

Cameron Creole Grand Bayou Marsh Creation (CS-54) CWPPRA Project

FWS Construction Outreach Report

Darryl Clark, Project Manager

The Cameron Creole Grand Bayou Marsh Creation project (CS-54) (Grand Bayou), funded through the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA), is located north of Grand Bayou in the Cameron-Creole Watershed east of Calcasieu Lake on Cameron Prairie National Wildlife Refuge and Miami Corporation lands.

The Grand Bayou (CS-54) project was approved for E&D (Phase I) (\$2,376,789) in January 2011 and for construction (Phase II) (\$26,330,899) in January 2015. Total approved project funding equals \$28,707,688. The Construction budget is \$19,643,061, the original bid plus change orders and \$0.5M 45-acre project expansion equals \$10,949,580, leaving a construction balance of \$8,693,481 to return to the CWPPRA Program.

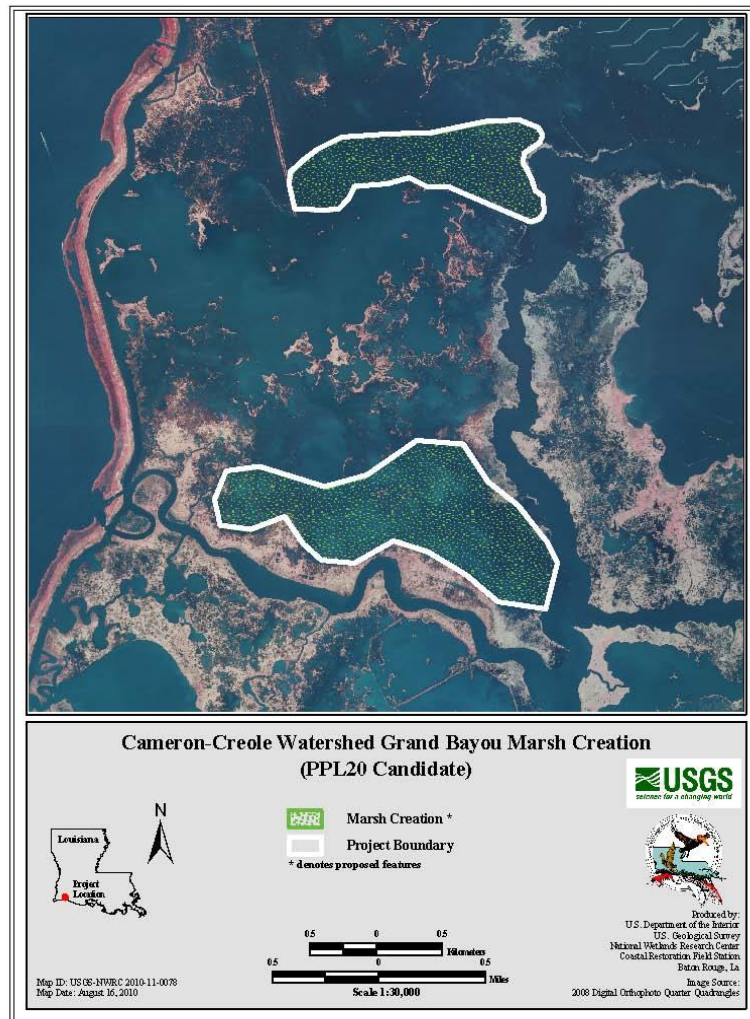
Project features include restoring 605 acres of brackish marsh north of Grand Bayou in the Cameron Creole Watershed (Figure 1). Project construction began in September 2017 and the 605-acre base project construction was completed on July 11, 2019.

Additional funding was secured from the LA Department of Natural Resources (LDNR) through their In Lieu Fee and Beneficial Use programs to add 122 acres of marsh creation, in addition to a CWPPRA 45-acre expansion (Table 1). In Lieu Fee funds will construct a 60-acre cell adjacent to the Northern Marsh Creation Area and Beneficial Use funds will create or nourish 62 acres of marsh north of the Southern Marsh Creation Area. The added restoration will be completed by November 30, 2019.

Table 1: Cameron-Creole Grand Bayou Marsh Creation Additional Restoration.

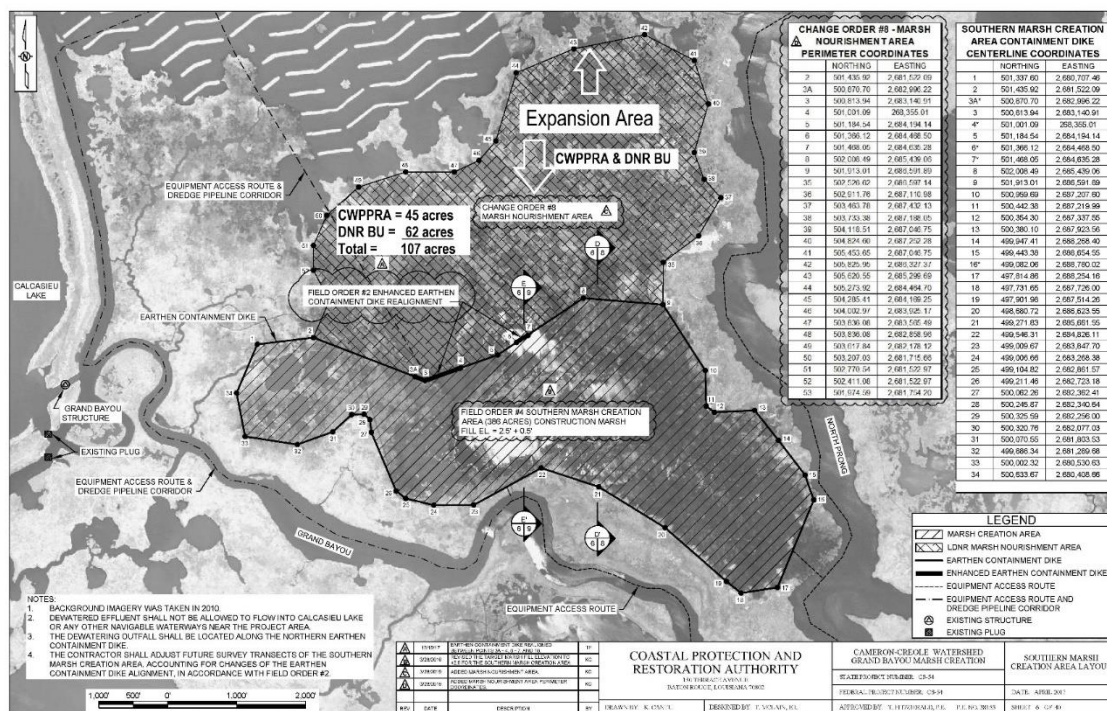
Program	Cost	Benefitted Acres
CWPPRA	\$500,000	45
DNR In Lieu Fee	\$1,269,105	60
<u>DNR BU</u>	<u>\$998,220</u>	<u>62</u>
Total	\$2,767,325	167

Figure 1: Cameron Creole Watershed Grand Bayou Marsh Creation Project (CS-54) Map with original 605-acre Northern and Southern Marsh Creation Cells.



The CWPPRA Task Force approved, in May 2019, a 45-acre CS-54 project marsh creation expansion comingled with the 62 acres funded by the DNR Beneficial Use Program for a total of 107 acres north of the South MC area (Figure 2). The Expansion (45 acres) plus DNR funded areas (122 acres) will increase the total area by 167 acres to a total of 772 acres.

Figure 2: Cameron Creole Watershed Grand Bayou Marsh Creation Project (CS-54)
 Approved Expansion Area (cross-hatched area) – CWPPRA (45 acres) and
 LDNR Beneficial Use (BU) (62 acres).



Construction Status – The North Cell was completed in June 2018 with 998,758 cubic yards of material from Calcasieu Lake. Hydraulic dredging to fill the southern cell began in June 2018 and was completed on July 11, 2019, with a total of 2,272,504 cubic yards, averaging about 5,000 cubic yards/day (total of 3.3 M CY for both cells). Construction is expected to be completed for all project phases by November 2019; the CWPPRA base project (605 acres), CWPPRA expansion area (45 acres), LDNR In Lieu Fee and BU areas (122 acres) (total 772 acres).

Figure 3: CS-54 Vicinity Map and Access Routes.



Figure 4: CS-54 Dredge Barge in Calcasieu Lake (5-9-2018) (Borchert).



Figure 5: CS-54 Dredge Barge and Pipeline to the eastern Calcasieu Lake shoreline and MCAs.



Figure 6: CS-54 Dredge Discharge into North MCA 2 months prior to MCA completion (5-9-2018).



Figure 7: CS-54 Measuring Slurry Height in No. MCA (1-30-2019).



Figure 8: Northern Marsh Creation Area looking NW from Southern Retention Dike after a 4-inch rain (4-10-2019).



Figure 9: Northern Marsh Creation Area looking NW from Southern Retention Dike (4-10-2019).



Figure 10: Terns Nesting on “Mud Lumps” in the CS-54 Project Northern MC Area June 22, 2018 (Trahan).



Figure 11: Terns Nesting in the CS-54 Project Northern MC Area June 22, 2018 (Trahan).



Figure 12: White Pelicans Using the CS-54 Project's North MCA (6-22-2018) (Trahan)



Figure 13: Southern MCA Dredge Material Slurry and Staff Gage (4-10-2019).



Figure 14: CS-54 Southern MCA Dredge Discharge Pipe and Track Hoe (4-10-2019).



Figure 15: Marsh Buggy Track Hoe CS-54 North MCA (5-9-2018) (Borchert).



Figure 16. CS-54 Dewatering Culverts Flowing Southward Out of MCA.



Figure 17. CS-54 Dewatering Culverts North MCA (6-22-2018).



Figure 18. CS-54 Black-Necked Stilt Using North MCA (Trahan).



Figure 19. CS-54 Black-Necked Stilts Using North MCA (Trahan).



Contact Information:

Darryl Clark, Project Manager
U. S. Fish and Wildlife Service
200 Dulles Drive
Lafayette, LA 70506

Darryl_Clark@fws.gov
337-291-3111

dc 9-5-2019