

Category	Criteria		 Option 1	 Option 2	 Option 1	 Option 2	 Option 1	 Option 2	No Action Alternative (Baseline)	
Purpose and Need (P&N)	Meets P&N (Y/N)		Y	Y	Y	Y	Y	Y	N	
Flood Risk Reduction 	Coastal Storm Surge Risk Reduction for Residents	Percentage of Population in Floodplain Receiving Risk Reduction (2010 Census)	98		86		85		0	
		Percentage of Study Area in Floodplain Receiving Flood Risk Reduction	83	82	74	73	73	72	0	
	Critical Facilities NOT Receiving Coastal Flood Risk Reduction		None		One (Fire Station, 1313 Washington Street)		One (Fire Station, 1313 Washington Street)		One Hospital (308 Willow Avenue) Four Fire Stations (201 Jefferson St, 43 Madison St, 801 Clinton St, 1313 Washington St) NHSA Water Treatment Plant (1600 Adams St.)	
	Potential to Adapt to Higher Coastal Flood Events		Yes							No
	Potential Runoff to be Managed by DSD Components		Up to 7 million gallons							0
Socioeconomics and Built Environment 	Environmental Justice Populations Receiving Flood Reduction Benefits		Rainfall: 2,053 Hispanic individuals, 1,883 Minority individuals, and 968 Households below poverty level Coastal Surge: 2,785 Hispanic individuals, 2,251 Minority individuals, 309 over 75 individuals, and 520 Households below poverty						Environmental Justice communities would remain exposed to flood risks	
	Public Health Benefits (acreage no longer flooding during 5 Year rainfall events)		48.1 acres with reduction in flooding severity, including 35.5 acres no longer flooding						No benefit to Public Health. Flood events will continue to represent an adverse impact to Public Health	
	Possible Potential Viewshed Impacts	Residential Impacts	1st/2nd floor of properties on N. side of 15th St from Garden St to Sinatra Dr. N, and first floor of properties along Sinatra Dr. N.	1st floor residential properties fronting 15th St from Garden to Washington and along Washington St. from 15th to 13th St.		Residential properties along Washington St. from 15th to 13th St.		None		
		Recreational Impacts	1600 Park ballfields, Shipyard Park, and Hudson River walkway from Weehawken Cove to Sinatra Dr. N to 11th St	1600 Park Ballfields		1600 Park Ballfields		None		
		Retail/Dining Impacts	1st floor businesses: Shops at Lincoln Harbor, 1st floor businesses along Sinatra Dr. N. and Sinatra Dr. (south)	Businesses along Washington St. from 15th to 13th St.		Businesses along Washington St. from 15th to 13th St.		None		
	Length of Waterfront Access Impacted (ft)		7,950		150		150		0	
	Acres of New or Improved Park Space		13.85		8.9		7.9		0	
Connectivity and Circulation	Number of Parking Spaces Impacted	2	0	15	13	9	7	0		
	Number of Gate Closures during Storm Conditions	29	31	21	25	19	23	0		
Benefit Cost Analysis 	Benefits for Resist (in millions)		\$1,448M		\$1,417M		\$1,416M		-	
	Estimated Resist Cost (in millions)		\$440-\$482	\$451-\$492	\$201-\$224	\$212-\$232	\$189-\$210	\$200-\$225	-	
	Estimated Resist Cost Contingency (in millions)		\$96-\$107	\$99-\$110	\$43-\$49	\$45-\$50	\$40-\$45	\$43-\$49	-	
	Total Resist Cost (in millions)		\$537-\$589	\$550-\$602	\$243-\$273	\$258-\$282	\$230-\$255	\$243-\$274	-	
	Resist Benefit/Cost Ratio		2.24		4.74		4.95		-	
	Total Project Benefit/Cost Ratio (includes Resist and DSD)		2.21		3.83		3.94		-	
Construction / Maintenance and Operations 	Constructability	Number of Private Parcels Requiring Easements	15	15	6	6	6	6	0	
		Potential Utility Relocation (linear feet)	4,860	4,600	2,300	2,060	1,280	1,030	0	
		Potential Utility Crossings	87	86	69	69	64	64	0	
	Temporary Construction Impacts (acres)		29.4	29.3	30.1	30.2	29.8	29.9	None	
	Estimated Annual Maintenance Cost (millions)		\$3.6-5.4	\$3.7-5.5	\$1.5-2.4	\$1.6-2.6	\$1.4-2.3	\$1.5-2.4	-	
Environmental Impacts 	Recognized Environmental Conditions (RECs)	Number of REC Properties Affected	43	46	45	49	45	49	0	
		Estimate of hazardous soils requiring off-site disposal (tons)	22,255	22,102	19,621	19,556	19,466	19,407	0	
		Estimate of non-hazardous soils requiring off-site disposal (tons)	128,738	128,163	118,829	118,583	118,246	118,024	0	
	Freshwater Wetlands	Freshwater Wetlands Within Footprint (Square Feet)	230						0	
	Threatened and Endangered Species/ Essential Fish Habitat	Impacts to T&E and Essential Fish Habitat	Potential for minor impacts due to in-water work along waterfront. Negligible impacts from new outfalls		Negligible in-water impacts from new outfalls		Negligible in-water impacts from new outfalls		None	
	State and Federal Environmental Permitting	NJDEP Flood Hazard Act (NJAC 7:13) Permit		Individual Permit						None
		Acreage of Floodplain Disturbance		7.54 ac Permanent 27.61 ac Temporary	7.57 ac Permanent 27.84 ac Temporary	5.81 ac Permanent 27.87 ac Temporary	5.85 ac Permanent 28.22 ac Temporary	5.76 ac Permanent 27.41 ac Temporary	5.80 ac Permanent 27.77 ac Temporary	None
		Number of Properties (by owner) Potentially Impacted (pursuant to NJAC 7:13), both Public and Private		2 properties potentially impacted (pursuant to NJAC 7:13)		5 properties potentially impacted (pursuant to NJAC 7:13)		5 properties potentially impacted (pursuant to NJAC 7:13)		None
		NJDEP Wetlands Permitting (NJAC 7:7A)		Individual Permits (for in-water work associated with bulkhead replacement)		General Permit (for proposed outfalls and work in wetlands)		General Permit (for proposed outfalls and work in wetlands)		None
		USACE Sections 10 and 404 Permitting		Individual Permit (for in-water work associated with bulkhead replacement)		Nationwide Permit (for proposed outfalls)		Nationwide Permit (for proposed outfalls)		None
Historic Properties	Number of historic properties or districts with adverse effect	45	45	61	61	60	60	0		
Archaeological Resources	Acres of potential archaeological resources affected by the alternative	16.64	16.60	15.42	15.54	14.40	14.52	0		
Noise	Number of Noise Receptors during Construction	Schools - 4 Parks - 13 Places of Worship - 3	Schools - 4 Parks - 13 Places of Worship - 3	Schools - 0 Parks - 4 Places of Worship - 2	Schools - 0 Parks - 4 Places of Worship - 2	Schools - 0 Parks - 4 Places of Worship - 2	Schools - 0 Parks - 4 Places of Worship - 2	0		

Category	Criteria	Definition of Criteria and Metrics
Purpose and Need (P&N)	Meets P&N	The purpose of the Project is to reduce the flood risk to flooding areas within the Study Area. The Project intends to minimize the impacts from surge and rainfall flood events on the community, including adverse impacts to public health, while providing benefits that will enhance the urban condition, recognizing the unique challenges that exist within a highly developed urban area. This criterion measures whether each alternative meets the P&N.
Flood Risk Reduction 	Coastal Storm Surge Risk Reduction for Residents	Percentage of Population in Floodplain Receiving Risk Reduction (2010 Census)
		Percentage of Study Area in Floodplain Receiving Flood Risk Reduction
	Critical Facilities NOT Receiving Coastal Flood Risk Reduction	
	Potential to Adapt to Higher Coastal Flood Events	
	Potential Runoff to be Managed by Delay, Store, Discharge (DSD) Components	
Environmental Justice Populations Receiving Flood Reduction Benefits	Federally-funded projects cannot disproportionately impact Environmental Justice communities - those that are made up primarily by low-moderate income households, minority populations, individuals over 75, and Hispanics. Instead of posing an impact, however, this project benefits these communities by reducing flood risk. This criterion provides a measurement of the estimated Environmental Justice population (based on Census data) that will receive rainfall flood risk reduction benefits from the Delay, Store, Discharge components during a 5-year rainfall event or during a 100-year coastal surge event.	
Socioeconomics and Built Environment 	Public Health Benefits (acreage no longer flooding during 5 Year rainfall events)	
	Viewshed Impacts	Residential Impacts Recreational Impacts Retail/Dining Impacts
	Length of Waterfront Access Impacted (feet)	
	Acres of New or Improved Park Space	
	Connectivity and Circulation	Number of Parking Spaces Impacted
		Number of Gate Closures during Storm Conditions
Benefit Cost Analysis 	Benefits	
	Estimated Resist Cost	
	Estimated Resist Cost Contingency	
	Total Resist Cost	
	Resist Benefit/Cost Ratio	
	Total Project Benefit/Cost Ratio (includes Resist and DSD)	
Construction / Maintenance and Operations 	Constructability	Number of Private Parcels Requiring Easements Potential Utility Relocation (linear feet) Potential Utility Crossings
	Temporary Construction Impacts (acres)	
	Estimated Annual Maintenance Cost (millions)	
Environmental Impacts 	Recognized Environmental Conditions (RECs)	Number of REC Properties Affected
		Estimate of Hazardous Soils Requiring Off-Site Disposal (tons)
		Estimate of Non-Hazardous Soils Requiring Off-Site Disposal (tons)
	Freshwater Wetlands	Freshwater Wetlands Within Footprint (square feet)
	Threatened and Endangered (T&E) Species/ Essential Fish Habitat	Impacts to T&E and Essential Fish Habitat
		NJDEP Flood Hazard Act (NJAC 7:13) Permit
		Acreage of Floodplain Disturbance (pursuant to NJAC 7:13)
	State and Federal Environmental Permitting	Number of Properties (by owner) Potentially Impacted (pursuant to NJAC 7:13), both Public and Private
		NJDEP Wetlands Permitting (NJAC 7:7A)
		USACE Sections 10 and 404 Permitting
Historic Properties	Number of Historic Properties or Districts with Adverse Effect	
Archaeological Resources	Acres of Potential Archaeological Resources Affected by the Alternative	
Noise	Number of Noise Receptors During Construction	