SOUTHWEST COASTAL LOUISIANA
FINAL INTEGRATED DRAFT FEASIBILITY REPORT
AND
ENVIRONMENTAL IMPACT STATEMENT

APPENDIX A

ENVIRONMENTAL REPORT

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Environmental Report

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INTRODUCTION

This Appendix provides information that supplements the information provided in corresponding sections of Chapter 1 of the Main Report (i.e. subsection 1.2.4 Transportation in Appendix A supplements information in subsection 1.2.4 Transportation in Chapter 1).

1.0 Project Setting

1.1 Affected Environment

Study Area

Figure 1-1 displays land class changes within the study area between 1956 and 2000. This information, derived for the present study, was taken from a data set that does not include areas outside the Coastal Zone; hence the large areas categorized as "Out of Analysis".

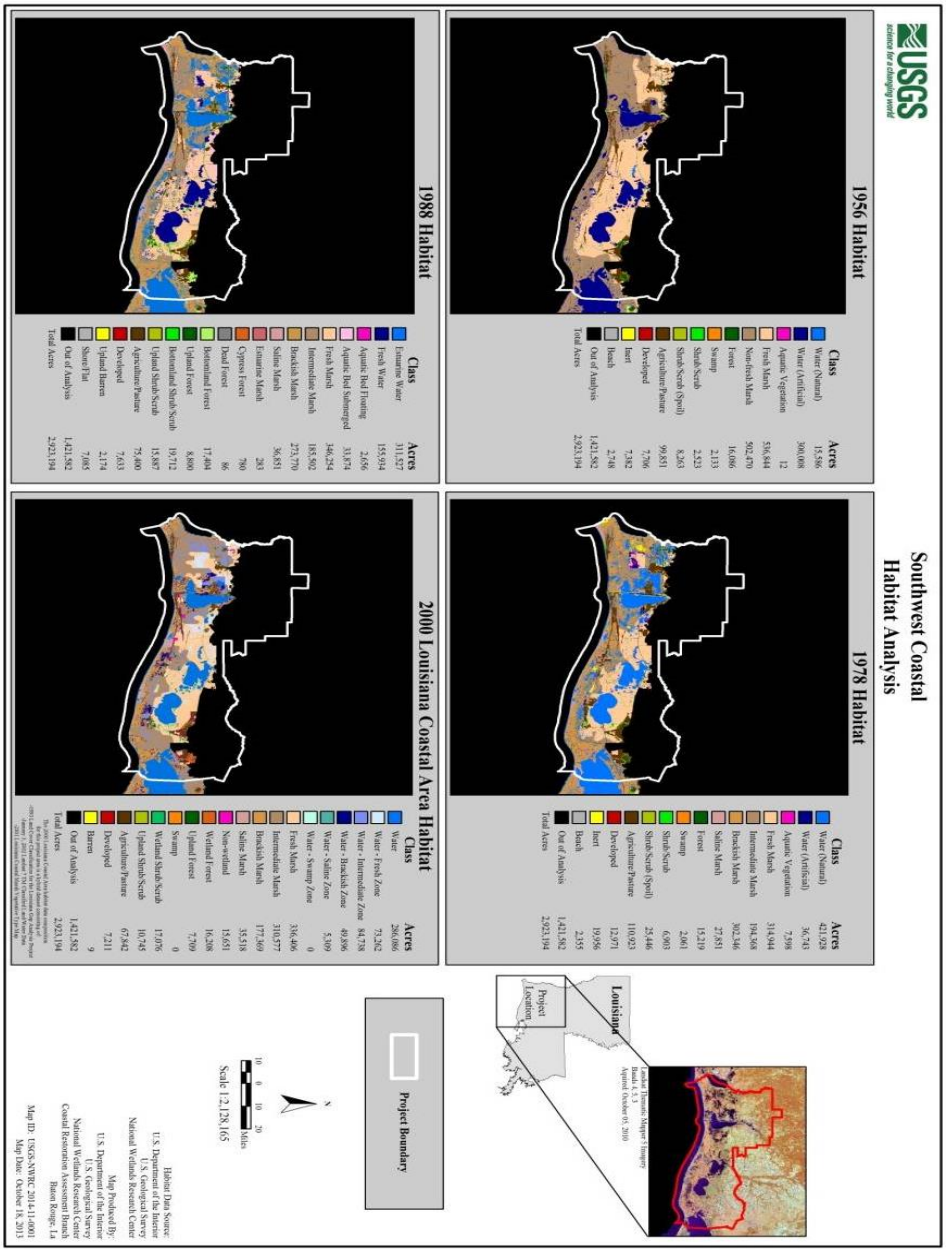

Figure 1-1: Land class (habitat) changes between 1978-2000 (source: USGS 2013).

Geomorphic and Physiographic Setting

The study area occupies a portion of the Pleistocene Prairie Terrace (or Prairie Complex) on the northern edge of Cameron, the northern half of Vermilion, as well as the majority of Calcasieu Parishes, and most of the Marginal Plain (or Chenier Plain) on the far southern portions of Calcasieu, most of Cameron and southern half of Vermilion Parishes. The main physiographic zones of the Chenier Plain include the Gulf Coast Marsh, Gulf Coast Prairies, and Forested Terraced Uplands. The Gulf Coast Marsh is at or near sea level and borders the Gulf of Mexico and most of the large lakes in the area. The Gulf Coast Prairie extends from the central part of Vermilion and Cameron Parishes into the southern part of Calcasieu Parish, while the Forested Uplands, which occur at or near 25-foot elevation, are located in the northern part of Vermilion and Calcasieu Parishes. Louisiana's coastal prairies, once encompassing an estimated 2.5 million acres in the Southwest portion of the state, now are considered critically imperiled with less than 600 acres remaining.

The study area formed over the past 7,000 years by the deltaic processes of the Mississippi River and other streams. Fine-grained sediment transported to the Chenier Plain in the mud stream from the Mississippi River was brought into coastal estuaries and marshes and deposited along the shore to form mudflats (Gagliano and van Beek, 1993). The newly formed land was then colonized by wetland vegetation, which further promoted the land-building process. Wave action and occasional storm events also deposited sand and shells onto the newly built land. As the Mississippi River changed course and active delta-building switched to the eastern Deltaic Plain, or extended to the edge of the continental shelf or beyond (current course), the mud stream ceased to carry sediment to the Chenier Plain and the Gulf shore became subject to erosion. Periods of erosion winnowed out fine-grained materials, leaving the deposits of sand and shell to form the Gulf beaches, examples of such in the area are Holly and Rutherford Beaches. Beach deposits were subsequently shaped by waves and coastal currents to form elevated ridge systems. Once the mud stream returned and land-building continued seaward, these elevated ridges or cheniers (forests atop relict beach ridges) were stranded inland where deciduous vegetative growth (e.g., live oak trees) occurred. Examples of cheniers in the area include Hackberry, Little Chenier, Grand Chenier, Pecan Island and Cheniere au Tigre ridges to name just a few. These ridges and cheniers blocked drainage and saltwater inflows from the Gulf of Mexico, resulting in the development of large freshwater basins on the landward side of the ridges. Chenier ridges run laterally to the modern shoreline and rise above the surrounding marshes by as little as a few inches or as much as 10 ft (Byrne et al. 1959). These ridges can range from 100 to 1,500 ft wide with some ridges extending along the coast for a distance of up to 30 miles. On the seaward side of the cheniers, a zone of brackish to saline marshes developed as a result of tidal influences from the Gulf (adapted from Visser et al. (2000), USACE (2004), and LADNR (2009)).

1.2 Human Environment

1.2. Employment, Business, and Industrial Activity

Table 1-1 displays the percentage breakdown of non-farm employment by industry for each parish in the study area.

Table 1-1: Non-farm employment by industry (2010)

Industry	Calcasieu	Cameron	Vermilion
Forestry, fishing, and related activities	0%	6%	3%
Mining	1%	6%	7%
Utilities	0%	X	0%
Construction	9%	7%	8%
Manufacturing	8%	10%	6%
Wholesale trade	2%	8%	3%
Retail trade	11%	X	13%
Transportation and warehousing	3%	11%	3%
Information	1%	X	1%
Finance and insurance	3%	X	4%
Real estate and rental and leasing	3%	X	4%

Professional, scientific, and technical services	5%	X	3%
Management of companies and enterprises	1%	X	0%
Administrative and waste management services	5%	3%	3%
Educational services	1%	1%	X
Health care and social assistance	12%	3%	X
Arts, entertainment, and recreation	2%	X	1%
Accommodation and food services	10%	X	5%
Other services, except public administration	6%	4%	9%
Federal, civilian	1%	1%	1%
Military	1%	1%	1%
State government	3%	2%	1%
Local government	10%	19%	14%

Source: Bureau of Economic Analysis (BEA)
An "X" denotes that data is not available for an entry.

Approximately 32% of the land area is used for agriculture. The major crops grown in the area are rice, soybeans, sugarcane, and sorghum. Pecans are also a major crop in Cameron Parish. According to the 2007 Census of Agriculture, the total stock of crops in the area is valued at over $62 million, with Vermillion Parish accounting for 80% of the total crop value.

1.2.4 Transportation

Navigation Projects

Navigational channels in the chenier plain influence hydrology, primarily by increasing marine influences (saltwater intrusion, wave energies) into freshwater and other interior marshes (LCA 2004). The following navigation waterways are in the vicinity of the Southwest Coastal Louisiana feasibility study area:

- GIWW
- Sabine-Neches Waterway
- Calcasieu River and Pass
- Mermentau River
- Freshwater Bayou
- Bayou Teche and Vermilion River

Gulf Intracoastal Waterway

The GIWW traces the U.S. coast along the Gulf of Mexico from Apalachee Bay near St. Marks, FL to Brownsville, TX, near the Mexico border. It intersects the Mississippi River and extends eastward for approximately 376 miles and west-southwestward for approximately 690 miles. In the study area, the approximate distances between major crossings are as follows:

- Atchafalaya River to Vermilion River, 64 miles;
- Vermilion River to Mermentau River, 43 miles;
- Mermentau River to Calcasieu River, 37 miles;
- Calcasieu River to Sabine River, 27 miles.

In addition to its main stem, the GIWW (Figure 1-2) includes a major alternative route (64 miles) which connects Morgan City, LA to Port Allen, LA. Project dimensions for the main stem channel and the alternative route are 12 ft deep and 125 ft wide, except for the reach between the Mississippi River and Mobile Bay, which is 150 ft wide. Today, parts of the GIWW are deeper and wider than the original construction dimensions.

Figure 1-2 Gulf Intracoastal Waterway Mainstem and Alternate Route

The GIWW was first authorized and construction began in the 1920s. The project was authorized by the River and Harbor Act of July 24, 1946, Senate Document 242, 79th Congress, 2nd Session, and prior River and Harbor Acts. The primary purpose of the inland navigation channel is transportation of goods by barge. Numerous side channels and tributaries intersect both the eastern and western main stem channel, providing access to inland areas, coastal harbors, and the Gulf of Mexico. The USACE operates the Leland Bowman Lock located on the GIWW. The lock helps to regulate the flow of water in the Mermentau Basin and keeps salt water out of the fresh water supply that serves the farming communities further north, while allowing barge transportation.

Sabine-Neches Waterway and Sabine Pass Ship Channel

The Sabine-Neches Waterway is an approximately 64-mile federally authorized and maintained waterway located in Jefferson and Orange Counties in southeast Texas and Cameron Parish, Louisiana. The Sabine Pass, Sabine Lake, and Sabine River together form part of the boundary between the states of Texas and Louisiana. The Sabine-Neches main channel dimensions are currently 40 ft deep and 400 ft wide. The existing waterway consists of a jettied entrance channel, 42 ft deep and 500 to 800 ft wide, from the Gulf of Mexico; a channel 40 ft deep and 400 ft wide to Beaumont via the Neches River; and a channel 30 ft deep and 200 ft wide to Orange via the Sabine River.

The Sabine-Neches Project was authorized by the River and Harbor Act of 1962, House Document No. 553, 87th Congress, 2nd Session. The Sabine-Neches Waterway and the Sabine Pass Ship Channel serve the ports of Port Arthur, Beaumont, and Orange, Texas in the movement of commodities, particularly crude petroleum.

The USACE Galveston District is currently investigating navigation improvements on the Sabine-Neches Waterway. A draft report has been circulated for public review which tentatively recommends a channel modification to a depth of 48 ft. The project modification process is described in more detail in the chapter on Existing and Future Without Project Conditions.

Calcasieu River and Pass

The Calcasieu River is a 68-mile, deep-draft navigation channel. The northern boundary of the ship channel is located at Mile 36.0, just south of Interstate 10 in Lake Charles, LA. The southern boundary extends to Mile 32.0 in the Gulf of Mexico. The project was authorized under the River & Harbor Act of July 14, 1960 House Document 436, 86th Congress, 2nd Session (USACE). The purpose of this project is to provide deep-draft access to the Port of Lake Charles, the 12th largest port in the U.S. based on tonnage. The project also provides for a Saltwater Barrier Structure located north of Lake Charles, approximately 3 miles north of the northern boundary of the deep-draft ship channel.

Mermentau River

The Mermentau River navigation channel is a 4.6-mile channel beginning at the point of entry of the Mermentau River into Lower Mud Lake and extends in a southerly direction to the Gulf of Mexico.

The project includes two salinity control structures: the Catfish Point Control Structure located at Mile 24 of the Mermentau River, and the Schooner Bayou Control Structure located in the enlarged White Bay to Vermilion Bay channel, approximately 5 miles southwest of Intracoastal City. The Catfish Point and Schooner Bayou Control Structures reduce saltwater intrusion into the Mermentau Basin, which consists of hundreds of thousands of acres of rice and crawfish farms that are dependent on freshwater.

The project is authorized by the Flood Control Act of August 18, 1941, as modified by the River and Harbor Act of July 24, 1946. The Act provides for enlargement of the lower Mermentau River below Grand Lake to a minimum cross-sectional area of 3,000 sq ft below Mean Low Gulf (MLG) for discharge of flows. It also provides for channel enlargement and realignment of the Inland Waterway from Vermilion Bay to Grand Lake to provide a minimum cross-sectional area of 3,000 sq ft below MLG for discharge of flood flows and interflow between lakes.

This project also provides for the enlargement of the North Prong of Schooner Bayou and Schooner Bayou Cutoff to a channel -6 ft MLG by 60 ft. It also provides for a sector gated control structure at Catfish Point, Mile 24 of the Mermentau River, and Schooner Bayou Lock on Schooner Bayou. The Act further provides for incorporation of the existing projects: "Waterway from White Lake to Pecan Island, LA" and the portion of "Inland Waterway from Franklin, LA to the Mermentau River" west of Vermilion Bay. The waterway from "Inland Waterway from White Lake to Pecan Island, LA" consists of a channel -5 ft MLG by 40 ft.

Freshwater Bayou and Freshwater Bayou Lock

Freshwater Bayou is a 23.1-mile navigation channel that serves as the hydrologic boundary between the Mermentau Basin to the west and the Teche-Vermilion Basin to the east. The canal extends from the northern boundary at Mile 161.2 of the GIWW, at Intracoastal City west of the Harvey Lock, to the 12-ft depth contour in the Gulf of Mexico. A lock is located at the Gulf of Mexico to aid in reducing saltwater intrusion into interior wetlands along the canal. Between 1979 and 1986, approximately 300,000 tons of cargo was transported along Freshwater Bayou Canal, mostly in oil and gas service and supply vessels and commercial fishing boats (USACE, 1989). The project was authorized under the River and Harbor Act of July 14, 1960 (USACE Project Fact Sheet) and constructed between 1965 and 1967. The purpose of this project is to provide deep-draft vessels access between the Gulf of Mexico and Intracoastal City, Abbeville Harbor and Terminal District, and the GIWW.

Bayou Teche and Vermilion River, LA

The Vermilion River is a 131.8-mile navigable channel that flows from the 8-foot contour in Vermilion Bay to the head of navigation at Mile 52 at Lafayette, LA. There is a flood control project from Lafayette to Port Barre, LA, as well as in Bayou Teche from 2 miles below Arnaudville to Port Barre (USACE Project Fact Sheet).

The project was authorized by the Flood Control Act of August 18, 1941 (USACE Project Fact Sheet). The purpose of this project is to provide a shallow-draft navigation channel to Lafayette and improve flood control from Port Barre to the Vermilion River via Bayou Teche, Bayou Fusilier, and the Vermilion River.

Operations and Maintenance Dredging of Navigation Channels

Calcasieu River and Pass, Louisiana, published as House Document Number 436, 86th Congress, resulted in authorization by the River and Harbor Act of July 14, 1960 (Public Law 86-646) of the following measures: a 42- by 800-foot approach channel from the 42-foot depth in the Gulf of Mexico to the jettied channel; a channel between the jetties varying in depth from 42 ft at the seaward end to 40 ft at the shoreline over a bottom width of 400 ft; a 40- by 400-foot channel from the shoreline (mile 0) to the wharves of the Port of Lake Charles (mile 34.1); enlargement of the existing turning basin at mile 29.6 to a depth of 40 ft; a mooring basin at about mile 3 having dimensions of 40 by 350 by 2,000 ft; extension of the existing channel at a depth of 35 ft over a bottom width of 250 ft from the Port of Lake Charles at mile 34.1 to the vicinity of the bridge on U.S. Highway 90 at mile 36.0, with a 35- by 750- by 1,000-foot turning basin at its upper end; and maintenance of the existing 12- by 200-foot channel from the ship channel to Cameron, Louisiana, via the old channel of the Calcasieu River. The project maintenance is focused in 3 primary reaches. The most gulfward reach from mile 0-5 is maintained with agitation dredging. Two Calcasieu Lake reaches, mile 5-17 and mile 17-22 are typically maintained on an alternating year cycle. The typical quantity removed and disposed for each reach is 2.5 million cubic yards.

The Calcasieu River and Pass Dredged Material Management Plan (DMMP) was approved in December 2010. Existing disposal areas for the continued maintenance of the navigation channels cannot accommodate the volume of material, which would be dredged for channel maintenance. Alternative plans addressed in the DMMP include modification of existing disposal areas, development of new disposal areas, and measures to reduce channel maintenance requirements.

Operations and maintenance (O&M) dredging of navigation channels can provide a source of materials for ecosystem restoration projects. For example, the Calcasieu Dredge Material Management Plan estimates that over 6,000 acres could be created over the next 20 years from the Calcasieu River.

In general, O&M dredge material management plans must be "environmentally acceptable;" however, that does not necessarily mean that the material will be used beneficially. The authorized and funded Louisiana Coastal Area (LCA) Beneficial Use of Dredged Material (BUDMAT) Program also could provide a potential source of funding for beneficial use of dredged material throughout the Louisiana coastal area. Of the nine authorized Federal navigation channels that represent the most significant opportunities for additional beneficial use of dredged material in coastal Louisiana, three are located in the Southwest Coastal area: Calcasieu River and Pass, Mermentau River, and Freshwater Bayou. See Table 1-2 for information on dredging quantities and amounts for beneficial use by channel.

Table 1-2: Marsh restoration dredging locations and quantities

Channel / Reach	Average Quantity/ Event (cubic yard)	Average Annual Quantity (cubic yard)	Frequency Of Dredging	Federal Standard (% Used Beneficially)
Freshwater Bayou - Lock to Gulf	1,057,000	352,333	2 to 4 yrs	100
Freshwater Bayou - inland	2,000,000	133,333	every 15 yrs	n/a
Total	3,057,000	485,666		
Mermentau River – bar & inland*	1,264,000	632,000	1 to 3 yrs	100
Total*	1,264,000	632,000		
Calcasieu – Mile 5 to 14	3,615,000	1,446,000	2 to 3 yrs	0
Calcasieu – Mile 14 to 24.5	5,250,000	2,100,000	2 to 3 yrs	0
Calcasieu – Mile 28 to 36	1,334,000	242,545	3 to 8 yrs	0
Calcasieu - bar	7,547,000	7,547,000	annually	10
Total	17,746,000	11,335,545		
Grand Total	22,067,000	12,453,211		

Note: Based on New Orleans District data from years 1996 through 2007. Extracted from BUDMAT Table 2-6. New Orleans District (CEMVN) Primary Navigation Channels

* The Mermentau River project includes dredging of the Mermentau River from Highway 82 out to the Gulf of Mexico (and also includes Schooner Bayou and Catfish Point Control Structures). The USACE typically dredges Mermentau from LA-82 to the Gulf (approx 6 mile reach) every 2 to 4 years. Most recent dredging took place after Gustav/Ike. However, in light of O&M funding being decreased and low use waterways being funded 50% of their average annual funding, USACE may not dredge the Mermentau again anytime soon. Mermentau falls under the classification of a "low use" waterway (communication with Tracy Falk, USACE Operations Manager for Mermentau).

1.4.5 Rare, Unique, and Imperiled Vegetative Communities

The following rare, unique, and imperiled communities, documented by the Louisiana Natural Heritage Program, are important in that they contribute to the diversity and stability of the coastal ecosystem. In the future without action, these rare, unique, and imperiled vegetative communities are expected to continue disappearing. For example, without action, saltwater intrusion and drainage problems would continue, resulting in the conversion of freshwater marsh to intermediate and brackish marsh.

Coastal Live Oak-Hackberry Forest (chenier maritime forest): Also known as chenier maritime forest, this natural community formed on abandoned beach ridges primarily in southwest Louisiana. Composed primarily of fine sandy loams interbedded with sand and shell debris, these ridges range in height from 4 to 5 ft above sea level. Live oak and hackberry are the dominant canopy species. Other common species include red maple, sweet gum, water oak, green ash, and American elm.

Chenier forests have historically been subject to human disturbance. It is the only high ground in the landscape and therefore is used for development, highways, access roads, infrastructures, oil and gas production, and agriculture. In a study conducted by Providence Engineering and funded by the LDNR on the cheniers and natural ridges, approximately 11 percent of the cheniers studied were undeveloped (Cheniers and Natural Ridges Report, 2009). Of the original 100,000 to 500,000 acres in Louisiana, only 2,000 to 10,000 acres remain.

Coastal Dune Grassland: Coastal dune grasslands occur on beach dunes and elevated backshore areas above intertidal beaches. Louisiana's coastal dunes are poorly developed because of the high frequency of overwash

associated with hurricanes and storms, and a limited amount of eolian-transported sand. Vegetative cover ranges from sparse to fairly dense and is dominated by salt spray tolerant grasses. Coastal dune grasslands are estimated to have occupied less than 2,000 acres in pre-settlement times, and 50 to 75 percent was thought to remain prior to the 2005 hurricanes. Some of the most extensive examples of coastal dune grasslands in Louisiana occur in the Chenier Plain.

Coastal Prairie: The Coastal Prairie can be divided into two main types, upland dry to mesic prairies at the northern end of its range, and marsh fringing prairies on "islands" or "ridges" in the marsh at the southern end of its range. The soil conditions and frequent burning from lightning strikes prevented invasion by woody trees and shrubs and maintained the prairie vegetation. Coastal prairie vegetation is extremely diverse and dominated by grasses. Remnant Louisiana coastal prairies, once covering an estimated 2.5 million acres, have been reduced to less than 1 percent of the original extent. Some of the larger prairie remnants are marsh fringing, wet prairies found in Vermilion and Cameron Parishes.

Freshwater Marsh: Freshwater marsh is generally located adjacent to intermediate marsh along the northern extent of the coastal marshes. Salinities are usually less than 2 parts per thousand (ppt) and normally average about 0.5-1 ppt. Freshwater marsh has the greatest plant diversity of any of the marsh types. Although the freshwater marshes, as previously described, compose a large amount of the entire coastal marsh acreage, the Louisiana Natural Heritage Program ranks this community as imperiled because it has undergone the largest reduction in acreage of any of the marsh types over the past 20 years due to saltwater intrusion. Some of the largest contiguous tracts of freshwater marsh in Louisiana occur in Vermilion and Cameron Parishes.

1.4.7 Aquatic and Fisheries Resources

Benthic Resources

Estuarine benthic organisms include: macrobenthic (e.g., molluscs, worms, large crustaceans); microbenthic (e.g., protozoa); and meiobenthic (e.g., microscopic worms and crustaceans) groups (Day et al. 1989). Primary consumer groups of the benthic habitat include: bacteria and fungi, microalgae, meiofauna, and microfauna (Mitsch and Gosselink 2000). A major link in the aquatic food web between plants and predators is formed by the conversion of plant material (formed in primary production) by benthic detritivores and herbivores to animal tissue (Cole 1975). The salt marsh is a major producer of detritus for both the salt marsh system and the adjacent estuary (Mitsch and Gosselink 2000).

Fisheries Resources

The area contains a variety of aquatic habitats, including rivers, bayous, canals, lakes, ponds, shallow open water areas, the Gulf of Mexico, and estuarine marsh and embayments. Salinity and habitat structure (SAV, marsh, tidal creeks, deep water, oyster reefs, and benthic substrate) are the primary drivers that affect the distribution of fish and macrocrustaceans throughout the area with three general types: freshwater resident, estuarine resident, and transient marine species. Freshwater species, some of which may tolerate low salinities, generally live in the freshwater portions of the more interior and northern-most regions of the area. Resident species are generally smaller and do not commonly migrate very far. Marine transient species spend a portion of their life cycle in the estuary, generally spawning offshore or in high-salinity bays, and use coastal marshes as nursery areas (Herke 1971, 1995). Species typically found in freshwater areas include: spotted gar, bowfin, largemouth bass, channel catfish, crappie, and gizzard shad. Estuarine-dependent species typically include red and black drum, spotted seatrout, Gulf menhaden, and southern flounder. Typical marine species include king and Spanish mackerel, and cobia.

1.4.8 Essential Fish Habitat (EFH)

Figures 1-3, 1-4, 1-5 and 1-6 display EFH for coastal migratory pelagics (king mackerel, Spanish mackerel and cobia); shrimp (brown, white and pink shrimp); red drum; and stone crab, respectively within the area (source: http://www.habitat.noaa.gov/protection/efh/newInv/index.html; accessed December 15, 2015).

Figure 1-3: Coastal migratory pelagic EFH (source: http://www.habitat.noaa.gov/protection/efh/newInv/index.html; accessed December 15, 2015)

Figure 1-4: Shrimp EFH (source: http://www.habitat.noaa.gov/protection/efh/newInv/index.html; accessed December 15, 2015)

Figure 1-5: Red drum EFH (source: http://www.habitat.noaa.gov/protection/efh/newInv/index.html; accessed December 15, 2015).

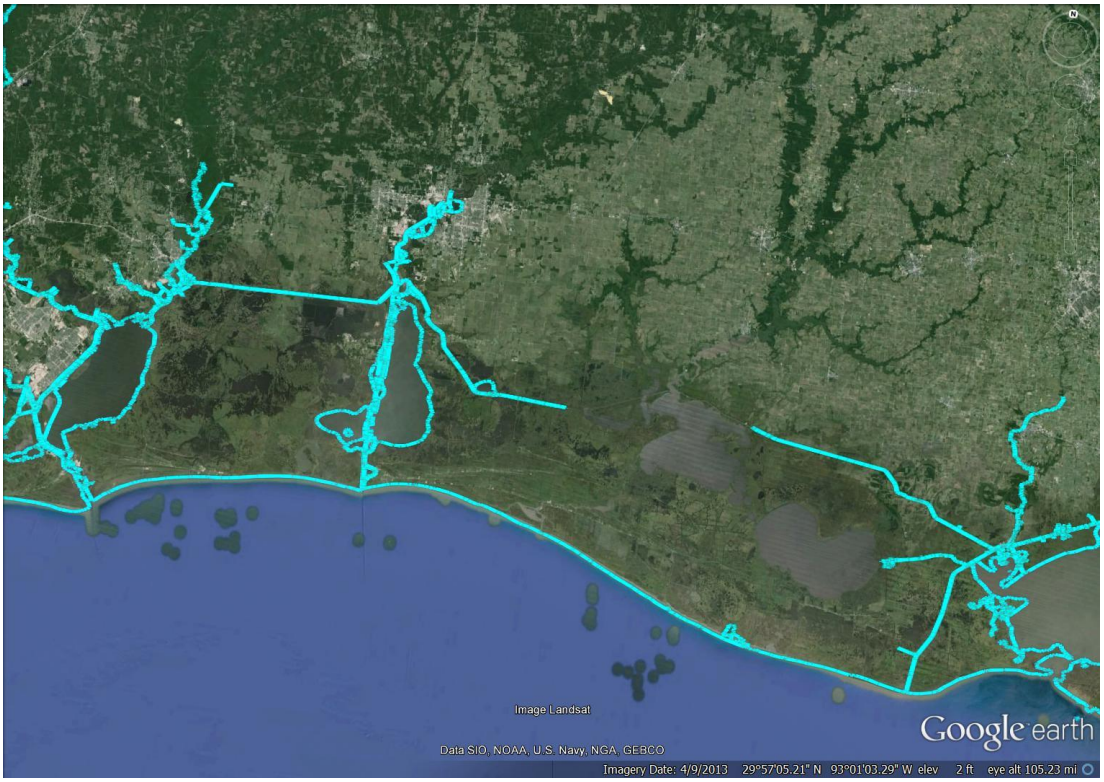

Figure 1-6: Stone crab EFH (source: http://www.habitat.noaa.gov/protection/efh/newInv/index.html; accessed December 15, 2015)

1.4.9 Threatened and Endangered Species

Piping plovers winter in Louisiana but do not nest on Louisiana's coast. Critical wintering habitat encompasses 24,950 acres along 342.5 miles of shoreline, which is most of the coast of Louisiana. Critical habitat is presented in Figure 1-7. Piping plovers arrive from their northern breeding grounds as early as late July and may be present in designated critical wintering habitat for 8 to 10 months of the year.

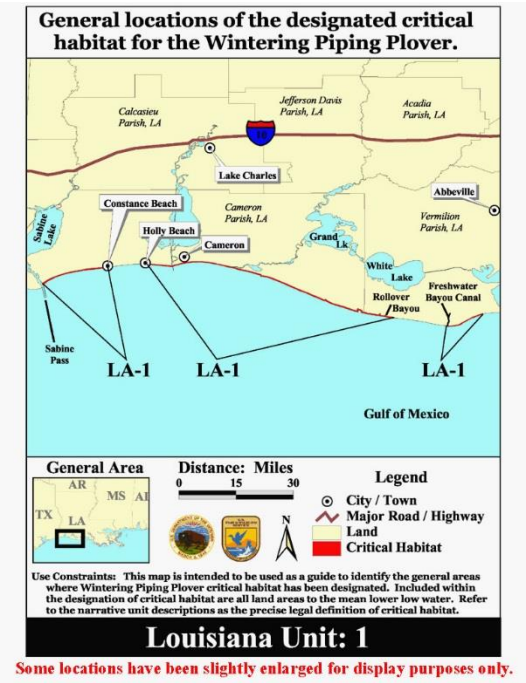

Figure 1-7: Designated critical habitat for wintering piping plover (Source: http://www.fws.gov/plover/finalchmaps/Plover_LA_1.jpg; accessed December 15, 2015)

Loggerhead Critical Habitat (*Sargassum* habitat) exists in the southernmost (offshore) portion of the study area (Figure 1-8). This critical habitat expands the entire length of the project (west to east) with the closest points ranging from approximately four miles to nine miles offshore. For additional detail concerning threatened and endangered species see Annex K.

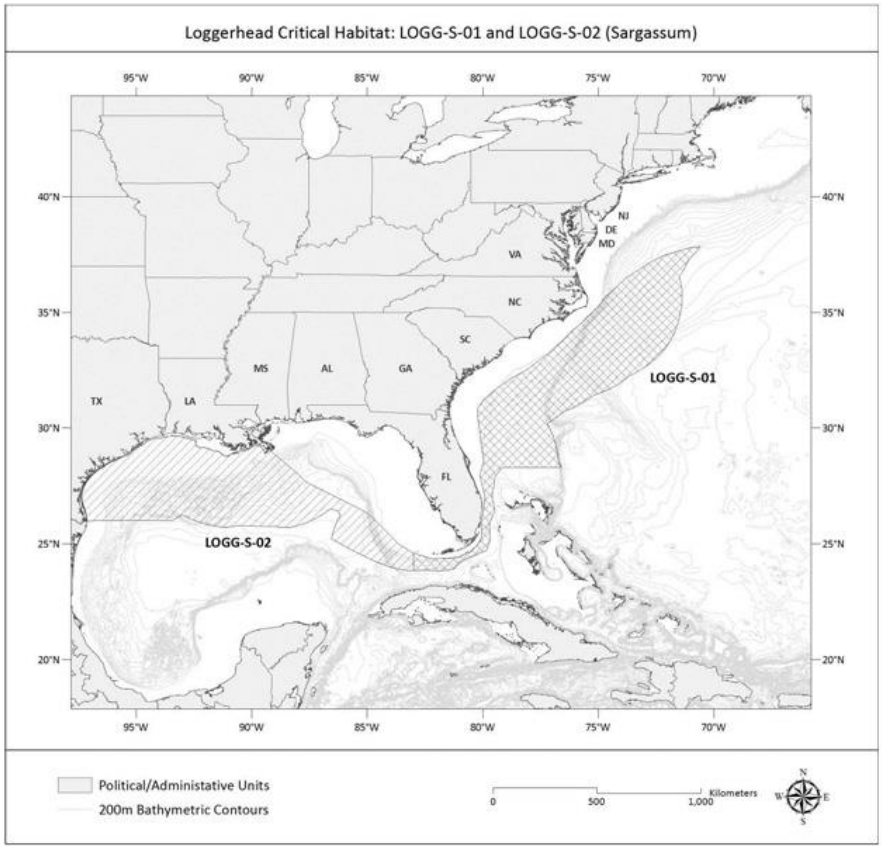

Figure 1-8 Loggerhead Critical Habitat

1.4.11 Aesthetics and Visual Resources

Other major water resources include the Gulf of Mexico, Sabine Lake, Calcasieu Lake, Grand Lake, White Lake and Vermillion Bay as large bodies of water. Within the coastal parishes there is an abundance of varying water bodies both salt and fresh water mixed with marsh, swamp and wetland. Numerous canals, streams and creeks crisscross the native habitat south of I-10 and the more developed areas along that corridor.

There are a variety of eco-regions within the area. Cameron Parish is primarily made up of Texas – Louisiana Coastal Marshes. Vermilion Parish is made up of Northern Humid Gulf Coastal Prairies in the northwest, Lafayette Loess Plains in the northeast, and Texas – Louisiana Coastal Marshes in the south. Calcasieu Parish is made up of Northern Humid Gulf Coastal Prairies in the southern parish of the parish, Flatwoods in the northern portion of the parish, and small pockets of Texas – Louisiana Coastal Marshes along the Calcasieu River corridor (according to the State of Louisiana Eco-Region Map, ref. "Louisiana Speaks").

The Northern Humid Gulf Coast Prairies originally contained tallgrass grasslands with gallery forests along streams paired with gently sloping coastal plain. In modern times, almost all of the coastal prairies have been converted to croplands, pasture, aquaculture or urban land uses. Texas – Louisiana Coastal Marshes is an area characterized by extensive freshwater and saltwater coastal marshes, few bays, and lack of barrier islands. There are many rivers, lakes, bayous, tidal channels, and canals. Chenier plains occupy about three percent of the region and are typically treeless. Lafayette Loess plains originally were home to a variety of plant species that included trees and grasses. In modern times native species have been replaced with crops of rice, soybeans, cotton, sugarcane, sweet potatoes, wheat, and aquaculture. Urban expansion into this eco-region has been substantial. Flatwoods generally occurs on mostly flat to gently sloping sediments. This eco-region was once dominated by longleaf pine flatwoods and savannas, pimple mounds, and small hillocks. While reduction of these characteristics has taken place, these features still dominate the area, especially in the case of the longleaf pine.

Other entities with institutional and public significance include the Sabine National Wildlife Refuge, Cameron Prairie National Wildlife Refuge, and Lacassine National Wildlife Refuge, all of which are located in Cameron Parish, and, finally, Sam Houston Jones State Park, which is located in Calcasieu Parish. These state and federally protected areas offer a refuge for the landscape and wildlife of southeast Louisiana and important recreational opportunities.