Sullivan Shoreline

Living Shorelines Project

Trinity Bay, Chambers County, TX

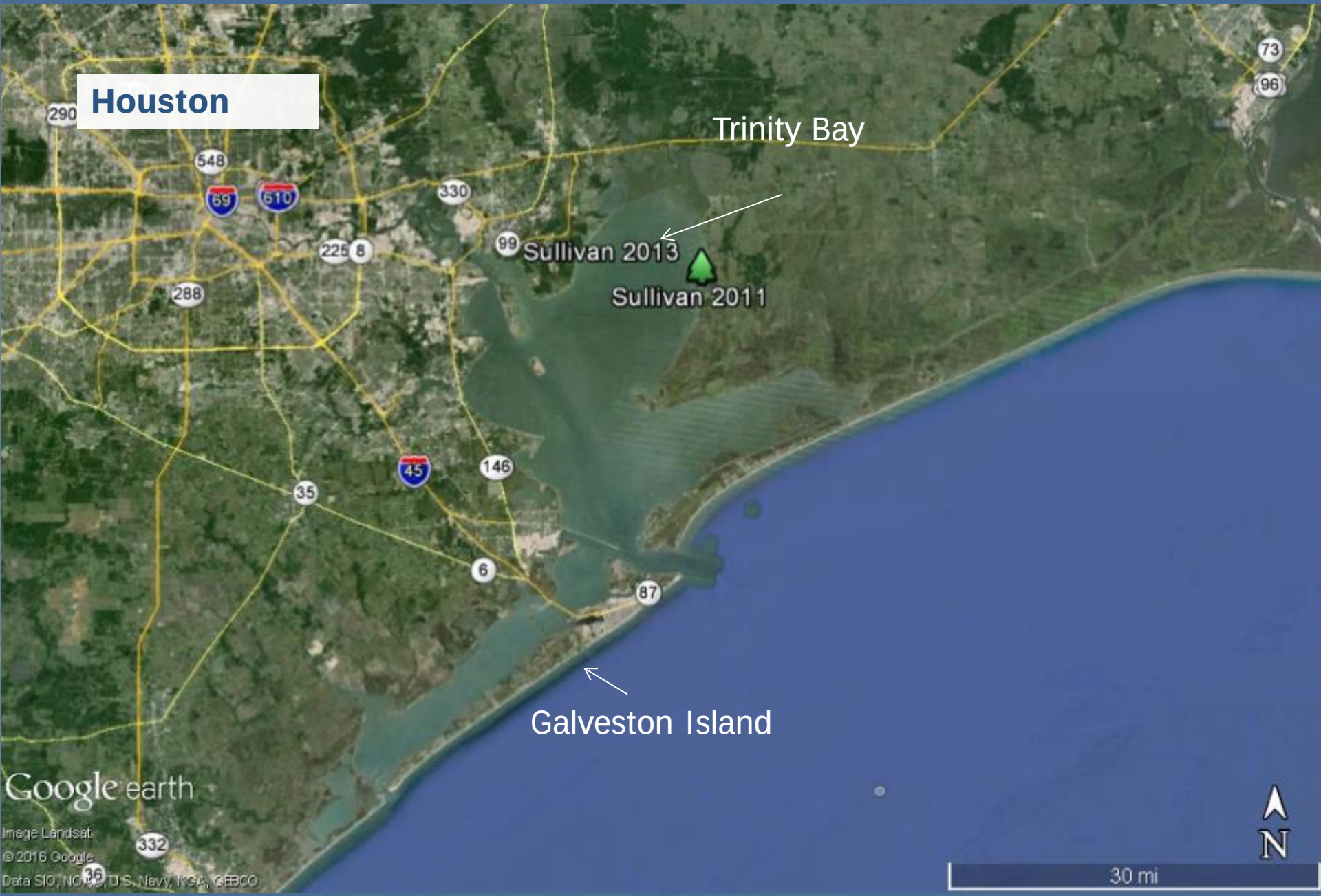
Breakwater: 890LF

Marsh created: 2.31 acres

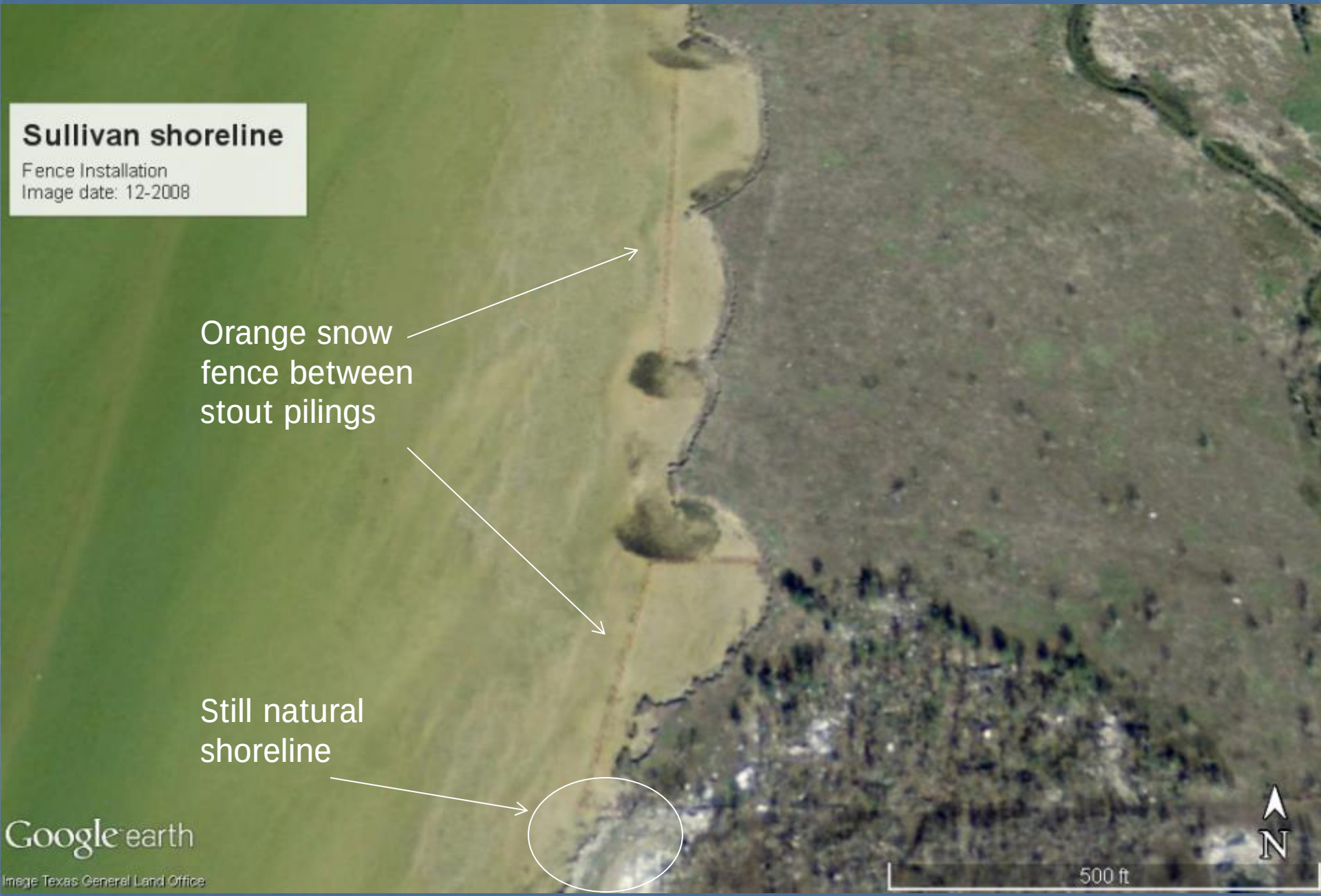
Total Project Cost: $51,940.50

Summary: Various methods tried in high energy environment.

Photos: Jim Dobberstine


Houston
Trinity Bay
Sullivan 2013
Sullivan 2011
Galveston Island
290
548
69
610
330
99
225
8
288
45
146
35
6
87
73
96
332
36
Google earth
Image Landsat
© 2016 Google
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
N
30 mi


Sullivan shoreline
Pre-shoreline work
Image date: 11-2006
Note: Natural shoreline
Google earth
Image U.S. Geological Survey
700 ft
N


Sullivan shoreline
Fence Installation
Image date: 12-2008
Orange snow fence between stout pilings
Still natural shoreline
Google earth
Image Texas General Land Office
500 ft
N


Sullivan shoreline
Fence Installation
Image date: 03-2010
Bulkhead
Google earth
500 ft
N

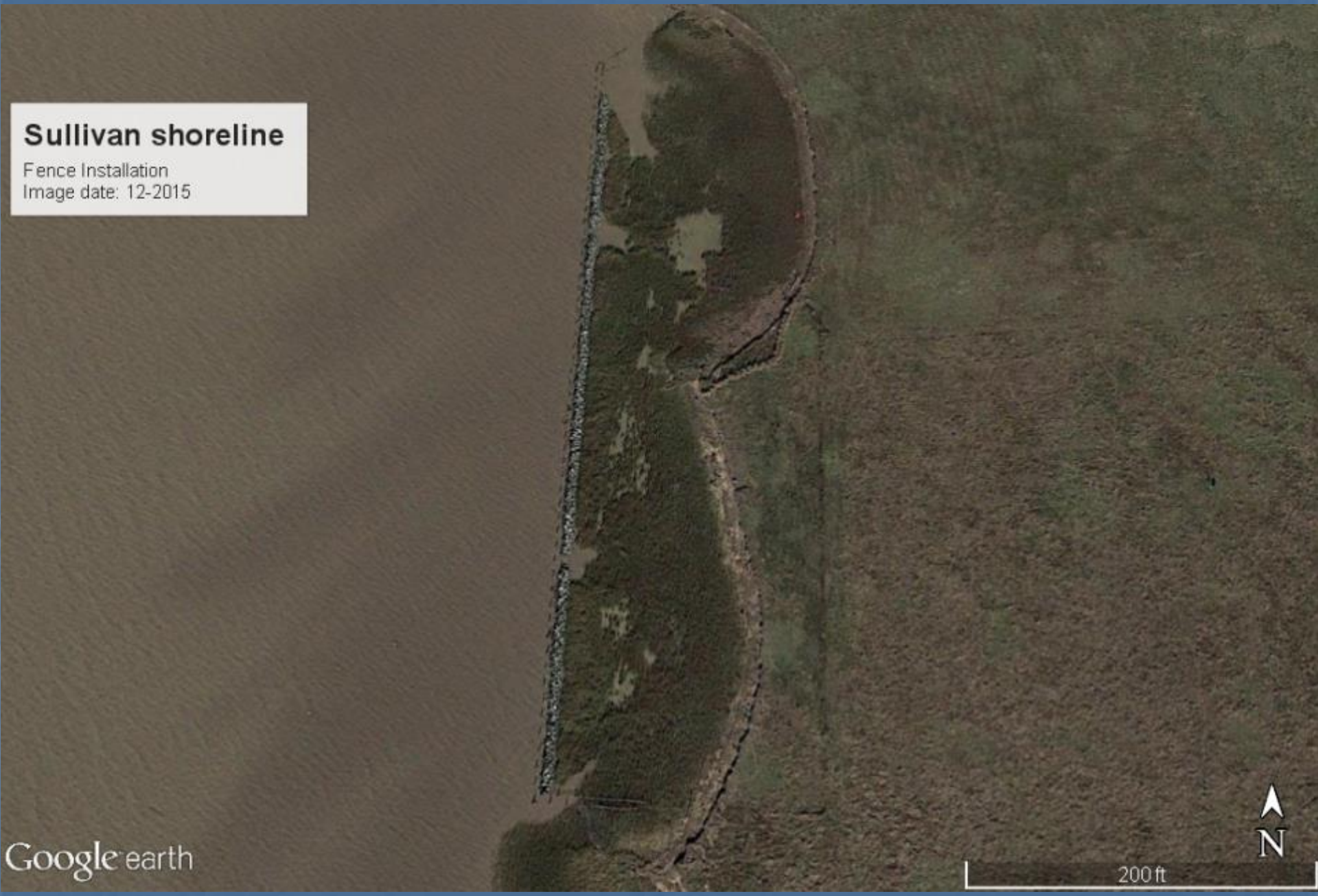

April 2011

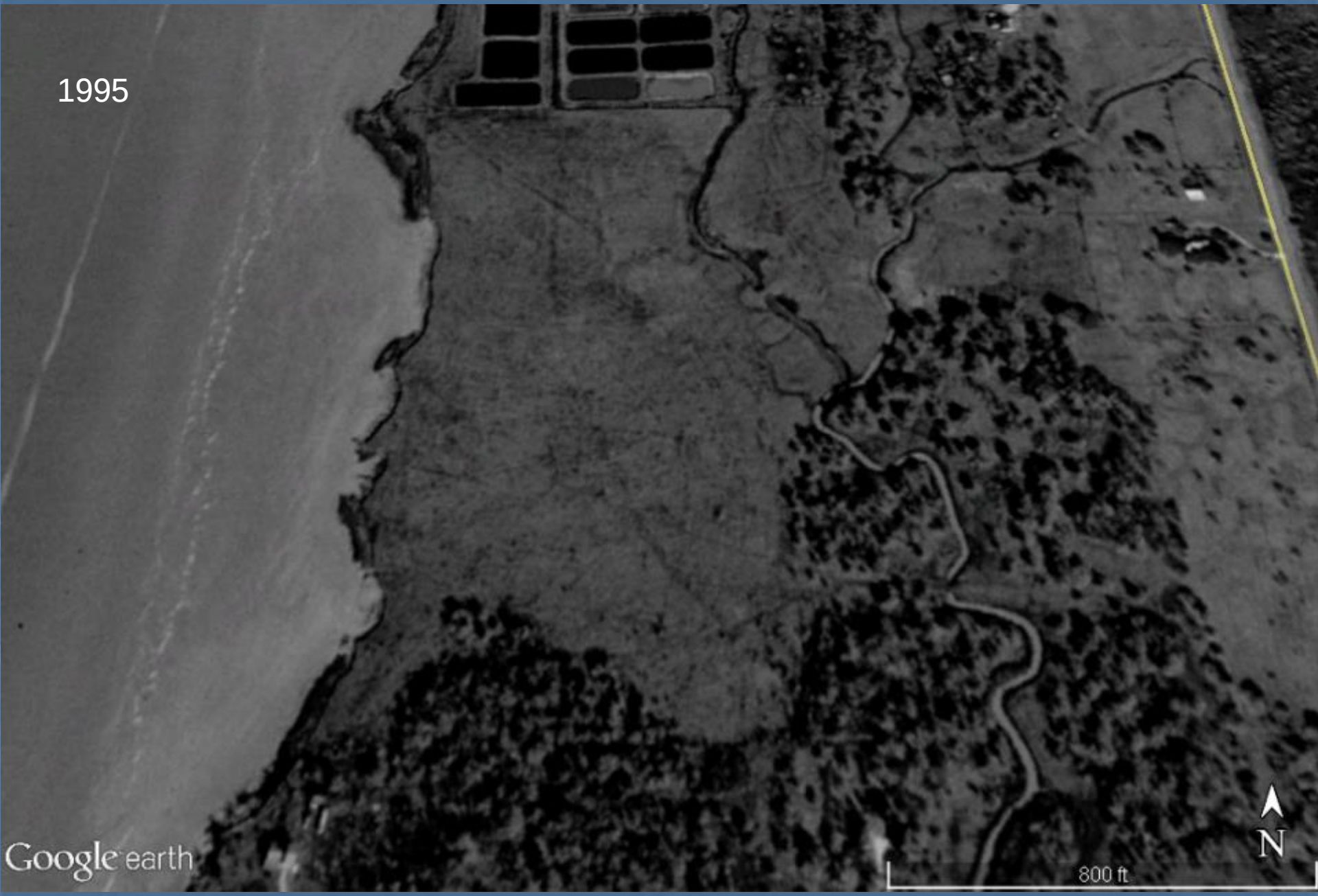

October 2012

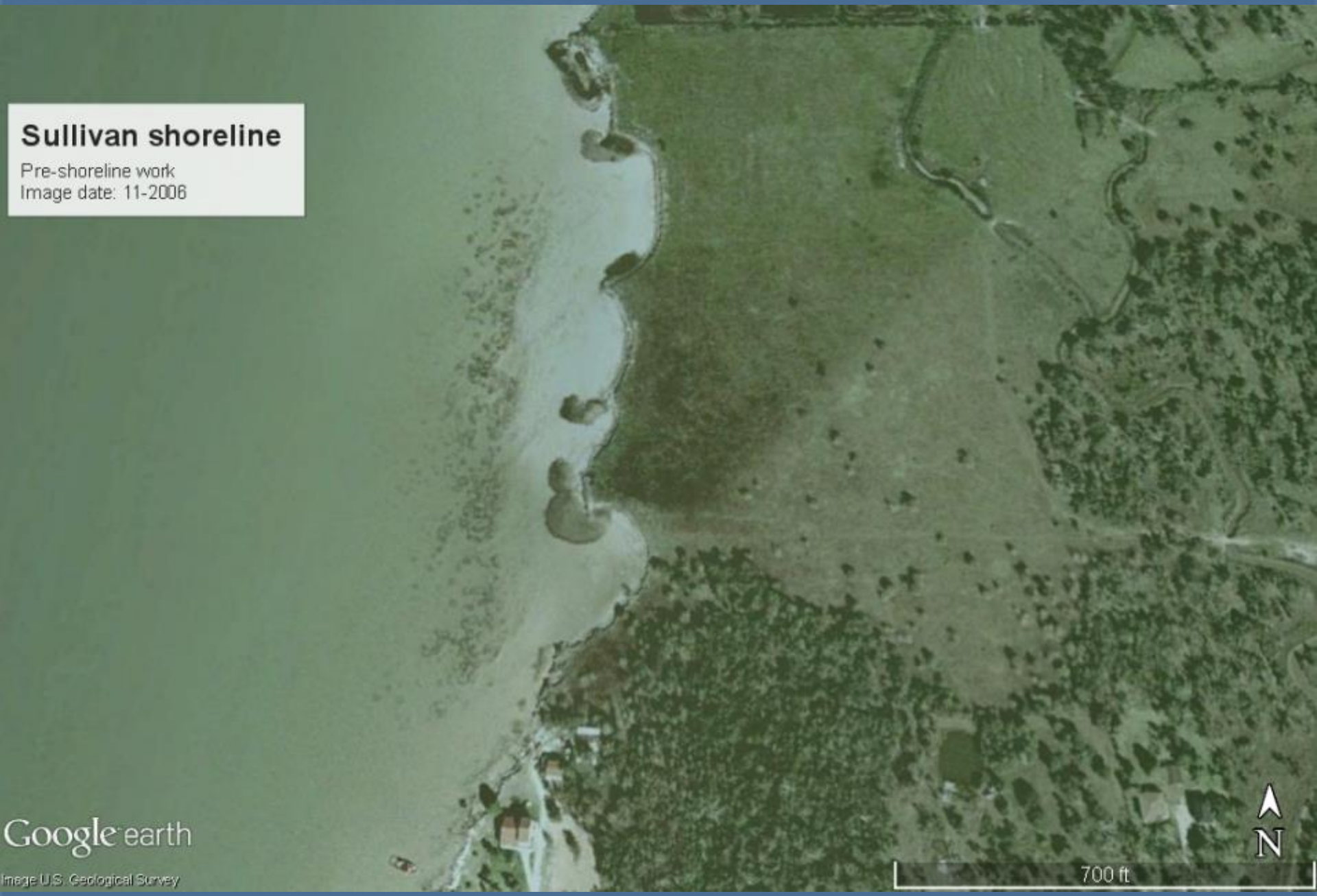

March 2013


Sullivan shoreline
Fence Installation
Image date: 03-2010
Google earth
500 ft
N


September 13, 2013 (a Friday)


Sullivan shoreline
Fence Installation
Image date: 12-2015
Google earth
N
200 ft


1995
Google earth
800 ft
N


Sullivan shoreline
Pre-shoreline work
Image date: 11-2006
Google earth
Image U.S. Geological Survey
700 ft
N


Sullivan shoreline
Fence Installation
Image date: 12-2008
Google earth
Image Texas General Land Office
N
500 ft


Sullivan shoreline
Fence Installation
Image date: 03-2010
Google earth
500 ft
N


Google earth
N
500 ft

Lessons Learned

In high wave energy environments, the use of heavier materials off-shore to slow the waves is necessary. However, correctly designed and placed, they can still yield healthy inter-tidal marsh and provide additional benefits such as increased oyster habitat.

Permitting

NWP 27 – Aquatic Habitat Restoration, Establishment. and Enhancement Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the rehabilitation or enhancement of tidal streams, tidal wetlands, and tidal open waters, provided those activities result in net increases in aquatic resource functions and services.