

Rabbit Island Update

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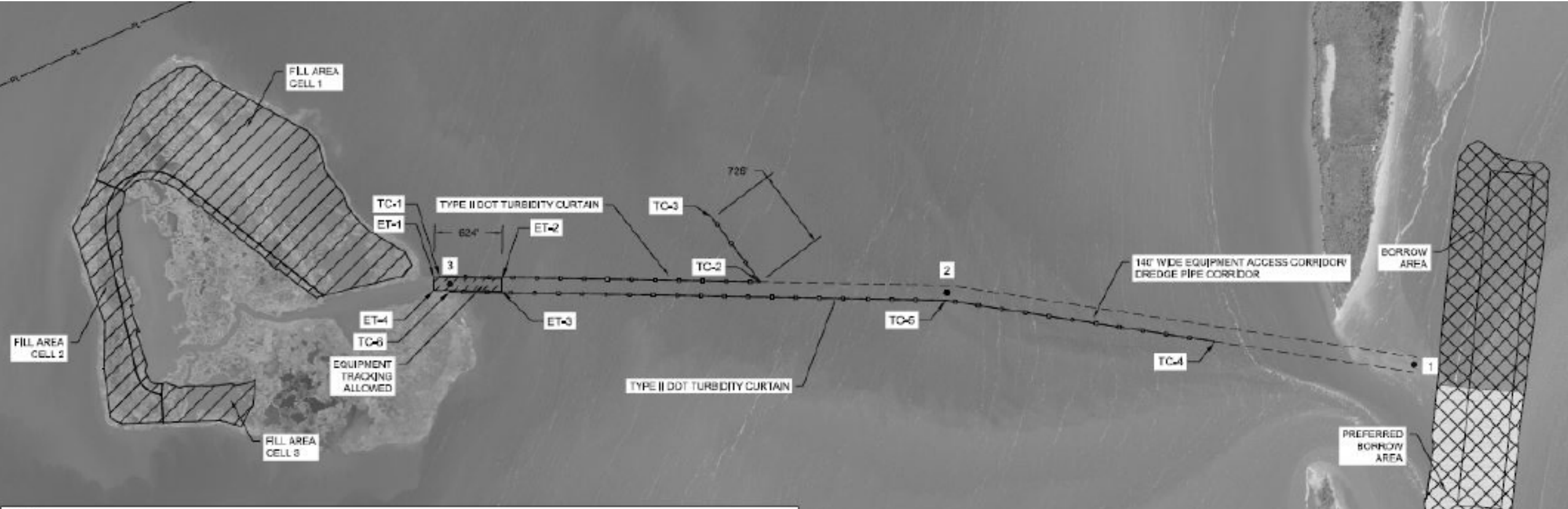


Rabbit Island 2020



- 200 Acre Island Located in West Cove of Calcasieu Lake in Cameron Parish
- The only Brown Pelican colony in Southwest Louisiana
- Prior to restoration, the average elevation = 1.0' NAVD 88
- Mean High Tide of Calcasieu Lake 1.01' NAVD 88





Project Features

- 606,300 cy of sediment pumped onto Rabbit Island from the Calcasieu River
- Cell 1 was constructed to an elevation of 3.0' NAVD88
- Cell 2 was constructed to an elevation of 3.5' NAVD88
- Cell 3 was a Marsh Nourishment Cell
- Planted 65,561+ Shrubs and Herbaceous Vegetation Planted for Nesting Habitat





2021 - *Looking South*

December 2023

- 
- **102 Acres Restored**
 - 81 acres of bird nesting habitat
 - 21 acres of secretive marsh bird nesting habitat
 - **167 Acres Enhanced (65 acres) or restored**



Shoreline Protection – \$846,928

2,400 linear feet of rock filled gabion baskets

Funded by: Cheniere Energy, the Nature Conservancy, and O&M Project Funds



An aerial photograph of a coastal landscape. On the left, a body of water with gentle ripples meets a shoreline composed of dark rocks and a strip of light-colored sand. To the right of the shore is a vast, flat area of land covered in low-lying green vegetation, possibly marshland or coastal scrub. In the far distance, a thin line of land separates the water from a hazy horizon under a cloudy sky. The word "VIDEO" is superimposed in large, bold, white capital letters across the center of the image, partially obscuring the landscape details.

VIDEO

Was the \$16.4 M Rabbit Island Successful?

- Success for most projects is measured by the quantity of acres created or protected.
- Rabbit Island's success was to be measured by number of birds produced.
 - *Bird restoration from the 2010 BP Deepwater Horizon oil spill*



Was the \$16.4 M Rabbit Island Successful?



This project has produced more than 107,000 fledglings since 2021 at a cost of \$153/fledgling. If production stays the same next year the cost will be \$119/fledgling and decrease each following year.

Bird Restoration Goals

(Section 5.5.12 in PDARP/PEIS)

- **Restore lost birds** by facilitating additional production and/or reduced mortality of injured bird species
- **Restore or protect habitats** on which injured birds rely
- **Restore injured birds by species** where actions would provide the greatest benefits within geographic ranges that include the Gulf of Mexico.





Identify Comprehensive, Rigorous, and Repeatable Monitoring Methods

- Document **individual** and **coastwide** CWB performance
- Document CWB **habitat utilization**
- Inform future **project design and construction**
- Inform need and effectiveness of **adaptive management strategies**
- Facilitate Trustees' ability to **easily convey restoration benefits** to resource stakeholders **emphasizing the general public**



Invest

Comprehensive, rigorous, and repeatable monitoring methods for coastal birds

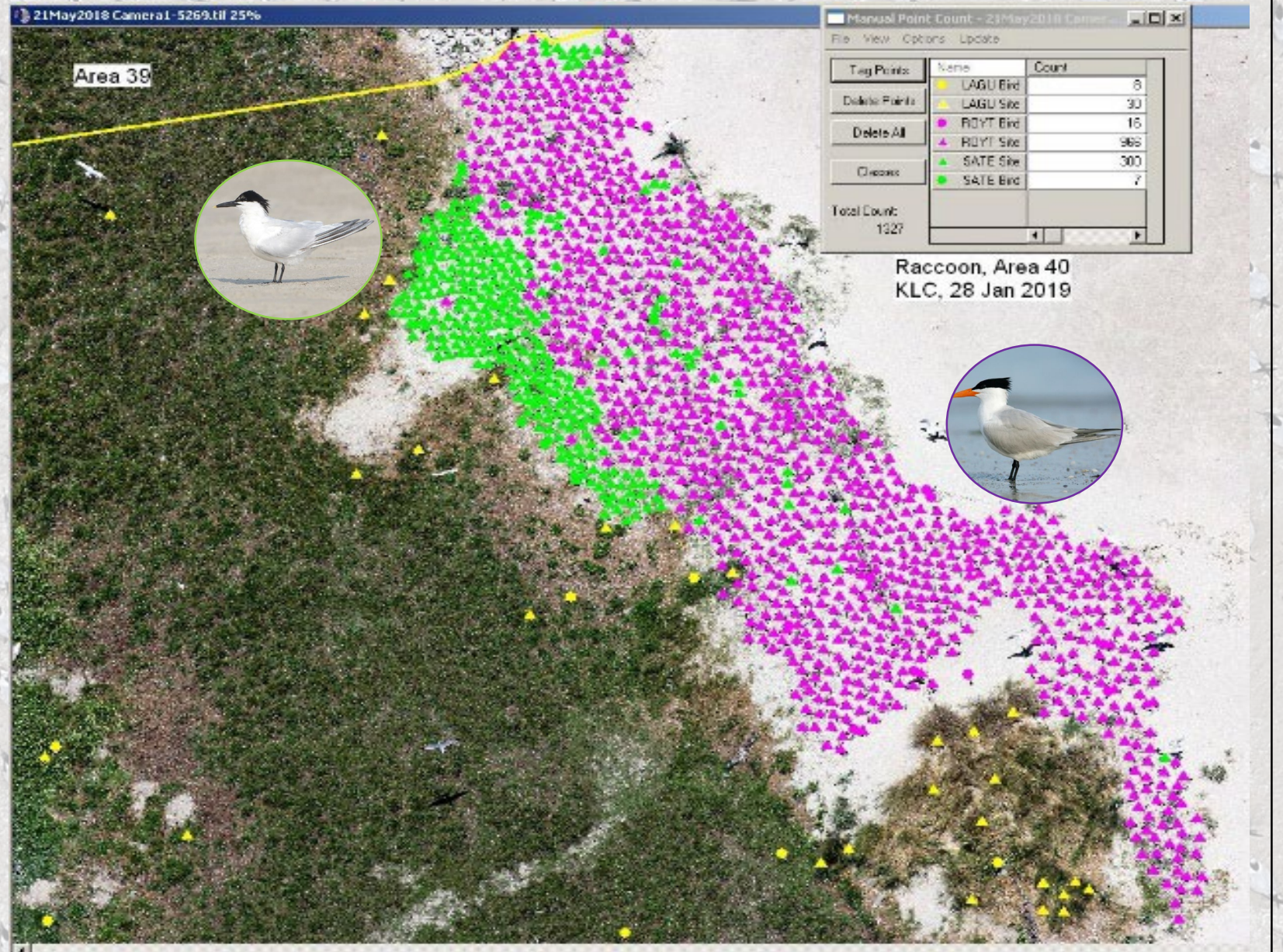


Address

*Our capacity to clearly convey
restoration successes to diverse
stakeholders*



The Past





Legend

2022 Colonial Avian Monitoring GIS Dotting

Species Common Name

- Sea Turtle
- American Avocet,AMAV,Bird
- American Coot,AMCO,Bird
- American Oystercatcher,AMOY,Bird
- American White Pelican,AWPE,Bird
- Black-bellied Whistling-Duck,BBWD,Bird
- Black-crowned Night-Heron,BCNH,Bird
- Black-crowned Night-Heron,BCNH,Nest
- Black Skimmer,BLSK,AbandNest
- Black Skimmer,BLSK,Brood
- Black Skimmer,BLSK,Bird
- Black Skimmer,BLSK,C
- Black Skimmer,BLSK,Cw.out.Ad
- Black Skimmer,BLSK,EmptyNest
- Black Skimmer,BLSK,Nest
- Black Skimmer,BLSK,T
- Black-necked Stilt,BNST,Bird
- Black-necked Stilt,BNST,Nest
- Brown Pelican,BRPE,AbandNest
- Brown Pelican,BRPE,Brood
- Brown Pelican,BRPE,Bird
- Brown Pelican,BRPE,C
- Brown Pelican,BRPE,Cw.out.Ad
- Brown Pelican,BRPE,EmptyNest
- Brown Pelican,BRPE,PBN
- Brown Pelican,BRPE,T
- Brown Pelican,BRPE,WBN
- Caspian Tern,CATE,AbandNest
- Caspian Tern,CATE,Brood
- Caspian Tern,CATE,Bird
- Caspian Tern,CATE,C
- Caspian Tern,CATE,Cw.out.Ad
- Caspian Tern,CATE,EmptyNest
- Caspian Tern,CATE,Nest
- Caspian Tern,CATE,T
- Common Tern,COTE,AbandNest
- Common Tern,COTE,Brood
- Common Tern,COTE,Bird
- Common Tern,COTE,C
- Common Tern,COTE,Cw.out.Ad
- Common Tern,COTE,EmptyNest
- Common Tern,COTE,Nest
- Common Tern,COTE,T
- Forster's Tern,FOTE,AbandNest
- Forster's Tern,FOTE,Brood
- Forster's Tern,FOTE,Bird
- Forster's Tern,FOTE,C
- Forster's Tern,FOTE,Cw.out.Ad
- Forster's Tern,FOTE,EmptyNest
- Forster's Tern,FOTE,Nest
- Forster's Tern,FOTE,T

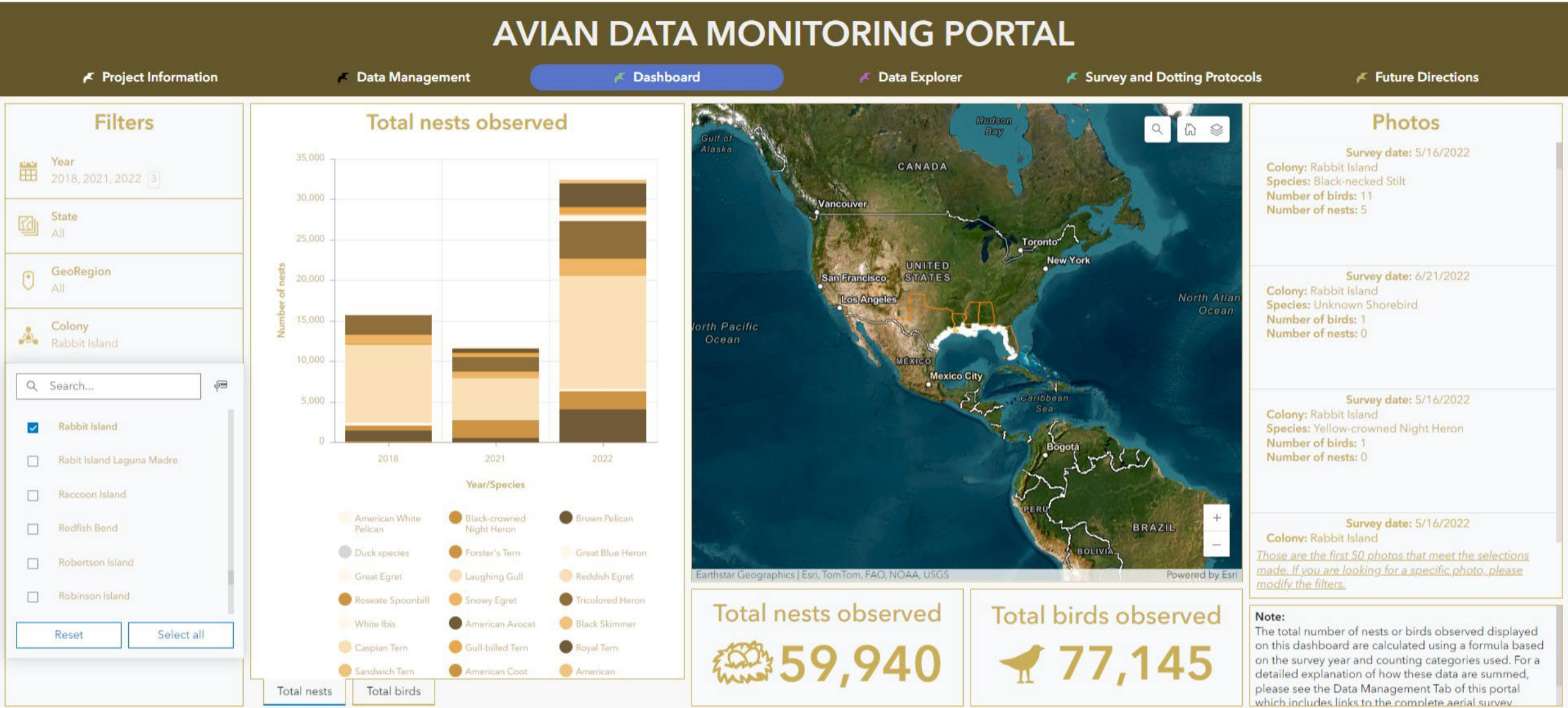
The Future: *Rabbit Island 2022*

Find address or place



300 ft

How Did the Birds Respond?



How Did the Birds Respond?



Number of Nests

		2018 Pre-construction
	Wading Birds	4,278
	Terns/Skimmers	573
	Laughing Gulls	9,647
	Brown Pelicans	1,340
	Total	15,838

How Did the Birds Respond?



Photo by PJ Hahn

Number of Nests

	2018 Pre-Construction	2021 “Year 0”
Wading Birds	4,278	2,869
Terns/Skimmers	573	3,214
Laughing Gulls	9,647	5,031
Brown Pelicans	1,340	521
Total	15,838	11,635

How Did the Birds Respond?



Number of Nests

		2018 Pre-Construction	2021 “Year 0”	2022 Year 1
	Wading Birds	4,278	2,869	7,941
	Terns/Skimmers	573	3,214	6,596
	Laughing Gulls	9,647	5,031	13,887
	Brown Pelicans	1,340	521	4,043
Total		15,838	11,635	32,467

How Did the Birds Respond?

Number of Nests

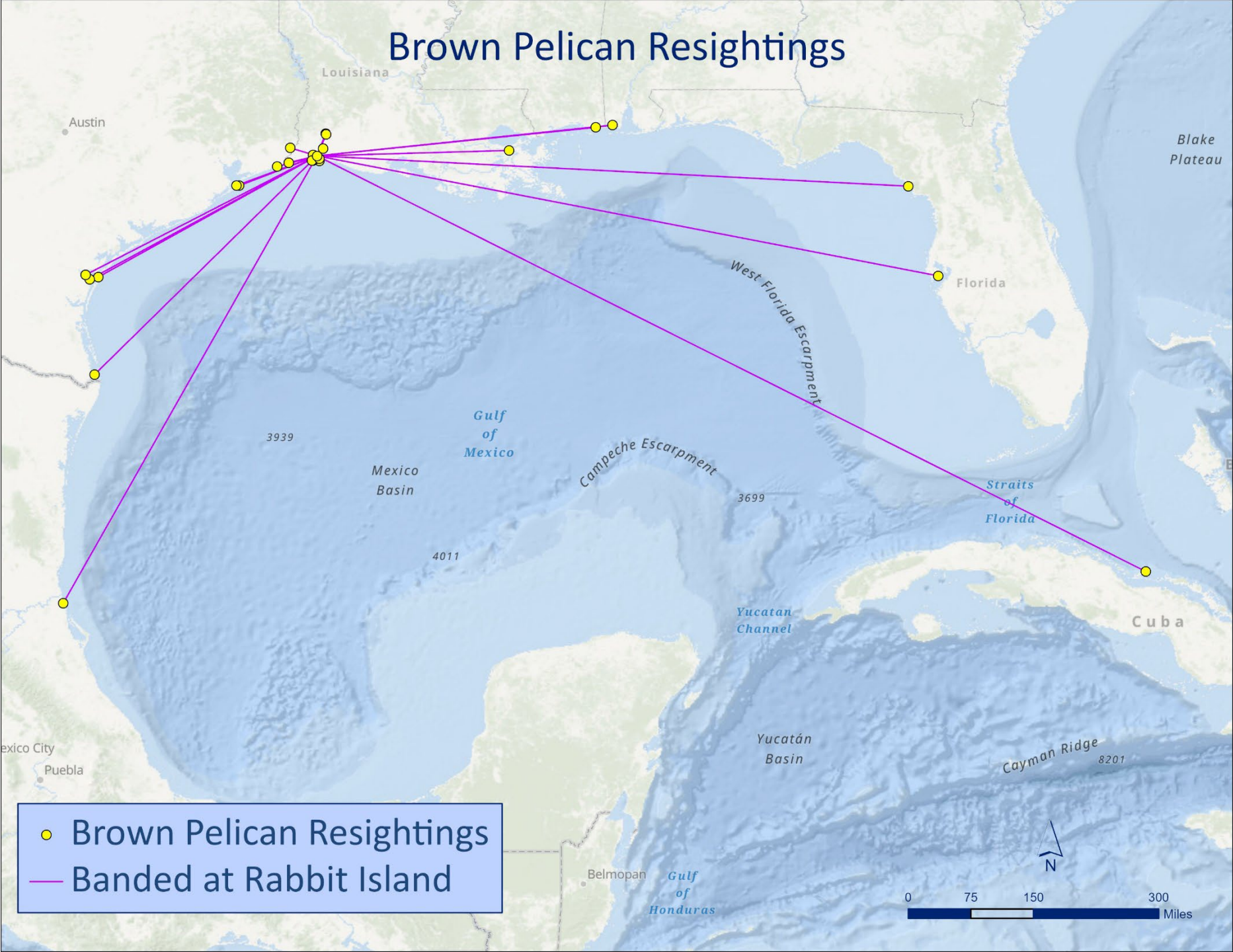
	2018 Pre-Construction	2021 “Year 0”	2022 Year 1	Percent Increase 2018 vs 2022
Wading Birds	4,278	2,869	7,941	86%
Terns/Skimmers	573	3,214	6,596	1,051%
Laughing Gulls	9,647	5,031	13,887	44%
Brown Pelicans	1,340	521	4,043	202%
Total	15,838	11,635	32,467	105%

Evaluating Success: *Local, Regional and International Scales*



- A total of **322 Pelicans** were banded between 2020 and 2021
- **30** have been resighted throughout the Gulf and internationally.
- **Many have been resighted** nesting on Rabbit Island.

Brown Pelican Resightings



Was Louisiana's \$16.4 M Investment in Rabbit Island Successful?

Goals

- **Restore lost birds** by facilitating additional production and/or reduced mortality of injured bird species
- **Restore or protect habitats** on which injured birds rely
- **Restore injured birds by species** where actions would provide the greatest benefits within geographic ranges that include the Gulf of Mexico.

Accomplishments

- Rabbit Island is an integral and highly **successful investment that continues to restore** DWH- impacted avian resources
- Louisiana's CWB's are habitat limited ... so our ability to **create, enhance and protect** these critical habitats like Rabbit Island will help to ensure long-term species viability
- Rabbit Island restoration continues to **benefit a diverse array of avian species prioritized as Species of Greatest Conservation Need**

A photograph of a large colony of brown pelicans on a grassy island. The pelicans are scattered across the landscape, some standing and others nesting. The background shows a clear blue sky with a few birds in flight. The text "Rabbit Island has a Bright Future! Questions?" is overlaid in the center of the image.

Rabbit Island has a Bright Future!

Questions?