Village of Southampton

Coastal Erosion Management

Post Sandy Considerations

March 14, 2013

August 23, 2012

November 4, 2012

Village of Southampton

Southampton, NY

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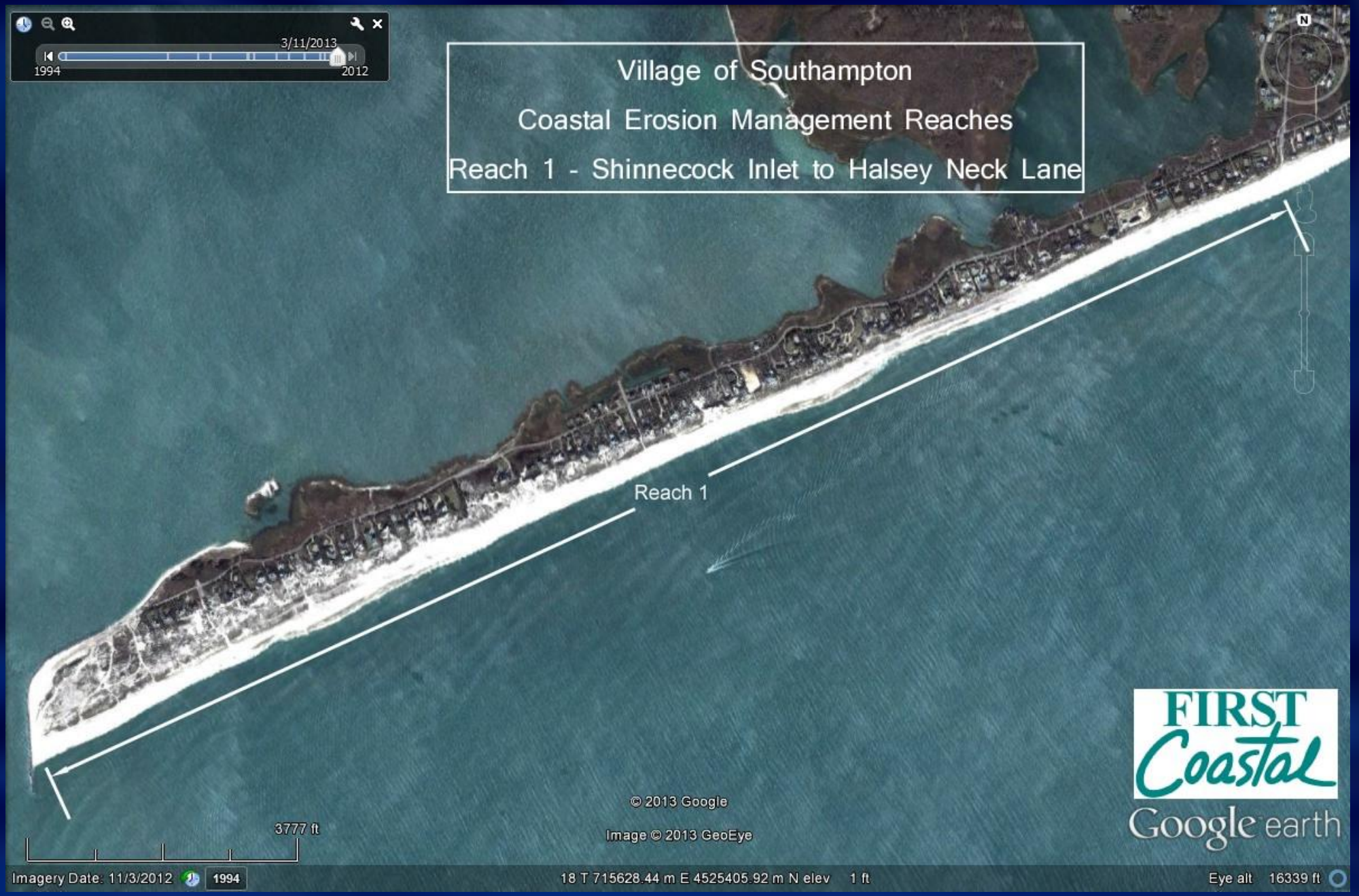
Coastal Erosion Management
March 14, 2013



Village of Southampton

Southampton, NY

Village of Southampton
Coastal Erosion Management
March 14, 2013

Village of Southampton Reach 1

August 23, 2012

Village of Southampton

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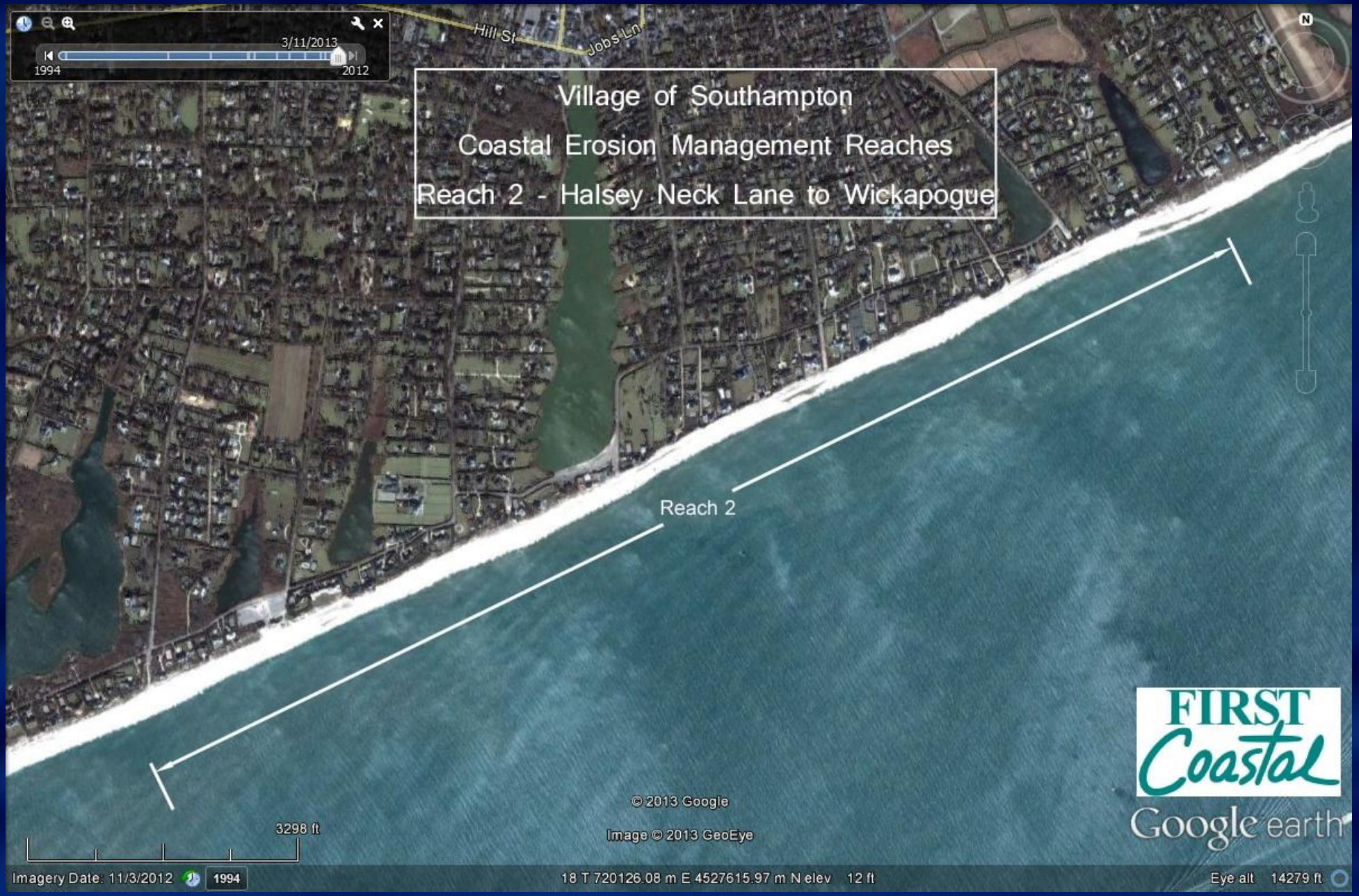

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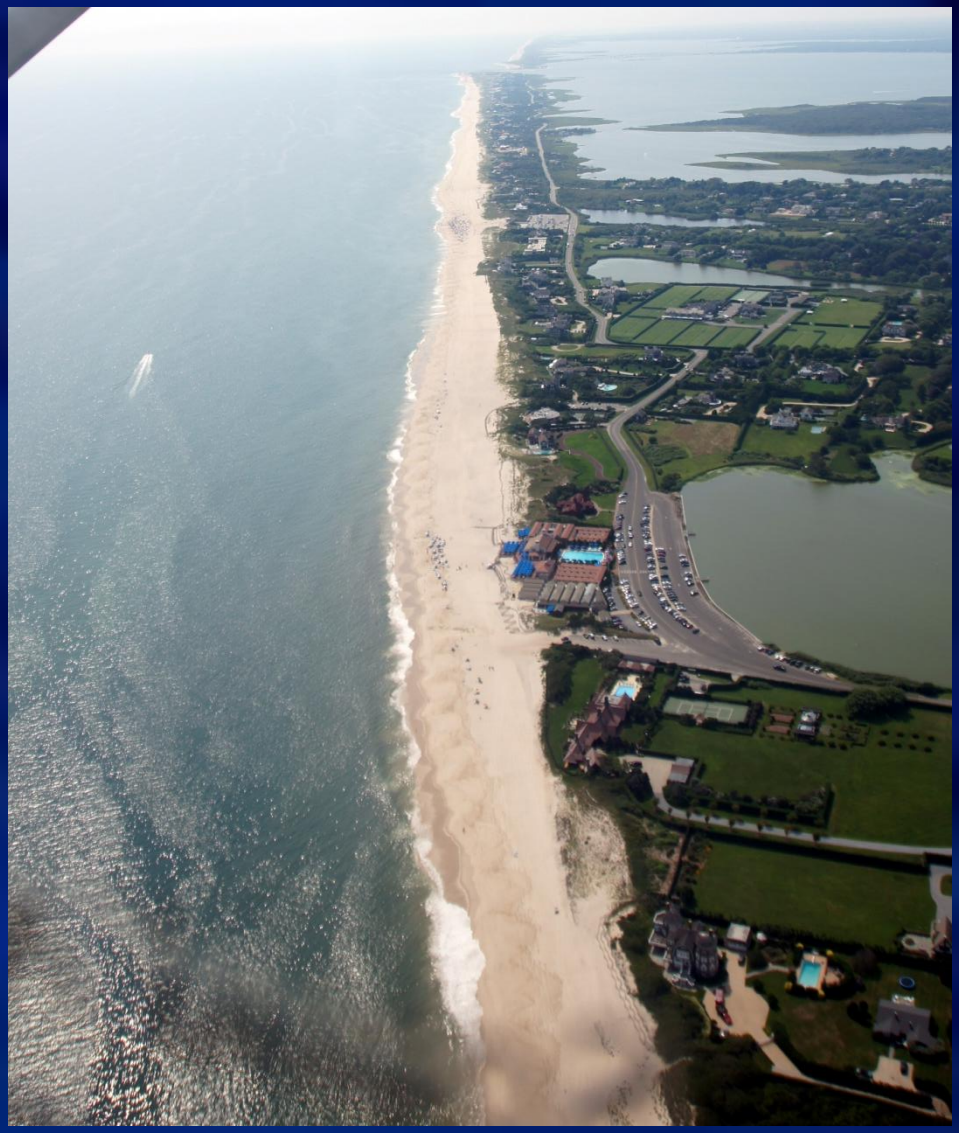
Coastal Erosion Management
March 14, 2013

Village of Southampton Reach 2

August 23, 2012



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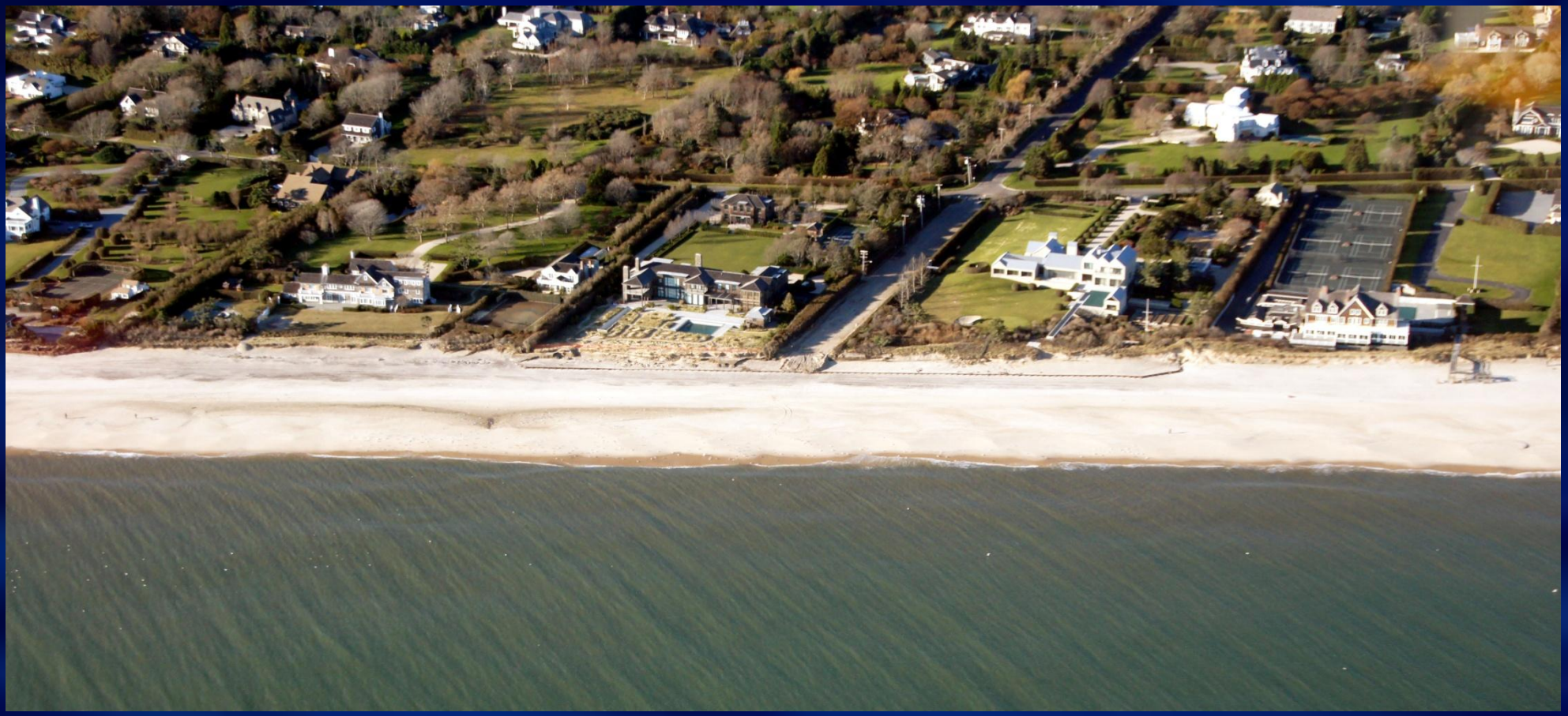

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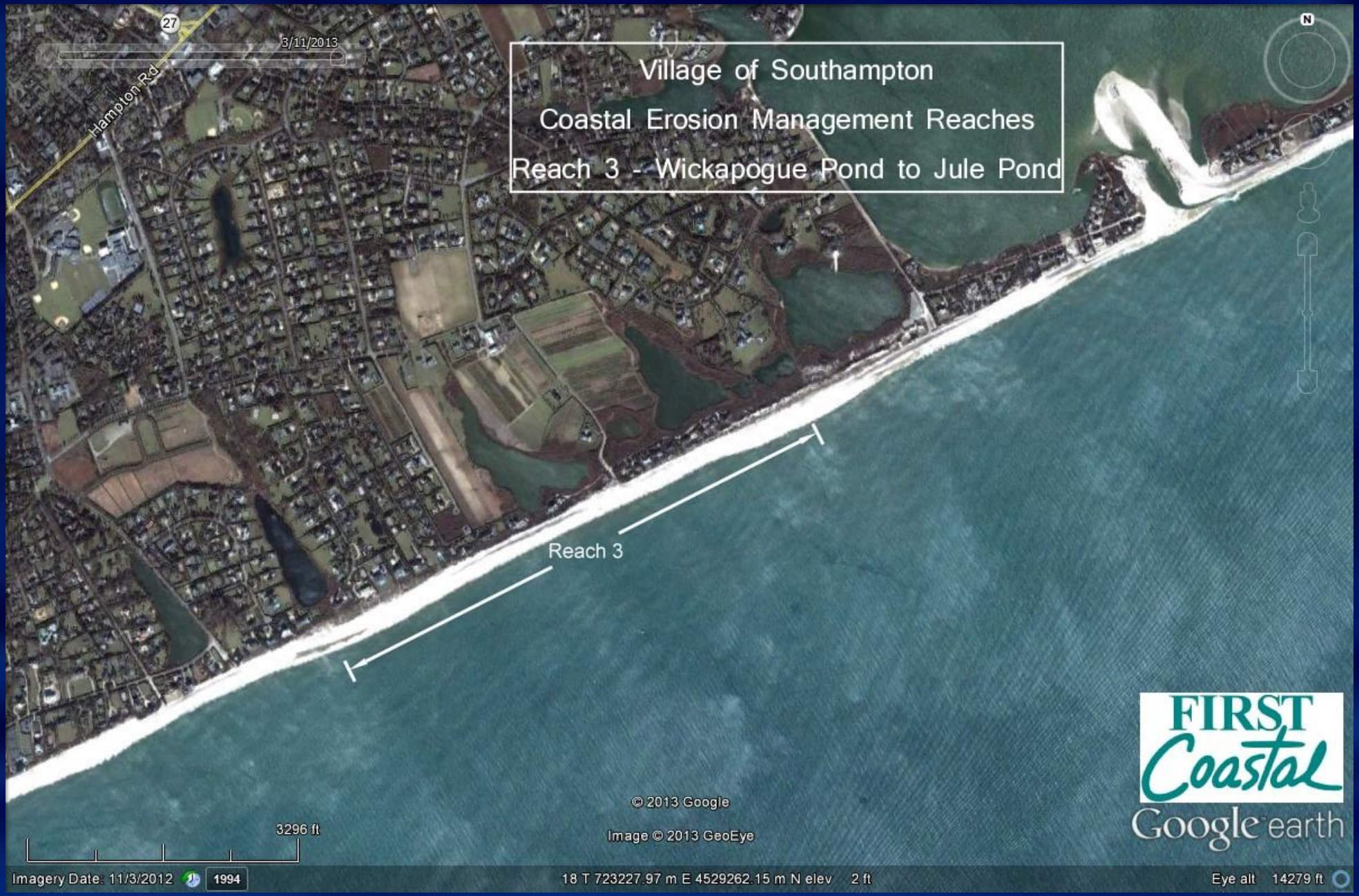
Coastal Erosion Management
March 14, 2013



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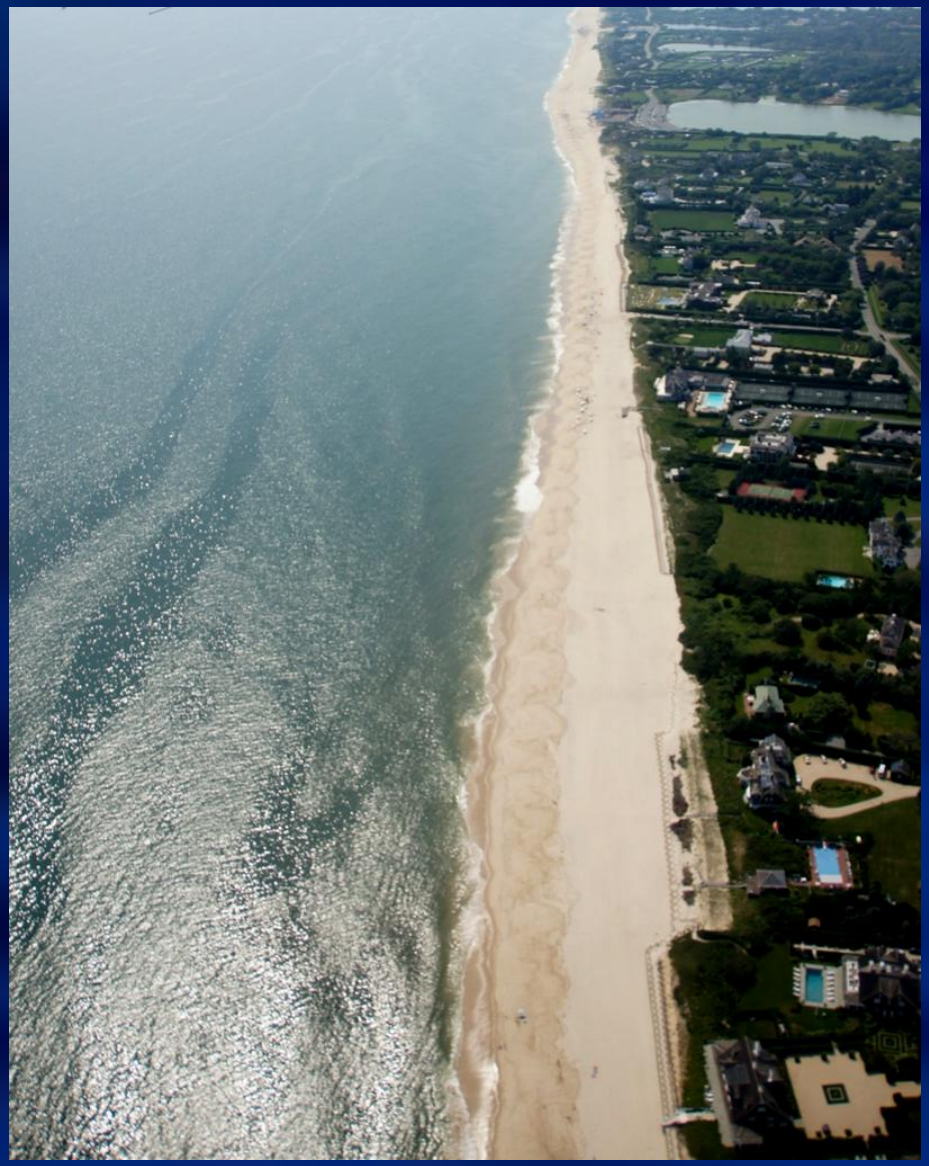
Village of Southampton Reach 3



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Village of Southampton Coastal Erosion Management

Three Coastal Reaches – Three Integrated Strategies

Reach 1 – Shinnecock Inlet to Halsey Neck Road

Condition - Generally wide beaches and high dunes

Recommend – Aggressive sand fence and beach grass to restore and enhance dunes

Reach 2 – Halsey Neck Road to Wickapogue

Condition - Substantial beaches and dunse with 95% of the area protected with seawalls.

Recommend – Complete seawalls to form consistent protection. Enhance dunes by adding dune compatible sand and maintain with sand fence and beach grass.

Reach 3 – Wickapogue to Jule Pond

Condition – Subject to increasing erosion by sand waves. Dunes not rebuilding naturally after storms. Apparent sand deficit.

Recommend – Interim measures to protect homes, ponds and infrastructure. Long term beach restoration.

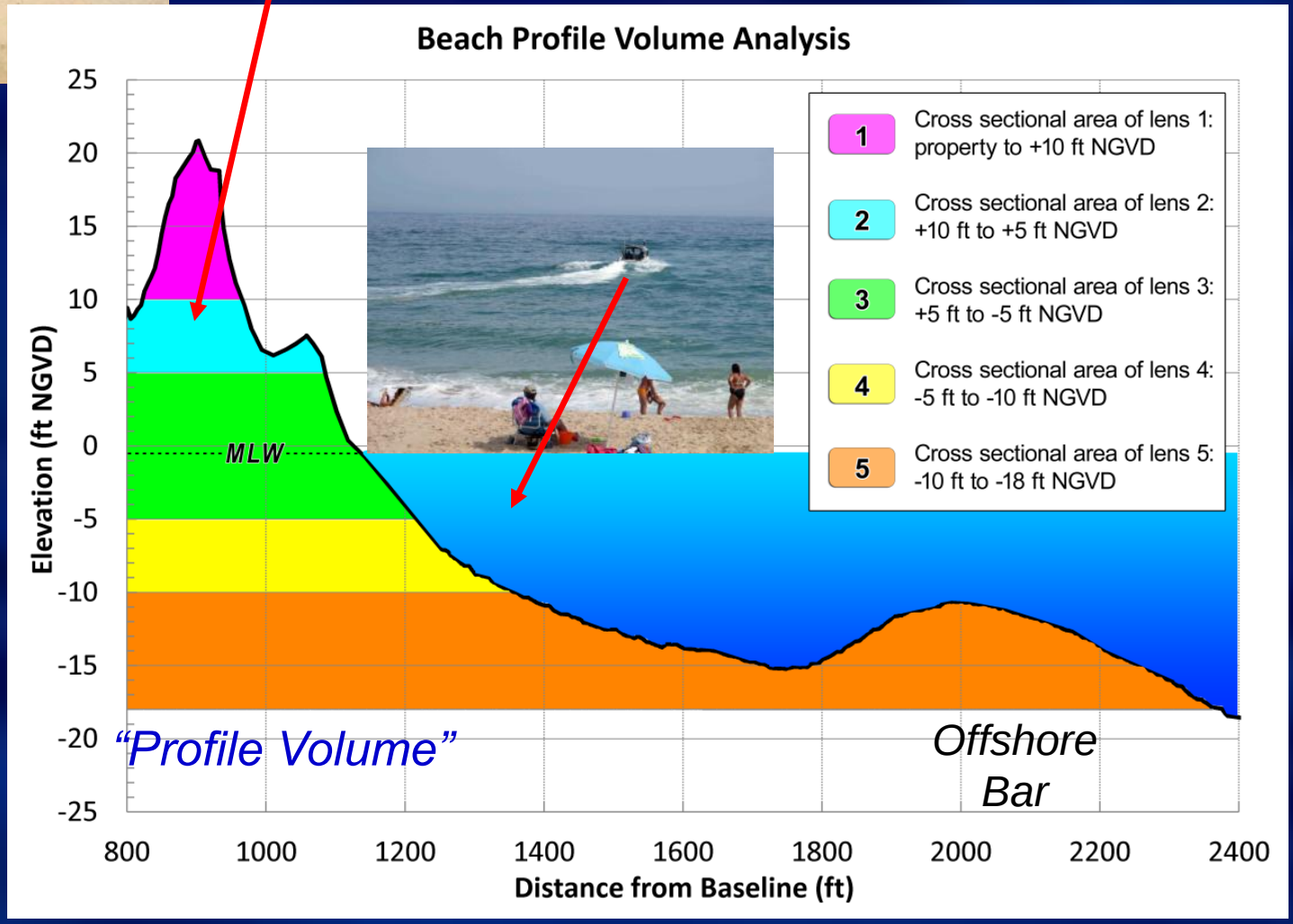
Village of Southampton - Coastal Erosion Management
The Path Forward

1- Conduct a Shoreline Analysis to determine the causes and amounts of shoreline erosion and accretion, including a flooding vulnerability analysis under varying beach and dune protection scenarios.

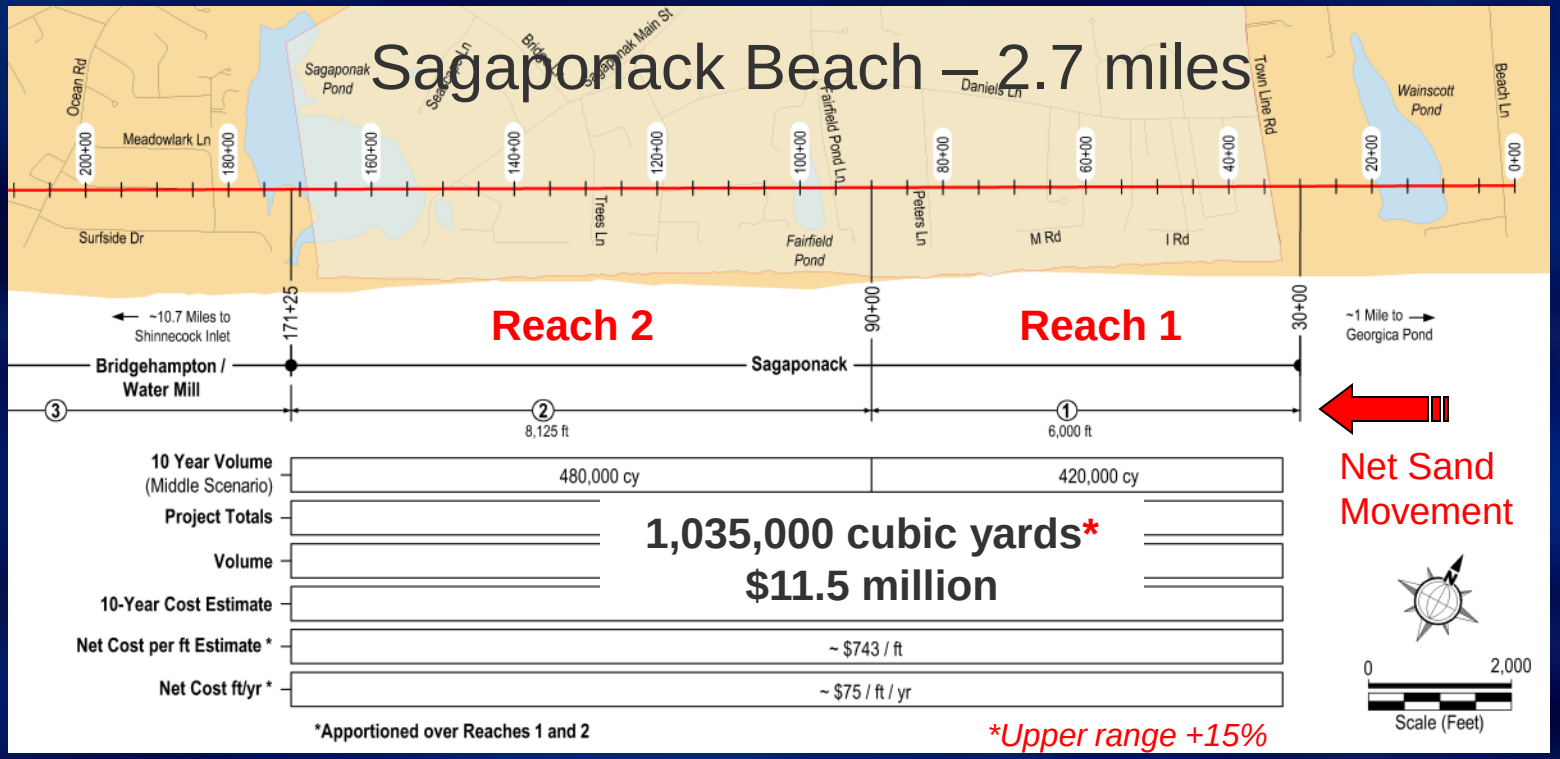
2 - Prepare a Coastal Erosion Management Plan that integrates the existing Land Use programs found in the Village Code (e.g. Coastal Erosion Hazard Areas – Chapter 49, Beach and Erosion Protection – Chapter 37, Flood Damage Prevention – Chapter 62) with a beach and dune restoration and enhancement program, including sand fence beach grass, seawalls, and beach nourishment.

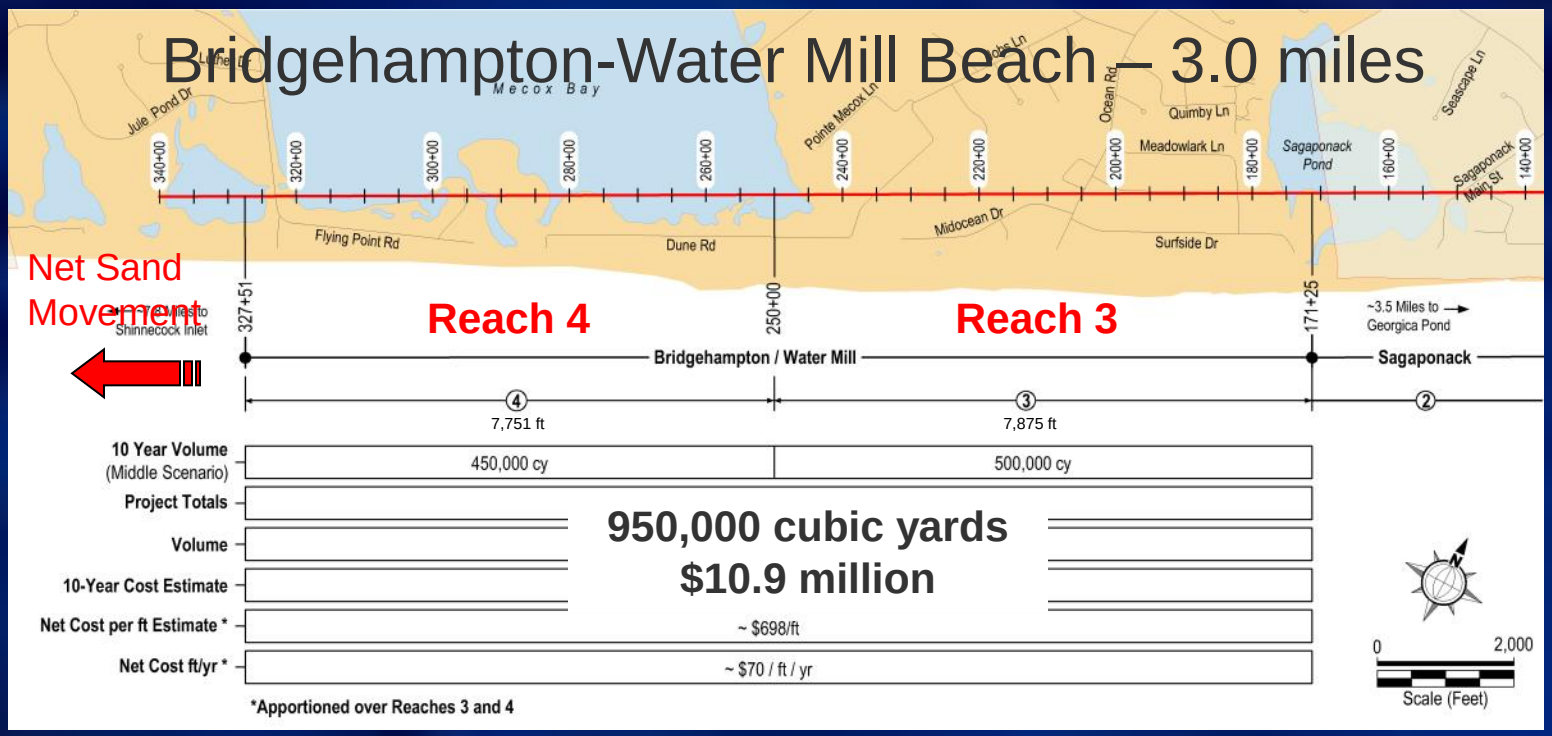
3 – Implement the Coastal Erosion Management though a combination of regulatory guidance documents for costal protection structures and activities and consider undertaking beach restoration similar to the Bridgehampton-Water Mill and Sagaponack areas.

Application To Sagaponack & Bridgehampton-Water Mill Beach



Recommended Plans





"Beach Nourishment Longevity Is Proportional to the Square of the Project Length"

"Double the Length and You Quadruple the Design Life"

"Sand Moves East and West According to Wind and Wave Direction. But On Average More Sand Moves West Over Time"

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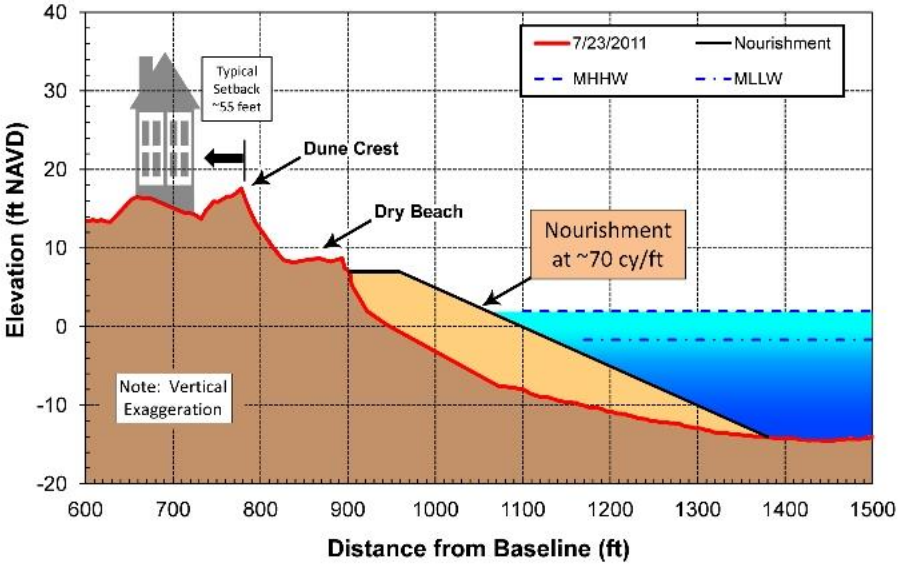
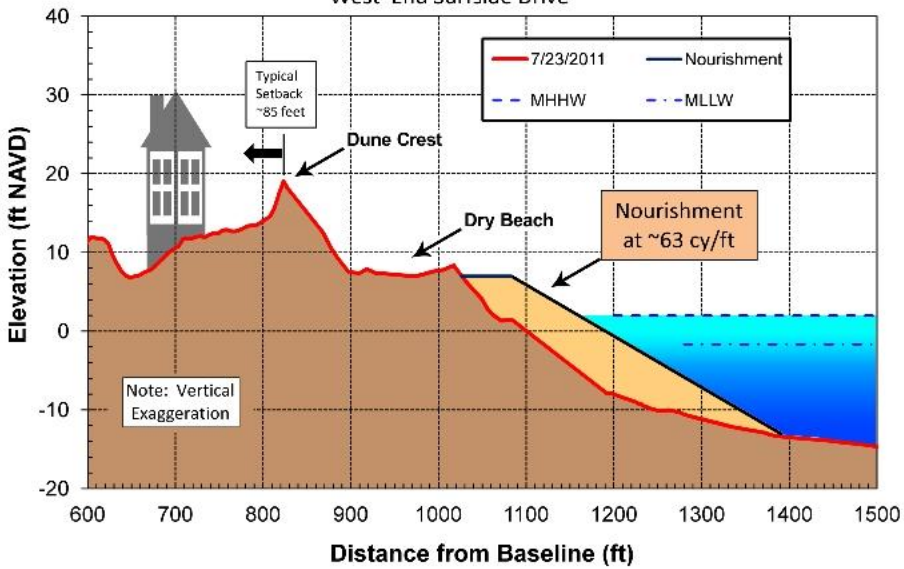
Sagaponack Reach 1 - Station 60+00 - Potato Road



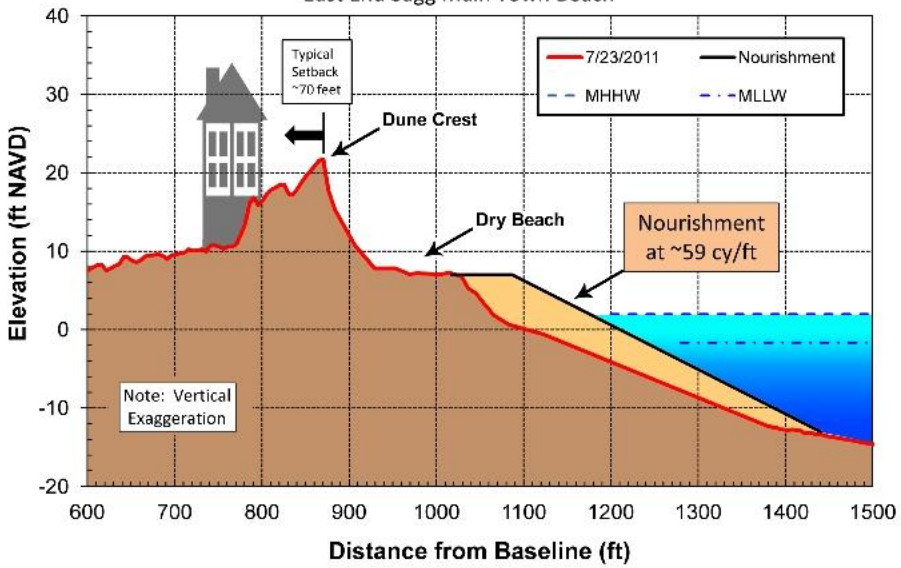
Bridgehampton - Water Mill Reach 3 - Station 200+00

West End Surfside Drive



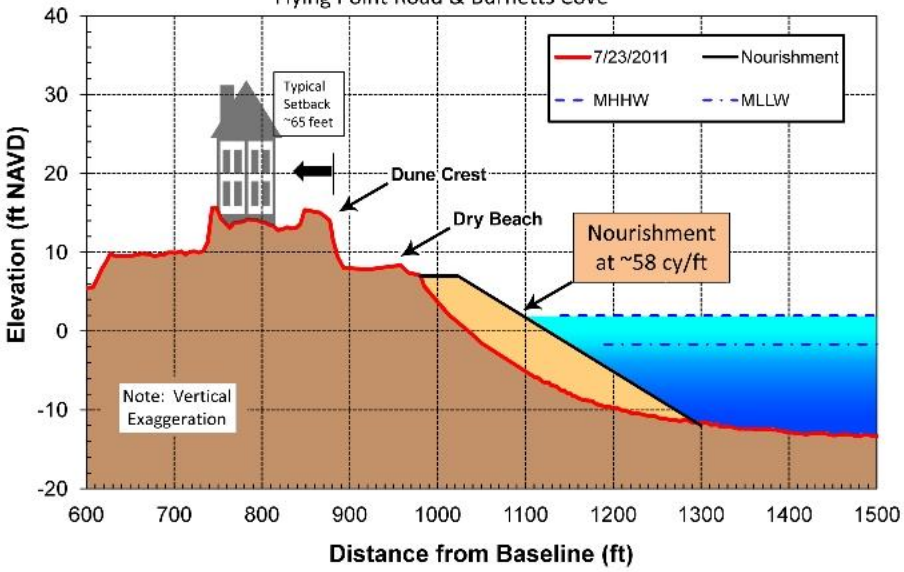
Sagaponack Reach 2 - Station 150+00

East End Sagg Main Town Beach



Bridgehampton - Water Mill Reach 4 - Station 300+00

Flying Point Road & Burnetts Cove



First Coastal - Long Island, NY - Coastal Services: Bluffs, Dunes, Tides, Erosion, Revetments, etc.

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Long Island's Coastal Environmental & Marine Construction firm since 1975

ARAM V. TERCHUNIAN, M. Sc.
Curriculum Vitae

Areas of Expertise

* Geomorphology, coastal processes, coastal hazard and erosion analysis
* Wetlands delineation, permitting and erosion control construction
* Environmental science and resource management
* Endangered species monitoring and management
* Zoning analysis and interpretation

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Timothy W. Kana, PhD

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Degrees: The Johns Hopkins University (BA), University of South Carolina (MS, PhD)
Specialties: beach erosion, coastal geomorphology and processes, sediment budgets, beach restoration planning and design, tidal inlet sediment dynamics

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