

Mississippi Coastal Improvements Program (MsCIP) Ship Island Restoration Project Update

Bureau of Ocean Energy Management (BOEM) – Gulf of Mexico Sand Management Working Group



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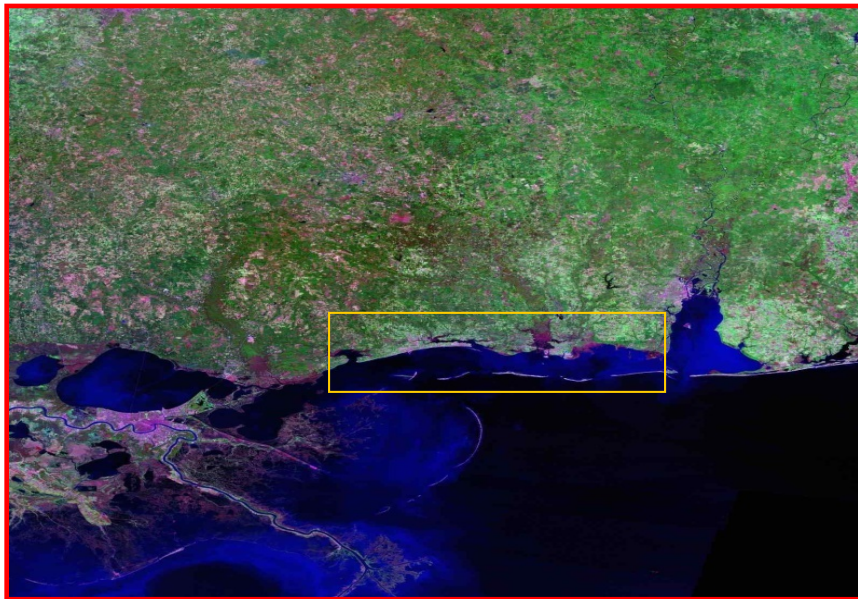
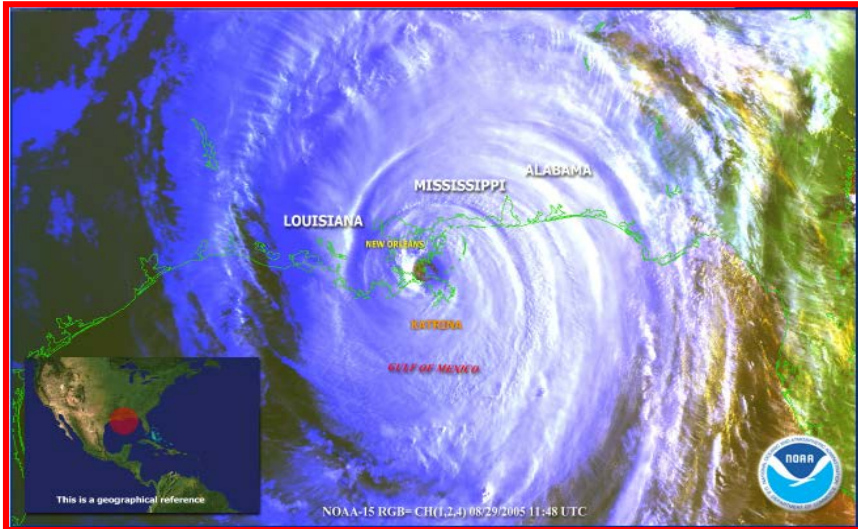
Presentation Outline

- History of the Mississippi Coastal Improvements Program (MsCIP)
- Overview of the Barrier Island Restoration Plan & borrow sites used for the project
- Ship Island Phase 1 construction details
- Status of Ship Island Phases 2 - 5



Mississippi Coastal Improvements Program (MsCIP)

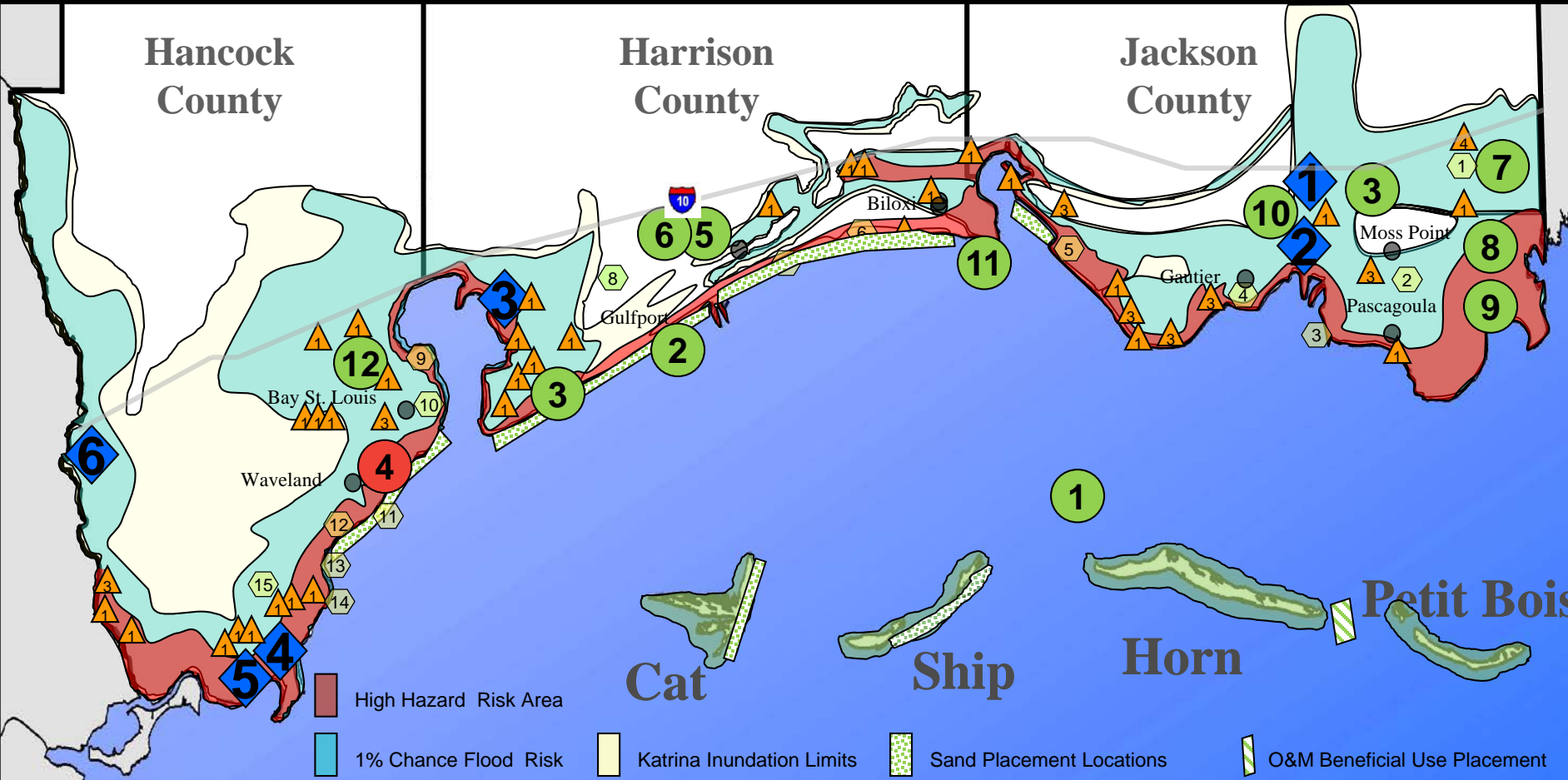
- P.L. 109-148, 30 December 2005
- Comprehensive Planning to Address
 - Hurricane and Storm Damage Reduction
 - Salt Water Intrusion
 - Shoreline Erosion
 - Fish and Wildlife Preservation
 - Other Water Related Resource Projects
- Cost Effective Projects in lieu of NED benefits
- No Incremental Benefit-Cost Analysis
- Report requirements
 - Interim Report within 6 months
 - Comprehensive Plan within 2 years
- Compatible with State Coastal Restoration Plan



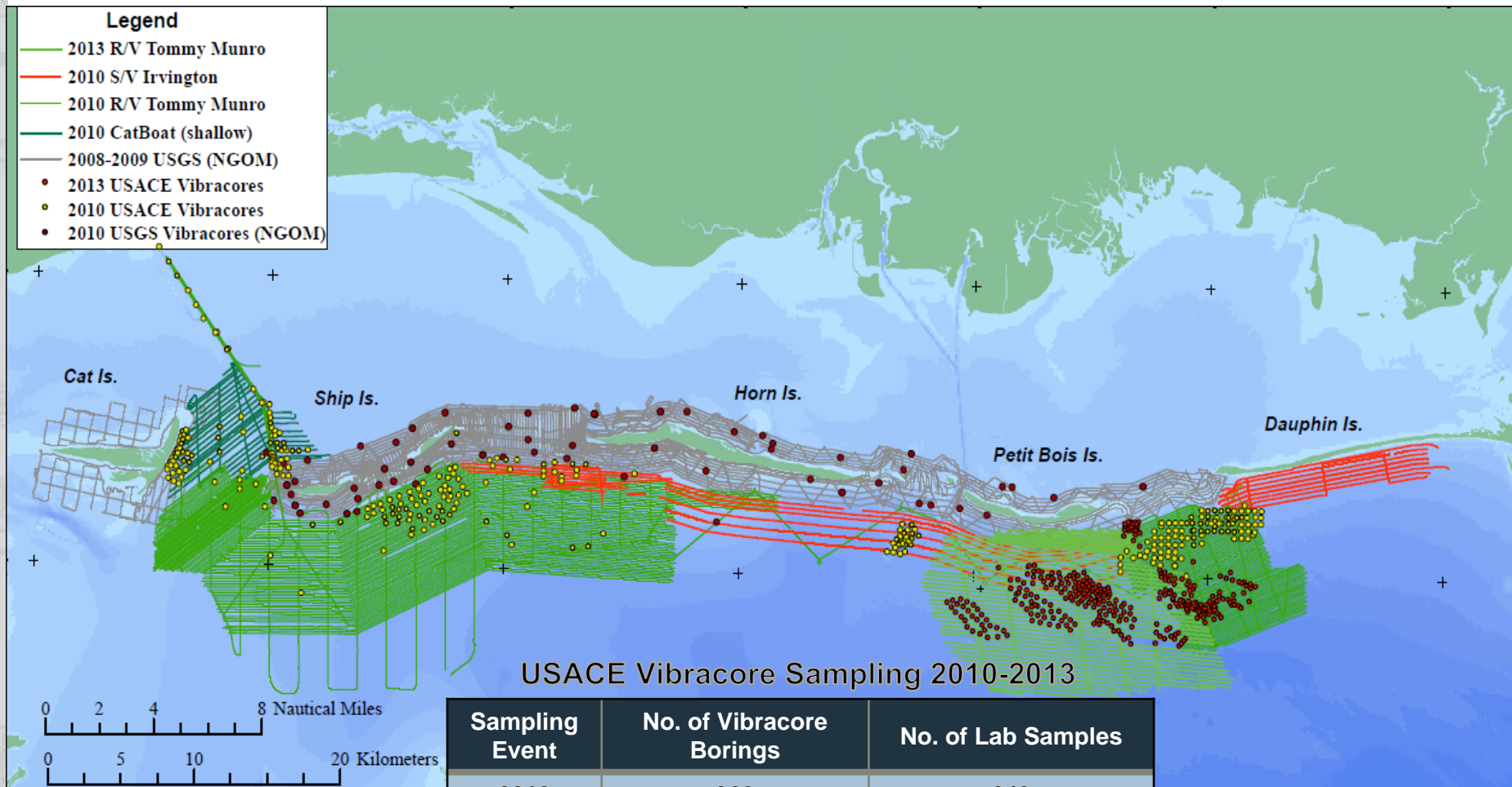
- Hurricane / Storm
- Salt Water Intrusion
- Shoreline Erosion
- Fish & Wildlife

MsCIP Restoration Elements

-  Interim Projects
-  Phase I Projects
-  Ecosystem Restoration Studies
-  Other Studies



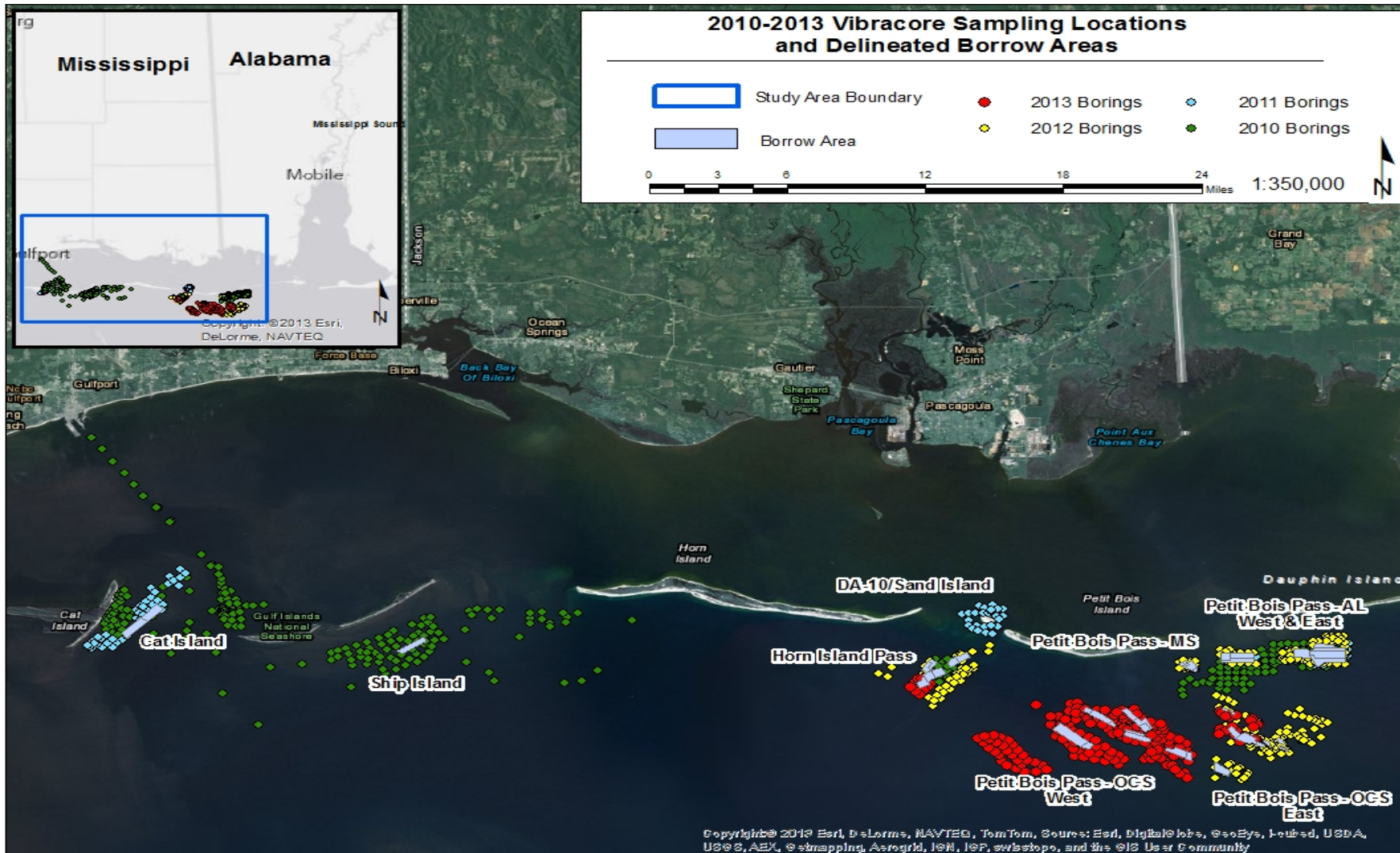
Geophysical & Geotechnical Investigations USGS & USACE



Sampling Event	No. of Vibracore Borings	No. of Lab Samples
2010	369	649
2011	89	176
2012	230	488
2013	206	455
Total	894	1,768



Geotechnical Investigations & Identified Borrow Sources



BORROW AREA QUANTITIES

Borrow Site	D50 (mm)	Required Dredge Volume (mcy)	Allowable Overdepth Volume (mcy)	Haul Distance to Ship Island (miles)
Petit Bois Pass- AL East	0.33	12.0	2.7	37
Petit Bois Pass- AL West	0.31	3.9	1.2	34
Petit Bois Pass- MS	0.31	1.6	0.4	32
Petit Bois Pass- OCS East	0.29	3.0	1.2	35
Petit Bois Pass- OCS West	0.27	10.4	5.3	31
Horn Island Pass	0.29	2.8	2.1	23
Ship Island	0.21	2.1	0.6	3
Cat Island	0.20	2.9	1.4	1.5



Ship Island Phase 1 Construction Details

Phase I: Awarded to Great Lakes Dredge and Dock Co.

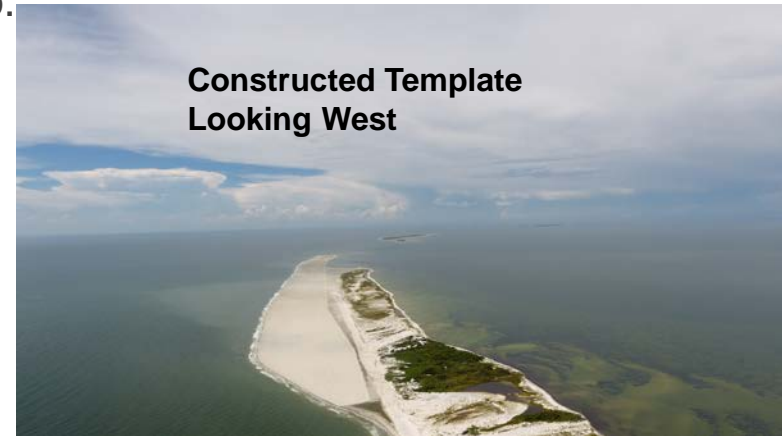
Award: 18 January 2017 - \$88.5M

Actual Start: 8 December 2017

Equipment: Hopper dredges "Ellis Island" & "Liberty Island"

Status: Placed approximately 6.3 million cubic yards (45% came from OCS borrow sites)

Anticipated Completion Date: December 2018



Phase 1 Construction – December 30th



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Phase 1 Construction – December 30th



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Phase 1 Construction – July 17th



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Phase 1 Construction – August 31st



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Phase 1 Construction – September 24th



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Phase 1 Construction – October 31st



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Phase 1 Construction – October 31st



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OCS Borrow Site Material Observations

- Shell content is higher than anticipated in some areas of the borrow site, ultimately affecting color and grain size distribution of the fill.
- Median grain size (D50) of the fill is skewed slightly coarser than anticipated because of shell content.
- Fill Munsell Value is slightly higher (lighter) than anticipated, likely because of less fines content. Some shell fragments are very dark, which affects the overall appearance of the sand when they are present.
- Fine sediment content is lower than anticipated, likely due to winnowing out during dredging and placement.



Ship Island Phases 2 - 5 Construction Details

Phase 2:

- Awarded to Weeks Marine for \$112.8M on 7 August 2018
- Anticipated start date is March / April 2019

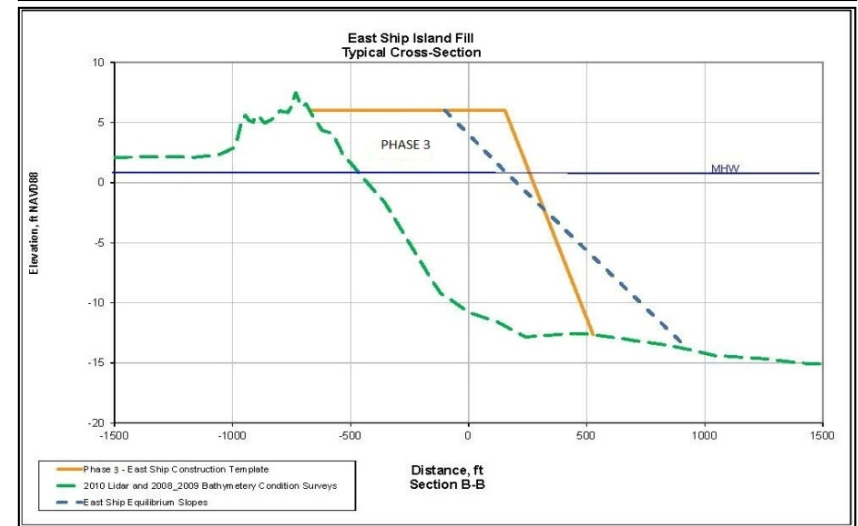
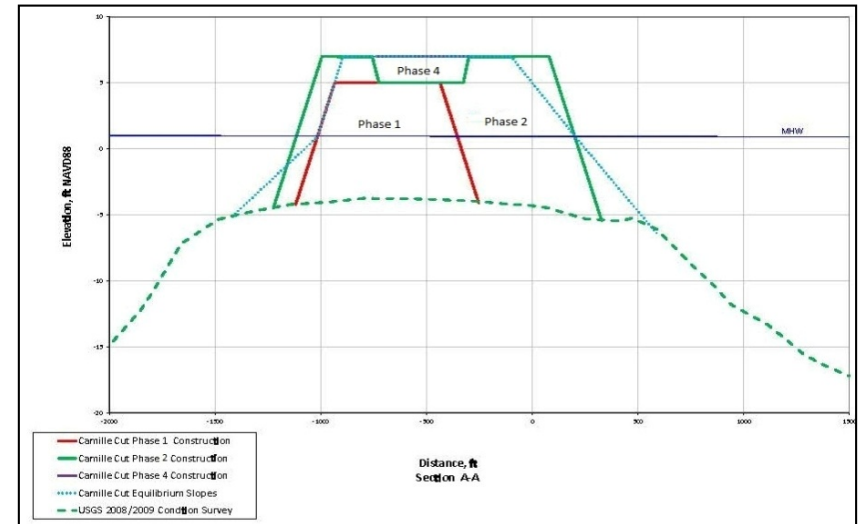
Phases 3 & 4:

- Combined contract package
- Scheduled to advertise in May 2019
- Estimated cost of approximately \$100M

Phase 5:

- Contract to plant vegetation on the site after sand placement is finished
- Awarded to DCMS for \$2.8M on 18 July 2018
- Plant harvesting completed September 2018
- Plants currently being grown in Sarasota, FL

CONCERN: Escalating dredging prices may impact our ability to construct the project as intended. Prices increased 45% between Phase 1 and Phase 2 in just 18 months.



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collaboration
is everything



QUESTIONS?

