





Please sign the attendance sheet, which will be made available



Project Purpose

The Barataria Basin Ridge and Marsh Creation Project is a large-scale restoration strategy for the Barataria Basin. Spanish Pass is the first increment, with goals to:

- 1. Create/nourish approximately 1,134 acres of saline marsh
- 2. Create 120 acres of marsh ridge

Sponsored jointly by NMFS and CPRA, funded by NRDA with money from DWH Oil Spill



Data Collection to Support Design

Data Collection in Borrow Sources and Fill Area

- Elevation + Magnetometer Surveys
- Geophysical investigation of borrow
- Cultural Resource Surveys
- Geotechnical Surveys



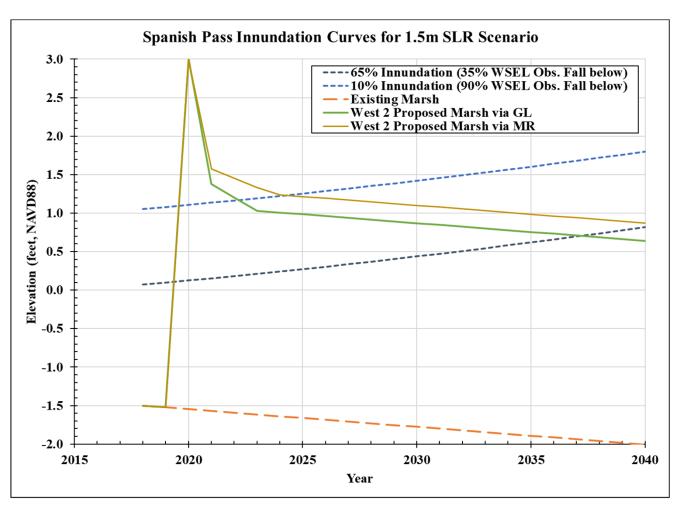
Fill Area Review: Ridge & Marsh Creation Area Layout



- Marsh Creation Areas (MCA)
- MCA A to G = base fill area
- MCA H is Additive
 Alternate (if project has enough \$\$)
- MCA B and E must be constructed using river sand (due to poor soil strength)



Fill Elevation



- Four separate soil conditions across project
- Construction elevation varies between +3.3 to +1.6



Fill Volumes

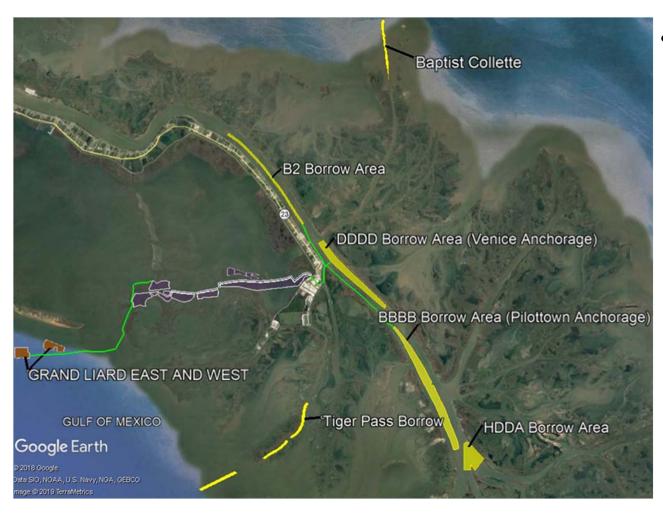
MCA	Volume from River	Volume from GL/River	
Α	457,000	1,640,000	
В	959,000	959,000	
С	49,000	230,000	
D1	141,000	471,000	
D2	1,582,000	1,582,000	
E	76,000	76,000	
F	1,069,000	1,069,000	
G	5,950,000	5,950,000	
Н	993,000	993,000	

- In CY
- Total in place volume varies 11.28M to 12.99M





Project Layout + All Investigated Borrow Sources



Design Process
 Investigated & Screened
 Multiple Sources



Slide 8

I would not state an assume volume. Give in place volume $_{\rm Gordon\ Thomson,\ 11/25/2019}$ GT1

GT2 Gordon Thomson, 11/25/2019

Borrow Area Review: Grand Liard



Clay with silt and less than 5% sand

GL West

- 2.5M CY
- Can only be used for MCA A, C, D1 & D2
- Needs containment dikes and access for bucket dredge
- MCA A, C, and D1 require 2,341,000



Borrow Area Review: Grand Liard



Clay with silt and less than 5% sand

GL East

- 4.2M CY
- Previously dredged
- Very loose, uncompacted sediment that may not be worth dredging
- Prefer to avoid dredging this borrow area



Borrow Area Review: B2



B2 North

- 8.5M CY
- 92% Sand

B2 South

- 7.5M CY
- 85% to 55% Sand
- Siltier going south



Borrow Area Review: DDDD (Venice Anchorage)



- ~21M CY
- 87% Sand



Borrow Area Review: BBBB (Pilottown Anchorage)



- 82M CY
- 87% Sand



Preliminary Bid Quantities

DESCRIPTION:	☐ Base Bid or ☐	Alt.# HYDRAULIC D	REDGE MOBILIZATION AND DEMOBILIZATIO	ON .		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
1	1	LUMP SUM				
DESCRIPTION:	I: Base Bid or Alt.# DREDGE PIPELINE MOBILIZATION, INSTALLATION, AND DEMOBILIZATION					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
2	1	LUMP SUM				
DESCRIPTION:	☐ Base Bid or ☐	Alt.# GENERAL MO	BILIZATION AND DEMOBILIZATION			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
3	1	LUMP SUM				
DESCRIPTION:	☐ Base Bid or ☐	Alt.# SURVEYS				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
4	1	LUMP SUM				
,						
DESCRIPTION:	☐ Base Bid or ☐					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
5	1	LUMP SUM				
DESCRIPTION:	☐ Base Bid or ☐	Alt.# PLACEMENT (OF MARSH AND RIDGE FILL (FROM MISSISSIPE	PI RIVER) – MCA A		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
6	457,000	CUBIC YARD				
0 137,000						
DESCRIPTION:	IPTION: Base Bid or Alt.# PLACEMENT OF MARSH AND RIDGE FILL (FROM MISSISSIPPI RIVER) – MCA B					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
7	959,000	EACH				
DESCRIPTION:	RIPTION: Base Bid or Alt.# PLACEMENT OF MARSH AND RIDGE FILL (FROM MISSISSIPPI RIVER) – MCA C					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
8	49,000	CUBIC YARD				
	•			er hTHTGer.		

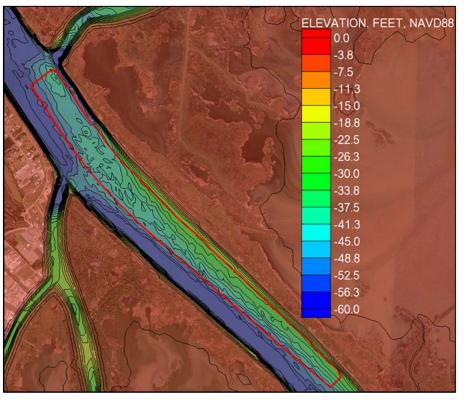


Preliminary Bid Quantities

DESCRIPTION:	DESCRIPTION: Base Bid or Alt.# PLACEMENT OF MARSH AND RIDGE FILL (FROM MISSISSIPPI RIVER) – MCA D1						
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
9	141,000	CUBIC YARD					
DESCRIPTION:	☐ Base Bid or ☐ Al	t.# PLACEMENT OF	F MARSH AND RIDGE FILL (FROM MISSISSIPF	PI RIVER) – MCA D2			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
10	1,582,000	CUBIC YARD					
DESCRIPTION:	☐ Base Bid or ☐ Al	t.# PLACEMENT OF	F MARSH AND RIDGE FILL (FROM MISSISSIPF	PI RIVER) – MCA E			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
11	76,000	LUMP SUM					
DESCRIPTION:	☐ Base Bid or ☐ Al		F MARSH AND RIDGE FILL (FROM MISSISSIPF				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
12	1,069,000	CUBIC YARD					
DEG CD IDET COL	l _ p _ p:			N. D. W. D. W. C.			
DESCRIPTION:	☐ Base Bid or ☐ Al		F MARSH AND RIDGE FILL (FROM MISSISSIPE	,			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
13	5,950,000	LUMP SUM					
DESCRIPTION:	☐ Base Bid or ☐ Al	+ # DAIL V DIDD OD	SERVATION AND ABATEMENT				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
	400		UNIT FRICE	UNIT FRICE EXTENSION (Quantity times Unit Price)			
14 400 DAY							
DESCRIPTION:	PTION: Base Bid or Alt.# ADDITION FOR MARSH AND RIDGE FILL PLACEMENT - MCA H1						
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
15	363,000	CUBIC YARD		(2			
DESCRIPTION:	☐ Base Bid or ☐ Alt.# ADDITION FOR MARSH AND RIDGE FILL PLACEMENT - MCA H2						
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
16	305,000	CUBIC YARD		AMEG			

Preliminary Bid Quantities

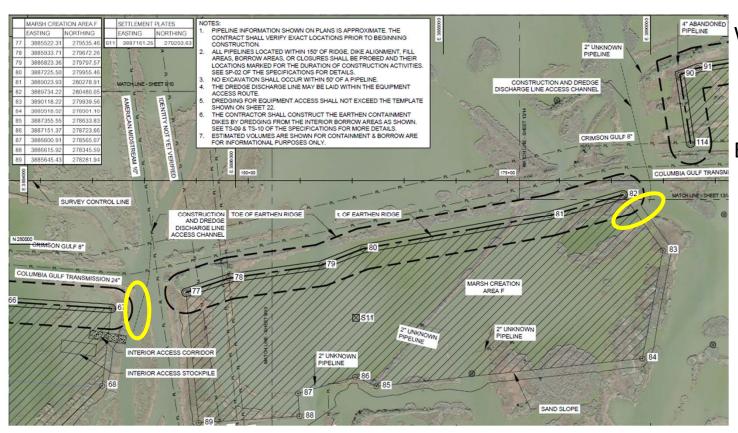
DESCRIPTION:	☐ Base Bid or ☐ Al	t.# ADDITION FOR M	AARSH AND RIDGE FILL PLACEMENT - MCA H3	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
17	325,260	CUBIC YARD		
DESCRIPTION:	☐ Base Bid or ☐ Al	t.# Not Applicable		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
DESCRIPTION:	\square Base Bid or \square Al	t.# Not Applicable		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
DESCRIPTION:	\square Base Bid or \square Al			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
DESCRIPTION:	☐ Base Bid or ☐ Al			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
DESCRIPTION:	☐ Base Bid or ☐ Al	t.# Not Applicable		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
DESCRIPTION:	☐ Base Bid or ☐ Al			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
DESCRIPTION:	☐ Base Bid or ☐ Al	^^		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable



- 1. We are anticipating permitting a crossing at the entrance of Grand Pass.
- 2. We anticipate two options:
 - Close river, float pipe over and sink
 - Pull pipe across river
- 3. Are there any concerns with this location?
- 4. We have estimated 1 month to pull pipe across the river. Is this realistic?



5. Are the proposed booster pump locations adequate to meet industry needs?

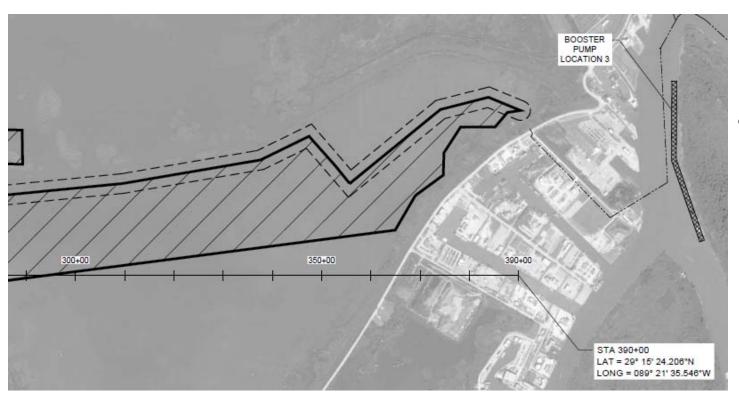


Western location
Depth ~6'
Distance ~5.8 miles

Eastern Location
Depth ~10'
Distance ~4.8 miles



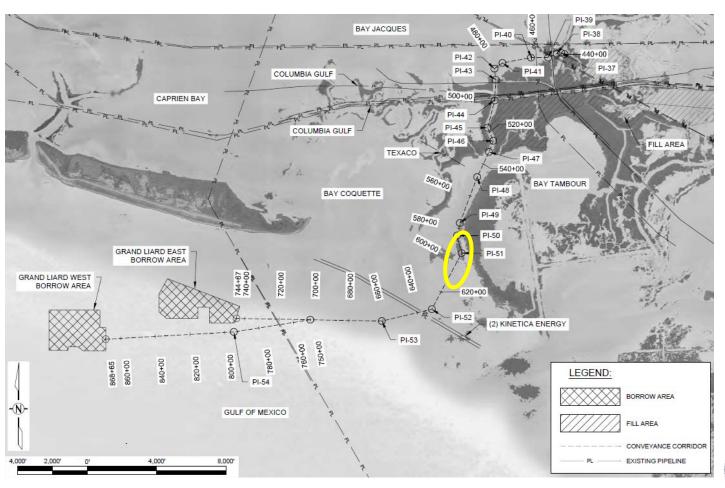
6. Are the proposed booster pump locations adequate to meet industry needs?



Plan to permit long swath along Grand Pass



7. Are the proposed booster pump locations adequate to meet industry needs?



location ~ PI-51



8. Do you foresee any difficulty constructing the MCA's without a containment dike using the Mississippi River sediment, which has a median grain size of approximately 0.17mm and contains between 6% and 18% silt in DDDD and BBBB (average of 13% each)?

We anticipate:

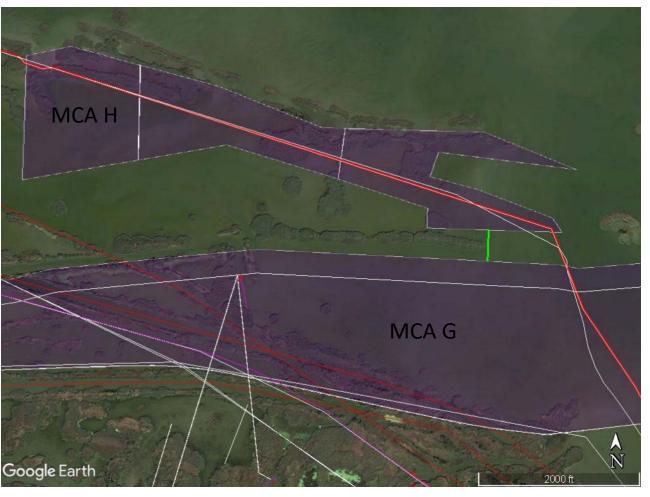
Unconfined disposal similar to:

- Chaland Headland (85% sand)
- Shell Island West (94% Sand)
- Chenier Ronquille (79% Sand)

Semi-submerged dike features ahead of the main fill to protect pipelines and/or prevent mudwaves



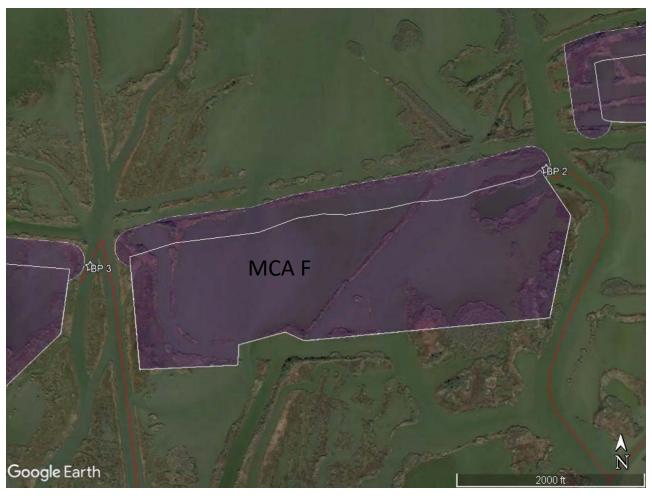
9. MCA H is separated from G by historic Spanish Pass. Would a 15' wide temporary sand bridge be adequate to access this area?



Depth is approximately -2.0'



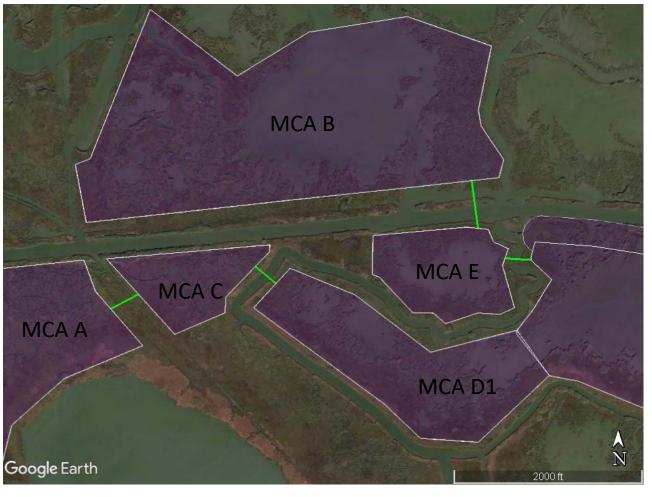
10. As MCA F is surrounded by relatively deep bayous. Is 8 to 12' of water depth adequate to load & transport equipment?



Pipeline will need to be floated over western bayou



11. B, E, and C are separated by Bayou Tambour. Would a 15' wide temporary sand bridge be adequate to access this area?



- Need bulldozers? Access?
- Marsh buggy for this area?
- Cross between
 MCA C to A with
 no fill, use mats.



- 12. We have estimated 40K cy/day.
 - Would this be realistic?
 - MCA G accounts ½ project volume with a center ~3.5 miles from DDDD.
- 13. Below is our anticipated contract time, totaling 550 days:
 - 60 days mob
 - 280 days of dredging
 - 60 days downtime
 - 60 days demob
 - 90 days float



14. Given that MCA B and E must be constructed from riverine borrow (due to geotechnical constraints), is the use of Grand Liard a valid option?

This would avoid:

- A 2nd mobilization;
- Installation of separate pipe;
- Containment dikes (24,550 LF) & need for bucket dredge;
- Spot dredging within dredge pipe corridor;
- Pumping extra volume (1.716M CY) for higher target elevation
- Allowing time for dewatering for acceptance.



15. Do you see any other project specific construction constraints, limitations, or difficulties?



Important Dates

- Early December: Submit Permit Modification
- Late December: Submit 95% Plans, Specifications
- Late January: Signed, sealed plans & specs late January
- February/March: Advertisement



Questions?

Please submit all questions via email to cpra.bidding@la.gov answers will be posted online.



Contact Info:

CPRA – Project Support PO Box 44027 Baton Rouge, La 70804-4027 cpra.bidding@la.gov

