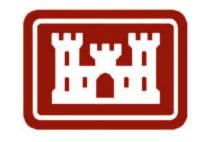
Environmental Assessment Appendix G: Coastal Zone Consistency



U.S. Army Corps of Engineers New York District

Environmental Assessment Appendix G1: New York State Coastal Zone Management Policies



U.S. Army Corps of Engineers New York District

APPENDIX G1 NEW YORK STATE COASTAL ZONE MANAGEMENT POLICIES

NEW YORK STATE COASTAL ZONE MANAGEMENT POLICIES

The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) was enacted by Congress to balance the competing demands of growth and development with the need to protect coastal resources. Its stated purpose is to "... preserve, protect, develop, and, where possible to restore or enhance, the resources of the nation's coastal zone . . .". The primary means of achieving this balance is through coastal zone management programs adopted by the states and designed to regulate land use activities that could affect coastal waters. The Act offers incentives to encourage the coastal states and territories to exercise their full authority over coastal areas through development of coastal zone management programs, consistent with the minimum Federal standards. The Coastal Zone Act Reauthorization Amendments of 1990 strengthened the Act by requiring the state programs to focus on controlling land use activities, and on the cumulative effect of activities in coastal zones.

The State of New York currently administers its Federally approved coastal zone program (N.Y. Executive Law §910 et seq. [Consol. 1996]) through the New York State Department of State (NYSDOS). Pursuant to the Federal Coastal Zone Management Act, New York State has defined its coastal zone boundaries and the policies to be utilized to evaluate projects occurring within the designated zones. In 1981, New York State adopted the Waterfront Revitalization and Coastal Resources Act, creating the New York State Coastal Management Program (CMP). The CMP embodies 44 policy statements supportive of the Act's intent to promote a balance between economic development and coastal resource preservation and optimization. In addition, the City of New York has established a coastal zone under the Local Waterfront Revitalization Program (LWRP). The LWRP includes 10 policy statements applicable to the City's Coastal Zone.

This coastal zone consistency evaluation considers the proposed consolidation of separately authorized navigation improvement projects¹ (Predecessor Projects) with the New York and New Jersey Harbor Navigation Project (Recommended Plan), the combination of which to be hereinafter known as consolidated implementation. The impacts associated with unconsolidated implementation of the Predecessor Projects with the Recommended Plan are documented in various National Environmental Policy Act (NEPA) and feasibility documents, the most recent being the New York and New Jersey Harbor Navigation Study Feasibility Report and its accompanying Final Environmental

¹ Specifically, the Arthur Kill Channel, Howland Hook Marine Terminal, New York and New Jersey; the Kill Van Kull and Newark Bay Channels, New York and New Jersey; and the New York and Adjacent Channels, Port Jersey Channel, New Jersey. They are designated AK-41/40, KVK/NB-45, and PJ-41, respectively, and hereinafter referred collectively to as the "Predecessor Projects". They are Predecessor Projects in the sense that their complete implementation was assumed as part of the most likely withoutproject future condition for the New York and New Jersey Harbor Navigation Study.



Impact Statement – December 1999 (the Feasibility Report)². This evaluation addresses only those effects attributable to proposed consolidated implementation.

Opportunities for consolidated implementation include vertical consolidation of two construction contract areas (KVK Area 4b and KVK Area 5, See Environmental Assessment Figure 2-2). Vertical consolidation combines authorized navigation improvement projects into a single construction effort, directly deepening project channels to final depths authorized in §202 of WRDA 2000.

Because the configuration and channel depths for consolidated implementation and unconsolidated implementation are the same, no new long-term impacts are associated with consolidated implementation as it results in the same final depth and width as would be produced by the sequential dredging of each authorized project.

The short-term impacts associated with consolidated implementation are similar to those identified in the *Feasibility Report*, primarily the short-term disturbance of bottom sediment and localized change in channel depth associated with dredging and blasting activities; however, the frequency and duration of these impacts would be changed. A consolidated deepening schedule would reduce the frequency of events (e.g., number of dredging episodes) and the frequency of effects. This change in frequency and duration would reduce the overall potential effects.

This consistency evaluation is being provided in order to: (1) support the USACE consistency determination, pursuant to 15 CFR Part 930 Subpart C, regarding the consistency of the activity with the NYS CMP; (2) enable New York State to consider the effects of the proposed project on the land and water uses and natural resources of its coastal area; and (3) to provide information permitting New York State to agree or disagree with the USACE consistency determination pursuant to 15 CFR Part 930 Subpart C.

NEW YORK STATE COASTAL ZONE MANAGEMENT POLICIES

Development Policies

(1) Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Consolidated implementation is consistent with this policy, as it will implement previously authorized projects that improve the channels within the Harbor and maintain commercial uses compatible with the character of the area.

² U.S. Army Corps of Engineers, *New York and New Jersey Harbor Navigation Study Feasibility Report*, (December, 1999). Hereinafter the shorthand reference "*Feasibility Report*" will be used to refer to this document and "Recommended Plan" to refer to the plan recommended in the *Feasibility Report* with the modifications that have occurred since the 1999 release of the *Feasibility Report*.



(2) Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

Consolidated implementation is consistent with this policy, as it will expedite authorized projects providing access to shoreline facilities by fully loaded vessels during any period of the tide cycle. A primary objective of the policy is to create a process by which water dependent uses can be accommodated well into the future.

(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.

Consolidated implementation is strongly consistent with this policy, as it expedites previously authorized projects that support port development in New York and the maintenance and enhancement of port activity. A State public authority, the Port Authority of New York and New Jersey (PANYNJ) operates a facility that would benefit from the consolidated implementation.

(4) Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities that have provided such areas with their unique maritime identity.

This policy is not applicable to the proposed action.

(5) Encourage the location of development in areas where public services and facilities essential to such development are adequate.

Consolidated implementation is consistent with this policy, as development in the coastal area is encouraged within existing areas of concentrated development where infrastructure and public services are adequate, and where topography, geology, and other environmental conditions are suitable for and able to accommodate development.

(6) Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

The proposed project is strongly consistent with this policy, as the primary goal is to consolidate already authorized channel deepening, thereby streamlining permitting procedures and other activities involved with navigation improvements in New York and New Jersey Harbor.

Fish and Wildlife Policies



(7) Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Consolidated implementation of the previously authorized deepening projects is consistent with this policy. Impacts associated with unconsolidated implementation of the authorized channel improvement projects (i.e., AK-41/40, KVK/NB-45, PJ-41, and the Recommended Plan) were previously identified and evaluated in separate NEPA environmental assessments³. Where practical, potential impacts were avoided and minimized to the extent possible so as to maintain their viability as habitats. Mitigation planning for long-term, unavoidable impacts was developed and the District is in the process of finalizing mitigation measures for these previously authorized projects with cooperating agencies. Because the ultimate configuration of consolidated implementation is the same as the unconsolidated implementation of the authorized projects, no new long-term impacts are associated with consolidated implementation. Therefore, consolidated implementation is consistent with this policy.

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

Consolidated implementation is consistent with this policy, in that, similar to the authorized projects, it minimizes the re-suspension of contaminants during dredging. As described in separate NEPA environmental assessments⁴ for the authorized projects, potential impacts will be minimized by employing Best Management Practices (BMPs) during dredging operations in areas where the sediments have been determined to be unsuitable for remediation purposes. Potential measures to mitigate this impact include closed-bucket dredging and silt curtains where determined to be appropriate. While consolidated implementation would reduce the frequency of dredging events (e.g., number of dredging episodes), dredging equipment and dredging operations would remain the same as described in the *Feasibility Report*. By employing these management measures, consolidated implementation will be consistent with this policy.

⁴ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)



³ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)

(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.

This policy is not directly applicable to consolidated implementation. As stated above, fish and wildlife populations and habitats will be protected to the extent possible. The beneficial use of dredged material from the previously authorized navigation improvement projects will be utilized to create/ expand artificial reefs. Ongoing discussions with National Marine Fisheries Service (NMFS) and New York State Department of Environmental Conservation (NYSDEC) may also lead to additional enhanced resources or development of new resources for the future utilization of the State's recreational fish and wildlife resources, for example creating/enhancing Essential Fish Habitat (EFH) through habitat enhancement opportunities.

(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.

This policy is not applicable as there are no commercial fishery development activities associated with consolidated implementation.

Flooding And Erosion Hazards Policies

(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.

This policy is not applicable as there are no new buildings or other structures involved in consolidating the authorized navigation improvement projects.

(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.

This policy is not applicable as consolidation of the separately authorized navigation improvement projects does not affect natural protective features or property in the project area.

(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.



Construction of erosion control structures will be undertaken and assessed under NEPA and other Federal, state, and local authorities should data and modeling efforts indicate such structures are warranted. No definitive areas within the project area have been identified.

(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.

Consolidated implementation is consistent with this policy as the separately authorized projects do not involve any measurable increase in erosion or flooding, and potentially may decrease flooding as the channel deepening will allow more water storage capacity.

(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.

Consolidated implementation is consistent with this policy, as the separately authorized projects have demonstrated that channel deepening will not substantially change the supply and net flow of beach materials or their natural regenerative powers. Proposed dredging under the consolidated schedule will be accomplished in a manner similar to that described in the *Feasibility Report* so as not to cause a reduction of supply, and thus an increase of erosion, to such shore lands.

(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.

This policy is not applicable to consolidated implementation, as the separately authorized projects are not involved with development of natural protective features influencing the rate of erosion.

(17) Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

This policy is not applicable to consolidated implementation, as the separately authorized projects are not involved with structural measures to minimize natural resource damage.



(18)To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions 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.

Consolidated implementation is consistent with this policy, as the separately authorized projects have demonstrated that channel deepening will not significantly impair valuable coastal waters and resources. Consolidated implementation has considered the social, cultural, economic and environmental interests of the State and their citizens and will be protecting the valuable coastal resource areas, as well as increasing the economic benefits of the State due to expediting improved access to the Port.

Public Access Policies

(19)Protect, maintain, and increase the level and types of access to public waterrelated recreation resources and facilities.

This policy is not directly applicable to consolidated implementation, as the separately authorized projects are not involved with development of water-related recreation. The authorized projects protect, maintain and increase access to Port facilities, enabling fully loaded vessels to enter the port independent of tide levels. Consolidated implementation would not interfere with the level and types of access to public water-related recreation resources and facilities.

Access to the publicly-owned foreshore and to lands immediately adjacent to the (20)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.

This policy is not applicable to consolidated implementation, as the separately authorized projects are not involved with development of the water's edge or public access.

Recreation Policies

Water-dependent and water-enhanced recreation will be encouraged and (21)facilitated, and will be given priority over non-water-related use along the coast.

This policy is not applicable to consolidated implementation, as the separately authorized projects are not involved with development of water-related recreation.

Development, when located adjacent to the shore, will provide for water-related (22)recreation, whenever such use is compatible with reasonably anticipated demand



for such activities, and is compatible with the primary purpose of the development.

This policy is not applicable to this project as there will be no development adjacent to the shore as part of the consolidated implementation of the separately authorized projects. Consolidated implementation is not related to onshore water-related recreation.

Historic and Scenic Resources Policies

(23) Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the nation.

Consolidated implementation is consistent with this policy because the ultimate configuration and channel depth is the same as that evaluated in the *Feasibility Report* and as modified during the Pre-Construction Engineering and Design (PED) phase; no new long-term impacts are associated with the project. Proposed design modifications that may result in significant cultural resource impacts will be addressed through a Programmatic Agreement (PA) among the District, the New Jersey State Historic Preservation Officer (NJSHPO) and the New York State Historic Preservation Officer (NYSHPO), as described below.

Cultural resources information, which focused on potential in-water resources, was addressed in the *Feasibility Report* Final Environmental Impact Statement. A PA among the District, NJSHPO and NYSHPO was executed on April 12, 2000 to address on going prehistoric and historic investigations, evaluations and mitigation measures during the Project's execution. This PA, amended and accepted by the District, NJSHPO and NYSHPO in April 2003, specifies the stipulations and actions to be taken by the District during project execution to satisfy the District's responsibilities under Section 106 of the National Historic Preservation Act of 1996, as amended. These stipulations also apply to consolidated implementation; therefore, consolidated implementation is consistent with this policy.

(24) Prevent impairment of scenic resources of statewide significance.

Consolidated implementation is consistent with this policy, as the activities involved will not result in impairment of scenic resources of statewide significance.

(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.

Although several natural and man-made resources were identified in the project area, the Feasibility Report determined that construction of the authorized projects should not impair these scenic resources nor adversely impact the overall scenic quality of the coastal area. Because the ultimate configuration and channel depth is similar to that evaluated in the Feasibility Report, consolidated implementation is consistent with this policy.

Agricultural Lands Policy

(26)Conserve and protect agricultural lands in the State's coastal area.

This policy is not applicable to consolidated implementation as it does not involve upland activities and does not influence agricultural lands. Activities for this project are limited to in-water areas within the New York and New Jersey Harbor.

Energy and Ice Management Policies

(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.

This policy is not applicable, as consolidated implementation does not involve the siting and construction of energy facilities.

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

This policy is not applicable, as consolidated implementation does not involve ice management.

(29)Encourage the development of energy resources on the outer continental shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities.

This policy is not applicable, as consolidated implementation does not involve energy development in the Outer Continental Shelf (OCS) or in Lake Erie.

Water and Air Resources Policies

(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.



This policy is not applicable as consolidated implementation does not involve municipal, industrial and commercial discharges.

(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.

Consolidated implementation of the separately authorized projects would reduce the overall dredging duration. Consolidated implementation would not affect the water classification or water quality standards in the project area, as determined by the 401(b)(1) evaluations performed for separately authorized projects; therefore, it is consistent with this 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.

This policy is not applicable, as consolidated implementation does not involve sanitary waste systems in small communities.

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

This policy is not applicable as consolidated implementation does not involve the control of stormwater runoff and combined sewage overflows.

(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.

Consolidated implementation is consistent with this policy, as the dredging and support vessels will not be discharging any waste material into coastal waters. Dredging contractors will be required to adhere to all applicable state and Federal regulations regarding the discharge of waste materials (e.g., disposal of human waste at a licensed sewerage treatment facility).

Dredging and dredge spoil disposal in coastal waters will be undertaken in a (35)manner that meets existing state dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.



Consolidated implementation is consistent with this policy, as the previously authorized projects do not involve discharging any dredge spoils unregulated into coastal waters. Potential short-term impacts to significant fish and wildlife habitats associated with consolidated implementation are similar to those identified in the *Feasibility Report*, primarily the short-term disturbance of bottom sediment and localized change in channel depth associated with dredging and blasting activities; however, the frequency and duration of these impacts would be reduced.

A consolidated deepening schedule would reduce the frequency of events (e.g., number of dredging episodes) and the frequency of effects. Consolidation of the navigation improvement projects would also reduce the overall duration of deepening activities needed to achieve a 50 ft depth. Overall, project construction duration would be shorter under consolidated implementation, as a separate second-period or stage of equipment mobilization and demobilization would not be necessary. This change in frequency and duration would reduce the overall potential effects.

In addition, potential impacts from release of contaminants from sediments during dredging or placement operations will be minimized by employing Best Management Practices (BMPs) during dredging and dredged material placement operations, as required by Water Quality Certification permits. Based upon testing prior to dredging, material suitable for placement at the Historic Area Remediation Site (HARS) will be designated for disposal at that site in accordance with procedures established by USEPA. Material not suitable for the HARS will be designated for disposal according to the guidelines of the Dredged Material Management Plan (DMMP) and guidelines from the states of New York and New Jersey. Consolidated implementation would therefore be consistent with this 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.

This policy is not applicable as consolidated implementation does not directly involve shipment and storage of petroleum or other hazardous materials.

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

This policy is not applicable to consolidated implementation, as it does not involve non-point discharges of excess nutrients, organics and eroded soil into coastal waters.



(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.

This policy is not applicable to consolidated implementation as it does not involve surface and groundwater supplies.

(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.

This policy is not directly applicable to consolidated implementation, as it does not directly involve the transport, storage, treatment and disposal of solid waste. Based upon testing prior to dredging, sediment suitable for placement at the HARS will be designated for disposal at that site in accordance with procedures established by USEPA. Material not suitable for the HARS will be designated for disposal or treatment and beneficial use according to the guidelines of the Dredged Material Management Plan (DMMP) and guidelines from the states of New York and New Jersey. Dredging contractors will be required to dispose of any contractor-generated solid waste (i.e., daily refuse) according to all applicable state and local requirements.

(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.

This policy is not applicable, as consolidated implementation does not involve effluent discharges from steam electric generating or industrial facilities.

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

The General Conformity Rule (GCR) of the Clean Air Act Amendment (CAA) of 1990 (40 CFR 193) went into effect as of January 31, 1994. The GCR requires Federal Actions, including providing funds or issuing permits, not interfere with states' efforts to attain or maintain ambient air quality standards in accordance with EPA-approved State Implementation Plans (SIPs). All Federal Actions must comply with the GCR unless otherwise exempt. GCR only applies to actions that emit one or more criteria pollutants in areas that do not meet CAA standards for one or more pollutant (nonattainment area) or have just recently come within the standard (maintenance area).

The study area is located within the New York Northern New Jersey Connecticut nonattainment area (NYNJCTNA) which is also referred to as the New York New Jersey Long Island nonattainment area and thus falls within the jurisdiction of both state's SIPs.

The region is currently designated as a severe nonattainment area for ozone and a maintenance area for carbon monoxide (CO). The GCR is triggered when, in severe ozone nonattainment areas, emissions exceed 25 tons per year. This quantity also applies to amounts of ozone precursors, oxides of nitrogen (NOx) and volatile organic carbons (VOCs). The GCR applies to consolidated implementation because the project area is within the NYNJCTNA and consolidated implementation is not exempt.

Consolidated and unconsolidated plan emission estimates predict project NOx emissions would exceed the GCR trigger level for severe ozone nonattainment areas during each year of construction. However, consolidated implementation reduces the number of years that emissions are generated. Consolidated implementation affects the timing and magnitude of when peak year estimated emissions occur, as well as the years leading up to and after the peak year, but the peak emission amounts are similar under either consolidated or unconsolidated implementation.

The plan for reaching Conformity with the CAA for the consolidated implementation project is presented in the Harbor Air Management Plan (HAMP. The details of the HAMP are being finalized by a Regional Air Team (RAT), on which NYSDEC plays an active role. The HAMP will be a combination of actions, as outlined in the conditional Statement of Conformity (SOC) that was finalized and agreed to by the States and EPA in April 2002. The result of implementing the HAMP will be no net emission increase during any year of consolidated implementation and an overall decrease in NOx levels both during and after construction, providing long-term air quality benefits. Therefore, consolidated implementation is consistent with this 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.

This policy is not applicable as consolidated implementation does not involve land classifications in coastal regions or adjacent areas.

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

As described under Policy 42, consolidated and unconsolidated plan emission estimates predict project NOx emissions would exceed the GCR trigger level for severe ozone nonattainment areas during each year of construction. However, consolidated implementation reduces the number of years that emissions are generated. Consolidated implementation affects the timing and magnitude of when peak year estimated emissions occur, as well as the years leading up to and after the peak year, but the peak emission amounts are similar under either consolidated or unconsolidated implementation.



The plan for reaching Conformity with the CAA for the consolidated implementation project is presented in the Harbor Air Management Plan (HAMP. The details of the HAMP are being finalized by a Regional Air Team (RAT), on which NYSDEC plays an active role. The HAMP will be a combination of actions, as outlined in the conditional Statement of Conformity (SOC) that was finalized and agreed to by the states and EPA in April 2002. The result of implementing the HAMP will be no net emission increase during any year of consolidated implementation; and an overall decrease in NOx levels both during and after construction, providing long-term air quality benefits. Therefore, consolidated implementation is consistent with this policy.

(44) Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Long-term, unavoidable impacts associated with unconsolidated implementation of the separately authorized navigation improvement projects (i.e., AK-41/40, KVK-45, PJ-41, and the Recommended Plan) were previously identified and evaluated in separate NEPA environmental assessments⁵. Mitigation planning for long-term, unavoidable impacts to tidal wetlands was developed and the District is in the process of finalizing mitigation measures for these previously authorized projects with cooperating agencies. Because the ultimate configuration and channel depth is the same under the consolidated schedule as the unconsolidated schedule, no new impacts to tidal or freshwater wetlands are associated with the proposed project. Consolidated implementation would therefore be consistent with this policy.

NEW YORK CITY LWRP

(1) Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

Consolidated implementation is consistent with this policy as it will implement previously authorized projects that improve existing channels within the Harbor and maintain commercial uses compatible with the character of areas within New York City previously designated for upgrading and redevelopment for waterborne commerce.

(2) Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

Consolidated implementation of the separately authorized projects support this policy by maintaining and promoting economic growth for the Port of New York and New Jersey. The previously authorized channel improvement projects would improve commercial

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⁵ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)

navigation and access to existing centers of commerce and industry in the Port of New York and New Jersey, thereby helping to prevent the loss of port business to competing East Coast ports. Therefore, consolidated implementation of the separately authorized projects is consistent with this policy.

(3) Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

See response to Policies 1 and 2 above. The navigation channel improvements in the Harbor will enhance navigational safety for all components of waterborne traffic. This is particularly important given the recent increases in recreational boating and ferry service in the Harbor. Consolidated implementation is therefore consistent with this policy.

(4) Protect and restore the quality and function of ecological systems within the New York City coastal area.

As described in the *Feasibility Report*, the harbor navigation improvement projects were developed to minimize adverse impacts while providing enhanced navigational facilities. Long-term, unavoidable impacts associated with unconsolidated implementation of the authorized projects (i.e., AK-41/40, KVK-45, PJ-41, and the Recommended Plan) were previously identified and evaluated in separate NEPA environmental assessments⁶. Under consolidated implementation, the duration and frequency of impacts would be Mitigation planning for long-term, unavoidable impacts to the further reduced. ecological habitat was developed and the District is in the process of finalizing mitigation measures for these previously authorized projects with cooperating agencies. Because the ultimate configuration and channel depth is the same under the consolidated schedule as the unconsolidated schedule, no new impacts are associated with the consolidated implementation of the separately authorized projects. Consolidated implementation would therefore be consistent with this policy.

Protect and improve water quality in the New York City coastal area. (5)

Consolidated implementation of the separately authorized navigation channel improvement projects will have no adverse impacts on water quality of the Harbor, nor will it inhibit future improvements to water quality in areas where water quality may be degraded. The authorized projects will contribute to the control of contaminants through the direct removal of in-place contaminants during dredging and the beneficial use of dredged material as part of upland remediation actions at contaminated sites that are sources of ongoing pollution in the Harbor. Consolidated implementation of the authorized projects is therefore consistent with this policy.

⁶ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)

(6) Minimize loss of life, structures and natural resources caused by flooding and erosion.

Construction of the separately authorized projects will not contribute to flooding or coastal erosion. In those areas of the channels where rock will be removed for deepening, beneficial use of dredged material is proposed (i.e. the rock would be available for use in shoreline protection projects for areas currently experiencing erosion and clean sand excavated for deepening will be used in beach nourishment projects as it has in the past). Consolidated implementation of the authorized deepening project is therefore consistent with this policy.

(7) Minimize environmental degradation from solid waste and hazardous substances.

Consolidated implementation will have no effect on solid waste and hazardous substances, thus this policy is not applicable.

(8) Provide public access to and along New York City's coastal waters.

Consolidated implementation does not involve any shoreline areas where public access may be an issue, thus this policy is not applicable.

(9) Protect scenic resources that contribute to the visual quality of the New York City coastal area.

Consolidated implementation will have no effect on visual quality because all actions are within the channels, thus this policy is not applicable.

(10) Protect, preserve and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

Consolidated implementation is consistent with this policy because the ultimate configuration and channel depth is the same as that evaluated in the *Feasibility Report* and as modified during the Pre-Construction Engineering and Design (PED) phase; no new long-term impacts are associated with the project. Proposed design modifications that may result in significant cultural resource impacts will be addressed through a Programmatic Agreement (PA) among the District, the New Jersey State Historic Preservation Officer (NJSHPO) and the New York State Historic Preservation Officer (NYSHPO), as described below.

Cultural resources information, which focused on potential in-water resources, was addressed in the *Feasibility Report* FEIS. A PA among the District, NJSHPO and NYSHPO was executed on April 12, 2000 to address on-going prehistoric and historic investigations, evaluations and mitigation measures during the Project's execution. This

PA, amended and accepted by the District, NJSHPO and NYSHPO in April 2003, specifies the stipulations and actions to be taken by the District during project execution to satisfy the District's responsibilities under Section 106 of the National Historic Preservation Act of 1996, as amended. These stipulations also apply to consolidated implementation; therefore, consolidated implementation is consistent with this policy.

FINDINGS OF THE COASTAL ZONE CONSISTENCY EVALUATION

This coastal zone consistency evaluation considered the proposed consolidated implementation of the separately authorized navigation improvement projects in the New York and New Jersey Harbor and evaluated the project's consistency with the applicable New York State Coastal Zone Management Policies. Based on this evaluation, the proposed consolidated implementation is consistent with all applicable policies.



Environmental Assessment Appendix G2: New York State Coastal Zone Management Rules



U.S. Army Corps of Engineers New York District

APPENDIX G2 NEW JERSEY COASTAL ZONE MANAGEMENT RULES

NEW JERSEY COASTAL ZONE MANAGEMENT RULES

The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) was enacted by Congress to balance the competing demands of growth and development with the need to protect coastal resources. Its stated purpose is to "... preserve, protect, develop, and, where possible to restore or enhance, the resources of the nation's coastal zone . . .". The primary means of achieving this balance is through coastal zone management programs adopted by the states and designed to regulate land use activities that could affect coastal waters. The Act offers incentives to encourage the coastal states and territories to exercise their full authority over coastal areas through development of coastal zone management programs, consistent with the minimum Federal standards. The Coastal Zone Act Reauthorization Amendments of 1990 strengthened the Act by requiring the state programs to focus on controlling land use activities, and on the cumulative effect of activities in coastal zones.

The State of New Jersey administers its coastal zone program through the New Jersey Department of Environmental Protection (NJDEP) Land Use Regulation Program. The Coastal Zone Management Rules (N.J.A.C. 7:7E, as amended through 2/3/2003) regulate the use and development of coastal resources, and are used by NJDEP in reviewing permit applications under the Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19-1 et seq. (as amended to July 19, 1993) and Federal Consistency Determinations (307 of the Federal Coastal Zone Management Act) among others. The Coastal Zone Management Rules were first adopted following Federal approval in September 1978, and were most recently amended in February 2003. The Coastal Zone Management rules constitute the substantive core of the program.

This coastal zone consistency evaluation considers the proposed consolidation of separately authorized navigation improvement projects¹ (Predecessor Projects) with the New York and New Jersey Harbor Navigation Project (Recommended Plan), the combination of which to be hereinafter known as consolidated implementation. The impacts associated with unconsolidated implementation of the Predecessor Projects with the Recommended Plan are documented in various National Environmental Policy Act (NEPA) and feasibility documents, the most recent being the New York and New Jersey Harbor Navigation Study Feasibility Report and its accompanying Final Environmental Impact Statement – December 1999 (the Feasibility Report)². This evaluation addresses only those effects attributable to proposed consolidated implementation.

⁽December, 1999). Hereinafter the shorthand reference "Feasibility Report" will be used to refer to this



¹ Specifically, the Arthur Kill Channel, Howland Hook Marine Terminal, New York and New Jersey; the Kill Van Kull and Newark Bay Channels, New York and New Jersey; and the New York and Adjacent Channels, Port Jersey Channel, New Jersey. They are designated AK-41/40, KVK/NB-45, and PJ-41, respectively, and hereinafter referred collectively to as the "Predecessor Projects". They are Predecessor Projects in the sense that their complete implementation was assumed as part of the most likely withoutproject future condition for the New York and New Jersey Harbor Navigation Study.

² U.S. Army Corps of Engineers, *New York and New Jersey Harbor Navigation Study Feasibility Report*,

Opportunities for consolidated implementation include vertical consolidation of two construction contract areas (KVK Area 4b and KVK Area 5, See Environmental Vertical consolidation combines authorized navigation Assessment Figure 2-2). improvement projects into a single construction effort, directly deepening project channels to final depths authorized in §202 of WRDA 2000.

Because the configuration and channel depths for consolidated implementation and unconsolidated implementation are the same, no new long-term impacts are associated with consolidated implementation as it results in the same final depth and width as would be produced by the sequential dredging of each authorized project.

The short-term impacts associated with consolidated implementation are similar to those identified in the Feasibility Report, primarily the short-term disturbance of bottom sediment and localized change in channel depth associated with dredging and blasting activities; however, the frequency and duration of these impacts would be changed. A consolidated deepening schedule would reduce the frequency of events (e.g., number of dredging episodes) and the frequency of effects.

Short-term impacts attributable to consolidated implementation were identified only for vertical consolidation efforts (i.e., KVK Area 4b and KVK Area 5).

A consolidated implementation schedule would reduce the overall duration of short-term impacts by reducing the total in-water construction period. Overall, project construction duration would be shorter under consolidated implementation, as a separate secondperiod or stage of equipment mobilization and demobilization would not be necessary. This change in frequency and duration would reduce the overall potential effects.

The proposed project is within the coastal zone boundaries of New Jersey. The following describes the state's coastal zone policies and evaluates the project's consistency with applicable policies. This consistency evaluation is provided to enable New Jersey environmental authorities to consider the effect of the proposed project on the state's coastal zone resources.

COASTAL ZONE MANAGEMENT RULES

Subchapter 3. Special Areas

Special Areas are areas that are so naturally valuable, important for human use, hazardous, sensitive to impact, or particular in their planning requirements, as to merit focused attention and special management rules. This subchapter divides Special Areas into four categories. Category 1 (7:7E-3.2 through 3.15) includes Special Water Areas,

document and "Recommended Plan" to refer to the plan recommended in the Feasibility Report with the modifications that have occurred since the 1999 release of the Feasibility Report.



which extend landward to the spring high water line or the level of normal flow in nontidal waters. Category 2 (7:7E-3.16 through 3.32) includes Special Water's Edge Areas. Category 3 (7:7E-3.33 through 3.35) includes Special Land Areas, which generally are landward of the Special Water's Edge Areas. Category 4 (7:7E-3.36 through 3.49) includes Coastwide Special Areas, and may include Special Water Areas, Special Water's Edge Areas or Special Land Areas.

7:7F-3.2 Shellfish Habitat

This policy generally limits disturbance of shellfish habitat. Because the ultimate configuration and channel depth is the same under the consolidated schedule as the unconsolidated schedule, no new impacts to shellfish habitat are associated with consolidated implementation. Any disturbance of productive shellfish habitat associated with unconsolidated implementation of the separately authorized projects will be mitigated for as described in their respective NEPA environmental assessments³.

7:7F-3.3 Surf Clam Areas

This policy prohibits development that would destroy or contaminate surf clam areas. Although surf clams are commercially harvested in the study area, surf clams and surf clam areas will not be impacted by dredging activities related to the consolidated schedule for the proposed navigation channel improvements⁴. Consolidated implementation is therefore consistent with this policy.

7:7F-3.4 Prime Fishing Areas

This policy prohibits submarine mining of sand or gravel in prime fishing areas. Since consolidated implementation does not involve submarine mining, this policy is not applicable.

7:7F-3.5 Finfish Migratory Pathways

This policy prohibits developments, such as dams or dikes that would create physical barriers to migratory fish. Developments that would lower water quality, so as to interfere with fish movement patterns, are also prohibited. Dredging and deepening operations are not projected to have an adverse impact on fish migration in the study area. Because of the reduction in total duration of disturbance under consolidated implementation, the project area would be available for use earlier than under an unconsolidated schedule. Migratory and resident species are expected to use remaining

³ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)

⁴ Refer to the 1999 Feasibility Report, Section 6.

habitats in the Harbor during construction. Because the potential impacts resulting from consolidated implementation would be shorter in duration and less in frequency than a multiphase, unconsolidated schedule, the overall adverse effects would be reduced. Therefore, consolidated implementation is consistent with this policy.

7:7E-3.6 Submerged Vegetation Habitat.

This policy prohibits development in submerged vegetation habitat, except for utility trenching or dredging, provided that there is no practicable or feasible alternative to avoid the vegetation, and that impacts to the habitat area are minimized to the maximum extent practicable. Dredging allowances include new and maintenance dredging of navigation channels maintained by the State or Federal government, new and maintenance dredging of previously authorized operating marinas, and maintenance dredging to regain access to existing private docks, piers, boat ramps and mooring piles not associated with marinas. Since consolidated implementation of the separately authorized projects does not occur in a submerged vegetation habitat area, this policy is not applicable.

7:7E-3.7 Navigation Channels

This policy prohibits construction that would extend into a navigation channel and restrict dredging in navigation channels. The separately authorized navigation improvement projects would deepen and realign navigation channels in the project area to facilitate expanded navigation access to the Ports to increase commercial benefits. Dredging standards (e.g., channel side-slopes and stability) under both consolidation and unconsolidation of the authorized projects would meet all applicable conditions for new or maintenance dredging in navigation channels and therefore would be consistent with this policy.

7:7E-3.8 Canals

This policy prohibits actions that would interfere with boat traffic in canals used for navigation. Consolidated implementation of the separately authorized projects does not occur near a canal as defined by NJDEP, and therefore this policy is not applicable.

7:7E-3.9 Inlets

This policy prohibits filling and discourages submerged infrastructure in coastal inlets. The project area is not an inlet as defined by NJDEP, and therefore this policy is not applicable.

7:7E-3.10 Marina Moorings

This policy prohibits non-water-dependent development in marina mooring areas. Consolidated implementation of the separately authorized projects would not involve development in any marina mooring areas, and therefore this policy is not applicable.

7:7E-3.11 Ports

This policy prohibits uses within a port that preempt or interfere with typical port uses, and encourages docks and piers for cargo movements. Consolidated implementation of the separately authorized projects is consistent with this policy, as it minimizes the interference with typical port uses.

7:7E-3.12 Submerged Infrastructure Routes

This policy prohibits any activity that would increase the likelihood of damaging submerged infrastructure (pipelines, cables) or interfering with maintenance operations. Buried cables and transmission lines currently in use will either be exposed or effectively moved nearer the substrate surface as a result of channel deepening. Those buried utility lines left with insufficient cover will be re-lain or re-drilled. Abandoned subsurface cables or pipelines encountered during dredging will be removed. Consolidated implementation is therefore consistent with this policy.

7:7E-3.13 Shipwrecks and Artificial Reefs

This policy restricts the use of special areas with shipwrecks and artificial reefs that would adversely affect the usefulness of this special area as a fisheries resource. The consolidated schedule will not result in any impacts to identified shipwrecks or artificial reefs. Therefore this policy is not applicable.

7:7E -3.14 Wet Borrow Pits

This policy restricts the use and filling of underwater borrow pits. The project area does not include wet borrow pits. The placement of dredged material in Harbor borrow pits permitted for such use is indicated as a contingency option in the Dredged Material Management Plan (DMMP). Disposal of dredged material may be acceptable provided that: the dredged material is clean and non-toxic; the material is an appropriate particle size for the site; the placement will not disturb groundwater flow or quality; and at least half of the water area remains as surface water in a pattern designed to maximize wildlife habitat value and create wetland areas. If this contingency option were selected, placement of dredge material would be performed in a manner consistent with this policy. If the placement of dredged material is not to wet borrow pits, the policy would not be applicable.

7:7E-3.15 Intertidal and Subtidal Shallows

This policy discourages disturbance of shallow-water areas (i.e., permanently or twice daily submerged areas from the spring high tide to a depth of 4 ft MLW). As described in the *Feasibility Report*, the harbor navigation improvement projects were developed to minimize adverse impacts while providing enhanced navigational facilities. Long-term, unavoidable impacts associated with unconsolidated implementation of the authorized

projects (i.e., AK-41/40, KVK-45, PJ-41, and the Recommended Plan) were previously identified and evaluated in separate NEPA environmental assessments⁵. Mitigation planning for long-term, unavoidable impacts to the ecological habitat, including subtidal shallows, was developed and the District is in the process of finalizing mitigation measures for these previously authorized projects with cooperating agencies. Because the ultimate configuration and channel depth is the same under the consolidated schedule as the unconsolidated schedule, no new impacts are associated with the consolidated implementation of the separately authorized projects. Consolidated implementation would therefore be consistent with this policy.

7:7E-3.16 Dunes

This policy protects and preserves ocean and bayfront dunes. Since the project area contains no dunes, the policy is not applicable.

7:7F-3.17 Overwash Areas

Overwash areas are areas subject to accumulation of sediment, usually sand, that is deposited landward of the beach or dune by the rush of water over the crest of the beach berm, a dune or a structure. An overwash area may, through stabilization and vegetation, become a dune. This policy restricts development in overwash areas, due to their sensitive nature. Since the project area contains no overwash areas, the policy is not applicable.

7:7E-3.18 Coastal High-Hazard Areas

This policy restricts development in coastal high-hazard (i.e., flood-prone) areas. Since the project area is not a coastal high-hazard area, the policy is not applicable.

7:7F-3.19 **Erosion Hazard Areas**

This policy prohibits development under most circumstances in erosion-prone areas except to protect public safety. Most of the shoreline in the project area has been filled or bulkheaded. The project area is not an erosion hazard area, and therefore this policy is not applicable, however shoreline erosion effects have been considered.

The potential for increased coastal erosion was documented Feasibility Report. The Feasibility Report concluded that deepening the Ambrose Channel will increase wave heights in the immediate vicinity of the channel, but that waves on adjacent shorelines will be unchanged in virtually all areas, with no attendant contribution to coastal erosion. In addition, the *Feasibility Report* concluded, based on the results of the analytical ship

⁵ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)

wake model, that wakes generated by a design vessel will remain unchanged because increases in vessel size will be offset by deeper channels.

Recent field studies⁶ indicate that tugs typically generate the type of short waves that may break and impact adjacent channel shorelines. On the other hand large vessels generate long waves (drawdown and return current) that do not typically break at the shoreline, and their impact on the shoreline is relative small. The relative importance of tug waves is also magnified by the fact that they represent a much larger percentage of total vessel traffic in the Harbor. The recent studies also concluded that tug wake would be slightly reduced under deepened channel conditions. Therefore, a reduction in overall vessel traffic (a deeper channel will allow for larger vessels, less ship calls and a concomitant reduction in tug traffic) and wake energy will reduce the total energy absorbed at the shoreline with an attendant reduction in the potential for bank erosion.

Consolidated implementation would change the timing of channel deepening, but not the final configuration of channels; therefore, no differences in vessel generated wakes leading to changes in the potential for coastal erosion are expected between the consolidated and unconsolidated projects; therefore, consolidated implementation is consistent with this policy.

7:7E-3.20 Barrier Island Corridor

This policy restricts new development on barrier island corridors. The project area is not a barrier island corridor, and therefore this policy is not applicable.

7:7E-3.21 Bay Islands

This policy restricts development on bay islands. The project area does not contain any bay islands, and therefore this policy is not applicable.

7:7E-3.22 Beaches

This policy restricts development on beaches. No direct impacts to beaches are anticipated and no reduction in use of presently accessible public areas will occur. The project is therefore consistent with this policy.

7:7E-3.23 Filled Water's Edge

This policy seeks to promote water-dependent uses at waterfront areas that have been previously filled or modified for commercial activity. This policy is not applicable.

⁶ Moffatt & Nichol Engineers (2003). Arthur Kill Ship Wave Study, Final Report prepared for the Port Authority of New York and New Jersey.



7:7E-3.24 Existing Lagoon Edges

This policy restricts development at lagoon edges because of potential water quality problems. Since the project area contains no lagoon edges, this policy is not applicable.

7:7E-3.25 Flood Hazard Areas

This policy is designed to restrict development in flood hazard areas and to ensure that the waterfront is not pre-empted by uses that could function equally well at inland locations. Consolidated implementation of the separately authorized projects involves no development of areas subject to tidal or fluvial flooding, and therefore this policy is not applicable.

7:7E-3.26 (Reserved) NOT APPLICABLE

7:7F-3.27 Wetlands

This policy restricts disturbance in wetland areas and requires mitigation if wetlands are destroyed or disturbed. As described in the *Feasibility Report*, the harbor navigation improvement projects were developed to minimize adverse impacts while providing enhanced navigational facilities. Long-term, unavoidable impacts to wetlands associated with unconsolidated implementation of the authorized projects (i.e., AK-41/40, KVK-45, PJ-41, and the Recommended Plan) were previously identified and evaluated in separate NEPA environmental assessments⁷. Mitigation planning for long-term, unavoidable impacts to the ecological habitat, including subtidal shallows, was developed and the District is in the process of finalizing mitigation measures for these previously authorized projects with cooperating agencies. Because the ultimate configuration and channel depth is the same under the consolidated schedule as the unconsolidated schedule, no new impacts are associated with the consolidated implementation of the separately authorized projects. Consolidated implementation would therefore be consistent with this policy.

7:7E-3.28 Wetland Buffers

This policy restricts development in wetland buffer areas in order to protect wetlands. Consolidated implementation of the separately authorized projects will not adversely affect upland buffers or areas adjacent to wetlands. Consolidated implementation, including construction of any wetland mitigation areas required under previous NEPA environmental assessments⁸ for the separately authorized projects (i.e., AK-41/40, KVK-45, PJ-41, and

⁸ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)



⁷ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)

the Recommended Plan) will meet all applicable agency guidelines or permit requirements. Therefore, consolidated implementation is consistent with this policy.

7:7E-3.29 (Reserved) NOT APPLICABLE

7:7E-3.30 (Reserved) NOT APPLICABLE

7:7E-3.31 Coastal Bluffs

This policy restricts development on coastal bluffs, defined as steep slopes (greater than 15 percent) of consolidated (rock) or unconsolidated (sand, gravel) sediment which are adjacent to the shoreline or which are demonstrably associated with shoreline processes. Since the project area does not contain coastal bluffs, this policy is not applicable.

7:7F-3.32 **Intermittent Stream Corridors**

This policy restricts action in intermittent stream corridors. Intermittent streams in the project area are not tidally influenced, and will not be impacted⁹.

7:7E-3.33 Farmland Conservation Areas

This policy seeks to preserve large parcels of land used for farming. The project area does not contain farmland conservation areas, and therefore this policy is not applicable.

7:7E-3.34 Steep Slopes

This policy seeks to preserve steep slopes by restricting development in such areas. Steep slopes are land areas with slopes greater than 15 percent, which are not adjacent to the shoreline. Since there are no steep slopes in the project area, this policy is not applicable.

7:7E -3.35 Dry Borrow Pits

This policy restricts the excavation and filling of upland or dry borrow pits. The project area does not contain nor is it proposed to contain dry borrow pits. However, the filling and grading of upland borrow pits and quarries are an option in the DMMP. Dredged material disposal in dry borrow pits is conditionally acceptable provided that: the dredged material will not degrade groundwater quality; the dredged material is of a particle size that will not disturb groundwater hydrology; and the dredged material disposal is compatible with neighboring uses. All applicable agency guidelines and permit requirements will be met if dry borrow pits are used for dredge material disposal. Therefore, the consolidated implementation of the separately authorized projects is consistent with this policy.

⁹ See the 1999 FEIS, Section 6.1 for a discussion of impacts to wetland areas.

7:7E-3.36 Historic and Archeological Resources

Consolidated implementation is consistent with this policy because the ultimate configuration and channel depth is the same as that evaluated in the *Feasibility Report* and as modified during the PED phase; no new long-term impacts are associated with the project. Proposed design modifications that may result in significant cultural resource impacts will be addressed through a Programmatic Agreement (PA) among the District, the New Jersey State Historic Preservation Officer (NJSHPO) and the New York State Historic Preservation Officer (NYSHPO), as described below.

Cultural resources information, which focused on potential in-water resources, was addressed in the *Feasibility Report*. A PA among the District, NJSHPO and NYSHPO was executed on April 12, 2000 to address on-going prehistoric and historic investigations, evaluations and mitigation measures during the Project's execution. This PA, amended and accepted by the District, NJSHPO and NYSHPO in April 2003, specifies the stipulations and actions to be taken by the District during Projects execution to satisfy the District's responsibilities under Section 106 of the National Historic Preservation Act of 1996, as amended. These stipulations also apply to consolidated implementation; therefore, consolidated implementation is consistent with this policy.

7:7E-3.37 Specimen Trees

This policy seeks to protect specimen trees as defined by NJDEP. The project area does not contain specimen trees, and therefore this policy is not applicable.

7:7E-3.38 Endangered and Threatened Wildlife or Vegetation Habitats

This policy restricts development in areas known to harbor endangered or threatened wildlife or vegetation species. Potential impacts to Federal and state protected species due to the separately authorized channel deepening projects were evaluated in the *Feasibility Report*. No new Federal and state protected species were identified in the study area. Based on recent observations, potential short-term impacts to avian activity at Shooters Island are confined to foraging or roosting activities. Nesting of herons has not been observed on Shooters Island since 1997, and recent monitoring confirms general avian activity primarily consists of several species of gulls, Canada geese, cormorants, starlings and crows. Migratory and resident species are expected to continue to utilize other habitats in the Harbor such as Pralls, Hoffman and Swinburne Islands.

Under consolidated implementation, the frequency and duration of dredging and deepening activities would change, requiring only a single dredging event (construction activities within a contract area would occur only once), thereby reducing the potential for adverse impacts to protected species and other wildlife. The duration of this single consolidated event would be longer than each individual dredging event but shorter overall; therefore, no significant adverse impact to protected species and other wildlife

attributable to consolidated implementation is expected and consolidated implementation would be consistent with this policy.

7:7E-3.39 Critical Wildlife Habitats

Critical wildlife habitats are specific areas known to serve an essential role in maintaining wildlife, particularly in wintering, breeding, and migrating. Such habitats include rookeries and stopovers for birds, natural corridors for wildlife movement, and ecotones (edges between two types of habitats). This policy discourages development that would impact critical wildlife habitat. Consolidated implementation of the authorized projects will not impact critical wildlife habitats, and is therefore consistent with this policy.

7:7E-3.40 Public Open Space

This policy encourages the development of new public open spaces and discourages development that might adversely affect existing public open space. implementation of the authorized projects would not affect any public open space; the policy is therefore not applicable.

7:7E-3.41 Special Hazard Areas

This policy discourages development in Special Hazard Areas. Since the project area does not include any Special Hazard Areas, the policy is not applicable.

Excluded Federal Lands 7:7F-3.42

Federal lands are beyond the jurisdiction of the New Jersey Coastal Zone. New Jersey has the authority to review activities on Federal lands if there may be spillover impacts on New Jersey's Coastal Zone. There are, however, no excluded Federal lands in the project area, and this policy is therefore not applicable.

7:7E-3.43 Special Urban Areas

This policy seeks to encourage waterfront development that would benefit certain municipalities that receive state aid. Special urban areas located within the project area include Bayonne, Elizabeth, Jersey City, and Newark. Consolidated implementation of the authorized projects would provide indirect economic benefits to these areas as a result of improved shipping efficiencies and therefore is consistent with this policy.

7:7E-3.44 Pinelands National Reserve and Pinelands Protection Area

This policy allows the Pinelands Commission to serve as the reviewing agency for actions within the Pinelands National Reserve. Since the project area is not located within the Pinelands, this policy is not applicable.

7:7E-3.45 Hackensack Meadowlands District

This policy allows the Hackensack Meadowlands District Commission to serve as the reviewing agency for actions within the Hackensack Meadowlands District. The project area is not located within the Hackensack Meadowlands District, and therefore this policy is not applicable.

7:7E-3.46 Wild and Scenic River Corridors

This policy recognizes the outstanding value of certain rivers in New Jersey by restricting development to compatible uses. The project area is not located within a New Jersey wild and scenic river corridor, and therefore this policy is not applicable.

7:7E-3.47 Geodetic Control Reference Marks

This policy discourages disturbance of geodetic control reference marks. No geodetic control reference marks will be disturbed as a result of consolidated implementation of the authorized projects; therefore, the proposed project will be consistent with this policy.

7:7F-3.48 Hudson River Waterfront Area

This policy sets forth non-industrial and industrial development standards for public access and open space along the Hudson River Waterfront Area, and requires development, maintenance, and management of a section of the Hudson Waterfront Walkway coincident with the shoreline of the development property. Although the project area is included in the boundaries of the Hudson River Waterfront Area, consolidated implementation is not a waterfront development, and therefore this policy is not applicable.

7:7E-3.49 Atlantic City

This policy establishes restrictions and prohibitions within the municipal boundary of the City of Atlantic City. No portion of the project area is within this boundary, and therefore the policy is not applicable.

Subchapter 3A - Standards for Beach and Dune Activities

These standards apply to routine beach maintenance, emergency post-storm beach restoration, dune creation and maintenance, and construction of boardwalks. The project area is not located within a beach or dune area, and therefore these standards are not applicable.

Subchapter 3B - Wetland Mitigation Proposals

This subchapter details the requirements of a wetland mitigation proposal. Consolidated implementation, including construction of any wetland mitigation areas required under



previous NEPA environmental assessments ¹⁰ for the separately authorized projects (i.e., AK-41/40, KVK-45, PJ-41, and the Recommended Plan) will meet all applicable agency guidelines or permit requirements. Therefore, consolidated implementation is consistent with this subchapter.

Subchapter 3C - Standards for Conducting and Reporting the Results of an Endangered or Threatened Wildlife or Plant Species Habitat Impact Assessment and/or Endangered or Threatened Wildlife Species Habitat Evaluation

This subchapter sets standards for conducting an Endangered or Threatened Wildlife or Plant Species Habitat Impact Assessment and for conducting an Endangered or Threatened Wildlife Species Habitat Evaluation. One or both must be employed to demonstrate compliance with or inapplicability of 7:7E-3.38 (Endangered and Threatened Wildlife or Vegetation Habitats) when the site contains or abuts areas mapped as endangered or threatened wildlife species habitat on the Landscape Maps. This EA and the Feasibility Report identified potential adverse impacts for threatened or endangered species in the project area in a manner that is consistent with the standards provided within this subchapter.

Subchapter 4 - General Water Areas

General Water Areas are all water areas which are located below either the spring high water line or the normal water level of non-tidal water that are subject to this subchapter and to Special Area rules. General water areas within the project area are as follows: Large tidal river – Hudson River; Open bay – Raritan Bay, Sandy Hook Bay, and Upper New York Bay; Tidal gut – Arthur Kill and the Kill Van Kull.

7:7E-4.2 Aquaculture

Aquaculture is the use of permanently inundated water areas, whether saline or fresh, for the purposes of growing and harvesting plants or animals in a way to promote more rapid growth, reduce predation, and increase harvest rate. Consolidated implementation does not involve aquaculture, and therefore the policy is not applicable

7:7E-4.3 Boat ramps

Boat ramps are inclined planes, extending from the land into a water body for the purpose of launching a boat into the water until the water depth is sufficient to allow the boat to float. Boat ramps will not be constructed as a result of consolidated implementation, and therefore the policy is not applicable.

¹⁰ U.S. Army Corps of Engineers Kill Van Kull-Newark Bay Channels, Phase II Deepening Project Limited Reevaluation Report (1997); U.S. Army Corps of Engineers Arthur Kill Channel-Howland Hook Marine Terminal Limited Reevaluation Report (December 1997); and U.S. Army Corps of Engineers New York and New Jersey Harbors Navigation Study Feasibility Report (December 1999)

7:7E-4.4 Docks and piers for cargo and commercial fisheries

Docks and piers for cargo and passenger movement and commercial fisheries are structures supported on pilings driven into the bottom substrate or floating on the water surface, used for loading and unloading passengers or cargo, including fluids, connected to or associated with, a single industrial or manufacturing facility or to commercial fishing facilities. No additional docks or piers will be constructed as part of consolidated implementation of the separately authorized projects. This policy is not applicable.

7:7E-4.5 Recreational docks and piers

Recreational and fishing docks and piers are structures supported on pilings driven into the bottom substrate, or floating on the water surface or cantilevered over the water, which are used for recreational fishing or for the mooring of boats or jet skis used for recreation or fishing, except for commercial fishing, and house boats. No additional docks or piers will be constructed as part of consolidated implementation of the separately authorized projects. Therefore, the policy is not applicable.

7:7E-4.6 Maintenance dredging

Maintenance dredging is the removal of accumulated sediment from previously authorized and legally dredged navigation and access channels, marinas, lagoons, canals or boat moorings for the purpose of maintaining a previously authorized water depth and width for safe navigation. To be considered maintenance dredging, the proposed dredge area must be limited to the same depth, length and width as the previous dredging operation. This policy also restricts reprofiling, the movement of material from one area of a berth or channel to an adjacent, deeper location. As consolidated implementation is considered new dredging, this policy is not applicable.

7:7E-4.7 New dredging

New dredging is the removal of sediment that does not meet the definition of maintenance dredging as defined in 7:7E-4.6. Removal of the existing sediment layer will be followed by dredging to deepen the channels to the authorized depth of 50 ft. All dredge activities will occur in existing channels. Deepening is needed to ensure that adequate depth is available for safe navigation of newer larger ships with deeper drafts. New dredging of materials previously unexposed will occur. Most of these materials are expected to be uncontaminated and will be available for beneficial uses. Those deemed unsuitable for HARS remediation will be treated and also used beneficially. Adverse environmental impacts will be minimized to the maximum extent feasible through compliance with Best Management Practices (BMP's), such as slow hoist speeds. There will be no barge overflow, unless approved through state water quality conditions, overboard disposal, dumping or filling with any materials related to the dredging operations. Mitigation activities will occur as necessary, as defined in the Recommended Plan. All conditions

specified under this policy will be met, and the consolidated project is therefore consistent with this policy, as is the unconsolidated plan.

7:7E-4.8 Dredged material disposal

This policy sets the standards relevant to dredged material disposal in water areas. As stated, all dredged material will be tested and coordinated with appropriate regulatory authorities no later than 3 years before its scheduled removal to determine disposal methods. Dredged materials will be beneficially used to the extent possible (e.g., habitat enhancement, abandoned landfill and brownfield remediation, etc.). Soft material will be classified as either HARS-suitable or HARS-unsuitable. HARS-unsuitable material will be treated and used beneficially as well, when practical. Disposal options have been evaluated in the DMMP. Dredging and dredged material disposal would meet the acceptability conditions for both of these applicable standards in accordance with the DMMP. The proposed consolidation would utilize the same options and are consistent with this policy.

7:7E-4.9 Solid waste or sludge dumping

This policy prohibits the discharge of solid or semi-solid waste material from industrial or domestic sources or sewage treatment operations into a water area. Consolidated implementation does not involve solid waste or sludge dumping, and therefore this policy is not applicable to this project.

7:7E-4.10 Filling

This policy restricts the deposition of material including sand, soil, earth, and dredged material into water areas for the purpose of raising water bottom elevations to create land areas. No filling will occur as a result of consolidated implementation of the separately authorized projects, and therefore this policy is not applicable to this project.

7:7E-4.11 Mooring

A boat mooring is a temporary or permanently fixed or floating anchored facility in a water body for the purpose of attaching a boat. No boat moorings will be constructed as a result of consolidated implementation. Therefore, the policy is not applicable.

7:7E-4.12 Sand and gravel mining

Consolidated implementation does not involve sand or gravel mining. Therefore, the policy is not applicable.

7:7E-4.13 Bridges

Consolidated implementation does not involve the construction of new bridges, or the alteration of existing bridges. Therefore, the policy is not applicable.

7:7E-4.14 Submerged pipelines

Consolidated implementation does not involve the installation of submerged pipelines. Therefore, the policy is not applicable.

7:7E-4.15 Overhead transmission lines

Consolidated implementation does not involve the installation of overhead transmission lines. Therefore, the policy is not applicable.

7:7E-4.16 Dams and impoundments

Consolidated implementation does not involve the construction of dams or impoundments. Therefore, the policy is not applicable.

7:7E-4.17 Outfalls and intakes

Consolidated implementation does not involve the siting or construction of any facility requiring intake of water or discharge of sewage, stormwater, or industrial effluents. Therefore, the policy is not applicable.

7:7E-4.18 Realignment of water areas

Realignment of water areas means the physical alteration or relocation of the surface configuration of any water area. This does not include the rebulkheading of a previously bulkheaded water area or the bulkheading at or above the spring high water line. Consolidated implementation will not realign any water area. Therefore, the policy is not applicable.

7:7E-4.19 Breakwaters

Breakwaters, including, but not limited to, those constructed of concrete, rubble mound and timber, are structures designed to protect shoreline areas or boat moorings by intercepting waves and reducing the wave energy which would normally impact the adjacent shoreline areas or boat mooring areas. Consolidated implementation does not include the construction or renovation of any breakwaters. Therefore, the policy is not applicable.

7:7E-4.20 Submerged cables



This policy establishes conditions that must be met by submerged cables, defined as underwater lines such as telecommunication cables or electrical transmission lines. Consolidated implementation does not involve the installation of submerged cables. Therefore, the policy is not applicable.

7:7F-4.21 Artificial reefs

Artificial Reefs are man-made structures intended to simulate the characteristics and functions of natural reefs created by placing hard structures on the sea floor for the purpose of enhancing fish habitat and/or fisheries. In time, an artificial reef will attain many of the biological and ecological attributes of a natural reef. Artificial reefs do not include shore protection structures, pipelines, fish aggregating devices, and other structures not constructed for the sole purpose of fish habitat. As described in the DMMP, artificial reef construction for selected material (rock) is an option proposed for beneficial re-use in the Feasibility Report and would be similarly utilized with any consolidation. Therefore, this action is consistent with this policy.

7:7E-4.22 Miscellaneous uses

Miscellaneous uses are uses of Water Areas not specifically defined in this section or addressed in the Use rules (7:7E-7). Consolidated implementation involves new and maintenance dredging, which are uses that are specifically defined in this section. Therefore, this policy is not applicable.

Subchapter 5. Requirements for Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas

This subchapter, along with Subchapters 5A and 5B, sets forth requirements for impervious cover and vegetative cover on sites in the upland waterfront development area and in the CAFRA area. The upland waterfront area includes the area extending upland from the mean high water line of a tidal water body to the first paved public road, railroad, or property line, and its impervious cover limits and vegetative cover percentages are determined under Subchapter 5A. "CAFRA area" means the "coastal area" defined in the Coastal Area Facility Review Act at N.J.S.A. 13:19-4. The "coastal area" extends from New Jersey's seaward territorial jurisdiction to an upland boundary specified in the code. The applicable impervious cover limits and vegetative cover percentages are determined under Subchapter 5B.

Although within the CAFRA area, consolidated implementation is contained under water, and will not add or alter impervious or vegetative cover. Therefore, this subchapter is not applicable.

Subchapter 5A. Impervious Cover Limits and Vegetative Cover Percentages in the Upland Waterfront Development Area

This subchapter sets the impervious cover limits and vegetative cover percentages for sites in the upland waterfront development area. Because the proposed project within the CAFRA area will not be within the upland waterfront development area, this subchapter is not applicable.

Subchapter 5B. Impervious Cover Limits and Vegetative Cover Percentages in the CAFRA

This subchapter sets impervious cover limits and vegetative cover percentages for sites in the CAFRA area. Although within the CAFRA area, the proposed project is contained under water, and will not add or alter impervious or vegetative cover. Therefore, this subchapter is not applicable.

Subchapter 6 - General Location Rules

7:7E-6.1 Rule on location of linear development

"Linear development" means a development with the basic function of connecting two points, such as a road, drive, public walkway, railroad, sewerage pipe, stormwater management pipe, gas pipeline, water pipeline, or electric, telephone or other transmission line. This rule sets conditions for acceptability of linear development. The proposed project does not include linear development, and therefore this policy is not applicable.

7:7E-6.2 Basic location rule

This rule states that NJDEP may reject or conditionally approve a project as reasonably necessary to: promote the public health, safety, and welfare; protect public and private property, wildlife and marine fisheries; and preserve, protect and enhance the natural environment. The proposed project is consistent with the location rule.

7:7F-6.3 Secondary impacts

This rule sets the requirements for secondary impact analysis. Indirect and cumulative impacts were evaluated for unconsolidated implementation of the separately authorized projects in the Feasibility Report and for consolidated implementation the EA. Therefore, consolidated implementation is consistent with the requirements for secondary impact analysis.

Subchapter 7 - Use Rules

7:7F-7.2 Housing use rules

These rules set standards for housing construction in the coastal area. Consolidated implementation does not involve housing construction, and therefore this policy is not applicable.



7:7E-7.3 Resort/recreational use

This rule sets standards for resort and recreational uses in the coastal area, which includes hotels, motels, marinas, boating facilities, campgrounds, amusement piers, parks and recreational structures such as bathhouses, natural areas, open space for active and passive recreation, and linear paths for bicycling and jogging. The proposed project does not involve resort or recreational uses, and therefore this policy is not applicable.

7:7E-7.3A Marina development

This rule sets standards for marina development in the coastal area. The proposed project does not involve marina development, and therefore this policy not applicable.

7:7E-7.4 Energy facility use rule

This rule sets standards for energy facilities in the coastal area. Energy facilities include facilities, plants or operations for the production, conversion, exploration, development, distribution, extraction, processing, or storage of energy or fossil fuels. Energy facilities also include onshore support bases and marine terminals. Energy facilities do not include operations conducted by a retail dealer, such as a gas station, which is considered a commercial development. The proposed project does not involve the construction or alteration of any energy facility. Therefore this policy is not applicable.

7:7E-7.5 Transportation use rule

This rule sets standards for roads, public transportation, footpaths, and parking facilities in the coastal area. The proposed project does not involve construction of offsite roads, public transportation, footpaths, or parking facilities, and therefore this policy is not applicable.

7:7E-7.6 Public facility use rule

This rule sets standards for public facilities (e.g., solid waste and wastewater treatment facilities) in the coastal area. The proposed project does not involve construction of a public facility, and therefore this policy is not applicable.

7:7E-7.7 Industry use rule

This rule sets standards for industrial uses in the coastal area, including (but not limited to) electric power production, food and food by-product processing, paper production, agrichemical production, chemical processes, storage facilities, metallurgical processes, mining and excavation processes, and processes using mineral products. Because the proposed dredging would benefit appropriately cited industrial uses, the proposed project is consistent with this policy.

7:7E-7.8 Mining use rule

This rule sets standards for mining in the coastal area. Consolidated implementation of the separately authorized projects does not involve mining, and therefore this policy is not applicable.

7:7E-7.9 Port use rule

This rule sets standards for port uses and port-related development. The standards are designed to ensure that port facilities retain their economic vitality. Since the project will ensure the vitality of the port for future years, the proposed project directly supports this policy.

7:7E-7.10 Commercial facility use rule

This rule sets standards for commercial facilities such as hotels, casinos, retail trade, and convention centers in the coastal zone. Consolidated implementation of the separately authorized projects does not involve construction of these types of commercial facilities, and therefore this policy is not applicable.

7:7E-7.11 Coastal engineering

This rule sets standards for the protection of shoreline and the maintenance of dunes, and provides for beach nourishment. Standards applicable to structural shore protection are included. Any impacts to the coastal portion of the study area will be addressed in the mitigation plan¹¹. Dredge material disposal for coastal engineering purposes will involve only the clean material removed during the blasting activities associated with the deepening activities. Rock material may be used for erosion control and shoreline protection. Coastal engineering involving non-structural measures is one beneficial use recommended for the clean dredged materials. The proposed project is consistent with this policy.

7:7E-7.12 Dredged material placement on land

This rule sets standards for the placement of dredged materials, defined as the disposal or beneficial use of sediments removed during dredging operations. Beneficial uses of dredged material include, but are not limited to, fill, topsoil, bricks and lightweight aggregate. This rule applies to the placement of dredged material landward of the spring high water line; disposal in water areas is covered in N.J.A.C. 7:7E- 4.8.

Dredging operations and disposal of dredged materials would be done in accordance with the District's DMMP, and would comply with project-specific state and Federal permit

¹¹ The potential use of sand dredged from the Ambrose Channel for beach nourishment is discussed in detail in the mitigation plan, and is summarized in the 1999 FEIS, Section 7.



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regulations and special conditions. As stated, dredged material will be tested to determine appropriate disposal methods; being classified as either HARS-suitable or HARSunsuitable. Dredged materials will be beneficially used to the extent possible, including treatment of unsuitable materials as necessary and evaluated in the DMMP. The DMMP is consistent with this policy and both the consolidated implementation and unconsolidated implementation plans in adapting the DMMP become consistent as well.

7:7E-7.13 National defense facility use rule

This rule sets standards for the location of defense facilities in the coastal zone. Consolidated implementation of the separately authorized projects does not involve National Defense Facilities, thus this policy is not applicable.

7:7E-7.14 High Rise Structures

This rule sets standards for high-rise structures in the coastal zone. High-rise structures are structures which are more than six stories or more than 60 feet in height as measured from existing preconstruction ground level. Consolidated implementation of the separately authorized projects does not involve high-rise structures, thus, this policy is not applicable.

Subchapter 8 - Resource Rules

Marine Fish and Fisheries 7:7F-8.2

This rule sets standards of acceptability so as to cause minimal interference with the reproductive and migratory patterns of estuarine and marine species of finfish and shellfish. Consolidated implementation of the separately authorized projects is not projected to have an adverse impact on the reproductive and migratory patterns of estuarine and marine species of finfish and shellfish.

Potential short-term impacts due to consolidated implementation would have similar effects on aquatic resources as identified in the Feasibility Report except the overall duration would be shorter. The removal of the sediment would result in a loss of the invertebrates living in the sediment and a disruption of habitat for the epibenthos and fish using the area at the time of dredging. Benthic and epibenthic species from adjacent areas will recolonize the area once dredging is complete, and fish species would soon follow. Consolidated implementation will change the frequency and duration of these potential effects on aquatic resources, reducing the overall short-term impact and speeding up recovery time.

Unconsolidated implementation would require two periods of dredging and blasting in some areas. Between these periods, benthic communities would recolonize only to be disturbed again during the second construction period. Consolidated implementation eliminates the need for dredging and blasting twice, and therefore eliminates disturbing aquatic biological (benthic and pelagic) resources twice, allowing for earlier recovery.

Because of the reduction in total duration of disturbance under consolidated implementation, the project area would be available for use earlier than under an unconsolidated schedule. Migratory and resident species are expected to use remaining habitats in the Harbor during construction. Because the potential impacts resulting from consolidated implementation would be shorter in duration and less in frequency than a multiphase, unconsolidated schedule, the overall adverse effects would be reduced. Therefore, consolidated implementation is consistent with this policy.

7:7F-8.4 Water Quality

This rule sets standards for coastal development so as to limit effects on water quality. Potential impacts of consolidated implementation to the hydrodynamics, salinity, water temperature, dissolved oxygen, and sediment transport in the study area were evaluated using the three-dimensional numerical model of hydrodynamics and water quality developed as part of the Feasibility Report. Details of the model and evaluation of potential effects in the study area are described in Appendix B of the EA.

Model results indicate minimal and localized changes in dissolved oxygen as a result of consolidated implementation; however, these changes are within the recorded seasonal variation for these parameters within the Harbor. Model results indicate that salinity concentrations and temperatures during consolidated implementation will be no worse than unconsolidated implementation. The duration of consolidated implementation would be shorter than the individual dredging events combined under unconsolidated implementation; therefore, no significant adverse impact to water resources are attributable to the proposed project.

Potential short-term dredging-related impacts (e.g., turbidity) due to consolidated implementation would have similar effects on water quality as identified in the Feasibility Report except the overall duration would be shorter. Consolidated implementation will change the frequency and duration of these potential effects on water quality and reduce the overall short-term impact.

Construction related impacts will be minimized and mitigated through the same best management practices (BMPs) as described in the Feasibility Report and as specified in State Water Quality Certifications, such as utilizing environmental buckets, where appropriate and complying with hoist speed restrictions. Consolidated implementation would therefore be consistent with this policy.

7:7F-8.5 Surface water use

This rule sets standards for coastal development so as to limit effects on surface water. The proposed consolidation of the separately authorized projects will not cause unacceptable surface water disturbances. There will be no use or consumption of surface waters, and consolidated implementation is therefore consistent with this policy.

7:7E-8.6 Groundwater Use

This rule sets standards for coastal development so as to limit effects on groundwater supplies. The proposed consolidation of the separately authorized projects will not place a demand on groundwater supplies nor will construction activities associated with the proposed navigation channel improvements impact area groundwater. Consolidated implementation is therefore consistent with this policy.

7:7E-8.7 Stormwater management

This rule sets standards for coastal development so as to limit effects of stormwater runoff. No land-based work is associated with consolidated implementation of the separately authorized projects. Therefore, this policy is not applicable.

7:7E-8.8 Vegetation

This rule sets standards for coastal development to protect vegetation. The results of hydrodynamic modeling and site surveys indicate that the proposed project will not influence any significant vegetated areas, and therefore the proposed project is consistent with this policy.

7:7E-8.9 (Reserved) NOT APPLICABLE

7:7E-8.10 Air quality

This rule sets standards for coastal development with requirements that projects meet applicable air quality standards. The General Conformity Rule (GCR) of the Clean Air Act Amendment (CAA) of 1990 (40 CFR 193) went into effect as of January 31, 1994. The GCR requires Federal Actions, including providing funds or issuing permits, not interfere with states' efforts to attain or maintain ambient air quality standards in accordance with EPA-approved State Implementation Plans (SIPs). All Federal Actions must comply with the GCR unless otherwise exempt. GCR only applies to actions that emit one or more criteria pollutants in areas that do not meet CAA standards for one or more pollutant (nonattainment area) or have just recently come within the standard (maintenance area).

The study area is located within the New York Northern New Jersey Connecticut nonattainment area (NYNJCTNA) which is also referred to as the New York New Jersey Long Island nonattainment area and thus falls within the jurisdiction of both state's SIPs. The region is currently designated as a severe nonattainment area for ozone and a maintenance area for carbon monoxide (CO). The GCR is triggered when, in severe ozone nonattainment areas, emissions exceed 25 tons per year. This quantity also applies to amounts of ozone precursors, oxides of nitrogen (NOx) and volatile organic carbons (VOCs). The GCR applies to consolidated implementation because the project area is within the NYNJCTNA and consolidated implementation is not exempt.

Consolidated and unconsolidated plan emission estimates predict project NOx emissions would exceed the GCR trigger level for severe ozone nonattainment areas during each year of construction. However, consolidated implementation reduces the number of years that emissions are generated. Consolidated implementation affects the timing and magnitude of when peak year estimated emissions occur, as well as the years leading up to and after the peak year, but the peak emission amounts are similar under either consolidated or unconsolidated implementation.

The plan for reaching Conformity with the CAA for the consolidated implementation project is presented in the Harbor Air Management Plan (HAMP). The details of the HAMP are being finalized by a Regional Air Team (RAT), on which NJDEP plays an active role. The HAMP will be a combination of actions, as outlined in the conditional Statement of Conformity (SOC) that was finalized and agreed to by the States and EPA in April 2002. The result of implementing the HAMP will be no net emission increase during any year of consolidated implementation; and an overall decrease in NOx levels both during and after construction, providing long-term air quality benefits. Therefore, consolidated implementation is consistent with this policy.

7:7E-8.11 Public Access to the Waterfront

This rule requires that coastal development adjacent to the waterfront provide perpendicular and linear access to the waterfront to the extent practicable, including both visual and physical access. Consolidated implementation of the separately authorized projects will not affect access to the waterfront, therefore this policy is not applicable.

7:7E-8.12 Scenic Resources and Design

This rule sets standards for new coastal development to be visually compatible with its surroundings. Consolidated implementation of the previously authorized projects does not involve coastal development, therefore this policy is not applicable.

7:7E-8.13 Buffers and Compatibility of Uses

This rule sets standards for adequate buffers between uses found to be incompatible. Because the separately authorized projects are compatible with existing land uses in their vicinity, consolidated implementation is consistent with this policy.

7:7F-8.14 Traffic

This rule sets standards for coastal development so as not to disturb traffic systems. The proposed project will not affect existing traffic systems, and therefore this policy is not applicable (see the *Feasibility Report* Section 3).

7:7E-8.15 through 8.20 (Reserved) NOT APPLICABLE



7:7E-8.21 Subsurface sewage disposal systems

This rule sets standards for subsurface sewage disposal systems in the coastal zone. Consolidated implementation does not involve subsurface sewage disposal, therefore this policy is not applicable.

7:7E-8.22 Solid and hazardous waste

This rule requires that coastal development conforms with all applicable State and Federal regulations, standards and guidelines for the handling and disposal of solid and hazardous wastes. Solid waste includes any garbage, refuse, sludge or other waste material that is "disposed of" by being discharged, deposited, injected, dumped, spilled, leaked or placed into or on any land or water so that it may enter the environment. Solid waste becomes a hazardous waste when it exhibits any of the characteristics which are specified in 40 CFR 261 (e.g., ignitibility, corrosivity, reactivity, and toxicity). Solid waste does not include certain agricultural wastes, recyclable materials, or materials approved for beneficial use or categorically approved for beneficial use under New Jersey code.

This project does not directly involve solid waste. However, some contaminates may be found in dredge materials. Dredged material will be tested to determine appropriate disposal methods as described in the Feasibility Report. Disposal would be in accordance with the DMMP, which takes into account the applicable Federal and state regulations.

The re-suspension of contaminants during dredging will be minimized, and the consolidated schedule for Harbor deepening in particular minimizes possible contamination of and bio-accumulation of contaminants in the State's coastal fish and wildlife resources by removing these materials from the system on an accelerated schedule and treating and/or placing these materials in secure locations. Potential impacts will be minimized by employing BMPs during dredging operations in areas where the sediments have been determined to be contaminated. Potential measures to mitigate this impact include closed-bucket dredging, reduced hoist speeds, no barge overflow, and silt curtains where determined to be appropriate. implementation employs the same measures and follows the same DMMP and is therefore consistent with this policy.

FINDINGS OF THE COASTAL ZONE CONSISTENCY EVALUATION

This coastal zone consistency evaluation considered the proposed consolidated implementation of the separately authorized navigation improvement projects in the New York and New Jersey Harbor and evaluated evaluates the project's consistency with the applicable Coastal Zone Management Rules. Based on this evaluation, the proposed consolidated implementation is consistent with all applicable policies.

