

Economic Analysis

- Cost Benefit Analysis compares costs to benefits to determine if a project is economically justified.
- Computer simulations of random storms estimate damages to property and contents over a 50 year analysis period.
- Benefits compare without project damages to with project damages to estimate ‘damages avoided.’
- Project features are combined to maximize net benefits.
- No project eliminates all damages from all storms. Coastal areas remain highly vulnerable to major storms – residual risk always remains.
- Nearly 2/3 of the without project damages are shown to be reduced with the project in place.*

Total Damage Estimates *

Damage Category	Without Project PLAN C	Great South Bay	Moriches Bay	Shinnecock Bay	Ponds Reach (Southampton)	Montauk Reach (East Hampton)	WITH PROJECT* PLAN A	WITH PROJECT* PLAN B
Total Project								
Tidal Inundation occurring due to inlet conditions, and wave setup in back bay								
Mainland	\$5,834,500	\$3,403,700	\$14,379,500	\$9,051,300			\$19,081,400	\$13,270,200
Barrier	\$942,300	\$941,400	\$2,400	\$6,600			\$942,300	\$942,300
Tidal Inundation occurring due to the event resulting in breaching, and overwash								
Mainland	\$11,035,500	\$6,483,500	\$3,618,700	\$933,300			\$3,298,500	\$7,929,300
Barrier	\$1,946,900	\$1,939,600	\$1,600	\$5,700			\$10,000	\$70,000
Total Inundation	\$78,240,200	\$50,241,100	\$18,002,200	\$9,996,900			\$31,790,800	\$30,692,800
Damages (Inundation and Structure Failure) due to a breach remaining open								
Inundation	\$8,292,700	\$6,660,500	\$1,469,600	\$162,600			0	\$380,000
Structure Failure (barrier island)	\$358,900	\$304,600	-	\$54,300			0	0
Total Breach-Open	\$8,651,600							
Shorefront Damages	\$7,305,200	\$3,900,000	\$355,000	\$1,150,000	\$1,123,000	\$779,000	\$4,045,200	\$4,045,200
Total Storm Damage	\$94,197,000	\$61,106,200	\$19,826,800	\$11,363,800	\$1,123,000	\$779,000	\$35,836,000	\$35,118,000

* Damage totals reflect rapid breach closure, and 100% participation in non-structural measures.

Analysis is based upon historic rates of sea level rise

Changes in sea level rise will increase the with and without project damage estimates.



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