



ATTENDANCE RECORD



DATE(S)	SPONSORING ORGANIZATION	LOCATION
February 6, 2020 10:00 A.M.	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	USFWS Southeast La. Refuges Complex (Big Branch) 61389 Highway 434, Lacombe, LA
PURPOSE MEETING OF THE REGIONAL PLANNING TEAM REGION I & II		
PARTICIPANT REGISTER		
NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER
Eric Wolverton	Coastal Zone Mgr	225-562-2370
Louise Indryk	JESCO (minute-taker)	337-802-7508
Brad Crawford	EPA	214 665 7255
PATRICIA A TAYLOR	EPA	214 665 6403
Blaise Pezard	Meroux Foundation	504-264-8125
BARRY HERBERT	LDWF	225 765 0233
Kevin Roy	USFWS	337-291-3120
Robert Dubois	USFWS	337-291-3127
Kristen Ramsey	CPRA	
Jason Kroll	NOAA	225 757 5411
Gary Shaffer	Southwest Team	885 549 2865
Ally James	USDA NRCS	
Quin Kinler	NRCS	225-271-2403
Crake Bufkin	NRCS	
Roy Richek	GUEST	985 875 1934
Angela Trahan	NRCS	337 291 3142
Eric Whitney	NRCS	337-291-3069
Jagke Jones	NRCS	337-291-3055
Ra Bourstaux	NRCS	337 291-3067
Dale Garber	ECM, Inc	337-581-9078
JACQUES BOURBAUX	ENGINEER, CPRA	(225) 603-9733
Craig Cothreux	NOAA	225 380, 0078



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PURPOSE **MEETING OF THE REGIONAL PLANNING TEAM REGION I & II**

PARTICIPANT REGISTER

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER
January Murray	NOAA	225-380-0089
Charles Bassen	LSU	225-578-6375
Patrick Williams	NOAA	225-380-0058
Dawn Davis	NOAA	225 380 0041
Jason Smith	Jefferson Parish	(504) 731-4625
Brendal Howard	NOAA	225-380-0050
Kacie Wright	CWPPRA Outreach	337-266-8626
Ross Limer	St Tammany Planning & Development	
Michael Beatty	Machine GARDENS LLC	504 430 8900
DEVIN FOIL	St. John Parish	(985) 651 5565
Amanda Phillips	Sec. Treas. Edward Wisner Denation	504.214.1152
Jennifer Smith	NOAA	225-954-6665
JOHN PETITBOIS	USACE	504-862-2732
Jay Watson	ST. Tammany Parish Govt	985.898-2552

Coastal Wetlands Planning Protection & Restoration Act

30th Priority Project List



Region 1 Regional Planning Team Meeting

February 6, 2020
Lacombe, LA

CWPPRA

1. Welcome and Introductions



- RPT Region 1 Leader: Wes Leblanc, CPRA

Announcements

- Copies of the PPL 30 Selection Process & Schedule available at the sign-in table.
- PPL 30 RPT meetings to accept project nominees:
 - Region IV, Port of Lake Charles, Feb. 4, 2019, 10:00 am
 - Region III, Port of Morgan City - Office, Feb. 5, 2019, 9:30 am
 - Region II, USFWS SE LA Refuges Complex (Big Branch), Feb. 6, 2019, 10:00 am
 - **Region I, USFWS SE LA Refuges Complex, Feb. 6, 2019, immediately following Region II**
- For parishes that do not have a voting registration form filled out already - Parish representatives must identify themselves during the RPT meetings and **fill out a voting registration form**, including contact information for the primary and secondary voting representatives that will cast votes during the Coastwide Electronic Vote.



Region 1 Parishes

- Eligible parishes for Pontchartrain Basin in Region 1 include:
 - **Plaquemines Parish**
 - **Jefferson Parish**
 - **Orleans Parish**
 - **St. Bernard Parish**
 - **Ascension Parish**
 - **Livingston Parish**
 - **St. James Parish**
 - **St. Charles Parish**
 - **St. John the Baptist Parish**
 - **St. Tammany Parish**
 - **Tangipahoa Parish**



RPT Meetings

- Project proposals should be consistent with the 2017 State Master Plan.
- A project can only be nominated in one basin except for coastwide projects
- Proposals that cross multiple basins, excluding coastwide projects, shall be nominated in one basin only, based on the majority area of project influence.
- If similar projects are proposed within the same area:
 - RPT representatives (CWPPRA agencies and only the parishes located within the project's basin) will determine if those projects are sufficiently different
 - If sufficiently different:
 - Each project will move forward
 - If not sufficiently different:
 - Projects will be combined
 - Federal sponsor will be determined prior to coastwide vote (February 20th).
 - *This decision will be made at the meeting where the projects are proposed*



RPT Meetings

- Presenters without factsheets **MUST** complete a PPL 30 Nomination Sign-Up Sheet for each project nominee (demo projects too).
- Presenters with factsheets, please give a factsheet each to Alice, Michelle & Lonnie before your presentation.
- Limit project proposals to 5 minutes and Powerpoint presentations to 5 slides.
- Public comments on project proposals will be accepted orally during the RPT meetings and in writing by **February 13, 2019**.
- Limit comments/questions during meeting to PPL 30 subject proposals and processes.



Coastwide Projects

- Proposes a technique applicable across the coast (e.g. vegetative planting)
- Nominated at any RPT meeting
- Engineering/Environmental Workgroups will validate that coastwide projects fit CWPPRA Standard Operating Procedures criteria
- All coastal parishes & agencies will vote on selection of coastwide nominee
- Only one coastwide nominee may be selected from the coastwide nominee pool during the Electronic Coastwide Vote on **February 20, 2019**.
- The Technical Committee may or may not select a coastwide project in April 2020.



Demonstration Projects

- Demonstrates a technology which can be transferred to other areas in coastal Louisiana
- Engineering/Environmental Workgroups will validate that demos fit CWPPRA Standard Operating Procedures criteria
- The RPTs select up to 6 demos during the **February 20th** Coastwide Electronic Vote.
- The Technical Committee selects up to 3 demos in April 2020.
- Workgroups may recommend that no demos move forward to candidate stage
- Previous demo candidates must be **re-nominated** for PPL 30.



Coastwide Electronic Vote (**Feb. 20th**) to select:

Projects per Basin

(Determined by loss rates, the highest loss rates have the most projects)

4 Barataria
4 Terrebonne
3 Breton Sound
3 Pontchartrain
2 Mermentau
2 Calcasieu/Sabine
2 Teche/Vermilion
1 Atchafalaya
1 Coastwide
22 Total

& up to 6 demos

CWPPRA

Coastwide Electronic Vote

- Each officially designated parish representative, each Federal agency, and the State (CPRA) will have one vote.
- No additional projects can be nominated after the RPTs.
- No significant changes to projects proposed at the first round of RPT meetings will be allowed (this includes combining projects).
- Public comments will be heard today and written comments must be submitted by **February 13, 2020**.



Coastwide Electronic Voting Process

- USACE will send out voting sheets as both Excel spreadsheet and PDF documents 1 week prior to the Coastwide Electronic Vote. Voters will only receive voting sheets for the basins that they are eligible to vote for & the column that they need to mark their vote will be highlighted. Voting instructions will be provided with the voting sheets.
- Voters must email their voting sheets to kaitlyn.m.carriere@usace.army.mil

All votes must be received by 10:30 am on February 20, 2020.



Nominee Project Evaluations

- Following the Coastwide Electronic Vote, an agency will be assigned to each project to prepare a Nominee Project factsheet (1 page + map).
- CWPPRA Engineering & Environmental Workgroups review draft features and assign preliminary cost and benefit ranges.
- Work groups will also review demo & coastwide projects and verify that they meet PPL 30 criteria.



PPL 30 Candidate Project Evaluation

Candidates evaluated between May and October

- Workgroups conduct site visits and meetings to identify needs and establish project baselines and boundaries.
- Workgroups determine benefits, project features, and cost estimates



PPL 30 Timeline

- **Coastwide Electronic Vote, Feb. 20, 2020**
 - 21 basin-project nominees, 1 coastwide nominee, and 6 demos selected
- **Technical Committee Mtg, Apr. 2020, New Orleans**
 - Selection of 10 candidates and up to 3 demos
- **Technical Committee Mtg, Dec. 2020, New Orleans**
 - Typically recommend up to 4 projects for Phase 1 funding
- **Task Force Mtg, Jan. 2021, New Orleans**
 - Final Selection of projects for Phase 1 funding



Written Comments

- Send written comments on projects & demos proposed today to the CWPPRA program manager
- **Deadline: February 13, 2020**

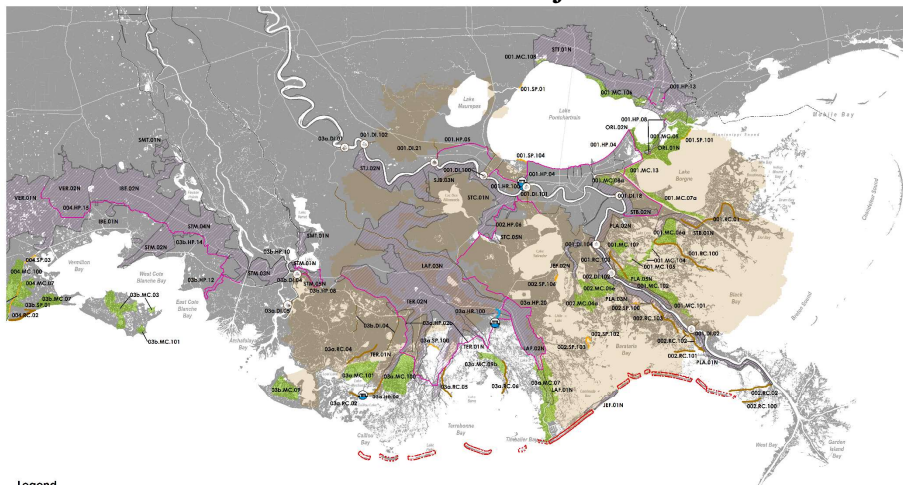
Brad Inman
Projects and Restoration Branch Chief
U.S. Army Corps of Engineers
7400 Leake Avenue
New Orleans, Louisiana 70118

Email: Brad.L.Inman@usace.army.mil

(this information is on the back of the agenda)



Draft 2017 State Master Plan Southeast Coast Projects



Southeast Coast Projects				
Project Type	Project No.	Project Description	Implementation Period	Project Cost
Hydrologic Restoration	001.HR.100	LaBranche Hydrologic Restoration: Construction of a 750 cfs hybrid pump-siphon structure, intake structure, and an approximately 1-mile long conveyance system to LaBranche wetlands via the Mississippi River to reduce the historical fresh to intermediate marshes. Features also include a conveyance channel, roadway, and railroad crossing.	Years 1-10	\$80,900,000
	001.MC.05	New Orleans East Landbridge Restoration: Creation of approximately 11,600 acres of marsh in New Orleans East Landbridge to create new wetland habitat and restore degraded marsh.	Years 1-10	\$396,500,000
Marsh Creation	001.MC.13	Golden Triangle Marsh Creation: Creation of approximately 3,900 acres of marsh in Golden Triangle Marsh between the MRGO and GWW to create new wetland habitat and restore degraded marsh.	Years 1-10	\$273,700,000
	001.MC.108	Cute Island Marsh Creation: Creation of approximately 700 acres of marsh in St. Tammany Parish along the northwest Lake Ponchartraine shoreline to create new wetland habitat and restore degraded marsh.	Years 1-10	\$64,400,000
	001.RC.100	Bayou Terre aux Boeufs Ridge Restoration: Restoration of approximately 21,200 feet of historic ridge to an elevation of 5 feet NAVD83 to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation along Bayou Terre aux Boeufs.	Years 1-10	\$15,200,000
Ridge Restoration	001.RC.103	Carlsde Ridge Restoration: Restoration of approximately 38,200 feet of historic ridge to an elevation of 5 feet NAVD83 to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation near Carlsde.	Years 1-10	\$9,300,000
	002.RC.101	Adams Bay Ridge Restoration: Restoration of approximately 31,000 feet of historic ridge to an elevation of 5 feet NAVD83 to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation along Adams Bay.	Years 1-10	\$7,200,000
	002.RC.102	Bayou Eau Noire Ridge Restoration: Restoration of approximately 34,600 feet of historic ridge to an elevation of 5 feet NAVD83 to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation along Bayou Eau Noire.	Years 1-10	\$9,800,000
	002.RC.103	Grand Bayou Ridge Restoration: Restoration of approximately 48,500 feet of historic ridge to an elevation of 5 feet NAVD83 to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation along Grand Bayou.	Years 1-10	\$10,300,000
	001.DI.02	Lower Breton Diversion: Sediment diversion of 60,000 cfs into Lower Breton Sound to build and maintain land (modeled at \$10,000/cfs for river flow and 1,000,000 cfs variable flows above 200,000 cfs calculated using a linear function for river flow above 200,000 cfs, estimated using linear extrapolation for river flow below 200,000 cfs. No operation below 200,000 cfs).	Years 1-10	\$383,200,000
Sediment Diversion	001.DI.18	Central Wetlands Diversion: Diversion into Central Wetlands near Violet to provide sediment for emergent marsh creation and freshwater to sustain existing wetlands. 5,000 cfs capacity (modeled at a constant flow of 5,000 cfs, independent of the Mississippi River flow).	Years 1-10	\$231,000,000
	001.DI.21	East Maumee Diversion: Diversion into East Maumee near Anglin to provide sediment for emergent marsh creation and freshwater to sustain existing wetlands. 2,000 cfs capacity (modeled at a constant flow of 2,000 cfs, independent of the Mississippi River flow).	Years 1-10	\$184,900,000

Project Type	Project No.	Project Description	Implementation Period	Project Cost
Sediment Diversion (continued)	001.DI.100	Manche Landbridge Diversion: A structure in the existing western spillway guide levee to divert 2,000 cfs thereby increasing freshwater exchange with adjacent wetlands.	Years 1-10	\$148,200,000
	001.DI.102	Union Freshwater Diversion: Diversion into West Maumee swamp near Burnside to provide sediment for emergent marsh creation and freshwater and fine sediment to sustain existing wetlands. 25,000 cfs capacity (modeled at 25,000 cfs when Mississippi River flow equals 400,000 cfs; closed when river flow is below 200,000 cfs or above 400,000 cfs; a variable flow rate calculated using a linear function from 0 to 25,000 cfs for river flow between 200,000 cfs and 400,000 cfs and held constant at 25,000 cfs for river flow between 400,000 cfs and 650,000 cfs).	Years 1-10	\$876,700,000
	001.DI.104	Mid-Breton Sound Diversion: Sediment diversion into Mid-Breton Sound in the vicinity of White's Ditch to build and maintain land. 35,000 cfs capacity (modeled at 35,000 cfs when the Mississippi River flow equals 1,000,000 cfs; flow rate calculated using a linear function for river flow from 200,000 cfs to 1,000,000 cfs; flows variable above 1,000,000 cfs. 5,000 cfs minimum flow maintained when Mississippi River flow is below 200,000 cfs).	Years 1-10	\$479,100,000
	002.DI.102	Mid-Barataria Diversion: Sediment diversion into Mid-Barataria near Myrtle Grove to build and maintain land. 75,000 cfs capacity (modeled at 5,000 cfs for Mississippi River flow below 200,000 cfs; variable flows to capacity between 200,000 and 1,250,000 cfs calculated using a linear function; flows exactly 75,000 cfs when flows are at 1,250,000 cfs).	Years 1-10	\$998,800,000
	001.SP.01	Manche Landbridge Shoreline Protection: Shoreline protection through rock breakwaters designed to an elevation of 1.5 feet NAVD83 along approximately 5,500 feet of the west side of Lake Ponchartraine north of Pass Manchac near Sinking Bayou to preserve shoreline integrity and reduce wetland degradation from wave erosion.	Years 1-10	\$17,600,000
	001.SP.010	Unknown Pass to Rigoles Shoreline Protection: Shoreline protection through rock breakwaters designed to an elevation of 2,000 feet of the west side of the New Orleans Landbridge from Unknown Pass to the Rigoles to preserve shoreline integrity and reduce wetland degradation from wave erosion.	Years 1-10	\$5,200,000
	001.SP.010	LaBranche Wetlands Shoreline Protection: Shoreline protection through rock breakwaters designed to an elevation of 3.5 feet NAVD83 along approximately 11,100 feet of the southern shore of Lake Ponchartraine near the LaBranche wetlands to preserve shoreline integrity and reduce wetland degradation from wave erosion.	Years 1-10	\$23,100,000
	002.SP.100	Lake Hermitage Shoreline Protection: Shoreline protection through rock breakwaters designed to an elevation of 3.5 feet NAVD83 along approximately 1,500 feet along the southern shore of Lake Hermitage to preserve shoreline integrity and reduce wetland degradation from wave erosion.	Years 1-10	\$14,500,000
	002.SP.102	East Snail Bay Shoreline Protection: Shoreline protection through rock breakwaters designed to an elevation of 2.5 feet NAVD83 along approximately 7,300 feet of the northeastern shore of Snail Bay south of Little Lake to preserve shoreline integrity and reduce wetland degradation from wave erosion.	Years 1-10	\$15,400,000

Southeast Coast Projects - continued					
Project Type	Project No.	Project Description	Implementation Period	Project Cost	
Shoreline Protection (continued)	002.SP.106	Bayou Perot Shoreline Protection: Shoreline protection through rock breakwaters designed to an elevation of 3.5 feet NAVD83 along approximately 5,900 feet of the western shore of Bayou Perot to preserve shoreline integrity and reduce wetland degradation from wave erosion.	Years 1-10	\$13,400,000	
	JEF.01N	Jefferson - Grand Lake Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$98,200,000	
Nonstructural Risk Reduction	JEF.02N	Jefferson - Little to Barataria Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$200,800,000	
	LAF.01N	LaFourche - Lower Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$1,700,000	
	LAF.02N	LaFourche - Larose/Golden Meadow Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$32,600,000	
	LAF.03N	LaFourche - Raceland Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$163,500,000	
	ORL.01N	Orleans - Rigoles Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$18,000,000	
	ORL.02N	Orleans - Lake Catherine Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$135,600,000	
	FLA.01N	Plaquemines - West Bank Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$264,700,000	
	FLA.02N	Plaquemines - Brashear Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$54,200,000	
	Structural Protection	001.HP.05	West Shore Lake Ponchartraine: Construction of a levee to an elevation between 16 and 17 feet NAVD83 in the feet of earthen levee, approximately 5,000 feet of (1) 16-foot culvert gate, (2) 25-foot roller gate, and (3) 25-foot wing gate, and (4) pump station with a total capacity of 250 cfs.	Years 1-30	\$730,400,000
		001.HP.08	Lake Ponchartraine Barrier: Construction of closure gates and levees to an elevation of 2 feet NAVD83 across the passes at Chef Menteur and the Rigoles for storm surge risk reduction.	Years 1-30	\$2,090,000,000
		001.HP.13	Global River Levee: Construction of a levee to an elevation of 16 feet NAVD83 for storm surge risk reduction around Slidell. Project features approximately 31,000 feet of earthen levee and 14,500 feet of T-wall.	Years 1-30	\$181,300,000
		FLA.03N	Plaquemines - Grand Bayou Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$3,000,000
FLA.04N		Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$38,300,000	
STB.01N		St. Bernard - Tuckers Bayou Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$70,400,000	
STB.02N		St. Bernard Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$2,400,000	
STC.03N		St. Charles - Saline Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$2,300,000	
SUB.03N		St. John the Baptist - Edgard Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$7,800,000	
STT.01N		St. Tammany Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1.3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 1-30	\$1,611,200,000	

Southeast Coast Projects – continued									
Project Type	Project No.	Project Description	Implementation Period	Project Costs	Project Type	Project No.	Project Description	Implementation Period	Project Costs
Structural Protection (continued)	002.HP.06	Upper Barataria Risk Reduction: Construction of a levee at an elevation between 12.5 and 15 feet NAVD83 along Highway 90 between the West Bank and Larose. Project includes 204,300 feet of earthen levees, 8,200 feet of T-wall, (6) 10-foot sluice gates, (1) 250-foot surge gate, (2) 42-foot surge gates, and (8) pump stations with a total capacity of 6,872 cfs.	Years 1-30	\$940,900,000	Ridge Restoration (continued)	002.RC.100	Red Pass Ridge Restoration: Restoration of approximately 22,000 feet of historic ridge southwest of Venice to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation along the banks of Red Pass.	Years 11-30	\$3,500,000
	03a.HP.20	Larose to Golden Meadow: Improvements to the existing Larose to Golden Meadow levee system, including raising to an elevation between 12 and 21 feet NAVD83. Project features approximately 399,500 feet of earthen levees and approximately 6,700 feet of T-wall.	Years 1-30	\$355,500,000	Sediment Diversion	001.DI.101	Anna Diversion: Sediment diversion into Upper Barataria near Anna to provide sediment for emergent marsh creation and freshwater to sustain existing wetlands. 50,000 cfs capacity (modeled as 50,000 cfs when the Mississippi River flow equals 1,000,000 cfs; open with a variable flow rate calculated using a linear function from 0 to 50,000 cfs for river flow between 200,000 cfs and 1,000,000 cfs; shuts exactly 50,000 cfs when the Mississippi River flow is 1,000,000 cfs; and open with a variable flow rate (higher than 50,000 cfs) estimated using linear extrapolation for river flow above 1,000,000 cfs. No operation below 200,000 cfs.	Years 11-30	\$882,400,000
Marsh Creation	001.MC.05	New Orleans East Landbridge Restoration: Creation of approximately 23,800 acres of marsh in the Breton Marsh east of Delcambre Island to create new wetland habitat and restore degraded marsh.	Years 11-30	\$1,104,700,000	Shoreline Protection	002.SP.103	West Snail Bay Shoreline Protection: Shoreline protection through rock breakwaters designed to an elevation of 3.5 feet NAVD83 along approximately 16,000 feet of the western shoreline of Snail Bay south of Little Lake to preserve shoreline integrity and reduce wetland degradation from wave erosion.	Years 11-30	\$31,000,000
	001.MC.06a	Breton Marsh Creation - Component A: Creation of approximately 12,000 acres of marsh in the Breton Marsh east of Delcambre Island to create new wetland habitat and restore degraded marsh.	Years 11-30	\$982,400,000	Nonstructural Risk Reduction	STC.01N	St. Charles - Hibernia/Luling Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1-3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.	Years 31-50	\$829,500,000
	001.MC.07a	Lake Borgne Marsh Creation - Component A: Creation of approximately 5,900 acres of marsh along the south shoreline of Lake Borgne near Proctors Point to create new wetland habitat and restore degraded marsh.	Years 11-30	\$271,700,000		STJ.02N	St. James - Veterans Nonstructural Risk Reduction: Project includes floodproofing non-residential properties where 100-year flood depths are 1-2 feet, elevating residential properties where 100-year flood depths are 2-18 feet, and acquiring residential properties where 100-year flood depths are greater than 18 feet.	Years 31-50	\$3,900,000
	001.MC.08a	Central Wetlands Marsh Creation - Component A: Creation of approximately 2,800 acres of marsh in Central Wetlands near Bravo Bismarck to create new wetland habitat and restore degraded marsh.	Years 11-30	\$122,300,000	Structural Protection	001.HP.04	Greater New Orleans High Level: Improvements of existing Hurricane and Storm Damage Risk Reduction System levees surrounding the East Bank of Greater New Orleans to elevations between 15 and 35 feet NAVD83. Project features approximately 202,000 feet of earthen levees and approximately 242,100 feet of T-wall.	Years 31-50	\$2,222,700,000
	001.MC.102	Poivre à la Hache Marsh Creation: Creation of approximately 13,700 acres of marsh on the west bank of Plaquemines Parish near Poivre à la Hache to create new wetland habitat and restore degraded marsh.	Years 11-30	\$640,800,000		Marsh Creation	001.MC.101	Uhan Bay Marsh Creation: Creation of approximately 700 acres of marsh on the east bank of Plaquemines Parish around Uhan Bay to create new wetland habitat and restore degraded marsh.	Years 31-50
	001.MC.104	East Bank Land Bridge Marsh Creation: Creation of approximately 2,300 acres of marsh in Plaquemines Parish between Grand Lake and Lake Lary to create new wetland habitat and restore degraded marsh.	Years 11-30	\$154,200,000	001.MC.102		Poivre à la Hache Marsh Creation: Creation of approximately 5,400 acres of marsh on the east bank of Plaquemines Parish near Poivre à la Hache to create new wetland habitat and restore degraded marsh.	Years 31-50	\$353,700,000
	001.MC.105	Spanish Lake Marsh Creation: Creation of approximately 800 acres of marsh in Plaquemines Parish along the eastern shore of Spanish Lake to create new wetland habitat and restore degraded marsh.	Years 11-30	\$59,900,000	002.MC.04a	Lower Barataria Marsh Creation - Component A: Creation of approximately 7400 acres of marsh in Jefferson Parish on the east shore of Little Lake and Turle Bay to create new wetland habitat and restore degraded marsh.	Years 31-50	\$709,500,000	
	001.MC.106	St. Tammany Marsh Creation: Creation of approximately 6,700 acres of marsh in St. Tammany Parish along the northern shore of Lake Pontchartrain to create new wetland habitat and restore degraded marsh.	Years 11-30	\$795,300,000					
	001.MC.107	Tiger Ridge/Maple Knoll Marsh Creation: Creation of approximately 4,700 acres of marsh in Plaquemines Parish near Tiger Ridge to create new wetland habitat and restore degraded marsh.	Years 11-30	\$214,600,000					
	002.MC.05a	Large Scale Barataria Marsh Creation - Component E: Creation of approximately 12,900 acres of marsh in the Barataria Basin south of the Pen to the Barataria Landbridge to create new wetland habitat and restore degraded marsh.	Years 11-30	\$674,500,000					
Ridge Restoration	001.RC.01	Bayou LaLoutre Ridge Restoration: Restoration of approximately 108,500 feet of historic ridge to an elevation of 5 feet NAVD83 to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation along Bayou LaLoutre.	Years 11-30	\$20,200,000					
	002.RC.02	Spanish Pass Ridge Restoration: Restoration of approximately 46,300 feet of historic ridge to an elevation of 5 feet NAVD83 to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation west of Venice along the banks of Spanish Pass.	Years 11-30	\$11,600,000					

Region 1-
Pontchartrain Basin

RI PO-01

PPL30 PROJECT FACT SHEET

February 6, 2020

Project Name

East Labranche Shoreline Protection

Master Plan Strategy

Master Plan 2017: Project No. 00 I.SP. I 04 Labranche Wetlands Shoreline Protection

Project Location

Region I, Pontchartrain Basin, St. Charles Parish

Problem: The Labranche Wetlands serve as not only a crucial coastal marsh wetland in St. Charles Parish, but also as a protective barrier from Lake Pontchartrain to crucial infrastructure in the parish including I-10, LA HWY 61, and multiple levee systems. The majority of the Labranche Wetlands has shoreline protection along the lake; however, the eastern portion near the St. Charles line remains unprotected. This shoreline has retreated 200 to 1200 lf in the last 18 years, which equates to about 140 acres of marsh.

Goal: The goal of this project is to establish a protective barrier between the current shoreline and Lake Pontchartrain by installing a foreshore rock dike. Access dredge material would be used beneficially to restore marsh that has been lost.

Proposed Solutions: The project will install 12,800 linear feet of shoreline protection using a rock riprap with a light-weight aggregate core. The access borrow material will be beneficially used to create marsh in the void between the rock protection and the shoreline.

Preliminary Project Benefits: The project will create 12,800 lf of shoreline protection reducing the current loss rate of shoreline which is anywhere from 12 ft/year to 60 ft/year resulting in approximately 140 acres of marsh protected. Use of the access dredged material will create another 24 acres of marsh for a total of 164 acres.

Preliminary Construction Costs: The estimated construction cost with contingency is \$10-15 million.

Preparer(s) of Fact Sheet:

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NE Labranche SP

Legend
12,138 ft



Google Earth





NE Labranche SP

Legend
12,138 ft

Google Earth

3000 ft

PPL-30
East Labranche
Shoreline Protection

Project Objectives:
To protect the last remaining exposed shoreline segment where the shoreline is experiencing significant erosion.

Project Features and Benefits:

- Install 12,000 ft of foreshore protection to protect 140 acres of marsh
- Create 24 acres from floatation excavation

Project Cost: \$10-15 million

RI 190-02

PPL29 PROJECT NOMINEE FACT SHEET
February 6, 2020

Project Name

Biloxi Marsh Living Shoreline – Drum Bay Increment

Project Location

Region 1, Pontchartrain Basin, St. Bernard Parish

Problem

Wetland loss in the Biloxi Marsh area of the Pontchartrain Basin is due to altered hydrology, shoreline erosion, and hurricane-induced damage. The eastern fringing islands of Biloxi Marsh protect the interior marsh from wind-driven erosion, and serve as one of the first outer lines of defense, yet these islands are disappearing at a rapid rate. The area of focus includes fringing coastal islands on the north (Turtle Pen Isle) and south (Rawhead Island) shores of Drum Bay, with an estimated (1989 to 2019 satellite imagery) 30-year average shoreline erosion land loss rate of over 16 feet/year.

Goals

The project goal is to conserve approximately 210 acres of saline tidal marsh of coastal islands around Drum Bay in the Biloxi Marsh area of Pontchartrain Basin. Additionally, this project would serve to strengthen conservation relationships by collaborating with locally-led oyster shell recycling and living shoreline construction programs.

Proposed Solution

The proposed solution would be to conserve approximately 210 acres of saline tidal marsh, by constructing approximately six miles of living shoreline oyster reefs to protect a portion of the Biloxi Marsh from shoreline erosion. Living shorelines will be constructed of gabion mats utilizing recycled oyster shells generated by efforts led by local non-governmental organizations. Specifically, this proposed project would incentivize restaurant participation in the Coalition to Restore Coastal Louisiana's (CRCL) oyster shell recycling program, thereby increasing shell recycling capacity to satisfy the shell needed to construct the living shoreline oyster reefs.

Preliminary Project Benefits

- 1) *What is the total acreage benefited both directly and indirectly?*
The total project area would conserve approximately 210 acres of saline tidal marsh through the construction of approximately six miles of living shoreline oyster reef.
- 2) *How many acres of wetlands will be protected/created over the project life?*
The net acre benefit range is 200-250 acres after 20 years.
- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
A 95% loss rate reduction is assumed for the marsh protected by the gabion oyster reefs. (based on reporting data from the TE45 demonstration project)

- 4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*

Yes, the living shoreline would serve to create fringing oyster reefs providing both ecosystem services and shoreline protection for coastal island marshes.

- 5) *What is the net impact of the project on critical and non-critical infrastructure?*

The project may have minor net positive impact to non-critical infrastructure comprised of pipelines, as well as serving as an intertidal broodstock reef for the surrounding public oyster seed grounds.

- 6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*

The project will have synergistic effects with: 1) PO-0148 Living Shoreline (western shore of Eloi Bay), 2) PO-0174 Biloxi Marsh Living Shoreline (planned project for Eloi Bay and Eloi Point), 3) Lake Eloi living shorelines (constructed by The Nature Conservancy (TNC)), 4) Lake Athanasio living shorelines (constructed by TNC, including a section using CRCL's gabion reefs), and 5) Lake Fortuna living shorelines (constructed by TNC).

Considerations

Public oyster seed grounds and private oyster leases.

Preliminary Construction Costs

The estimated construction cost including 25% contingency is \$15M-\$20M.

Preparer(s) of Fact Sheet:

Craig Gothreaux, NOAA Fisheries, 225-380-0078, craig.gothreaux@noaa.gov



PPL30 Biloxi Marsh Living Shoreline

214 Total Project Acres
 5.6 Miles (4 Acres) Living Shoreline
 210 Acres Marsh Conserved/Protected

Federal Sponsor: NOAA Fisheries
 2016 Google Earth Aerial Imagery
 Map Date 02-06-2020



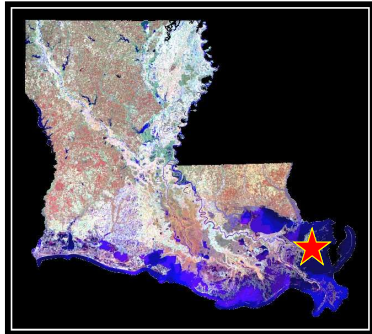
Legend

- 1989 Shoreline
- Living Shoreline Oyster Reef



Biloxi Marsh Living Shoreline Project – *Drum Bay Increment*

NOAA
FISHERIES



REGION 1 – Pontchartrain Basin

Presenter: Craig Gothreaux, Fisheries Biologist, NOAA

Special Thanks

- Coalition to Restore Coastal Louisiana
- The Nature Conservancy
- The Meraux Foundation
- Biloxi Lands

PPL30 CWPPRA Regional Planning Team Meeting
Lacombe, Louisiana
February 6, 2020

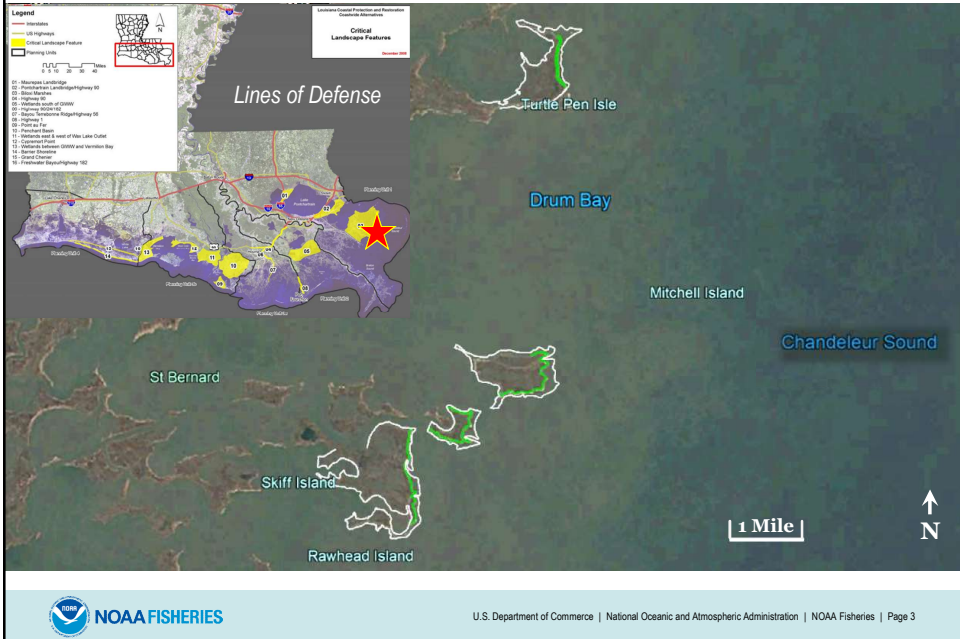
Project Vicinity

Biloxi Marsh Living Shoreline Project
Drum Bay Increment



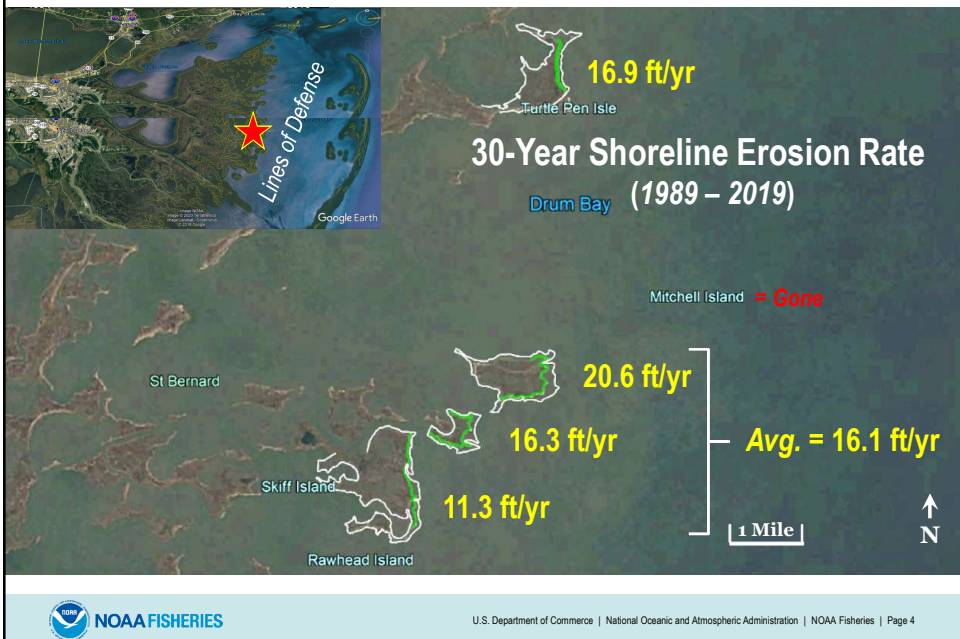
Project Area Problems

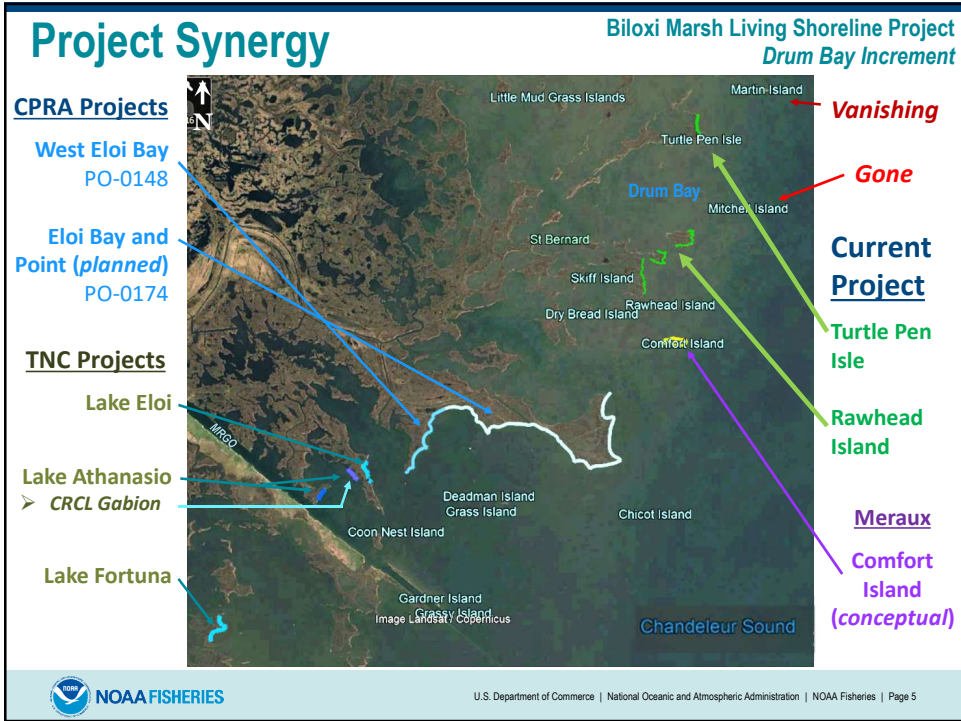
Biloxi Marsh Living Shoreline Project
Drum Bay Increment



Project Area Problems

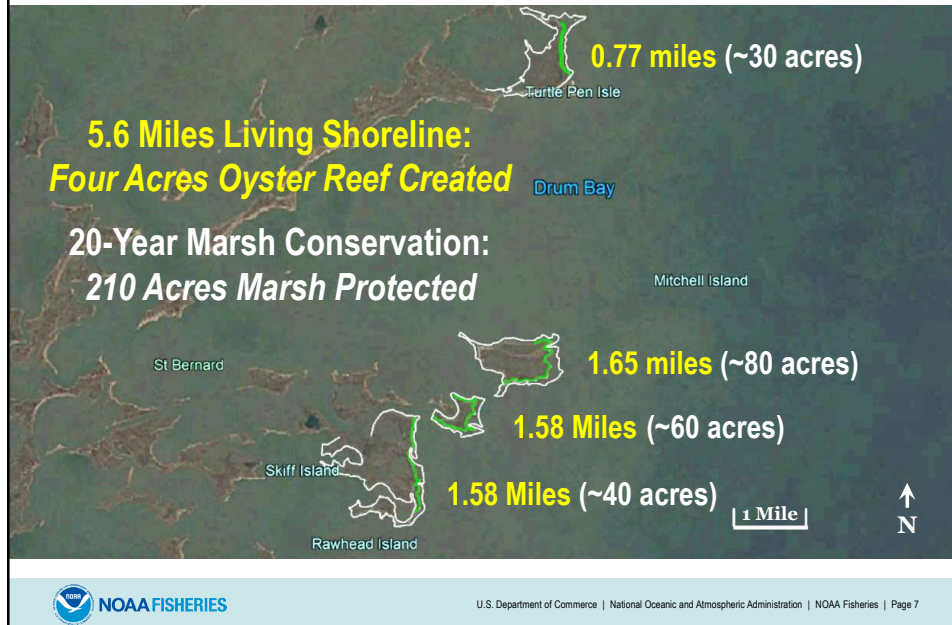
Biloxi Marsh Living Shoreline Project
Drum Bay Increment





Project Elements

Biloxi Marsh Living Shoreline Project
Drum Bay Increment



Summary

Biloxi Marsh Living Shoreline Project
Drum Bay Increment

- ❖ **214 Total Project Acres**
 - 210 Acres Marsh Conserved/Protected
 - Four Acres of Oyster Reefs Created
 - 5.6 miles of Living Shoreline Oyster Reefs
- ❖ **Construction Cost + 25% Contingency: \$15M – \$20M**
- ❖ **Net Benefits: 200 – 250 Acres**

Contact information:
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PPL30 PROJECT NOMINEE FACT SHEET
February 6, 2020

Project Name

Miller Bayou Marsh Creation

Project Location

Region 1, Pontchartrain Basin, Orleans Parish

Problem

Wetland loss in Pontchartrain Basin from erosion of wetlands, saltwater intrusion, subsidence, and river levee and oil/gas construction has caused large impacts to this region in recent decades. Lakes Pontchartrain and Borgne continue to increase in size due to Borgne Land Bridge marshes disappearing because of severe shoreline retreat and increased tidal fluctuations. High subsidence rates range from 3.4-5.5 mm/year. The 1985 to 2016 USGS land loss rate for this area is -0.30%/year from the East Orleans Landbridge subunit.

Goals

The project goal is to create and nourish approximately 493 acres of marsh along the southeastern bank of Lake Saint Catherine.

Proposed Solution

The proposed solution would be to create approximately 297 acres and nourish 196 acres to restore a portion of the Lake Saint Catherine shoreline. Sediment will be hydraulically pumped from Lake Saint Catherine. Temporary containment dikes will be constructed and gapped within three years of construction to allow greater tidal exchange and estuarine organism access.

Preliminary Project Benefits

- 1) *What is the total acreage benefited both directly and indirectly?*
The total project area is approximately 493 acres.
- 2) *How many acres of wetlands will be protected/created over the project life?*
The net acre benefit range is 250-300 acres after 20 years.
- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
A 50% loss rate reduction is assumed for the marsh creation and marsh nourishment.
(USGS data from 1985 to 2016 shows from -0.30%/year)
- 4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
The project will help restore portions of Lake Saint Catherine shoreline which is part of the Borgne Landbridge.
- 5) *What is the net impact of the project on critical and non-critical infrastructure?*

The project may have minor net positive impact to non-critical infrastructure comprised of pipelines and oil and gas wells and camps.

- 6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*

The project will have synergistic effects with: 1) PO-179 St. Catherine Island Marsh Creation and Shoreline Protection, 2) PO-169 N.O. LandBridge Shoreline Stabilization and March Creation, 3) PO-22 Bayou Chevee Shoreline Protection, and 4) PO-06 Fritchie Marsh Restoration.

Considerations

This project could have potential sturgeon considerations.

Preliminary Construction Costs

The estimated construction cost is \$15M-\$20M.

Preparer(s) of Fact Sheet:

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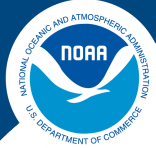
PPL30 Miller Bayou Marsh Creation

297 Acres Marsh Creation
196 Acres Marsh Nourishment

Federal Sponsor: NOAA Fisheries
2018 Aerial Imagery
Map Date 10-16-2019

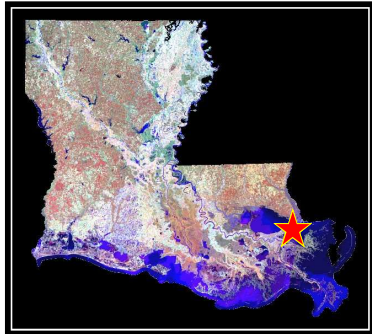
Legend

-  Marsh Creation
-  Borrow Area



NOAA
FISHERIES

PPL30 Miller Bayou Marsh Creation Project



REGION 1 – Pontchartrain Basin
Presenter: Dawn Davis, NOAA

PPL30 CWPPRA Regional Planning Team Meeting
Lacombe, Louisiana
February 6, 2020

Miller Bayou Marsh Creation Project

Project Location



Project Area Problem

- Wetland degradation
 - Sea Level Rise and Subsidence
 - Hurricane impacts
 - Shoreline retreat
 - Conversion of marsh to open water.



Project Goals

- Marsh Creation and Nourishment
 - Restore intertidal marsh habitat along the Orleans land bridge.
 - Design and construct resilient wetlands to maximize wetland benefits throughout the 20 year project life.

Restoration Solution

- 493 Acres of Marsh Creation/Nourishment
 - 297 Acres of Marsh Creation & 196 Acres of Marsh Nourishment
- Hydraulically dredge material from Lake Saint Catherine
- Contained Fill areas with dike gapping after construction
- Short pumping distance, less than 2.0 miles.

Project Map

- 2017 State Master Plan Polygon 001.MC.05
- Lake Saint Catherine Borrow Area
- 493 Acres TOTAL of Marsh Creation/Nourishment
- Approximately 297 acres Creation and 196 acres Nourishment



PPL30 Miller Bayou Marsh Creation

297 Acres Marsh Creation
196 Acres Marsh Nourishment

Federal Sponsor: NOAA Fisheries
2018 Aerial Imagery
Map Date 10-16-2019

Legend

-  Marsh Creation
-  Borrow Area

Summary of Features, Cost, and Benefits

- **493 Acres Total**
 - 297 acres Marsh Creation
 - 196 acres Nourishment
- **Construction Cost + 25% Contingency \$15M - \$20M**
- **Net Benefits: 250-300 acres**

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NOAA FISHERIES

PPL30 PROJECT FACT SHEET
February 6, 2020

Project Name

Central Wetlands Hydrological Restoration and Marsh Creation

Master Plan Strategy

Programmatic Considerations: Small-Scale Hydrologic Restoration. Hydrologic restoration, as a technique for improving marsh health, seeks to restore natural hydrologic patterns either by conveying fresh water to areas that have been isolated by man-made features, relieving unnatural impoundments, or by preventing the intrusion of salt water. The state recognizes that there are many small-scale hydrologic improvements that could benefit existing wetlands and work synergistically with existing and planned restoration projects.

001.MC.08a: Central Wetlands Marsh Creation-Component A: Creation of approximately 2,010 acres of marsh in Central Wetlands near Bayou Bienvenue to create new wetland habitat, restore degraded marsh, and reduce wave erosion.

Project Location

Region 1, Pontchartrain Basin, St. Bernard Parish

Problem

Over the past decades, the wetlands and wetland function in the area have been lost because of altered hydrology due to impoundment, subsidence, and saltwater intrusion. The area was heavily impacted by the construction of the MRGO in the 1960's. The majority of the area is shallow open water. Spoil banks associated with logging, navigation, and oil and gas canals created impoundments south of Violet Canal which restricted tidal exchange and increased saltwater intrusion caused by the MRGO. Due to the spoil banks, minimal fresh water and sediment from the Violet Canal reached the nearby wetlands. Historically, Mississippi River water and sediment moved through the Violet Canal and Bayou Dupre into the MRGO, but was not deposited in side canals and tributaries due to the spoil banks and hydrologic efficiency towards the MRGO. Much of the area is impounded and experiencing declining vegetation, soil erosion, and conversion to open water. (LPBF 2015).

Proposed Solution

Dedicated dredging of sediments from the Mississippi River (or other source) will be used to create emergent marsh adjacent to Bayou Bienvenue. The project would benefit 781 acres of wetlands by converting open water into marsh and nourishing existing marsh remnants. Restoration of the hydrology by making strategic cuts in the spoil banks would benefit the wetlands by restoring tidal exchange, increasing soil strength, and counteracting storm surge. Additionally, vegetation would benefit from periods of drying to allow the vegetation time to recover from waterlogged conditions.

Project Benefits

Hydrologically restore approximately 15,898 acres of marsh by creating gaps in nearby canal spoil banks and create/nourish approximately 513 acres of marsh

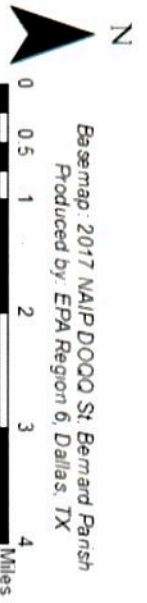
Project Costs

The estimated construction cost including 25% contingency is \$35-40M.

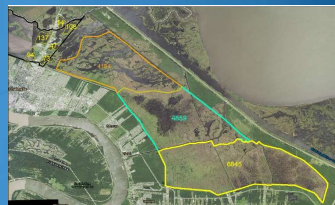
Preparer(s) of Fact Sheet:

Sharon L. Osowski, Ph.D.; EPA; (214) 665-7506; osowski.sharon@epa.gov

Brad Crawford, P. E., EPA; (214) 665-7255; crawford.brad@epa.gov



Central Wetlands Hydrological Restoration & Marsh Creation

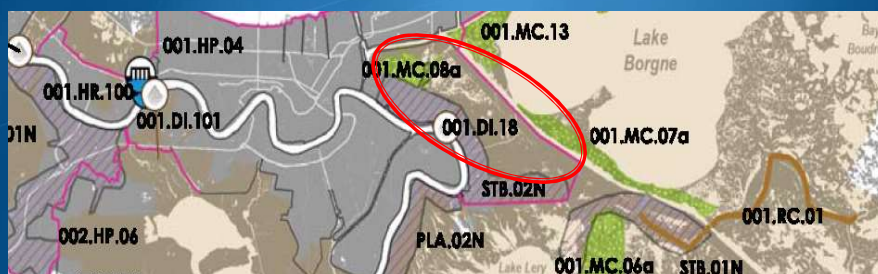


Coastal Wetlands Planning, Protection and Restoration Act

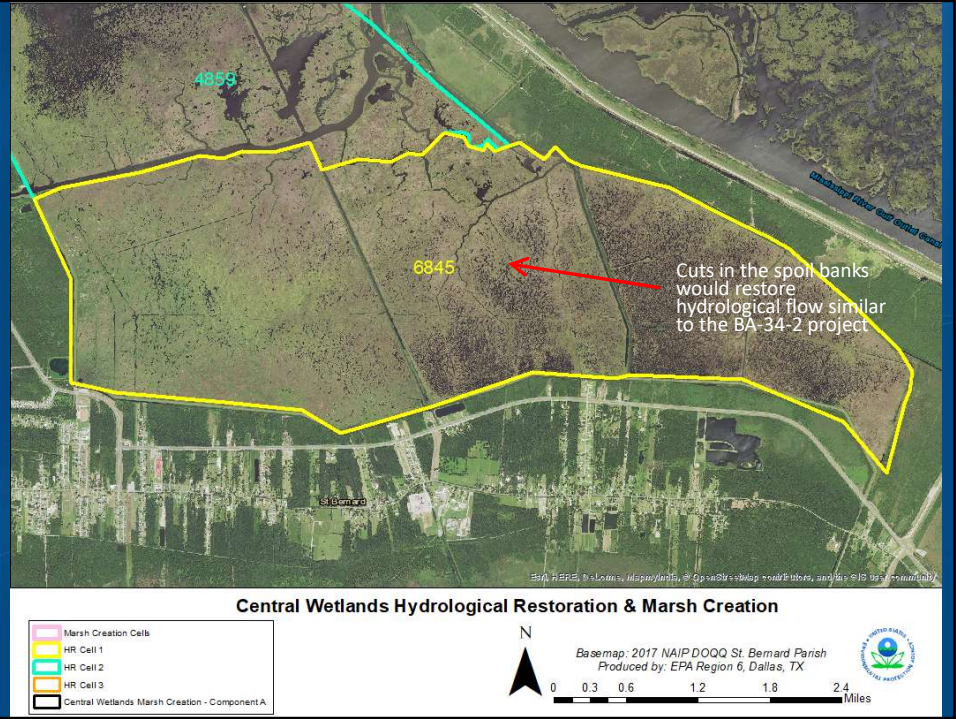
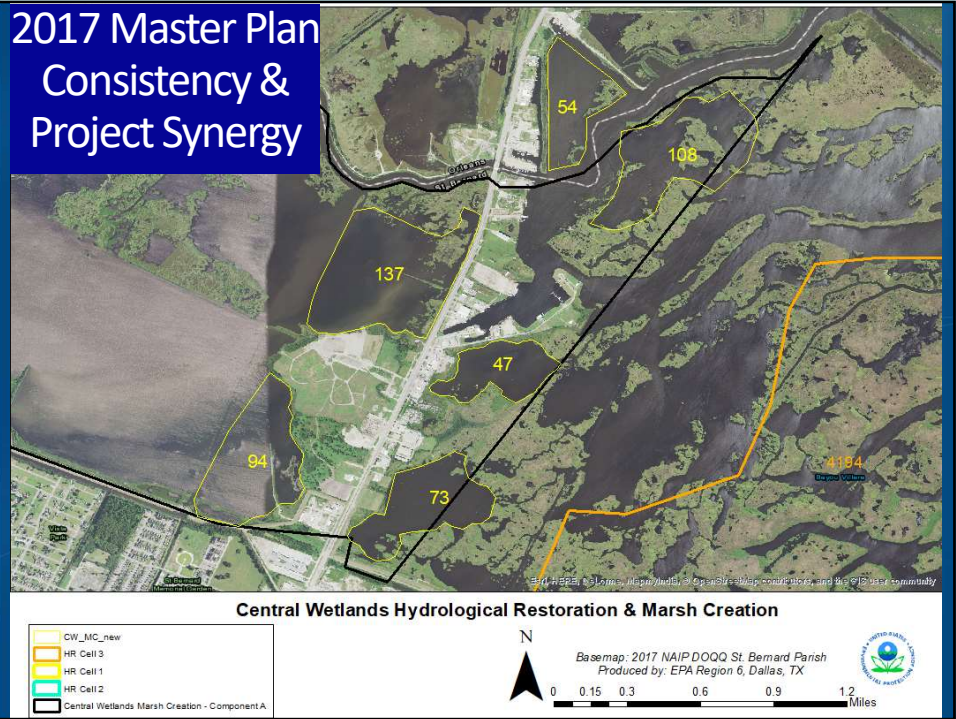
2017 Master Plan Solution

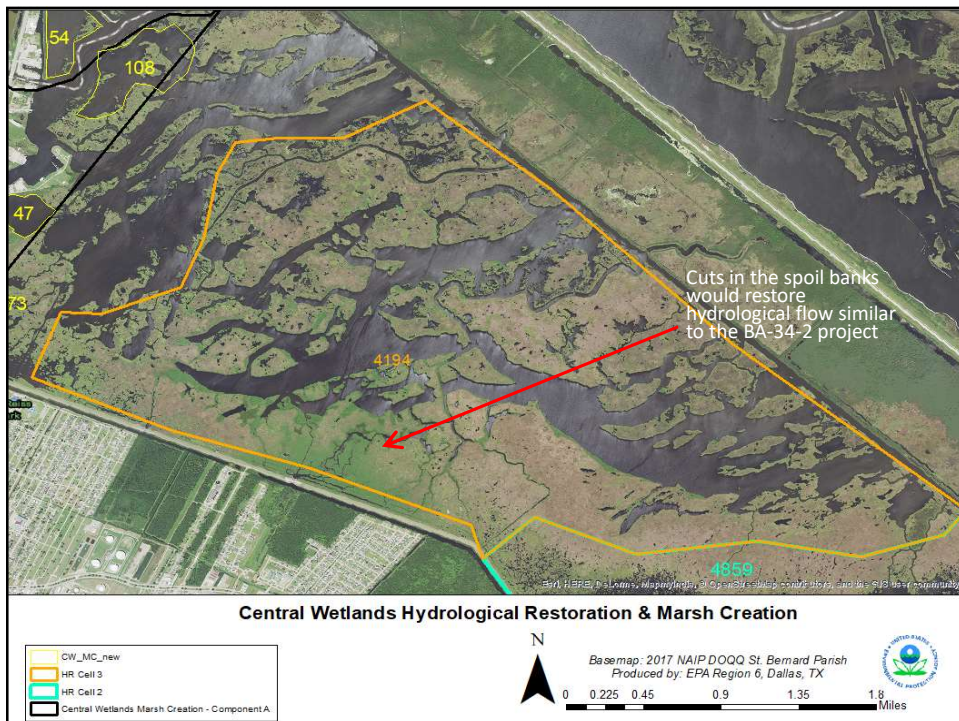
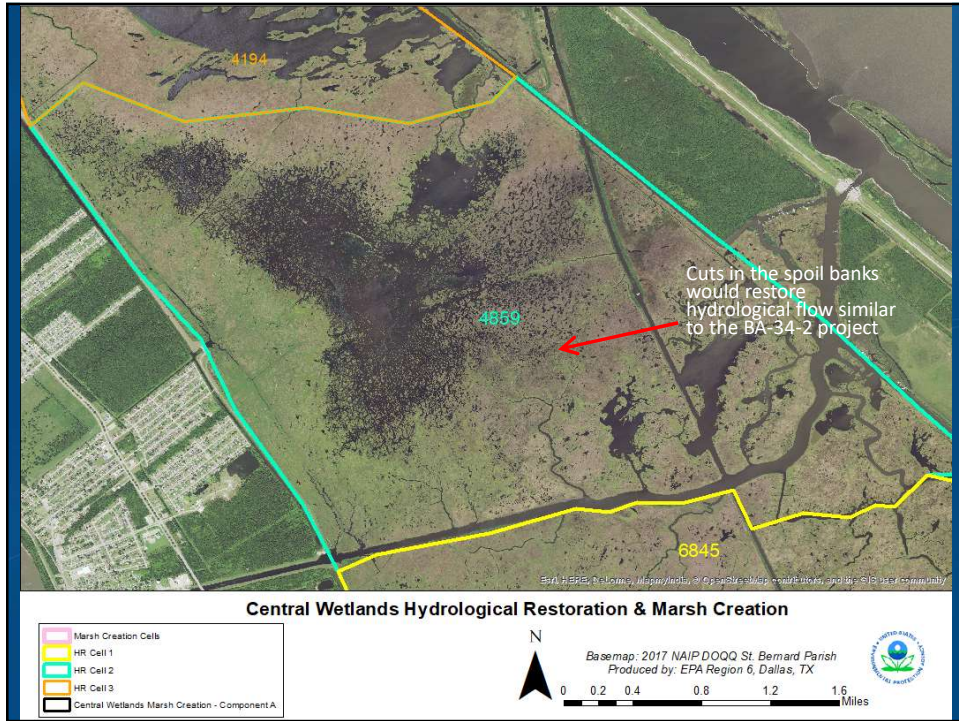
Programmatic Considerations: Small-Scale Hydrologic Restoration. Hydrologic restoration, as a technique for improving marsh health, seeks to restore natural hydrologic patterns either by conveying fresh water to areas that have been isolated by man-made features, relieving unnatural impoundments, or by preventing the intrusion of salt water. The state recognizes that there are many small-scale hydrologic improvements that could benefit existing wetlands and work synergistically with existing and planned restoration projects.

M001.MC.08a Central Wetlands Marsh Creation-Component A: Creation of approximately 3,000 acres of marsh in Central Wetlands near Bayou Bienvenue to create new wetland habitat and restore degraded marsh.



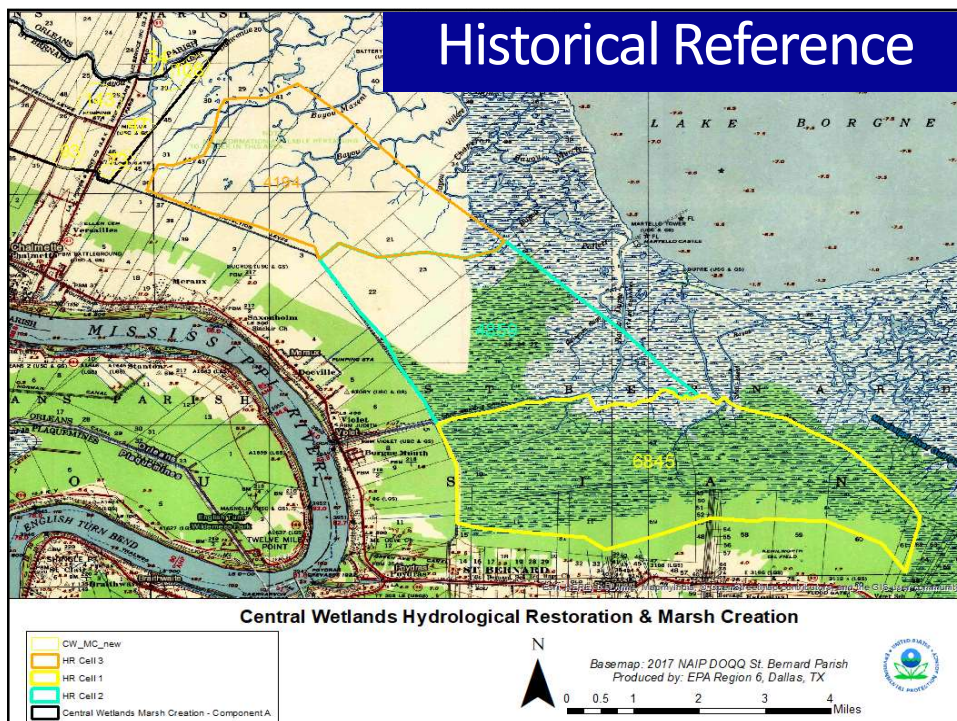
**2017 Master Plan
Consistency &
Project Synergy**

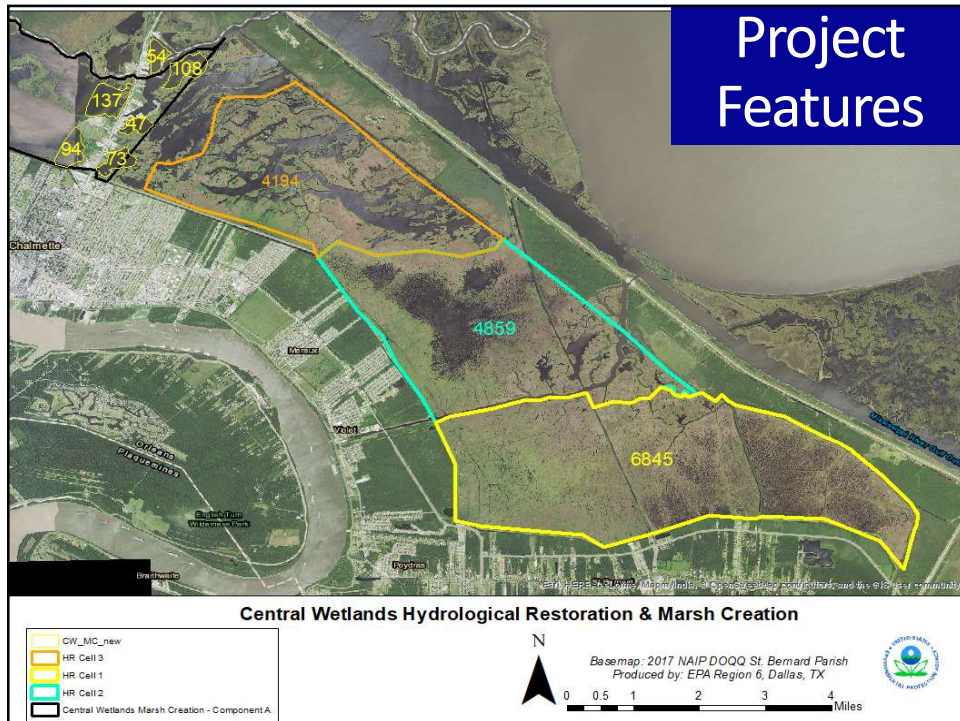




Problems

- Spoil banks from canals have created an impounded area where tidal exchange has decreased (LPBF 2015)
- Sediment, nutrient, and freshwater supply cut off; can't counteract saltwater intrusion (LPBF 2015)
- Mississippi River water does not flow into side canals and tributaries due to the hydrological efficiency of the MRGO (LPBF 2015)
- St. Bernard Parish could lose an additional 72% of its land area over the next 50 years and face severe wetland loss and storm surge flood risk (2017 MP).





Project Goals

- Hydrologically restore 15,898 acres of intermediate marsh by creating gaps in nearby canal spoil banks
- Gaps would restore tidal exchange, allow vegetation to recover, increase soil strength, and counteract storm surge
- Create/nourish 513 acres cells (457 acres marsh creation, 56 acres marsh nourishment) of emergent marsh with sediment from the Mississippi River
- Construction cost + 25% contingency is \$35M - \$40 M

PPL30 PROJECT FACT SHEET
February 6, 2020

Project Name

Guste Island Marsh Creation Project

Master Plan Strategy

Guste Island Marsh Creation (2017 Master Plan 001.MC.108): Creation of approximately 700 acres of marsh in St. Tammany Parish along the northwest Lake Pontchartrain shoreline to create new wetland habitat and restore degraded marsh.

Project Location

Region 1, Pontchartrain Basin, St. Tammany Parish

Problem

The project area is a shallow open body of water located east of the Tchefuncte River near the Tangipahoa and St. Tammany Parish border. The property was used for livestock grazing. A levee and canal system with pumps kept the property from flooding. The agricultural activity and construction of levees for drainage resulted in substantial land loss in the Guste Island area. With an increase in tidal exchange due to increased land loss and increased wind driven fetch, land located north of this site is deteriorating quickly.

Proposed Solution

Sediment dredged from Lake Pontchartrain will be used to create emergent marsh in 3 semi-confined cells within the Guste Island area. The project would benefit approximately 436 acres of wetlands by converting open water into marsh and nourishing existing marsh remnants. Restoration in this area would build the area's defenses against hurricanes and flooding and offer opportunities for public recreation and wildlife habitat.

Project Goals

Create/nourish approximately 436 acres (create 406 acres and nourish 30 acres) of emergent marsh using sediment dredged from the Lake Pontchartrain

Project Costs

The estimated construction cost including 25% contingency is \$20M - \$25M.

Preparer(s) of Fact Sheet:

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Joseph P. Guillory, Duplantis Design Group; (985) 249-6180; jguillory@ddgpc.com



EAH, HARRIS, & SLOAN'S MARSHLANDS, © Geospatial solutions and the GIS user community

Guste Island Marsh Creation

 Guste Island Marsh Creation 436 ac



Basemap: 2017 NAIP DOQQ St. Tammany Parish
 Produced by: EPA Region 6, Dallas, TX

0 0.125 0.25 0.5 0.75 1 Miles



Guste Island Marsh Creation



Guste Island is located east of the Tchefuncte River near the Tangipahoa and St. Tammany Parish border.

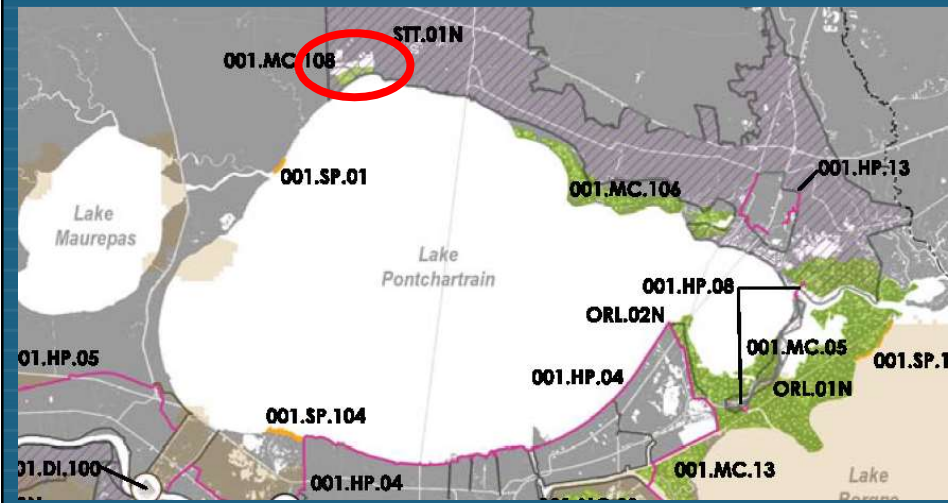


The Coastal Wetlands Planning, Protection and Restoration Act

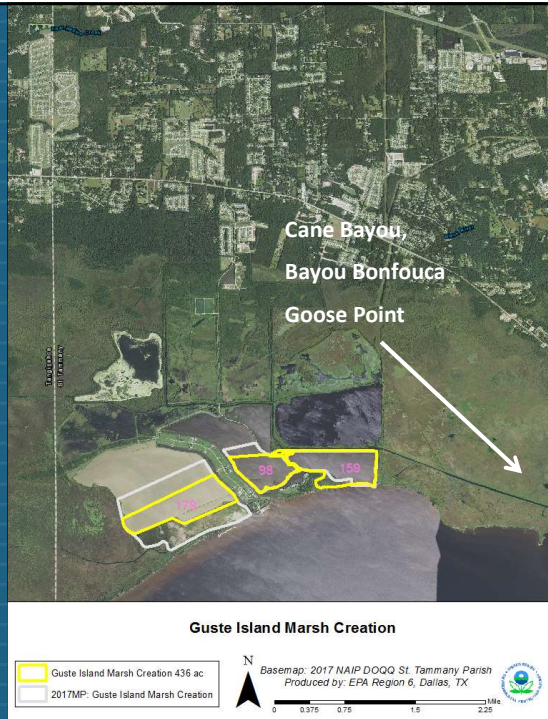
2017 Master Plan Solution



001.MC.108 Guste Island Marsh Creation : Creation of approximately 700 acres of marsh in St. Tammany Parish along the northwest Lake Pontchartrain shoreline to create new wetland habitat and restore degraded marsh.



2017 Master Plan Consistency & Project Synergy



2017 Master Plan Consistency & Project Synergy



**US Army Corps
of Engineers®**



- Constructed as a result of unavoidable impacts to intermediate marsh habitat as a result of the LPV HSDRRS
 - 143 acres of intermediate marsh restoration achieved by dredging borrow material from Lake Pontchartrain
-
- TNC Tchefuncte Marsh property is adjacent to the Guste Island project polygons
-
- Voluntary, partnership-based, habitat conservation program located in 24 priority coastal areas
 - Guided by a national strategic plan that integrates FWS priorities with the shared conservation goals of conservation partners and stakeholders
 - Guste Island Project location is part of the Louisiana Focus area for the FWS Coastal Program

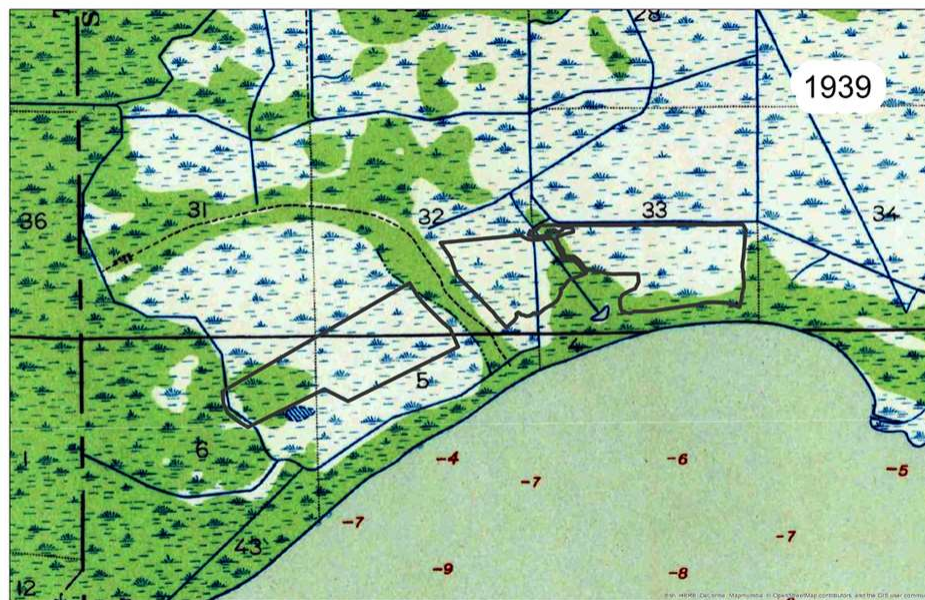
Guste Island Land Loss Issues



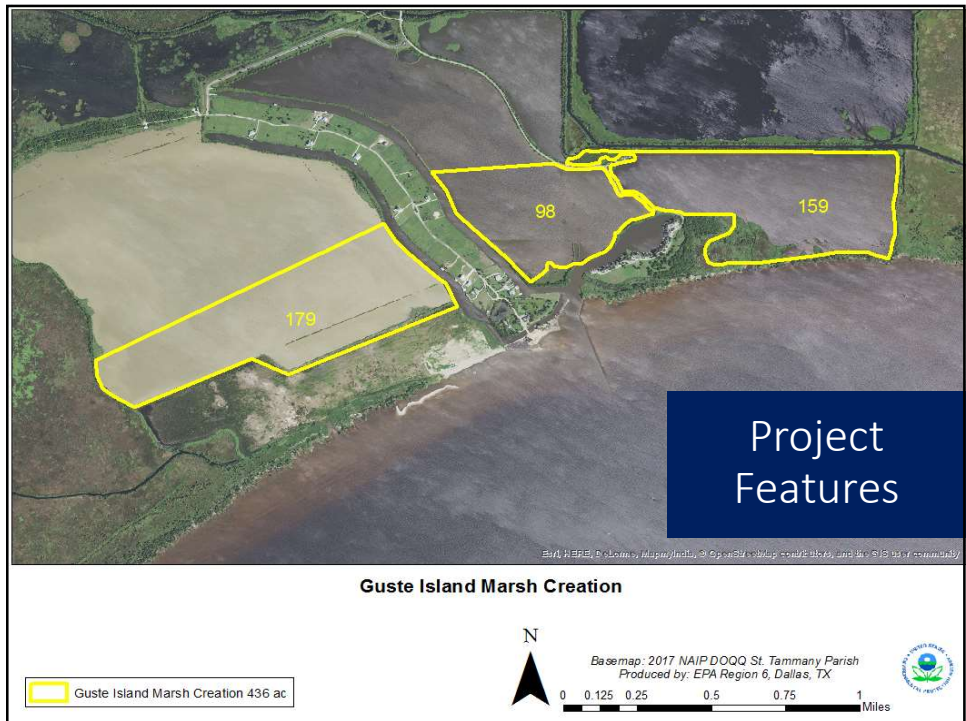
2010 imagery showing land loss developed through impoundment of marsh areas for agricultural activities.



- Large open water areas due to impoundment for agricultural use
 - High rates of land loss since the 1930's
- Saltwater intrusion/concentration
 - Lake Pontchartrain floods area with high southerly winds and storm surge
 - Saltwater trapped inside impounded areas, salt concentrates







Guste Island Marsh Creation Project



- Create 406 acres and Nourish Approx. 30 acres of marsh
- Protects nearby housing developments and freeway
- Sustainable marsh after 30 years
- Achieves St. Tammany Restoration Goal of 100%
- Project 001.MC.108 in 2017 Master Plan



Guste Island Marsh Creation Project

- Works synergistically with other projects
- Creates wetland habitat
- Construction cost + 25% contingency \$20M - \$25M



RI PO-06

PPL30 PROJECT FACT SHEET
February 6, 2020

Project Name

St. Catherine's Pass Marsh Creation

Master Plan Strategy

New Orleans Landbridge Restoration (2017 Master Plan 001.MC.05): Creation of approximately 33,400 acres of marsh in the New Orleans East Landbridge to create new wetland habitat and restore degraded marsh.

Project Location

Region 1, Pontchartrain Basin, Orleans Parish

Problem

The project area is a fragmented marsh on the New Orleans landbridge adjacent to Lake Catherine. The area has experienced impacts from storm surge and hurricanes as well as subsidence. Without continued sediment input, marshes cannot maintain viable elevations due to ongoing subsidence. Restoring the marsh in this area would protect and maintain resources vital to nearby communities.

Proposed Solution

The proposed project would create/nourish approximately 283 acres of marsh using sediment dredged from the Lake Borgne. The dredged material would be fully contained. Containment dikes would be degraded as necessary to reestablish hydrologic connectivity with adjacent wetlands. The created marsh would be planted.

Project Benefits

Create/nourish approximately 283 acres (create 195 acres and nourish 88 acres) of emergent marsh using sediment dredged from Lake Borgne.

Project Costs

The estimated construction cost including 25% contingency is \$15M - \$20M.


Preparer(s) of Fact Sheet:

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Brad Crawford, P.E., EPA; (214) 665-7255; Crawford.brad@epa.gov



St. Catherine Pass Marsh Creation (PPL29 Candidate)

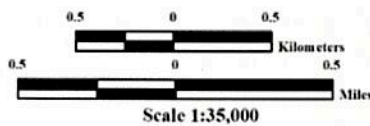


 **Marsh Creation ***
Project Boundary
 * denotes proposed features



Produced by:
 U.S. Department of the Interior
 U.S. Geological Survey
 Wetland and Aquatic Research Center
 Coastal and Ocean Restoration Branch
 Baton Rouge, La

Image Source:
 2017 NAIP



Map ID: USGS-NWRC 2019-11-0021
 Map Date: July 22, 2019



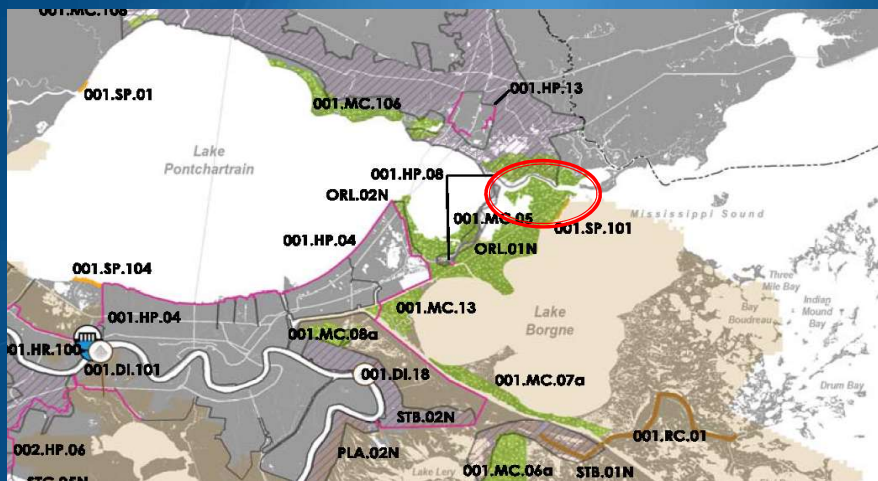
St. Catherine's Pass Marsh Creation



Coastal Wetlands Planning, Protection
and Restoration Act

2017 Master Plan Solution

001.MC.05 New Orleans Landbridge Restoration: Creation of approximately 33,400 acres of marsh in the New Orleans East Landbridge to create new wetland habitat and restore degraded marsh.



2017 Master Plan Consistency & Project Synergy

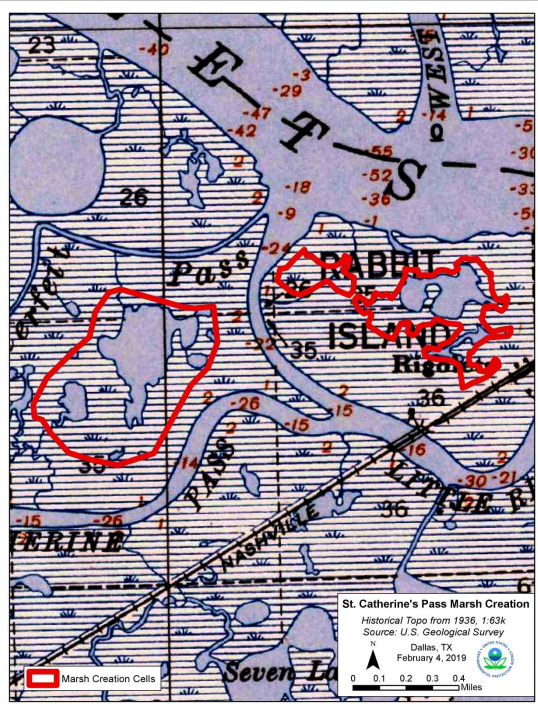


Problems

- Fragmented/degraded wetlands converting to open water
- Subsidence
- Storm events
- Wave energy
- Orleans Parish could lose 32% of its land area over the next 50 years and face increased wetland loss and severe storm surge flood risk (2017 MP).

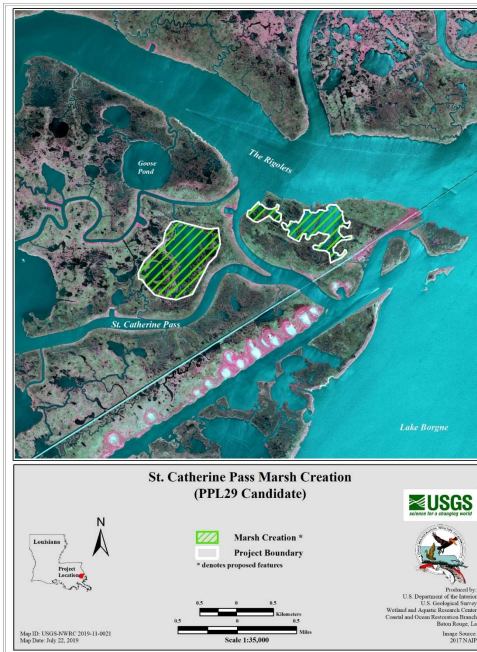
Historical Reference

- 1936 Topo



Project Features

- Create/nourish 283 acres (create 195 acres and nourish 88 acres) of emergent marsh with sediment from the Lake Borgne
- Provide increased protection from storm surge and flooding
- Restore wetland habitat
- Construction cost + 25% contingency is \$15M - \$20M.



RI PO-07

PPL30 PROJECT NOMINEE FACT SHEET

February 6, 2020

Project Name

Bayou Sauvage Marsh Creation

Project Location:

Region 1, Pontchartrain Basin, Orleans Parish

Problem:

The eastern shoreline of Lake Pontchartrain experienced extensive loss of interior emergent wetlands and severe damage to the lake shorelines from Hurricane Katrina passing directly over the area in 2005. The continued loss of the weakened project area shorelines has increased the vulnerability of the New Orleans East Hurricane Protection Levee. Based on the hyper-temporal analysis conducted by USGS for the extended project boundary, interior loss rates near the project area are estimated to be -0.26% per year for the period 1984 to 2016.

Goals:

The primary goals of this project are to create interior low salinity marsh with placement of material hydraulically dredged from Lake Pontchartrain, restore a portion of the Lake Pontchartrain shoreline and protect a portion of the New Orleans East Hurricane Protection Levee.

Specific Goals: Create approximately 110 acres of marsh and nourish an additional 10 acres of marsh with material dredged from Lake Pontchartrain.

Proposed Features

Hydraulically dredge material from Lake Pontchartrain and pumped via pipeline to create/nourish approximately 120 acres of marsh. The proposed design is to place the dredged material to a height suitable for intertidal marsh after adjusting for dewatering and compaction of dredged sediments. Containment dikes will be constructed to fully contain material. Containment dikes will be gapped/degraded after 3 years with the exception of those along Irish Bayou and Lake Pontchartrain.

Preliminary Project Benefits

- 1) *What is the total acreage benefited both directly and indirectly?*
This total project area is 120 ac.
- 2) *How many acres of wetlands will be protected/created over the project life?*
Approximately 107 net acres would result after the 20-year project life.
- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74%, and >75%)?*
The anticipated land loss rate reduction throughout the area of direct benefits is 50% to 74% over the project life.

- 4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*

This project would protect a section of the New Orleans East Hurricane Protection Levee, restore a portion of the Irish Bayou bankline as well as a portion of the eastern shoreline of Lake Pontchartrain.

- 5) *What is the net impact of the project on critical and non-critical infrastructure?*

This project would help protect New Orleans East Hurricane Protection Levee, Highway 11, and several small camps.

- 6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*

This project would work synergistically with the constructed PO-22 (Bayou Chevee), PO-169 (obtained Phase II construction funding), and PO-179 (currently in Phase I E& D).

Preliminary Cost

The construction cost plus 25% contingency is estimated to be between \$5-\$10M.

Preparer(s) of Fact Sheet:

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U.S. Fish & Wildlife Service

Bayou Sauvage Marsh Creation

Louisiana Ecological Services Field Office
National Wildlife Refuges





PPL 30

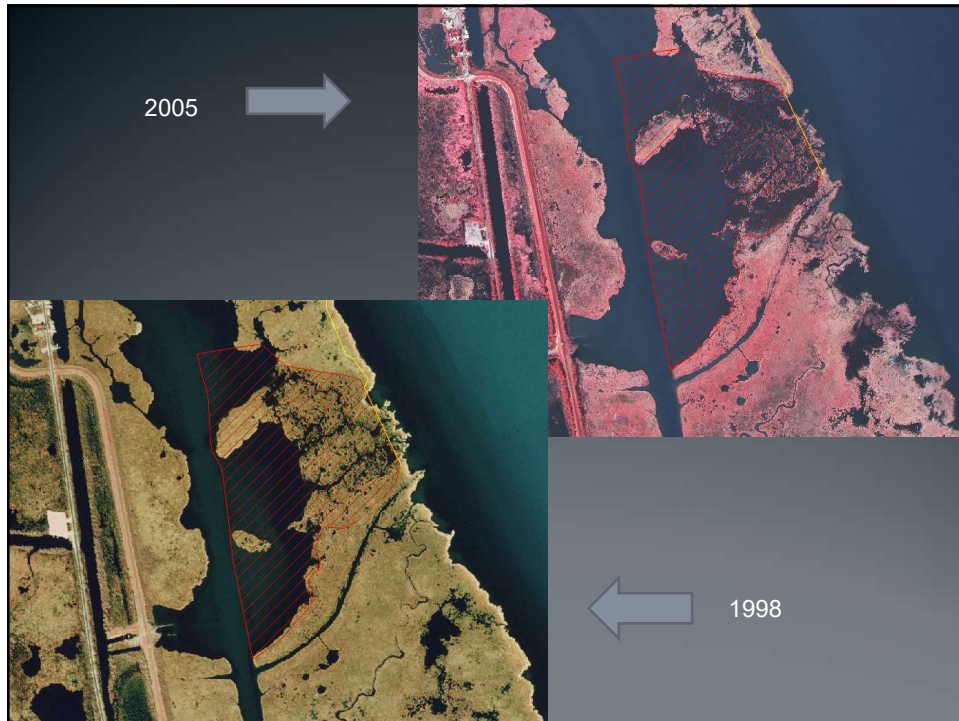
BAYOU SAUVAGE MARSH CREATION

Bayou Sauvage Marsh Creation

Problem:

- Mechanical scouring of marsh from Hurricane Katrina destroyed thousands of acres of marsh within the Lake Pontchartrain basin
- Wind generated waves along the weakened Lake Pontchartrain shoreline contribute to the high shoreline erosion rate.
- The project area has lost most of the marsh between Lake Pontchartrain and Irish Bayou where the shoreline protection has ended. The Hew Orleans East Hurricane Protection Levee has a small piece of marsh for protection.
- Most of this portion of the Bayou Sauvage NWR will be gone within the next 20 years.





Bayou Sauvage Marsh Creation

Goals:

- Protects 3,000 LF of the New Orleans East Hurricane Protection Levee.
- Hydraulically dredge material from Lake Pontchartrain to create 110 acres of marsh and nourish 10 acres of broken marsh.

Net Acres:

- Total acres benefited 160. Approximately 40 marsh acres would be protected/created adjacent to levee.

Identification of Potential Issues:

- Borrow site is located within Gulf sturgeon critical habitat

Preliminary Construction Costs:

- The estimated construction cost plus 25% contingency \$5-\$10 M.

Species of Concern and Rare Species

- Least Bittern
- Black Rail
- Mottled Duck
- Saltmarsh topminnow
- Brown Pelican
- Louisiana Eyed Silkmoth
- King Rail

PPL 30 PROJECT FACT SHEET

February 6, 2020

Project Name

Bayou Ducros Marsh Creation

Master Plan Strategy

Master Plan 2017: Marsh creation .06a concepts

Project Location

Region 1, Pontchartrain Basin, St. Bernard Parish

Problem: Marsh loss near Bayou Ducros is due to manipulation of the tidal prism from multiple canals and lack of sediment input from the Mississippi River. The Mississippi River Gulf Outlet (MRGO) was completed in 1968. Construction of this ship channel combined with oil exploration and conveyance canals have increased the tidal prism of local waterways. The increase in the tidal prism lead to salinity spikes as high as 35 ppt that destroyed the freshwater and brackish marsh environments along Bayou Ducros. The MRGO was officially closed in 2008 and salinities have stabilized to around 3-4 ppt, but the area still suffers from lack of sediment input from the Mississippi River. The land area change rate determined by Couvillion et al (2017) between 1932-2016 is -0.53%/year. The subsidence in the area is estimated to be 4.4 mm/yr in a moderate scenario.

Goal: Restore 560 acres of estuarine marsh within the Golden Triangle marsh. Approximately 314 acres (56%) will be created and 246 acres (44%) will be nourished.

Proposed Solutions: Approximately 314 acres of marsh will be created and approximately 246 acres of marsh will be nourished (560 acres total) using sediment dredged from Lake Borgne. Portions of the MRGO shoreline along the project area include riprap. However, earthen containment is proposed for the entire area. Upon completion earthen containment will be degraded as necessary to re-establish hydrologic connectivity with adjacent wetlands.

Preliminary Project Benefits: This project will restore approximately 560 acres of brackish marsh that serves as a natural buffer within the Golden Triangle area, an area identified by several restoration plans as a priority for restoration. These marshes offer important wildlife, fish, and shellfish habitat and recreational opportunities. The proposed project will have significant synergistic effects with the Golden Triangle Marsh Creation, NRDA Lake Borgne Phase 3 and institutes components of the MRGO Ecosystem Restoration Plan. The Bayou Bienvenue Marsh Creation project also serves as a structural line of defense for communities in St. Bernard and the greater New Orleans area from highly destructive storm surge events.

Identification of Potential Issues: The proposed project has the following potential issues: pipelines bisect the project site and oyster leases exist adjacent to the potential borrow site.

Preliminary Construction Costs: The estimated construction cost with 25% contingency is approximately \$25-\$30 million.

Preparer of Fact Sheet:Blaise Pezold, Meraux Foundation, 504-264-8125, Blaise@merauxfoundation.org



Map Produced By:
United States Department of Agriculture
Natural Resources Conservation Service
Alexandria, LA

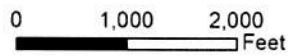
Data Source: NAIP 2019

Map Date: JANUARY 16, 2020



Content may not reflect
National Geographic's current
map policy. Sources: National

PPL 30
**BAYOU DUCROS
MARSH CREATION
ST BERNARD PARISH, LA**

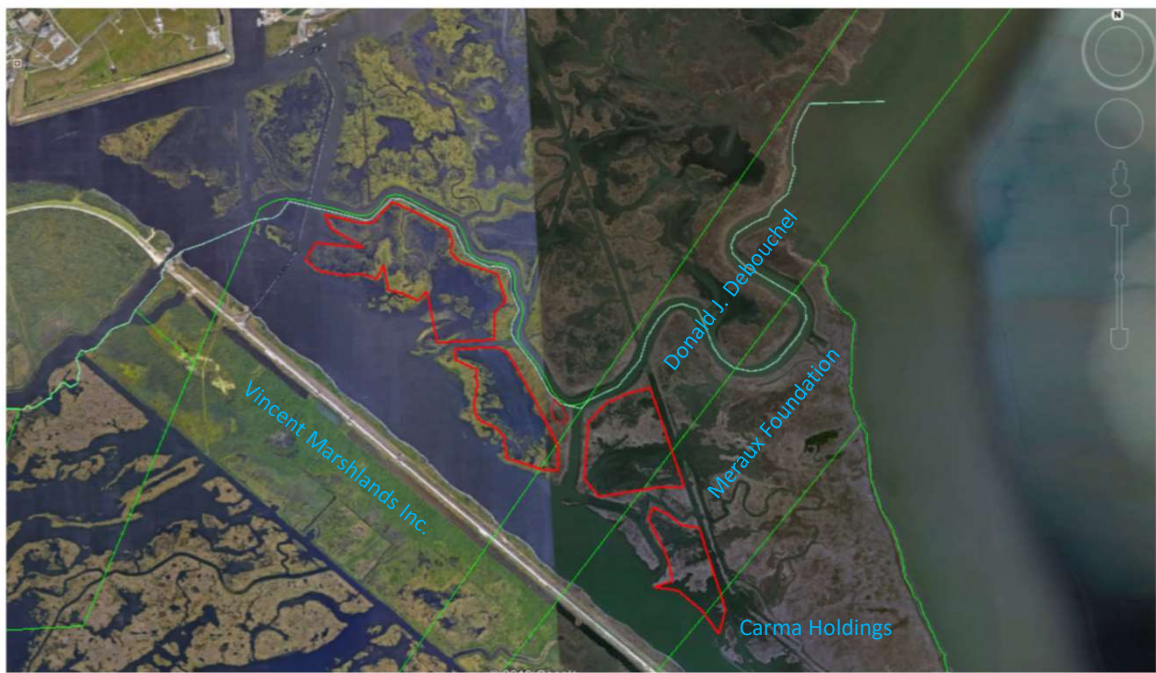


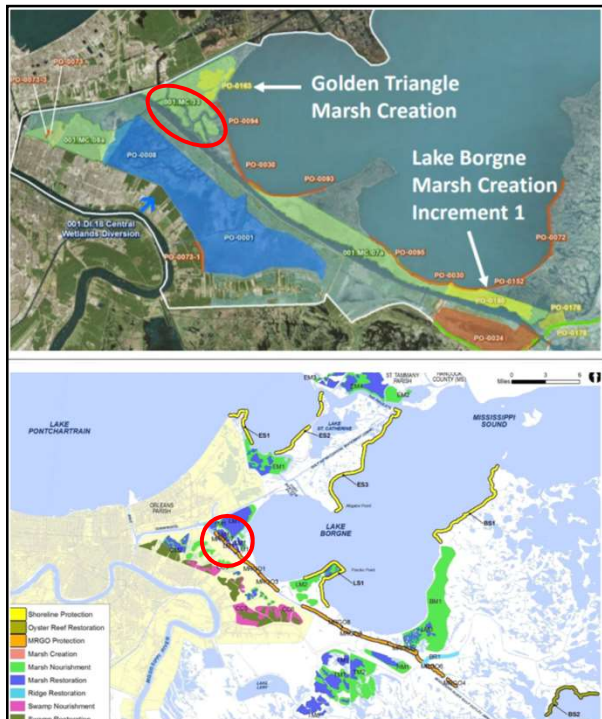
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MARSH CREATION CELLS

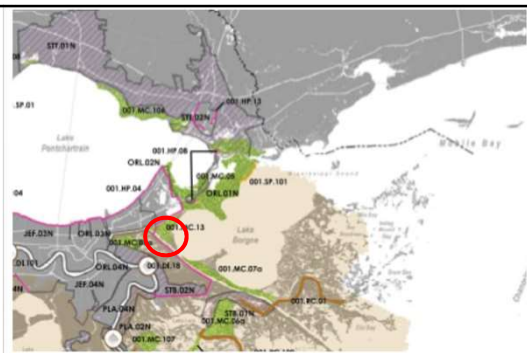
Bayou Ducros Marsh Creation and Nourishment

USDA NRCS/Meraux Foundation
Blaise Pezold





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Bayou Ducros MC

Marsh Creation

- 314 acres total

Marsh Nourishment

- 246 acres total

Total Cost + contingency =
25-30 million

Any questions?

