commercial/retail area (see Map 2).

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[1] Code of the Village of Ocean Beach Code. Section 164-40.5.A, Findings. General Code Publishers Corp. Spencerport, NY. 1981. p. 16432.

The following sections address the required elements of a Harbor Management Plan, as promulgated in 19 NYCRR 603.3, Harbor Management – Contents.

4.2.2 Harbor Management Boundary

The coastal area boundary for the Village of Ocean Beach LWRP encompasses the entire area of the Village from its corporate boundaries on the eastern and western sides, out into the water bodies on the north (Great South Bay) and south (Atlantic Ocean) to a distance of 1,500 feet from the Village shoreline, as described in Section I of the LWRP and shown on Map 1.

4.2.3 Inventory of Existing Uses, Features and Conditions in the Harbor Management Area

Section II of this LWRP contains the full inventory and analysis covering both the upland and water areas within the Village of Ocean Beach's coastal area boundary. The following subsections are particularly relevant to the water areas and shorefront properties covered by this HMP:

- 2.2.2 – Surface Water Resources
- 2.2.4 – Wetland Ecology
- 2.2.6 – NYS Designated Significant Coastal Fish and Wildlife Habitats
- 2.2.8 – Flooding and Erosion
- 2.3.1 – Land Uses (including water-dependent and water-enhanced uses, and underutilized, deteriorated and abandoned sites)
- 2.3.2 – Surface Water Uses
- 2.3.4 – Public Access and Recreation
- 2.3.6 – Infrastructure (including wastewater disposal and storm drainage systems)
- 2.3.7 – Vessel Usage
- 2.3.8 – Commercial and Recreational Shellfish Harvesting and Finfishing

4.2.4 Analysis of Harbor Management Issues and Opportunities

As discussed in Subsection 2.4 of this LWRP, the issues and opportunities to be addressed by the Village of Ocean Beach LWRP (including this HMP component) were discussed during a series of meetings of the Village's LWRP Advisory Committee that were held on October 27 and December 1, 2001. The following is a listing of the issues and opportunities that are pertinent to this HMP (see the relevant portions of Subsection 2.4 for a full discussion):

- House elevations (mitigation of flooding impacts)
- Concrete walkways (mitigation of flooding impacts)
- Sanitary sewer system
- Ferry boat terminal
- Village Marina

- Dune management
- Bay beach
- Community House renovation (to restore this facility to its former prominence as a focus of community activities in the Village)
- Pedestrian access
- Vessel operations
- Protection of ecological resources and open space
- Conflicts and inconsistencies arising from multi-agency jurisdiction of activities in the Village
- Appropriate balance between commercial activity and other uses

4.2.5 Harbor Management Goal, Objectives, and Policies

The coastal management goals and objectives of the Village of Ocean Beach are set forth in the Policies, comprising Section III of this LWRP. The policies that are particularly relevant to this HMP are listed as follows (see the relevant portions of Section III for a full discussion):

Policy 1 Foster a pattern of development in the Village of Ocean Beach coastal area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a coastal location, and minimizes adverse effects of development.

Policy 2 Protect water-dependent uses, promote siting of new water-dependent uses in suitable locations, and support efficient harbor operation.

Policy 4 Promote sustainable use of fish and wildlife resources.

Policy 5 Protect and restore ecological resources, including significant fish and wildlife habitats, wetlands, and rare ecological communities.

Policy 6 Protect and improve water resources.

Policy 7 Minimize loss of life, structures, and natural resources from flooding and erosion.

Policy 11 Improve public access to and use of public lands and waters.

Policy 12 Enhance visual quality and protect outstanding scenic resources.

4.2.6 Harbor Management Plan Implementation

The proposed techniques for implementing the Village of Ocean Beach are described in Sections IV and V of this LWRP. The implementation techniques that are particularly relevant to is HMP are listed as follows (see the referenced portions of Sections IV and V for a full discussion):

- Proposed land use plan (Subsection 4.1), as illustrated in Map 5
- Proposed water use plan (Subsection 4.2.7) , as illustrated in Map 6
- Proposed capital projects (Subsection 4.3.2) – including dune management, house elevation program, walkway elevation and maintenance program, improvement of sanitary waste collection and disposal system, ferry boat terminal, Village Marina, bay beach improvement, improved handicapped access to the ocean, Community House restoration, Village Green beautification, additional bicycle racks, Windswept improvements, and redesign and improvements to wagon park
- Proposed/recommended procedural actions (Subsection 4.3.3) – including improved agency coordination, continued monitoring of activities in the business district, and business improvement district
- Recommended studies (Subsection 4.3.4) – including flooding and erosion protection, possible extension of the promenade on the Village's bayfront, improved bicycle access, improved access for small boats, sand management plan, and underground placement of utility lines
- Proposed public education programs (Subsection 4.3.5) – including initiatives related to water quality improvement, mitigation of floatable debris, flooding and erosion abatement, and environmental stewardship
- Proposed new and amended local laws (Subsection 5.2) – comprising a new local consistency review law; no other revisions to the Village Code are proposed

4.2.7 Proposed Water Use Plan

As described above, the bay waters adjacent to the north shore of the Village of Ocean Beach presently support a variety of uses, including commercial, transportation, and recreational. The ocean waters directly off the Village shoreline are used primarily for recreational activities. These uses shall be retained, as shown in Map 6, which depicts the location of channels, fairways and basins, swimming areas, and other proposed water uses within the Village's LWRA. These water uses are defined as follows:

- Channels – Primary travel-ways for vessels. Moorings (including docking facilities) and anchoring are prohibited in channels in order to ensure safe vessel movement.

- Fairways – Secondary vessel travel-ways, connecting docking facilities to channels. Moorings (including docking facilities) and anchoring also are prohibited in fairways.

- Basins – Areas occupied by docking structures (e.g., the Village Marina basin) and/or which are intended to accommodate near-shore turning movements for large vessels (e.g., the ferry terminal basin).

- Swimming areas – Surface water areas that are used in conjunction with active bathing beaches. Boating activities are excluded from swimming areas; except, however, that access by hand-launched boats (i.e., canoes, kayaks, sunfish, etc.) may be compatible with

the concurrent use of an area for swimming provided that adequate distances are maintained between the boats and bathers.

4.3 PROPOSED PROJECTS AND OTHER ACTIONS

4.3.1 PROPOSED LAND ACQUISITIONS

No land acquisitions are proposed by the Village at this time.

4.3.2 PROPOSED CAPITAL PROJECTS

The following is a list of capital projects that are proposed to implement the goals and objectives of the LWRP. The execution of these projects is contingent upon the availability of sufficient funding and the cooperation of other involved agencies.

A. Dune Management — The primary dune provides the Village's last line of defense against storm waves and surge from the Atlantic Ocean. Therefore, the Village will undertake all reasonable efforts to maintain and, to the extent practicable, augment the primary dune. In the past, these efforts had included an annual "Dune Day" event, which provided for community participation in the planting of dune grass to enhance the stability of the dune. In 2001 and 2002, dune planting was performed by Village staff, due to liability concerns that arose when volunteers in the 2000 Dune Day event sustained injuries because of over-exertion. In order to address these concerns in the future, hired personnel covered by Workers' Compensation may be used in the dune planting program. This project will implement Policy 7.

   In addition to the maintenance of dune vegetation, a program of regular beach scraping and/or beach nourishment also will be pursued, at a frequency of approximately twice per year when conditions are favorable. These methods of erosion control bolster the protective capacity of the primary dune without causing significant adverse impacts to the shorefront environment.

B. House Elevation Program — The Village is participating in this federal program to raise homes above the base flood elevation, so as to decrease the susceptibility of these structures to future flood damage. The ongoing first phase of this project involves the expenditure of $2 million within two years for 25 homes. This is considered to be an incremental step in a long-term, ongoing commitment by the Village to abate flood hazards throughout Ocean Beach, in accordance with the *Village of Ocean Beach Flood Mitigation Plan* (October 1998). The Village will continue to pursue available sources of funding for the house elevation program until all of the homeowners who wish to take part have done so. This project will implement Policy 7.

C. Walkway Elevation and Maintenance Program — The Village has initiated a five-year capital program for the maintenance and elevation of its walkway system, at a total cost of approximately $1.5 million. This project will serve multiple purposes, to ensure the continuing acceptable conditions of the only means of transportation within the Village. The use of the walkways by trucks that carry on necessary functions (e.g., solid waste removal, construction contracting, etc.), combined with other factors such as high groundwater elevation, has resulted in cracking of the concrete slabs in many locations, creating a pedestrian hazard. The ongoing program involving the placement of a layer of reinforced concrete over the existing concrete slabs is expected to alleviate the physical deterioration of the walkways, and improve pedestrian safety. Since this project will increase the elevation of the walkway surfaces throughout the Village, persistent flooding of these vital travel ways will also be abated. This project will implement Policies 7 and 11.

D. Improvement of Water Supply System — The Village has initiated a five-year capital plan for the maintenance of the water tower and improvements to the delivery system. The first year project work includes painting of the water tower and replacement of 880 feet of water main along the ocean to create a loop in the system. Future work will include: relocation of the water supply wells from the current location near the Ocean, where they are susceptible to ongoing erosion and inundation by saltwater; and replacement of all old, cast iron waters lines with PVC. This project will implement Policy 1.

E. Improvement of Sanitary Waste Collection and Disposal System — The Village has completed an engineering analysis of the treatment plant and, on the basis of the findings of that analysis, has initiated a five-year capital plan for plant maintenance (mostly consisting of improvements to replace system components that have deteriorated due to age) and a full engineering evaluation of the total system.

The sewer mains were first installed in about 1914, and are composed of clay piping. Some of this piping has collapsed, and the entire system eventually will have to be replaced. Addressing this issue is a high priority, because of quality-of-life and public health concerns related to system failures. The magnitude of problems caused by deficiencies of the sewage collection system have been exacerbated recently due to increased flows resulting from a growing year-round population and a general increase in the usage of houses that still serve as vacation homes (e.g., from weekend to full-week occupancy). There will be a systematic program of sewer pipe replacement, ideally on a street-by-street basis. It is estimated that completion of this program throughout the Village would take a total of ten years, at an approximate cost that can be as high as $2 million per street.

The sewer lines all have gravity flow, so that it will be necessary to maintain proper grades in any pipe replacement work. Overhead utility lines are present in some areas

where sewer mains are located. Special measures may be required in these areas to accommodate repairs to the sewer lines while still maintaining utility service. It also will be necessary to clear existing vegetation to gain access to sewer lines. This includes sections of the Village to the east of Bungalow Walk where "delivery lane" rights-of-way are present behind the houses, and sections to the east of Bungalow Walk where the rear property lines of the housing lots directly abut one another.

In some areas, sewer mains and water mains lie side-by-side. Because of current regulations which call for a greater separation distance between these two types of piping, it will be necessary to relocate the water lines in the affected areas before the sewer lines are replaced.

This project will implement Policies 1 and 6.

F. Ferry Boat Terminal — The ferry terminal serves a vital function for the Ocean Beach, providing the only means of access between the Village and the Long Island mainland for most travelers and freight. However, this facility has deteriorated due to years of exposure to a harsh marine environment. It is estimated that the total cost to reconstruct this facility will be between approximately $1.2 and $1.7 million.

The pilings of the ferry terminal have deteriorated due to the effects of 65 years of salt water exposure. Therefore, under any plan for this facility, the pilings have to be replaced, as will the bulkhead. Additionally, the building will have to be elevated, pursuant to current FEMA requirements. The requirement to elevate the building above base flood level will necessitate the integration of the project into the surrounding area, by means of ramping and other related work. The implications of the potential project should be thought all the way through to avoid unforeseen but avoidable secondary problems and reduce long-term costs.

No decision has been made to build at the ferry terminal. However, in anticipation of the ultimate need, the Village Board has investigated two plans. The number of stories (one or two) for the new facility has not been determined. The current concept is to design the new pilings to accommodate two stories in case this is called for in the final plan. There shall be an evaluation of the relative costs to construct a second story at this time, even if this additional space is not immediately needed and is left as an unfinished shell. This information would allow an informed decision that could help to avoid unnecessary additional costs which would be incurred if a one-story building were initially constructed but space needs in the not-too-distant future require the extra floor area that would be provided by a second story.

This project will implement Policies 2, 7, and 11.

G. Village Marina — This facility is governed by a ten-year capital improvement program. The first year of the program, involving the installation of 75 feet of new dock, including the selection of vinyl sheeting over wood to enhance durability, has been completed. The Village is seeking a ten-year dredging permit from NYSDEC and the Army Corps of Engineers. This project will implement Policies 2 and 11.

H. Bay Beach Improvement — The Village has received a dredging permit from NYSDEC to create a graduated water depth for the bay-side bathing beach and to provide sand replenishment to enhance the adjacent playground. This project is expected to commence in April 2003, and should provide a full-size beach that is capable of accommodating all bathers, including small children and seniors, by means of shallow depths which facilitate wading. Provision of small boat access at this location will be of secondary importance. This project will implement Policy 11.

I. Improved Handicapped Access to the Ocean — The Village will examine the existing dune crossovers leading to the oceanfront beach in order to identify the most practical means of improving handicapped access to this area. If direct physical access to the beach is not feasible, enhanced access to the top of the dune will be considered to allow wheelchair-bound individuals to gain visual access to the ocean. This project will implement Policy 11.

J. Community House Restoration — This facility is underutilized, largely because of its antiquated systems and physical condition. The ultimate goal of this project would be to restore Community House to its historic prominence as a focus of community activities in the Village. As a first step in the restoration process, a comprehensive engineering analysis is needed. This analysis will document all engineering deficiencies and deteriorated conditions, and will establish a phased program of capital improvements based on priority needs.

   The restoration program for the Community House will consist of two components: a plan for the physical renovations, and a comprehensive facility use plan. The facility use plan shall accommodate youth group activities. There also has been discussion about having an annual "Fire Island Film Festival" in the off-season, which would enhance the use of the facility as well. Other appropriate uses could also be incorporated into the final plan.

   This project will implement Policies 1, 11, and 12.

K. Street Lighting — The Village is undertaking ongoing improvements to the local street lighting system. This project will continue until it has been completed throughout the entire Village. New lighting will reflect the Village's rural setting, and will eliminate the excessive light pollution caused by some existing fixtures. Fixtures for use in this project

have been selected by the street lighting committee. This project will implement Policy 12.

L. Village Green Beautification — The Village will continue to augment landscaping and undertake other appropriate improvements to the Village Green in order to enhance the aesthetic appeal of this important focal point of activities in the Village. This project will implement Policies 11 and 12.

M. Additional Bicycle Racks — There is a shortfall of bicycle storage racks in the Village, especially at the Ferry Terminal and the playground. Given that travel within the Village predominantly occurs via foot and bicycle, the availability of sufficient facilities to properly and securely store bicycles is important to the overall adequacy of the Village's transportation system. This project will implement Policy 11.

N. Windswept Improvements — Windswept's facilities have deteriorated over the years and are no longer considered to be adequate to serve the needs of the Ocean Beach Youth Group, which is a not-for-profit organization that leases this building from the Village and uses it as a base of operation for a local youth program. The Board of Directors of the Youth Group is developing a business plan to identify and implement improvements to Windswept. These improvements are expected to include an expanded art room, additional space for younger campers who spend more time indoors, rehearsal and studio space for the performing arts program, modernized administrative and nursing space, improved entrances and egresses, additional storage and housing areas, upgraded plumbing and electrical systems, replacement of windows, roofing and siding, and similar repairs. This project will implement Policies 1, 11, and 12.

O. Redesign and Improvements to Wagon Park — This facility, located near the ferry terminal, was developed many years ago, and requires enlargement and upgrading to accommodate the larger size and number of wagons that are now in use. This project will implement Policies 2 and 11.

4.3.3 PROPOSED OR RECOMMENDED PROCEDURAL ACTIONS

A. Improved Agency Coordination — The Village of Ocean Beach is subject to multiple levels of regulatory jurisdiction, surpassing what most regulated entities are subjected to. This includes tight oversight at both the State level (primarily by NYSDEC) and the federal level (primarily by the National Park Service and the Army Corps of Engineers). It is of particular concern that the policies and decisions of these involved regulatory entities can be inconsistent with one another, which makes project planning especially problematic. Improved coordination among these agencies would provide a more predictable and comprehensible regulatory framework, which would facilitate the achievement of coastal management goals and objectives by the Village of Ocean Beach. This action will implement Policy 7.

B. Continued Monitoring of Activities in the Business District — The Village Board shall continue to seek effective solutions to reduce conflicts between the Village's residential uses and activities occurring within the Village's business district. This shall entail ongoing monitoring of activities in the business district, especially during the late night hours of summer weekends and holidays, and implementation of additional measures as appropriate to achieve a harmonious balance between the Village's residential and commercial uses. This action will implement Policy 1.

C. Business Improvement District — The Village shall continue to pursue the creation of a BID in an effort to enhance economic vitality in the Village's commercial district. This action will implement Policy 1.

4.3.4 RECOMMENDED STUDIES

A. Flooding and Erosion Protection — In addition to the ongoing and recommended dune protection measures discussed in Section 4.3.2 above, the Village will explore the full range of options available for mitigating flooding and erosion, including offshore measures. This study will implement Policy 7.

B. Possible Extension of Promenade on Bayfront — The existing "west walk" was described as being very popular, and usage of this amenity possibly could be enhanced by extending the shorefront walkway further to the east. However, the property to the east of the existing walkway is privately owned, and some type of arrangement (e.g., purchase, lease, public-private partnership, etc.) would have to be reached in order to allow its use for public access. Expansion of pedestrian access in this area could be undertaken independently of a potentially more controversial marina expansion project, but it would be necessary to engage the public actively in the decision-making process so that they are properly informed of the exact nature of the action. This study will implement Policy 11.

C. Improved Bicycle Access — A special committee has been formed to examine the existing restrictions on bicycle operation in the Village and to develop recommendations to allow increased bicycle access in a manner that does not adversely affect the primary use of the Village's walkway system for pedestrian traffic. This study will implement Policy 11.

D. Improved Access for Small Boats — The Village will identify actions that can be implemented to enhance the access available to the bay for small non-motorized boats (e.g., kayaks, canoes, sunfish, etc.). Various sites have been discussed for this type of use, but a systematic analysis has not yet been undertaken to identify the most appropriate location and facilities (including the construction of storage racks) to best advance this objective. This study will implement Policy 11.

E. Facade Review — The Village will undertake an investigation to identify the most appropriate means of improving the aesthetic appeal of the commercial district. This study will focus on formulating a mechanism that can be implemented to regulate architectural design during the reconstruction of the existing buildings. The restriction or use of plastic siding on building exteriors throughout the Village also will be addressed. This study will implement Policies 1, 12, and 13.

F. Property Maintenance — The Village will undertake an investigation to identify the most suitable means of ensuring that property owners effect appropriate maintenance of their premises. This study would be directed at addressing concerns that continuing poor maintenance of some highly visible buildings is detracting from the overall aesthetic quality of the Village, and to assist in the continued revitalization of areas throughout the Village to attract new businesses, promote the public interest in continued development, ensure regular maintenance and improvements to existing structures, safeguard against blight and preserve property values and community standards. This study will implement Policies 1 and 12.

G. Sand Management Plan — The Village is preparing a plan, in conjunction with NYSDEC, to address the issues of dredging, sand storage and beach scraping. Satisfactory completion of this plan is a priority for the Village, due to the local importance that providing adequate storm protection and response has with respect to the long-term future of the community. For this project, the Village Engineer is seeking to negotiate specifics for an Environmental Impact Statement that satisfies the requirements of both the State Environmental Quality Review Act (SEQRA) and the National Environmental Policy Act (NEPA). This plan will implement Policy 7.

H. Underground Placement of Utility Lines — The existing overhead utility lines in the Village detract from local aesthetic quality, and create a safety hazard when electrical lines are downed by storms. A site-specific engineering study will be undertaken to assess the feasibility of burying these utility lines. This study will implement Policy 12.

4.3.5 PROPOSED PUBLIC EDUCATION PROGRAMS

Education efforts will be augmented with respect to actions that can be taken by the general public to mitigate the following problems:

- water quality impacts related to the improper disposal of household hazardous wastes and vessel wastes, and the need to properly dispose these materials;

- littering and dumping, which detracts from visual quality and can lead to the discharge of floatables into coastal waters;

- erosion, and the manner that this problem can be mitigated by the preservation of natural protective features; and

- excessive application of fertilizer and turf chemicals, which can accelerate dissolved oxygen depletion and introduce harmful contaminants to the coastal ecosystem.

Additionally, it is recommended that the responsibility of members of the general public to act as stewards of the environment be emphasized whenever possible. The Village will undertake efforts to promote public awareness of the cottage-beach resort resources present in the Village.

The proposed enhancement to public education will implement Policies 5, 6, 7, and 10.

GREAT SOUTH BAY

COMMUNITY HOUSE

WINDSWEPT

BAY BEACH

VILLAGE MARINA

PLAYGROUND

VILLAGE HALL

VILLAGE MARINA

TENNIS COURTS

BASKETBALL COURTS

WAGON PARK

BOATHOUSE/FERRY TERMINAL

REFUSE BARGE LOADING AREA

BAYVIEW WALK

VILLAGE GREEN

BAYVIEW WALK

BAYVIEW WALK

SEWAGE TREATMENT AND WATER TREATMENT FACILITY

ANNEXED VILLAGE PROPERTY

VILLAGE BOUNDARY

SURF ROAD

WILMOT ROAD

OCEAN ROAD

BUNGALOW WALK

DELIVERY ROAD

MIDWAY WALK

COTTAGE WALK

DELIVERY ROAD

DEHNHOFF WALK

DELIVERY ROAD

BAYBERRY WALK

OCEAN BREEZE WALK

DELIVERY ROAD

DELIVERY ROAD

EVERGREEN WALK

SURF VIEW WALK

DELIVERY ROAD

VILLAGE BOUNDARY

OCEAN VIEW WALK

PUBLIC BATHING BEACH

WEST GROIN

EAST GROIN

VILLAGE MAINTENANCE FACILITY
PUBLIC WATER SUPPLY WELLS
PUBLIC BATHROOMS

ATLANTIC OCEAN

OVERPASS

OVERPASS / RAMP

VILLAGE BOUNDARY

PUBLIC PARKLAND AND OPEN SPACE

RESIDENTIAL

GENERAL COMMERCIAL

MIXED COMMERCIAL AND RESIDENTIAL

MARINE COMMERCIAL

INSTITUTIONAL

VACANT PRIVATE LAND

100 0 100 200 300

Scale: 1" = 200'

FINAL DRAFT

MAP 5

VILLAGE OF OCEAN BEACH

LOCAL WATERFRONT REVITALIZATION PROGRAM

PROPOSED LAND USE

(NO CHANGE FROM EXISTING LAND USE)

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