



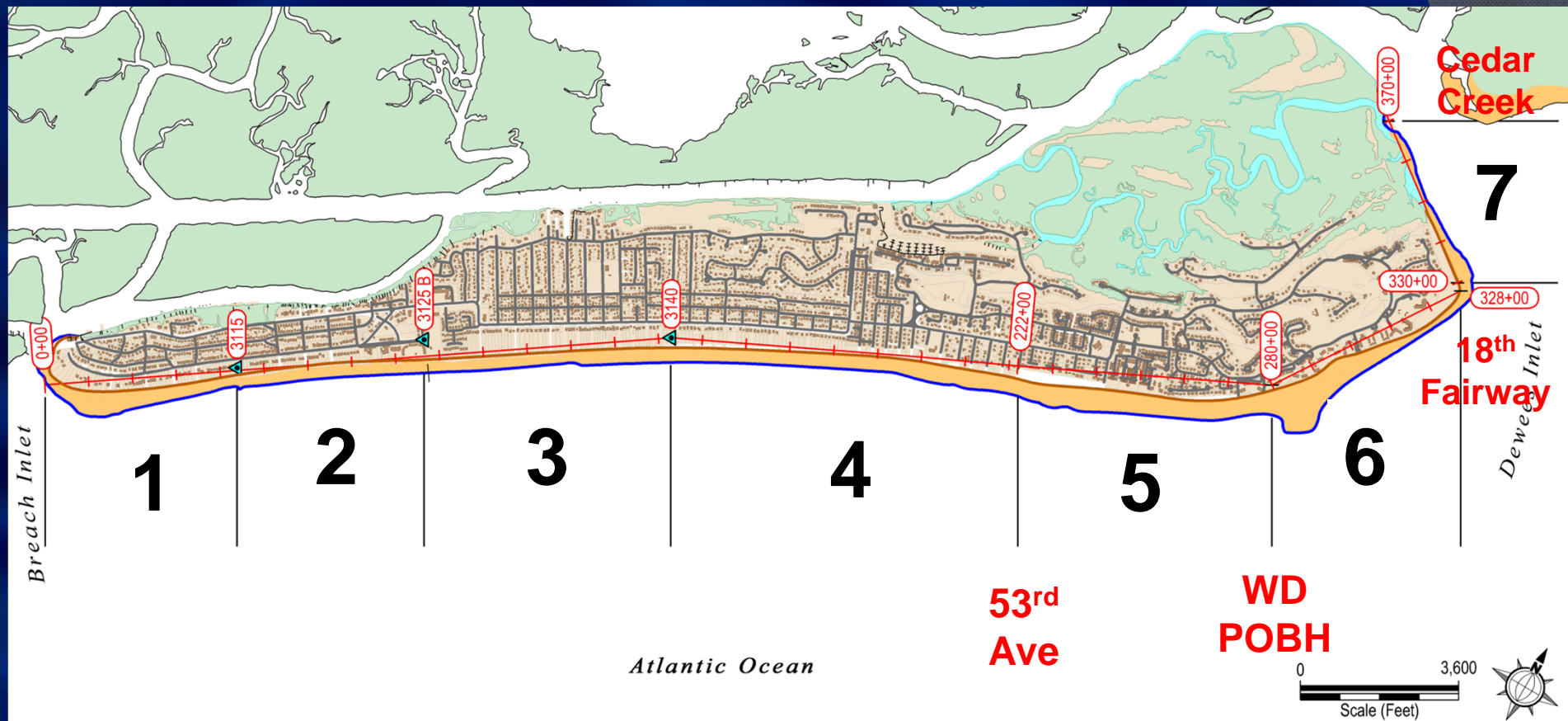
06 Oct 2014

IOP EAST END EROSION UPDATE



Beach Monitoring

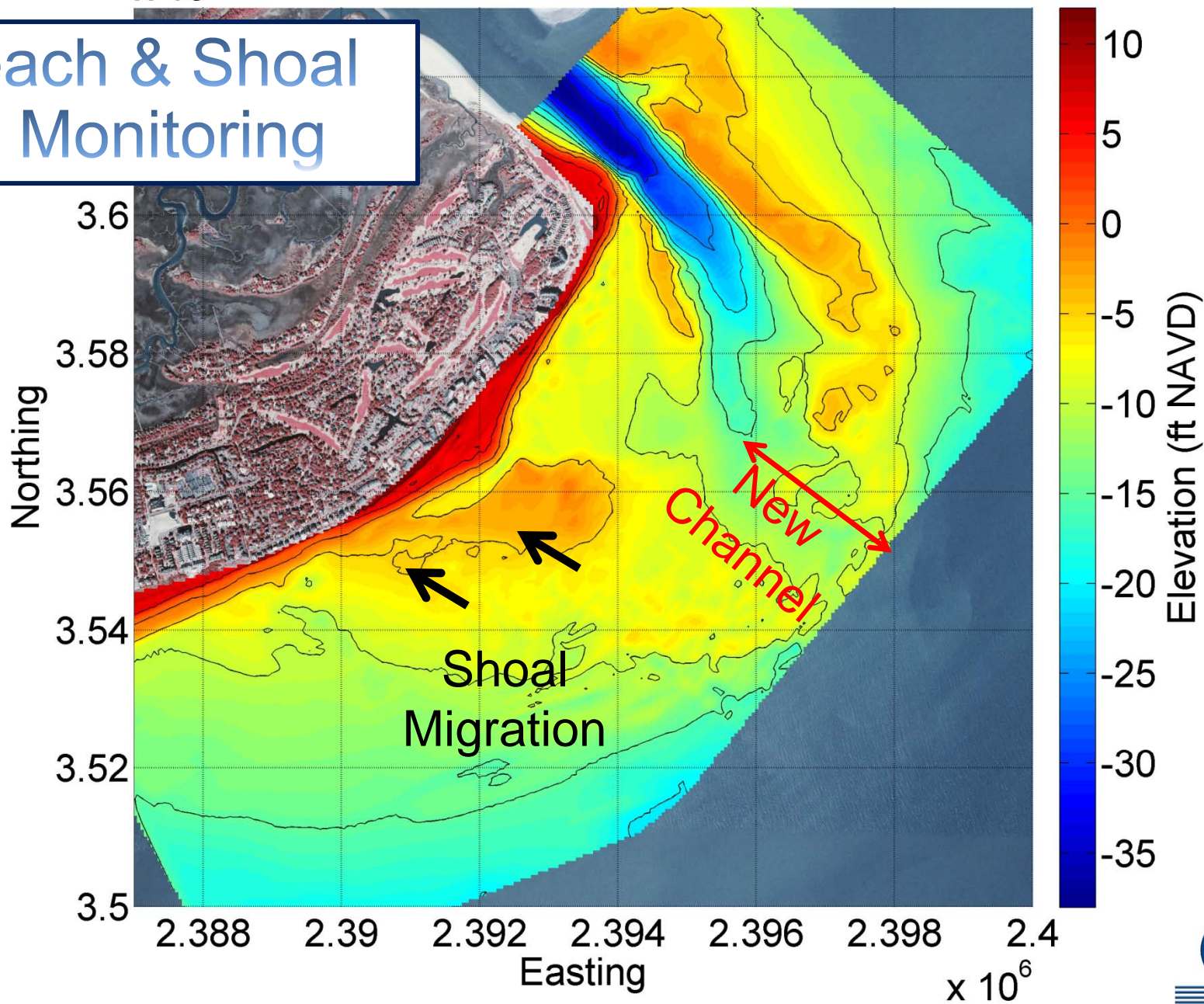
- 7 Monitoring Reaches over ~7 miles of shoreline
- Over 120 monitoring stations and 220 miles of survey lines



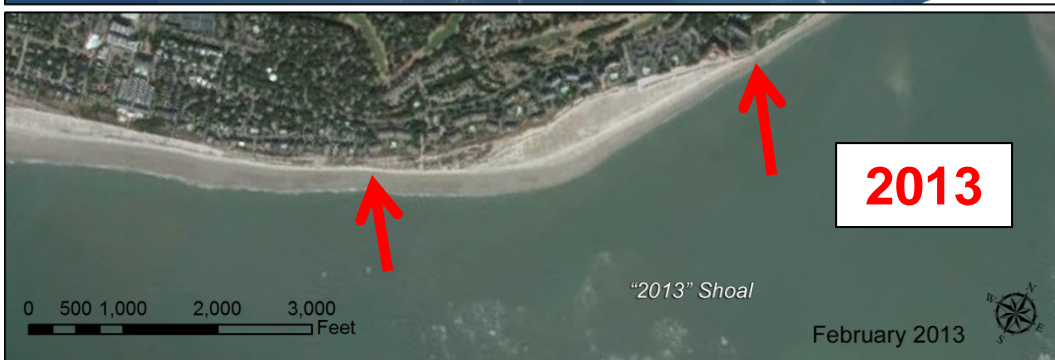
September 2014

$\times 10^5$

Beach & Shoal Monitoring

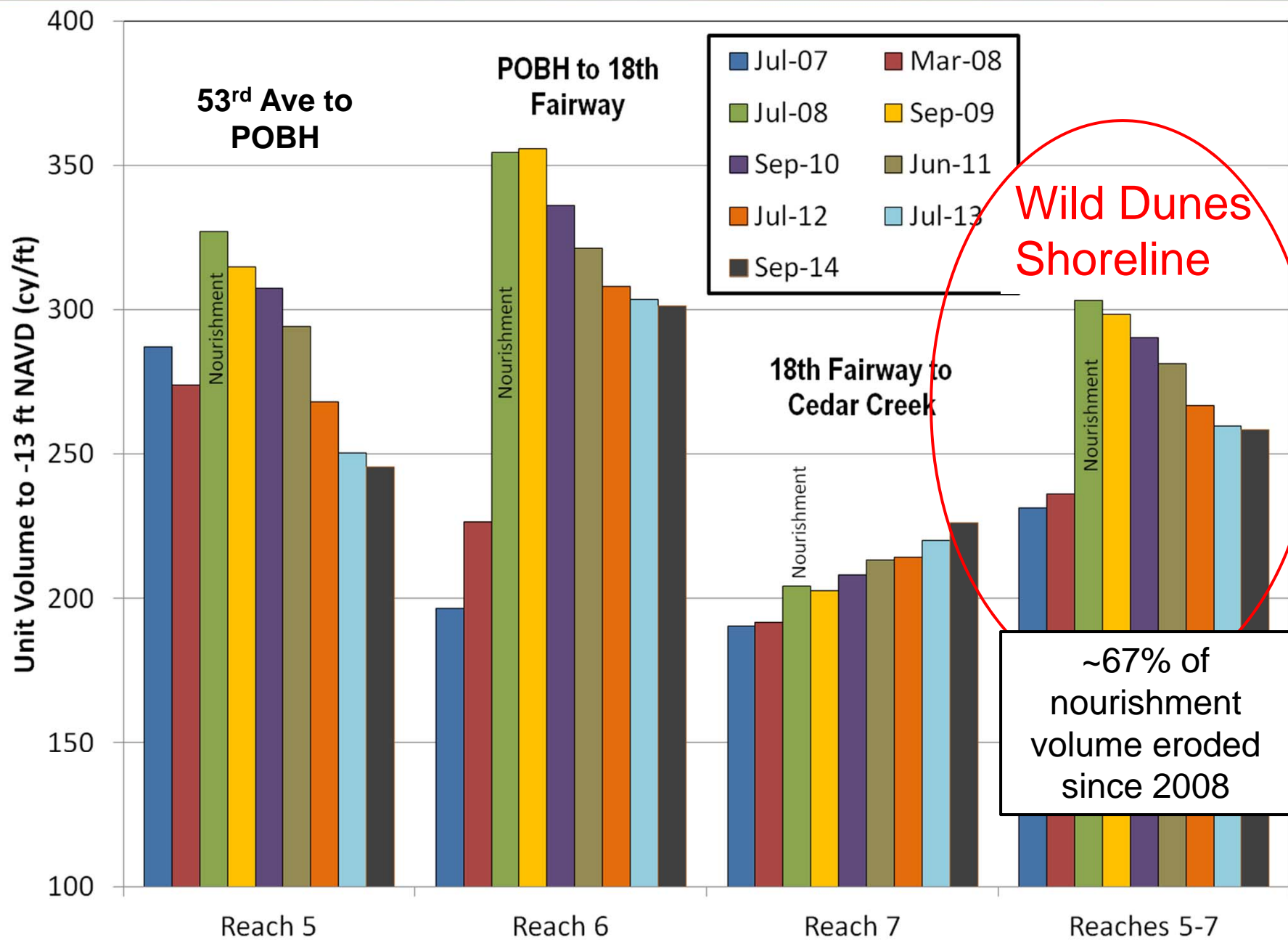


Shoal Bypass Events

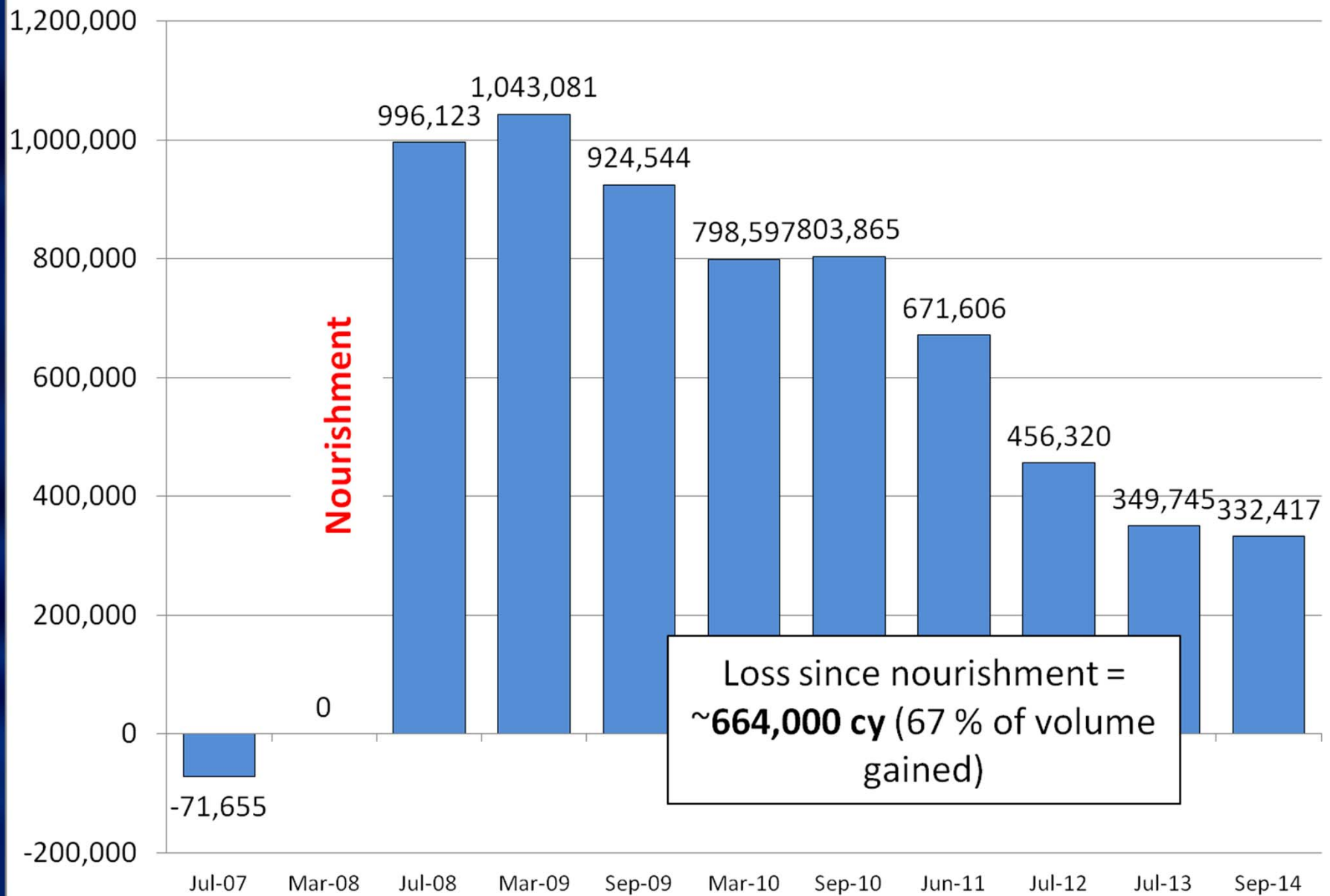


Erosion Hot Spots





Beach Volume (cy) Since Pre Nourishment - 53rd Avenue to Cedar Creek



Loss since nourishment =
~**664,000 cy** (67 % of volume
gained)

Isle of Palms



Shoal Migration



March
2014

Image © 2014 TerraMetrics

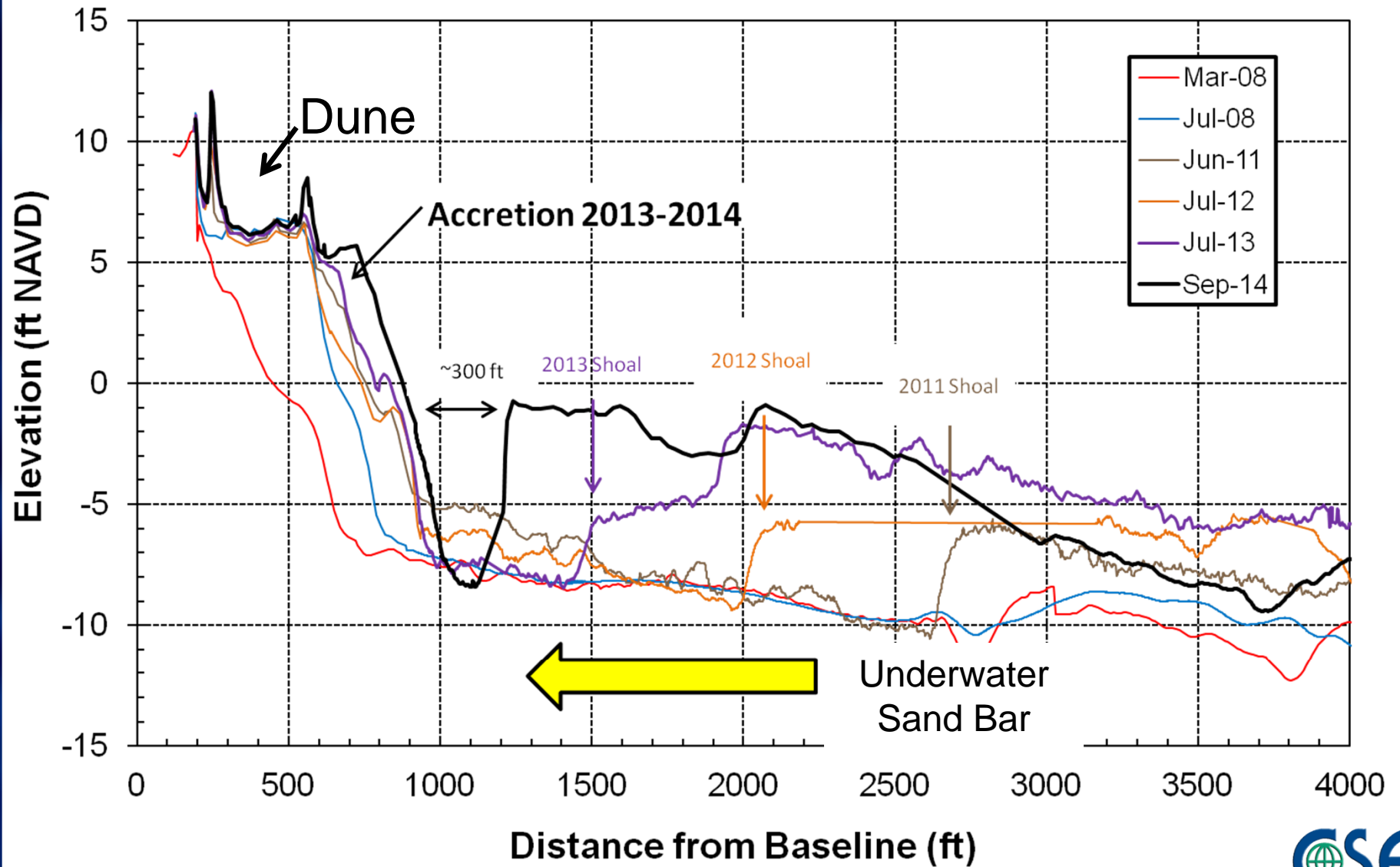
Google earth

1989

Imagery Date: 3/1/2014 32°48'15.70" N 79°43'17.83" W elev -3 ft eye alt 7641 ft

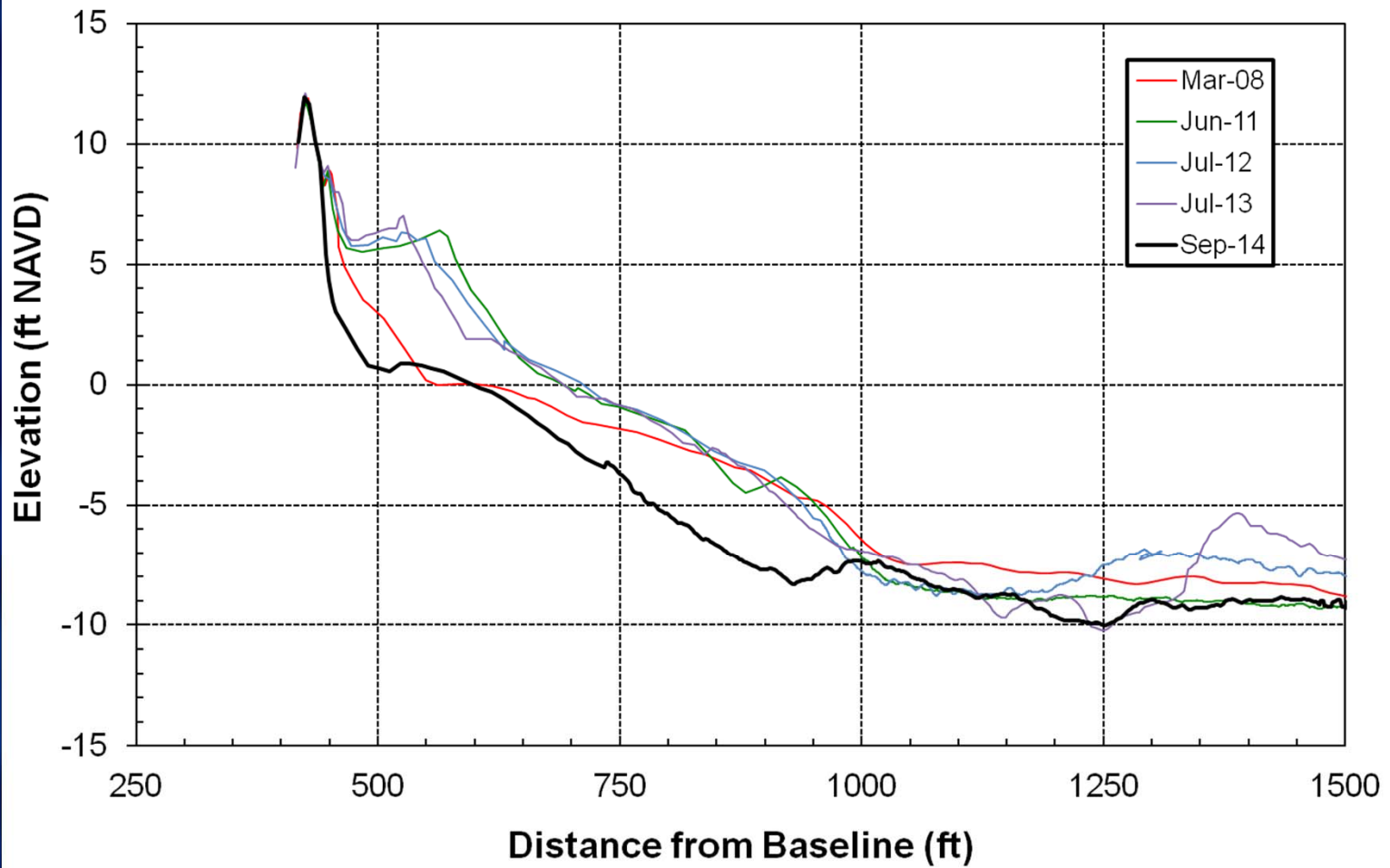


Shoal Migration



Erosion

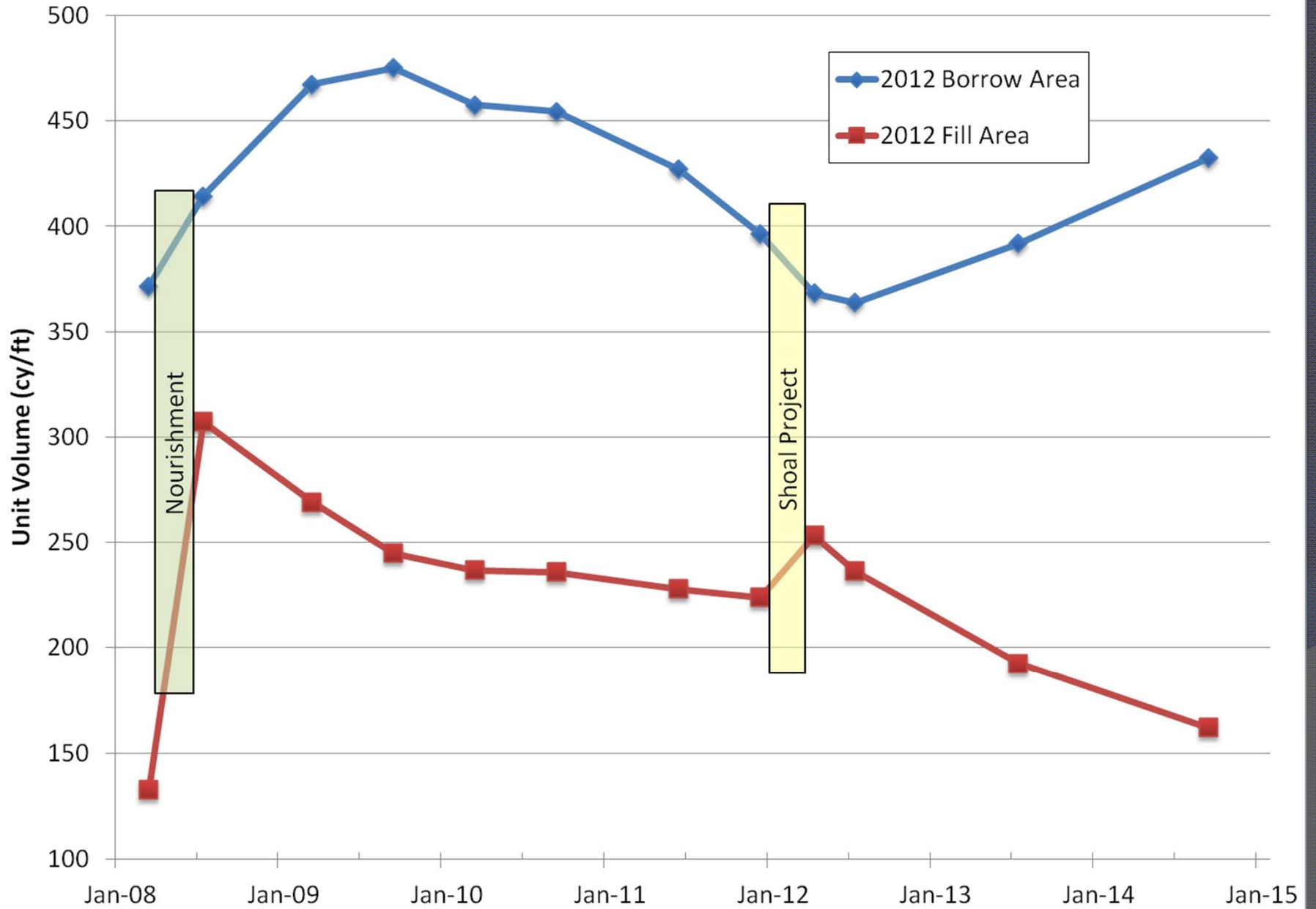
Station: 256+00 (Seagrove)



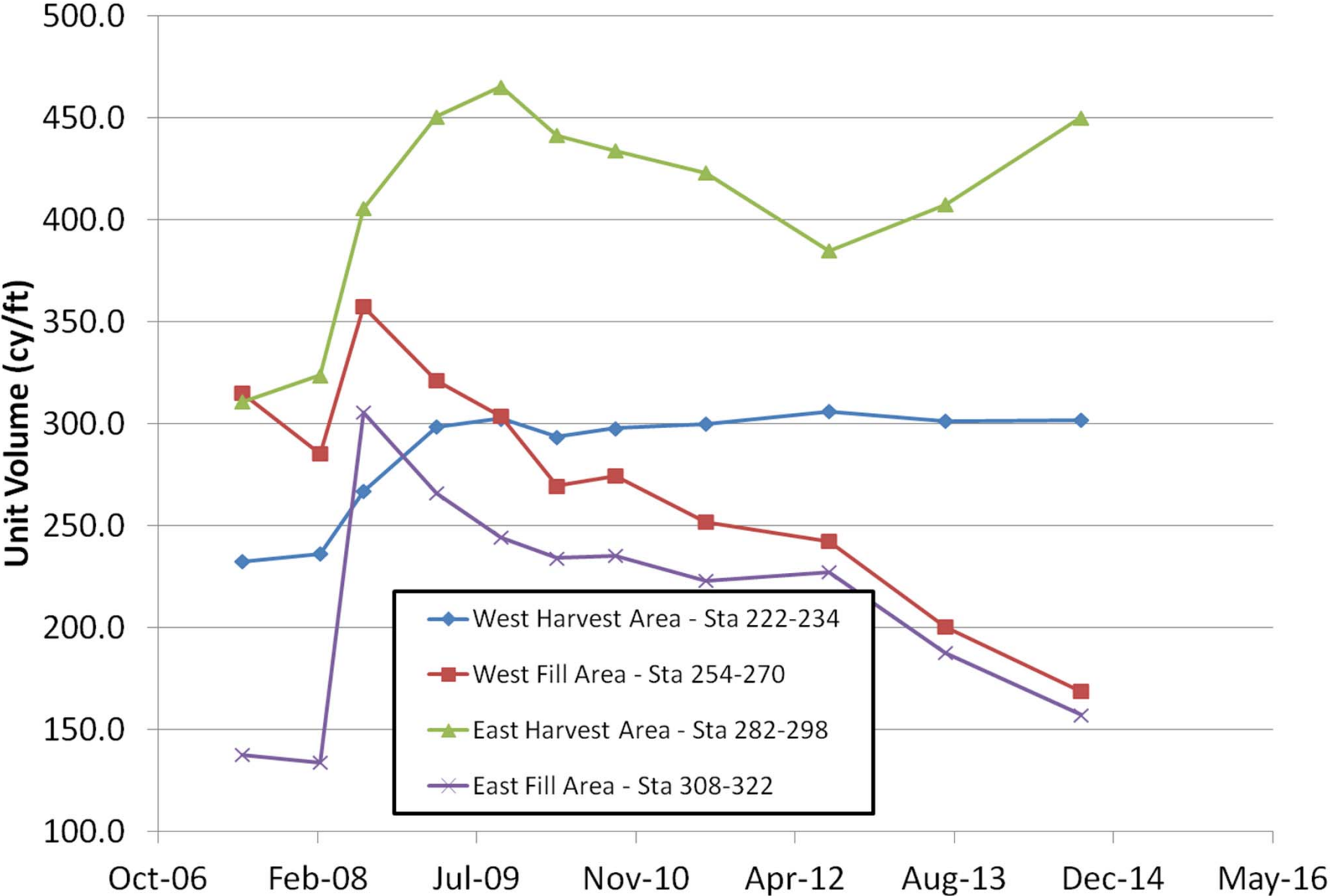
Construction Windows

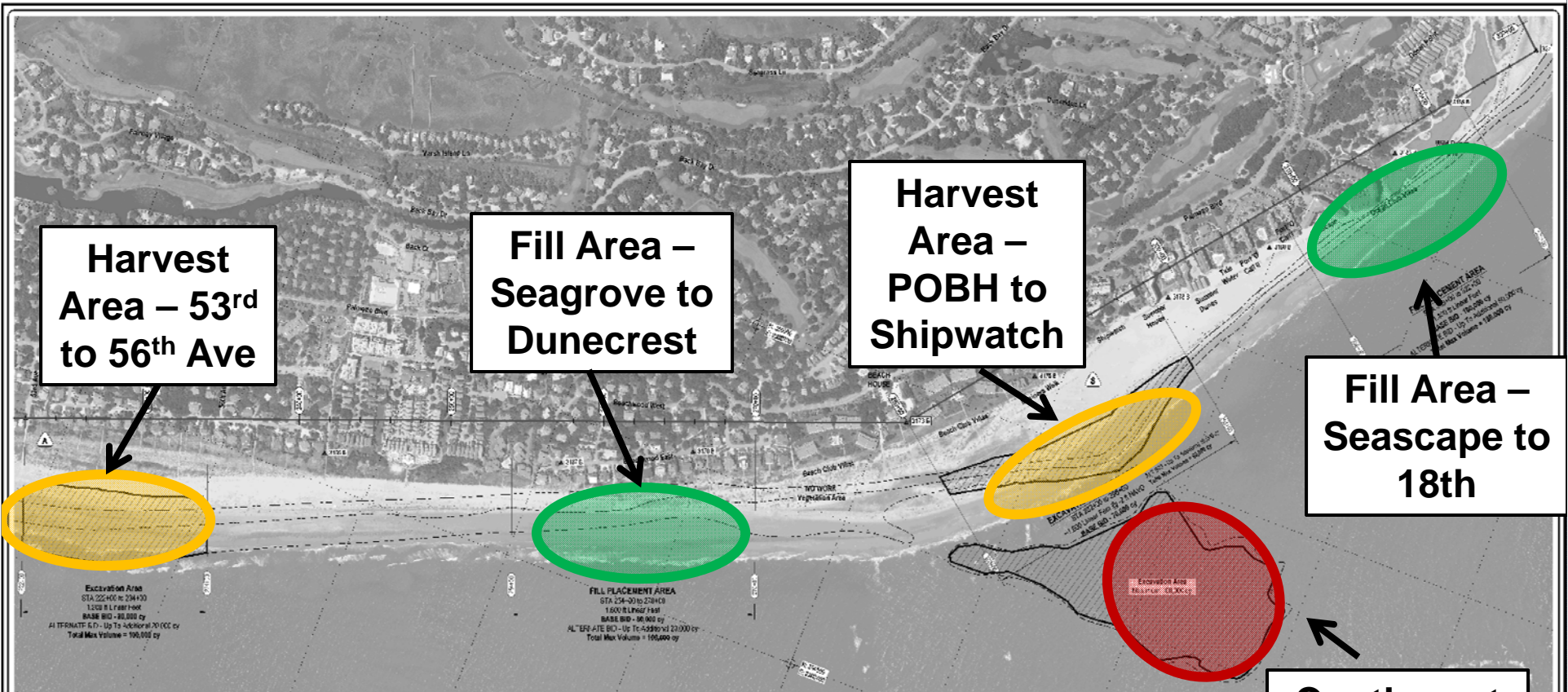
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2021 | |
|------------------|---------------------|----------------------------------|----------|----------|----------|----------|----------|------------------------|--|
| January | | | Window 1 | Window 2 | Window 3 | Window 4 | Window 5 | | |
| February | | Fed Permit Issued | | | | | | | |
| March | | 2012 Scraping Event (~87,500 cy) | | | | | | Federal Permit Expires | |
| April | | | | | | | | | |
| May | | | | | | | | | |
| June | | | | | | | | | |
| July | | | | | | | | | |
| August | State Permit Issued | | | | | | | State Permit Expires | |
| September | | | | | | | | | |
| October | | | | | | | | | |
| November | | Window 1 | Window 2 | Window 3 | Window 4 | Window 5 | | | |
| December | | | | | | | | | |

2012 Shoal Management Project Area* Unit Volumes (cy/ft)



Harvest and Fill Area Unit Volumes





Harvest Area – 53rd to 56th Ave

Fill Area – Seagrove to Dunecrest

Harvest Area – POBH to Shipwatch

Fill Area – Seascape to 18th

Contingent Harvest Area – If accessible

| BASELINE COORDINATE CHART | | | |
|---------------------------|-------------|---------------|----------------|
| System: | NAD 83 | Zone: | 18N |
| NAME | NORTHING | EASTING | ELEV (FT NAVD) |
| 218 D | 354,733.716 | 7,385,475.668 | 4.823 |
| 3173 B | 356,248.097 | 7,390,843.494 | 4.980 |
| 322-0 | 228,819.54 | 7,293.53 | 188 |

| CONTROL POINT DATA | | | |
|--------------------|------------|--------------|----------------|
| NAME | NORTHING | EASTING | ELEV (FT NAVD) |
| 3170 B | 351,824.26 | 7,382,034.48 | 4.54 |
| 3152 B | 259,487.32 | 7,294,111.41 | 5.15 |
| 3153 B | 259,852.26 | 7,293,229.67 | 5.55 |
| 3146 B | 258,112.66 | 7,292,223.12 | 3.38 |
| 3175 G | 351,632.56 | 7,392,110.69 | 3.27 |
| 3175 G | 356,824.78 | 7,391,573.16 | 16.08 |
| 3170 B | 355,935.47 | 7,393,333.12 | 5.51 |



CONTROL STATION 3173 B
 VERTICAL DATUM: NAVD 83
 HORIZONTAL DATUM: NAD 83
 ELEVATION: 16.08 FT NAVD
 POINT DESCRIPTION: ...

STATIONING
 NAME: BEACH INLET
 NO. OF STATIONS: 13
 TOTAL LENGTH: 1.15 MILES
 CONTROL POINT: 3173 B
 ELEVATIONS OF TIDAL DATUMS REFERRED TO:
 MEAN HIGH WATER (MHW) ...
 MEAN LOW WATER (MLW) ...
 MEAN SEA LEVEL (MSL) ...

| | | | | | | | |
|-----|----|------|--|--|---|--|---|
| NO. | BY | DATE | | CLIENT: CITY OF ISLE OF PALMS PO DRAWER 508 ISLE OF PALMS SC 29451 | PROJECT: ISLE OF PALMS SHOAL MANAGEMENT PROJECT | DRAWING TITLE: OVERALL PROJECT PLAN & SURVEY CONTROL | SCALE: AS SHOWN SHEET NO.: 02 |
|-----|----|------|--|--|---|--|---|

What to expect

