

2018 STATE OF THE COAST MISSISSIPPI RIVER SEDIMENT DIVERSION PROGRAM – THE STATE OF THE PROGRAM

BRAD BARTH



2018 MAY 30



MID-BASIN

SEDIMENT DIVERSION

PROGRAM

Vision: Building and sustaining land in the Barataria and Breton Basins by reconnecting the river.

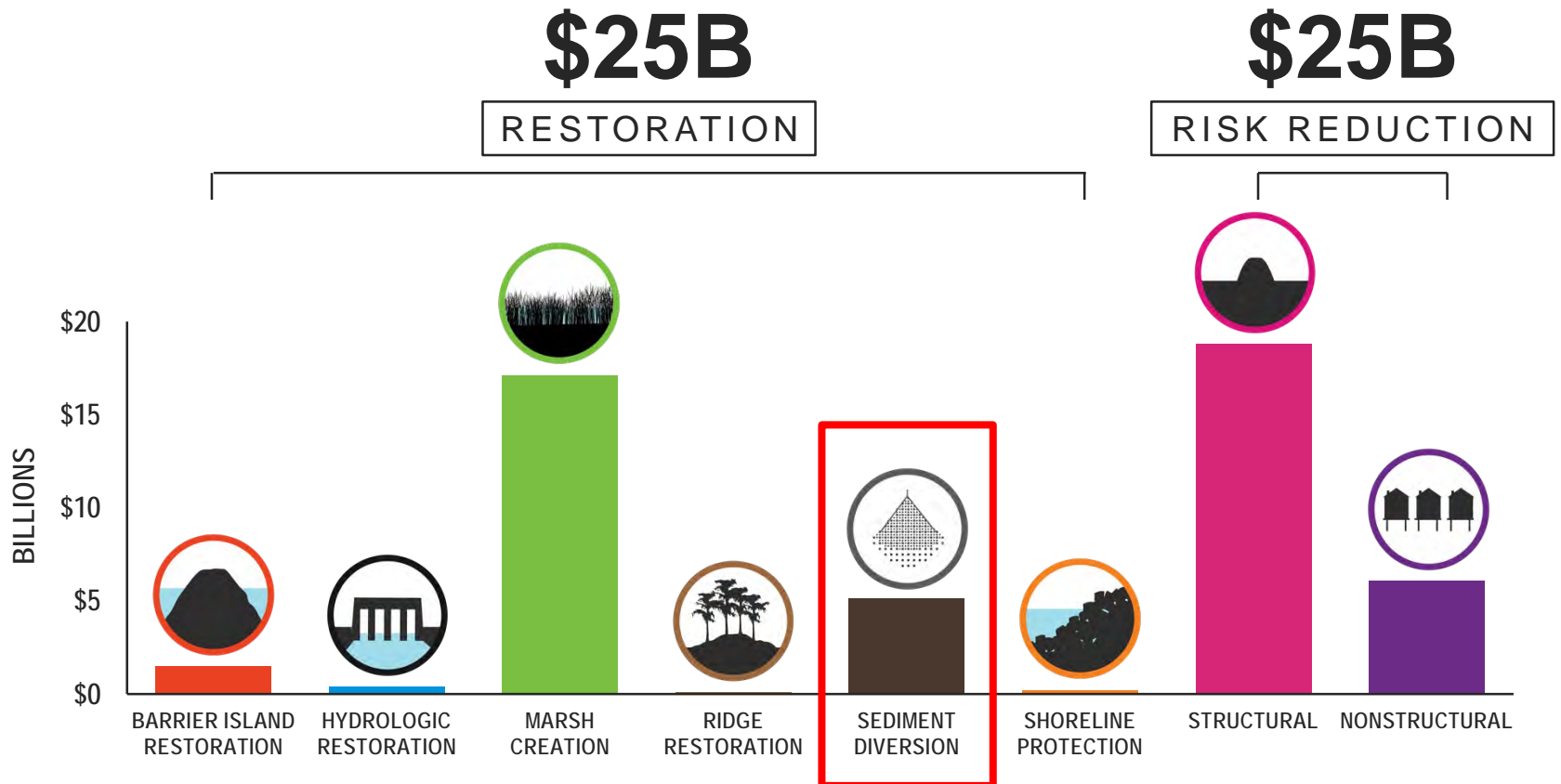
Mission: Improve Louisiana's Coastal sustainability through CMP's five objectives, flood protection, natural processes, coastal habitat, cultural heritage, and a working coast.

©LindseyJanies



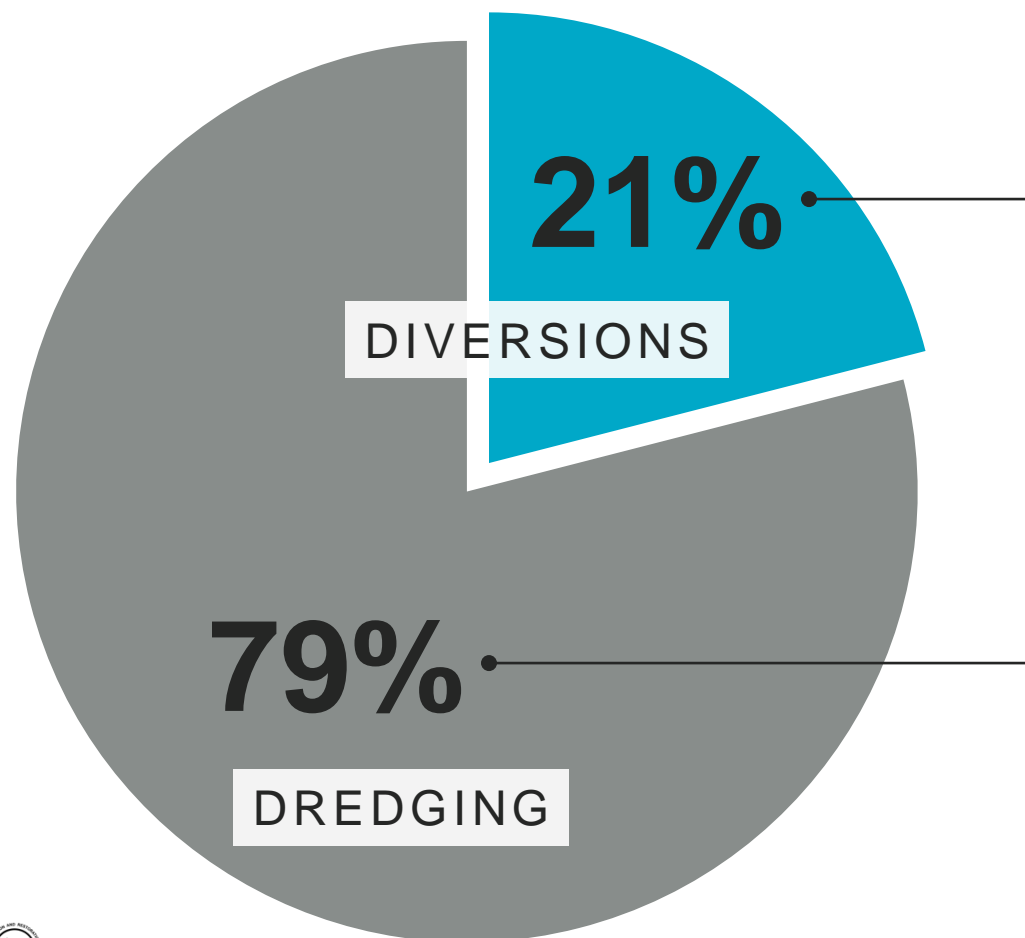
COASTAL MASTER PLAN

TOTAL FUNDING:
\$50B



FUNDING BY PROJECT TYPE

COASTAL MASTER PLAN



SEDIMENT
DELIVERY:
\$23.8B

The background of the slide is an aerial photograph of a coastal region, likely a river delta or estuary, with a teal color overlay. A thin white vertical line is positioned to the left of the text.

HISTORICAL PERSPECTIVE

MISSISSIPPI RIVER



WHY ARE WE IN THIS PREDICAMENT?

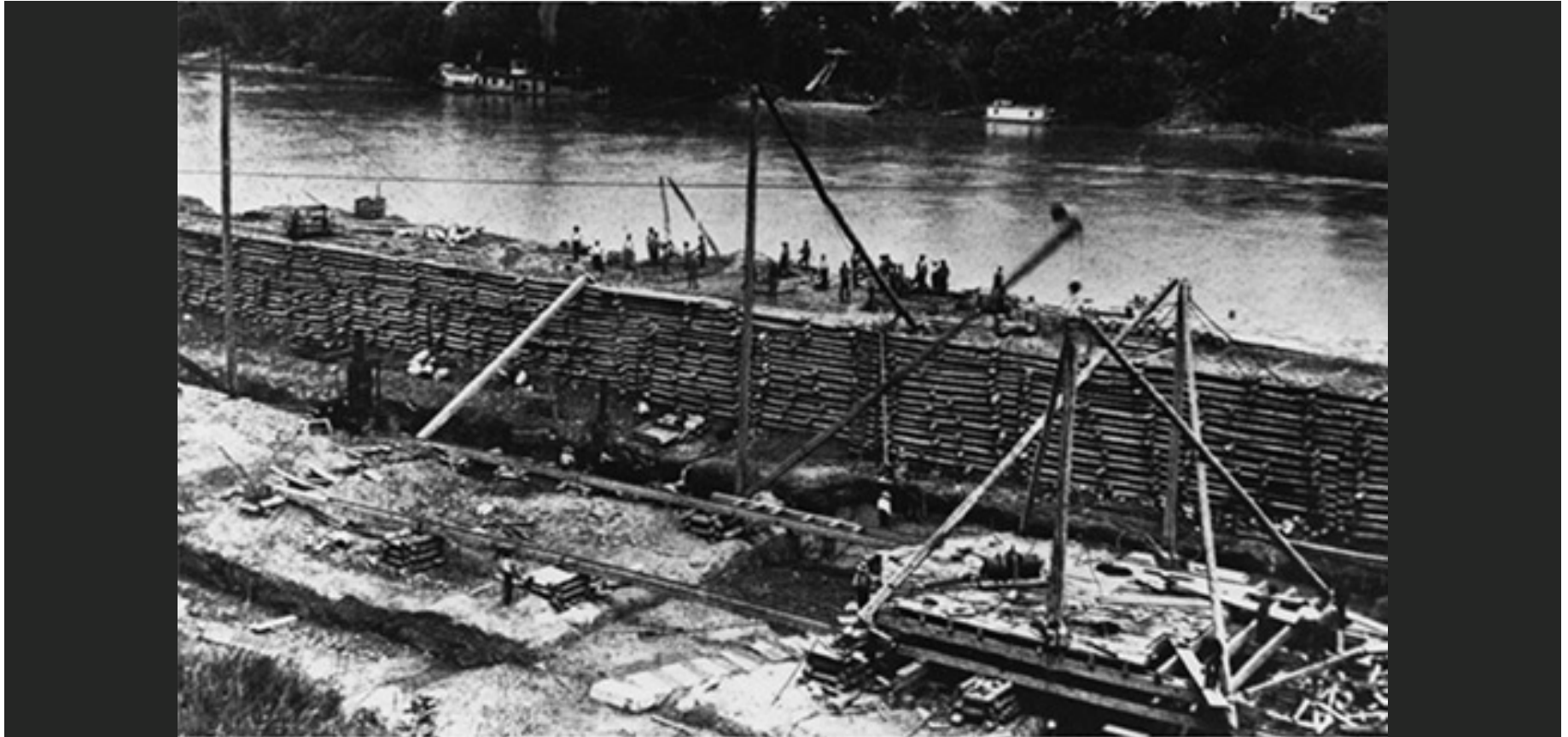
8



GREAT FLOOD OF 1927

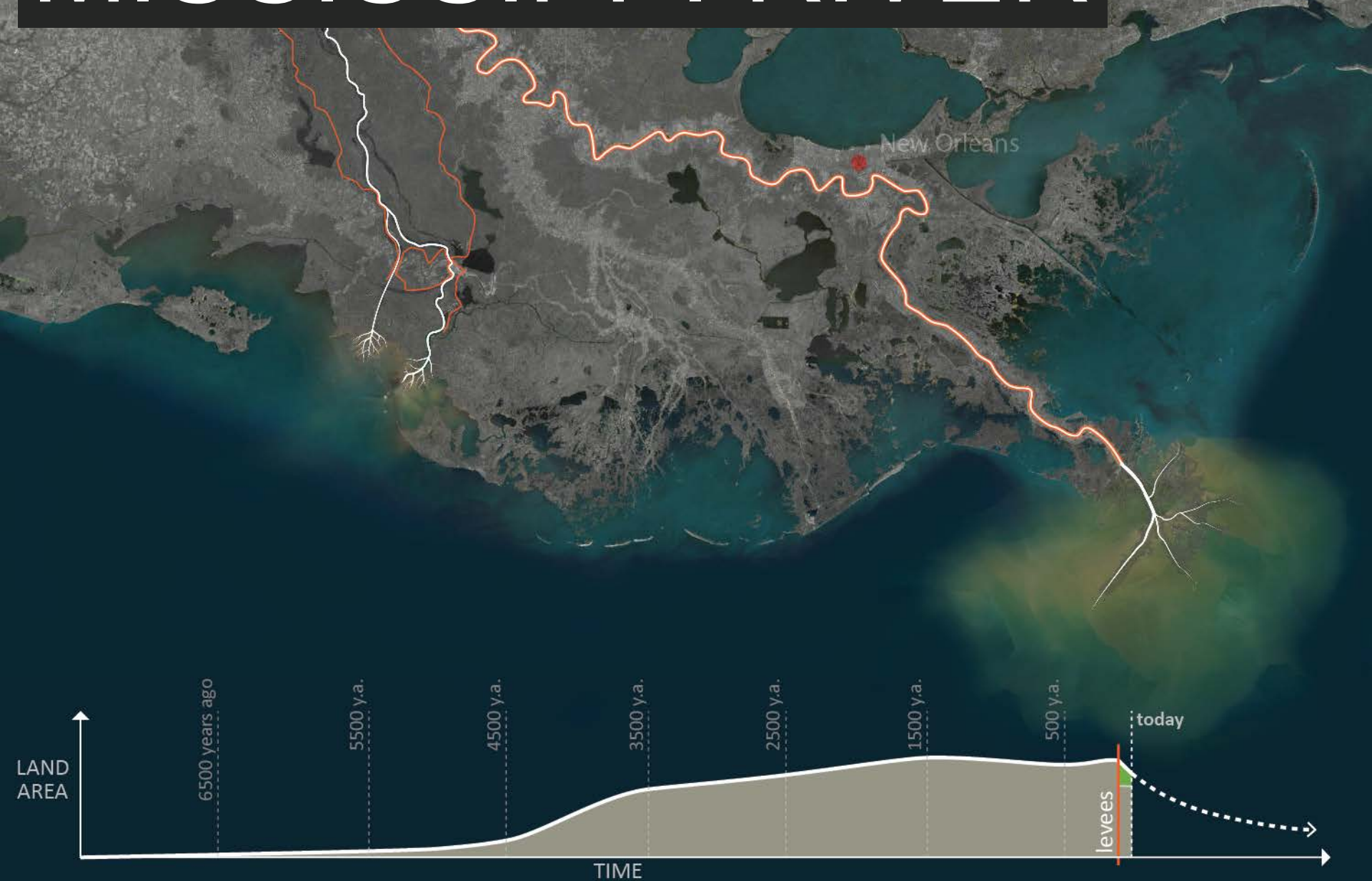
WHY ARE WE IN THIS PREDICAMENT?

9



FLOOD CONTROL ACT OF 1928

MISSISSIPPI RIVER



HISTORIC LAND LOSS

11

698
SQUARE
MILES
OF LAND
LOST

=



RECONNECTING THE RIVER



SEDIMENT
WASTED

SEDIMENT STARVED WETLANDS

SEDIMENT
WASTED

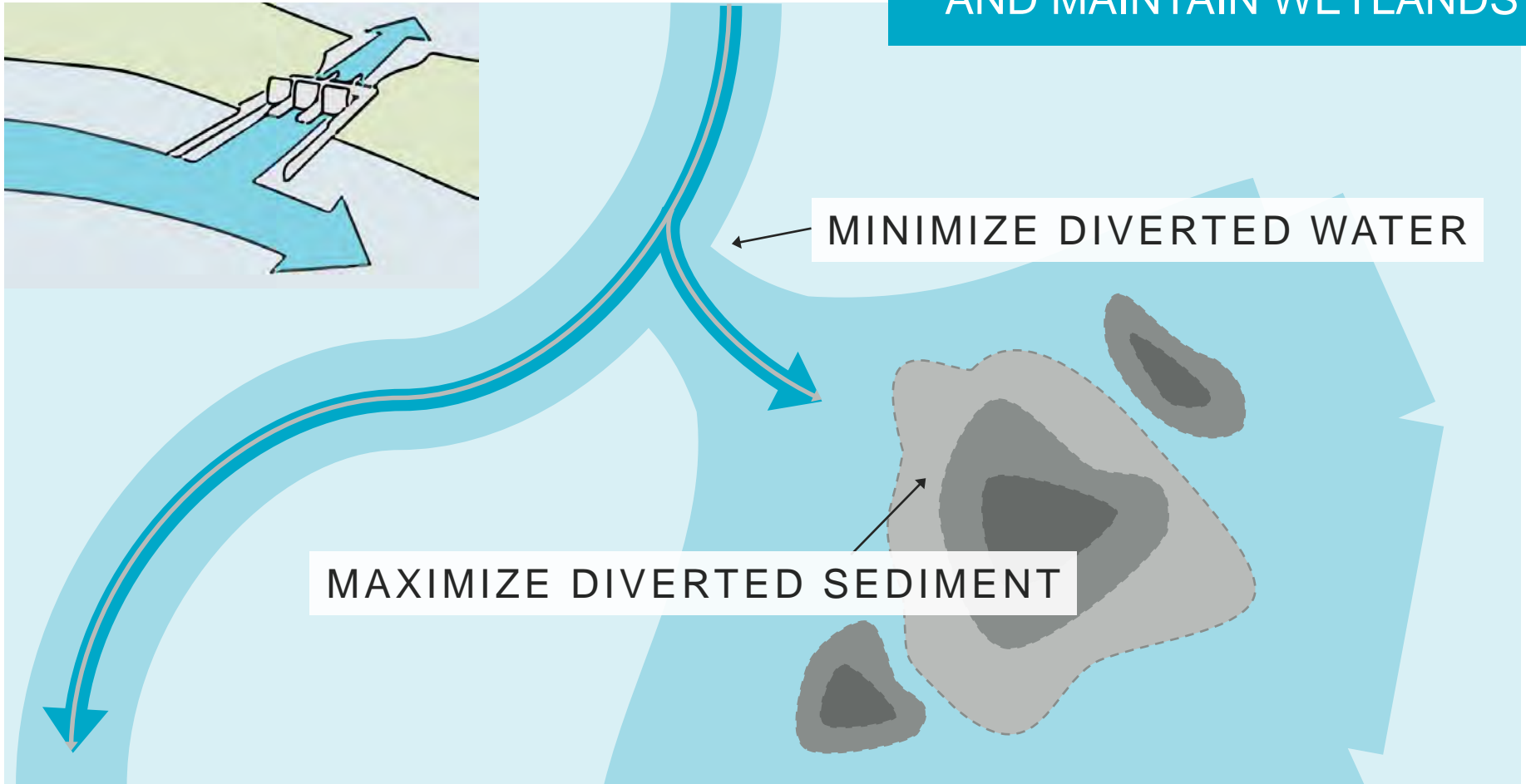
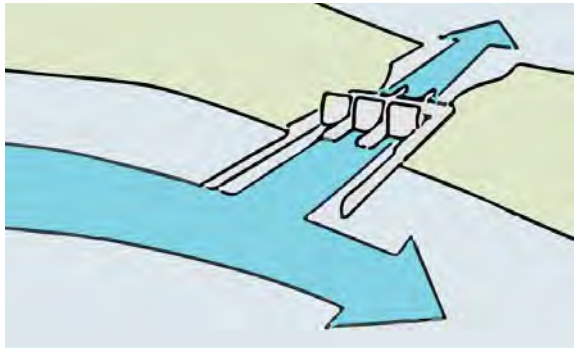
BOLD ACTION IS REQUIRED



MID-BASIN SEDIMENT DIVERSION PROGRAM

SEDIMENT DIVERSIONS

- BUILD AND SUSTAIN LAND
- INCREASE NUTRIENTS AND SEDIMENT DEPOSITION TO SUSTAIN AND MAINTAIN WETLANDS



RECONNECTING THE RIVER

An aerial photograph of a river delta region, likely in Louisiana. The river is shown winding through a landscape of marshes and fields. Two locations are highlighted: Mid-Breton, marked with a green dot and a green-bordered label, and Mid-Barataria, marked with a blue dot and a blue-bordered label. The river flows from the top left towards the bottom right, where it branches out into smaller channels.

MID-BRETON

MID-BARATARIA

RECONNECTING THE RIVER

An aerial photograph of a river system, likely the Mississippi River, showing a winding path through a landscape of fields and forests. Two specific locations are highlighted with colored dots and labeled with text boxes. A green dot is located on the river, with a green line and arrow pointing from the 'MID-BRETON' label to it. A blue dot is located further downstream, with a blue line and arrow pointing from the 'MID-BARATARIA' label to it. The river continues to flow towards the bottom right of the image.

MID-BRETON

MID-BARATARIA

PROJECTED COSTS AND FUNDING

MID-BARATARIA

\$1.3B

MID-BRETON

\$696M



FUNDING STREAMS

FUNDING OPTIONS RELATED TO DEEP WATER HORIZON:

\$1.2B

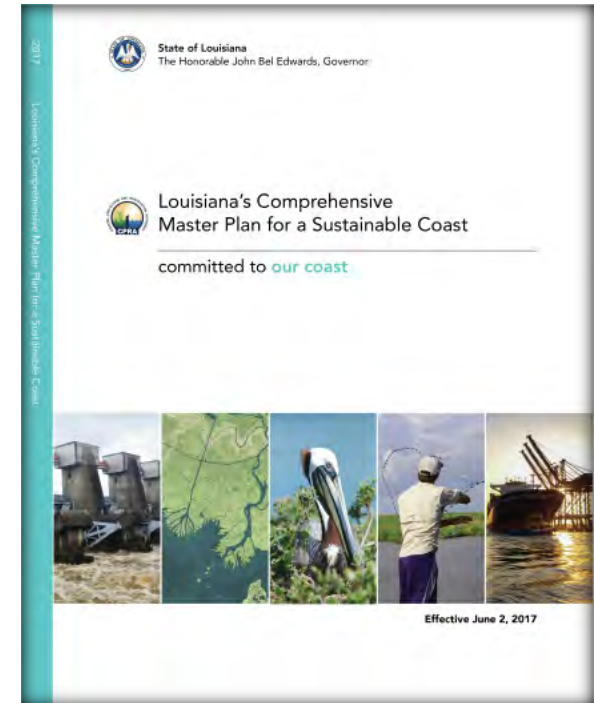
CRIMINAL
FINES/NFWF

\$988M

CIVIL FINES/
RESTORE ACT

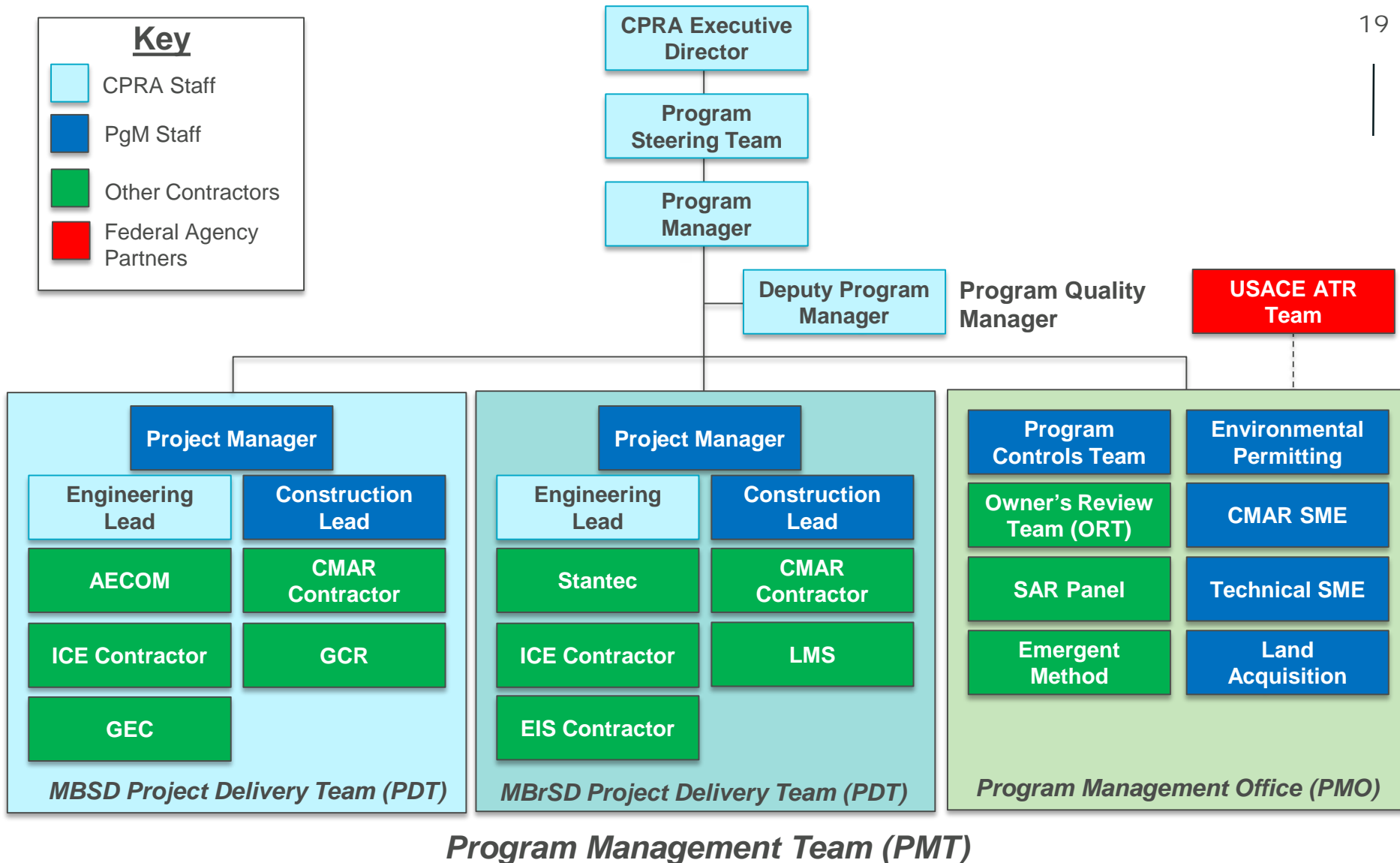
\$5B

NATURAL
RESOURCE
DAMAGE



PROGRAM ORGANIZATIONAL CHART

19



PERMITTING AND CONSTRUCTION

APPROVALS

20

START EIS

COASTAL USE (LDNR), NAVIGATION, AND WETLANDS

- Section 10 (USACE Navigation)/404 (USACE Wetlands) and Coastal Use Permit (INDR CUP)
- **Permit Public Notice and Comment**
- Coastal Use Permit
- **Coastal Use Permit Public Act Notice and Comment**
- Coastal Use Permit Approval
- Section 10/404 Approval
- Project Implementation and Monitoring

NEPA COMPLIANCE

NATIONAL ENVIRONMENTAL POLICY ACT

- **Solicitation of Views (2013)**
- Notice of Intent for EIS
- Start EIS
- **Public scoping meeting**
- Draft EIS
- USACE (HQ/MVD) Approves Draft EIS for Release
- **Public Comment on Draft EIS**
- Final EIS
- **Public Review on Final EIS**
- Complete EIS (Record of Decision)

408 APPROVAL (USACE)

REQUEST TO ALTER A FEDERAL PROJECT OR PROJECT WITH FEDERAL INTEREST NO DIRECT PUBLIC INVOLVEMENT

- 408 Request
- 60% Plans and Specifications Review
 - District – PDT
 - Agency Technical Review (ATR)
 - IEPR-SAR Review
- USACE (HQ/MVD) Preliminary 408 Approval
- Record of Decision (408)
- 408 Approval
- 408 Construction Oversight

PERMITS



US Army Corps
of Engineers®

COASTAL PERMIT

Authorization to execute a project in Louisiana's Coast Zone that is in compliance with the guidelines of the Louisiana Coastal Resources Program

404/10 PERMIT

Authorization for the construction of any structure in or over any navigable water and the discharge of fill material into the wetlands

408 REQUEST

Authorization for the alteration of a USACE civil works project if the Secretary determines the activity will not be injurious to public interest and will not impair the usefulness of the project

PROJECT BENEFITS

22



BUILD AND
SUSTAIN LAND

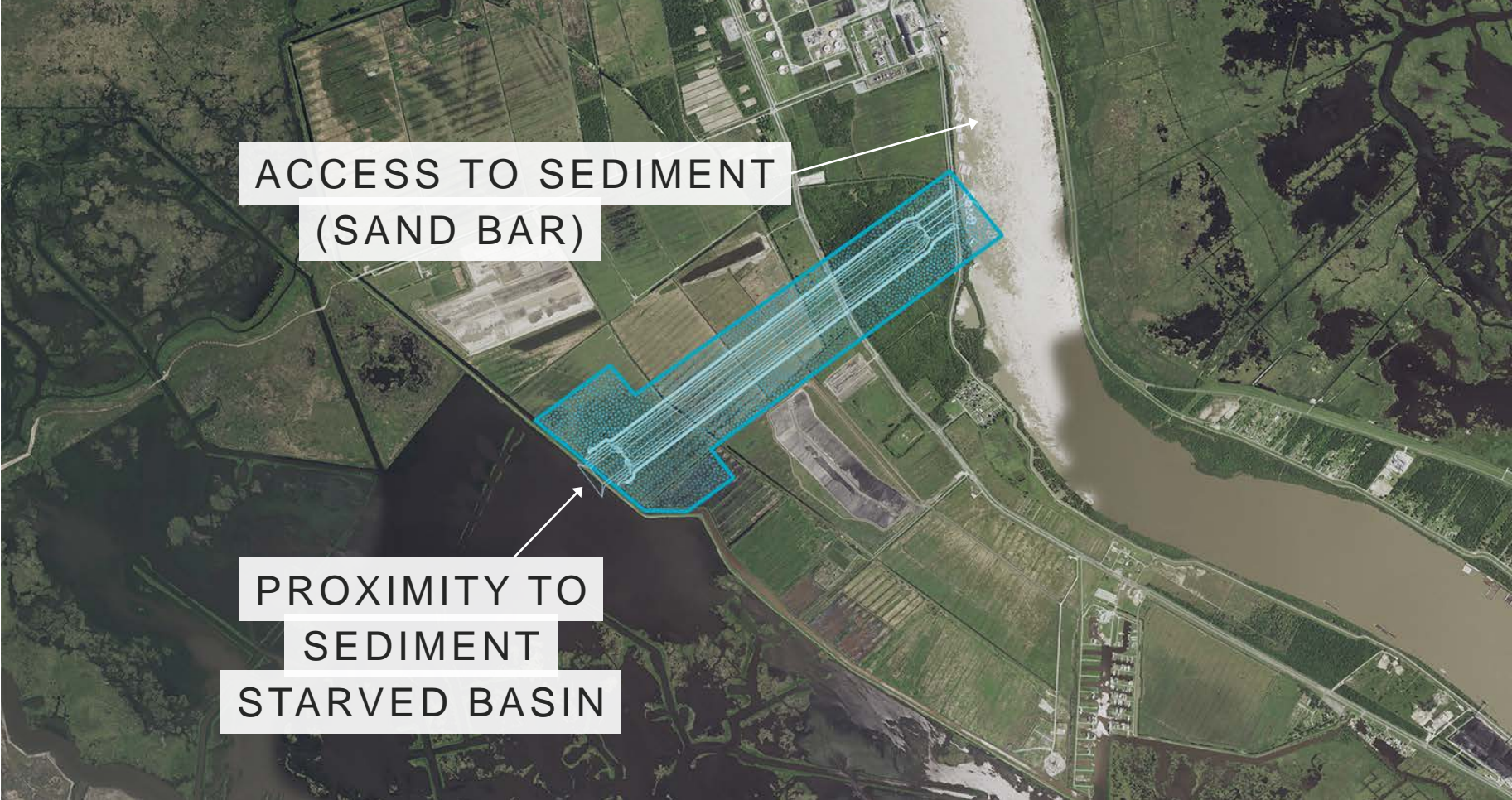


REDUCE HURRICANE
STORM SURGE RISK



BOOST
LOCAL
ECONOMY

FACTORS USED TO DETERMINE LOCATION

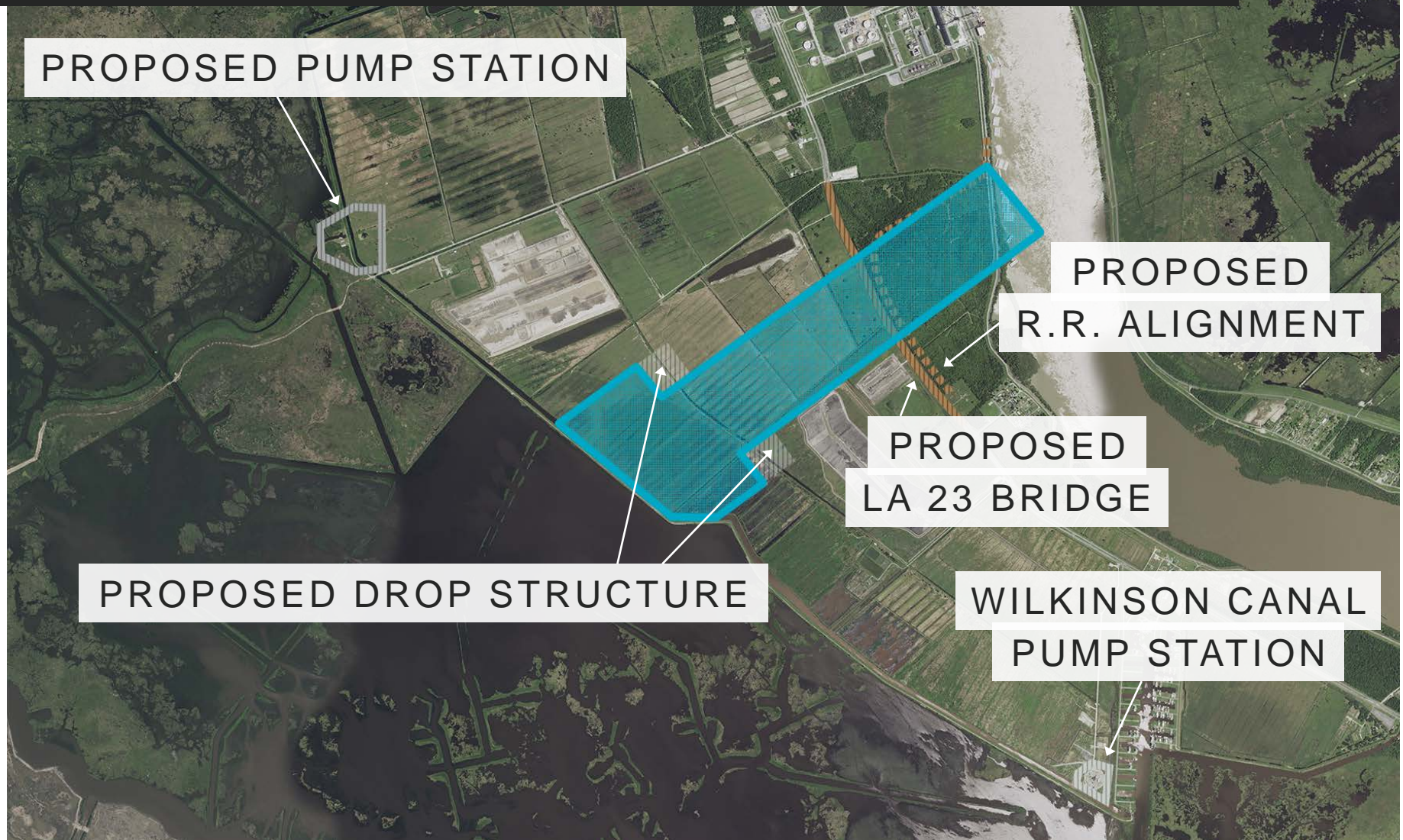


ACCESS TO SEDIMENT
(SAND BAR)

The image is an aerial photograph of a coastal or riverine area. A large, irregularly shaped area is highlighted in a light blue color, representing a proposed project or study area. This area is elongated and follows a path that leads towards a large body of water on the right side of the image. Two white arrows point from text labels to specific features within or near the highlighted area. The first arrow points to a narrow strip of land or a sand bar at the top of the highlighted area. The second arrow points to a dark, irregularly shaped area at the bottom left of the highlighted area, which is identified as a sediment-starved basin. The surrounding landscape includes green fields, some industrial or agricultural structures, and a network of roads or canals.

PROXIMITY TO
SEDIMENT
STARVED BASIN

PROJECT LOCATION



MID-BARATARIA SEDIMENT DIVERSION

PROJECT LOCATION

LOCATION

IRONTON, LOUISIANA

TASKS

- Funding E&D, Construction
- Permitting and Construction Approvals
- Environmental (EIS)
- Land Rights
- Engineering and Design
- Operations

PEAK FLOW

75,000

PROJECT FEATURES

- Inlet, Conveyance Structure, Outlet
- Interior Drainage Pump Station
- Highway Modifications
- Rail Road Modifications

MID-BARATARIA SEDIMENT DIVERSION

PROJECT LOCATION



NON-FEDERAL LEVEE

MISSISSIPPI RIVER
AND TRIBUTARIES LEVEE

MID-BRETON SEDIMENT DIVERSION

PROJECT LOCATION

LOCATION

WILL'S POINT/
BERTRANDVILLE, LA

TASKS

- Funding E&D, Construction
- Permitting and Construction Approvals
- Environmental (EIS)
- Land Rights
- Engineering and Design
- Operations

PEAK FLOW

35,000

PROJECT FEATURES

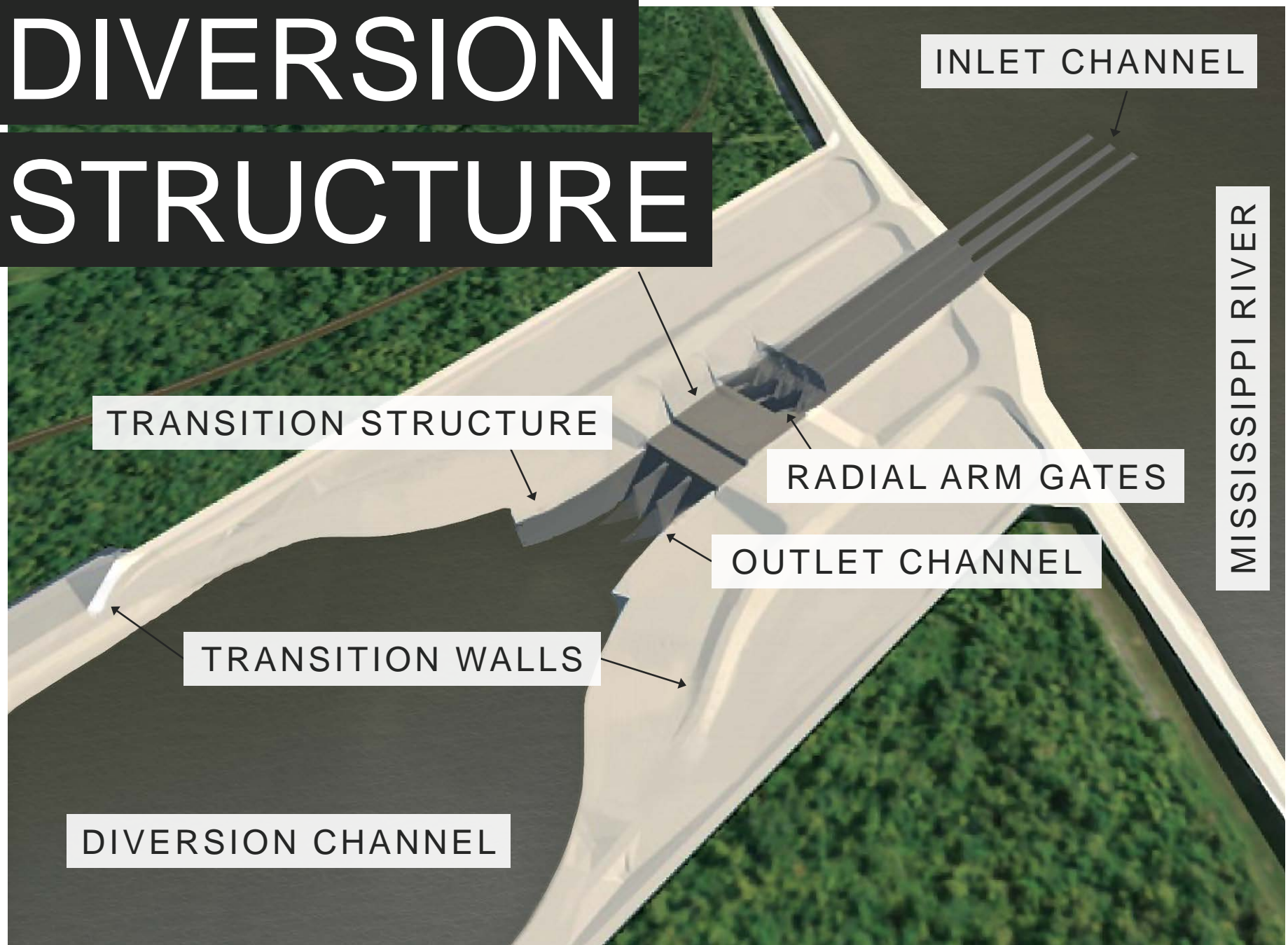
- Inlet, Conveyance Structure, Outlet
- Interior Drainage Pump Station
- Highway Modifications

MID-BRETON SEDIMENT DIVERSION

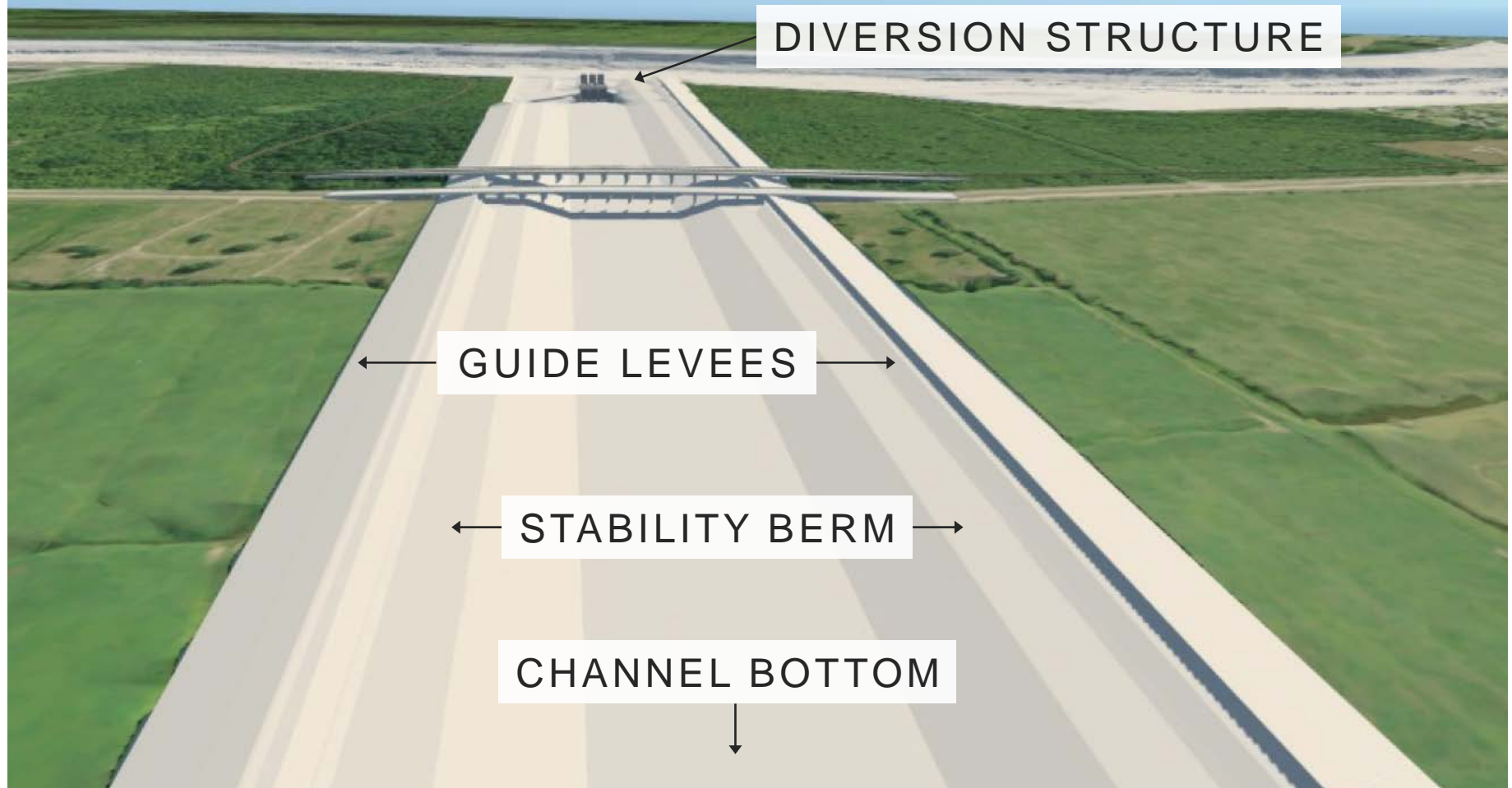
The background of the slide is an aerial photograph of a coastal or wetland area, showing various landforms, water bodies, and infrastructure. A semi-transparent green overlay covers the entire image. A thin white vertical line is positioned to the left of the title text.

IMPLEMENTATION & OPERATIONS

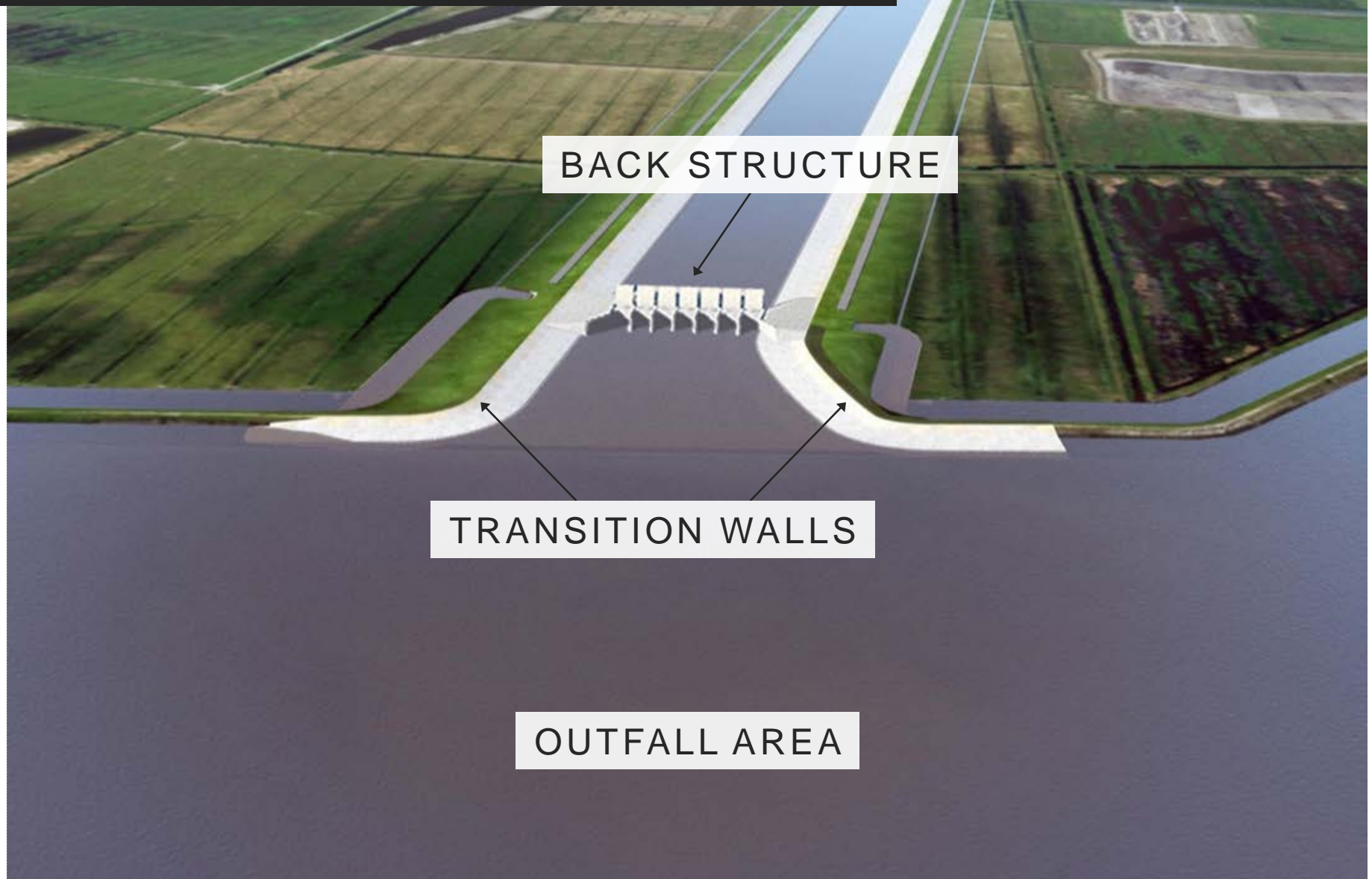
DIVERSION STRUCTURE



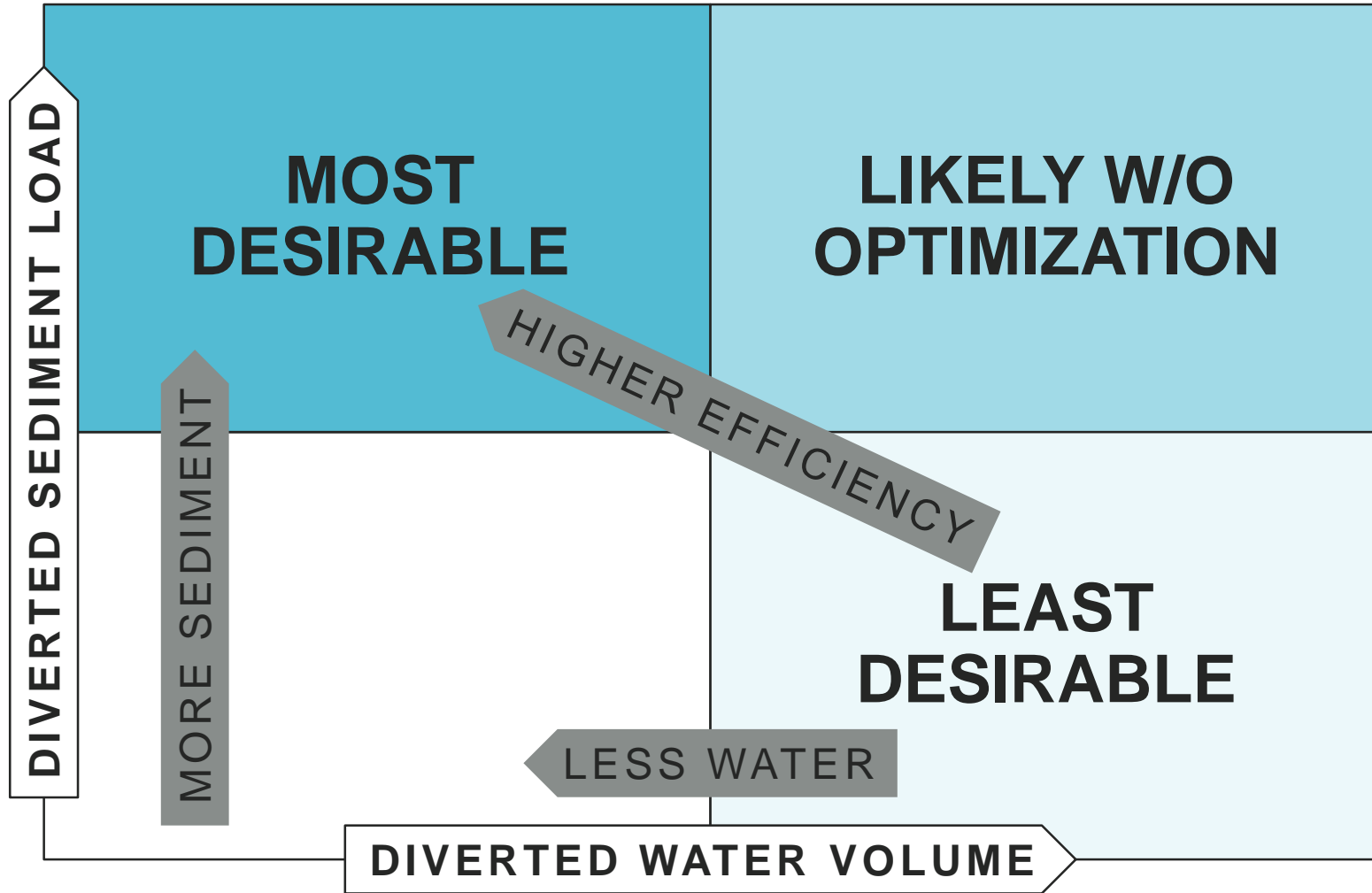
CONVEYANCE CHANNEL



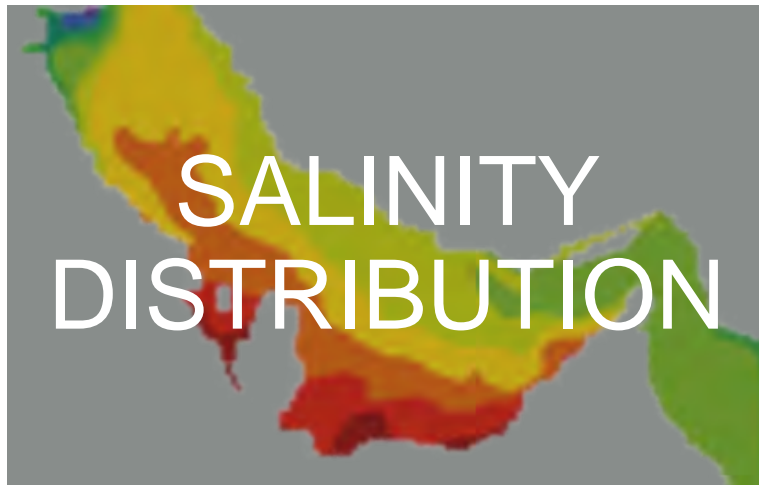
OUTFALL AREA



OPERATIONS PLAN



OPTIMIZATION CONSIDERATIONS



BASIN SIDE

ADAPTIVE

MANAGEMENT

34



Real time monitoring of river side **turbidity**
(supported by frequent/periodical sediment measurements)



Real time monitoring of receiving area **salinity, water level, water quality parameters, and natural resources**



Forecasting tools to support adaptive management of structures

OPERATIONS STRATEGY

START EIS

- Plan to assess impact to the human environment
- Simple, practical, implementable
- Most opportunistic operations which can avoid, minimize, or if necessary mitigate impact
- Natural Process
- Flexible

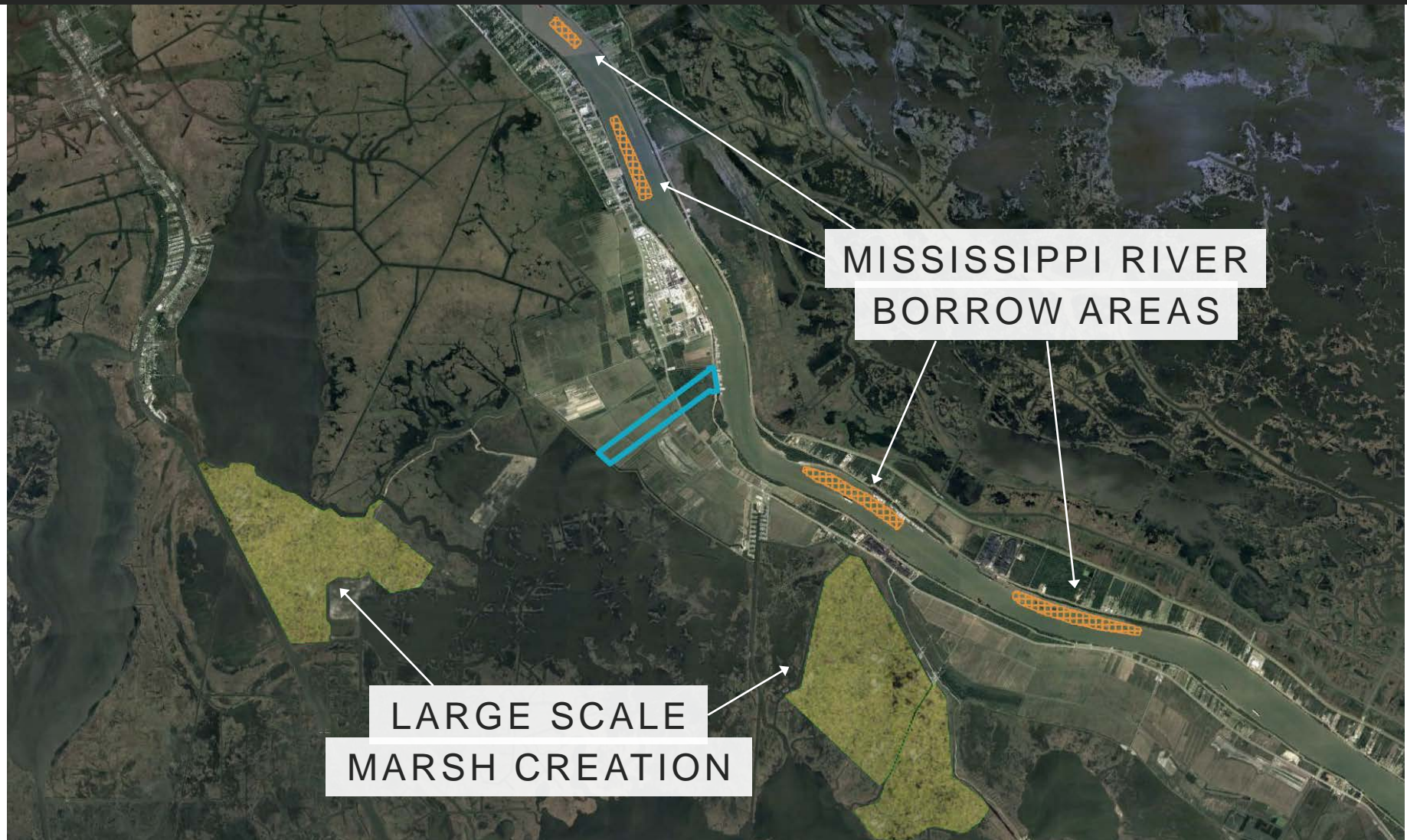
FINAL EIS

- Simple, practical, implementable
- Serves as the basic permit conditions for the Section 10/404 Permit
- Natural Process
- Flexible

POST-CONSTRUCTION

- Meets Section 10/404 Permit
- Real Time Monitoring/Forecasting Tools
- Natural Process
- Flexible - Adaptively Manage to Maximize the Sediment/Water Ratio, the Changing Environment, and the Measured Project Performance

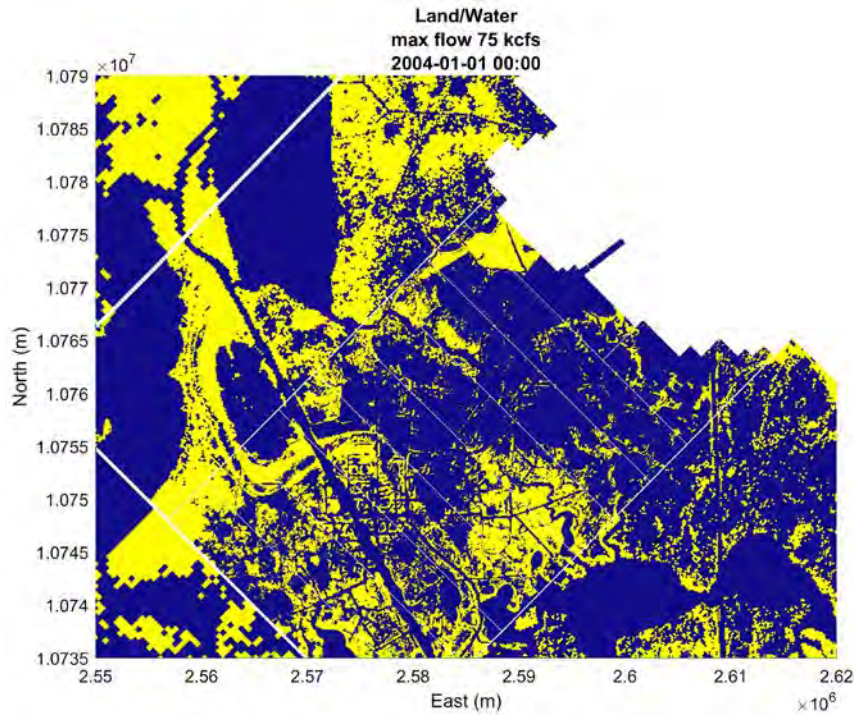
SYNERGISTIC APPROACH



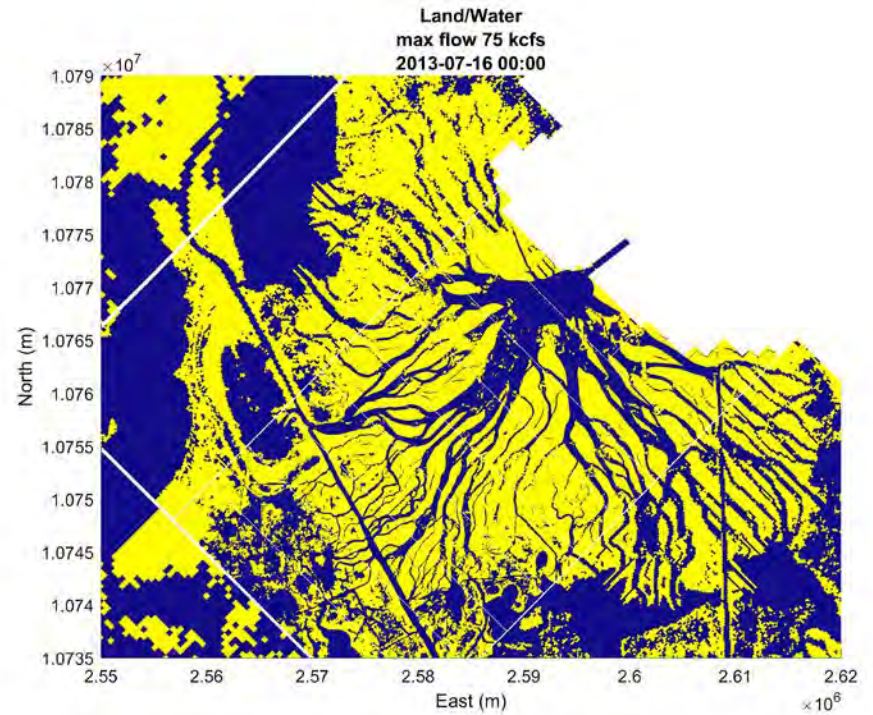
DREDGING + DIVERSIONS = SUSTAINABLE LAND GAIN

LAND/WATER DISTRIBUTION

OUTFALL AREA



INITIAL



AFTER 10 YEARS

The background is an aerial photograph of a landscape, likely a river valley, with a green semi-transparent overlay. A thin white vertical line is positioned to the left of the text.

PROJECT UPDATES

CURRENT PROJECT ACTIVITY

EIS UNDERWAY

PUBLIC SCOPING
MEETINGS HELD

JULY 20, 25, 27

ENGINEERING AND DESIGN
SOLICITATION POSTED

JUL

AUG

SEP

OCT

NOV

DEC

AECOM SELECTED LEAD
ENGINEER AND DESIGNER

AECOM BEGINS
WORK

CMAR RFQ
AD POSTED

■ MID-BARATARIA ■ MID-BRETON

CURRENT

PROJECT ACTIVITY

STANTEC SELECTED LEAD
ENGINEER AND DESIGNER

CPP UPDATED TO REFLECT
NOV 2020 PERMIT DECISION

2018

JAN

FEB

MAR

APR

MAY

JUN

COMPLETED 1ST 408 REVIEW
SOIL BORING PLAN

STANTEC BEGINS WORK

■ MID-BARATARIA ■ MID-BRETON

MID-BARATARIA

SCOPING PROCESS

**SCOPING
MEETINGS**

JULY
20

JULY
26

JULY
27

SCOPING PERIOD
CLOSED SEPTEMBER 5

OVER **800** COMMENTS

OVER
100

COMMENTS
FROM
OUTSIDE OF
LOUISIANA

OVER
500

INDIVIDUAL
(FORM)
LETTERS

OVER
40

“AFFILIATIONS”
WITHIN
COMMENTS

RECENT

ACCOMPLISHMENTS



- **Diversion Complex (fastlands)**
 - Phase II Cultural Resources Complete
- **St. Rosalie Plantation (16PL107)**
 - Reviewed by SHPO
 - Not Eligible for Nomination to the National Register of Historic Places

CULTURAL
RESOURCES

ONGOING

WORK / EFFORTS

43



- **Mid-Barataria DEIS – Alternative / Impact / Cumulative Impact Analyses**
- **Mid-Barataria DEIS – Affected Environment**
- **Mid-Barataria – Basin Monitoring Plan**
- **Mid-Barataria CMAR Selection**

ONGOING

WORK / EFFORTS

44



- In-River Monitoring and Sediment Sampling – Breton and Barataria



ONGOING

WORK / EFFORTS



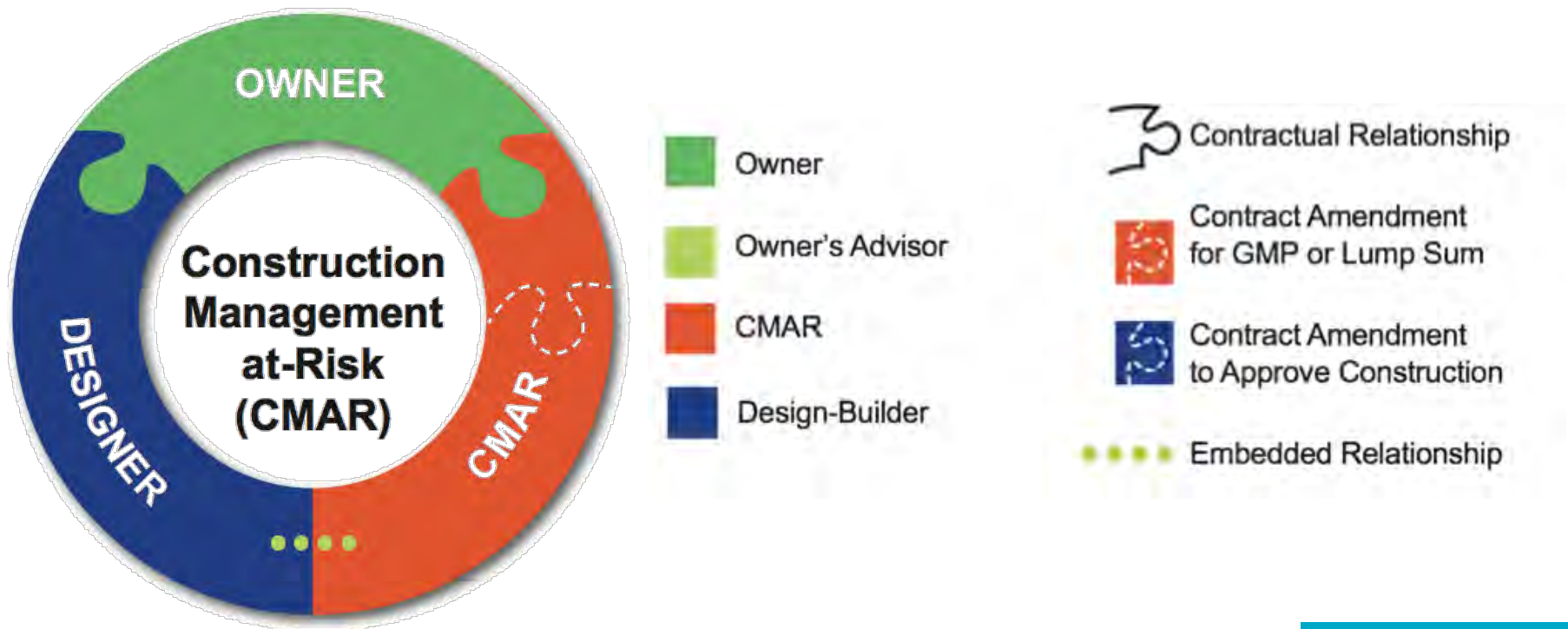
Barataria

- Land Survey
- Aerial Drone Survey/Video
- Traffic Counts



ONGOING

WORK / EFFORTS



CMAR

DELIVERY MODEL

An aerial photograph of a coastal landscape, featuring a mix of land and water. The land is divided into various patches, some of which appear to be agricultural or developed. The water is a deep blue, and the sky is filled with white clouds. The entire image is overlaid with a semi-transparent teal color.

OUTREACH & ENGAGEMENT

2017 OUTREACH AND ENGAGEMENT

57 MEETINGS 

27

PUBLIC
OUTREACH
EVENTS

18

ADVISORY
GROUP
MEETINGS

12

GENERAL
PRESENTATION
BRIEFINGS



4,125

PEOPLE
REACHED

COASTAL CONNECTIONS

MYRTLE GROVE

IRONTON

EMPIRE

BELLE CHASSE

PORT SULPHUR

VIOLET

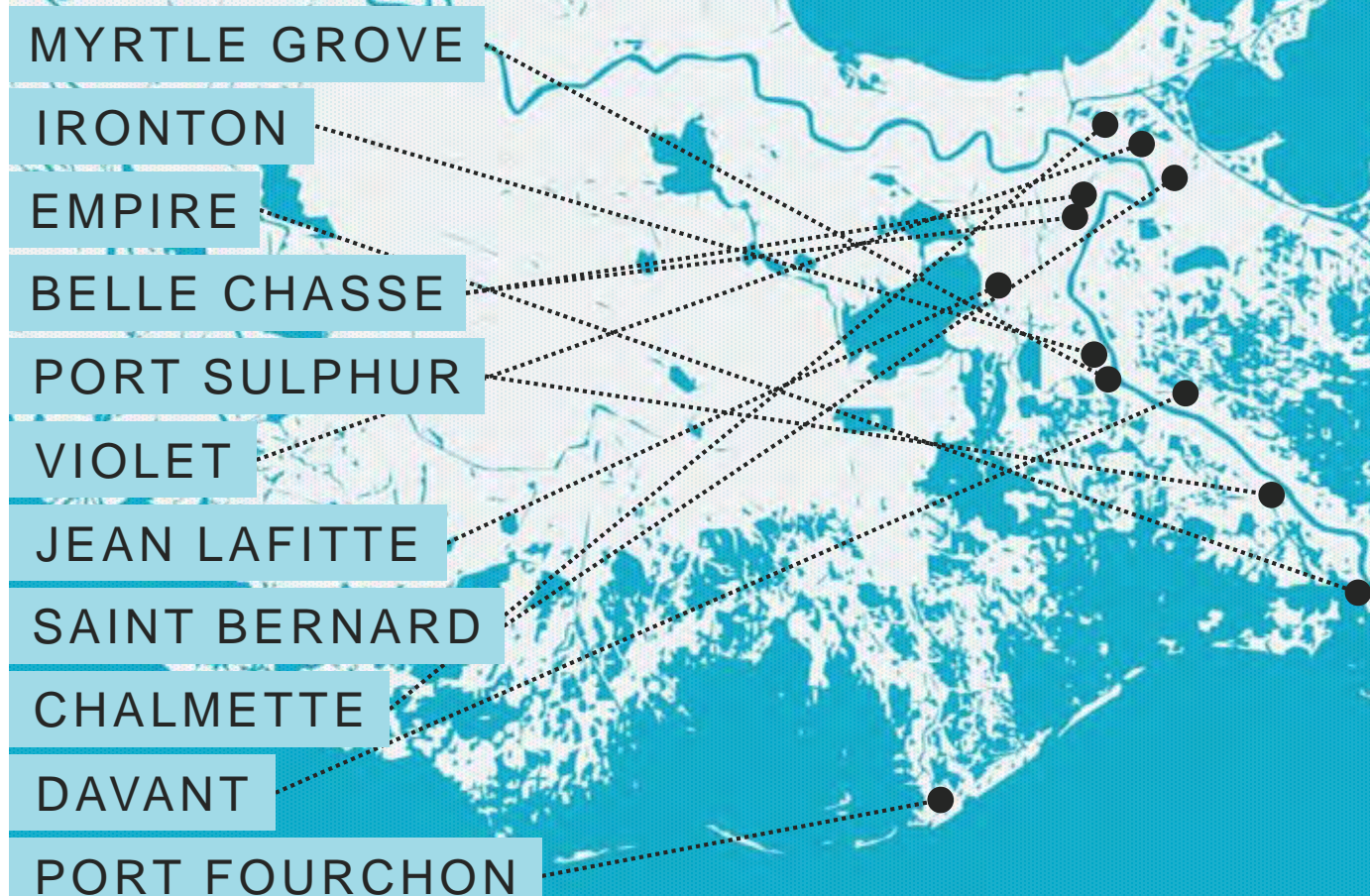
JEAN LAFITTE

SAINT BERNARD

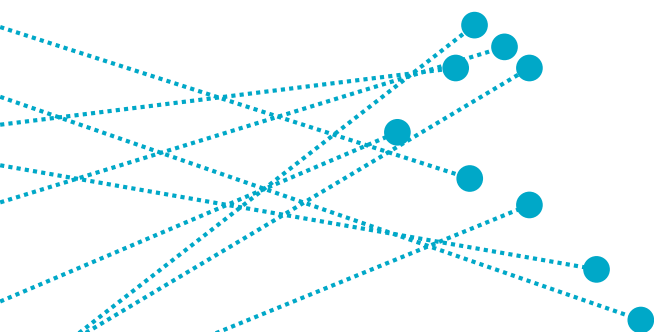
CHALMETTE

DAVANT

PORT FOURCHON



COASTAL CONNECTIONS



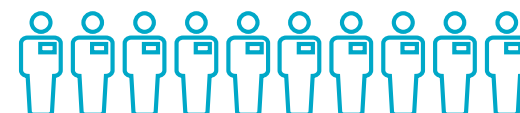
4,327

**MILES
TRAVELED**

20 COASTAL
CONNECTIONS

10 LOCATIONS

512



ATTENDEES

RESOURCES

MISSISSIPPI RIVER SEDIMENT DIVERSIONS WEBPAGE



Educational Brochures • Past Presentations • FAQ's

THANK YOU



@LOUISIANACPRA



BRAD BARTH BRADLEY.BARTH@LA.GOV