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SECTION 6 WATER USE PLAN: ISSUES AND OBJECTIVES

6.1 Local and Regional Issues, Opportunities and Objectives of Importance

When the Sag Harbor LWRP was adopted in 1986, it included the establishment of three *water use districts*. These include the harbor district, the limited-intensity district, and conservation district (see Figure 4). Although these districts were established, no use standards were developed to guide activities that occurred within the individual districts. Therefore, the following standards should be applied in all water use districts, many of these provisions are presently contained in Chapters 12 and 53 of the Village of Sag Harbor Code.

- 1. No structure erected below the mean high water line shall be permitted unless it is waterdependent in nature and used solely for the purpose of gaining access to a waterway for commerce, navigation, recreation and other public trust purposes, including the incidental right of public anchoring. Water-dependent uses include any activity which can only be conducted on, in over or adjacent to a water body because the activity requires direct access to that water body, and which involves, as an integral part of such activity, the use of the water.
- 2. Piers, docks, and catwalks are not permitted where the result would be unnecessary interference with the use of public trust lands. Interference with passage along the shoreline is limited to the minimum extent necessary to gain access from the upland to the water.
- 3. Obstruction of navigable waters is limited to the extent that it interferes with commercial navigation; to the minimum distance necessary to access navigable waters; by the extent and characteristics of the developable adjacent upland area and its ability to support inwater development for the water-dependent use; by potential adverse impacts on natural resources and their uses; and by potential adverse impacts on public safety.
- 4. No activity shall be permitted that would materially cause saltwater intrusion to the water table serving the Village of Sag Harbor.
- 5. No activity shall be permitted that would create unreasonable traffic and congestion upon the waters located within 1,500 feet of the Village shoreline.
- 6. No activity shall be permitted that would adversely affect marine life in wetland areas.
- 7. No boat shall be anchored or moored in such a way that it, at any time, rests within the lines of any channel.
- 8. All floats shall be anchored or moored in such a way as to be secure at all times and under all conditions.

- 9. No person shall operate a vessel at speeds greater than five (5) miles per hour within two hundred feet (200) of the shoreline west of the breakwater, within five hundred (500) feet of the shoreline of the breakwater, or within fifty (50) feet of swimmers, bathing floats, or lifelines.
- 10. No boat shall be operated within 1,500 feet of the shore at a speed in excess of that posted by speed markers.
- 11. No person shall ride on water skis or a surfboard or similar device or use or operate a boat to tow a person thereon in any marked channel, nor within 200 feet of any shoreline, nor within 50 feet of any bather or swimmer, except for the sole purpose of commencing or terminating the ride in an approach or departure that is perpendicular to the shoreline.
- 12. No person shall operate a personal watercraft or a specialty-prop craft within 500 feet of a designated swimming area.
- 13. No person shall skin-dive with any type of diving equipment within any channel, nor shall any person bathe or swim in any channel, except in the course of a rescue.
- 14. No person shall skin-dive with any type of diving equipment unless the diving area has been marked with the regulation red diving flag, nor shall any person allow or permit such diving flag to remain in any area unless such a person is actually skin diving in the area at the time. No boat shall operate within 50 feet of any area marked for skin diving by the placement of said regulation diving flag.
- 15. No person shall discharge any apparatus designed for use in spearfishing within 200 feet of any lifelines or bathing float, nor within 200 feet of any public or semi-public beach regularly used for bathing or swimming, nor within 50 feet of any person bathing or swimming.

The *harbor district* (Figure 12) is targeted as the appropriate location to foster most new waterdependent use and development. It is designated for the most intensive water uses, permitting activities that are customarily found in an active recreational boating harbor. This district is the most suitable location for the expansion or renovation of existing water-dependent uses. Only those uses that are incompatible to the safe operation of a harbor, or that are detrimental to the harbor environment, are prohibited. The harbor district includes the Sag Harbor and Outer Sag Harbor Cove areas, that are developed with, and contain concentrations of, water-dependent commercial and/or industrial uses and support facilities. The harbor and Outer Cove areas are the center for water-borne commerce, recreation, and other water-dependent business activity in the Village. Allowable surface water uses in the harbor district include secondary contact recreation, such as fishing, boating and shellfishing for market purposes (as permitted). Within the harbor district, preference will be given to promoting and facilitating new waterdependent use and development in areas that have been previously developed and do not exhibit significant or high natural resource values. New water-dependent uses should be sited outside the harbor district only if the use has unique siting requirements that require a location outside of the district, and all potential significant impacts are mitigated. The following standards shall apply within the harbor district.

- 1. Existing shoreline stabilization and engineering structures, such as piers, wharfs, jetties, and bulkheads, shall be maintained and, where necessary, new shoreline stabilization and engineering structures may be constructed in accordance with the provisions of the WF Waterfront and MA Marine zoning districts.
- 2. Public and private navigation lanes. channels and basins shall be maintained to provide water depths consistent with requirements of existing water-dependent uses.
- 3. An increase in the use of surface waters in areas where such additional activity would pose safety hazards or obstruct navigation shall be prohibited.
- 4. Development shall be consistent with principal historic water-dependent harbor uses.
- 5. Development along the shoreline shall enhance or complement the harbor character in terms of scale, intensity of use, and architectural style.
- 6. Public access to the shore through provisions, such as including access from the upland, boat ramps and/or transient boat moorings, shall be encouraged, provided that such increased access does not pose safety hazards or create undue congestion.
- 7. Additional use of surface waters, where the resulting increase in traffic and congestion is likely to jeopardize public safety, is prohibited.
- 8. No boat shall be operated in any harbor or in any area where there is congestion of boats, either underway or at anchor, at a speed in excess of five miles per hour unless speed markers have been posted by the Village indicating otherwise.

The *low-intensity district* is a transition zone between the more permissible harbor district and the stringent conservation district. The purpose of this district is to accommodate the shoreline use associated with the historical pattern of development, which is predominantly residential, while encouraging public access and such water-dependent activities as fishing. General boating areas of Sag Harbor Bay and Outer Sag Harbor Cove are included in this district. Waters in the low-intensity district shall be used for activities involving primary contact recreation, including swimming, diving, water skiing and surfing, and secondary contact recreation, such as fishing, boating, and shellfishing for market purposes (as permitted).

Standards applicable to the low-intensity district include the following.

- 1. Water surface coverage shall be permitted only to accommodate water-dependent uses which require structures or activities in the water as a part of the use and to the minimum extent necessary to exercise littoral rights.
- 2. An increase in the use of surface waters in areas where such additional activity would pose safety hazards to swimming and public access or obstruct navigation shall be prohibited.
- 3. Hardening of the shoreline within the low-intensity district is discouraged. Hard structural erosion protection measures shall be used for control of erosion only where:

• setback from the shoreline is not appropriate because a structure is functionally dependent on a location on or in coastal waters, located in an area of extensive public investment, or is otherwise not practicable;

• vegetative approaches to controlling erosion would not be effective;

• enhancement of natural protective features would not prove practical in providing erosion protection;

• construction of a hard structure is the only practical design consideration and is essential to protecting the principal use;

• the structure is necessary to mitigate the erosive effects of immediately adjacent structures;

• the proposed hard structural erosion protection measures are limited to the minimum scale necessary and are based on sound engineering practices;

• practical vegetative methods have been included in the project design and implementation; or

• adequate mitigation is provided and maintained to ensure that there is no adverse impact to adjacent property, to natural coastal processes and natural resources, and if undertaken by a private property owner, does not incur significant direct or indirect public costs.

The *conservation district* is intended to support the sensitive environmental resources and habitats of the Village of Sag Harbor's waters. Low intensity use is necessary in some highly sensitive water areas to assure their preservation and enhancement, such as that in the coves where poor flushing action is prevalent. Waters in the conservation district shall be used for activities involving primary contact recreation, including swimming, diving, and surfing, and secondary contact recreation, such as fishing, boating, and shellfishing for market purposes (as permitted). and fishing and fish propagation.

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Standards applicable to the conservation district include the following;

- 1. New bulkheading shall not be allowed. Use of vegetative non-structural measures which have a reasonable probability of managing flooding and erosion based on shoreline characteristics including exposure, geometry, and sediment composition.
- 2. The disturbance of natural shorelines shall be avoided.
- 3. The bottom condition of water bodies in the conservation district shall be enhanced and maintained at a level what would support shellfish propagation and harvesting.
- The extent of surface water coverage shall be the minimum necessary for access to navigable waters.
- 5. The preservation of natural protective features shall be enhanced (beaches, nearshore, bars, spits, flats, wetlands, and all associated vegetation) and success of restoration efforts through relevant signage or other management measures which focus on presentation of educational, research or interpretive information.
- 6. Vegetative buffers between shoreline properties and surface waters within the conservation district shall be provided and maintained to achieve a high filtration efficiency of surface runoff. Avoid permanent or unnecessary disturbance within buffer areas. Such buffer areas shall be planted and maintained with indigenous vegetation.

As noted above, when the Sag Harbor LWRP was adopted in 1986, it established three harbor use districts for controlling the intensity of water uses within the Sag Harbor Cove/Bay Complex. In an effort to place a greater emphasis on environmental protection and resource preservation, a fourth district is proposed. The district, to be known as the "preservation district", would be more protective than the conservation district. Surface waters identified to be designated as preservation districts include Round Pond, Otter Pond, and the upper reaches of both Ligonee Brook and Little Northwest Creek. The only permitted activities in these areas would be passive in nature to avoid potential adverse environmental impacts. Access to these areas would be provided for passive recreational, educational, scientific, and interpretive uses of natural resources that would not result in adverse impacts. Motorized activities would not be permitted in these areas. Furthermore, the construction of shoreline structures or the hardening of the shoreline in these areas would be prohibited.

The following is a discussion of the issues of local and regional importance and opportunities exist for improvement in the harbor management area. The conditions and recommendations set forth below are illustrated on the HMC and Fig. 12.

1. The character of Sag Harbor's waterfront is directly related to the dependency and intensity of water-related and enhanced uses

Sag Harbor Village is one of two areas in the Peconic Bays region that supports a concentration of water-dependent uses. This is important from both a regional and local perspective. The uses and activities that occur along the Sag Harbor Village waterfront should benefit from this coastal location. In light of this, efforts should be taken to maintain Sag Harbor as a center for maritime uses. In all the water use districts, a pattern of development should be enhanced and encouraged that reflects a mix of appropriately located water-dependent commercial uses, recreational uses and open space, and residential uses. The Village's commercial maritime heritage should also be enhanced and maintained. In the Harbor District, priority should be given to establishment and maintenance of water-dependent uses over all other uses in this area. Sufficient infrastructure should be provided to support these efforts.

In the Low-intensity District and the Conservation District, efforts should be focused on the establishment of new, and the maintenance of existing, water-dependent recreational uses at appropriate locations. New development, however, should be avoided at sites in the Conservation District (as well as the Preservation District) that exhibit important natural resource value.

2. The viability of water-dependent uses and other uses that occur on the water surface is directly related to adequate dredging to protect the channels that provide access to the Harbor District

Water-dependent uses in Sag Harbor rely upon the navigational access infrastructure that has been established. As discussed in Section 3.2.G and shown in Figure D, there are a number of navigation channels located throughout the Sag Harbor Cove/Bay Complex. Some of these channels have not been dredged since they were first established. In addition, there are areas situated outside of the delineated channels that are in need of dredging to mitigate shoaling and water depth problems. The dredging guidelines set forth below should be utilized to direct future actions in Village waters. They should also provide the basis for seeking dredging assistance and funding from appropriate governmental agencies.

- Dredging is an important activity with costs and impacts that require it to be undertaken to meet the current and future needs of water-dependent uses in the Harbor District. Dredging activities undertaken east of the North Haven/Route 114 bridge should be continued to the ten-foot depths initiated by the Army Corps of Engineers. West of the bridge, access channels should be maintained at sufficient depths (four feet below mean low water) to meet the needs of existing water-dependent uses.
- In 1960, the Suffolk County Department of Public Works (SCDPW) constructed an extensive navigation channel through Outer Sag Harbor Cove. This channel extends west from the North Haven/State Route 114 bridge to the head of Paynes Creek. In 1965, this channel was extended south through Inner and Upper Sag Harbor Cove. The area in the vicinity of Marine Park was dredged in 1977 and the Village A and B Docks area was dredged in 1979. Through the analysis conducted as a part of this harbor management plan, it has been determined that the portion of the main channel that extends from the

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North Haven/State Route 114 bridge west to the Big Narrows, including the spur for the Village docks and the spur to the Ship Ashore Marina and Redwood Boat Basin, should be maintained in the public interest. That portion of the main channel that extends into Paynes Creek and the Inner and Upper Cove areas should remain as a designated channel, but no longer be publicly maintained, except in extreme circumstances.

- The SCDPW has not conducted any maintenance dredging of the channels and basin areas in the Sag Harbor Cove/Bay Complex since they were originally established. The SCDPW has indicated that they have not received any formal requests for dredging from the Village through the Towns of East Hampton and Southampton and are unaware of localized shoaling conditions or current dredging needs. Furthermore, with the exception of permit applications that were filed in 1990 for the dredging of a spur from the main channel to the Redwood boat basin at the Ship Ashore Marina in Outer Sag Harbor Cove, all dredging permits for Sag Harbor projects have expired. The administrative process for initiating County-sponsored dredging in local waters is a lengthy one, which is exacerbated by the time constraints involved with securing the necessary state and federal permit approvals. Therefore, the Village should promptly advise the County of their dredging needs to commence the application process and facilitate dredging where required.
- There is a navigation channel and turning basin located within the Sag Harbor area that was originally dredged by the Army Corps of Engineers (ACE). This channel, which has not been dredged since it was constructed in 1937, was deauthorized by the ACE in 1992. The Village is responsible for the placement and maintenance of navigational aids in this area. However, although this channel has shoaled and requires dredging, the federal government is no longer responsible for the dredge maintenance of this channel. Therefore, the Village must either: 1) request that the ACE re-authorize this navigation channel; 2) request that the SCDPW add this channel to their list of dredging projects that are in the public interest; or 3) directly arrange for the private maintenance dredging of this channel.
- The ACE constructed a two-section, 3,180-foot breakwater to the east of the federal navigation channel and adjacent anchorage area. Shoaling is occurring along the western side of this structure, particularly near its intersection with the shoreline, and is impacting the full use of the anchorage area which is located between the channel and the breakwater. This has restricted the use of portions of the anchorage area to only shallow-draft vessels. Shoaling is also a problem in the small anchorage area located to the west of the Long Wharf. Bottom depths in this area have been reduced, making it accessible to only shallow-draft vessels. Dredging is required in these areas to re-establish the full extent of mooring activities and improve navigation. Since neither of these areas have been dredged in the past, they should also be added to the County's dredging list for the Sag Harbor area.
- NYSDEC is also taking a closer look at all new dredging projects (those areas that have not been dredged within the past 20 years are considered new projects). New projects are not likely to receive approval unless an overwhelming public need can be demonstrated and the issue of acceptable dredge spoil disposal methods and sites can be addressed. In the past, dredge spoils were disposed in upland areas in the vicinity of the

Redwood peninsula; Haven's Beach was utilized for the disposal of spoil materials from the Marine Park dredging site. However, disposal of dredge spoils in these areas is no longer feasible because these areas are residentially-developed, in close proximity to residential development, or (in the case of Haven's Beach) utilized for active public recreation. There are not upland areas suitable for dredge spoil disposal in the Village. Therefore, spoil materials generated from future dredging projects would have to be removed from the project site and disposed of at a suitable location outside of the Village.

- The expansion of water-dependent structures (i.e., docks and marinas) in the Harbor District is limited by the nearshore location of the navigation channels. Certain channels would have to be relocated further from shore to allow for such expansion. A channel relocation would result in a loss of navigable water depth of approximately two feet and a loss in anchorage space. The Village must access the alternatives for expansion of water-dependent structures and the relocation of channels required to permit such expansion.
- The breakwater in the Harbor District, that separates Sag Harbor from Sag Harbor Bay, was constructed in 1908. This structure acts to shelter the harbor from the open waters of the bay, reducing the impacts of wave action generated in the bay. The breakwater was rehabilitated in 1963 to restore it to its original height and structural integrity. The breakwater is once again in need of repair. In the past thirty years this structure has succumbed to gravitational settlement and wave-induced shifting of the rocks. Some of the supporting stones have fallen into the adjacent waters. Due to these changes, the effectiveness of the breakwater has been dramatically reduced. As a result, even moderate storms, especially northeasters (which drive waves directly against the breakwater) can cause surging waves to overtop the breakwater. During a relatively modest storm event in December of 1994, waves that bypassed the breakwater caused substantial damage to the bulkhead in front of the Village sewage treatment plant. The Village should issue requests to the Army Corps of Engineers for the repair of this structure.
- In the Low-Intensity District situated west of the North Haven/Route 114 bridge, water use activities have the inherent potential to conflict with navigation on the waters surface. Access through Outer Sag Harbor Cove is dependent on the maintenance of the existing navigation channel. Since the location of the channel in this area is fixed, the expansion of navigational access for private residential uses should not interfere or encroach on the navigation channel nor result in increased vessel congestion.

3. The use of surface waters depends on the size and nature of the waterbody

The Harbor District is best suited for accommodating the high concentrations of waterdependent uses found along the Sag Harbor waterfront. The characteristics of the surface waters establish a hierarchy for determining where water-dependent uses should locate. Uses with the highest degree of dependence on waterfront access for navigation include: commercial water-dependent activities that require adequate water depths to navigate, turning basins, docking facilities, and access for the public as users (these water-dependent uses are generally found in the vicinity of the Long Wharf); marinas and yacht clubs for sail boats and larger vessels that require adequate water depths for navigation, adequate clearance for masts, and docking and anchorage facilities and facilities for dinghies (these uses are generally found to the east of the North Haven/Route 114 bridge); and marinas for motorized vessels and small sail boats that require docking facilities, boat launching and public access (these uses are generally found west of the North Haven/Route 114 bridge).

• A total of 155 acres of underwater lands in the Harbor District area (situated between the North Haven/State Route 114 bridge and the breakwater) are uncertified by NYSDEC and closed year-round to shellfish harvesting. These waters are classified by the State as "SA" which is the highest possible ranking for surface waters. SA waters are considered suitable for the harvesting of shellfish for market purposes and primary and secondary contact recreation.

The activities occurring inside the harbor area are not compatible with shellfish harvesting activities and are not predicted to change. The marinas and anchorage areas are a prosperous element in the economy of Sag Harbor and help to support significant tourist activity. This area has been specifically designated as a part of the harbor district by the Village, and is considered an appropriate area for such intensive uses. In accordance with the National Shellfish Sanitation Program (described in 5.6.B and Appendix A), a seasonal closure area must be maintained around marinas to mitigate potential contamination problems. In addition, the outfall for the STP is located in Sag Harbor, and a large area around this outfall is permanently closed to shellfish harvest. The location of the outfall is not subject to change. Relocation of this structure to an area outside the breakwater would be cost prohibitive and would require the closure of additional underwater lands to shellfish harvest.

Since the NYSDEC water quality standards that mandate the closure of the harbor area to shellfishing will continue to be maintained, the water quality classification for this area should be changed to SB to reflect actual conditions. SB waters are considered suitable for primary and secondary contact recreation and any other use except the taking of shellfish for market purposes. However, although the water quality conditions in the harbor that warrant the closure of these waters to shellfishing may not change, efforts to improve water quality in this area through the prohibition of vessel waste and other discharges and the implementation of best management practices in the adjacent upland areas should not be relaxed.

Another area in the Sag Harbor Cove/Bay Complex that is suffering from degraded water quality is the southeastern corner of Upper Sag Harbor Cove (which is designated as a Conservation District). Since 1986, water samples collected in this area have failed to meet the standards for total and fecal coliform bacteria under both wet and dry weather conditions. NYSDEC has consequently closed this area to shellfish harvesting on a year-round basis. The causes of this water quality problem are not totally clear; however, it is suspected that the discharge from Otter Pond is a significant source of coliform bacteria. Otter Pond is known to support a large population of waterfowl, a prominent contributor of fecal matter to surface waters. Both Otter Pond and the upper reaches of Upper Sag Harbor Cove are surrounded by older homes that may have failing septic systems that are adding to the pollution problem in this area. In addition, poor mixing and flushing action in this area of Upper Sag Harbor Cove may also be a factor in elevated coliform levels.

In an attempt to address the water quality problems in the Upper Sag Harbor Cove area, a number of mitigative actions could be implemented at Otter Pond. The Village, in conjunction with the Town of Southampton is currently upgrading the stormwater drainage appurtenances in the vicinity of Otter Pond to improve the quality of runoff entering this water body. In addition to this, the Sage Foundation, the entity that owns the Otter Pond property, is proposing to undertake a wetland planting to restore the fringe of wetland grasses around the perimeter of the pond. This will aid in the filtration of pollutants entering the pond. Additional planting in the vicinity of the outlet stream to Upper Sag Harbor Cove would also help to reduce pollutant loading to the upper cove area. The Sage Foundation and the Village should also undertake a educational campaign to inform the public about the detrimental effects of feeding wildfowl. È.

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Failing on-site sewage disposal systems (OSDS's) are another serious problem that is difficult to pinpoint through direct observation. In order to identify faulty OSDS's in the vicinity of Otter Pond and Upper Sag Harbor Cove, a die-testing program should be conducted. The Village should investigate sources of funding, possibly in conjunction with the Suffolk County Department of Health Services, to establish a die-testing program that would allow for the testing of systems in the area of concern and provide financial incentives to enable local homeowners to upgrade failing systems.

4. The nature of the existing use of the water's surface limits the extent of other uses

In addition to navigation and access for water-dependent uses, it is important that other principal public uses of surface waters, such as mooring fields and docking facilities, are not obstructed by active recreational use of surface waters. Water skiing, jet skiing, skin diving and swimming should be uses designated for specific areas that do not conflict with other public uses of surface waters throughout the harbor management area. Swimming primarily occurs within 500 feet of the shoreline. This use should not be obstructed by other active surface water uses, such as jet skiing, water skiing or diving. In the Conservation District, the principal and preferred use of surface waters is shellfishing and the protection of natural resources. All other uses of the waters should be subordinate to this primary objective. Other surface water use concerns include the following.

• During the summer boating season, the harbor district area is subject to extensive vessel traffic, particularly on weekends, as evidenced by data collected by the Village Harbormaster's office to estimate the average number of vessels entering the harbor and outer cove areas during peak mid-summer periods. According to the Village Harbormaster, vessel congestion occurs in a number of locations throughout the harbor district. At some of these locations, congestion problems are heightened by localized shoaling. The ballast that was dumped at the end of the Long Wharf complicates congestion problems that may arise in this area and has led to a number of boating accidents.

In Sag Harbor, the area under the bridge tends to get congested due to the fact that the channel narrows and there are generally a significant number of boats seeking egress from and ingress to the four marinas and docking facilities in Outer Sag Harbor Cove. The Outer Sag Harbor Cove area provides dockage for up to 385 vessels and supports

an extensive amount of boating activity. The fueling dock at Baron's Cove Marina is another location of congestion in the Outer Cove area.

There is a significant amount of vessel activity occurring at the head of Sag Harbor, in the vicinity of Marine Park. Combined, the marinas and boat yard in this area provide dockage for approximately 225 boats. The Village anchorage area and the boat launch ramp can also accommodate a large number of vessels. Therefore, at the height of the summer, the Sag Harbor area can become congested with vessels seeking to access shoreside dockage and services or egress to Sag Harbor Bay. Congestion also occurs in the Sag Harbor area, where the channels meet and an increased number of boaters attempt to enter or exit from the main channel to the harbor channel on the eastern side of the Long Wharf or the dockage and anchorage areas on the western side of the Long Wharf.

• As shown in Fig. 11 and the HMC, there are a number of docks located throughout the harbor management area. The construction of private docks has become a growing concern to the Village, particularly docks constructed in areas subject to heavy vessel activity and in areas that possess significant natural resources. The increasing size and number of docking structures in Village waters exacerbates harbor congestion and threatens interference with navigation channels. At present, the construction of a dock in the harbor management area requires a permit from the Village. Dock construction in Sag Harbor Village also requires a permit from the Town of Southampton or the State of New York because each of these entities has jurisdiction over a portion of the underwater lands in the study area. As discussed in Section 3.3.B, the underwater lands inside the cove complex are owned by the Town of Southampton; the underwater lands situated east the of the cove complex are owned by the State of New York.

In an effort to control the construction of docks, this activity should be directly connected with the character of the upland use. If the upland use is not water-dependent, then a dock should only be permitted to provide necessary access to reach navigable waters. This action would essentially contain excessive dock construction activity within the harbor district, where the water-dependent are primarily located.

5. The nature of shoreline hardening is directly related to upland use

Water-dependent development is the functional use within the Harbor District. Much of this area has been subject to extensive public investment that is exposed to flood hazards out of necessity. Therefore, the water-dependent uses in the waterfront and marine zoning districts have a priority for shore hardening to protect them against the erosive forces of storm events. Where the shoreline has been hardened to support a water-dependent use, the existing bulkhead should be replaced in-kind when deteriorated. Where a substantial portion of the water-dependent use in the Harbor District has been bulkheaded, it may be desirable to continue the bulkheading along the full length of the use.

In the Low-Intensity District, shoreline hardening should be limited to locations above the mean high water line and should only be utilized after all other non-structural alternative for erosion protection have been exhausted. In the Conservation District, shore hardening

structures should only be used when no other practical design consideration is suitable and when they are essentially required to protect principal upland structures. Practical nonstructural vegetative measures should be initially utilized.

6. The use of surface waters is limited by potential adverse impacts on navigation and public interest in public lands underwater

For public safety purposes, surface water uses in the Harbor District should be limited based on their consistency with the public interest for navigation. Water-dependent uses are reliant upon the utilization of surface waters and offer the public the benefit of access to the waters of Sag Harbor and beyond. Such uses, however, must not unreasonable impede navigation, the use and ownership of underwater lands, or riparian interests. Other areas of concern include the following.

- At present the Town of Southampton is responsible for the patrol of surface waters and enforcement of waterways regulations in Southampton Town waters, which includes those portions of Outer and Inner Sag Harbor Cove lying outside of the Village's jurisdiction. Throughout the summer boating season, when recreational boating and other in-water recreational activities increase, the Town does not conduct regular patrols in this area due mainly to the fact that these waters are isolated from the main body of the Town's waters. To ensure that an appropriate level of enforcement is provided in this area, the Town of Southampton should consider granting authority to the Village of Sag Harbor to allow the Village Harbormaster the ability to act on violations that are presently outside Village jurisdiction. Presently, the Harbormaster can only issue warnings to boaters outside Village waters that are violating speed restrictions or other waterways regulation; the Village cannot issue citations or enforce Town law to any other extent unless authorized by the Town. The Town and the Village should jointly pass a resolution to establish a cooperative arrangement to allow the Village to assist with patrols in this area and to transfer authority so the Village can enforce existing Town regulations.
- There is a boat launching ramp located at the Marine Park boat basin (see Figure 5). This ramp receives heavy usage throughout the year, particularly in the summer season. As a result, the ramp is in need of repair. The concrete ramp is beginning to crack and subside and the culvert located to the immediate east of this ramp is caving in. The Village should continue to seek funding for the reconstruction of this amenity.
- The State of New York issued seven grants to various upland property owners for underwater lands in the Sag Harbor area. These grants were issued between 1845 and 1968, and in most of these cases these lands consist of upland properties or portions of the upland that were formerly underwater lands that have been filled in. Research into the status of these seven grants has revealed that all of the grants were issued with full interest given to the grantee. Unless the upland was sold to another party, the ownership of the underwater lands remains with the original grantee; otherwise, the lands belong to the current upland owner. With the exception of a grant issued to the East Long Island Pottery Company in 1882, which was never utilized, the underwater land grants in Sag Harbor are all accounted for.

• There are three waterfront properties that have been developed that do not have grants from the State Office of General Services. These include the underwater lands that contain the Waterfront Marina, owned by Malloy Enterprises; the former underwater lands that comprise the Marine Park property, which is owned by the Village of Sag Harbor; and the underwater lands and small upland area that comprises the Sag Harbor Yacht Club property. Grants for these lands should be obtained from the State through the appropriate application process. In addition, the Village of Sag Harbor was conveyed a portion of the underwater lands originally granted to the Long Island Rail Road (LIRR) in 1888 when the existing North Haven/State Route 114 bridge was constructed. The Village should seek to gain ownership of the remainder of the underwater lands that are still owned by the LIRR.

Natural Resources

- The Village contains a number of public recreation and open space areas, some of them quite large in size. These lands are currently zoned for either residential or waterfront use; the larger properties are all zoned for residential use. In an effort to insure that these lands will remain as public recreational and open space holdings, and to prevent the future possibility of these lands ever being residentially developed, it is recommended that the Village rezone these properties under an open space/recreation classification. The properties considered for rezoning include Otter Pond and Mashashimuet Park, Havens Beach, and the NYSDEC conservation area adjacent to Little Northwest Creek.
- The Village presently regulates development in wetland areas under Chapter 12, the Bulkhead, Dredging and Canals law. Although this law regulates, by permit, dredging and the construction canals, bulkheads and other shoreline structures that may impact tidal wetlands, this law is not comprehensive in its protection of wetland resources. In particular, the present law does not address impacts from upland development activities. The Village contains a significant number of freshwater wetland areas and extensive areas of tidal marsh throughout the Sag Harbor Cove Complex. These wetland resources warrant stronger protection, and the NYSDEC, under Articles 24 and 25 of the Environmental Conservation Law, cannot be fully reliant for this action. Therefore, the Village should adopt a separate wetlands and watercourses law that more specifically outlines provisions for activities that may impact both tidal and freshwater wetlands are; outlines the significance of protecting these resources; and delineates where protected resources are found within the Village. This law should also outline the full realm of activities that should be regulated in order to protect wetland resources.

The wetlands and watercourses law would also contain the standards required to implement the provisions of the conservation and preservation districts. It would specify the necessary setback requirements and structural limitation applicable in these districts.

<u>Water Quality</u>

• Marinas can contribute significantly to the concentration of pollutants in the water column, bottom sediments, and tissues of benthic organisms living within the limits of the marina itself. Pollutants from marinas and recreational boating may enter the water through discharges from boats, spills, maintenance areas, stormwater runoff and vessel operation. The types of pollutants often associated with marinas and recreational boating activities include: organic materials discharges from recreational boats; toxic heavy metals associated with boat maintenance and repair operations at boat yards and marinas; petroleum hydrocarbons from refueling activities and bilge or fuel discharges from boats; fecal coliform bacteria; and disruption of sediments and habitat from boat operations and dredging.

Point sources of pollution from marinas are primarily handled through the NYSDEC general permit system for industrial activities, which includes marina activities. To receive a NYSDEC permit, marina operators are required to develop and implement comprehensive stormwater management plans and controls to minimize the potential impacts from polluted stormwater runoff. Marinas are also required to monitor runoff and the types of pollutants that are being discharges. The Village currently applies its site plan review procedures to marinas and other nonresidential land use and construction to regulate stormwater runoff and other off-site discharges. To strengthen the Village's commitment to protecting coastal water quality, standards should be included in the Site Plan Review Law that specifically apply to marinas and boat yards, and their associated upland activities.

Vessel discharges, although not the only source of pollutants to the Sag Harbor Cove/Bay Complex, can cause localized water quality problems. The discharge of sanitary wastes from boats can degrade water quality by: introducing microbial pathogens into surface waters; and locally increasing biological oxygen demand. Due to the high concentration of marine vessel activity (three marinas, one boat yard and two anchorage areas) and the location of the sewage treatment outfall, the entire area located inside the breakwater (the Sag Harbor area) is closed to shellfish harvesting by NYSDEC on a year-round basis. In addition, NYSDEC has identified two specific areas in the harbor complex that are of concern with regard to the potential contamination of shellfish beds due to seasonal water quality degradation and/or vessel discharges. These include the easterly portion of Outer Sag Harbor Cove and the waters in the Redwood boat basin. NYSDEC has indicated that concentrated sewage discharges from vessels in these areas have the potential for the localized contamination of the underlying shellfish beds.

To address the impacts associated with vessel waste discharges, Shelter Island Sound or, at a minimum, the entire Sag Harbor Cove/Bay Complex should be designated by the USEPA as a vessel waste "no-discharge zone". The advantage of this designation would be to prohibit the discharge of vessel sewage within the bounds of the harbor complex. Furthermore, it would provide State and local officials with the authority to enforce the laws governing vessel waste discharges and vessel inspections (to ensure that onboard discharge devices are disabled). Although Federal law prohibits the discharge of untreated sewage within three miles of shore, treated sewage may be discharged inside this boundary and the U.S. Coast Guard has the sole responsibility for enforcement.

• Haven's Beach is bisected by a drainage ditch which outlets to Sag Harbor Bay. This ditch carries stormwater runoff collected along Bay Street and Hempstead Street. This runoff is conveyed into this ditch without pretreatment to remove pollutants. Stormwater runoff can contain a high degree of contaminants, particularly the "first flush" that is collected at the onset of a storm event.

The development of a wet detention system at Haven's Beach would be one way to provide the recommended mitigation. Surface flows in the ditch would be diverted through the created wetland system to allow for settlement and some pretreatment of stormwater prior to discharge into Sag Harbor Bay. This detention system is expected to significantly reduce the load of suspended solids, pathogens, dissolved nutrients (i.e., nitrogen and phosphorus compounds, especially ammonia), oxygen-demanding substances, and certain metals currently carried in the stormwater runoff flowing through the ditch. After passing through the wetland system, flows would be diverted back into the drainage ditch to outlet to Sag Harbor Bay.

- The culvert underneath Redwood Road that connects Upper Sag Harbor Cove with Outer Sag Harbor Cove has partially collapsed which restricts tidal flow. Some debate has occurred over whether the culvert should be closed completely or restored. Advocates of closure have cited the fact that the culvert connects to a marina basin which is a potential source of pollutant loadings to the Upper Cove. Proponents of restoring the culvert believe that such a project would improve tidal flushing of the Upper Cove. The analysis performed for this Harbor Management Plan support the latter position.
- The implementation of best management practices at marinas and the installation of additional vessel pump-out facilities throughout, especially in the Outer Sag Harbor Cove area, are also key elements for improving surface water quality. The Village should also consider upgrading the Sewage Treatment Plant process to accept marine waste effluent collected by the Village pump-out systems. This would eliminate the current need to utilize a private waste hauler to transport stored wastes outside the Village for disposal.
- There are two boat ramps that provide access to the Sag Harbor Cove Complex that require improvement to address water quality problems. The boat launch ramp located on the Redwood peninsula, at the terminus of Amherst Road, is undeveloped. Boaters maneuver their trailers down this moderate slope to the water. Through the years of use, this site has developed ruts and small swales that convey roadway runoff and sediment directly into Inner Sag Harbor Cove. The boat launch ramp located off John Street, at the southeastern end of Upper Sag Harbor Cove, is in a similar state. These problems can be remedied by upgrading the surface conditions of these ramps.

Both the Amherst Road and the John Street ramps should be regraded and a large-size gravel should be installed that will stabilize the ramps, preventing sediment from entering the bay, and retain a permeable surface to permit continued percolation. In addition, small berms should be constructed at the top of each ramp, near the roadway, to prevent surface runoff from traveling down the ramp. At Amherst Road, the runoff should be conveyed from the berm into a storm grate that is connected to a leaching pool. At John Street, the runoff should be directed into the John Street wetland to provide filtration, rather than conveying it directly into the adjacent outlet stream that connects the pond

to Upper Sag Harbor Cove. These upgrades could be instituted without significant cost to the Village. Nonetheless, the Village should investigate the potential availability of funding for this type of water quality improvement project.