

# Tampa Bay Regional Sediment Management (RSM):

## IMPLEMENTATION OF RSM PRINCIPLES FOR ECOSYSTEM RESTORATION IN TAMPA BAY, FL



October 26, 2017

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USACE, Jacksonville District

*Trusted Partners Delivering Value,  
Today and Tomorrow*



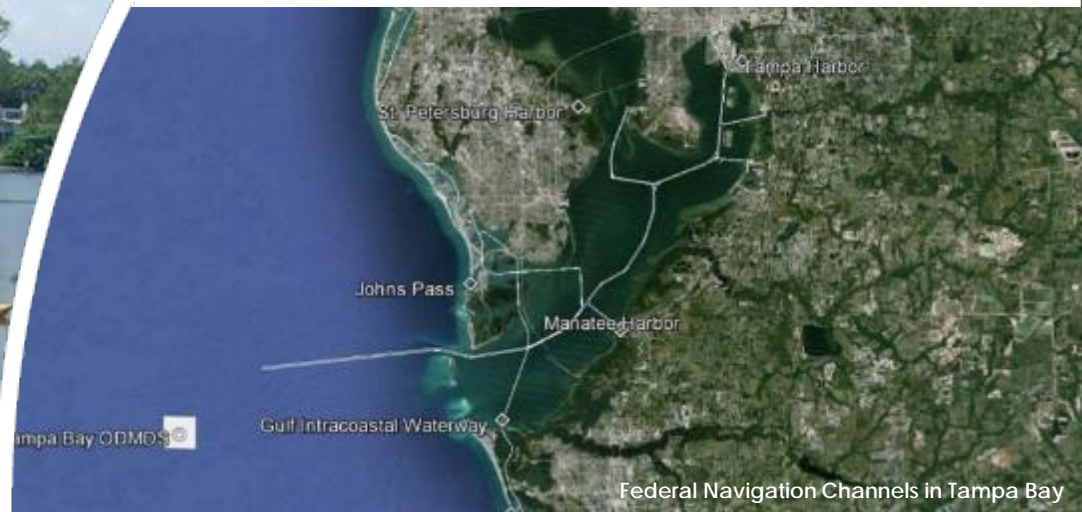
Seagrasses



Mangrove Habitat



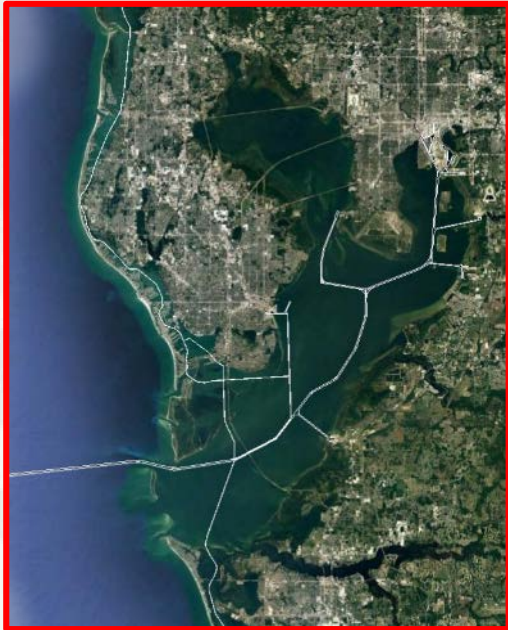
US Army Corps of Engineers  
**BUILDING STRONG®**



Federal Navigation Channels in Tampa Bay



# STUDY BACKGROUND



- 3 Deep Draft Harbors (Tampa Harbor, Manatee Harbor, St. Petersburg Harbor)
- 3 Shallow Draft Channels/Inlets (Johns Pass, Longboat Pass, GIWW)
- Available forums for stakeholder coordination
- Extensive scientific data available (dredged hole studies, academia, resource agencies)







# METHODOLOGIES



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**1**

## Identify the existing sediments

- Collect sediment data (both local agency and USACE)



Egmont Key Beach Placement

**2**

## Identify restoration opportunities

- Stakeholder meetings
- Other studies
- Community priorities



Fish Utilizing Seagrass Habitat

**3**

## Connect the sediment with the opportunity to create habitat...

*...and let people know about it!!*



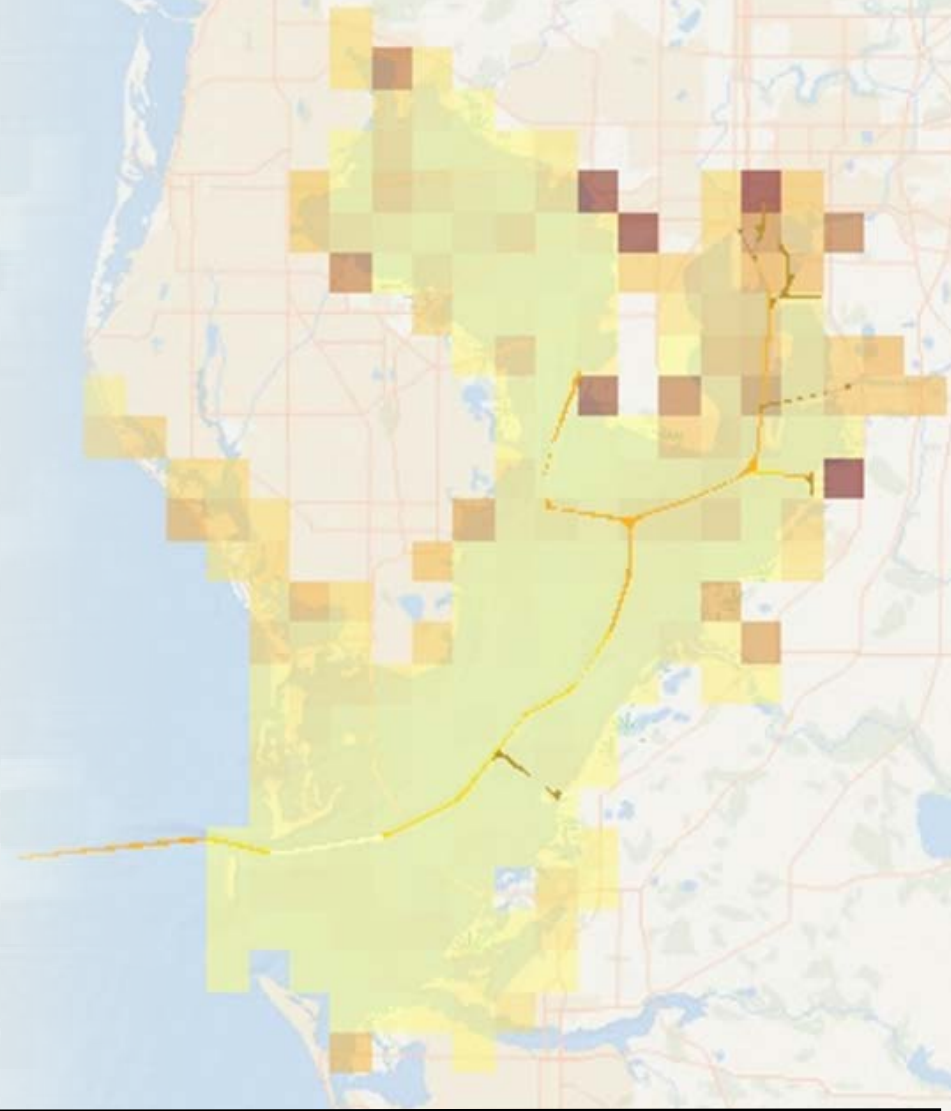
Bird Nesting at Alafia Bank Sanctuary



# SEDIMENT SUITABILITY



- **Sediment Sampling:**
  - Hillsborough County
  - USACE
- **Restoration in close proximity to dredge site**
- **Sources located throughout the Bay**





# STAKEHOLDER MEETINGS



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- January 2016 and September 2016
- Beach nourishment
- Nearshore placement
- Dredged holes
- Island creation/stabilization
- Longshore bars
- Thin-layer placement
  - Marsh creation/enhancements
- Mosquito ditch restoration





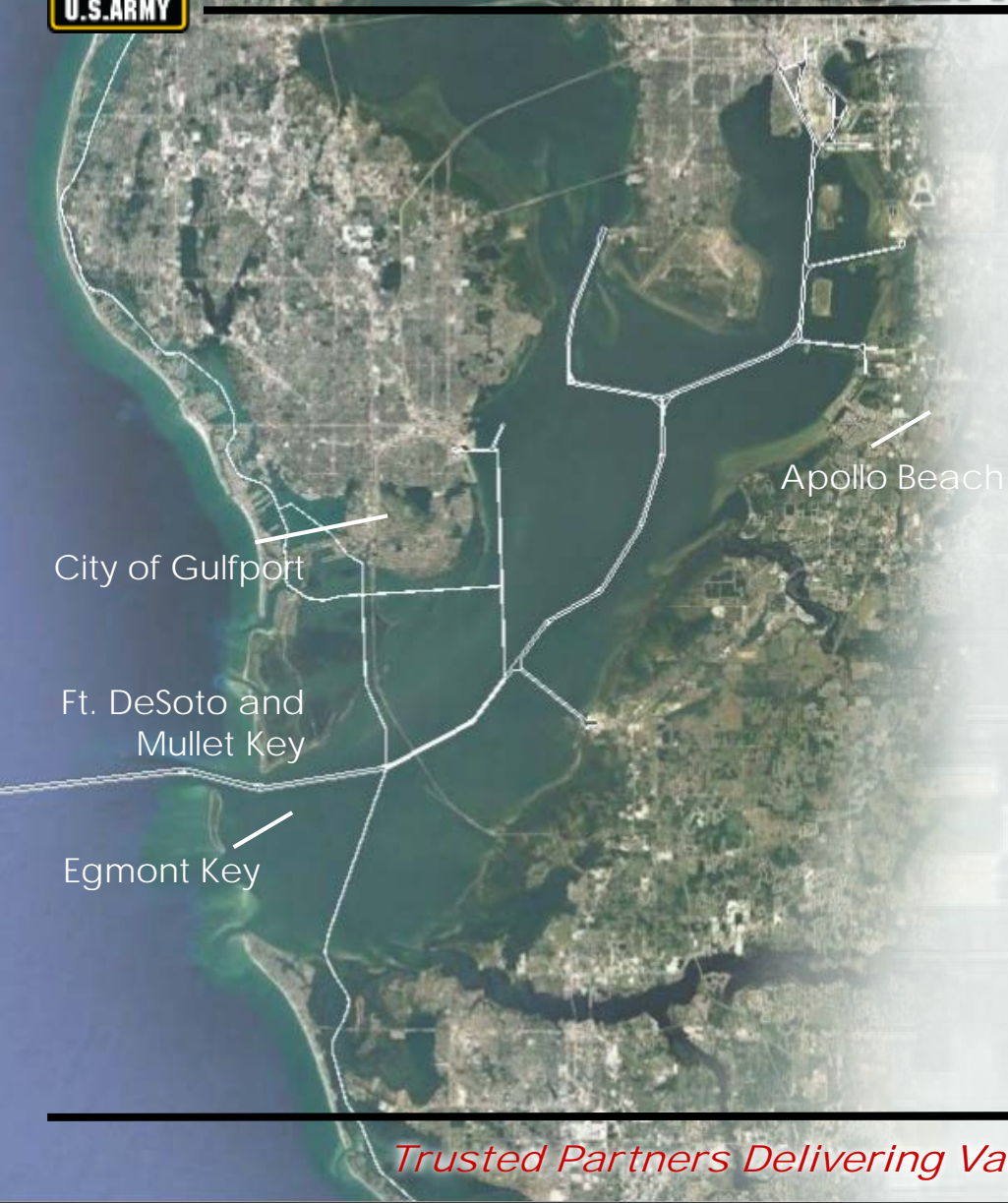
U.S. ARMY



# BEACH AND NEARSHORE PLACEMENT



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- Egmont Key (beach and nearshore)
- Ft. DeSoto (beach)
- Mullet Key (beach)
- Local communities (Gulfport, Apollo Beach)



# DREDGED HOLES



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## Tampa Bay Dredged Hole Habitat Assessment Project



Final Report  
April 2005

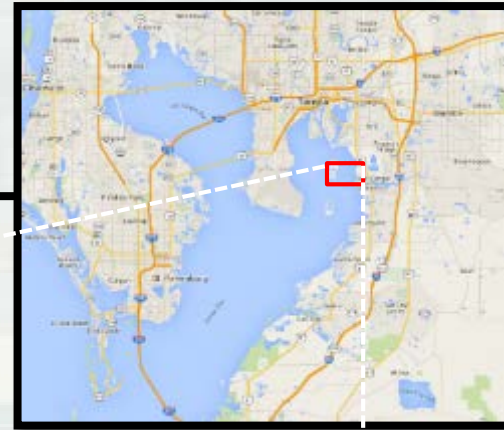
A report to the  
U.S. Environmental Protection Agency, Region 4  
By the Tampa Bay Dredged Hole  
Habitat Assessment Advisory Team







# ISLAND CREATION/ STABILIZATION



- Alafia Banks Bird Sanctuary - Audubon Florida







# LONGSHORE BARS



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## Historical Longshore Bar Mapping Tampa Bay, Florida



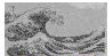
Prepared By



Roy R. Lewis III  
Coastal Resources Group, Inc.  
P.O. Box 5430  
Salt Springs, FL 32134



November 29, 2005



Coastal Resources Group, Inc.  
A Non-Profit Organization



Loss of longshore bars in  
Tampa Bay may have led  
to a loss of seagrass in  
front of and behind bars

Historical longshore  
bar from 1957 and the  
same location in 1990



Source: Southwest Florida Water Management District

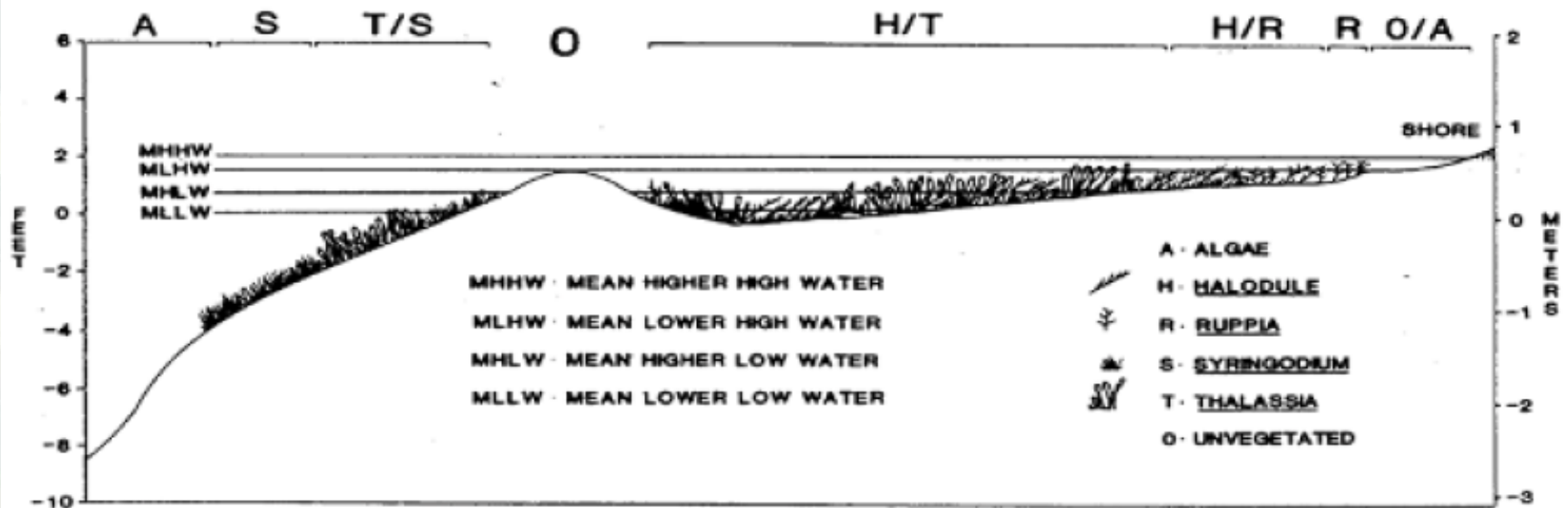


# LONGSHORE BARS



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## SEAGRASS ZONATION - TAMPA BAY

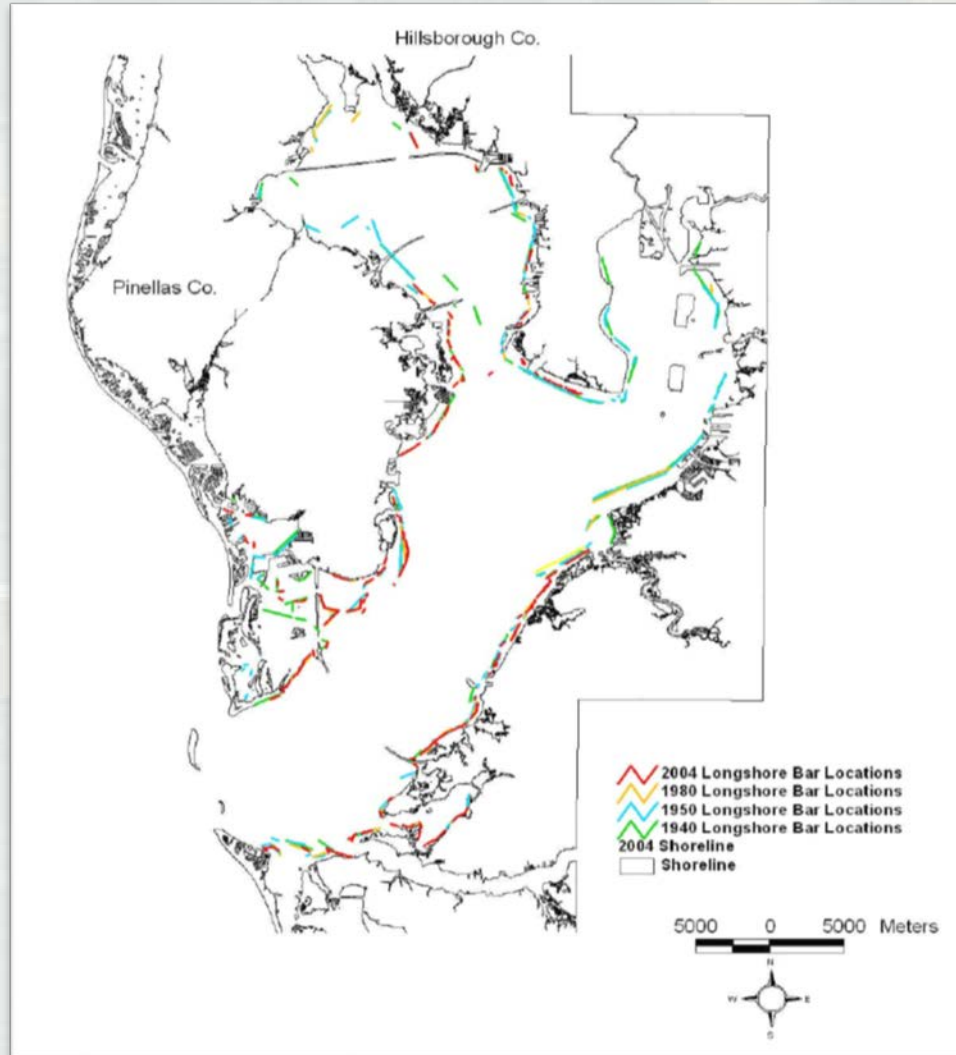




# LONGSHORE BARS



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# COST CONSIDERATIONS



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- Smaller volume placement = increased cost
- Additional disposal methods may require separate equipment = increased costs
- Turbidity containment = increased costs

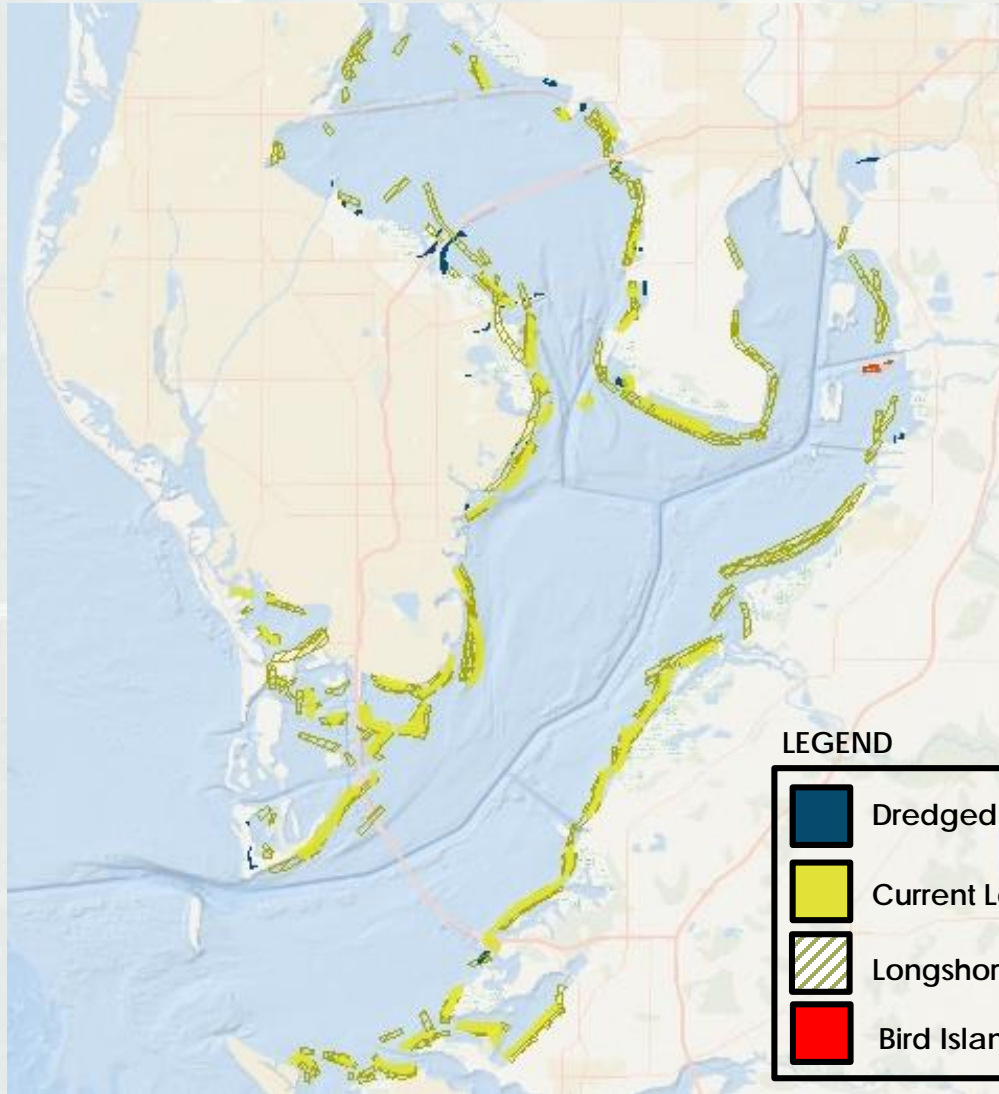




# TAMPA BAY RSM STRATEGY MAP



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## LEGEND

-  Dredged Hole Restoration
-  Current Longshore Bars
-  Longshore Bar Restoration
-  Bird Island Creation



# THANK YOU!!



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## QUESTIONS?

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