

APPENDIX O

ENVIRONMENTAL CONSEQUENCES IMPACT SUMMARY

Resource Category	Stressor	Effect	Direct (D) or Indirect (I)	Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5		Alternative 6	
				Level of Effect	Potential Cumulative Effects? (Y or N)	Level of Effect	Potential Cumulative Effects? (Y or N)	Level of Effect	Potential Cumulative Effects? (Y or N)	Level of Effect	Potential Cumulative Effects? (Y or N)	Level of Effect	Potential Cumulative Effects? (Y or N)	Level of Effect	Potential Cumulative Effects? (Y or N)
MARINE COMMUNITIES															
Soft Bottom	Dredging	Mechanical Habitat Disturbance/Benthic Invertebrate Loss	D	Low to Moderate	N	Absent	N	Low to Moderate	N	Moderate	Y	Low	N	Low	N
	Dredging	Demersal Fish Entrainment	D	Low	N	Low	N	Low	N	Low	N	Low	N	Low	N
	Dredging	Invertebrate Prey Loss Effects on Demersal Fishes	I	Low to Moderate	Y	Absent	N	Low to Moderate	Y	Moderate	Y	Low	Y	Low	Y
	Dredging	Sediment Suspension/Redeposition	I	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Beach Fill	Benthic Invertebrate Loss	D	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Beach Fill	Invertebrate Prey Loss Effects on Demersal/Surf Zone Fishes	I	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Beach Fill	Sediment Suspension/Redeposition	I	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
Hard Bottom	Dredging	Mechanical Habitat Disturbance/Benthic Invertebrate Loss	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Dredging	Sediment Suspension/Redeposition	I	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Dredging	Hardbottom/Reef Fish Entrainment	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
Water Column	Dredging	Sediment Suspension/Turbidity	D, I	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Dredging	Underwater Noise Effects	D, I	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Dredging	Larval Fish/Invertebrate Entrainment	D	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Beach Fill/Groin/Inlet Management	Hydrodynamic Effects on Larval Transport	I	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
OCEANFRONT BEACH COMMUNITIES															
Intertidal Beach	Beach Fill	Shorebird Disturbance/Displacement (Foraging)	D	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Beach Fill	Invertebrate Infauna Loss	D	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Beach Fill	Invertebrate Prey Loss Effects on Shorebirds/Surf Zone Fishes	I	Low to Moderate	Y	Absent	N	Low to Moderate	Y	Low to Moderate	Y	Low	Y	Low	Y
	Shoreline Erosion	Erosional Habitat Loss	I	Low	N	High	N	Low	N	High	N	Low	N	Low	N
Dry Beach and Dune	Beach Fill	Invertebrate Macrofauna Loss	D	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Beach Fill	Shorebird Disturbance/Displacement (Nesting/Roosting)	D	Absent to Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Beach Fill	Habitat Modification (Sediment Composition/Beach Morphology)	I	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Shoreline Erosion	Erosional Habitat Loss	I	Moderate	N	High	Y	Moderate	N	Moderate	N	Low	N	Low	N
	Beach Fill/Groin/Inlet Management	Downdrift Effects on Adjacent Beaches	I	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
INLET COMMUNITIES															
Intertidal Flats and Shoals	Dredging	Mechanical Habitat Disturbance	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Beach Fill	Shorebird Disturbance/Displacement (Foraging)	D	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill	Invertebrate Infauna Loss	D	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill	Invertebrate Prey Loss Effects on Shorebirds/Fishes	I	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill/Groin/Inlet Management	Habitat Loss/Modification (Hydrodynamic/Sediment Transport Effects)	I	Absent to Low	N	Absent	N	Absent to Low	N	Moderate	Y	Absent to Low	N	Absent to Low	N
Inlet Dry Beach and Dune	Beach Fill	Invertebrate Macrofauna Loss	D	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill	Shorebird Disturbance/Displacement (Nesting/Roosting)	D	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill	Habitat Modification (Sediment Composition/Beach Morphology)	I	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill/Groin/Inlet Management	Habitat Loss/Modification (Hydrodynamic/Sediment Transport Effects)	I	Low	N	Low	N	Low	N	Low to Moderate	Y	Low	N	Low	N
ESTUARINE COMMUNITIES															

Shellfish	Dredging	Mechanical Habitat Disturbance	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Dredging	Sediment Suspension/Redeposition	I	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
SAV	Dredging	Mechanical Habitat Disturbance	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Dredging	Sediment Suspension/Redeposition	I	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
Tidal Marshes	Dredging	Mechanical Habitat Disturbance	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Beach Fill/Groin/Inlet Management	Marsh Erosion (Hydrodynamic Effects)	I	Absent	N	Absent to Low	N	Absent	N	Absent	N	Absent	N	Absent	N

THREATENED/ENDANGERED SPECIES

N. Atlantic Right/Humpback Whales	Dredging	Vessel Collision Risk	D	Absent	N	Absent	N	Absent to Low	N	Low	N	Absent to Low	N	Absent to Low	N
	Dredging	Underwater Noise Effects	D	Absent	N	Absent	N	Absent to Low	N	Low	N	Absent to Low	N	Absent to Low	N
West Indian Manatee	Dredging	Vessel Collision Risk	D	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
Piping Plover	Beach Fill	Disturbance/Displacement	D	Absent to Low	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill	Inlet Habitat Modification (Sediment Composition/Beach Morphology)	I	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Beach Fill/Dredging/Groin	Inlet Habitat Modification (Hydrodynamic/Sediment Transport Effects)	I	Absent	N	Absent	N	Absent	N	Moderate	Y	Absent	N	Absent	N
Red Knot	Beach Fill	Disturbance/Displacement	D	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Beach Fill	Ocean Beach Habitat Modification (Sediment Composition/Beach Morphology)	I	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Shoreline Erosion	Erosional Ocean Beach Habitat Loss	I	Moderate	N	High	Y	Moderate	N	High	N	Low	N	Low	N
	Beach Fill/Dredging/Groin	Inlet Habitat Modification (Hydrodynamic/Sediment Transport Effects)	I	Absent	N	Absent	N	Absent	N	Moderate	Y	Absent	N	Absent	N
Wood Stork	Beach Fill/Dredging	Disturbance/Habitat Modification	D,I	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
Sea Turtles	Beach Fill	Disruption of Sea Turtle Nesting/Hatchling Emergence	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
	Beach Fill	Habitat Modification (Sediment Composition/Beach Morphology)	I	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Shoreline Erosion	Erosional Dry Beach Habitat Loss	I	Moderate	N	High	Y	Moderate	N	Moderate	N	Low	N	Low	N
	Dredging	Entrainment	D	Absent	N	Absent	N	Absent to Low	N	Low	N	Absent to Low	N	Absent to Low	N
Atlantic/Shortnose Sturgeon	Dredging	Entrainment	D	Absent	N	Absent	N	Absent to Low	N	Low	N	Absent to Low	N	Absent to Low	N
	Dredging	Benthic Habitat Modification	I	Low	N	Absent	N	Low	N	Low to Moderate	N	Low	N	Low	N
	Dredging	Sediment Suspension/Redeposition	D,I	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
Seabeach Amaranth	Beach Fill	Mechanical Injury/Burial of Plants	D	Absent	N	Absent	N	Absent to Low	N	Absent to Low	N	Absent to Low	N	Absent to Low	N
	Beach Fill	Habitat Modification (Sediment Composition/Beach Morphology)	I	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Shoreline Erosion	Erosional Dry Beach Habitat Loss	I	Moderate	N	High	Y	Moderate	N	Moderate	N	Low	N	Low	N

CULTURAL RESOURCES

Civil War Vessels (Shipwrecks)	Dredging	Mechanical Disturbance	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N	Absent	N
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PUBLIC INTEREST FACTORS

Public Safety	Beach Fill	Beach Fill Placement Operations	D	Low	N	Absent	N	Low	N	Low	N	Low	N	Low	N
	Beach Fill/Dredging/Groin	Hazards to Navigation	D	Absent	N	Absent	N	Absent	N	Absent	N	Absent to Low	N	Absent to Low	N
Aesthetics/Recreation	Active Beach Fill/Dredging	Reduction in Aesthetic Quality	D,I	Low to Moderate	N	Absent	N	Low to Moderate	N	Low to Moderate	N	Low	N	Low	N
	Shoreline Erosion	Reduction in Recreational Beach Width	I	Moderate to High	N	High	Y	Moderate to High	N	Moderate	N	Low	N	Low	N
Economics	Beach Fill/Groin/Inlet Management	30-Year Construction and Maintenance Costs	D	Moderate	N	Absent	N	High	N	High	N	Low	N	Low	N
	Shoreline Erosion	Loss of Property/Infrastructure/Tax Base	I	Moderate to High	N	High	Y	Moderate to High	N	Moderate	N	Low	N	Low	N
	Shoreline Erosion	Loss of Recreational/Environmental Value	I	Moderate	N	High	Y	Moderate	N	Moderate	N	Low	N	Low	N