

# Calcasieu-Sabine Large Scale Marsh and Hydrologic Restoration

PROJECT OVERVIEW AND PROGRAM UPDATE





# Project Overview and Background

# Project Scope

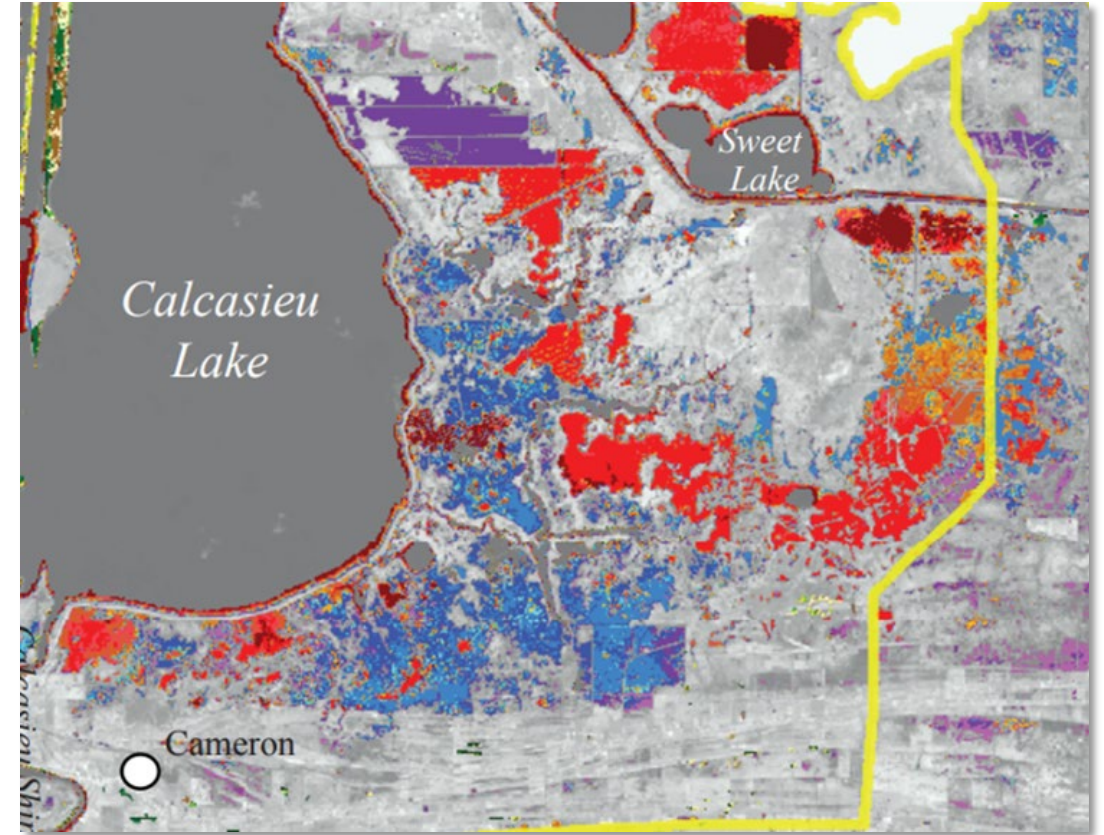
PROJECT GOAL: Reduce the rate of land loss in the Calcasieu Sabine Basin

## PROJECT OBJECTIVES

- Reduce marsh stress from flood inundation through:
  - Improved drainage
  - Dredged sediment input
- Maintain marsh salinity levels achieved through existing CCW management practices

## TWO MAIN PROJECT COMPONENTS

- Drainage structures with backflow prevention to improve marsh drainage
- Large-scale marsh creation & nourishment to increase elevation capital (~2,000 acres)

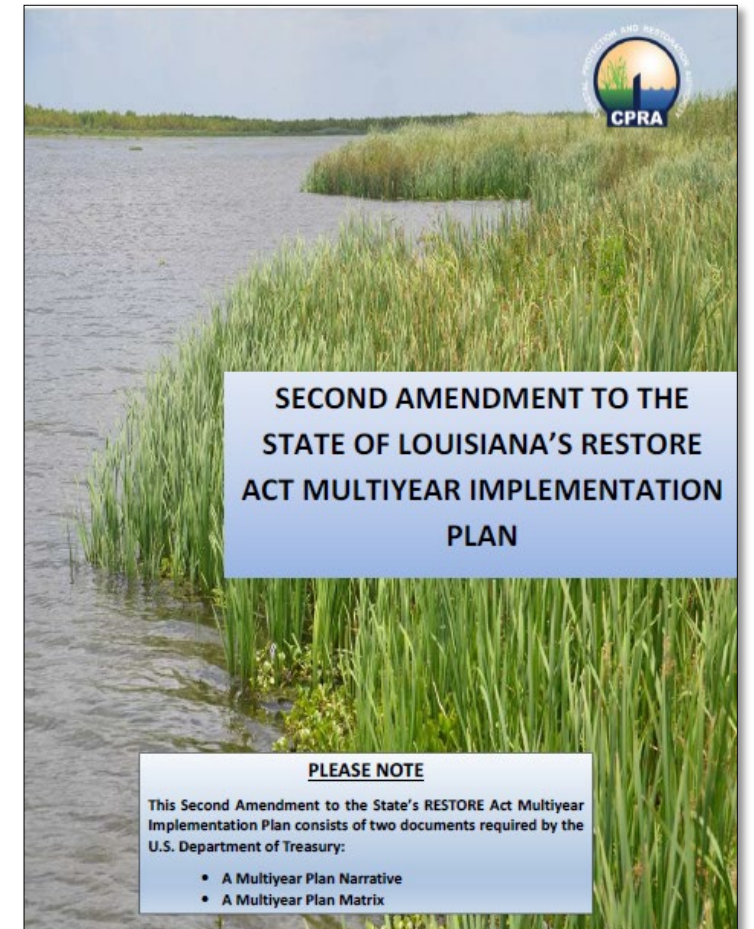


Source: Couvillion, B.R., Beck, Holly, Schoolmaster, Donald, and Fischer, Michelle, 2017, *Land area change in coastal Louisiana 1932 to 2016: U.S. Geological Survey Scientific Investigations Map 3381*, 16 p. pamphlet, <https://doi.org/10.3133/sim3381>.

# Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project

## Funding Source: RESTORE Act Direct Component (Bucket 1)

- This project replaces the discontinued Calcasieu Ship Channel Salinity Control Measures Project
- Full \$260.97M Bucket 1 allocation for Louisiana dedicated to this project
  - Engineering & Design
  - Permitting
  - Construction
  - Operations & Maintenance of Drainage Structures
  - Monitoring and Adaptive Management



# Project Features

## A. Lake Rim Drainage

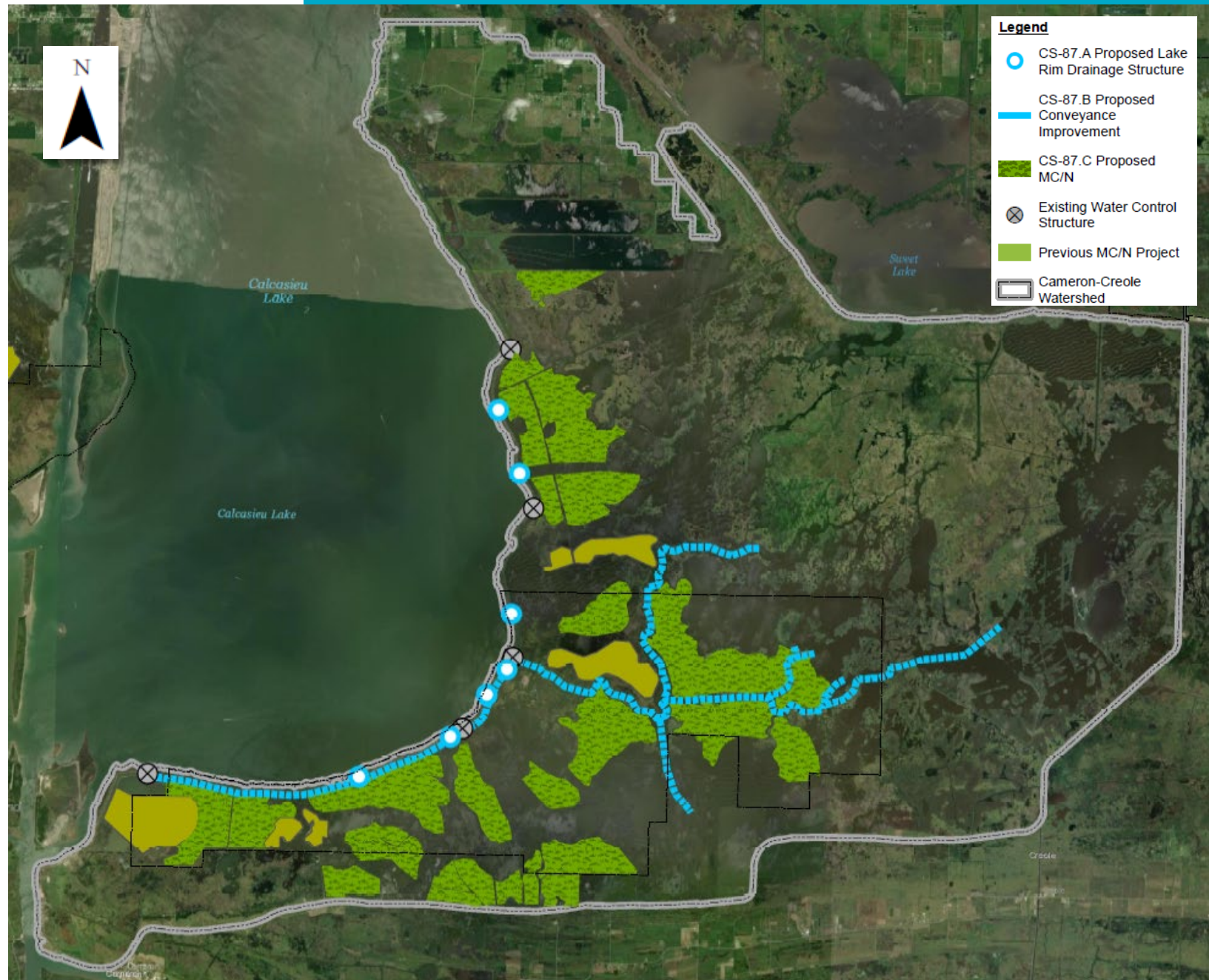
- Seven (7) proposed gravity drainage structures with backflow prevention

## B. Conveyance

- Up to 18 miles of channel improvements
- Improve drainage from back of the marsh to the Lake Rim
- Focused on dredging of historic bayous

## C. Marsh Creation

- Over 1,500 of 7,000 proposed acres to be built through CS-87
- Using dredged material from channel improvements



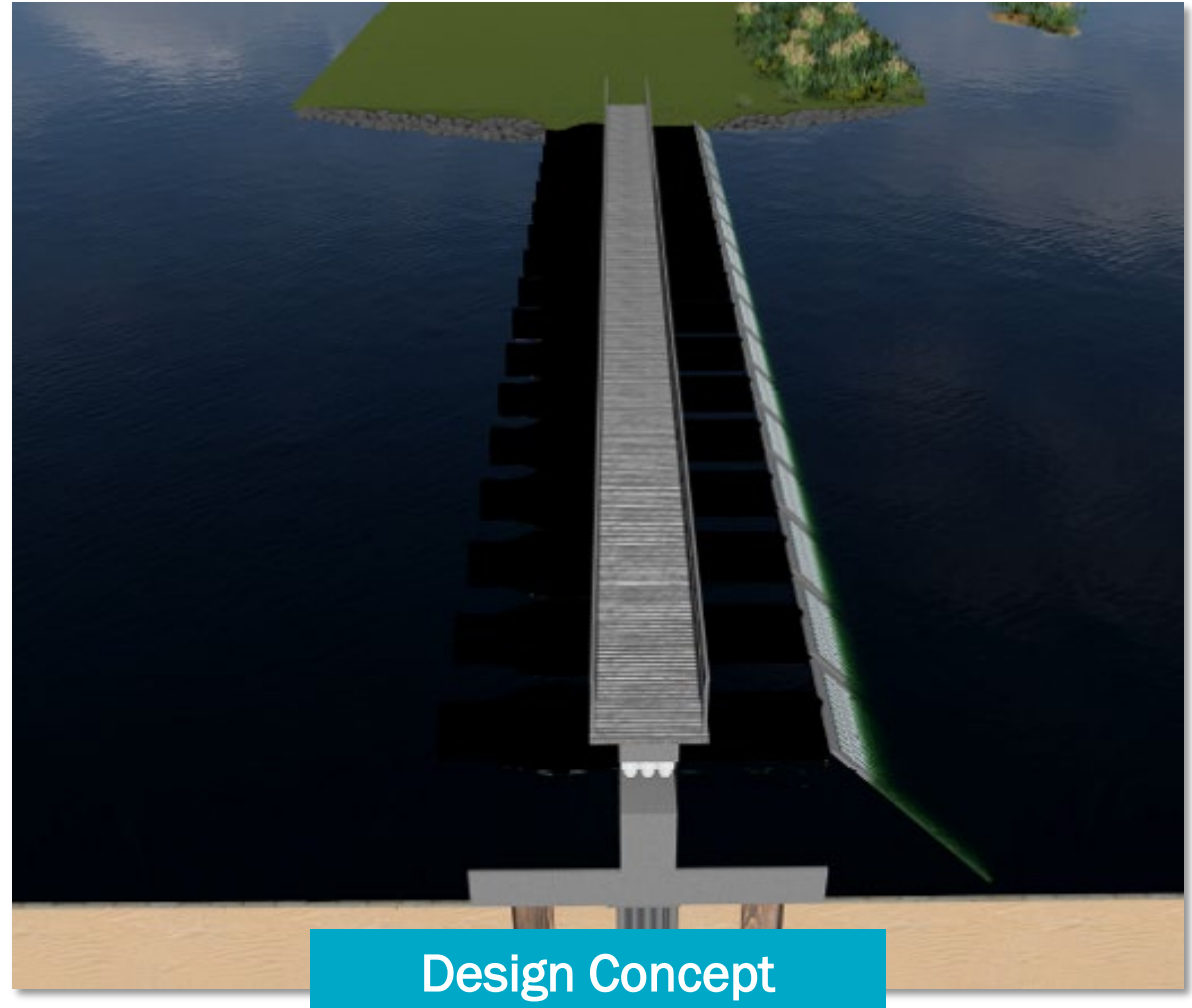


# Program Features

# Lake-Rim Drainage Structures

## JPA Received & 100% Design Complete

- Seven (7) Multiple barrel structures with inline check valves for backflow prevention
- The total structure capacities (with additional capacity for redundancy/ resiliency) includes 159 – 60” diameter culverts
- 100% Design is complete & bids advertised in the coming weeks



# Lake-Rim Drainage Structures

## Design Concept



Lake Side



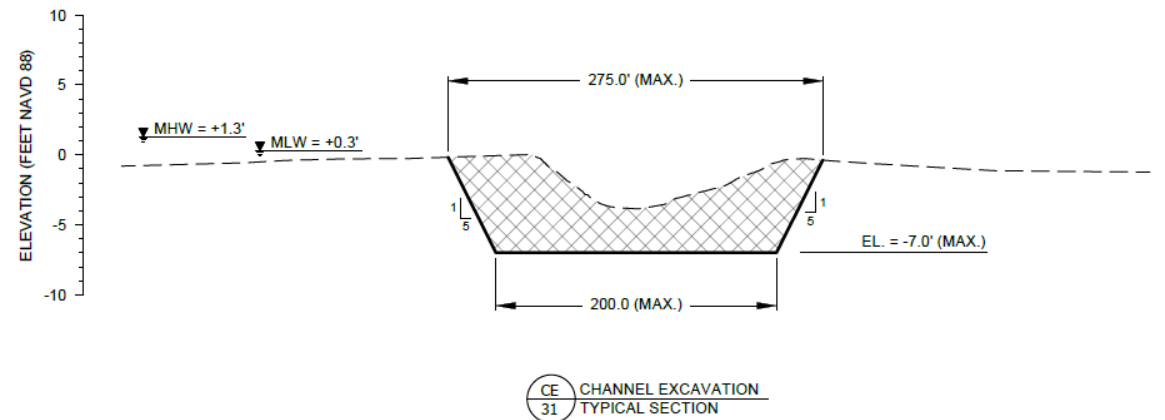
Marsh Side

# Conveyance Improvements

## Data Collection & Detailed Design

Excavation of over 18 miles of channels within the CCW to increase conveyance capacity to the lake rim drainage structures and beneficial re-use of material for large-scale marsh creation and nourishment.

- Permitting Complete
  - Includes borrow canal, Grand Bayou, North & South prong dredging
- Data Collection
  - Phase 1 & 2 data collection complete
- Engineering & Design Ongoing
  - Refining placement areas

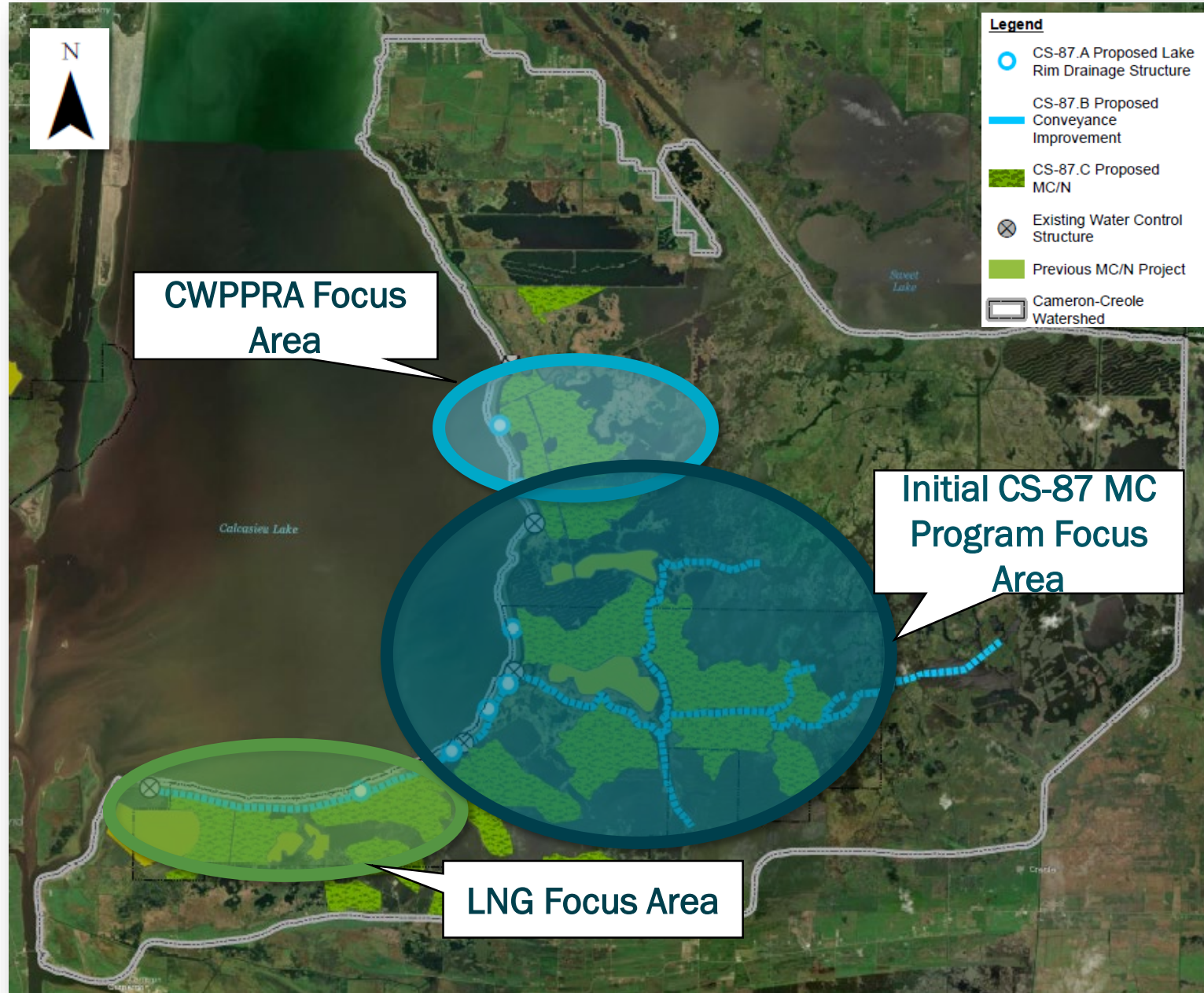


# Marsh Creation & Nourishment

## Fill Placement Area Groupings

Large-scale marsh creation and nourishment (over 1,500 acres) throughout the CCW.

- CWPPRA
- CS-0087 Program
- Available to LNGs



# Marsh Creation & Nourishment

## CS-87 Initial Placement

- 5 planned marsh creation cells for the material excavated from 18 miles of conveyance improvements



# Multiple Project Tracks for Efficiency

Milestone	Lake-Rim Drainage	MC/N with Conveyance Channel Borrow
Design Optimization	Mid 2022	Mid 2022
15% Design	Late 2023	Late 2023
JPA Submittal	Early 2024	Early 2024
30% Design	Mid 2024	★ Fall 2025
90% Design	Early 2025	Early 2026
Advertise for Bids	★ September 2025	Mid 2026

★ Current Project Phase





# Next Steps

# Next Steps

## Lake-Rim Drainage

- Expected Advertisement late Sept/early October 2025

## Conveyance Improvements & MC/N

- Phase 2 Data Collection Complete
- CPRA conducting detailed design
- 30% design for Fall 2025