

WEDA GULF COAST CHAPTER - ANNUAL CONFERENCE

FY17 PLANNING STUDIES FUTURE DREDGING REQUIREMENTS

New Orleans District

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**US Army Corps
of Engineers.**



Study/Project Overview

- Projects with Construction Approval:
 - CWPPRA Program Cole's Bayou Marsh Restoration Project (TV-63)
- Completed Studies:
 - Southwest Coastal, Louisiana Feasibility Study
 - West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Study
- Active Studies:
 - Mississippi River Ship Channel - Gulf to Baton Rouge, LA
 - Inner Harbor Navigation Canal (IHNC) Lock Replacement



Projects with Construction Approval:

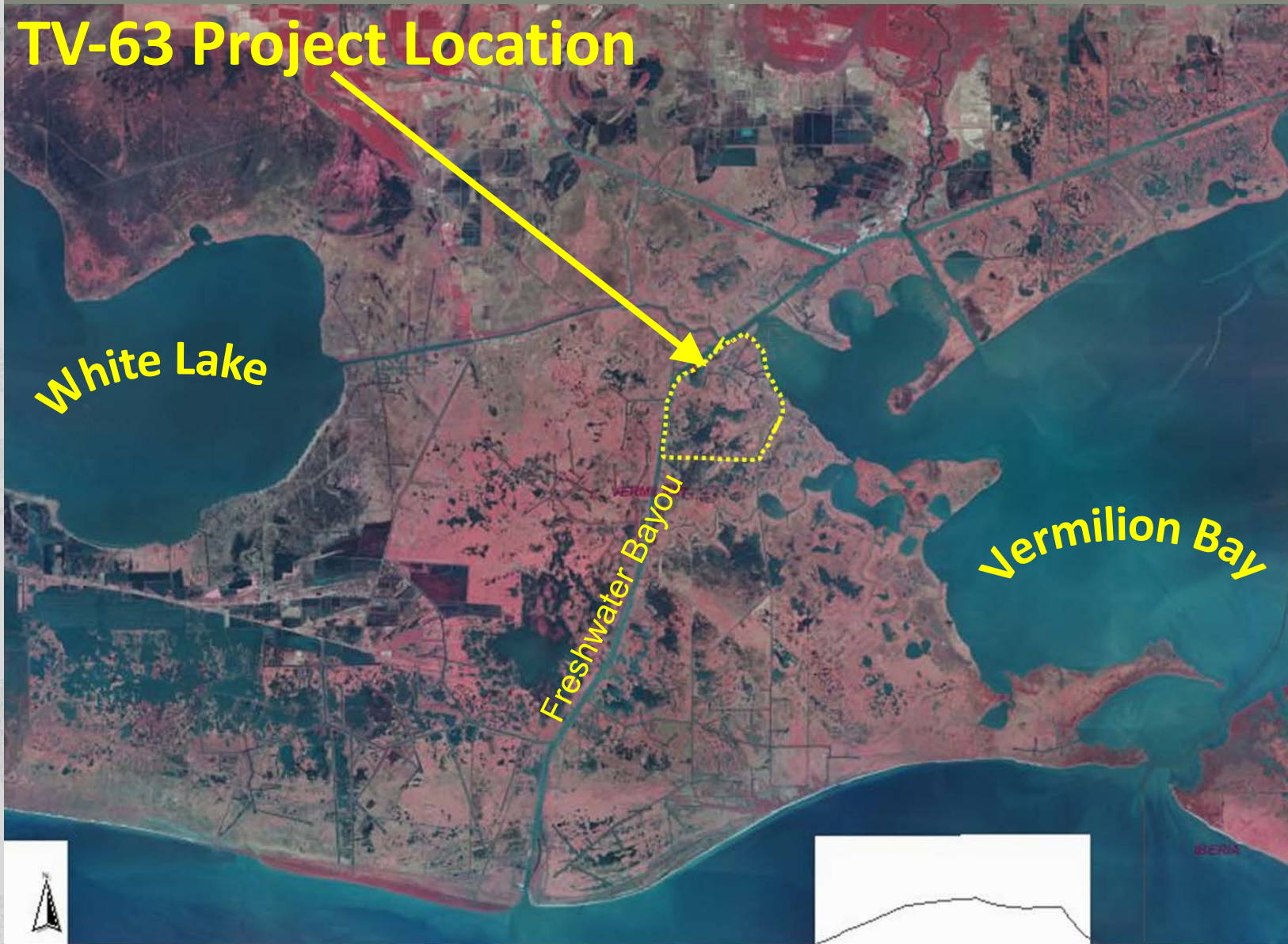
Cole's Bayou Marsh Restoration Project (TV-63)

Approved by
CWPPRA Task
Force (Dec
2016)



Projects with Construction Approval:

TV-63 Project Location



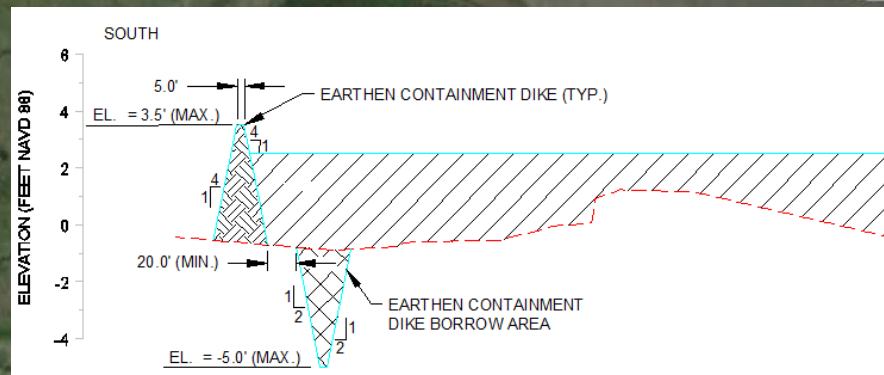
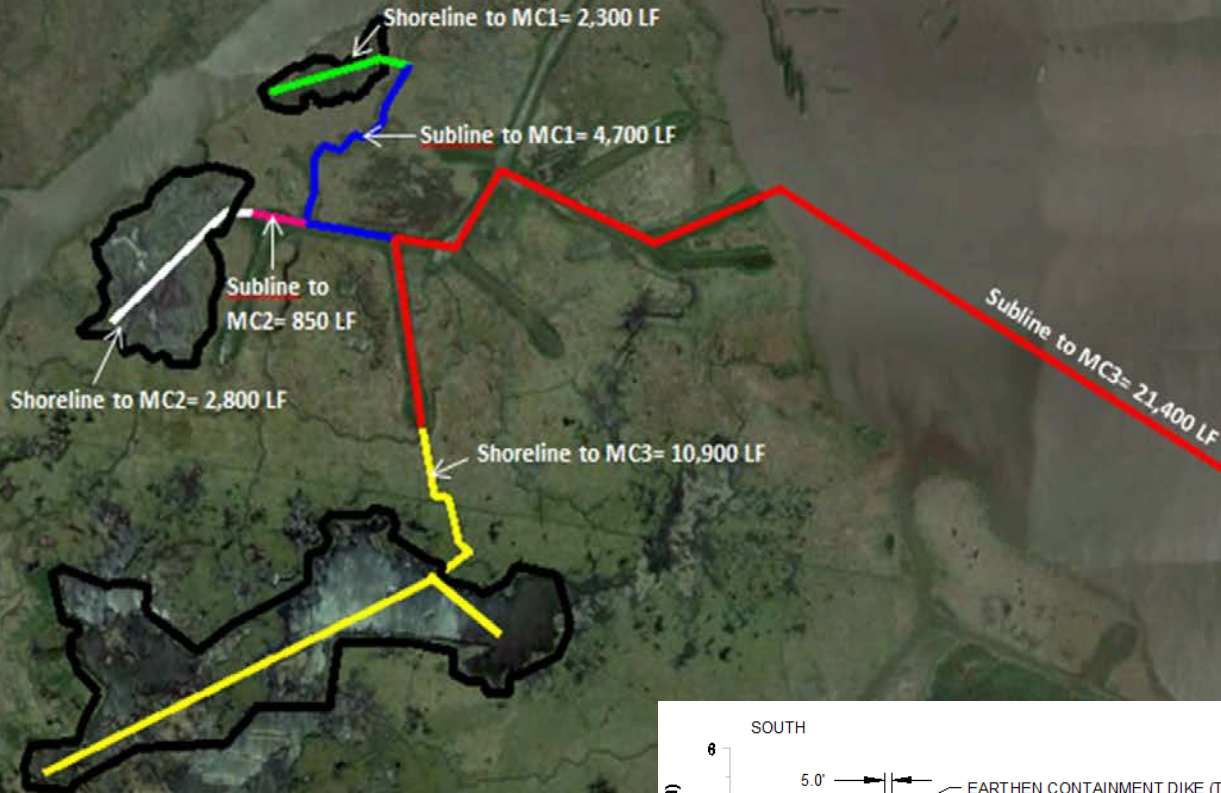
Projects with Construction Approval: TV-63

- Project funded originally through CWPPRA on PPL 21.
- Project Goals: Create and nourish approximately 418 acres of brackish marsh, and increase freshwater and sediment inflow into interior wetlands by improving the project area hydrology.
- Benefits and Costs
 - The project benefits 3,840 acres of marsh and open water habitats.
 - 340 net acres at the end of the 20-year project life.
 - Fully funded cost = \$25,635,640.
- Expected to begin construction spring 2017



Projects with Construction Approval:

TV-63 General Design



Completed Studies:

- Southwest Coastal, Louisiana Feasibility Study
 - Chief's Report Signed in 29-Jul-2016
 - Awaiting Project Authorization under Water Resources Development Act (WRDA), included in House Bill to Senate
 - Recommended Plan includes National Economic Development (NED) benefits and National Ecosystem Restoration (NER) Features



Completed Studies: Southwest Coastal, Louisiana Feasibility Study

- NER Recommended Plan:
 - **Comprehensive Small Integrated Restoration Plan (CM-4, Federal Plan) includes:**
 - ▶ Features in the Calcasieu/Sabine and Mermentau/Tech-Vermilion Basins
 - ▶ Forty-nine features representing 3 ecosystem restoration measure types:
 - ▶ 9 marsh restoration features
 - ▶ 35 Chenier reforestation locations
 - ▶ 5 shoreline protection features (48 miles)
 - ▶ A long-term study of the Calcasieu Ship Channel Salinity Barrier
 - ▶ Additional study of the Cameron-Creole Spillway salinity control structure
 - ▶ Two of 49 features located partially on USFWS property
 - ▶ These features are identified as in the national interest but USACE is not requesting implementation authority (Corps Implemented Plan)



Completed Studies: Southwest Coastal, Louisiana Feasibility Study

NER Recommended Plan Implementation

Tier I Projects:

- Restore all Chenier Features (Calcasieu and Mermentau)
- Beneficial Use of Dredged Material from Calcasieu Ship Channel (3a1)
- Fortify Spoil Banks of the GIWW and Freshwater Bayou (16b)
- Gulf Shoreline Restoration: Calcasieu River to Freshwater Bayou (6b1)
- Marsh Restoration at Pecan Island (127c3)
- Holly Beach Shoreline Stabilization – Breakwaters (5a)
- Marsh Restoration at Mud Lake (124d) - **USFWS**

Tier II Projects:

- Marsh Restoration at Mud Lake (124c)
- Gulf Shoreline Restoration: Calcasieu River to Freshwater Bayou (6b2)
- Rainey Marsh Restoration Southwest Portion (Christian Marsh) (306a1)

Tier III Projects:

- Marsh Restoration Using Dredged Material South of Highway 82 (47a1)
- Marsh Restoration Using Dredged Material South of Highway 82 (47a2)
- Marsh Restoration Using Dredged Material South of Highway 82 (47c1)
- Gulf Shoreline Restoration: Calcasieu River to Freshwater Bayou (6b3)
- Beneficial Use of Dredged Material from Calcasieu Ship Channel (3c1) - **USFWS**



Completed Studies: Southwest Coastal, Louisiana Feasibility Study

- NER Recommended Plan Implementation

- **Tiers Details** (Corps Plan – excludes USFWS features)

	Cost x \$1,000	AAHUs	Acres
▪ Tier I	\$846,554	1,930	6,056
▪ Tier II	\$558,255	1,117	3,554
▪ Tier III	\$771,950	1,318	4,336

- **Implementation Constraints**

- NER RP features will interface with and compliment 10 existing mitigation projects.
- 20-year permit obligation ranges between 2016 and 2040.
- Earliest construction of NER RP features interfacing with mitigation project area will correspond to fulfillment of the mitigation permit obligation.



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Completed Studies:

- West Shore Lake Pontchartrain, Louisiana Feasibility Study
 - Chief's Report Signed in 12-Jun-2015
 - Awaiting Project Authorization under Water Resources Development Act (WRDA), included in House Bill to Senate
 - Recommended Plan includes National Economic Development (NED) benefits and Environmental Mitigation Features



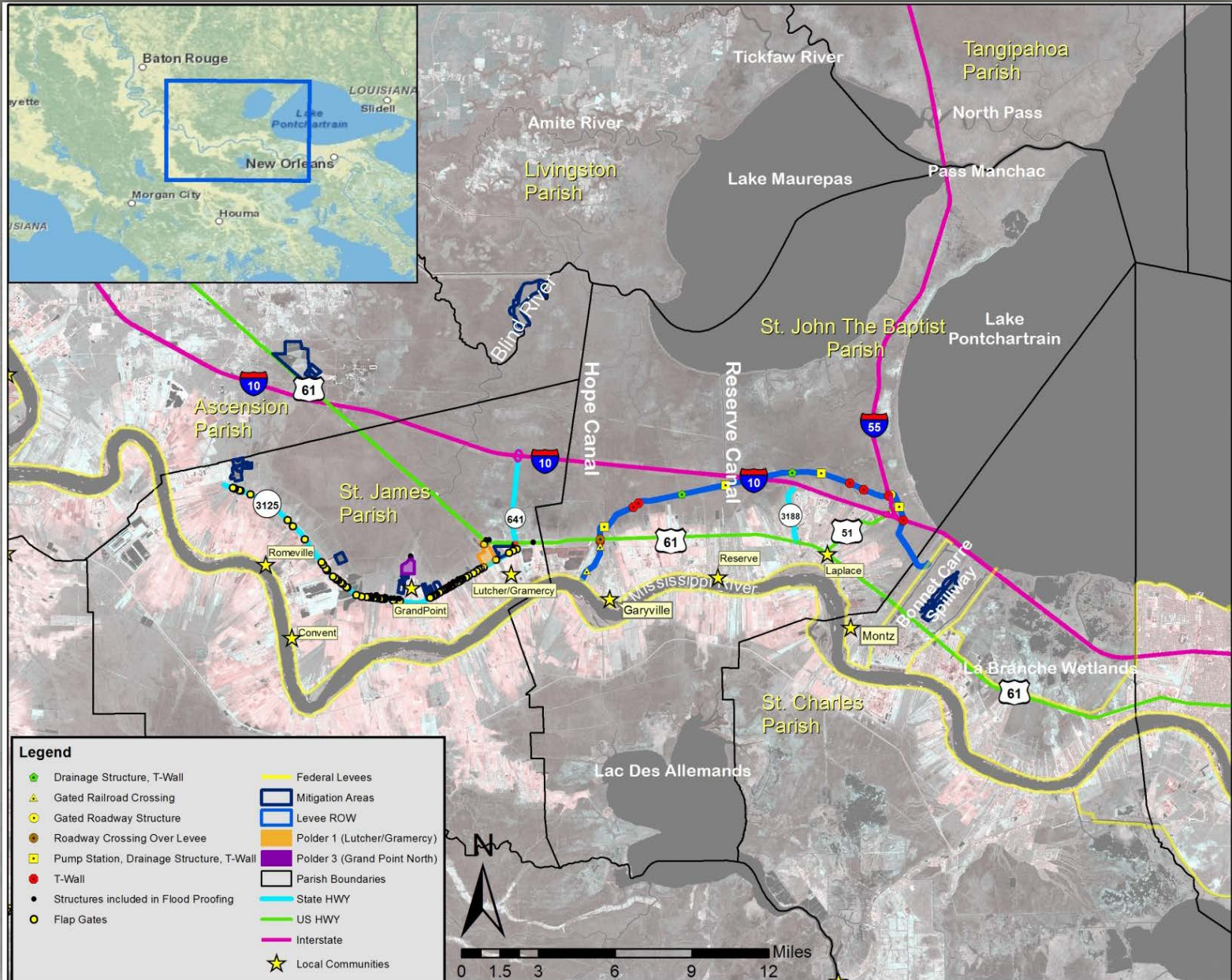
Completed Studies: West Shore Lake Pontchartrain, Louisiana Feasibility Study

- NED Recommended Plan:

- Recommend comprehensive risk reduction system in SE LA:
 - Levee system in St. Charles and St. John Parishes
 - Localized risk reduction measures in St. James Parish in SE LA
- Compensatory mitigation sites required to offset direct and indirect impacts of the construction of all WSLP features.
 - Direct Impacts – 691 AHU
 - Indirect Impacts - 498 AHU
- Mitigation Acres will occur on 3,015 acres for the required 1,189 AHU offset
- Cost of WSLP Mitigation = \$111,000,000 (includes 20M for real estate)



Completed Studies: West Shore Lake Pontchartrain, Louisiana Feasibility Study



Active Studies:

Mississippi River Ship Channel - Gulf to Baton Rouge, LA Deep Draft Navigation

- Evaluate the depth that creates the greatest net benefits up to a depth of 50 ft, in order to proceed to implementation of deepening the MRSC from the current depths
- Alternative 1 (No action/Base Condition): 45 ft at Crossings) and 48 ft in Lower MS River)
- Alternative 2: Lower MS at 48 ft and Crossings at 48 ft
- Alternative 3: Lower MS 48 ft to 50 ft and Crossings 45 ft to 50 ft



Active Studies: Mississippi River Ship Channel - Gulf to Baton Rouge, LA Deep Draft Navigation



Active Studies:

Mississippi River Ship Channel - Gulf to Baton Rouge, LA Deep Draft Navigation

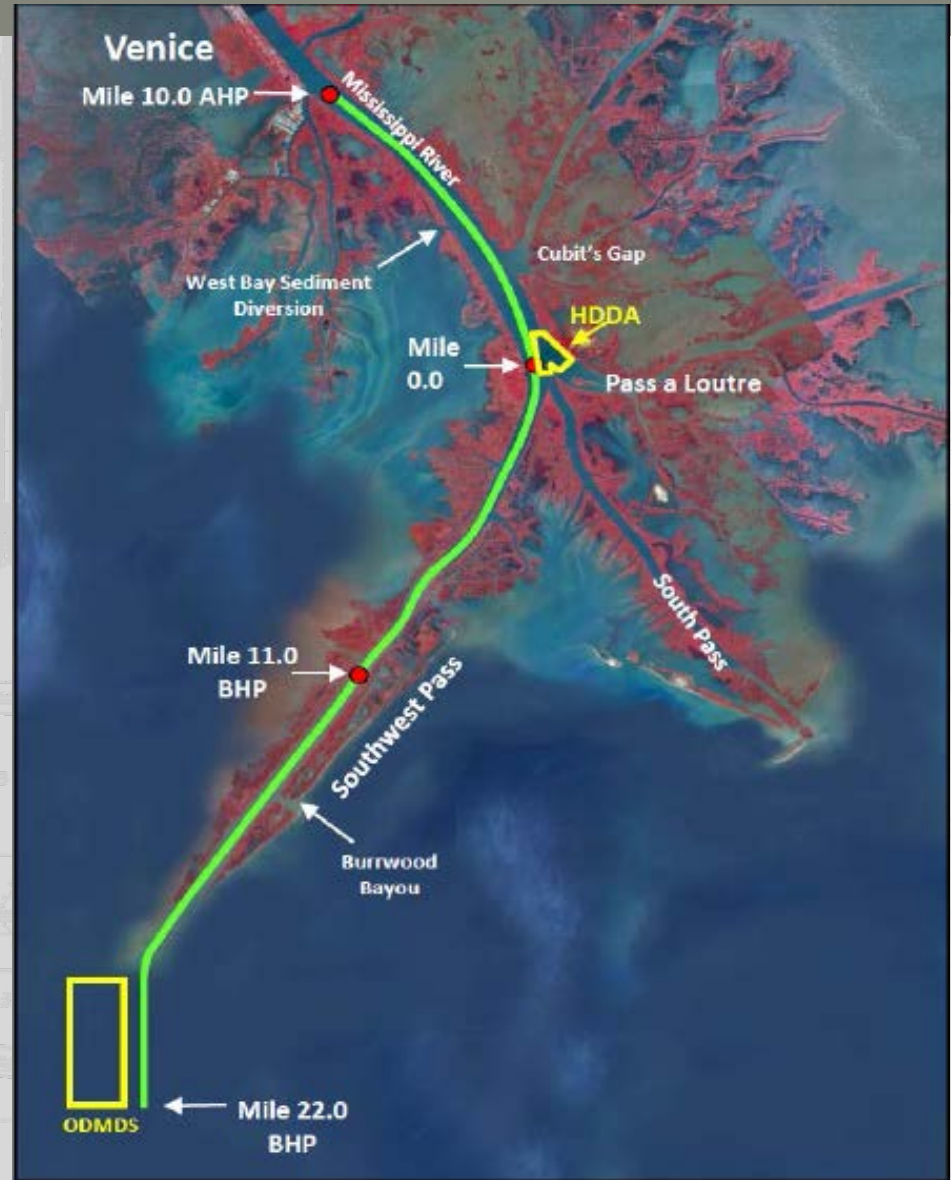
Cubits Gap to Head of Passes Reach
RM 7.0 or 6.0 AHP to RM 0.5 BHP

Southwest Pass

RM 0.5 BHP to RM 19.5 BHP

Bar Channel and Jetties

RM 19.5 BHP to RM 22 BHP



Active Studies:

Mississippi River Ship Channel - Gulf to Baton Rouge, LA Deep Draft Navigation

Engineering Assumptions: Construction, O&M and Disposal

	Construction Method	O&M Method	Disposal Method
Crossings	Dustpan Dredge	Dustpan Dredge	Material Placed Downstream in Channel
Southwest Pass	Cutter Head Dredge	Combination of Cutterhead and Hopper Dredges	Disposal Site
Bar Channel	Hopper Dredge	Hopper Dredge	Disposal Site

- Construction: 4-yr construction duration
- Operations and Maintenance: 3 dredge cycles per year



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Active Studies:

Mississippi River Ship Channel - Gulf to Baton Rouge, LA Deep Draft Navigation

Future Schedule:

Draft Report Released

25 NOV 2015

Agency Decision Milestone

08 MAR 2017

Division Engineer Transmittal

27 OCT 2017

Final Report Release

03 JAN 2018

Director's Report

30 MAR 2018

**Construction Depended on Future Construction
Appropriations from Congress**



Active Studies:

Inner Harbor Navigation Canal (IHNC) Lock Replacement

- IHNC provides a continuous route for east and west bound vessels to follow the Gulf Intracoastal Waterway (GIWW) and cross the Mississippi River. It is the only GIWW lock on the eastern side of the Mississippi River
- The GIWW is the nation's 3rd busiest inland waterway, with the Louisiana portion handling about 67% of its traffic
- Goal: Identify if there is a Federal interest to improve navigation efficiencies at the IHNC lock
- Objective: Reduce navigation transit times between the Mississippi River and waterways to the east of the river over the next 50 years



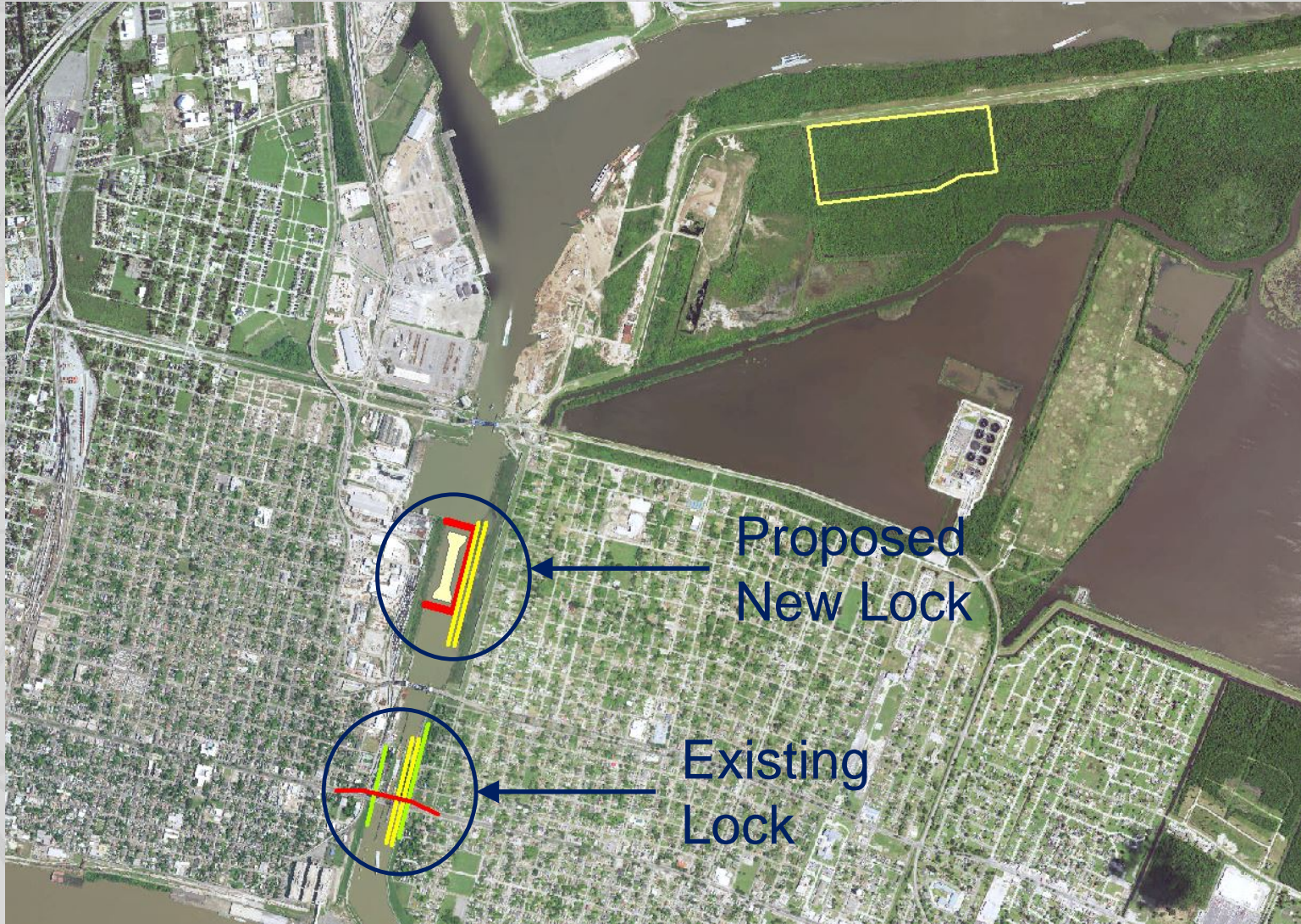
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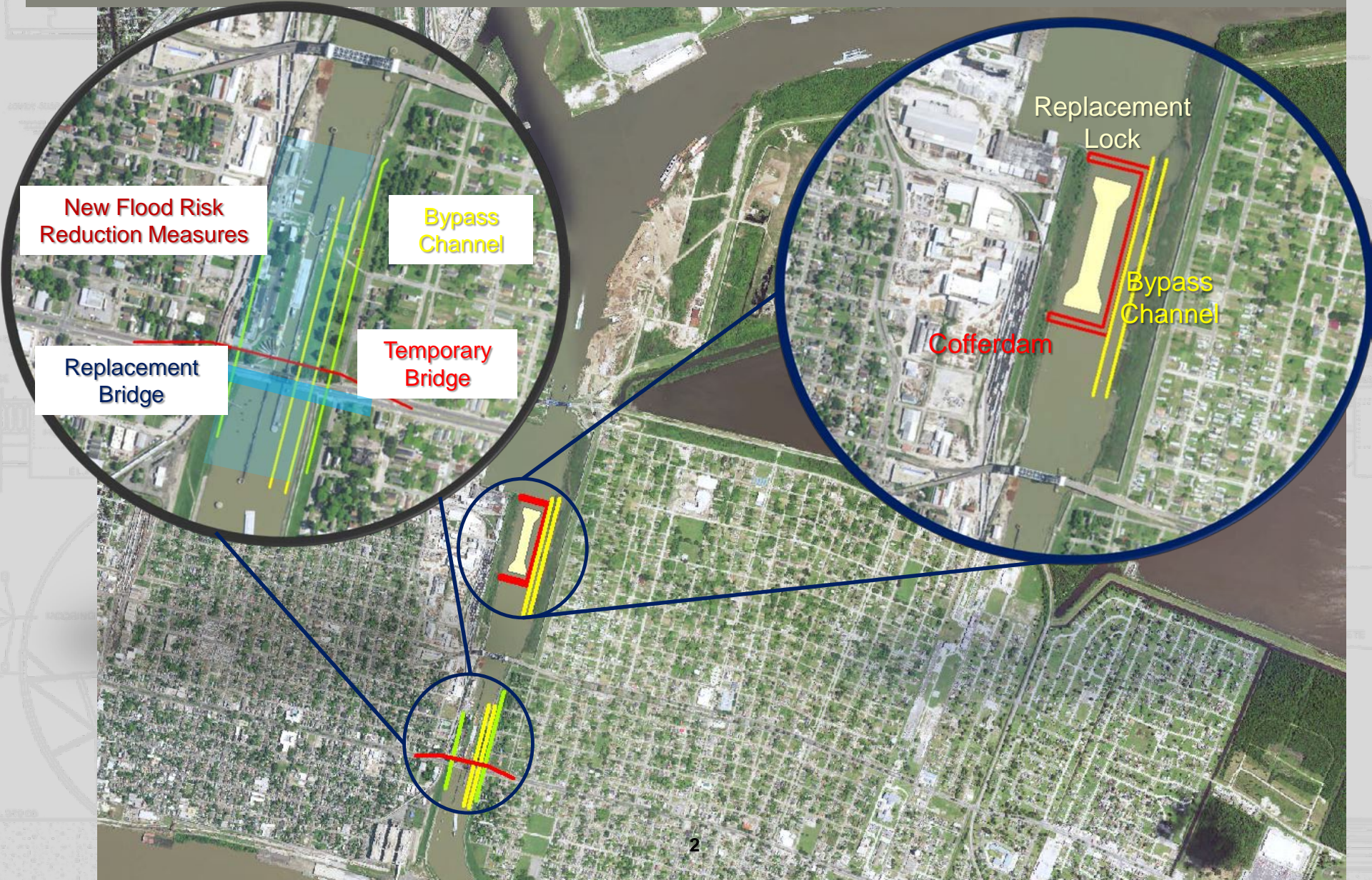
- Plan 1: No-action alternative - maintain existing lock
- Plan 2: 900' long x 110' wide x -22' MLLW
- Plan 3: 1,200' long x 110' wide x -22' MLLW
- Plan 4: 900' long x 75' long x -22' MLLW
- Plan 5: 1,200' long x 75' wide x -22' MLLW



Active Studies: Inner Harbor Navigation Canal (IHNC) Lock Replacement



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Active Studies: Inner Harbor Navigation Canal (IHNC) Lock Replacement

Milestone	Dates
Draft Report Submittal to EPA	30 December 2016
Concurrent Reviews: Public, Policy, ATR, & IEPR	6 January 2017 – 21 February 2017
Agency Decision Milestone	3 April 2017
Division Engineer's Transmittal Letter	5 January 2018
Civil Works Review Board	8 March 2018
State and Agency Review and Final EIS Review	23 March - 24 April 2018
Chief's Report	22 June 2018

