HUDSON RIVER HABITAT RESTORATION

ECOSYSTEM RESTORATION DRAFT INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT

New York State Coastal Zone Management Program Federal Consistency Determination



U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT September 2020

Table of Contents	
SCHODACK ISLAND STATE PARK	3
DEVELOPMENT POLICIES	5
FISH AND WILDLIFE POLICIES	6
FLOODING AND EROSION HAZARDS POLICIES	8
HENRY HUDSON PARK	
DEVELOPMENT POLICIES	
FISH AND WILDLIFE POLICIES	
FLOODING AND EROSION HAZARDS POLICIES	
MOODNA CREEK	
DEVELOPMENT POLICIES	
FISH AND WILDLIFE POLICIES	
FLOODING AND EROSION HAZARDS POLICIES	
REFERENCES	

SCHODACK ISLAND STATE PARK

NEW YORK COASTAL ZONE MANAGEMENT PROGRAM AND TOWN OF SCHODACK AND VILLAGE OF CASTLE-ON-HUDSON LOCAL WATERFRONT DEVELOPMENT PLAN FEDERAL CONSISTENCY DETERMINATION

As required under the Federal Coastal Zone Management Act, the USACE, New York District reviewed the Recommended Plan in relation to the applicable policies of the New York State Coastal Zone Management Program. A number of questions under Part C of the New York State Coastal Management Program (NYS CMP) Federal Consistency Assessment Form (New York State Department of State (NYSDOS), Division of Coastal Resources (DCR), 2003b) were answered in the affirmative; therefore, as stated under Part D, number two, it is necessary to analyze the Project in more detail with respect to its consistency with the *State Coastal Policies* (NYSDOS DCR, 2003c) of the NYS CMP, as well as The Town of Schodack and Village of Castle-on-Hudson's *Local Waterfront Revitalization Program* (LWRP). Following is a list of the state and town and village policies in question and a brief statement of how the Project is consistent with each of these policies.

Project: Town of Schodack, New York, Hudson River Habitat Restoration Ecosystem Restoration Feasibility Study - Schodack Island.

The proposed plan for Schodack Island is separated into a north and south section. Tidal wetland restoration north consists of approximately 1.8 acres of existing tidal habitat, dominated by invasive species such as common reed, would be treated and planted with native plant species. There is also a tidal wetland restoration and conversion to side channel connection consisting of approximately 2.31 acres of existing tidal habitat, dominated by invasive species such as common reed, would be treated and planted with native plant species. Additionally, minor grading would occur to convert wetland to a side channel connection point, which would facilitate the conveyance of flow. The shoreline would be stabilized as necessary to accommodate new flows.

Tidal wetland restoration south consists of approximately 15.69 acres of existing tidal habitat, dominated by invasive species such as common reed, would be treated. Minor grading would expand the existing tidal channel to accommodate increased flows with the proposed side channel connection. Fringe wetlands would be graded as necessary to stabilize the wetland and native vegetation would be planted. A side channel and tidal wetland corridor restoration consists of a side channel to be excavated in areas of historic fill placement to hydrologically connect Schodack Creek and the Hudson River with tidal waters. The channel would convey flow during low tide and higher water levels providing refuge to aquatic species during increased river velocities. A 400-foot tidal wetland corridor would be established adjacent to the channel. To accommodate local vehicular access to the southern portion of the island, a road crossing with rectangular reinforced box culverts would span the channel. The existing ski trail would also be redirected to this road crossing.

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

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.

DEVELOPMENT POLICIES

State and Town Policy 1 – *Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.*

Determination – Consistent: The Project will create two side channels to hydrologically connect Schodack Creek and the Hudson River with tidal waters. This will create habitat for fish possibly increasing recreational fishing.

Town Policy 1A – Development of a mixture of water dependent and enhanced uses shall be permitted on Campbell Island subject to controls, which protect the natural resources of the waterfront.

Determination - N/A: The Project is not on Campbell Island

Town Policy 1B – The Main Street of Castleton shall be revitalized in a manner that preserves the historic character of the existing buildings and promotes the diversity of uses compatible in a small scale business residential district.

Determination – N/A: The Project is not on Main Street of Castleton.

State and Town Policy 2 – *Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.*

Determination – Consistent: The restoration of intertidal wetland would support fish and bird populations, expanding recreational opportunities for fishing and bird watching.

State Policy 3 – Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

Determination – N/A: The Project will not affect any of the state's major ports.

State and Town Policy 4 – *Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities, which have provided such areas with their unique maritime identity.*

Determination – Consistent: The Project will provide minor beneficial impacts to the site's aesthetic and scenic resources through the restoration of wetland habitat. The wetlands will provide more habitat for fish and wildlife encouraging more wildlife watching and fishing.

State and Town Policy 5 – *Encourage the location of development in areas where public services and facilities essential to such development are adequate.*

Determination – N/A: The Project is dependent on natural resources existing on site.

State and Town Policy 6 – *Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.*

Determination – N/A: This policy is applicable to state agencies and local governments participating in the Waterfront Revitalization Program.

FISH AND WILDLIFE POLICIES

State and Town Policy 7 – *Significant Coastal Fish and Wildlife Habitats would be protected, preserved, and where practical, restored so as to maintain their viability as habitats.*

Determination – Consistent: The Project is in a Significant Coastal Fish and Wildlife Habitat. The Project North section will treat approximately 4.2 acres of existing tidal habitat, dominated by invasive species such as common reed, and plant with native plant species. Additionally, minor grading would occur to convert wetland to a side channel connection point, which would facilitate the conveyance of flow. In the South section of the Project, approximately 15.69 acres of existing tidal habitat, dominated by invasive species such as common reed, would be treated. Minor grading would expand the existing tidal channel to accommodate increased flows with the proposed side channel connection. Fringe wetlands would be graded as necessary to stabilize the wetland and native vegetation would be planted. A side channel would be excavated in areas of historic fill placement to hydrologically connect Schodack Creek and the Hudson River with tidal waters. The channel would convey flow during low tide and higher water levels providing refuge to aquatic species during increased river velocities. A 400-foot tidal wetland corridor would be established adjacent to the channel. To accommodate local vehicular access to the southern portion of the island, a road crossing with rectangular reinforced box culverts would span the channel. The existing ski trail would also be redirected to this road crossing. These actions will restore and protect Significant Coastal Fish and Wildlife Habitats.

Town Policy 7A – The Papscanee Marsh and Creek habitat shall be protected, preserved, and where practicable, restored so as to maintain its viability as a habitat.

Determination – N/A: The Project is not located on or near the Papscanee Marsh and Creek.

Town Policy 7B – The Schodack and Houghtaling Islands and Schodack Creek habitat shall be protected, preserved and, where practicable, restored so as to maintain its viability as a habitat.

Determination – Consistent: The Project is on Schodack Island and Schodack Creek. The Project North section on Schodack Island will treat approximately 4.2 acres of existing tidal habitat, dominated by invasive species such as common reed, and plant with native plant species. Additionally, minor grading would occur to convert wetland to a side channel connection point, which would facilitate the conveyance of flow. In the South section of the Project, approximately 15.69 acres of existing tidal habitat, dominated by invasive species such as common reed, would be treated. Minor grading would expand the existing tidal channel to accommodate increased flows with the proposed side channel connection. Fringe wetlands would be graded as necessary to stabilize the wetland and native vegetation would be planted. A side channel would be excavated in areas of historic fill placement to hydrologically connect Schodack Creek and the Hudson River with tidal waters. The channel would convey flow during low tide and higher water levels providing refuge to aquatic species during increased river velocities. A 400-foot tidal wetland corridor would be established adjacent to the channel. To accommodate local vehicular access to the southern portion of the island, a road crossing with rectangular reinforced box culverts would span the channel. The existing ski trail would also be redirected to this road crossing. These actions will restore and protect habitat on Schodack Island and Creek.

State and Town Policy 8 – *Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources.*

Determination – Consistent: Potentially hazardous materials typically used during construction activities that could pose a health risk to the environment if not properly stored and handled include motor fuel and oils used for vehicles and equipment. All handling of hazardous materials will be conducted in accordance with applicable Army, federal, state, and local solid and hazardous waste management policies and regulations throughout implementation of the Project. The Project will not involve any municipal, industrial, and commercial discharge of pollutants into coastal waters. None of the construction materials that will be used to support operation (i.e., stone and riprap materials) of the Project are considered hazardous.

State and Town 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 – Consistent: The restoration of wetlands and the restoration of side channels will create habitat for fish and wildlife. This will increase the recreational opportunities for wildlife viewing and fishing.

State Policy 10 – Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.

Determination – N/A: The Project is not related to commercial fishery development activities along the Hudson River waters.

FLOODING AND EROSION HAZARDS POLICIES

State and Town 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 – N/A: The Project does not involve buildings or other like structures.

State Policy 12 – Activities or development in the coastal area would 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 – Consistent: The Project is restoring natural resources, side channels and wetlands. The restoration of wetlands and restoration of side channels will increase flood protection.

State 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 30 years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Determination – Consistent: The Project is designed for a 50 – year life span. The Project has 10 – year Adaptive Monitoring and Management Plan. The Project will also provide an Operations, Maintenance, Repair, Replacement, and Rehabilitation manual to maintain the Project for its life.

Town Policy 13A – Repair and restoration of existing bulkheads shall be undertaken in a manner that will adequately protect adjacent property for appropriate use.

Determination – N/A: The Project does not involve bulkheads.

State and Town Policy 14 – Activities and development including the construction or reconstruction of erosion protection structures, shall be undertaken so that there would be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Determination – N/A: The restoration of the side channels will require stabilization of the shoreline. The shoreline will be stabilized as necessary and as discussed in Policy 13, it will be designed for a 50 - year life span.

State and Town Policy 15 – Mining, excavation, or dredging in coastal waters shall not significantly interfere with the natural coastal processes, which supply beach materials to land adjacent to such waters and shall be undertaken in a manner, which will not cause an increase in erosion of such land.

Determination – Consistent: The Project will carefully evaluate construction in a manner to prevent or minimize adverse impacts such as soil erosion and sediment alteration.

For example, work can be accomplished during low tidal periods or in areas temporarily disconnected from tidal waters. In addition, all appropriate BMPs for soil erosion and sediment control including use of an environmental bucket to perform mechanical dredging, silt fencing, turbidity curtains, and hay bales will be used.

State and Town 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 – Consistent: Both federal and state funds will be used to complete the Project, which is intended to restore the shoreline and the create wetlands. Erosion protection structures will protect the town park and deter erosion.

State Policy **17** – *Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.*

Town Policy 17 – Whenever possible, use non-structural measures to minimize damage to natural resources and property from flooding and erosion. Such measures shall include: (1) the setback of buildings and structures; (2) the planting of vegetation and the installation of sand fencing and drainage systems; (3) the reshaping of bluffs; (4) the flood-proofing of buildings or their elevation above base flood level.

Determination – Consistent: The Project involves creating additional salt marsh habitat and side channels. As mentioned for Policy 12, wetland habitats are natural buffers to storm-induced erosion and coastal flooding, as they are capable of retaining and/or baffling the flow of water. During construction, erosion to the Project site will be minimized by implementing approved BMP's, such as hay bales, silt fence, and/or sediment erosion control fabric and then planting with native vegetation species appropriate for the restored habitats.

State and Town Policy 18 – To safeguard the vital economic, social, and environmental interests of the state and of its citizens, proposed major action in the coastal area must give full consideration to those interests, and to the safeguards, which the state has established to protect valuable coastal resource areas.

Determination – Consistent: The purpose of the Project is to restore environmental resources altered by USACE actions. Full consideration was given to the economic, social, and environmental interests. The Environmental Assessment evaluated the economic, social, and environmental impacts, concluding no adverse long-term impacts to those interests.

State Policy **19** – *Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.*

Town Policy 19 – Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities so that these resources and facilities maybe fully utilized by the public in accordance with reasonably anticipated public recreation needs and protection of historic and natural resources.

Determination – Consistent: The Project will not impede access to the river or the park for recreational uses. The Project will continue to allow access through the park with a portion of a trail redirected to go over the created side channel.

Town Policy 19A – Access to the state owned Castleton Island State Park shall be designed in conjunction with the preparation of an overall plan for the development, use and management of state lands.

Determination – Consistent: Now called Schodack State Park, the Project will not impair access to the park

State and Town Policy 20– Access to 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 – N/A: Access to the foreshore and adjacent lands will be maintained. Wetlands will be restored on the shore of the Hudson River.

State Policy 21 – Water-dependent and water-enhanced recreation would be encouraged and facilitated, and would be given priority over non-water related uses along the coast.

Town 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, provided it is consistent with the preservation and enhancement of other coastal resources and takes into account demand for such facilities in facilitating such activities, priority shall be given to areas where access to the recreation opportunities of the coast can be provided by new or existing public transportation services and those areas where the use of the shore is severely restricted by existing development.

Determination – Consistent: The Project will improve water dependent recreational uses by creating fish habitat with the side channel restoration. This will also create habitat for bird watching.

State and Town Policy 22 – Development when located adjacent to the shore would 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 – N/A: The proposed restoration Project is located within a state owned park. The site is used for recreational purposes. However, as previously mentioned, the proposed undertaking will improve the quality of the coastal habitat thus providing improved opportunities for recreational usage. Since the proposed action does not

affect the current land-use or activities onsite, it is compatible with the surrounding areas.

State and Town Policy 23 – Protect, enhance, and restore structures, districts, areas of sites that are of significance in history, architecture, archeology, or culture of the State, its communities, or the Nation.

Determination – Consistent: The Proposed Action will be consistent through the implementation of design and siting measures in conjunction with recommendations from the NYSHPO and the NYSDOS that will avoid, minimize, or mitigate significant adverse impacts on historic and scenic resources within the Project area. USACE is in consultation with the NYSHPO, interested parties, and federally recognized Tribes, regarding the Project, and will implement any recommendations that will avoid potential adverse impacts on cultural resources. A draft Memorandum of Agreement has been prepared and is undergoing review by the NYSHPO and other interested parties to mitigate this adverse effect.

State Policy 24 – Prevent impairment of scenic resources of statewide significance.

Town Policy 24 – Prevent impairment of scenic resources of statewide significance as identified on the coastal area map. impairment shall include: (1) the irreversible modification of geological forms, the destruction or removal of structures, whenever the geologic forms, vegetation or structures are significant to the scenic quality of an identified resource; and (2) the addition of structures which because of siting or scale will reduce identified views or which because of scale, form, or materials will diminish the scenic quality of an identified resource.

Determination – Consistent: The site is within the New York State Significant Coastal Fish and Wildlife Habitat. The Project will restore side channels and wetlands within the park. Scenic resources at the park will be maintained.

State and Town 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 – Consistent: The Project will create and restore wetlands and create a side channel. This will increase the scenic quality of the coastal area.

State Policy 26 – Conserve and protect agricultural lands in the state's coastal area.

Town Policy 26 – To conserve and protect agricultural lands in the state's coastal area, an action shall not result in a loss, nor impair the productivity, of important agricultural lands, as identified on the coastal area map, if that loss or impairment would adversely affect the viability of agriculture in an agricultural district or if there is no agricultural district, in the area surrounding such lands.

Determination – N/A: The Project area has no agricultural lands.

State and Town Policy 27 – Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

Determination – N/A: The Project does not involve the siting or construction of major energy facilities

State and Town Policy 28 – Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

Determination - N/A: The Project does not involve ice management.

State Policy 29 – The development of offshore uses and resources, including renewable energy resources, shall accommodate New York's long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.

Determination – N/A: The Project does not involve the development of energy resources.

State and Town 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 – Consistent: The Project will not involve any municipal, industrial, and commercial discharge of pollutants into coastal waters. Industry and best management practices (BMPs) for conducting in-stream work will be implemented to protect water quality.

State and Town Policy 31 – State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

Determination - N/A: The Project will not involve the review of coastal water classifications or the modification of water quality standards.

State and Town Policy 32 – Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

Determination – N/A: The Project will not occur in a small community with need of alternative sanitary waste treatment, or affect any local sanitary waste facilities.

State and Town Policy 33 – Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Determination – Consistent: All construction activities will be conducted in accordance with applicable federal, state, and local regulations for erosion and sediment control; a site-specific Storm Water Pollution Prevention Plan and erosion and sediment control plan; and requirements of the NYS Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity (GP-0-08-001) for ground disturbances involving one or more acres.

A site-specific stormwater pollution prevention plan (SWPPP) will be prepared in accordance with NYSDEC standards and New York SPDES permit requirements for construction sites disturbing 1 acre (0.4 hectare) or more to have an erosion and sediment control plan (ESCP). Therefore, prior to the start of Project construction, preparation of an ESCP is required in accordance with the NYSDEC *Standards and Specification for Erosion and Sediment Control* (NYSDEC 2005). The ESCP will be included in the site-specific SWPPP prepared for the Project, and will identify site conditions and temporary and permanent erosion, sediment, and stormwater risk management measures. Any erosion protection structures deemed necessary in the plan for long-term erosion control in and around the Project site will be designed, constructed, and maintained according to NYSDEC and United States Environmental Protection Agency standards. Temporary measures that may be implemented during construction include stabilized construction entrances, stormwater inlet protection, silt fence, and erosion control blankets.

State and Town Policy 34 – Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

Town Policy 34A – No vessel shall discharge waste or other water unsuitable for human consumption into the coastal waters with the intent of taking on fresh water from the river to be transported elsewhere for sale or use without obtaining all required approvals and permits.

Determination – N/A: The Project will not involve the discharge of waste materials into coastal waters from vessels.

State and Town 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 – Consistent: The Project will not involve dredging or in coastal waters. It will involve the removal of upland material to create the side channel. All excavated material will be utilized onsite. All activities will be done with all necessary permits and is designed to enhance the environment.

State and Town Policy 36 – Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Determination – N/A: The Project will not involve activities related to the shipment and storage of petroleum and other hazardous materials.

State and Town Policy 37 – Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics, and eroded soils into coastal waters.

Determination – Consistent: Stormwater from the Project will be controlled as described for Policy 33. Approved BMPs for erosion and sediment control will be used during ground-disturbing activities.

State and Town 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 – Consistent: See text for Policy 33 and 37. The Project would not affect primary or sole source water supplies, and would not adversely affect surface or ground waters. Construction activities will be designed to reduce the potential for hazardous material spills; however, if a hazardous material spill does occur, USACE will report, contain, and remediate the affected area in accordance with Army and NYSDEC regulations, and the Project-specific SWPPP and ESCP. Under the Proposed Action, all solid wastes and construction debris generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and New York policies. No significant adverse impacts on groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources are anticipated to result from implementation of the Proposed Action.

State and Town Policy 39 – The transport, storage, treatment, and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources

Determination – Consistent: All solid wastes generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and state policies. Under the Proposed Action, all solid wastes and construction debris generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and New York policies. No significant adverse impacts on groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources are anticipated to result from implementation of the Proposed Action.

State Policy 40 – Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

Determination – N/A: The Project will not involve the discharge of effluent from major steam electric generating and industrial facilities

State and Town Policy 41 – Land use or development in the coastal area will not cause national or state air quality standards to be violated.

Determination – Consistent: The Project has been assessed for consistency with national and state air quality standards. Emissions attributable to the Project will be below the General Conformity Rule applicability thresholds

State and Town Policy 42 – Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act

Determination – N/A: The Project will not involve the reclassification of land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

State and Town Policy 43 – Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Determination - Consistent: See the text for Policy 41.

State and Town Policy 44 – *Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.*

Determination – Consistent: The Project will restore and create approximately 19 acres of wetlands. This will involve the removal of invasive plants and the planting of native vegetation. Wetland benefits will increase as determined by the Evaluation of Planned Wetland analysis.

HENRY HUDSON PARK

NEW YORK COASTAL ZONE MANAGEMENT PROGRAM FEDERAL CONSISTENCY DETERMINATION

As required under the Federal Coastal Zone Management Act, the USACE, New York District reviewed the Recommended Plan in relation to the applicable policies of the New York State Coastal Zone Management Program. A number of questions under Part C of the New York State Coastal Management Program (NYS CMP) Federal Consistency Assessment Form (New York State Department of State (NYSDOS), Division of Coastal Resources (DCR), 2003b) were answered in the affirmative; therefore, as stated under Part D, number two, it is necessary to analyze the Project in more detail with respect to its consistency with the *State Coastal Policies* (NYSDOS DCR, 2003c) of the NYS CMP. Following is a list of the state policies in question and a brief statement of how the Project is consistent with each of these policies.

Project: Town of Bethlehem, New York, Hudson River Habitat Restoration Ecosystem Restoration Feasibility Study – Henry Hudson Park.

The proposed plan for Henry Hudson Park is separated into a western tidal wetland, vegetated riprap, and cove tidal wetland restoration sections. The western tidal wetland restoration consists of approximately 3.6 acres of existing upland will be converted to tidal wetland. Soils would be excavated to an average depth of five feet below existing grade to achieve tidal wetland hydrology. The soils would be amended as necessary and planted with native vegetation. The shoreline would also be stabilized with rock to dissipate erosive forces.

The vegetated riprap creation is along the Hudson River shoreline, where the existing timber cribbing would remain. The concrete cap would be removed and replaced with riprap and graded to achieve a 1V:3H slope. The void spaces of the riprap would be filled with soil and subsequently planted with native vegetation. These modifications to the structure would not significantly encroach upon the park's upland areas.

The Cove Tidal Wetland Creation is along the northern bank on the Vloman Kill, A coir log toe protection would be installed at the toe of the slope around the existing mudflat, and riprap would be installed at the top of slope to stabilize existing scour. Native wetland vegetation would be planted within the intertidal area.

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

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.

DEVELOPMENT POLICIES

State Policy 1 – Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Determination – Consistent: The Project will repair the shoreline with vegetated riprap increasing habitat for fish and stabilizing the shoreline. This will allow safer access to the shoreline and create habitat for fish possibly increasing recreational fishing. The created wetland can also provide educational uses through signage.

State Policy 2 – *Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.*

Determination – Consistent: The restoration of intertidal wetland and a vegetated riprap shoreline would support fish and bird populations, expanding recreational opportunities for fishing and bird watching.

State Policy 3 – Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

Determination – N/A: The Project will not affect any of the state's major ports.

State Policy 4 – Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities, which have provided such areas with their unique maritime identity.

Determination – Consistent: The Project will provide minor beneficial impacts to the site's aesthetic and scenic resources through the restoration of wetland habitat and stabilization of the shoreline. The wetlands and the vegetated riprap shoreline will provide more habitat for fish and wildlife encouraging more wildlife watching and fishing.

State Policy 5 – *Encourage the location of development in areas where public services and facilities essential to such development are adequate.*

Determination – N/A: The Project is dependent on natural resources existing on site.

State Policy 6 – *Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.*

Determination – N/A: This policy is applicable to state agencies and local governments participating in the Waterfront Revitalization Program.

FISH AND WILDLIFE POLICIES

State Policy 7 – Significant Coastal Fish and Wildlife Habitats would be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Determination – Consistent: The Project is in a Significant Coastal Fish and Wildlife Habitat. The shoreline is being stabilized and planted with vegetation creating habitat for fish. The restoration of the wetland area will also provide fish habitat. These actions will restore and protect Significant Coastal Fish and Wildlife Habitats.

State Policy 8 – Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources.

Determination – Consistent: Potentially hazardous materials typically used during construction activities that could pose a health risk to the environment if not properly stored and handled include motor fuel and oils used for vehicles and equipment. All handling of hazardous materials will be conducted in accordance with applicable Army, federal, state, and local solid and hazardous waste management policies and regulations throughout implementation of the Project. The Project will not involve any municipal, industrial, and commercial discharge of pollutants into coastal waters. None of the construction materials that will be used to support operation (i.e., stone and riprap materials) of the Project are considered hazardous.

State 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 – Consistent: The restoration of wetlands and the restoration of the shoreline will create habitat for fish and wildlife. This will increase the recreational opportunities for wildlife viewing and fishing.

State Policy 10 – Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.

Determination – N/A: The Project is not related to commercial fishery development activities along the Hudson River waters.

FLOODING AND EROSION HAZARDS POLICIES

State 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 – N/A: The Project does not involve buildings or other like structures.

State Policy 12 – Activities or development in the coastal area would 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 – Consistent: The Project is restoring natural resources, shoreline and wetlands. The restoration of the shoreline and restoration of wetlands will increase flood protection.

State 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 30 years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Determination – Consistent: The Project is designed for a 50 – year life span. The Project has 10 – year Adaptive Monitoring and Management Plan. The Project will also provide an Operations, Maintenance, Repair, Replacement, and Rehabilitation manual to maintain the Project for its life.

State Policy 14 – Activities and development including the construction or reconstruction of erosion protection structures, shall be undertaken so that there would be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Determination – Consistent: The restoration of the wetlands and the restoration of the shoreline will require stabilization. The shoreline and wetland will be stabilized as necessary and as discussed in Policy 13, it will be designed for a 50 – year life span.

State Policy 15 – Mining, excavation, or dredging in coastal waters shall not significantly interfere with the natural coastal processes, which supply beach materials to land adjacent to such waters and shall be undertaken in a manner, which will not cause an increase in erosion of such land.

Determination – Consistent: The Project will not be mining or dredging in the coastal waters. There may be small amount of excavation at the site in order to restore and stabilize the shoreline and create the wetland. These activities will reduce erosion, allowing more natural processes to take place.

State 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 – Consistent: Both federal and state funds will be used to complete the Project, which is intended to restore the shoreline and the create wetlands. Erosion protection structures will protect the town park and deter erosion.

State Policy **17** – *Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.*

Determination – Consistent: The restoration of wetlands on the Project site can function as flood prevention measures and will help reduce erosion. The vegetation planted on the shoreline will also help reduce erosion.

State Policy 18 – To safeguard the vital economic, social, and environmental interests of the state and of its citizens, proposed major action in the coastal area must give full consideration to those interests, and to the safeguards, which the state has established to protect valuable coastal resource areas.

Determination – Consistent: The purpose of the Project is to restore environmental resources altered by USACE actions. Full consideration was given to the economic, social, and environmental interests. The Environmental Assessment evaluated the economic, social, and environmental impacts, concluding no adverse long-term impacts to those interests.

State Policy **19** – *Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.*

Determination – Consistent: The Project will not impede access to the river for recreational uses. The boat launch will be maintained or replaced. Currently part of the shoreline are fenced off due to erosion and the Project will repair that erosion and return access to the shoreline.

State Policy 20– Access to 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 – Consistent: Access to the water's edge will be maintained or increased with the Project. The Project will improve the quality of the publicly owned foreshore of Henry Hudson Park. Although access to the site will be limited during the 12-month construction period, the long-term effects of the Project will benefit the public by improving the recreational uses within the park.

State Policy 21 – Water-dependent and water-enhanced recreation would be encouraged and facilitated, and would be given priority over non-water related uses along the coast.

Determination – Consistent: The Project will improve the water-related recreational and environmental uses of an existing city park by restoring native coastal habitats. Since the site is already an existing city park, there will be no increased demands on the local

community including the transportation system nor will there be impacts to onsite or adjacent land uses.

State Policy 22 – Development when located adjacent to the shore would 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 – Consistent: The proposed restoration Project is located within the city owned park. The site is already used for water-related recreational purposes. However, as previously mentioned, the proposed undertaking will improve the quality of the coastal habitat thus providing improved opportunities for recreational usage. Since the proposed action does not affect the current land-use or activities onsite, it is compatible with the surrounding areas of Henry Hudson Park.

State Policy 23 – Protect, enhance, and restore structures, districts, areas of sites that are of significance in history, architecture, archeology, or culture of the State, its communities, or the Nation.

Determination – Consistent: The Proposed Action will be consistent through the implementation of design and siting measures in conjunction with recommendations from the NYSHPO and the NYSDOS that will avoid, minimize, or mitigate significant adverse impacts on historic and scenic resources within the Project area. USACE is in consultation with the NYSHPO, interested parties, and federally recognized Tribes, regarding the Project, and will implement any recommendations that will avoid potential adverse impacts on cultural resources. A draft Memorandum of Agreement has been prepared and is undergoing review by the NYSHPO and other interested parties to mitigate this adverse effect.

State Policy 24 – Prevent impairment of scenic resources of statewide significance.

Determination – Consistent: The site is within the New York State Significant Coastal Fish and Wildlife Habitat. The Project will restore the shoreline with vegetated riprap and create wetlands within the park. Scenic resources at the park will be maintained and possibly improved.

State 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 – Consistent: The Project will create wetlands and restore the shoreline with vegetated riprap. This will increase the scenic quality of the coastal area.

State Policy 26 – Conserve and protect agricultural lands in the state's coastal area.

Determination – N/A: The Project area has no agricultural lands.

State Policy 27 – Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

Determination – N/A: The Project does not involve the siting or construction of major energy facilities.

State Policy 28 – Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

Determination - N/A: The Project does not involve ice management.

State Policy 29 – The development of offshore uses and resources, including renewable energy resources, shall accommodate New York's long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.

Determination – N/A: The Project does not involve the development of energy resources.

State 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 – N/A: The Project will not involve any municipal, industrial, and commercial discharge of pollutants into coastal waters. Industry and best management practices (BMPs) for conducting in-stream work will be implemented to protect water quality.

State Policy 31 – State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

Determination - N/A: The Project will not involve the review of coastal water classifications or the modification of water quality standards.

State Policy 32 – Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

Determination – N/A: The Project will not occur in a small community with need of alternative sanitary waste treatment, or affect any local sanitary waste facilities.

State Policy 33 – Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Determination – Consistent: All construction activities will be conducted in accordance with applicable federal, state, and local regulations for erosion and sediment control; a site-specific Storm Water Pollution Prevention Plan and erosion and sediment control plan; and requirements of the NYS Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity (GP-0-08-001) for ground disturbances involving one or more acres.

A site-specific stormwater pollution prevention plan (SWPPP) will be prepared in accordance with NYSDEC standards and New York SPDES permit requirements for construction sites disturbing 1 acre (0.4 hectare) or more to have an erosion and sediment control plan (ESCP). Therefore, prior to the start of Project construction, preparation of an ESCP is required in accordance with the NYSDEC *Standards and Specification for Erosion and Sediment Control* (NYSDEC 2005). The ESCP will be included in the site-specific SWPPP prepared for the Project, and will identify site conditions and temporary and permanent erosion, sediment, and stormwater risk management measures. Any erosion protection structures deemed necessary in the plan for long-term erosion control in and around the Project site will be designed, constructed, and maintained according to NYSDEC and United States Environmental Protection Agency standards. Temporary measures that may be implemented during construction include stabilized construction entrances, stormwater inlet protection, silt fence, and erosion control blankets.

State Policy 34 – Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

Determination – N/A: The Project will not involve the discharge of waste materials into coastal waters from vessels.

State 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 – Consistent: The Project will not involve dredging or in coastal waters or the disposal of dredged material. It will involve the filling in coastal water with riprap and vegetation. All activities will be done with all necessary permits and is designed to enhance the environment.

State Policy 36 – Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Determination – N/A: The Project will not involve activities related to the shipment and storage of petroleum and other hazardous materials.

State Policy 37 – Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics, and eroded soils into coastal waters.

Determination – Consistent: Approved BMPs for erosion and sediment control will be used during ground-disturbing activities, and the Project will provide for long-term restoration of the shoreline and create wetlands, which will deter erosion.

State 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 – Consistent: The surface water of the Hudson River will be protected through BMPs and the restoration of the shoreline and the restoration of the wetlands.

State Policy 39 – The transport, storage, treatment, and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.

Determination – Consistent: All solid wastes generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and state policies. Under the Proposed Action, all solid wastes and construction debris generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and New York policies. No significant adverse impacts on groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources are anticipated to result from implementation of the Proposed Action.

State Policy 40 – Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

Determination – N/A: The Project will not involve the discharge of effluent from major steam electric generating and industrial facilities.

State Policy 41 – Land use or development in the coastal area will not cause national or state air quality standards to be violated.

Determination – Consistent: The Project has been assessed for consistency with national and state air quality standards. Emissions attributable to the Project will be below the General Conformity Rule applicability thresholds.

State Policy 42 – Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

Determination – N/A: The Project will not involve the reclassification of land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

State Policy 43 – Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Determination - Consistent: See the text for Policy 41.

State Policy 44 – Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Determination – Consistent: The Project will create 3.6 acres of wetlands as well as restoring the shoreline with vegetated riprap. The site is currently upland but will be converted into wetlands.

MOODNA CREEK

NEW YORK COASTAL ZONE MANAGEMENT PROGRAM FEDERAL CONSISTENCY DETERMINATION

As required under the Federal Coastal Zone Management Act, the USACE, New York District reviewed the Recommended Plan in relation to the applicable policies of the New York State Coastal Zone Management Program. A number of questions under Part C of the New York State Coastal Management Program (NYS CMP) Federal Consistency Assessment Form (New York State Department of State (NYSDOS), Division of Coastal Resources (DCR), 2003b) were answered in the affirmative; therefore, as stated under Part D, number two, it is necessary to analyze the Project in more detail with respect to its consistency with the *State Coastal Policies* (NYSDOS DCR, 2003c) of the NYS CMP. Following is a list of the state policies in question and a brief statement of how the Project is consistent with each of these policies.

Project: Town of Cornwall, New York, Hudson River Habitat Restoration Ecosystem Restoration Feasibility Study – Moodna Creek.

Three Aquatic Organism Passage (AOP) barriers on Moodna Creek in Orange County are planned to be removed to improve passage, AOP #1: Utility Crossing; AOP #2: Firth Cliff Dam; and AOP #3: Orr's Mill Dam

<u>AOP 1</u>

This alternative entails decommissioning the utility line and removal of the section that crosses Moodna Creek. The sanitary sewer line is a 16-inch ductile iron pipe (DIP); an approximately 100-foot-long section spans the channel and is contained in a concrete encasement approximately five feet wide and five feet deep. The recommended approach to decommissioning the line includes accessing the existing manhole on the floodplain to the north (i.e. river left side), and sealing-off the incoming sanitary line with concrete or similar means. On the river right bank, where the utility descends steeply from the inactive railroad bed at the top of the slope, the recommended approach to decommissioning this sewer line is to break the existing line at the base of the slope and install a manhole in connection with upgradient line, but with no outlet toward the Creek. The installation of the manhole on river right creates a stable and secure closure to the existing sewer line, and prevents any inadvertent leakage or discharge of fluid into the Creek, in the event of any unknown inflow or infiltration into the sewer line. A total of 175 feet of sewer line (100-foot concrete encased section and the 75-foot section under floodplain soils leading to the existing manhole) would be excavated and disposed of offsite.

<u>AOP 2</u>

This alternative entails demolition and removal of the concrete spillway to the full vertical extent and, pending favorable results of impounded sediment analysis, passive release of the impounded sediment. The abutments attached to the valley wall on river

left and the building foundations on river right may be left in place pending observations from a more detailed site investigation.

Approximately 1,300 feet upstream of the dam, a pronounced boulder riffle indicates the upstream limit of the impoundment and would serve as a natural grade control that would limit the upstream extent of any channel adjustment in the event of dam removal. The well-vegetated banks and narrow valley walls indicate little potential for lateral channel adjustment or meandering. In general, the geomorphic response to dam removal would follow a predictable trajectory: (1) initial water-lowering, (2) impounded sediment evacuates from the impoundment as head-cut moves upstream from the dam and then widens to the full span of the channel, and (3) temporary deposition of coarse-grained sediment in the downstream reaches. By the end of the first growing season, herbaceous, annual plants would begin to occupy the newly exposed upper banks; perennial species would begin to dominate by the end of the second growing season.

<u>AOP 3</u>

This entails breaking through the spillway concrete crest, and underlying cobble/boulder-filled timber crib structure, removing the vertical extent of a central portion of the spillway, and leaving the side portions in place. The ends of the spillway could be stabilized at their base with placed boulders, while the upper portions could be left open for visibility of the spillway's interior construction.

With the full vertical extent of the central portion of the spillway removed, a similar channel response is likely to be triggered as with full removal but with more retention of sediment on the channel margins proximal to the dam. The pronounced boulder riffle approximately 900 feet upstream of the dam would serve as a natural grade control that would limit the upstream extent of any vertical channel adjustment in the main channel if the dam is notched. The multiple extremely large boulders (i.e. five to ten feet in diameter) that are situated immediately upstream of the spillway are anticipated to form boulder-dominated steps or a cascade. Following dam notching, finer sediment would transport downstream, while the larger cobble and boulder may shift position. Due to the steep slope that is anticipated to re-form, full fish passage conditions for the full range of target fish could not be guaranteed to form passively and thus, some active re-grading and re-positioning of boulders may be necessary to facilitate the formation of a stable grade control and fish passage conditions, this alternative also includes supplementing this reach with large boulders to establish grade control.

The cobble-dominated tributary confluence requires additional investigation and would likely necessitate a stone grade control structure to prevent undermining of the over-lying residence.

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

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.

DEVELOPMENT POLICIES

State Policy 1 – Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Determination – N/A: The Project is not within an underutilized waterfront area.

State Policy 2 – *Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.*

Determination – N/A: The Project is not creating any facilities.

State Policy 3 – Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

Determination – N/A: The Project will not affect any of the state's major ports.

State Policy 4 – Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities, which have provided such areas with their unique maritime identity.

Determination – N/A: The Project will not impact any harbors.

State Policy 5 – *Encourage the location of development in areas where public services and facilities essential to such development are adequate.*

Determination – N/A: The Project is not a development project.

State Policy 6 – *Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.*

Determination – N/A: This policy is applicable to state agencies and local governments participating in the Waterfront Revitalization Program.

FISH AND WILDLIFE POLICIES

State 7 – Significant Coastal Fish and Wildlife Habitats would be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Determination – Consistent: The Project removal of the AOPs would reconnect to previously disconnected river reaches and restore passage for some resident species and American Eel. In addition, the removals are anticipated to restore the natural transport of bedload sediment, which in turn could rejuvenate benthic habitat conditions for aquatic invertebrates downstream, and offset any vertical channel degradation that has occurred in the decades and centuries since AOPs construction.

State Policy 8 – *Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources.*

Determination – Consistent: Potentially hazardous materials typically used during construction activities that could pose a health risk to the environment if not properly stored and handled include motor fuel and oils used for vehicles and equipment. All handling of hazardous materials will be conducted in accordance with applicable Army, federal, state, and local solid and hazardous waste management policies and regulations throughout implementation of the Project. The Project will not involve any municipal, industrial, and commercial discharge of pollutants into coastal waters. None of the construction materials that will be used to support operation of the Project are considered hazardous.

State 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 – Consistent: The removal of the AOPs will allow the free flow of fishes further up the Moodna Creek thereby increasing areas of recreational fishing.

State Policy 10 – Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.

Determination – N/A: The Project is not related to commercial fishery development activities along the Hudson River waters.

FLOODING AND EROSION HAZARDS POLICIES

State 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 – N/A: The Project does not involve buildings or other like structures.

State Policy 12 – Activities or development in the coastal area would 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 – Consistent: The Project is restoring natural resources, removal of the AOPs. Removal of the AOPs is not anticipated to impact flooding or erosion conditions.

State 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 30 years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Determination – Consistent: The Project will remove the AOPs and not require further Operations, Maintenance, Repair, Replacement, and Rehabilitation.

State Policy 14 – Activities and development including the construction or reconstruction of erosion protection structures, shall be undertaken so that there would be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Determination – N/A: Erosion protection structures are not part of the Project.

State Policy 15 – Mining, excavation, or dredging in coastal waters shall not significantly interfere with the natural coastal processes, which supply beach materials to land adjacent to such waters and shall be undertaken in a manner, which will not cause an increase in erosion of such land.

Determination – Consistent: The Project will carefully evaluate construction in a manner to prevent or minimize adverse impacts such as soil erosion and sediment alteration. In addition, all appropriate BMPs for soil erosion and sediment control including use of silt fencing, turbidity curtains, and hay bales.

State 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 – N/A: Both federal and state funds will be used to complete the Project however; permanent erosion control structures are not anticipated to be needed.

State Policy **17** – *Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.*

Determination – N/A: The Project is not creating involve flooding or erosion measures.

State Policy 18 – To safeguard the vital economic, social, and environmental interests of the state and of its citizens, proposed major action in the coastal area must give full consideration to those interests, and to the safeguards, which the state has established to protect valuable coastal resource areas.

Determination – Consistent: The purpose of the Project is to restore environmental resources altered by the creation of the AOPs. Full consideration was given to the economic, social, and environmental interests. The Environmental Assessment evaluated the economic, social, and environmental impacts, concluding no adverse long-term impacts to those interests.

State Policy **19** – *Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.*

Determination – Consistent: The Project may increase recreational fishing with the increase in fish passage and may increase canoe and kayak usage with the removal of the AOPs.

State Policy 20 – Access to 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 – Consistent: Access from the land is restricted as it is on private property however, access via the creek will be increased with the removal of the dam.

State Policy 21 – Water-dependent and water-enhanced recreation would be encouraged and facilitated, and would be given priority over non-water related uses along the coast.

Determination – Consistent: The Project will improve water dependent recreational uses by opening up 8 miles of the Moodna Creek with the removal of the AOPs.

State Policy 22 – Development when located adjacent to the shore would 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 – N/A: The Project is not developmental.

State Policy 23 – Protect, enhance, and restore structures, districts, areas of sites that are of significance in history, architecture, archeology, or culture of the State, its communities, or the Nation.

Determination – Consistent: The Proposed Action will be consistent through the implementation of design and siting measures in conjunction with recommendations from the NYSHPO and the NYSDOS that will avoid, minimize, or mitigate significant adverse impacts on historic and scenic resources within the Project area. USACE is in consultation with the NYSHPO, interested parties, and federally recognized Tribes, regarding the Project, and will implement any recommendations that will avoid potential adverse impacts on cultural resources. A draft Memorandum of Agreement has been prepared and is undergoing review by the NYSHPO and other interested parties to mitigate this adverse effect.

State Policy 24 – Prevent impairment of scenic resources of statewide significance.

Determination – Consistent: The site is within the New York State Significant Coastal Fish and Wildlife Habitat. The removal of the AOPs will not impair any scenic resources.

State 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 – Consistent: The Project will remove the AOPs restoring the views up and down the Moodna Creek.

State Policy 26 – Conserve and protect agricultural lands in the state's coastal area.

Determination – N/A: The Project area has no agricultural lands.

State Policy 27 – Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

Determination – N/A: The Project does not involve the siting or construction of major energy facilities

State Policy 28 – Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

Determination - N/A: The Project does not involve ice management.

State Policy 29 – The development of offshore uses and resources, including renewable energy resources, shall accommodate New York's long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.

Determination – N/A: The Project does not involve the development of energy resources.

State 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 – Consistent: The Project will not involve any municipal, industrial, and commercial discharge of pollutants into coastal waters. Industry and best management practices (BMPs) for conducting in-stream work will be implemented to protect water quality the atmosphere, and potable water.

State Policy 31 – State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

Determination - N/A: The Project will not involve the review of coastal water classifications or the modification of water quality standards.

State Policy 32 – Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

Determination – N/A: The Project will not occur in a small community with need of alternative sanitary waste treatment, or affect any local sanitary waste facilities.

State Policy 33 – Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Determination – N/A: The Project does not involve stormwater runoff or combined or sanitary sewers.

State Policy 34 – Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

Determination – N/A: The Project will not involve the discharge of waste materials into coastal waters from vessels.

State 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 – Consistent: All material from the excavated from the AOPs will be removed from the creek. All activities will be done with all necessary permits and is designed to enhance the environment.

State Policy 36 – Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Determination – N/A: The Project will not involve activities related to the shipment and storage of petroleum and other hazardous materials.

State Policy 37 – Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics, and eroded soils into coastal waters.

Determination – Consistent: Stormwater from the Project will be controlled as described for Policy 33. Approved BMPs for erosion and sediment control will be used during ground-disturbing activities.

State 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 – Consistent: See text for Policy 33 and 37. The Project would not affect primary or sole source water supplies, and would not adversely affect surface or ground waters. Construction activities will be designed to reduce the potential for hazardous material spills; however, if a hazardous material spill does occur, USACE will report, contain, and remediate the affected area in accordance with Army and NYSDEC regulations, and the Project-specific SWPPP and ESCP. Under the Proposed Action, all solid wastes and construction debris generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and New York policies. No significant adverse impacts on groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources are anticipated to result from implementation of the Proposed Action.

State Policy 39 – The transport, storage, treatment, and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources

Determination – Consistent: All solid wastes generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and state policies. Under the Proposed Action, all solid wastes and construction debris generated by the Project will be transported, stored, treated, and disposed of in accordance with applicable federal and New York policies. No significant adverse impacts on groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources are anticipated to result from implementation of the Proposed Action.

State Policy 40 – Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

Determination – N/A: The Project will not involve the discharge of effluent from major steam electric generating and industrial facilities

State Policy 41 – Land use or development in the coastal area will not cause national or state air quality standards to be violated.

Determination – Consistent: The Project has been assessed for consistency with national and state air quality standards. Emissions attributable to the Project will be below the General Conformity Rule applicability thresholds

State Policy 42 – Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act

Determination – N/A: The Project will not involve the reclassification of land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

State Policy 43 – Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Determination - Consistent: See the text for Policy 41.

State Policy 44 – Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Determination – N/A: The Project does not have contain any wetlands.

REFERENCES

- New York State Department of State (NYSDOS). Coastal Management Program, State Coastal Policies (Including Program changes from 1982-2017). 2017
- Town of Schodack and Village of Castleton-on-Hudson, Local Waterfront Revitalization Program. Approved: NYS Secretary of State Alexander F. Treadwell, March 1985 Concurred: U.S. Office of Ocean and Coastal Resource Management, August 15, 1995.