

COASTAL PROTECTION AND RESTORATION AUTHORITY

September 16, 2026

Birdfoot Delta Hydrologic Restoration Project MR-173



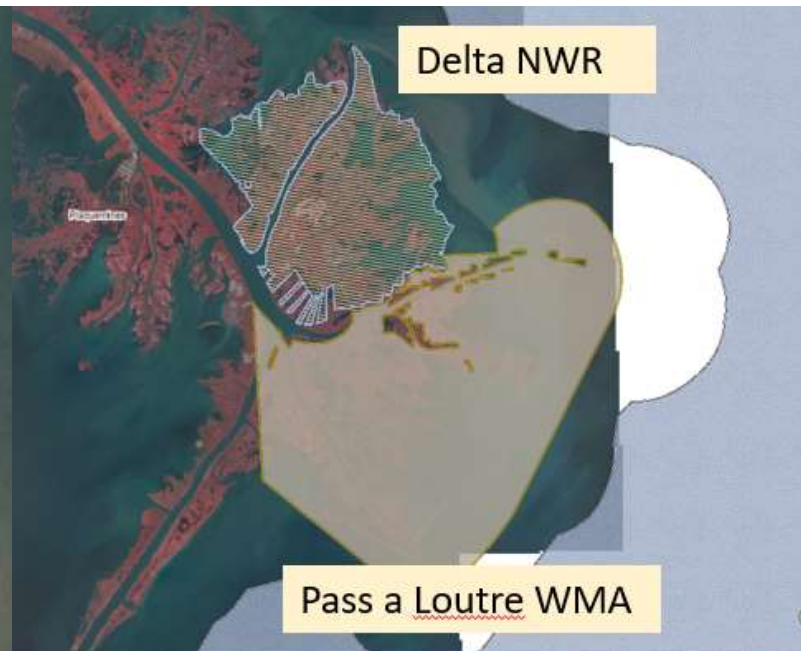
**COAST & HARBOR
ENGINEERING**



Todd Baker, Project Manager

Sean Duffy, President & CEO Big River Coalition

COASTAL PROTECTION AND RESTORATION AUTHORITY



164,000 Acres of Public Lands

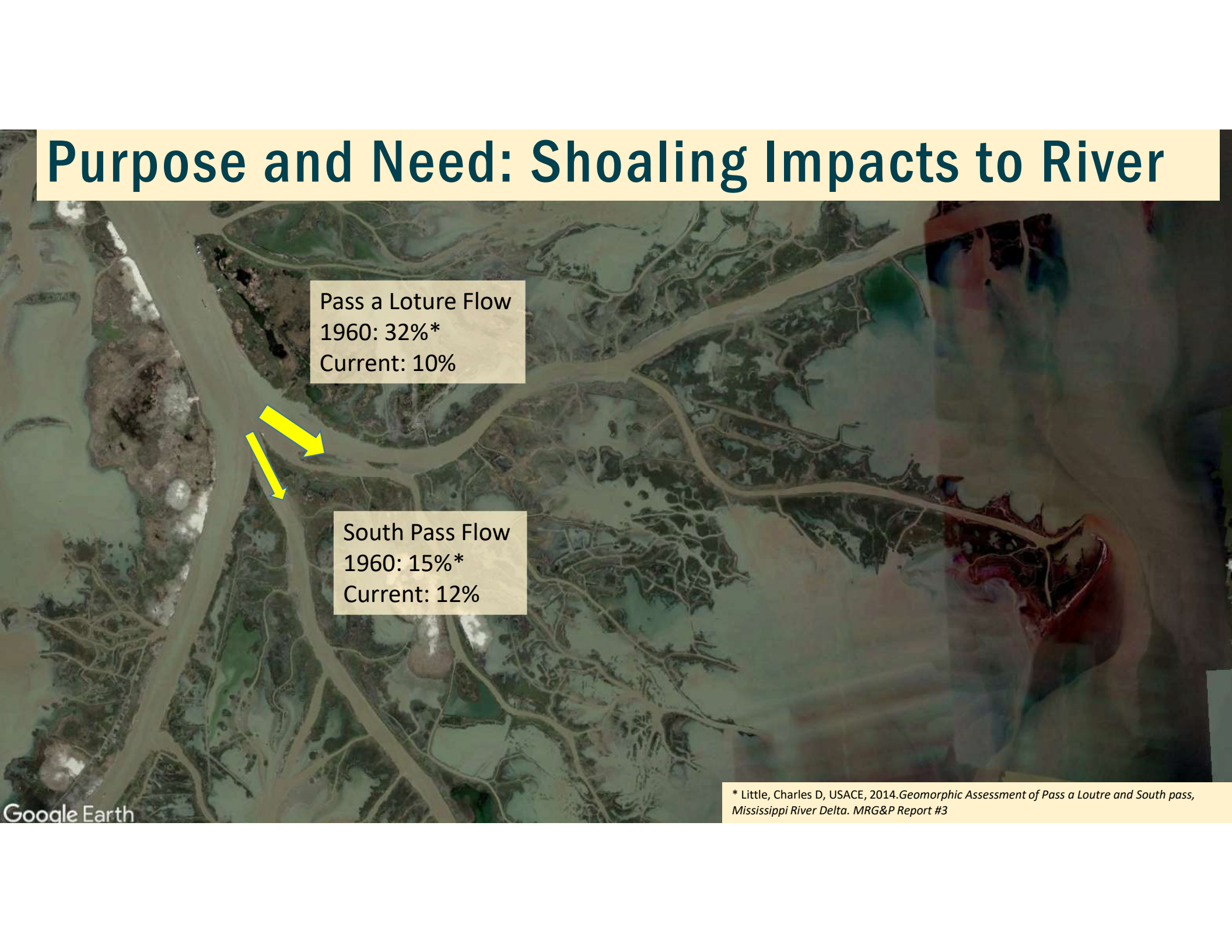




A Habitat Unique to LA and North America



Purpose and Need: Shoaling Impacts to River



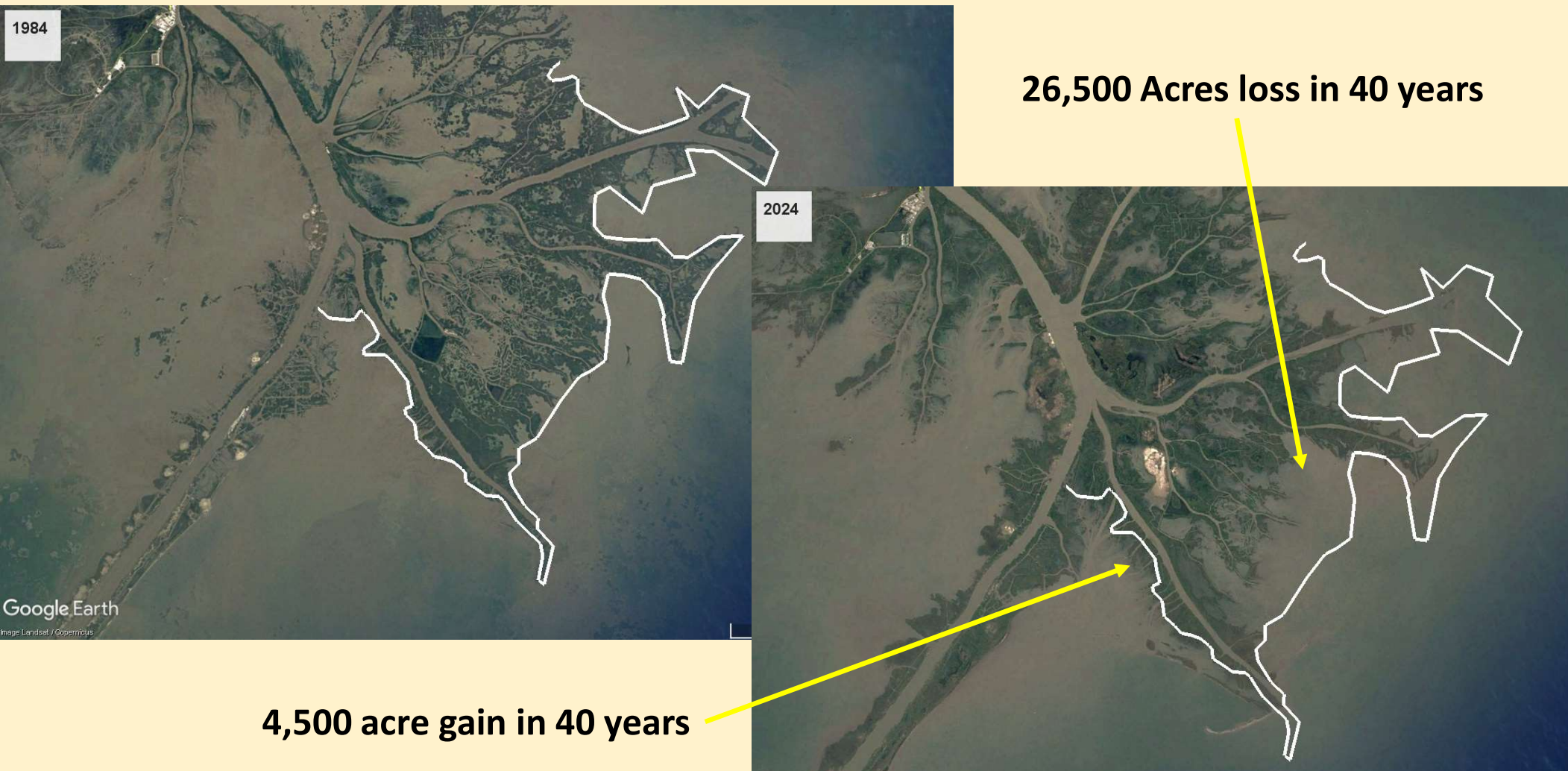
Pass a Loutre Flow
1960: 32%*
Current: 10%

The image is a satellite map of the Mississippi River Delta. Two yellow arrows point from the main river channel to two different passes. The top arrow points to Pass a Loutre, and the bottom arrow points to South Pass. The map shows the complex network of distributaries and the surrounding wetlands. The river water is a light brown color, while the surrounding land is a mix of green and brown.

South Pass Flow
1960: 15%*
Current: 12%



Purpose and Need: Wetland Loss





1984

Shoaling of Pass a Loture has resulted in less riverine flow and sediment availability to nourish marshes leading to severe wetland loss.

Pass a Loutre

2021



Purpose and Need: Impacts 2010 DWH Oil Spill

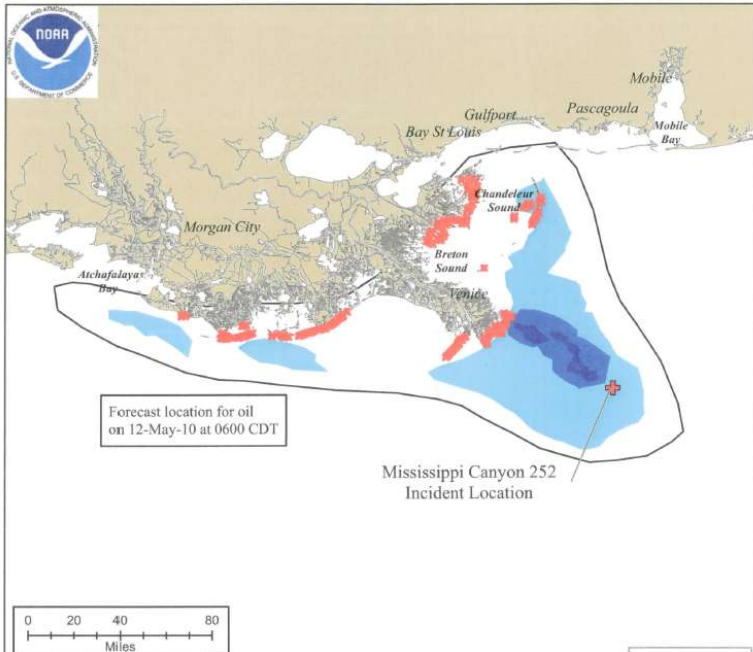
Trajectory Forecast Mississippi Canyon 252

NOAA/NOS/OR&R

Estimate for: 0600 CDT, Wednesday, 5/12/10

Date Prepared: 1300 CDT, Sunday, 5/09/10

This forecast is based on the NWS spot forecast from Sunday, May 9th AM. Currents were obtained from the NOAA Gulf of Mexico, USF West Florida Shelf, Texas A&M/TGLO and NAVO/NRL models; and HFR measurements. The model was initialized from satellite imagery and analysis provided by NOAA/NESDIS obtained the evening of May 8 and Sunday morning overflight observations. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization).



Purpose and Need: Impacts 2010 DWH Oil Spill



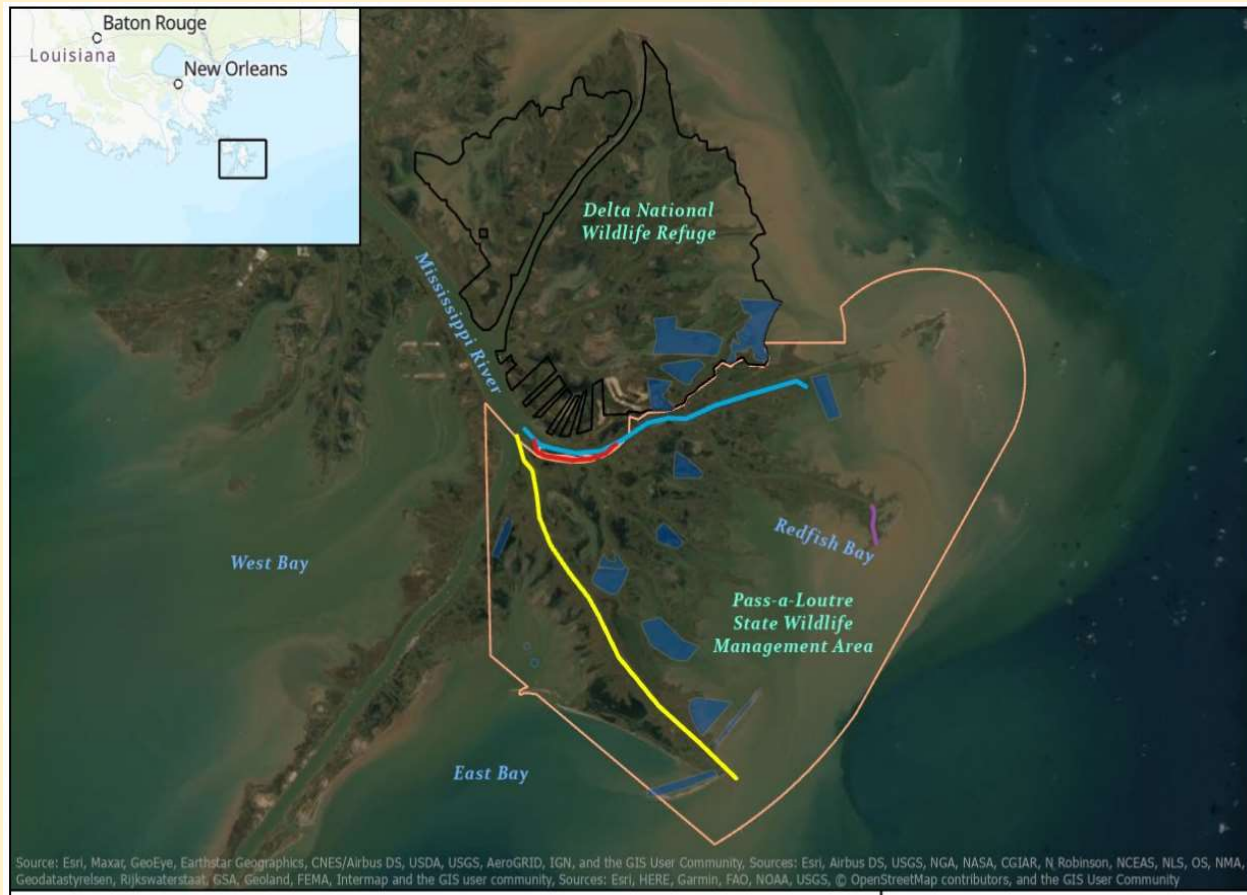
Funding for E&D: LA TIG Restoration Plan #7

\$6,000,000 Engineering and Design

Deepwater Horizon Oil Spill

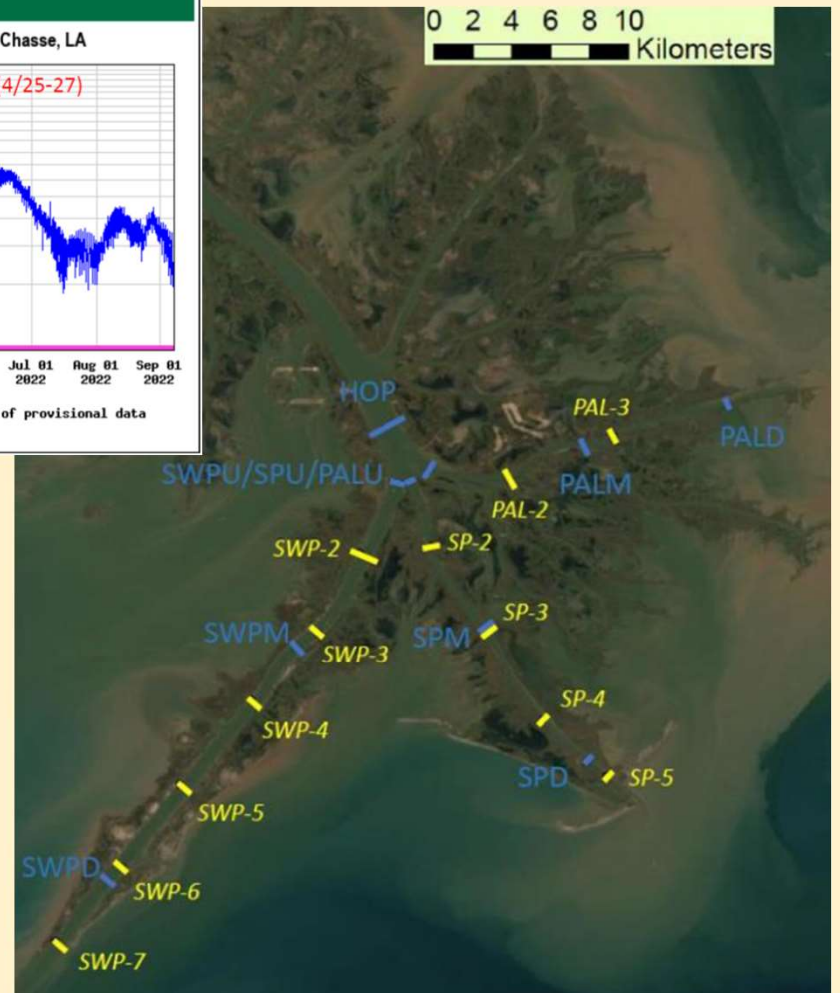
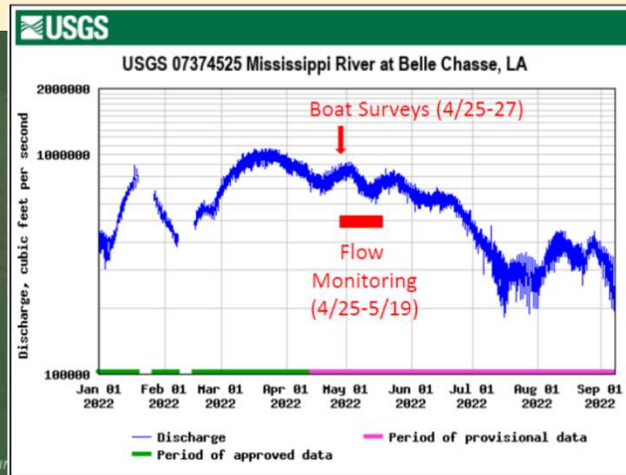
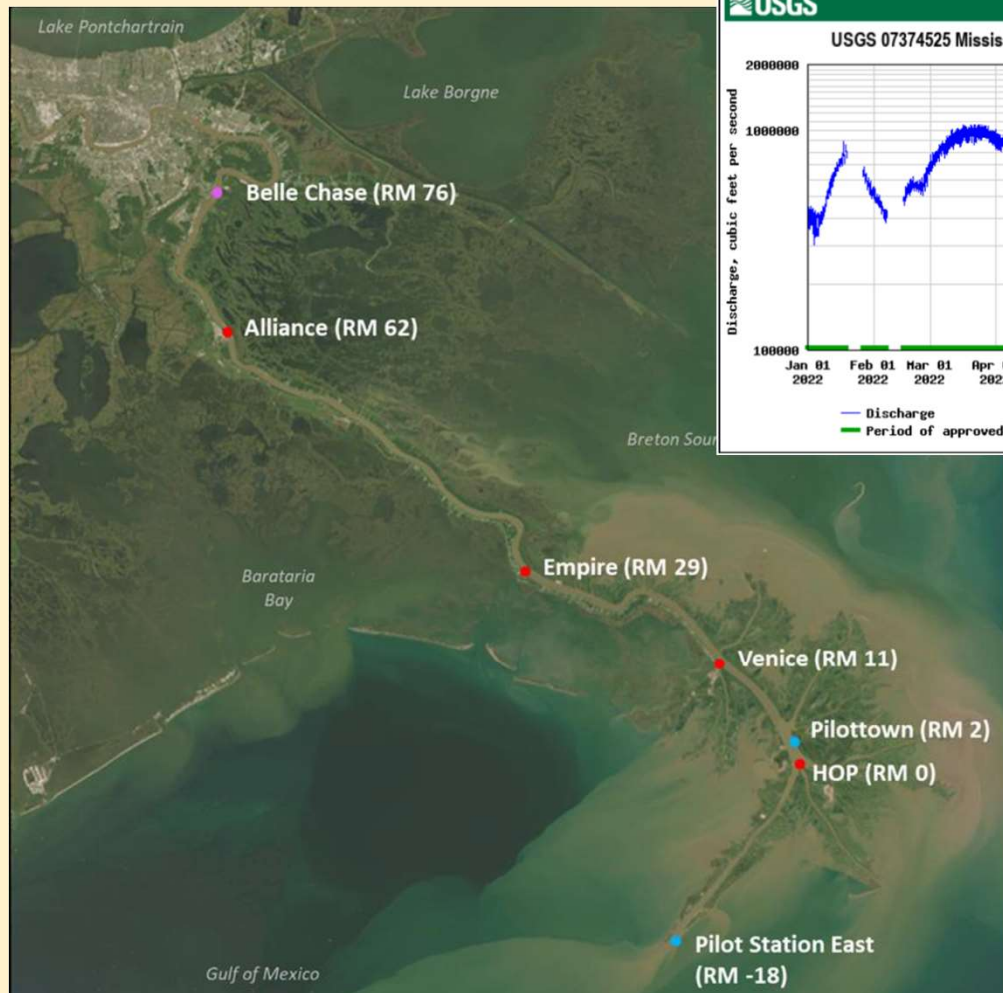
Louisiana Trustee Implementation
Group Final Restoration Plan and
Environmental Assessment #7:
Wetlands, Coastal, and Nearshore
Habitats and Birds

November 13, 2020



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N. Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community. Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

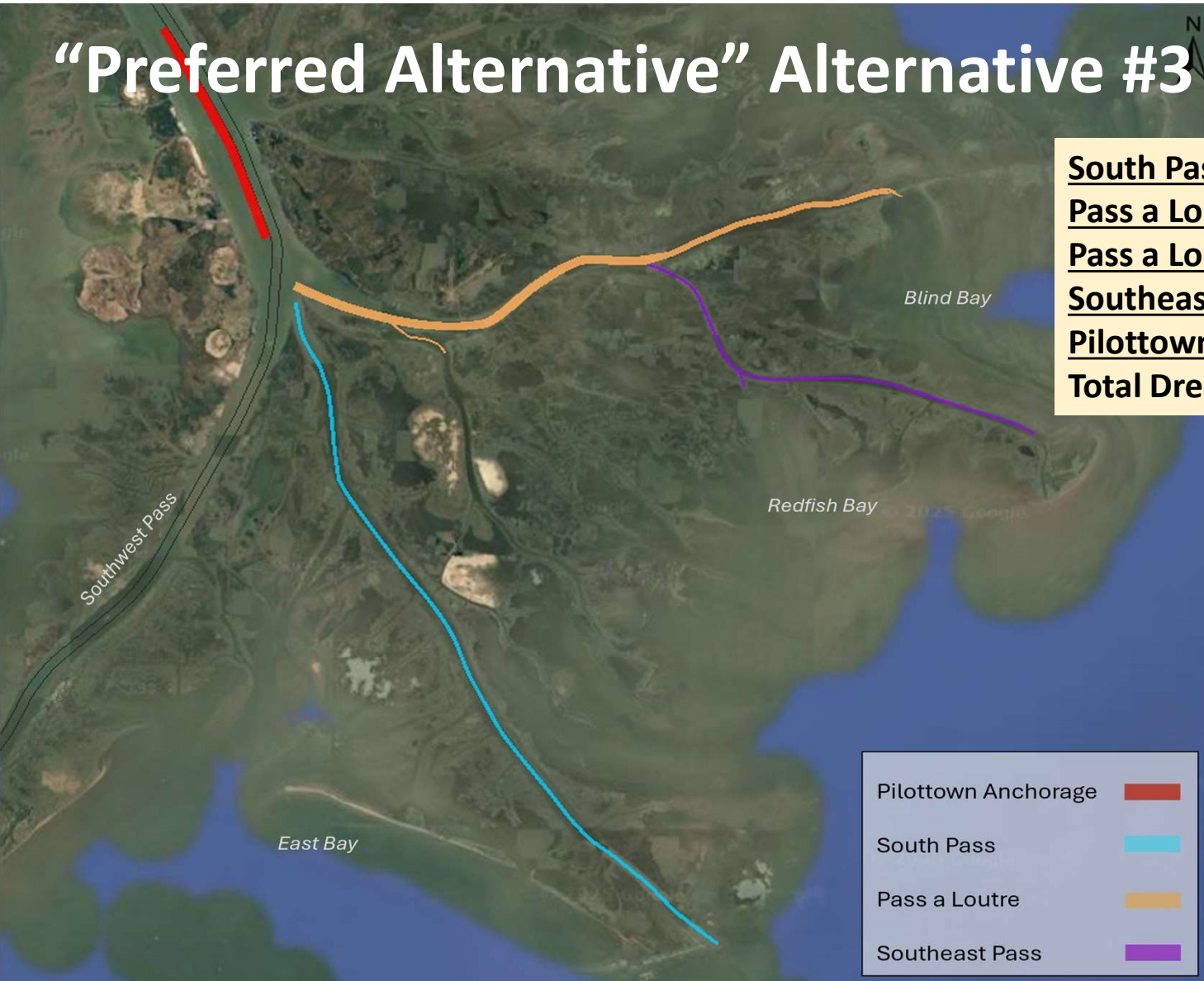
Data Collection and Model Inputs:



Stakeholder Input



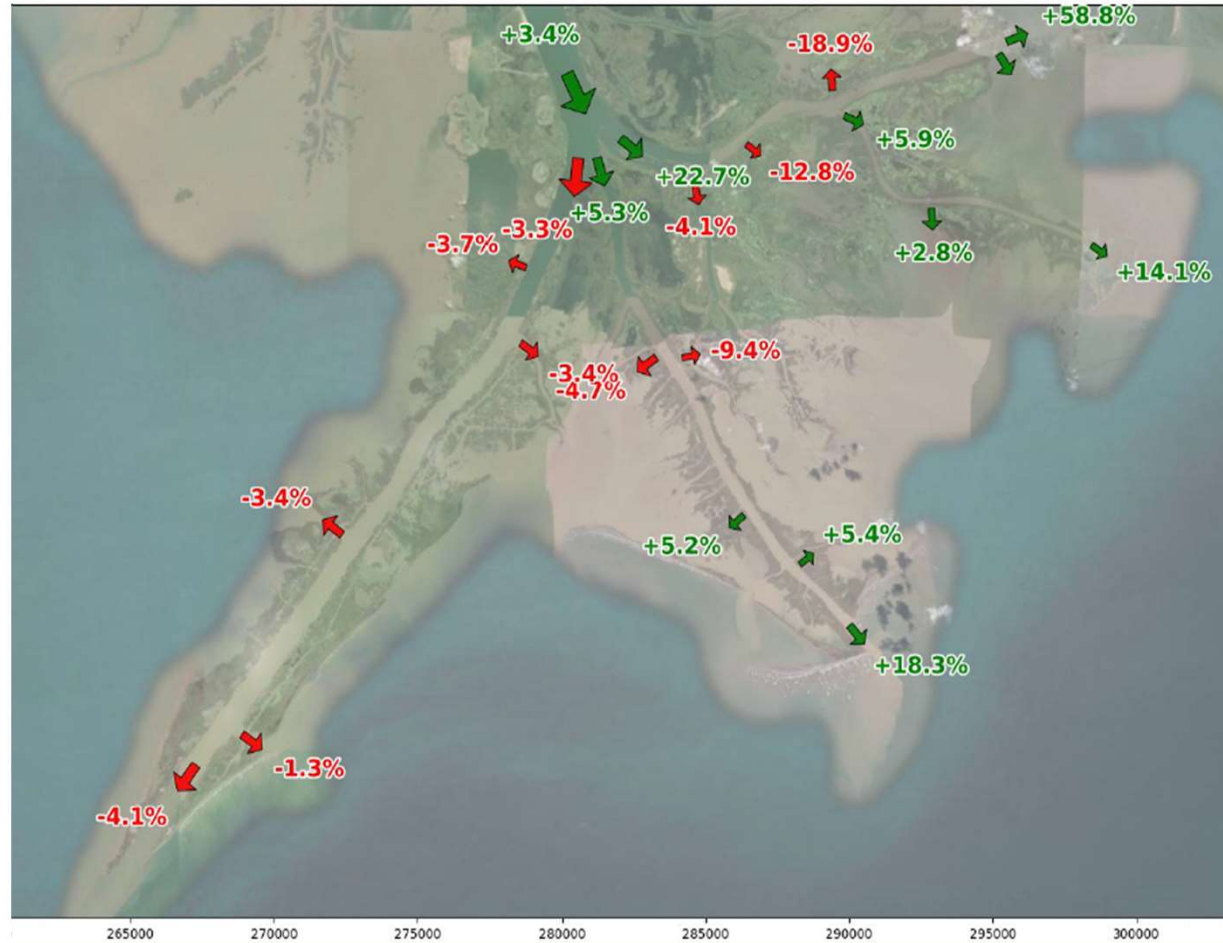
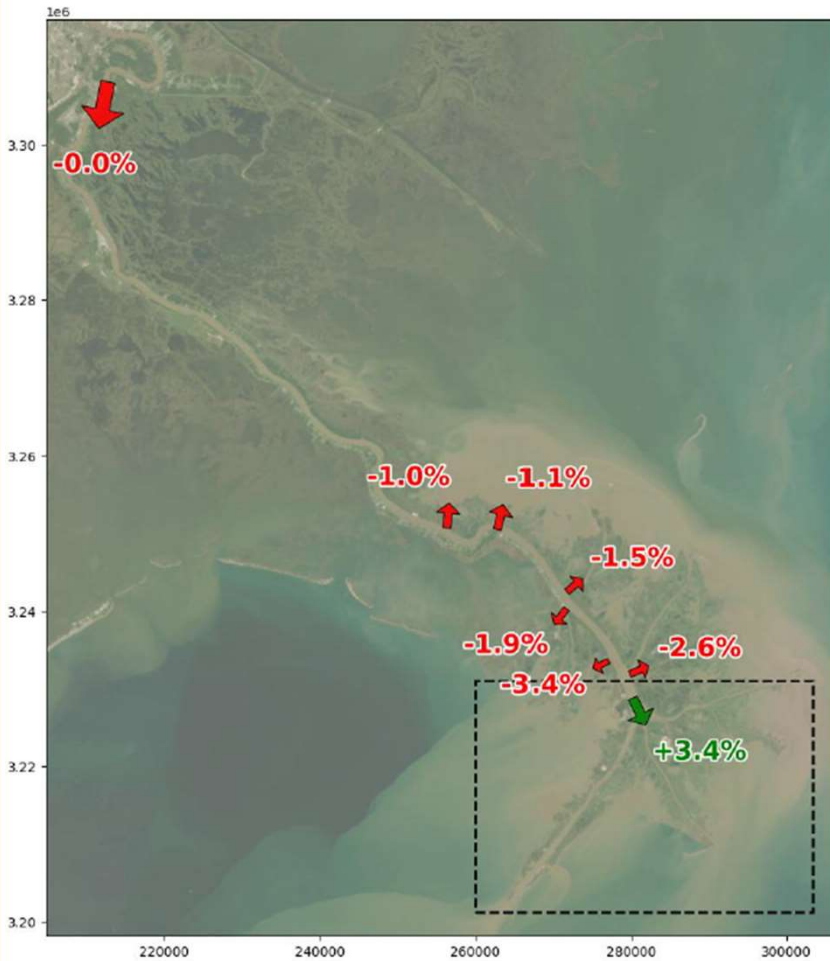
“Preferred Alternative” Alternative #3



<u>South Pass:</u>	<u>300'x25' - 3.5 mcy</u>
<u>Pass a Loutre Upper:</u>	<u>750'x25' - 3.45 mcy</u>
<u>Pass a Loutre Lower:</u>	<u>500'x20' - 2.8 mcy</u>
<u>Southeast Pass:</u>	<u>200'x20' - 2.15 mcy</u>
<u>Pilottown:</u>	<u>Nat. Slope x50' - 4.3 mcy</u>
<u>Total Dredge Quantity =</u>	<u>16.2 MCY</u>

Estimated Cost:
\$144,000,000 - \$176,000,000

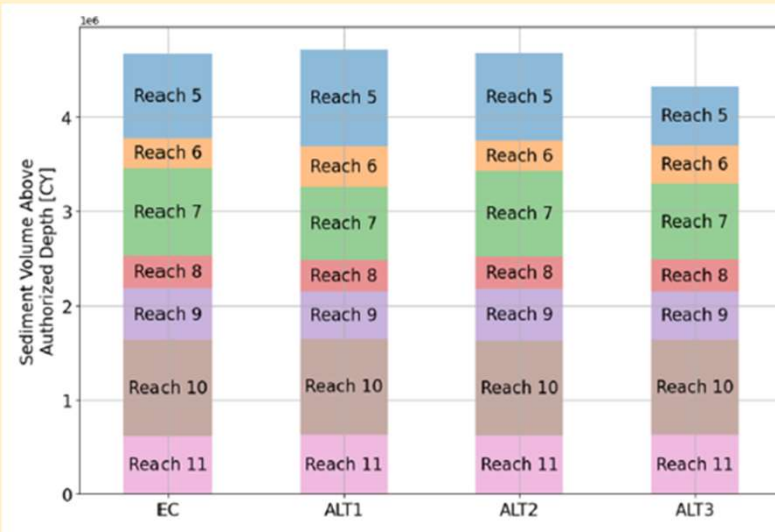
Calculating Project Benefits: Flow Budget



Calculating Project Benefits: Reduced Shoaling in Southwest Pass

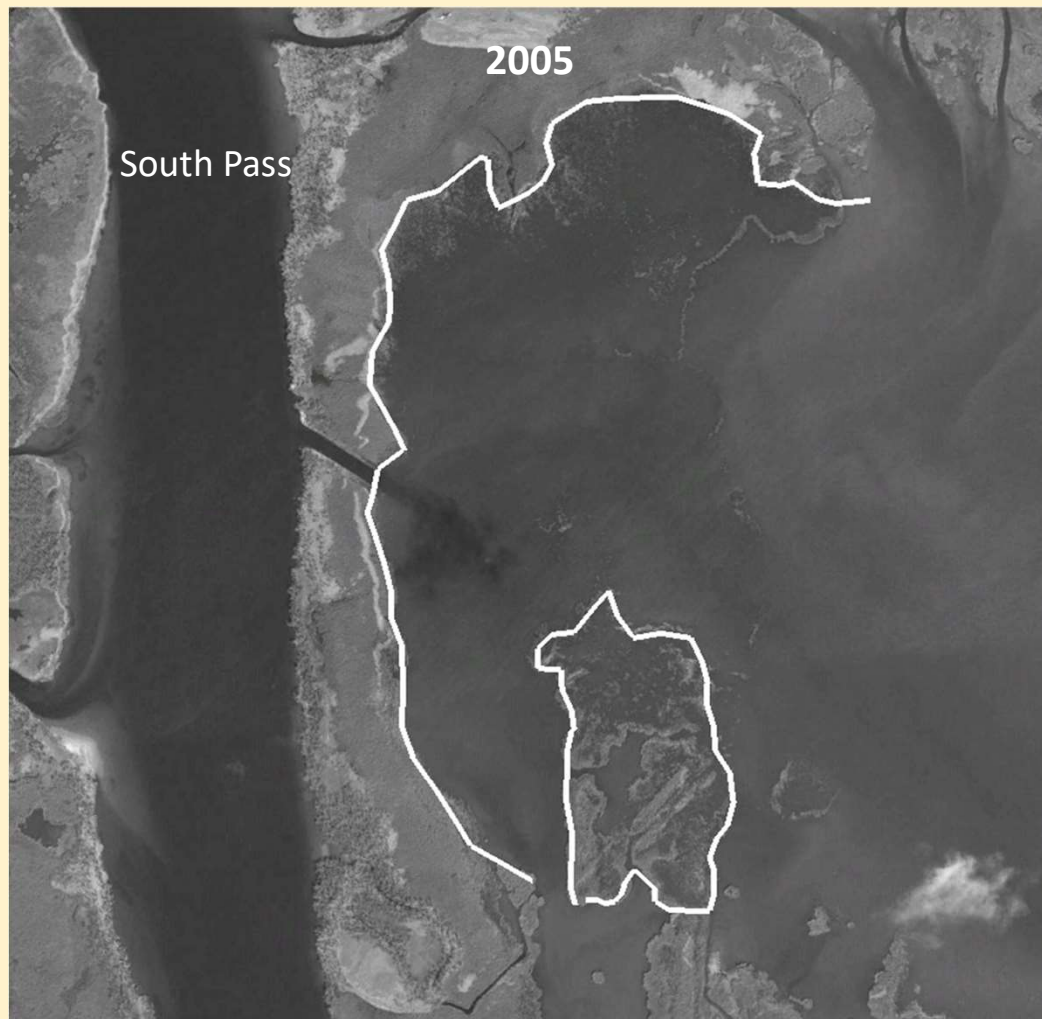
Sedimentation above navigable depth in SWP [CY]:

	EC	ALT1	ALT2	ALT3
Reach 5	896,000	1,029,000	925,000	721,000*
Reach 6	317,000	430,000	321,000	406,000
Reach 7	931,000	778,000	909,000	808,000
Reach 8	344,000	335,000	342,000	336,000
Reach 9	547,000	504,000	550,000	513,000
Reach 10	1,018,000	1,017,000	1,009,000	1,011,000
Reach 11	616,000	628,000	619,000	626,000
TOTAL	<u>4,669,000</u>	<u>4,721,000</u>	<u>4,675,000</u>	<u>4,421,000</u>



“ALT 3” – Is the preferred alternative for the project

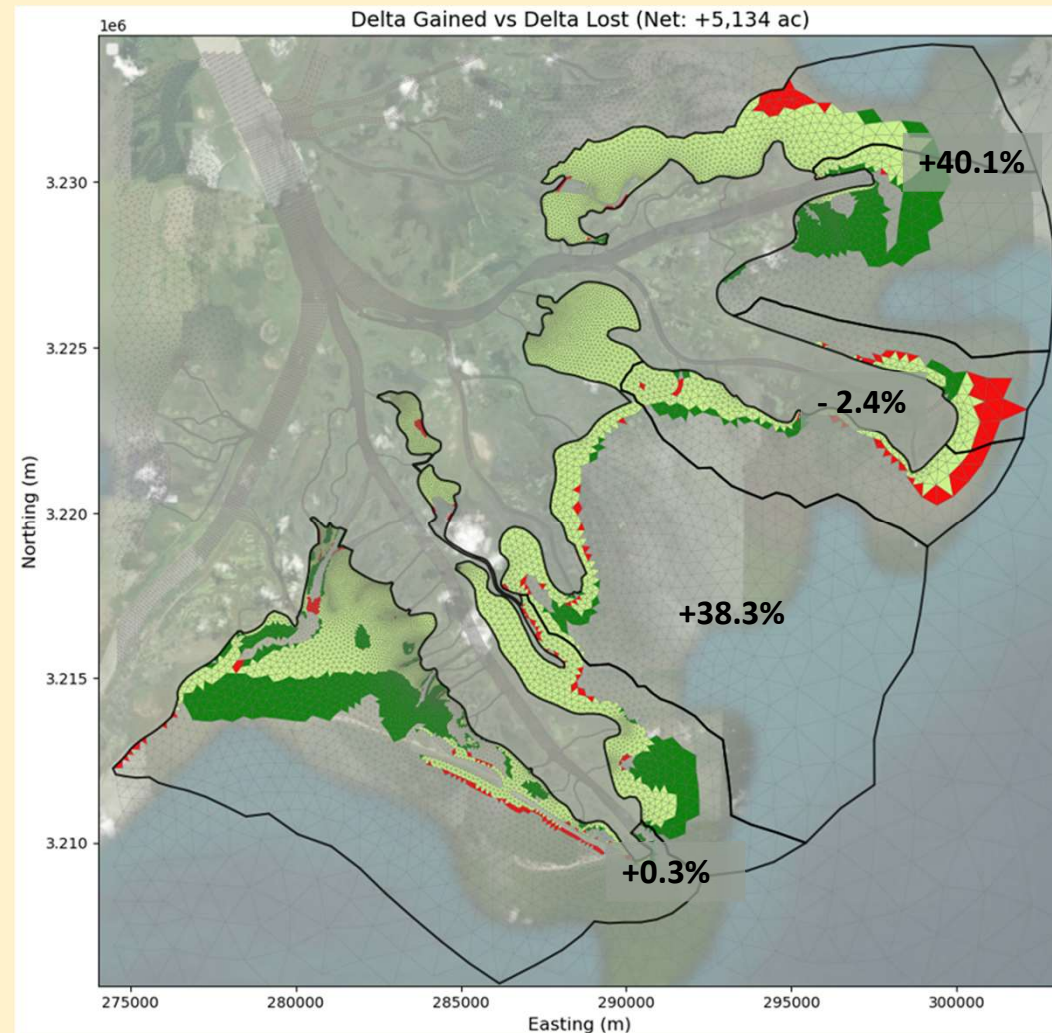
Calculating Project Benefits “Acres”



Calculating Project Benefits “Sediment Volume”

Modeled of Benefit over 21 years:

- **Increase in sediment deposition = +15.3%**
 - Highest Increases in the areas with highest erosion rates (Blind Bay & Garden Island Bay)
 - Suggests a reversal in wetland loss in some areas
- **Increased sediment deposition into wetlands = 32.1 Million Cubic Yards**
- **Model suggest benefits from project will extend well past 21 years compared to future without project conditions**



90 Species of Greatest Conservation Need

- Birds: 56 Species
 - Reptiles: 12 Species
 - Fish: 8 Species
 - Plants: 8 Species
 - Arthropods: 4 Species
 - Mammals: 2 Species
-
- 5 Natural Communities of Concern

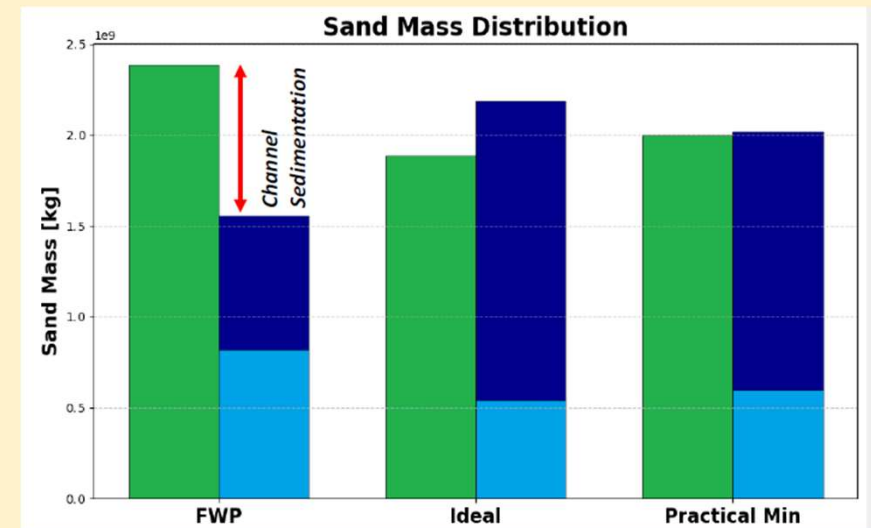
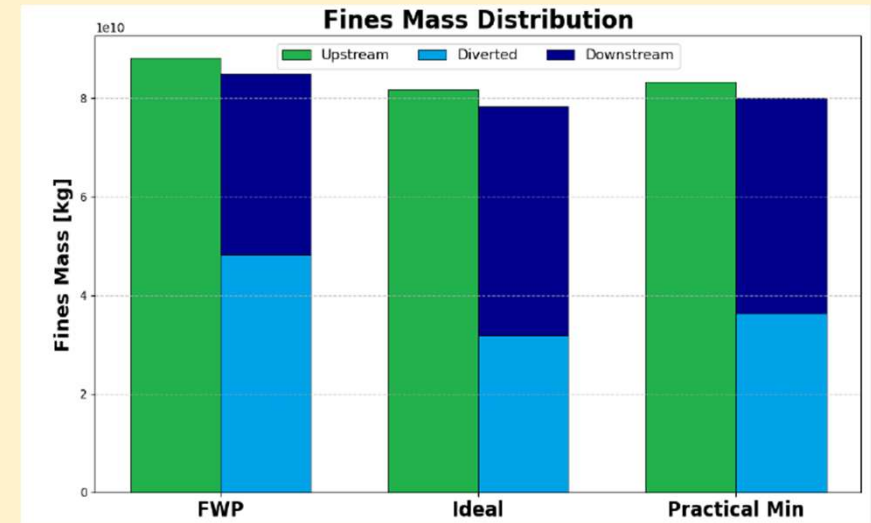
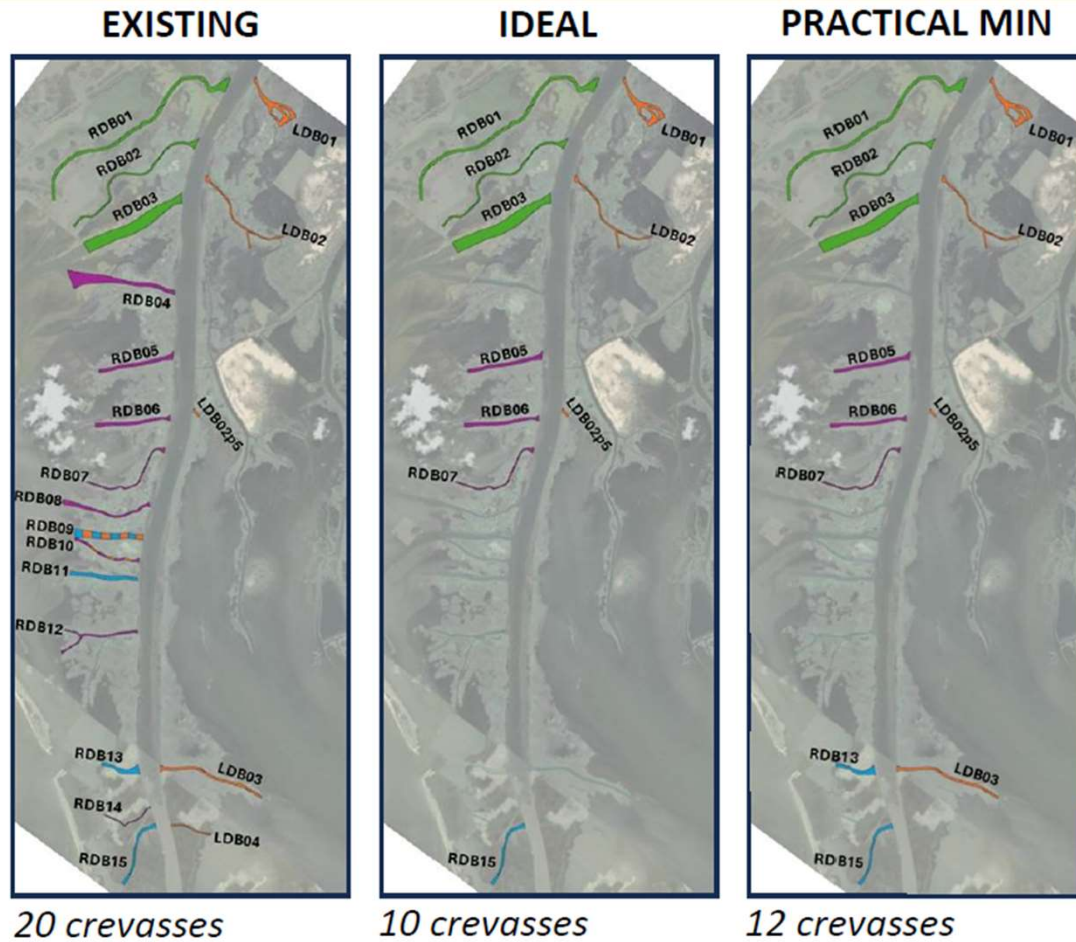


South Pass

- 9 New Crevasses > 4,500 acres of marsh
- South Pass has retreated almost 1 mile
- Marsh loss on Southern End



South Pass Crevasse Management

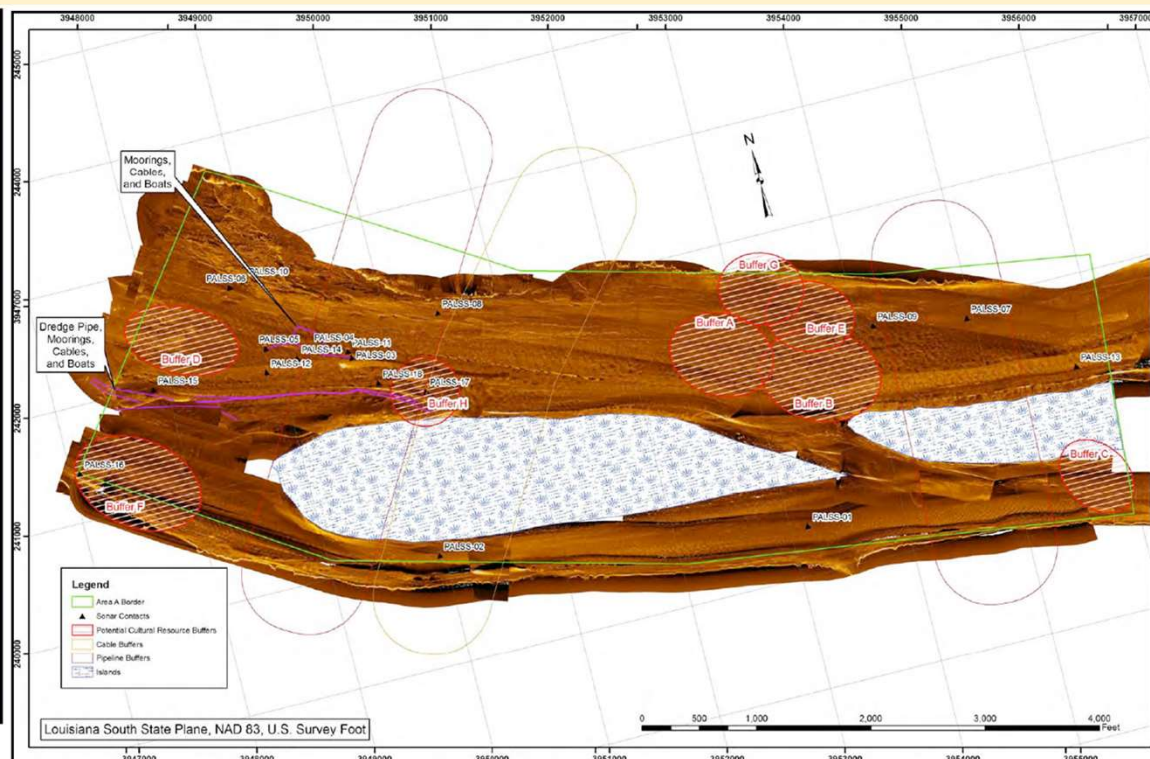


Archeological Surveys

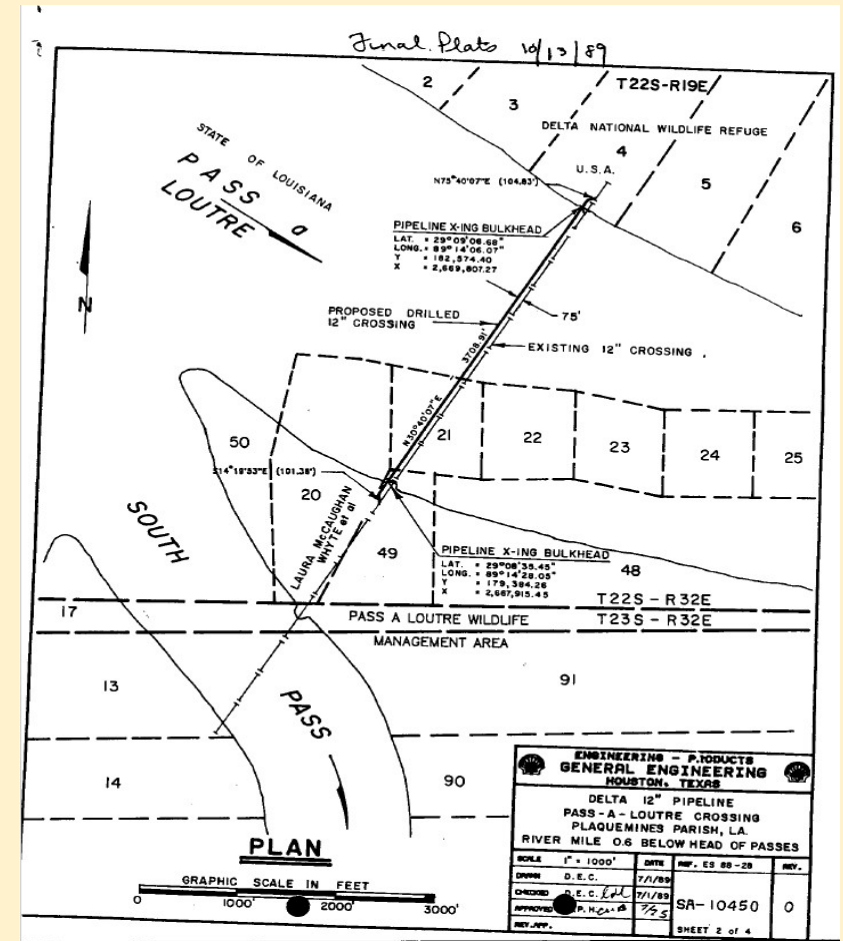
363 miles of survey covering 2,878 acres – Nearly Complete



(Courtesy I. N. Phelps Stokes Collection, Miriam and Ira D. Wallach Division of Art, Prints and Photographs, The New York Public Library, Astor, Lenox and Tilden Foundations).



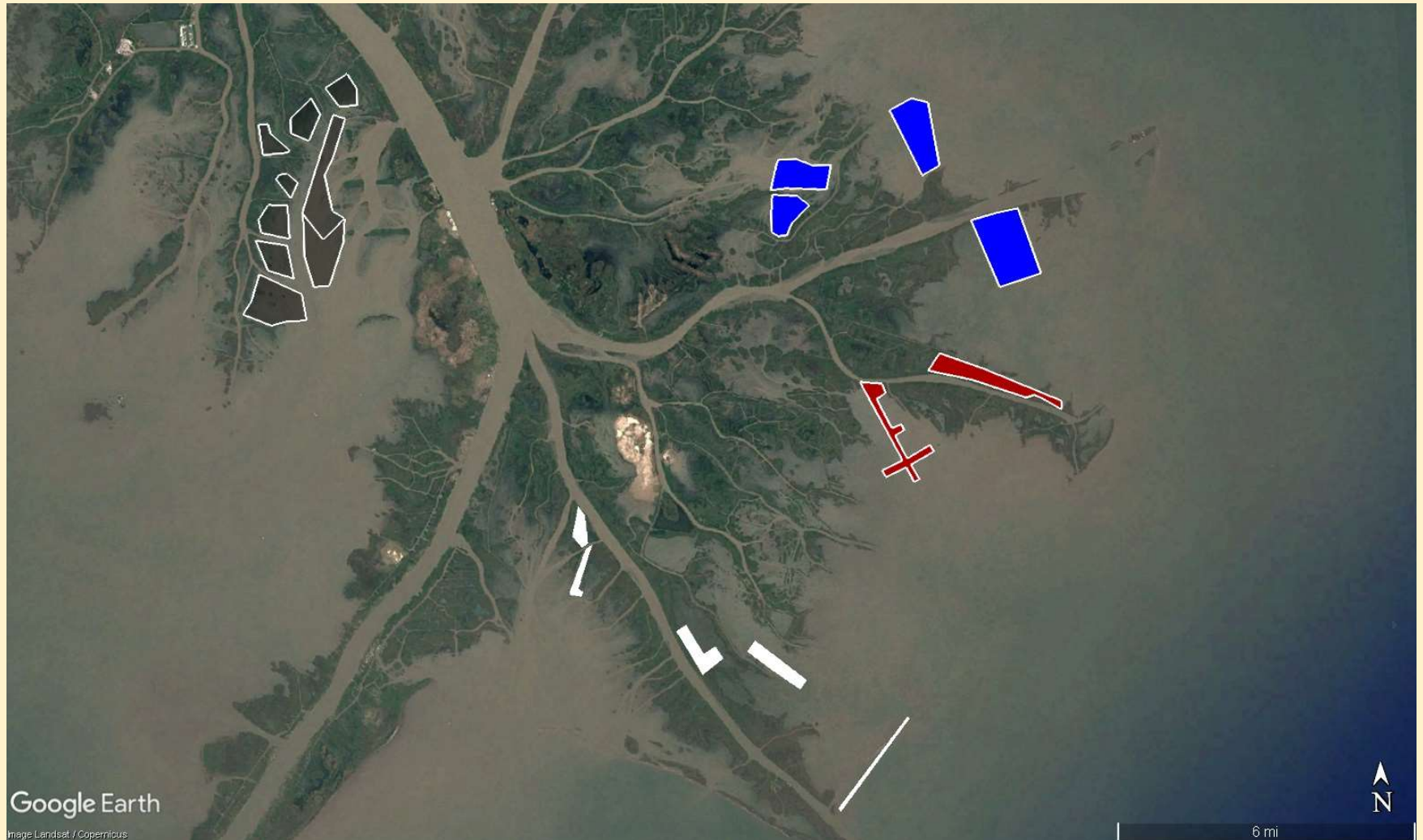
Oil and Gas Infrastructure Surveys - Underway



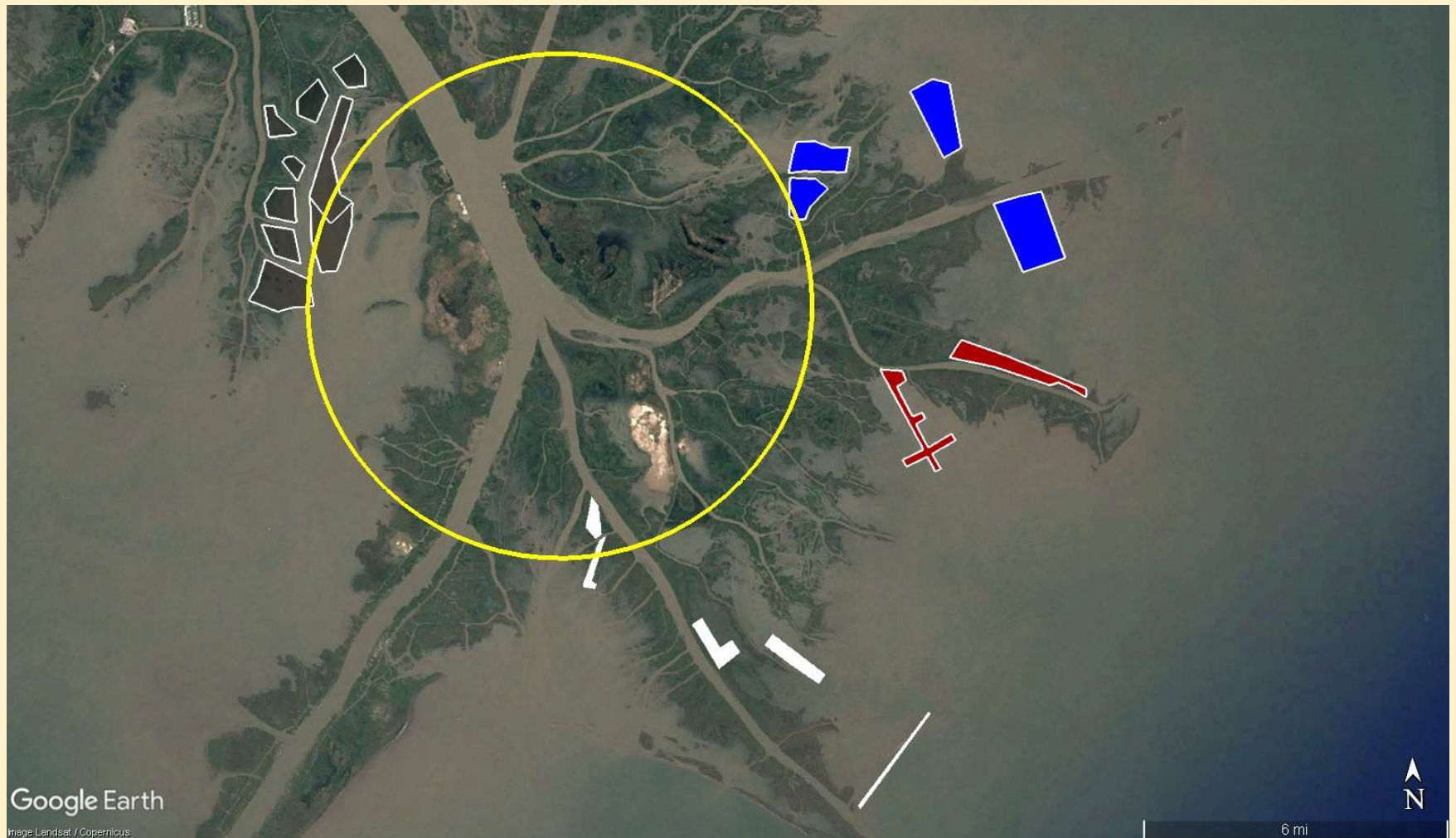
Next Steps: Develop Sediment Disposal Areas



Next Steps: Develop Sediment Disposal Areas



Next Steps: Develop Sediment Disposal Areas



Questions?

2004



2025



48

LOUISIANA CONSERVATION REVIEW

October, 1933

Get Your Limit on Ducks!

The Department of Conservation, of the State of Louisiana, cordially invites you to visit the Pass-a-Loutre Public Shooting club under its direction at the mouth of the Mississippi River, during the season of 1933-1934, November 16 to January 15.

The club house is adequately appointed for the entertainment of guests, being supplied with a comfortable dormitory, a light plant, a water supply system furnishing hot and cold water, and a cuisine under the management of competent help.

The many ponds have been opened with trails leading from the main passes; the equipment, such as duck boats, decoys, and blinds, has been put in proper shape for the season.

The hunting of wild waterfowl is permitted only from a half hour before sunrise to noon. This gives the ducks a half-day rest for feeding in the ponds.

The Pass-a-Loutre Club is located near the mouth of

the Mississippi, on one of the passes of the river, 90 miles from the City of New Orleans.

The Club can be reached by bus line over a good highway leading out of New Orleans to Venice Post Office, situated on the west bank of the Mississippi

River, at which point our boat will meet all guests each day at 2:30 P. M. o'clock.

At the club house the daily charge is \$9.00. This covers services of guide, duckboat, decoys, breakfast, lunch, dinner, and lodgings. Sportsmen must bring their own guns, but shells for standard 12, 16, and 20 gauge guns can be purchased at the club house at retail prices.

Sportsmen desiring to visit the club must register,

either in person or by mail, at the office of the Department of Conservation, 126 Civil Court Building, N. O.

For full information relative to registration and accommodation, apply to
DEPARTMENT OF CONSERVATION
126 Civil Court Building
New Orleans



Opening Day at the Pass-a-Loutre Hunting Club, November 1, 1925