

Central Wetlands Hydrologic Restoration Project PO-0204



Inspiration



Figure 13: Four sub-areas in the study region. There are three areas within the Central Wetlands Unit and one area outside which is the reference area.



Recommendations for Restoration: Central Wetlands Unit, Louisiana

Based on investigations and data collected from 2012-2014

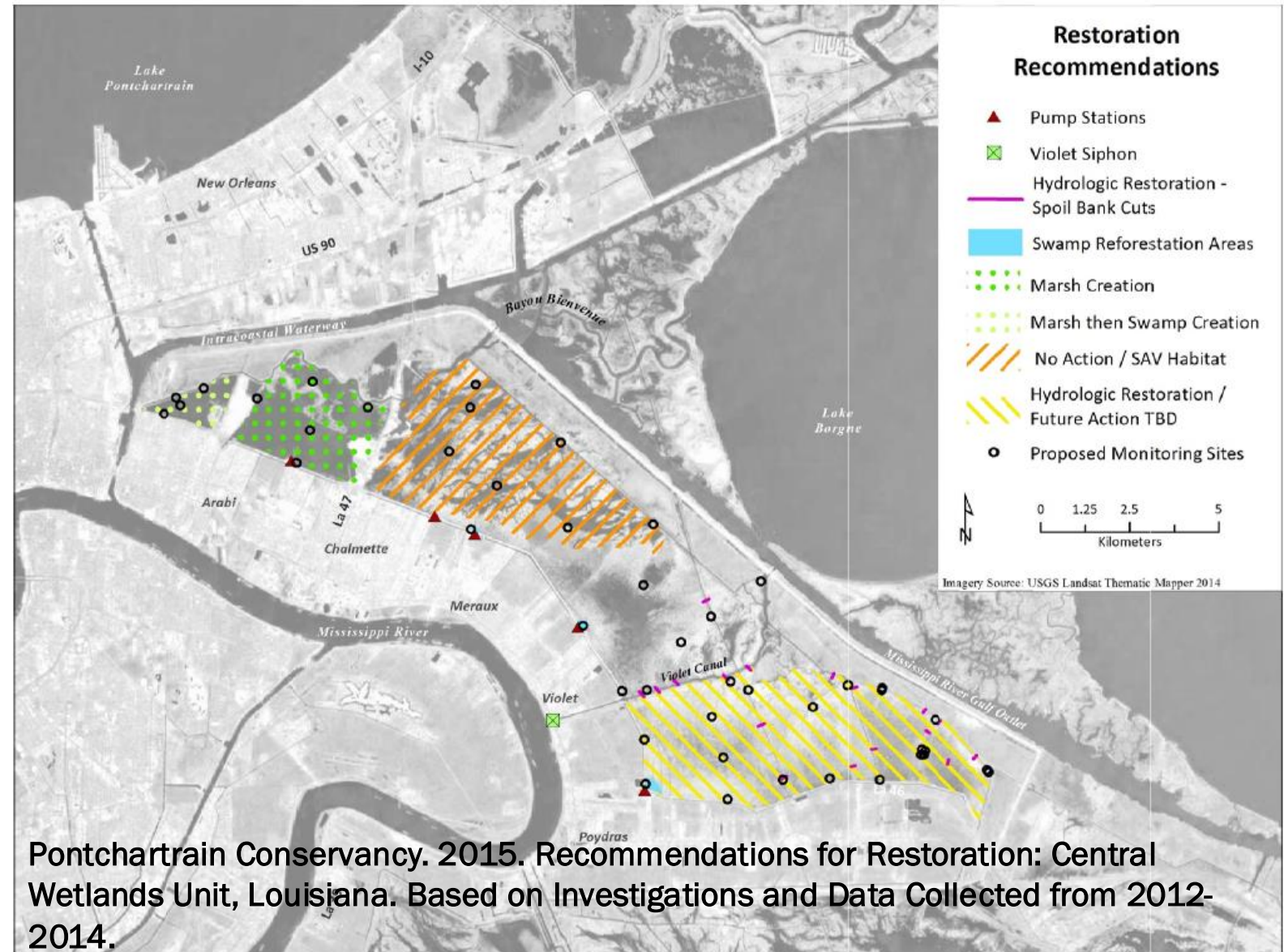
Lake Pontchartrain Basin Foundation
July 2015

Eva Hillmann
Theryn Henkel
John Lopez
David Baker



Study Recommendations

- Marsh creation west of Paris R.
- Spoil bank gapping along Violet Canal and other canals in southern part of CW.
- Swamp restoration where feasible (low salinities)
- Monitoring



Project Goals

1. Gapping spoil banks to alleviate impoundment and increase freshwater exchange and sediment input from the Violet siphon discharge;
2. Creation of a small marsh platform to increase elevation and allow planting of native marsh or swamp vegetation;
3. Identification of areas for vegetative planting effort conducted by volunteers engaged through local non-governmental organizations.



15,898
Acres of Wetland
Restored



8
Acres of Marsh/Ridge



\$1.1 M
E&D Through America
the Beautiful Grant

Funding

America the Beautiful Challenge grant (NFWF)

- \$947,000 in grant money
- \$142,000 state match
- Total: **\$1.1 million for Engineering and Design**



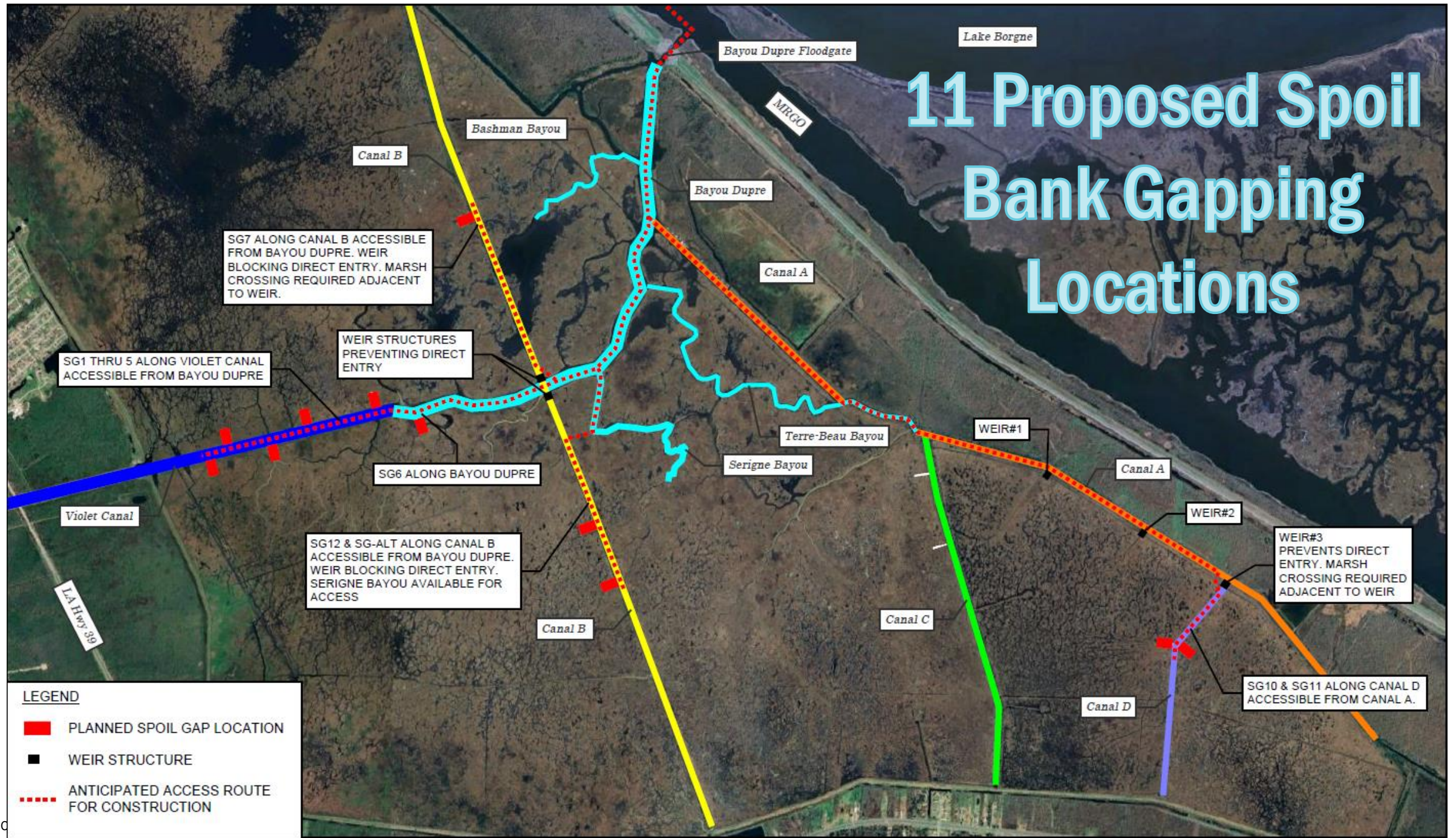
Timeline

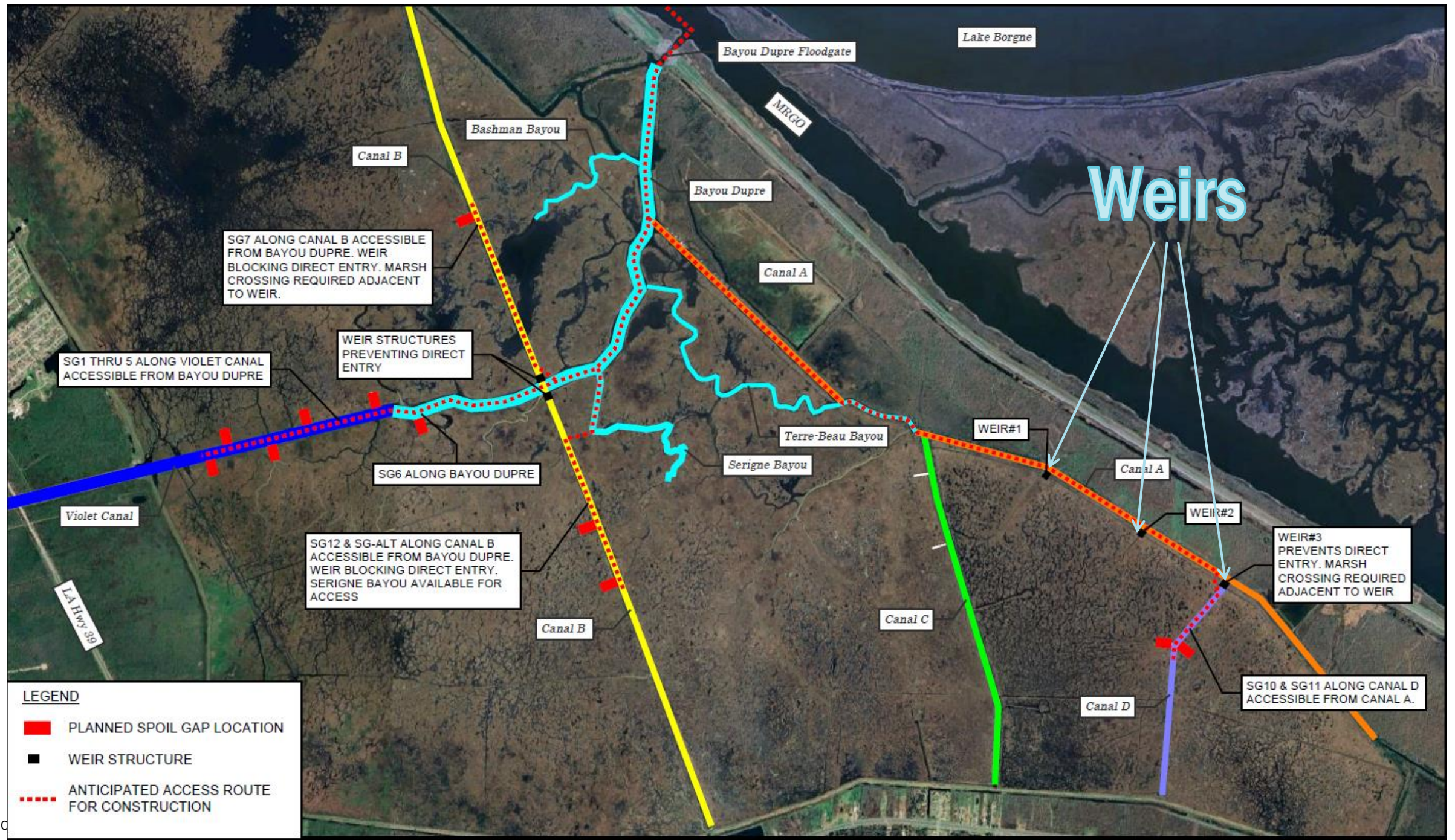
- Initial public meetings: Dec 2023 & April 2024
- Initial data collection: Aug 2024
- Alternatives Analysis: Nov 2024
- Community Charrettes: Oct & Nov 2024
- Additional data collection: June 2025
- Final Design: Fall 2025



Community engagement is key!

11 Proposed Spoil Bank Gapping Locations





Weirs

SG7 ALONG CANAL B ACCESSIBLE FROM BAYOU DUPRE. WEIR BLOCKING DIRECT ENTRY. MARSH CROSSING REQUIRED ADJACENT TO WEIR.

SG1 THRU 5 ALONG VIOLET CANAL ACCESSIBLE FROM BAYOU DUPRE

WEIR STRUCTURES PREVENTING DIRECT ENTRY

SG6 ALONG BAYOU DUPRE

SG12 & SG-ALT ALONG CANAL B ACCESSIBLE FROM BAYOU DUPRE. WEIR BLOCKING DIRECT ENTRY. SERIGNE BAYOU AVAILABLE FOR ACCESS

WEIR#1

WEIR#2

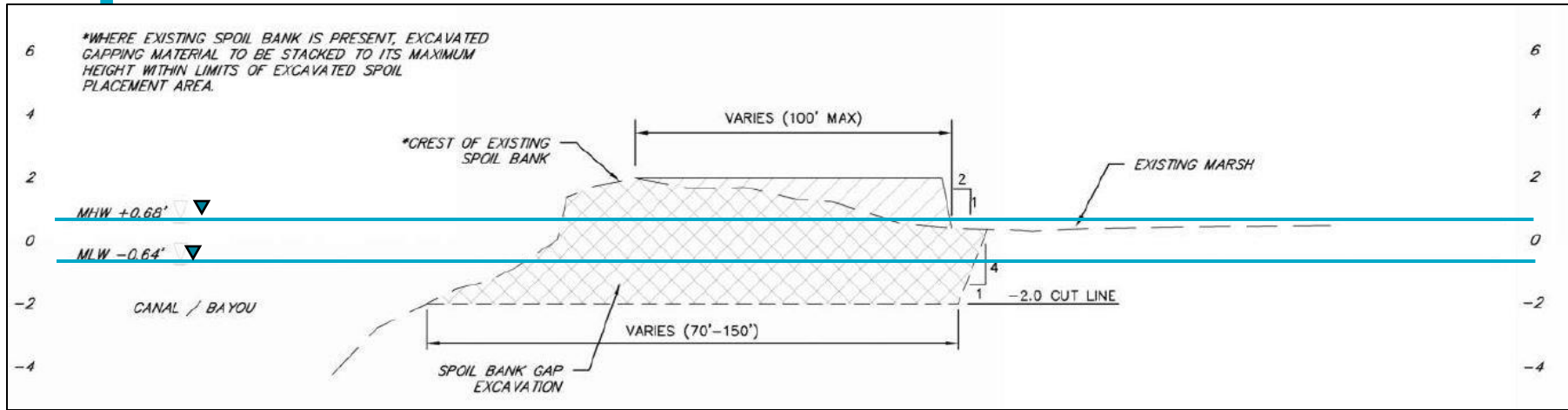
WEIR#3 PREVENTS DIRECT ENTRY. MARSH CROSSING REQUIRED ADJACENT TO WEIR

SG10 & SG11 ALONG CANAL D ACCESSIBLE FROM CANAL A.

LEGEND

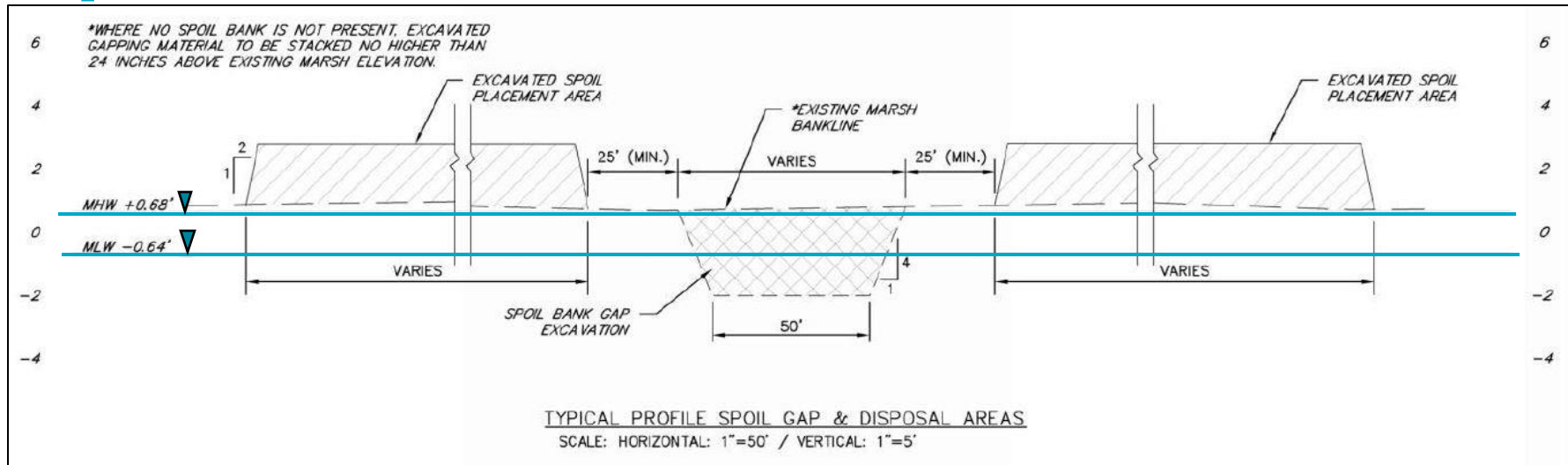
- PLANNED SPOIL GAP LOCATION
- WEIR STRUCTURE
- ⋯ ANTICIPATED ACCESS ROUTE FOR CONSTRUCTION

Spoil Bank side view



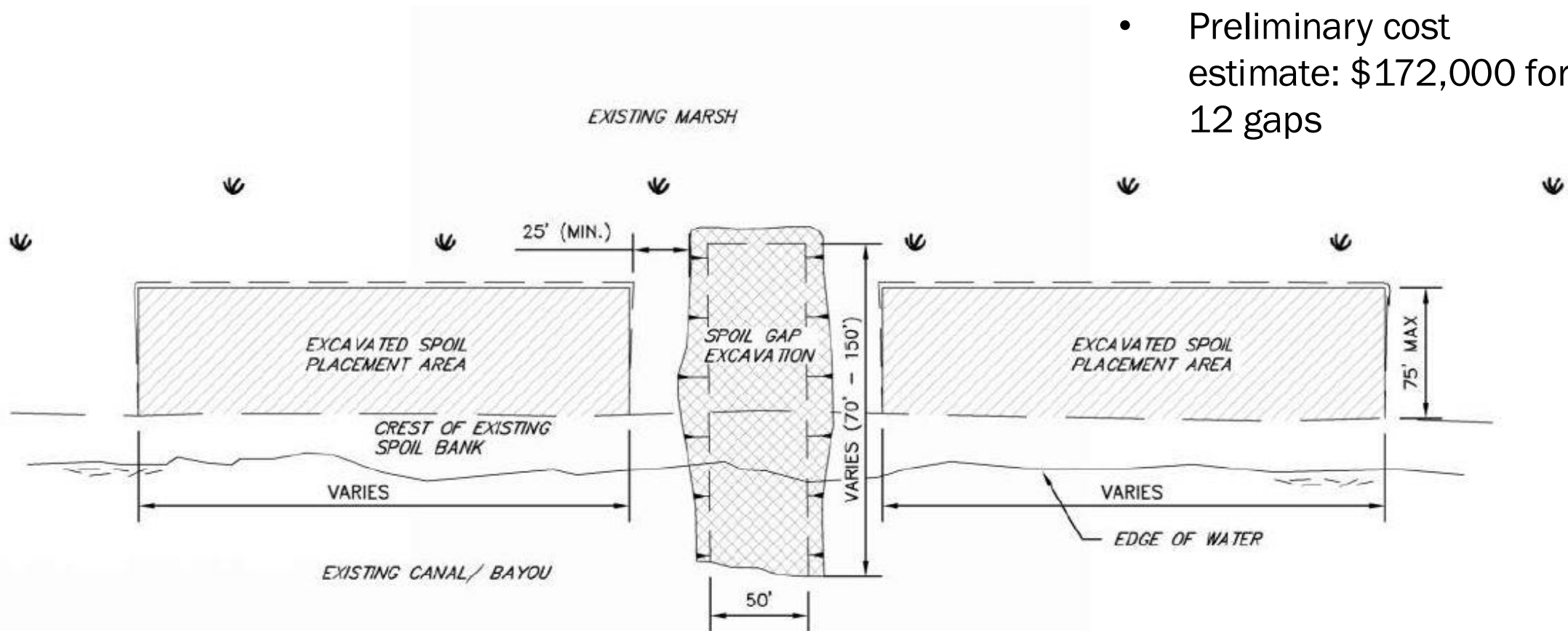
- Tidal exchange during mean low periods
- Gaps excavated to approximately -2 (NAVD88)
- Width = 50'

Spoil Bank front view



Spoil Bank Gap Dimensions

- Excavated material placed on existing spoil bank to minimize marsh impacts
- Preliminary cost estimate: \$172,000 for 12 gaps



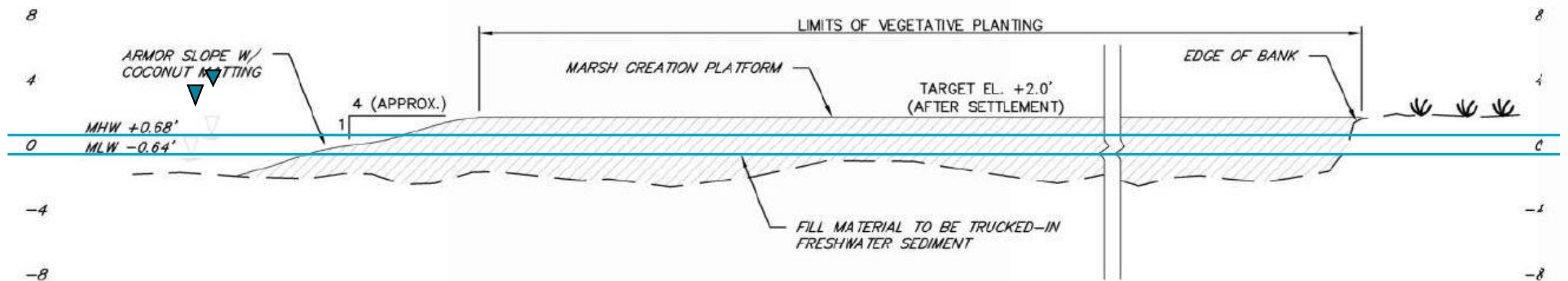
Proposed Marsh Creation Areas

- Only one (1) Marsh Creation Area will be constructed: approximately 8 acres
- Sediment to be trucked in
- Potential to use locally produced recycled glass sand



Example Marsh Creation Platform

- Preliminary target elevation is +2 ft. (NAVD 88)
- Geotech to inform final design
- Marsh to be planted by volunteers
- Preliminary cost estimate: \$2 - 2.5 M





Violet Siphon

- Operations turned over to St. Bernard Parish in 2021
- Recently operated for the first time since then
- Image from 4/16/2025

Partners and Support

- Lower 9th Ward Center for Sustainable Engagement and Development (CSED)
- Delta Coast Consultants
- The Pontchartrain Conservancy
- Common Ground Relief
- Coalition to Restore Coastal Louisiana
- The Arlene and Joseph Meraux Charitable Foundation
- St. Bernard Parish Government
- City of New Orleans Office of Resilience and Sustainability

