

**Hashamomuck Cove
Southold, New York
Coastal Storm Risk Management
Integrated Feasibility Study/EA**

**Appendix A3
Coastal Zone Management
Consistency Determination**

NEW YORK STATE COASTAL MANAGEMENT PROGRAM
CONSISTENCY DETERMINATION

Project: Town of Southold, New York, Hashamomuck Cove Coastal Storm Damage Reduction Project.

The proposed plan for Hashamomuck Cove includes the placement of fill material in the West, Central, and East Coves to rebuild the beaches with a 25-foot (FT) wide beach and berm. The source of the initial sand for the beach fill will be from an upland off-site source. The initial beach nourishment is estimated to include the placement of 94,400 cubic yards (CY) in the West Cove, 83,000 CY in the Central Cove and 38,200 CY in the East Cove. Periodic renourishment is anticipated to occur approximately 9 times (every 5 years) over the 50 year period of analysis to maintain the project design profile. Each renourishment event is estimated to include the placement of 30,700 CY in the West Cove, 12,900 CY in the Central Cove and 20,600 CY in the East Cove. It is anticipated that renourishment sand will be trucked in from a New York State approved upland source. The design profile of the beach berm is estimated to impact 164,000 square feet (SF) of intertidal habitat and 69,000 (SF) of subtidal habitat in the West Cove; 149,000 SF of intertidal habitat and 172,000 SF of subtidal habitat in the Central Cove; and 175,000 SF of intertidal habitat and 210,000 SF of subtidal habitat in the East Cove. Initial construction is estimated to take approximately one year to complete.

Applicant: U.S. Army Corps of Engineers, New York District.

Applicable Policies: Based on a review of the Coastal Management Program policies for New York, 19 were found to be applicable to the proposed project. These policies are listed below.

Consistency Determination: All of the applicable policies were evaluated with respect to the Project's consistency with their stated goals. The Project has been found to be consistent with each policy.

The construction of this coastal storm risk management project will serve to protect one of the two roadways to Orient Point and thus the community and allows the existing commercial uses and public infrastructure to continue to function within a safer and more secure environment. The nourishment of the beach will also improve the recreational opportunities of the beach as well as improve safety in regard to beach usage in areas that front previously constructed bulkheads/seawalls. Therefore, the U.S. Army Corps of Engineers has determined that the proposed project would be consistent with the 19 policies that were deemed applicable and evaluated with respect to the project's consistency with the stated goals.

POLICY 2 FACILITATE THE SITING OF WATER-DEPENDENT USES AND FACILITIES ON OR ADJACENT TO COASTAL WATERS.

Determination: The Hashamomuck Cove project is water dependent, as it involves the construction of a storm risk reduction project, the design of which is dependent on tidal and wave influences. As the use of the project site will not change with construction, existing facilities or services will be sufficient to support this project and the proposed activities are compatible with adjacent properties. The project may improve the overall environmental quality of the site over the long-term through reduced erosion and the potential use of the widened beach by rare species (e.g., piping plover). Construction of the project will not have a significant adverse impact to water quality or biota, however short term localized impacts to these resources are anticipated. It is therefore determined that this project is consistent with this policy.

POLICY 7 SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS WILL BE PROTECTED, PRESERVED, AND WHERE PRACTICAL, RESTORED SO AS TO MAINTAIN THEIR VIABILITY AS HABITATS.

Determination: The project site consists of beach, intertidal and subtidal areas along the southern shoreline of Long Island Sound, and is adjacent to residential and commercial development. The project area includes the three crescent beaches West, Central and East Coves. The project beach/shoreline has been regularly disturbed by various construction activities built to protect the shoreline, adjacent property, infrastructure and natural areas from erosion and storm damage.

The purpose of this project is to restore eroded coastal beach, and protect two commercial properties, plus the roadway and infrastructure, which is in direct accord with this policy. Filling and grading will be the major activities at the project site. It is estimated that the project will take approximately one year. It is estimated that construction will begin in the late winter at the West Cove (Southold Town Beach) and proceed eastward until project completion.

This policy requires that a narrative for each significant habitat be provided to aid in consistency determination. The following is a narrative for the project site, noting the five required items.

(1) The project site is located along the shoreline of Long Island Sound at Hashamomuck Cove in Southold, New York. (2) Many different species of fish, birds, and other wildlife may utilize the project site and vicinity. These species are described in the existing conditions section of the Integrated Feasibility Report and Environmental Assessment (IFR/EA). Documents can be downloaded from the following link:
<http://www.nan.usace.army.mil/Missions/Civil-Works/Projects-in-New-York/Hash>

amomuck-Cove/. (3) Beach nourishment (filling and grading) will have a direct, short-term impact on terrestrial and aquatic species however these impacts are expected to be short-term. 4) Prevention of future erosion will decrease potential threats to property, human safety and natural areas and create habitat for a variety of terrestrial and aquatic species, some of which may be rare species such as piping plover. 5) Existing conditions, including the fish and wildlife communities, tidal patterns, and human use patterns at the project sites were observed, and assessed and incorporated into the selection process of the recommended plan.

Benthic resources will be affected by direct burial and sedimentation within the project area. However, the benthic community is generally azoic or consisted of typical opportunistic annelid species. Benthic organisms would begin to recolonize immediately following the completion of the project and populations are expected to revert to pre-construction levels within approximately one year. Turbidity and activity from construction activities will displace resident fish to localities elsewhere in Long Island Sound. Habitat would be temporarily affected during beach fill placement as elevated suspended sediment levels may impact visual feeding efficiency, and may also affect respiratory efficiency likely causing displacement of mobile individuals. However, fish are expect to return to the area immediately following project activities. Placement activities will provide a certain level of benefit to those species able to feed on the organisms dispersed into the water column and exposed on the surface during construction activities.

According to an on-going monitoring program, piping plovers, a federally threatened species, nested at Southold Town Beach in 2004 but the habitat is currently rated as unsuitable due to the reduced width of the beach and anthropomorphic disturbances. The restored, enlarged beach area may be beneficial to this species and other shorebirds. The existing piping plover monitoring program conducted in the West Cove will be expanded to include the Central and East Cove to assure protection of the species. A piping plover monitor will be on-site during initial placement of sand to ensure project activities will not affect piping plover. Subsequent renourishment events will be conducted outside the piping plover nesting season (April 1 – August 31). This project is compatible with this policy.

POLICY 9 EXPAND RECREATIONAL USE OF FISH AND WILDLIFE RESOURCES IN COASTAL AREAS BY INCREASING ACCESS TO EXISTING RESOURCES, SUPPLEMENTING EXISTING STOCKS, AND DEVELOPING NEW RESOURCES.

Determination: Construction of the project will augment the use of the project site as a water oriented community resource and expand recreational use and access as well as enhance the habitat of the project site, promoting productivity and use by various aquatic and terrestrial species. The West Cove includes the Town Beach and will benefit from the addition of beach fill; the Central and East Coves (currently privately owned) will also be available for public use following project construction. Please see the attached Public Access Plan (PAP), prepared by the New York State Department of

Environmental Conservation (NYSDEC), for additional information on points of access. The post-construction project will support the use of the site as a water oriented recreational area which includes fishing and boating, as well as non-consumptive activities such as swimming, walking, sun bathing and wildlife/ bird watching. The project is consistent with this policy.

POLICY 11 BUILDINGS AND OTHER STRUCTURES WILL BE SITED IN THE COASTAL AREA SO AS TO MINIMIZE DAMAGE TO PROPERTY AND THE ENDANGERING OF HUMAN LIVES CAUSED BY FLOODING AND EROSION.

Determination: There are no structures to be constructed as part of this project. The project involves only beach fill. The increase in the area of beach will serve to protect adjacent property and decrease hazards to humans by helping to decrease erosion damage caused by storm surge and waves and threats to human life by protecting the roadway and infrastructure. The project is consistent with this policy.

POLICY 12 ACTIVITIES OR DEVELOPMENT IN THE COASTAL AREA WILL BE UNDERTAKEN SO AS TO MINIMIZE DAMAGE TO NATURAL RESOURCES AND PROPERTY FROM FLOODING AND EROSION BY PROTECTING NATURAL PROTECTIVE FEATURES INCLUDING BEACHES, DUNES, BARRIER ISLANDS AND BLUFFS.

Determination: The purpose of constructing this project is to restore natural barriers (beach) such that these restored features once again provide inherent levels of protection to inland habitats and residential properties from erosion. Construction of the project will help to maintain the coastal area. Portions of the Hashamomuck Cove project area are located within the 100 foot buffer zone for state-regulated freshwater wetlands and within the one half mile buffer zone of designated Significant Natural Communities. As occurs under current conditions, freshwater wetlands associated with the Arshamomaque Preserve wetland complex (located on the south side of Road 48) and two small palustrine wetlands (located north of Road 48), will be inundated by flood waters during extreme flood events. This project will have no direct impact on these inland natural habitats within the 50 year life of the project.

Temporary impacts to both terrestrial and aquatic habitats and associated biota are anticipated with full recovery within one to two years. The project is consistent with this policy.

POLICY 13 THE CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION STRUCTURES SHALL BE UNDERTAKEN ONLY IF THEY HAVE A REASONABLE PROBABILITY OF CONTROLLING EROSION FOR AT LEAST THIRTY YEARS AS DEMONSTRATED IN DESIGN AND CONSTRUCTION STANDARDS AND/OR ASSURED MAINTENANCE OR REPLACEMENT PROGRAMS.

Determination: The project has an engineered period of analysis of 50 years and provides for regular project renourishment estimated to occur approximately every 5

years during the project lifetime depending on severity of coastal storms to ensure effectiveness. The project is consistent with this policy.

POLICY 14 ACTIVITIES AND DEVELOPMENT, INCLUDING THE CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION STRUCTURES, SHALL BE UNDERTAKEN SO THAT THERE WILL BE NO MEASURABLE INCREASE IN EROSION OR FLOODING AT THE SITE OF SUCH ACTIVITIES OR DEVELOPMENT, OR AT OTHER LOCATIONS.

Determination: The beach fill and berm project has been designed to prevent/minimize erosion and flooding at the project site and construction/existence of this project will not increase flooding or erosion at the project site or at any other areas at other locations. This project is consistent with this policy.

POLICY 16 PUBLIC FUNDS SHALL ONLY BE USED FOR EROSION PROTECTIVE STRUCTURES WHERE NECESSARY TO PROTECT HUMAN LIFE, AND NEW DEVELOPMENT WHICH REQUIRES A LOCATION WITHIN OR ADJACENT TO AN EROSION HAZARD AREA TO BE ABLE TO FUNCTION, OR EXISTING DEVELOPMENT; AND ONLY WHERE THE PUBLIC BENEFITS OUTWEIGH THE LONG TERM MONETARY AND OTHER COSTS INCLUDING THE POTENTIAL FOR INCREASING EROSION AND ADVERSE EFFECTS ON NATURAL PROTECTIVE FEATURES.

Determination: The erosion protection project is necessary to support protection of essential infrastructure, residences, coastal features and habitats located adjacent to the Long Island Sound. Without the beach fill it is expected that the current rates of erosion will continue to cause significant damage to vital roadways and property and includes serious threats to human safety. The public benefits outweigh the costs in that there will be a significant reduction in the potential threat to human life and property by permitting continued access and egress to and from Orient Point by the residents as well as emergency and public service vehicles. This project is consistent with this policy.

POLICY 17 NON-STRUCTURAL MEASURES TO MINIMIZE DAMAGE TO NATURAL RESOURCES AND PROPERTY FROM FLOODING AND EROSION SHALL BE USED WHENEVER POSSIBLE.

Determination: Non-structural measures evaluated as part of the project included Elevating Buildings, Relocations and Buyouts. Building elevation would raise the buildings at risk by placing them on piles which is a relatively low cost measure and does not alter the natural processes of sand movement. While the pilings would reduce the damages from storm flooding, it is a temporary solution as the shoreline continues to erode and therefore, was not considered a viable measure. The relocation of roads and structures was also not a viable measure as the amount of buildable land along the shoreline is limited and cost for land is very expensive.

Under the Buyout alternative, properties at high risk of damage were evaluated for removal from the coastal hazard area. USACE appraised the properties by valuing a universe of properties (eighty parcels) as of 16 November 2015 based on recent sales data within the Southold, New York area. While this alternative does not alter the

natural processes of sand movement, there would continue to be a loss of shorefront land under this measure and this alternative would not be protective of the Town Beach or County Road 48. In addition, the cost analysis showed the annual net benefits for this alternative to be negative and therefore, this alternative was not considered to be viable.

The selected shore protection project consists of beach fill, which is a structural measure, but considered a soft structural measure. This alternative provides the highest level of protection while minimizing adverse environmental impacts. The alternative analysis determine that non-structural measures were not feasible for this project and therefore, this project is consistent with this policy.

POLICY 19 PROTECT, MAINTAIN, AND INCREASE THE LEVEL AND TYPES OF ACCESS TO PUBLIC WATER-RELATED RECREATION RESOURCES AND FACILITIES.

Determination: The project is restoration of beach and berm. Restoring the beach to increase storm and erosion protection also creates an expanded area for recreational activities. A 25' beach fill and berm will be constructed in the West Cove (Town Beach), Central Cove and East Cove. The Central and East Coves (currently privately owned) will be available for public use following construction (see attached Public Access Plan prepared by the New York State Department of Conservation). This project is consistent with this policy.

POLICY 20 ACCESS TO THE PUBLICLY-OWNED FORESHORE AND TO LANDS IMMEDIATELY ADJACENT TO THE FORESHORE OR THE WATER'S EDGE THAT ARE PUBLICLY-OWNED SHALL BE PROVIDED AND IT SHALL BE PROVIDED IN A MANNER COMPATIBLE WITH ADJOINING USES.

Determination: Where best suited, public access accommodations will be provided in a manner compatible with adjoining uses (see attached Public Access Plan prepared by the New York State Department of Conservation). Access to publicly owned lands will be safeguarded. This project is consistent with this policy.

POLICY 21 WATER-DEPENDENT AND WATER-ENHANCED RECREATION WILL BE ENCOURAGED AND FACILITATED, AND WILL BE GIVEN PRIORITY OVER NON-WATER-RELATED USES ALONG THE COAST.

Determination: The project will restore the beach and protect and enhance access to it (see attached Public Access Plan prepared by the New York State Department of Conservation). Water related recreational use is consistent with the project's purpose of preserving, enhancing, and restoring coastal resources. No boat launching facilities are located within project sites, however kayaks and canoes can access the water from the site and restoration of the beach will enhance this activity. No accepted water related uses are expected to be adversely affected. The project is consistent with this policy.

POLICY 22 DEVELOPMENT, WHEN LOCATED ADJACENT TO THE SHORE, WILL PROVIDE FOR WATER-RELATED RECREATION, WHENEVER SUCH USE IS COMPATIBLE WITH REASONABLY ANTICIPATED DEMAND FOR SUCH ACTIVITIES, AND IS COMPATIBLE WITH THE PRIMARY PURPOSE OF THE DEVELOPMENT.

Determination: The project may be considered “development” of the shoreline and in doing so provides for passive water-related recreational use of the site which is compatible with the project’s purpose. The project is consistent with this policy.

POLICY 25 PROTECT, RESTORE OR ENHANCE NATURAL AND MAN-MADE RESOURCES WHICH ARE NOT IDENTIFIED AS BEING OF STATEWIDE SIGNIFICANCE, BUT WHICH CONTRIBUTE TO THE OVERALL SCENIC QUALITY OF THE COASTAL AREA.

Determination: The project will preserve and restore shorefront beach habitat, enhancing a highly eroded area that includes sections of damaged bulkhead, seawalls and groins. The scenic coastal environment of Hashamomuck Cove is important to all who reside or visit there. Beach restoration and protection maintains/enhances this essential natural resource. The project will enhance and maintain these scenic resources of this section of Long Island Sound shoreline. This project is consistent with this policy.

POLICY 30 MUNICIPAL, INDUSTRIAL, AND COMMERCIAL DISCHARGE OF POLLUTANTS, INCLUDING BUT NOT LIMITED TO, TOXIC AND HAZARDOUS SUBSTANCES, INTO COASTAL WATERS WILL CONFORM TO STATE AND NATIONAL WATER QUALITY STANDARDS.

Determination: Pollutant discharge is not anticipated as a result of this project. Best management practices including an environmental protection plan regarding construction equipment, fueling sources etc. will be implemented to prevent leakage, spills and contaminations etc. The U.S. Army Corps of Engineers, New York District has prepared an Environmental Assessment that contains the appropriate analysis and regulatory documentation as required by the National Environmental Policy Act (NEPA) and other environmental laws and regulations. No significant discharges of HTRW are anticipated via this project. Therefore the project is consistent with this policy.

POLICY 35 DREDGING AND FILLING IN COASTAL WATERS AND DISPOSAL OF DREDGED MATERIAL WILL BE UNDERTAKEN IN A MANNER THAT MEETS EXISTING STATE PERMIT REQUIREMENTS AND PROTECTS SIGNIFICANT FISH AND WILDLIFE HABITATS, SCENIC RESOURCES, NATURAL PROTECTIVE FEATURES, IMPORTANT AGRICULTURAL LANDS, AND WETLANDS.

Determination: The Hashamomuck Cove project consists of beach fill which will cover areas of the intertidal and subtidal zone. These operations will temporarily impact fish and wildlife and their habitats, localized to the immediate project site and vicinity. All construction actions will be in compliance with state and federal regulations including NEPA and NYSDEC permit conditions. This includes clean, compatible sand to be used as fill and as needed, best management plans to minimize all impacts to significant habitats, flora, fauna, scenic resources and protective features. All construction related

adverse impacts are expected to be localized and short term, and full recovery to preconstruction conditions is expected. The project is consistent with this policy.

POLICY 38 THE QUALITY AND QUANTITY OF SURFACE WATER AND GROUNDWATER SUPPLIES WILL BE CONSERVED AND PROTECTED, PARTICULARLY WHERE SUCH WATERS CONSTITUTE THE PRIMARY OR SOLE SOURCE OF WATER SUPPLY.

Determination: The project will not impact ground water. Surface waters do not constitute primary or sole source water supplies. However, Long Island Sound surface waters will be temporarily affected on a localized scale by construction measures. Sand fill will not significantly impact any surface water or ground water resources in the long term. Impacts such as localized increases in turbidity will be minimized by strictly adhering to all best management practices such as maximizing construction actions during low tide. These impacts created by construction of the project are similar to those naturally occurring through coastal storms and in fact are of a much smaller magnitude because they are so localized. The project is consistent with this policy.

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

Determination: No State Air Quality Standards will be violated with the construction of this project. Final emissions calculations will be computed when the construction plans are finalized. However, due to the fact that Suffolk County NY is a severe non-attainment area there is no anticipated exceedance of *de minimus* trigger levels from any of the controlled pollutants. With the final emissions, construction plans will be coordinated with the State and configured so as not to violate State Laws. There are no long-term emissions expected from this project. The project is consistent with this policy.

POLICY 44 PRESERVE AND PROTECT TIDAL AND FRESHWATER WETLANDS AND PRESERVE THE BENEFITS DERIVED FROM THESE AREAS.

Determination: Construction of the project will be conducted in such a way using best management practices to minimize impacts to coastal resources during construction. These practices will include restrictive, protective covenants for storage of equipment and fuel together with regulations preventing damage to wetlands by vehicle activity, runoff from the project site or any other kind of contaminant or pollutant input. While portions of the Hashamomuck Cove project area are located within the 100 foot buffer zone for state-regulated freshwater wetlands and within the one half mile buffer zone of designated Significant Natural Communities, no impact on these inland natural habitats will occur as a result of project construction. The project is consistent with this policy.

TOWN OF SOUTHOLD, NEW YORK LOCAL WATERFRONT REVITALIZATION POLICIES

Project: Town of Southold, New York, Hashamomuck Cove Coastal Storm Damage Reduction Project.

The proposed plan for Hashamomuck Cove includes the placement of fill material in the West, Central, and East Coves to rebuild the beaches with a 25-foot (FT) wide beach and berm. The source of the initial sand for the beach fill will be from an upland off-site source. The initial beach nourishment is estimated to include the placement of 94,400 cubic yards (CY) in the West Cove, 83,000 CY in the Central Cove and 38,200 CY in the East Cove. Periodic renourishment is anticipated to occur approximately 9 times (every 5 years) over the 50 year period of analysis to maintain the project design profile. Each renourishment event is estimated to include the placement of 30,700 CY in the West Cove, 12,900 CY in the Central Cove and 20,600 CY in the East Cove. It is anticipated that renourishment sand will be trucked in from a certified upland source. The design profile of the beach berm is estimated to impact 164,000 square feet (SF) of intertidal habitat and 69,000 (SF) of subtidal habitat in the West Cove; 149,000 SF of intertidal habitat and 172,000 SF of subtidal habitat in the Central Cove; and 175,000 SF of intertidal habitat and 210,000 SF of subtidal habitat in the East Cove. Initial construction is estimated to take approximately one year to complete.

Applicant: U.S. Army Corps of Engineers, New York District.

Applicable Policies: Based on a review of the Town of Southold, New York Local Waterfront Revitalization Policies (LWRP), 11 policies and their sub-policies were found to be applicable to the proposed project. These policies are listed below.

Consistency Determination: All of the applicable policies were evaluated with respect to the Project's consistency with their stated goals. The Project has been found to be consistent with each policy and the proposal will be conducted in a manner consistent to the maximum extent practicable with the LWRP. Only the policies applicable to this project are presented here.

Policy 1: Foster a pattern of development in the Town of Southold area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a coastal location, and minimizes diverse effects of development.

Determination: The project will serve to stabilize the existing infrastructure including protection of residential property within the community of Hashamomuck Cove. Without the beach fill at West, Central, and East Coves, the erosion will continue to cause accelerated land losses, which would increase the risk of damage to nearby residences and reduce community character, open space and recreational use of the beach. The preferred project alternative will protect existing homes and the essential roadway and utilities. The proposed alternative will decrease beach/berm erosion and help rebuild the beach, maintain the natural areas including the beach and recreational open space. By restoring the beach the project will also enhance the aesthetics of the

site. The project will incorporate Best Management Practices during all phases of construction minimizing any impacts related to redevelopment. Also, the completed project will significantly decrease erosion and buffer impacts from episodic storms etc. and resulting loss of natural resources and possibly residences, commercial structures and the roadway. Therefore, the project is consistent with this policy.

Policy 2: Preserve historic resources of the Town of Southold.

2.1 Maximize preservation and retention of historic resources

D. Avoid potential adverse impacts of new development on nearby historic resources.

Determination: The project will be using beach fill on an existing beach to minimize erosion and widen an existing beach to protect residences, two commercial structures and the roadway. The area is already highly developed. There are no historic resources in the vicinity of the project area. Thus the project is consistent with this sub-policy.

2.3 Protect and enhance resources that are significant to the coastal culture of the Long Island Sound.

C. Where present, protect underwater historic, archaeological and cultural resources.

Determination: The project area is a highly dynamic area that is subject to wave action and erosion. The area possesses no sensitivity for historic, archaeological or cultural resources. The project is consistent with this sub-policy.

Policy 3: Enhance visual quality and protect scenic resources throughout the Town of Southold.

3.1 Enhance visual quality and protect scenic resources throughout the Town of Southold.

E. Preserve existing vegetation and establish new indigenous vegetation to enhance scenic quality:

Determination: Areas above mean high water (MHW) will be planted with native species such as American beachgrass (*Ammophila breviligulata*), seaside goldenrod (*Solidago sempervirens*), sea rocket (*Cakile edentula var. edentula*) and seaside spurge (*Euphorbia polygonifolia*). The area will be initially planted at a density optimal for piping plover habitat (approximately 30-40% cover) but will also provide scenic quality as vegetation will be randomly spaced to mimic natural conditions (e.g., an early successional, sparsely-vegetated beach strand habitat). The project is consistent with this sub-policy.

H. Protect the visual interest provided by active water-dependent uses.

Determination: The eroding beaches and failing bulkheads have impaired the visual quality of the project area by active water-dependent users. The proposed project will

improve the visual interest of the shore front as a wide beach is generally perceived as scenic by the public. The project is consistent with this sub-policy.

J. Protect visual quality associated with public lands, including public transportation routes, public parks and public trust lands and waters.

Determination: The project will preserve and restore shorefront beach habitat, enhancing a highly eroded area that includes a public beach and sections of damaged bulkhead, seawalls and groins. Beach restoration will enhance and protect the scenic coastal environment of Hashamomuck Cove and the Southold Town Beach (West Cove). The project is consistent with this sub-policy.

K. Protect visual quality associated with agricultural land, open space and natural resources.

Determination: The proposed alternative will decrease beach erosion and help rebuild the beach, maintain the natural area (e.g., the beach) and recreational open space. By restoring the beach, the project will also enhance the aesthetics of the site. The project is consistent with this sub-policy.

Policy 4 Minimize loss of life, structures and natural resources from flooding and erosion.

4.1 Minimize losses of human life and structures from flooding and erosion hazards.

Determination: The project provides erosion protection from storm events and waves to residences and utilities and infrastructure. The chosen alternative will provide the best level of protection for citizens and property while minimizing adverse environmental impacts. Thus the project complies with this sub-policy.

C. Enhance existing natural protective features and processes, and use non-structural measures which have a reasonable probability of managing erosion.

Determination: Non-structural measures evaluated as part of the project included Elevating Buildings, Relocations and Buyouts. These non-structure measures were determined to be infeasible (see Policy 17 for additional information). The selected shore protection project consists of beach fill, which is a structural measure, but considered a soft structural measure. This alternative provides the highest level of protection cost-effectively while minimizing adverse environmental impacts. The alternative analysis determine that non-structural measures were not feasible for this project and therefore, this project is consistent with this sub-policy.

4.2 Preserve and restore natural protective features.

Determination: The preferred alternative provides beach fill to help maintain a protective beach buffer. Periodic renourishment will maintain the beach and project property and infrastructure over the 50 year life of the project. Thus, the project is consistent with this sub-policy.

B. Maximize the protective capabilities of natural protective features by:

Determination: The West, Central, and East Coves of the Hashamomuck Cove protection project will be enhanced by restoring the condition of impaired natural protective features by placing a beach fill and berm. Thus the project is consistent with this sub-policy.

C. Minimize interference with natural coastal processes by:

Determination: The selected shore protection project consists of beach fill, which is a structural measure, but considered a soft structural measure. This alternative provides a supply of sand which simulates natural conditions allowing for the natural movement of unconsolidated materials for water and wind transport. Thus, the project is consistent with this sub-policy.

D. A limited interference with coastal processes may be allowed where the principal purpose of the structure is necessary to:

Determination: The project provides erosion protection from storm events and waves to residences, utilities, infrastructure and a public beach. The chosen alternative will provide the best level of protection for citizens and property while minimizing adverse environmental impacts. Thus the project complies with this sub-policy.

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

Determination: Implementation of the preferred alternative will protect a public roadway, utilities and infrastructure. The project will also greatly improve the beach aesthetics and recreational functionality on the Southold Town Beach. Public access to the Central and East Coves will be available post-construction (see attached Public Access Plan prepared by the New York State Department of Conservation). Therefore this project is consistent with this sub-policy.

4.5 Ensure that expenditure of public funds for flooding and erosion control projects results in a public benefit.

Determination: Implementation of the preferred alternative will protect an essential roadway and protect public utilities including emergency services. The project will also greatly improve the beach aesthetics and recreational functionality. Public access to the Central and East Coves will be available post-construction (see attached Public Access Plan prepared by the New York State Department of Conservation). Therefore this project is consistent with this sub-policy.

4.6 The siting and design of projects involving substantial public expenditure should factor in the trend of rising sea levels.

Determination: The direct and indirect effects of future sea level change on the identified Tentatively Selected Plan (beach nourishment) were incorporated in project design. Relative sea level change at Hashamomuck Cove is one of rising sea levels and costal storm analysis impacts (shore erosion). Future beach nourishment quantity estimates calculated for the project

incorporated the historical rate of rise over the 50-year period of analysis. The historical rate of sea level rise was determined to be 0.00961 ft/year (<http://corpsclimate.us/ccaceslcurves.cfm>). The project sensitivity to higher rates of rise was also considered. The future intermediate rate of sea level change (0.0185 ft/year) computed using modified NRC Curve I and equation 2 and 3 in EC 1165-2-212 and the future high rate of sea level change (0.046364) computed using modified NRC Curve III and equations 2 and 3 in EC 1185-2-212 were evaluated along with the historic rate. These relationships for future sea level change are coded within the Beach-fx coastal model and sea level change is internally computed continuously throughout the simulated project lifecycle of 50-years to confirm future project performance. In addition, the beach nourishment project is adaptable as the beach profile will be restored by periodic sand placement and the amount of sand to be placed can be adjusted as appropriate based on future observed conditions at the project area. Therefore, the project is consistent with this sub-policy.

Policy 5: Protect and improve water quality and supply in the Town of Southold.

5.1 Prohibit direct or indirect discharges, which would cause or contribute to contravention of water quality standards.

Determination: Project construction processes, including storage and fueling procedures, will utilize agency mediated regulatory guidelines and Best Management Practices to minimize the potential for spills or exposure to any potential contaminants or other hazardous materials. The completed project will reduce erosion thus decreasing the input of surface or soil related pollutants or fine sediment material known to degrade near shore areas. The preferred alternative supports this policy.

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

Determination: An erosion control plan will be developed and implemented during construction to minimize sedimentation to the sound. Additionally, an oil spill, HTRW contingency plan will be prepared for the construction equipment. Therefore, the project is consistent with this sub-policy.

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

Determination: An erosion control plan will be developed and implemented during construction to minimize sedimentation to the sound. Stormwater runoff will be controlled and avoided through the implementation of an oil spill and HTRW contingency plan for the construction equipment. Natural hydrologic conditions will be preserved. Appropriate best management practices will be utilized as determined by site characteristics, design standards, operational conditions, and maintenance programs. The project is consistent with sub-policy.

5.3 Protect and enhance quality of coastal waters.

Determination: The preferred alternative supports this sub-policy by decreasing erosion thus minimizing the introduction of soils and potential contaminants into the

Sound from surrounding properties, including the potential for inputs of toxic household material that might occur from storm damage to residences.

Policy 6: Protect and restore the quality and function of the Town of Southold ecosystem.

6.1 Protect and restore ecological quality throughout the Town of Southold.

Determination: The project will contribute to improvements of local water quality by reducing the potential of upland soil erosion and ensuing sedimentation within the shallow surface waters of the project area. Native vegetation will be planted along the upland edge of berm in appropriate areas to restore beach strand habitat. Storm damage protection also decreases the potential for input of pollutants from developed areas into the Sound that could result from flooding/damage of residences. The project is consistent with this sub-policy.

A. Avoid adverse changes to the Long Island Sound and the Peconic Bay ecosystems that would result from impairment of ecological quality as indicated by:

Determination: The project will protect from degradation the ecological quality of Long Island Sound through a reduction of upland soil erosion, sedimentation, and possible contamination input of pollutants from developed areas into the Sound from the adjacent residences. The project is consistent with this sub-policy.

B. Protect and restore ecological quality by adhering to the following measures.

Determination: The selected shore protection project consists of beach fill, which will simulate natural conditions regarding coastal transport processes by water and wind. In addition, areas above MHW will be planted with native species randomly spaced to mimic natural conditions (e.g., an early successional, sparsely-vegetated beach strand habitat). The project is consistent with this sub-policy.

6.3 Protect and restore tidal and freshwater wetlands.

Determination: The selected alternative is not expected to have any long term impacts to freshwater or tidal wetland areas. Freshwater wetlands are too far from the project area to be impacted. The total area of sand fill (footprint of the berm) for the initial construction of the project was estimated to be 164,000 square feet (SF) of intertidal habitat and 69,000 (SF) of subtidal habitat in the West Cove; 149,000 SF of intertidal habitat and 172,000 SF of subtidal habitat in the Central Cove; and 175,000 SF of intertidal habitat and 210,000 SF of subtidal habitat in the East Cove. However, erosion and coastal processes will continue to change and re-shape the beach over time. In general, it is expected that the amount of intertidal habitat will remain similar to existing conditions (intertidal habitat will move seaward) while subtidal habitat in the project will be reduced; the amount of which will vary over time depending on future conditions (e.g., slope of the beach, amount of erosion, etc.). This reduction in subtidal habitat is not considered significant in comparison to the quantity of similar habitat in the surrounding area. Therefore, the project is consistent with this sub-policy.

B. *Comply with statutory and regulatory requirements of the State's wetland laws.*

Determination: Portions of the Hashamomuck Cove project area are located within the 100 foot buffer zone for state-regulated freshwater wetlands and within the one half-mile buffer zone of designated Significant Natural Communities and there will be some temporary impacts to tidal habitats (see 6.3 for additional information). The local sponsor for the project will complete all applicable state and local wetland permitting as required by statute or regulation. The project is consistent with this sub-policy.

E. *Maintain buffers to ensure that adverse effects of adjacent or nearby development are avoided.*

Determination: No permanent or unnecessary disturbance will occur within existing buffer zones. The project is consistent with this sub-policy.

F. *Restore tidal wetlands and freshwater wetlands, wherever practical, to foster their continued existence as natural systems by:*

Determination: The construction of the beach fill and berms will restore a more natural beach that has been lost to erosion. There will be no impact to the adjacent Arshamomoque Preserve or freshwater wetlands. The project is consistent with this sub-policy.

6.4 Protect vulnerable fish, wildlife and plant species, and rare ecological communities.

Determination: The selected plan will not have significant adverse impacts to species within the project area. Turbidity and activity from construction activities will displace resident fish to localities elsewhere in the Sound. The temporary impacts to fish and benthic organisms will be localized. Habitat would be temporarily affected during beach fill placement, as elevated suspended sediment levels may impact visual feeding efficiency, and may also affect respiratory efficiency likely causing displacement of mobile individuals. Sessile benthic invertebrates will be buried or entrained and ultimately lost during construction. These areas will recover within a relatively short period of time. Placement activities will provide a certain level of benefit to those species able to feed on the organisms dispersed into the water column and exposed on the surface during construction activities.

There will be no impact to the adjacent Arshamomoque Preserve or freshwater wetlands. According to an on-going monitoring program, piping plovers, a federally threatened species, nested at Southold Town Beach in 2004 but the habitat is currently rated as unsuitable due to the reduced width of the beach and anthropomorphic disturbances. The restored, enlarged beach area may be beneficial to this species. The existing monitoring program in the West Cove will be expanded to include the Central and East Cove to assure protection of the species. A piping plover monitor will be on-site during the initial placement of sand (e.g., piping plover are not expected to be in the project area since the beach is currently unsuitable). However, subsequent renourishment events will be conducted outside the piping plover nesting season (April

1 – August 31). This project is compatible with this policy. This project is compatible with this sub-policy.

Policy 7: Protect and improve air quality in the Long Island Sound coastal area.

7.1 Control or abate existing and prevent new air pollution.

Determination: An air quality analysis will be completed for the project. Based upon the completed analysis, the emissions from the project are considered to have an insignificant impact on the regional air quality, and according to 40 CFR 93.153 (f) and (g) the proposed project is presumed to conform to the State Implementation Plan. This project is compatible with this sub-policy.

7.3 Limit sources of atmospheric deposition of pollutants to the Town of Southold, particularly from nitrogen sources.

Determination: An air quality analysis was completed for the project. Based upon the completed analysis, the emissions from the project are considered to have an insignificant impact on the regional air quality, and according to 40 CFR 93.153 (f) and (g) the proposed project is presumed to conform to the State Implementation Plan. See Policy 7.1. This project is compatible with this sub-policy.

Policy 8: Minimize environmental degradation in the Town of Southold from solid waste and hazardous substances and wastes

8.2 Manage hazardous wastes to protect public health and control pollution.

Determination: See Policy 5. All project/construction activities will be governed by an environmental protection plan and standard operating procedures (SOP). This project is compatible with this sub-policy.

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

Determination: The environmental protection plan will have contingencies to cover any potential contamination contingencies as well as best management plans to minimize potential hazards, spills etc. This project is compatible with this sub-policy.

8.4 Prevent and remediate discharge of petroleum products.

Determination: An oil spill prevention plan outlining precautionary measures to be taken during construction and rapid responsiveness strategies should an accidental oil spill occur will be developed. Petroleum spills and clean up strategies will developed for the project and located in the Hazardous material plan. This project is compatible with this sub-policy.

8.5 Transport solid waste and hazardous substances and waste in a manner which protects the safety, well-being, and general welfare of the public; the environmental resources of the state; and the continued use of transportation facilities.

Determination: All hazardous materials will be regulated under the project HTRW guidelines and Best Management practices developed in the project SOP. This project is compatible with this sub-policy.

Policy 9: Provide for public access to, and recreation use of, coastal waters, public lands, and public resources of the Town of Southold.

9.1 Promote appropriate and adequate physical public access and recreation to coastal resources.

Determination: The Hashamomuck Cove project will prevent the ongoing erosion and expand the physical public area for recreation. Public access to the project area is required by USACE public access requirements which are identified in ER 1165-2-130, and based upon U.S.C 426e(d). The Central and East Coves will be available for public use after construction (see attached Public Access Plan prepared by the New York State Department of Conservation) . The USACE policy requires public access points every one half mile, so that a visitor is never more than a quarter mile away from an access point while on the beach. The public access plan identifies locations for shore perpendicular access points to the beach along 1.6 mile project area at approximately ½ mile intervals. The access plan also identifies the proposed parking that would be included across the project area. The project is consistent with this sub-policy.

9.2 Protect and provide public visual access to coastal lands and waters from public sites and transportation routes where physically practical.

Determination: County Road is at 10 to 12 ft. NAVD88 and the proposed berm is at 6 ft. NAVD88, thus visual access to the shoreline from County Road will not be impacted.

9.3 Preserve the public interest in and use of lands and waters held in public trust by the state and the Town of Southold.

Determination: Public access to the project area is required by USACE public access requirements which are identified in ER 1165-2-130, and based upon U.S.C 426e(d). The Central and East Coves will be available for public use after construction (see attached Public Access Plan prepared by the New York State Department of Conservation). The project is consistent with this sub-policy.

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

Determination: A Public Access Plan has been developed and will be implemented by the New York State Department of Conservation. Access would be available at the Town Beach and at two additional locations along 1.6 mile project area (see attached Public Access Plan). The project is compatible with this sub-policy.

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

Determination: Public access to the project area is required by USACE public access requirements and in accordance with the Public Access Plan prepared by the New York

State Department of Conservation (see attached). Recreational use of the area will in accordance with Southold recreational use ordinances and bylaws and the Shorebird Management Plan prepared in coordination with jurisdictional agencies to ensure the protection of sensitive species (i.e., federal and state listed shorebirds during nesting season and horseshoe crab spawning season).

Policy 10: Protect Southold’s water-dependent uses and promote siting of new water-dependent uses in suitable locations.

10.1(a) Protect existing water dependent uses.

Determination: The rebuilding and stabilizing of Hashamomuck Cove will protect/preserve all water dependent uses generally associated with the utilization of a residential recreational beach. The project is compatible with this sub-policy.

Policy 11 Promote sustainable use of living marine resources in Long Island Sound, the Peconic Estuary and Town waters

11.2 Provide for commercial and recreational use of the Town of Southold’s finfish, shellfish, crustaceans and marine plants.

Determination: The rebuilding of the West Cove, Central Cove, and East Cove beaches with beach fill and berm of the Hashamomuck Cove project will cause temporary localized impacts to the benthic and finfish communities of the placement sites. The nearshore/intertidal/subtidal communities are anticipated to recover within 1 year. Once re-colonization has begun at the intertidal, subtidal, and nearshore areas, the overall diversity of the benthic community is expected to be restored to pre-construction levels. The restored beach will offer enhanced access to shoreline fishing under safer conditions promoting and enhancing recreational (surf) fishing. The project is compatible with this sub-policy.

11.4 Promote recreational use of marine resources.

Determination: The rebuilding and expansion of the Hashamomuck Cove project area will provide enhanced recreation opportunities and promote utilization of the beach for a variety of recreational activities including passive activities as sunbathing/walking, better and safer access to waterside activities such as fishing swimming, and personal watercraft usage (kayaks, canoes, etc.). The project is compatible with this sub-policy.