Joint Permit Application
For Work Within the Louisiana Coastal Zone

Print Application

Permit Number: P20190093 Date Received: 03/11/2019

Step 1 of 15 - Applicant Information

Applicant/Company Name: Coastal Protection & Restoration Authority of Louisiana (CPRA)
Applicant Type: GOVERNMENT AGENCY
Mailing Address: 150 Terrace Avenue
Baton Rouge, LA 70802
Contact Information: Megan Terrell
Daytime: 225 342 6952 Fax: 225

Step 2 of 15 - Agent Information

Company Name: CPRA
Mailing Address: 150 Terrace Avenue
Baton Rouge, LA 70802
Contact Information: Elizabeth Davoli
Daytime: 225 342 4616 Fax: 225 342 4591 Contact Email: Elizabeth.Davoli@la.gov

Step 3 of 15 - Permit Type

☑ Coastal Use Permit (CUP) ☐ Solicitation of Views (SOV) ☐ Request for Determination (RFD)

Step 4 of 15 - Pre-Application Activity
a. Have you participated in a Pre-Application or Geological Review Meeting for the proposed project?

☐ No  ☒ Yes  Date meeting was held: 03/06/2018

Megan Terrell, Ann Howard  Brad LaBorde
Attendees:  (Individual or Company Rep)  (OCM Representative)  (COE Representative)

b. Have you obtained an official wetland determination from the COE for the project site?

☒ No  ☐ Yes  JD Number:

c. Is this application a mitigation plan for another CUP?

☒ No  ☐ Yes  OCM Permit Number:

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Step 5 of 15 - Project Information

a. Describe the project:

The Mid-Breton Sediment Diversion is a large-scale, complex civil works and ecosystem restoration project. When operated, up to 75,000 cubic feet per second (cfs) of sediment-laden fresh water would be diverted from the Mississippi River to the Breton Sound Basin to reconnect and re-establish the deltaic sediment deposition processes between the Mississippi River and Breton Sound. See Attachment A for a list of Project features/components.

b. Is this application a change to an existing permit?

☒ No  ☐ Yes  OCM Permit Number:

c. Have you previously applied for a permit or emergency authorization for all or any part of the proposed project?

☒ No  ☐ Yes

<table>
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<tr>
<th>Agency Name</th>
<th>Permit Number</th>
<th>Decision Status</th>
<th>Decision Date</th>
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<tr>
<td>OCM</td>
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<td>COE</td>
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<tr>
<td>Other</td>
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</table>
Step 6 of 15 - Project Location

a. Physical Location

Street: Louisiana Highway 39 (LA 39)
City:         Parish: PLAQUEMINES Zip:
Water Body: Mississippi River (RM 68) Breton Sound Basin

b. Latitude and Longitude

Latitude: 29 45 5.510 Longitude: -90 0 43.01

c. Section, Township, and Range

Section #: 4,5 Township #: 15S Range #: 12E

Section #: Township #: Range #:

d. Lot, Tract, Parcel, or Subdivision Name

Lot #: Parcel #:
Tract #: Subdivision Name:

e. Site Direction:

START-From I-10 in New Orleans, follow I-10 E to LA 39 S/N Claiborne Ave. Take exit 236B from I-10 E. Continue onto LA 39 S/N Claiborne Ave for approx 4 miles. Turn right onto W Center St. Turn left onto LA 46 E. Continue on LA 46 E for approx 10 miles. Slight right towards LA 39 S/St. Bernard Park Way. Continue approx 6 miles; turn left to stay on LA 39 S. Continue South on LA 39 for approx 7 miles to the project area, near Mississippi River Mile 68. -END

Step 7 of 15 - Adjacent Landowners

Adjacent Landowner:

[Blank spaces for names and addresses]
Step 8 of 15 - Project Specifics

a. Project Name and/or Title: Mid-Breton Sediment Diversion (BS-30)

b. Project Type: Non-Residential

c. Source of Funding: State

d. What will be done for the proposed project?
   ☒ Bridge/Road  ☐ Home Site/Driveway  ☒ Pipeline/Flow Line  ☒ Rip Rap/Erosion Control
The impacts of coastal land loss threaten Louisiana's economy, commerce, infrastructure, and culture. Levees and Mississippi River channelization have altered natural fluvial interaction and sediment transport from the river into the basin, removing the sources of sediment, nutrients, and freshwater that help build and maintain wetlands. In addition, subsidence, sea level rise, and recent hurricane events have exacerbated land loss impacts in the basin. As a result, Breton Sound Basin is suffering from significant land loss—approximately 105,267 acres (426 km²) of wetland and marsh were lost between 1932 and 2016. Marshes in the Breton Sound Basin also suffered impacts from the Deepwater Horizon (DWH oil spill). The purpose of the Mid-Breton Sediment Diversion is to reconnect and re-establish the deltaic sediment deposition process between the Mississippi River and the Breton Sound Basin through a sediment diversion that will deliver sediment, freshwater, and nutrients. The project is needed as a long-term resilient, sustainable strategy within the Basin to reduce land loss rates and help sustain and restore wetlands, including wetlands injured by the DWH spill.

**Step 9 of 15 - Project Status**

a. **Proposed project start date:** 10/01/2023   **Proposed project completion date:** 05/01/2029

b. **Is any of the project work in progress?**
   - ☒ No
   - ☐ Yes

c. **Is any of the project work complete?**
   - ☒ No
   - ☐ Yes

**Step 10 of 15 - Structures, Materials, and Methods for the Proposed Project**

a. **Excavations**

   3,945,000.00 **yd³**

   122.00 **Acres**

b. **Fill Areas**

   5,061,800.00 **yd³**

   96.00 **Acres**
c. **Fill Materials**

<table>
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<tr>
<th>Item</th>
<th>Quantity</th>
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<tr>
<td>Concrete</td>
<td>67,800 yd³</td>
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<tr>
<td>Rock</td>
<td>409,500 yd³</td>
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<tr>
<td>Crushed Stone or Gravel</td>
<td>13,600 yd³</td>
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<tr>
<td>Sand</td>
<td>1,900 yd³</td>
</tr>
<tr>
<td>Excavated and placed onsite</td>
<td>111,000 yd³</td>
</tr>
<tr>
<td>Excavated and hauled offsite</td>
<td>6,610,000 yd³</td>
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<tr>
<td>Hauled in topsoil/Dirt</td>
<td>80,700 yd³</td>
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<tr>
<td>Asphalt and Structural Embankment</td>
<td>543,300 yd³</td>
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**Step 11 of 15 - Project Alternatives**

a. **Total acres of wetlands and/or waterbottoms filled and/or excavated.**

186.00 acres

b. **What alternative locations, methods, and access routes were considered to avoid impact to wetlands and/or waterbottoms?**

As part of the engineering and design phase, construction and staging areas would consider the use of existing access roads and drives to minimize impacts to wetlands. See Attachment for additional information on alternatives (location and capacity) analysis conducted that resulted in the location of the Mid-Breton Sediment Diversion at River mile 68 with a capacity of up to 75,000 cfs.

c. **What efforts were made to minimize impact to wetlands and/or waterbottoms?**

The analysis of the Mid-Breton Sediment Diversion was developed using the minimum construction footprint necessary that would still maximize the conveyance of sediment-laden water from the Mississippi to the Breton Sound Basin. The gravity conveyance alignment was developed for efficient sediment conveyance between the river and the basin. Best Management Practices (BMPs) are being developed for access routes to minimize disturbance to wetlands between the MR&T and non-federal levees.

d. **How are unavoidable impacts to vegetated wetlands to be mitigated?**
The project is self-mitigating. The purpose of the Mid-Breton Sediment Diversion is to reconnect and re-establish the deltaic sediment deposition process between the Mississippi River and the Breton Sound Basin through a sediment diversion that will deliver sediment, freshwater, and nutrients. The project is needed as a long-term resilient, sustainable strategy within the Basin to reduce land loss rates and help sustain and restore wetlands, including wetlands injured by the DWH spill.

Step 12 of 15 - Permit Type and Owners

a. Are you applying for a Coastal Use Permit?

☐ No    ☑ Yes

b. Are you the sole landowner/oyster lease holder?

☑ No    ☐ Yes

☐ The applicant is an owner of the property on which the proposed described activity is to occur.

☐ The applicant has made reasonable effort to determine the identity and current address of the owner(s) of the land on which the proposed described activity is to occur, which included, a search of the public records of the parish in which the proposed activity is to occur.

☐ The applicant hereby attests that a copy of the application has been distributed to the following landowners/oyster lease holders.

Landowner/Oyster Lease Holder:

[Redacted text]
c. Does the project involve drilling, production, and/or storage of oil and gas?

- No
- Yes

Step 13 of 15 - Maps and Drawing Instructions

- **AttB_combined_5pct_permit_drawings_rev3.pdf** 03/11/2019 04:10:35 PM
- **P20190093_5pct_Permit_Rev1_20190204.pdf** 02/04/2019 01:42:48 PM
- **P20190093_CPRAPreliminaryOperationsBreton_20190204.pdf** 02/04/2019 01:42:48 PM
- **BS-0030_JPAApplicationFeeWaiverRequest.pdf** 01/25/2019 03:08:51 PM
- **BS-0030_JPAPlats.pdf** 01/25/2019 03:08:51 PM
Step 14 of 15 - Payment

The fee for this permit is: $100.00

Step 15 of 15 - Payment Processed

Applicant Information

Applicant Name: Coastal Protection & Restoration Authority of Louisiana (CPRA)
Address: 150 Terrace Avenue
City/State/Zip: Baton Rouge, LA 70802

Application Information

Permit Type: CUP

To the best of my knowledge the proposed activity described in this permit application complies with, and will be conducted in a manner that is consistent with the Louisiana Coastal Resources Program. If applicable, I also certify that the declarations in Step 12c, oil spill response, are complete and accurate.

View Comments related to this project
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CONCEPTUAL DESIGN; SUBJECT TO REVISION - NOT FOR CONSTRUCTION

APPLICATION BY: CPRA
150 TERRACE AVENUE
BATON ROUGE, LA 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY
COASTAL ENGINEERING DIVISION
150 TERRACE AVENUE
BATON ROUGE, LA 70802

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

COVER SHEET

STATE PROJECT NUMBER: BS-0030
DATE: 02/20/2019

DRAWN BY: A. SPRAGUE
DESIGNED BY: D. GRANDAL
APPROVED BY: S. PEYTON

FEDERAL PROJECT NUMBER: SHEET 1 OF 13 REV. 3
LIMITS OF DIVERSION CHANNEL CONSTRUCTION

CONCEPTUAL DESIGN; SUBJECT TO REVISION - NOT FOR CONSTRUCTION

APPLICATION BY:
CPRA
150 TERRACE AVENUE
BATON ROUGE, LA 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY
COASTAL ENGINEERING DIVISION
150 TERRACE AVENUE
BATON ROUGE, LA 70802

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

VICINITY MAP
USACE MISSISSIPPI RIVER NAVIGATION MAP

STATE PROJECT NUMBER: BS-0030
DATE: 02/20/2019

FEDERAL PROJECT NUMBER:
SHEET 3 OF 13
REV. 3
CONCEPTUAL DESIGN, SUBJECT TO REVISION - NOT FOR CONSTRUCTION

LIMITS OF DIVERSION CHANNEL CONSTRUCTION

EXISTING NAVIGATION LIGHT (TO BE RELOCATED)

EXISTING DAY BEACON (TO BE RELOCATED)

PROPOSED BRIDGE AND DETOUR

WILLS POINT ANCHORAGE

MISSISSIPPI RIVER LEVEE (MRL)

MISSISSIPPI RIVER LEVEE (MRL)

GATED DIVERSION STRUCTURE

NON-FEDERAL BACK LEVEE (NFL)

LA HIGHWAY 39

LA HIGHWAY 39

LA HIGHWAY 23

JESUIT BEND REVETMENT

BELAIR REVETMENT

BELAIR PUMPING STATION

CONSTRUCTION LAYDOWN, STAGING, AND STOCKPILE AREAS. STOCKPILE SEQUENCE FOR OFF-SITE DISPOSAL WILL BE DONE IN PHASES

APPLICATION BY: CPRA
COASTAL PROTECTION AND RESTORATION AUTHORITY
150 TERRACE AVENUE
BATON ROUGE, LA 70802

DRAWN BY: A. SPRAGUE
DESIGNED BY: D. GRANDAL
APPROVED BY: S. PEYTON

COASTAL ENGINEERING DIVISION

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

STATE PROJECT NUMBER: BS-0030
FEDERAL PROJECT NUMBER:

DATE: 02/20/2019
SHEET 4 OF 13
REV. 3

DIVERSION CHANNEL PLAN
NOTE:
SEE SHEET 9 FOR TRANSITION ZONE TO AREA OF DELTA FORMATION

SCALE HORIZ: 1"=1000'
VERT: 1"=100'

CONCEPTUAL DESIGN, SUBJECT TO REVISION - NOT FOR CONSTRUCTION

APPLICATION BY: CPRA
150 TERRACE AVENUE
BATON ROUGE, LA 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY

COASTAL ENGINEERING DIVISION
150 TERRACE AVENUE
BATON ROUGE, LA 70802

DESIGNED BY: D. GRANDAL

APPROVED BY: S. PEYTON

STANTEC

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

STATE PROJECT NUMBER: BS-0030
DATE: 02/20/2019

FEDERAL PROJECT NUMBER:

DIVERION CHANNEL PROFILE

SHEET 5 OF 13 REV. 3
EXISTING GRADE

MISSISSIPPI RIVER LEVEE CONNECTION ELEV. +22.0

PROPOSED GRADE

EXISTING GRADE

GUIDE LEVEE ELEV. +22.0

80' STABILITY BERM

100' STABILITY BERM

GUIDE LEVEE ELEV. +22.0

80' STABILITY BERM

GUIDE LEVEE ELEV. +22.0

CHANNEL BOTTOM ELEV. -20.0

RIPRAP

APPROXIMATE DIMENSIONS OF STOCKPILE AREA, STOCKPILE SEQUENCE FOR OFF-SITE DISPOSAL WILL BE DONE IN PHASES.

CHANNEL BOTTOM ELEV. -20.0

RIPRAP

APPROXIMATE DIMENSIONS OF STOCKPILE AREA, STOCKPILE SEQUENCE FOR OFF-SITE DISPOSAL WILL BE DONE IN PHASES.

APPROXIMATE Dimensions OF STOCKPILE AREA, STOCKPILE SEQUENCE FOR OFF-SITE DISPOSAL WILL BE DONE IN PHASES.

APPROXIMATE Dimensions OF STOCKPILE AREA, STOCKPILE SEQUENCE FOR OFF-SITE DISPOSAL WILL BE DONE IN PHASES.

APPLICATION BY: CPRA
150 TERRACE AVENUE
BATON ROUGE, LA 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY

COASTAL ENGINEERING DIVISION

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

DIVERSION CHANNEL TYPICAL SECTIONS

STATE PROJECT NUMBER: BS-0030
DATE: 02/20/2019

FEDERAL PROJECT NUMBER:

SHEET 7 OF 13 REV. 3

DESIGNED BY: D. GRANDAL
APPROVED BY: S. PEYTON

D. GRANDAL

APPROVED BY: S. PEYTON

REVISIONS

DESIGNED BY: D. GRANDAL

APPROVED BY: S. PEYTON

APPLICATION BY: CPRA
150 TERRACE AVENUE
BATON ROUGE, LA 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY

COASTAL ENGINEERING DIVISION

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

DIVERSION CHANNEL TYPICAL SECTIONS

STATE PROJECT NUMBER: BS-0030
DATE: 02/20/2019

FEDERAL PROJECT NUMBER:

SHEET 7 OF 13 REV. 3

DESIGNED BY: D. GRANDAL
APPROVED BY: S. PEYTON

APPROVED BY: S. PEYTON

APPLICATION BY: CPRA
150 TERRACE AVENUE
BATON ROUGE, LA 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY

COASTAL ENGINEERING DIVISION

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

DIVERSION CHANNEL TYPICAL SECTIONS

STATE PROJECT NUMBER: BS-0030
DATE: 02/20/2019

FEDERAL PROJECT NUMBER:

SHEET 7 OF 13 REV. 3

DESIGNED BY: D. GRANDAL
APPROVED BY: S. PEYTON
EXISTING GRADE

PROPOSED GRADE

OUTFALL CHANNEL GUIDE BERM ELEV. +6.0

6:1

30.0

30.0

OUTFALL CHANNEL (DOWNSTREAM END)

CHANNEL BOTTOM ELEV. -20.0

EXISTING GRADE

RIPRAP

6:1

6.0:1

PROPOSED GRADE

OUTFALL CHANNEL GUIDE BERM ELEV. +6.0

6:1

30.0

30.0

TYPICAL SECTION - OUTFALL CHANNEL (UPSTREAM SECTION)

SCALE: 1" = 200'

CONCEPTUAL DESIGN; SUBJECT TO REVISION - NOT FOR CONSTRUCTION

APPLICATION BY: CPRA 150 TERRACE AVENUE BATON ROUGE, LA 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA 70802

COASTAL ENGINEERING DIVISION

MID-BRETON SEDIMENT DIVERSION PROJECT 5% PERMIT SET

DIVERSION CHANNEL TYPICAL SECTIONS

STATE PROJECT NUMBER: BS-0030 DATE: 02/20/2019

FEDERAL PROJECT NUMBER:

SHEET 8 OF 13 REV. 3

SHEET 8 OF 13

DESIGNED BY: D. GRANDAL

APPROVED BY: S. PEYTON

DRAWN BY: A. SPRAGUE
NOTES:

1. POTTENTIAL AREA OF DELTA FORMATION EXTENTS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON FURTHER ENGINEERING ANALYSIS. THE AREA OF DELTA FORMATION IS APPROXIMATELY 28,200 ACRES.

2. TRANSITION ZONE TO AREA OF DELTA FORMATION IS SUBJECT TO DIS-TRIBUTARY DEVELOPMENT AND DELTA FORMATION. POTTENTIAL SCOUR AND NATURAL CHANNEL DEVELOPMENT SHOULD BE ANTICIPATED IN THIS AREA. MAINTENANCE DREDGING OR ADDITIONAL CHANNELS IN THE IMMEDIATE OUTFALL AREA MAY BE DETERMINED TO BE NECESSARY DURING THE DESIGN PHASE. TOTAL AREA OF TRANSITION ZONE IS APPROXIMATELY 7,665 ACRES.
LA 39 BRIDGE
TYPICAL FINISHED SECTION
STA. 616+30.42 TO STA. 629+62.66

CONCEPTUAL DESIGN: SUBJECT TO REVISION - NOT FOR CONSTRUCTION
AREAS OF EXCAVATION

LA HWY 39 NORTH BRIDGE APPROACH AND DETOUR ROAD, 100’ RIGHT OF WAY, ASSUMED TO BE NET FILL. FILL AREA: 8 ACRES

DIVERSION CHANNEL LEVEES AND EMBANKMENTS FILL AREA: 57 ACRES

LIMITS OF DIVERSION CHANNEL CONSTRUCTION

DIVERSION CHANNEL EXCAVATION EXCAVATION AREA: 122 ACRES

NON-FEDERAL BACK LEVEE

MISSISSIPPI RIVER LEVEE (MRL)

MISSISSIPPI RIVER

CONSTRUCTION LAYDOWN, STAGING, AND STOCKPILE AREAS, ASSUMED TO BE NET FILL. SEE NOTE. FILL AREA: 25 ACRES

NOTE:
THE CONSTRUCTION LAYDOWN AND STAGING AREAS ARE ANTICIPATED TO USE SOME FORM OF GROUND STABILIZATION METHOD SUCH AS GRAVEL PLACEMENT, TIMBER MATTING, OR OTHER. SPECIFIC METHODS HAVE YET TO BE DETERMINED. STOCKPILE SEQUENCE FOR OFF-SITE DISPOSAL WILL BE DONE IN PHASES.

APPLICATION BY: CPRA
150 TERRACE AVENUE
BATON ROUGE, LA 70802

DRAWN BY: A. SPRAGUE

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APPROVED BY: S. PEYTON

COASTAL PROTECTION AND RESTORATION AUTHORITY
COASTAL ENGINEERING DIVISION
150 TERRACE AVENUE
BATON ROUGE, LA 70802

MID-BRETON SEDIMENT DIVERSION PROJECT
5% PERMIT SET

STATE PROJECT NUMBER: BS-0030
DATE: 02/20/2019

FEDERAL PROJECT NUMBER:

AREAS OF EXCAVATION AND FILL

SHEET 13 OF 13
REV. 3