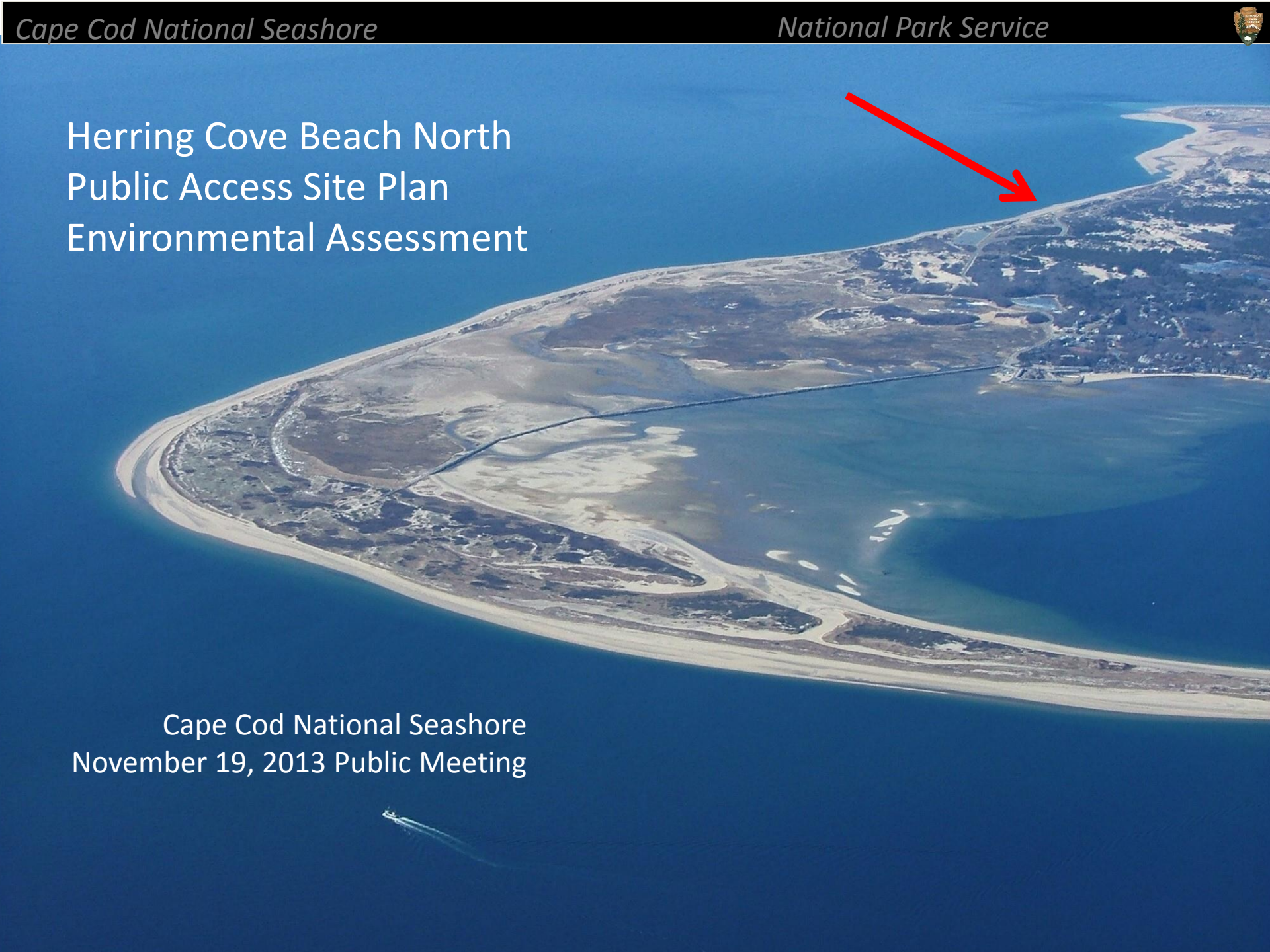


Herring Cove Beach North
Public Access Site Plan
Environmental Assessment



Cape Cod National Seashore
November 19, 2013 Public Meeting





Need for the plan

- Wave action in late December 2011 caused new damage to the asphalt revetment near the bath house and sections of the north parking lot, and coastal areas near the south parking lot.
- The Commonwealth of Massachusetts developed the Herring Cove Beach facilities in the 1950's and includes: a one-mile macadam revetment (seawall); two parking lots; and, bath house facilities and a concession stand that were recently replaced.
- Herring Cove Beach is of special concern to the residents of Provincetown, the National Park Service, and park visitors.
- Current state and federal coastal policies discourage development of hardened structures in vulnerable coastal areas.



Purpose of the plan

- The purpose of taking action is to develop a long-term plan for Herring Cove Beach revetment and parking in consultation with agencies and the community.
- The plan identified the values of the beach and its importance to visitors to the national seashore and local residents.
- The outcome is based upon sound coastal science and engineering practices and be responsive to shoreline change, projected sea level rise and visitor use.



Planning Process Roles

Subcommittee of CCNS Advisory Commission

- Rich Delaney, Chair, Advisory Commission Dept. of Interior Representative
- David Gardner, Town of Provincetown, Assistant Town Administrator
- Steve McKenna, (State) Coastal Zone Management Office
- Dr. Mary Foley, (NPS), Northeast Region Chief Scientist
- Mary Jo Avellar, Advisory Commission Provincetown Representative
- Mark Robinson, Advisory Commission State Representative

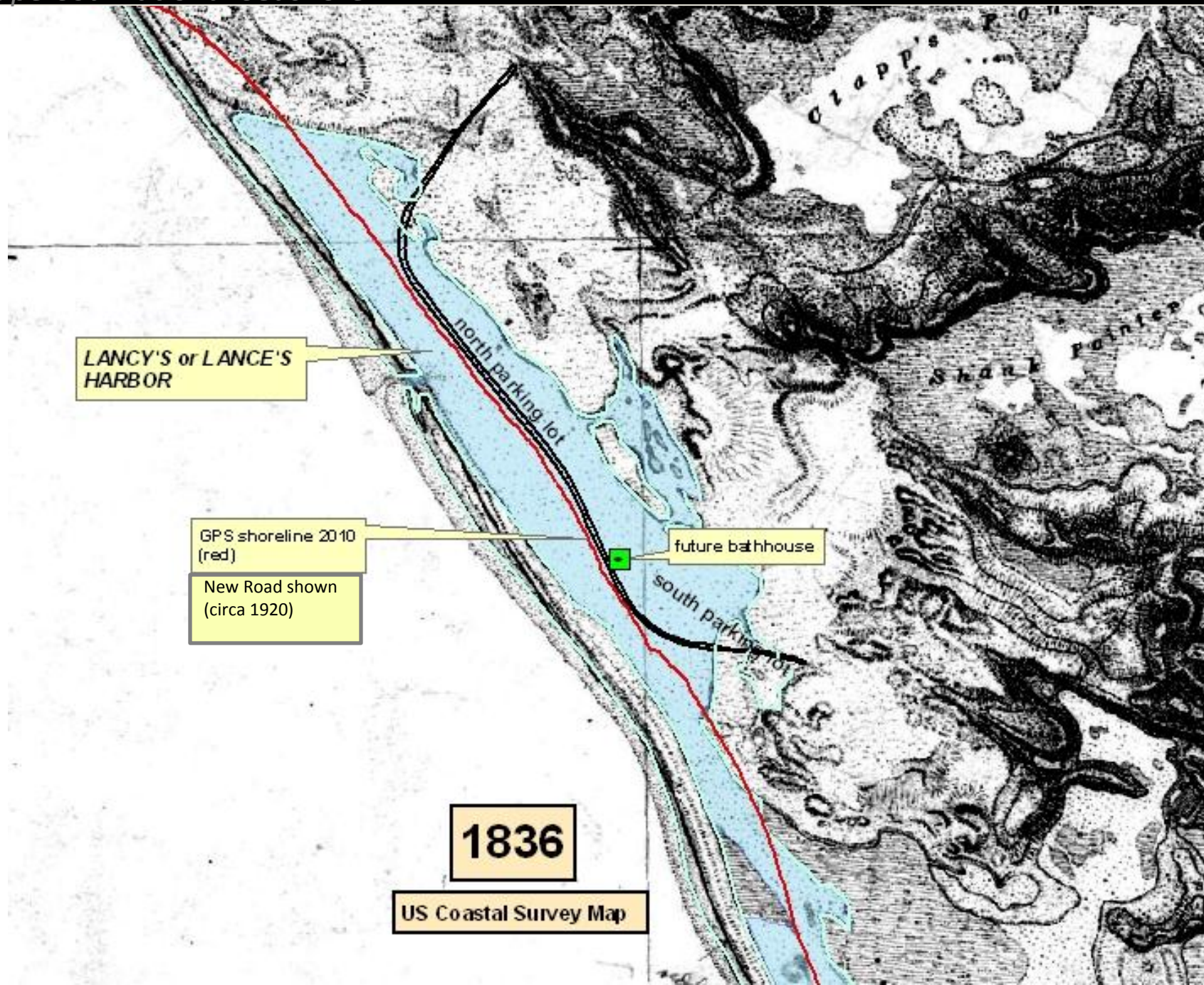
Consultants

- PCCS – Dr. Graham Giese and Dr. Mark Borelli, coastal scientist expertise
- BH+A /Childs Engineering contract: Deborah Robinson, Manager/Dave Porter, Coastal Engineer – coastal engineering expertise
- GWWO contract:
Consensus Building Institute –Stacie Smith and Eric Roberts - subcommittee facilitation work
VHB –Jake Hoogland and Tracy Hamm - environmental assessment work



Planning Process & Timeline

- | | |
|------------------------------|--|
| October 2012 | • Public Scoping |
| Oct – Nov 2012 | • Initial assessments by consultant team |
| Winter 2012 –
Spring 2013 | • Collaborative Work with Advisory Commission Subcommittee in monthly meetings open to the public (4 meetings Dec., Jan., Feb., April) |
| Spring 2013 | • Advisory Commission recommends draft alternative option (May 13 th meeting)
• Public Comments on Draft Alternatives |
| Summer 2013 | • Writing Proposed Plan/Environmental Assessment |
| Fall 2013 | • Public Review and Comment (due Nov. 30) |
| Winter 2013 | • Decision/Final Plan Issued |



LANCY'S or LANCE'S
HARBOR

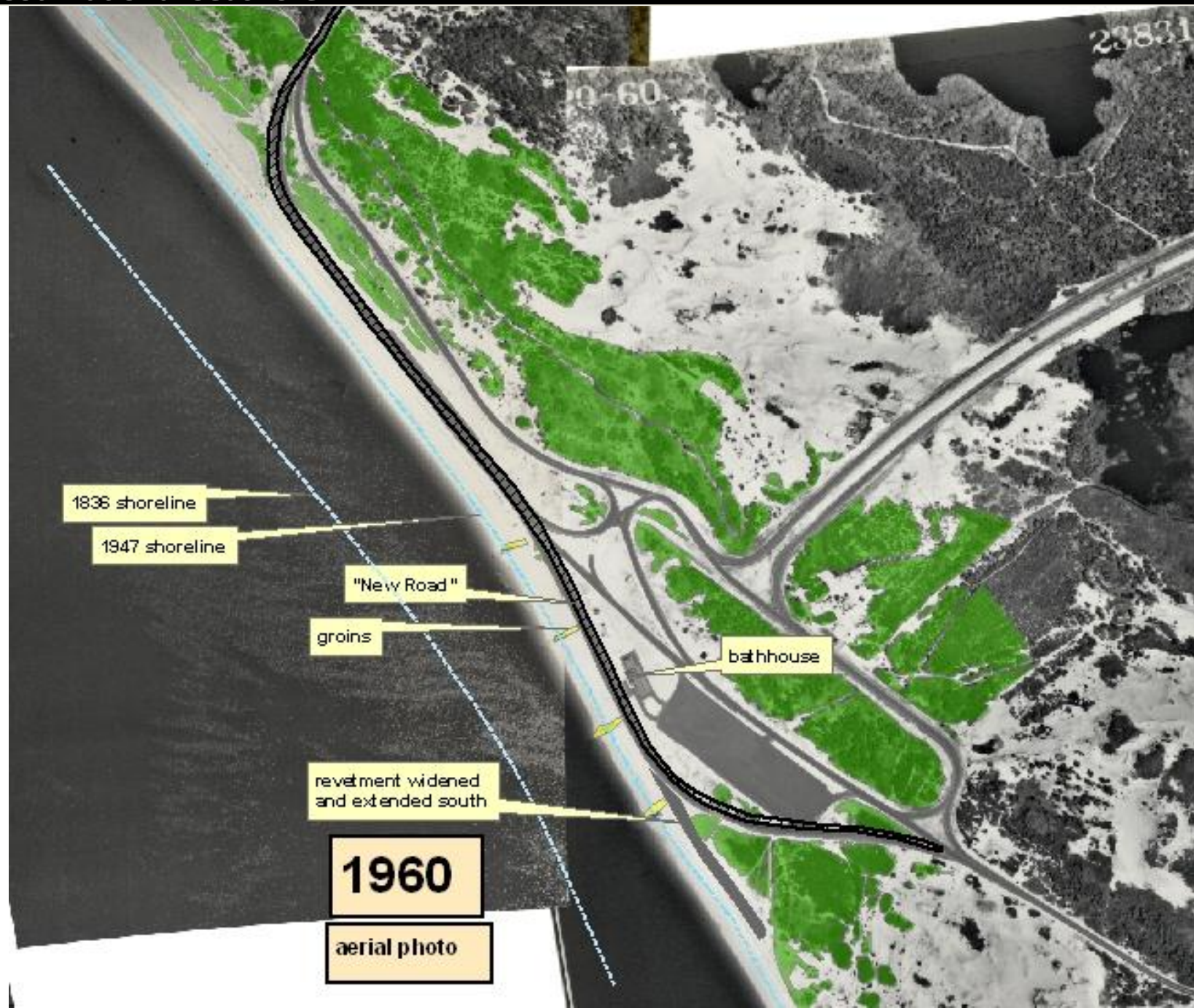
GPS shoreline 2010
(red)

New Road shown
(circa 1920)

future bathhouse

1836

US Coastal Survey Map



1836 shoreline

1947 shoreline

"New Road"

groins

bathhouse

revetment widened
and extended south

1960

aerial photo



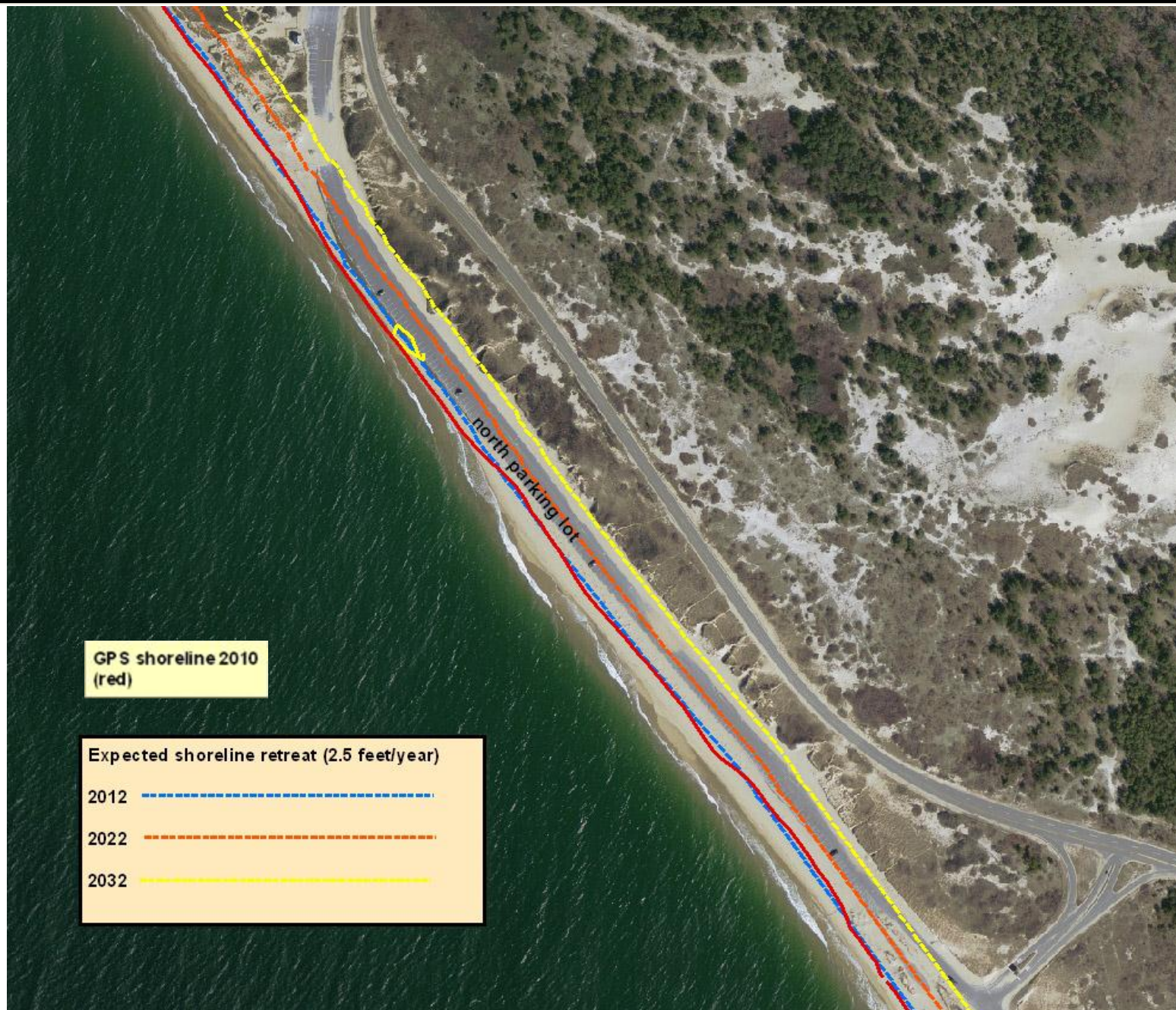
1947 shoreline
1836 shoreline

"natural" shoreline

2011

aerial photo

Average long-term erosion rate = 2.5 feet/year




GPS shoreline 2010
(red)

Expected shoreline retreat (2.5 feet/year)

2012 

2022 

2032 



Goals and objectives

- Develop a preferred alternative which will allow visitor access while being responsive to shoreline change and Commonwealth and Federal policies.
- Ensure the preferred alternative is based on coastal science best practices and anticipates sea level rise.
- Explore and institute as much as practical community and visitor values with the Herring Cove Beach experience.
- Identify suggestions for either phased or comprehensive construction plans for implementation.



Preferred Alternative: One-time Retreat of the Herring Cove North Parking Lot

- Key points:
 - Remove existing revetment and parking lot
 - Replace parking lot 125 feet inland (west), 15 foot elevation
 - Provide physical and visual access from the parking lot to the beach
 - NPS continues to manage the beach area as a recreational beach
 - Provide bicycle connection through project area



Preferred Alternative: One-time Retreat of the Herring Cove North Parking Lot

- Why 125 feet inland?
 - Life of the plan: 50 years
 - Estimated average annual shoreline retreat: 2.5 foot per year erosion rate
- Why 15 feet elevation?
 - Current parking lot is at ~10 feet
 - FEMA 100-year base flood elevation is between 13 and 15 feet
- This alternative plans for expected sea level rise, continental subsidence, and major coastal flood events having a predicted 100-year occurrence.



Preferred Option Overview



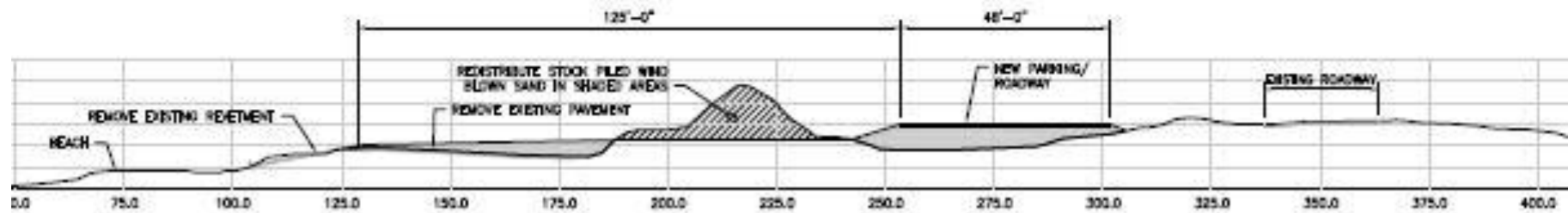
Herring Cove Beach North Public Access Site Plan
Environmental Assessment



FIGURE 6A
Alternative C: One-time Retreat

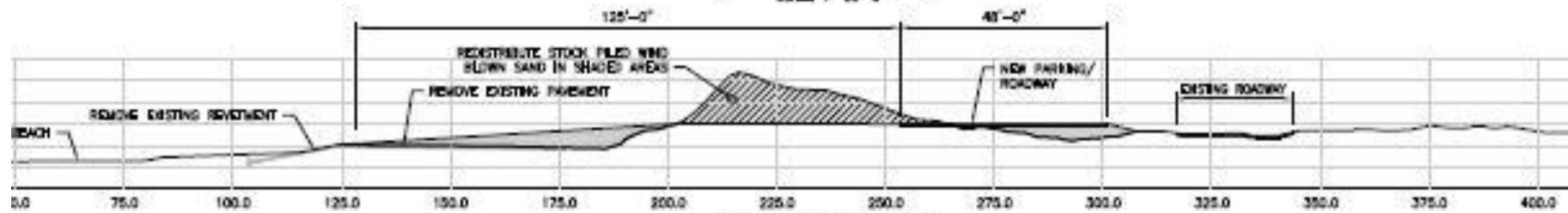


Preferred option section views



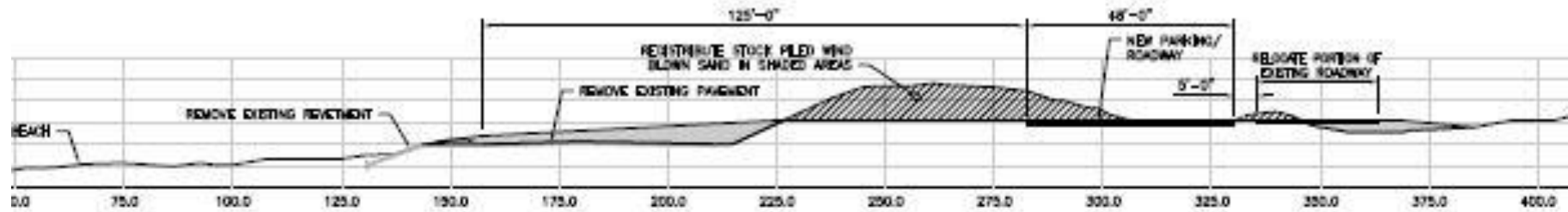
PROPOSED SECTION A-A

SCALE: 1"=30'-0"



PROPOSED SECTION B-B

SCALE: 1"=30'-0"



PROPOSED SECTION C-C

SCALE: 1"=30'-0"



Preferred Option Views



Existing

Simulation





Beach Area Amenities

- Vault toilet at the north end of the parking lot
- Shade shelter
- Dedicated bicycle lanes
- Informational sign
- Newly reconstructed Herring Cove Bathhouse



Herring Cove Revetment and Parking
Environmental Assessment 2012-13



Other Alternatives



- Other alternatives considered for analysis:
 - No-action: the Herring Cove Beach North parking lot and revetment remain in place and are repaired as long as practical
 - Periodic Retreat: the Herring Cove Beach North parking lot is moved back approximately 25 feet every 10 years
- Other alternatives considered but dismissed:
 - Elevation in Place
 - Periodic Retreat (Alternate Configuration)
 - Install Groins and New Seawall (with Beach Nourishment)
 - Remote Parking



Impacts of the Preferred Alternative

- Restore coastal processes
- Initial disturbance of vegetation followed by a long-term reestablishment of vegetation
- Remove infrastructure from the 100-year floodplain
- Public remains able to use the parking lot for access to and views of the beach
- Improved safety for bicyclists travelling through the project area





Public Comments

Do you have any questions?

What are your comments or suggestions?

Is there anything you would like to share with the planning team?

