



Sandy Neck Beach Park

Area of Critical Environmental Concern (ACEC)



Sandy Neck Beach Park-Parking Lot/Bathhouse



Sandy Neck Dune Erosion 2012-2015



Storm Events

Nemo (2013)

Juno (2015)

Linus (2015)

Marcus (2015)

Neptune (2015)

Un-named nor'easters (2012-2015)

Sand Placement in front of Parking Lots (Winter 2013/2014 and Winter 2014/2015)

	Date	Amount	Cost
Placement #1	Dec. 2013	5,500 c/y	\$119,250
Placement #2	Dec. 2014	4,300 c/y	\$90 ,000
Placement #3	Feb. 2015	2,600 c/y	\$50,000

Over Two Winter Seasons

Total Cost: \$259,250

Total Amount: 12,400 c/y



Coastal Zone Management (CZM) Coastal Community Resiliency Grant

TWO GRANTS AWARDED

- Assessment of Century Scale Sediment Budget of Sandwich and Barnstable (north side) \$157,930.
- Coastal Resiliency at Sandy Neck Beach Park Facilities \$148,5000.



CZM Grant - Coastal Resiliency at Sandy Neck Beach Park Facilities

Consultant: CLE Engineering

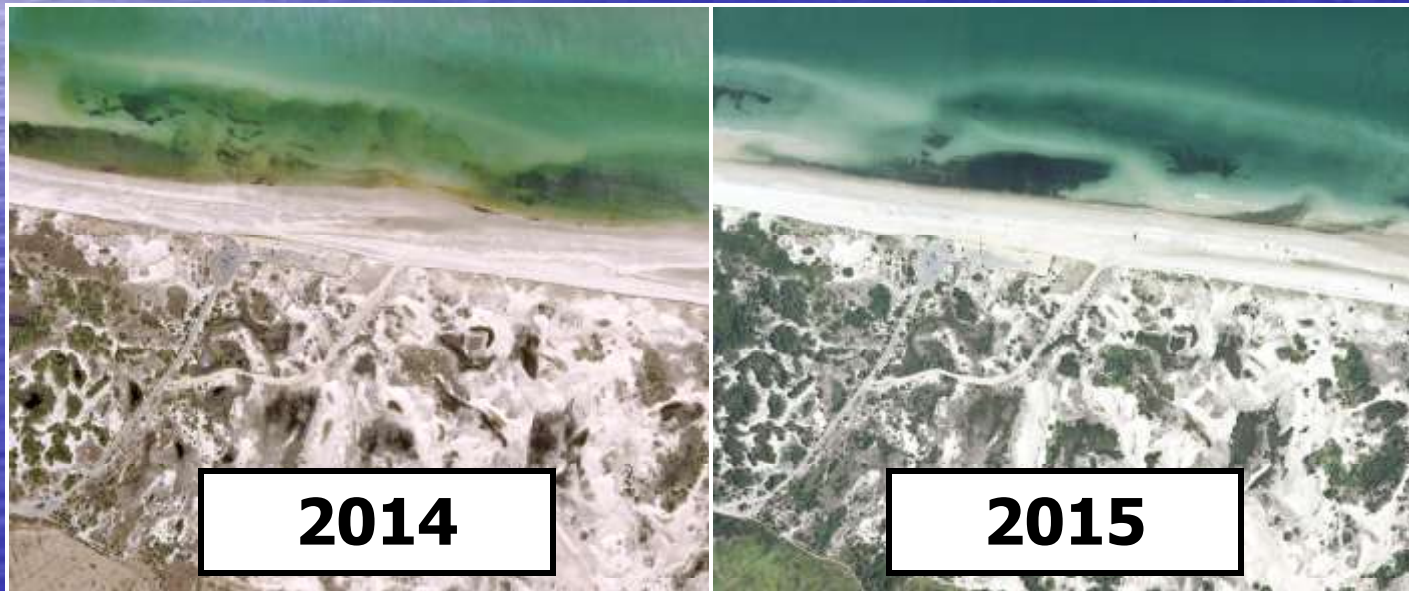
Tasks:

- Shoreline change evaluation (within the area of the facilities).
- Alternative analysis of coastal resiliency solutions.
- Public Outreach.
- Design.
- Permitting.



Coastal Sediment Transport/Shoreline Change Evaluation

- Beach sediment transport analysis to determine accretion and erosion rates.
- Create a model that will be used to project future shoreline change.



Assessment of Long-term Alternatives

- Alternative will be evaluated, at minimum, for:
 - Long-term sustainability and longevity using the shoreline change model
 - Cost-Benefit Analysis
 - Permitability – Evaluate the ability of each alternative to meet regulatory performance standards and comply with the requirements of the ACEC designation.
 - Potential mitigation efforts required to offset impacts
 - Potential impacts to abutting properties.

Assessment of Long-term Alternatives

The following alternatives will be considered:

- Do-Nothing
- Beach/Dune Nourishment



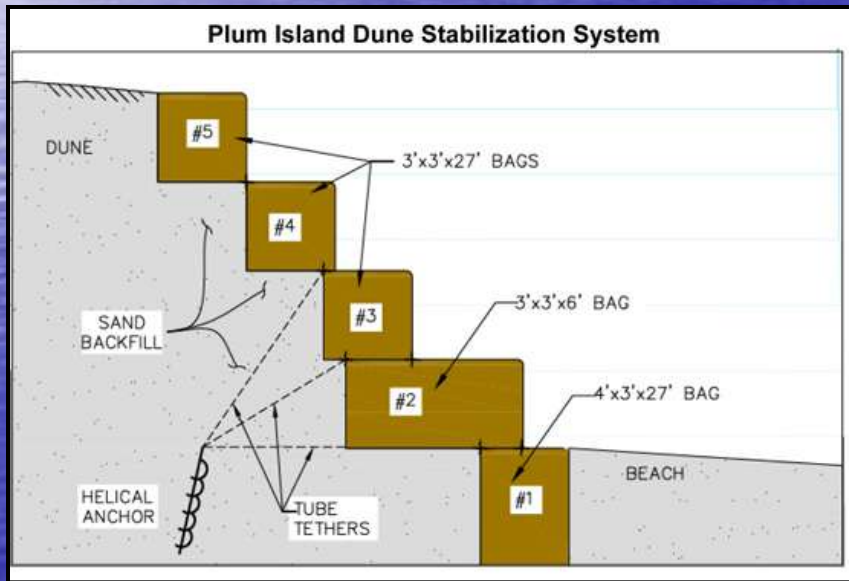
Assessment of Long-term Alternatives (cont.)

The following alternatives will be considered:

- Shoreline Protection Structures

“hard structures” -
bulkhead/seawall and
stone revetment
(unlikely to meet
performance
standards)

“soft structures” -
sand-filled coir bags
(temporary)



Assessment of Long-term Alternatives (cont.)



Managed Site Reconfiguration:

- Relocate structures per shoreline change evaluation.
- Possible phased approach.
- Improve resiliency of primary dune.
- Aesthetically pleasing and functional.



Public Workshops

- Long-term alternatives developed will be presented at two public workshop sessions.

Design

- The selected/preferred alternative will be advanced into preliminary design.
- Preliminary design plans will be suitable for environmental permitting efforts.

Permitting

- Pre-application meeting with regulatory agencies
- Prepare permit/submit permit applications.

Sandy Neck Project Time-Line



Design and
Permitting
Summer 2016.

Construction
winter
2016/2017.