

REAL ESTATE PLAN
APPENDIX D

JEFFERSON COUNTY ECOSYSTEM
RESTORATION FEASIBILITY STUDY

May 2019



**US Army Corps
of Engineers**

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This Real Estate Plan has been prepared in accordance with ER 405-1-12 dated 1 May 1998.

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1. General Background

This Real Estate Plan (REP) is the real estate work product of the U.S. Army Corps of Engineers (USACE), Galveston District, Real Estate Division that supports project plan formulation for the Jefferson County Ecosystem Restoration Feasibility Study (JCER). It identifies and describes the lands, easements, and rights-of-way required for the construction, operation and maintenance of the proposed project, including those required for relocations (i.e., P.L. 91-646 relocations and utility/facility relocations), borrow material, and dredged or excavated material disposal (LERRD). Furthermore, the REP describes the estimated LERRD value, together with the estimated administrative and incidental costs attributable to providing LERRD, and the acquisition process.

2. Project Type & Applicability

The Galveston District is conducting an ecosystem restoration feasibility study in Jefferson County, Texas. Jefferson County is located approximately 90 miles east of the City of Houston (Figure 1). Jefferson County is bounded by Orange County on the northeast, by Hardin County on the north, by Liberty and Chambers Counties on the west, and by the Gulf of Mexico on the south. The east county boundary is formed by the Neches River, Sabine Lake, and Sabine Pass, and to the North, Pine Island Bayou. A series of lakes extend across the southern part of the county and beaches overlook the Gulf of Mexico. The Neches River forms its northeast boundary. The county is part of the 14th Congressional District, which was established in 1837, and contains a total area of 1,113 square miles.

2.1 Project Authority

Authorization for the study is derived from Section 110 of the Rivers and Harbors Act of 1962 and Resolution 2620 from the House of Representatives Committee on Transportation and Infrastructure dated 16 February 2000 entitled “Sabine Pass to Galveston Bay, Texas” that states:

“Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That in accordance with in accordance with Section 110 of the Rivers and Harbors Act of 1962 the Secretary of the Army is requested to review the feasibility of providing shore protection and related improvements between Sabine Pass and the entrance to Galveston Bay, Texas, in the interest of protecting and restoring environmental resources on and behind the beach, to include the 77,0000 acres of freshwater wetlands and the maritime resources of east Galveston Bay and Rollover Bay, and including the feasibility of providing shoreline erosion protection and related improvements to the Galveston Island Beach, Texas, with consideration of the need to develop a comprehensive body of knowledge, information, and data on coastal area changes and processes to include impacts from federally constructed projects in the vicinity of Galveston Island.”

2.2 Proposed Project Alternatives

2.2.1 Existing and Future without Project Conditions

Conditions for Zone 1 (nearshore/shoreline): Shoreline erosion rate of 40 ft. per year with an average loss of 11 ft. per year. Severe erosion along Sabine-Neches Waterway (SNWW) canal entrance and further west along the shoreline. Without the project, the shoreline will continue to erode with sea level change allowing for continued saltwater intrusion from the Gulf and open water development in the marsh over time.

Conditions for Zone 2 (beach/dune): Beach/dune is less than 5-10 ft. in height along the beaches and few areas have actual dune left. Without the project the beach/dune ridge marsh areas are susceptible to overwash, allowing for faster rates of erosion and sea level encroachment into marsh areas.

Conditions for Zone 3 (ridge/intertidal marsh): Back ridges to dune structures are non-existent in some areas, allowing for breaching and saltwater intrusion into marsh areas. Without the project back ridge and filling of sediment to raise the marsh platform, saltwater will continue to encroach into open areas.

Conditions for Zone 4 (high marsh): Due to continued saltwater intrusion, vegetation and soil subsidence have occurred resulting in some areas lying currently 1-4 ft. below sea level. Without the project high marsh, the Gulf Intracoastal Waterway (GIWW) structure itself could be damaged with open water development adjacent to the waterways ridges/levees and cause more saltwater to come further inland, continuing the erosion, subsidence, and habitat switching mentioned above.

2.2.2 Alternative Management Measures Considered

The following measures were considered to form the different alternatives:

Shoreline Restoration, Nearshore/Beach/Dune/Ridge:

- Removal of invasive species
- Expansion of existing ridgelines/swales
- Planting of native species
- Stabilization of dunes
- Fencing
- Nourishment of shorelines
- Re-grading slopes to transitional intertidal/littoral elevations
- Use texturized breakwaters, bulkheads, geotubes, groins, etc.
- Feeder beaches
- Feeder berms
- Jetty modifications

Marsh/Wetland Restoration, Intertidal/High Marsh:

- Re-grading slopes to proper elevations
- Removal of invasive species
- Native plant species plantings
- Hydrologic modifications (new channel cuts, widen existing channels)

Hydrologic and Hydraulic Improvements, Rivers, GIWW, Salinity, Sediment, etc.:

- Inverted Siphons
- Modification of weirs
- Installation of Fish ladders
- Construction/modification of channels (new cuts or widen existing channels)
- Modify/redesign/construct water control structures
- Widening of culverts
- Removal of sediments (Beneficial Use)
- Cap, contain sediments (sediment traps, clay caps)

2.2.3 Recommended Plan

Through refinement of the above mentioned measures, the alternatives were screened resulting in the tentatively selected plan (TSP) of 4A: Beneficial Use of Dredged Material (Figure 2). Under this recommended plan, all restoration would occur on the eastern half of the focused study area within McFaddin National Wildlife Refuge, JD Murphree Wildlife Management Area, and private lands (Figure 3 and Figure 4). This plan provides beneficial use of dredged material to restore 6,347 acres of marsh with 65% fill of 6 marsh cells, including removal of non-native plant species and planting of native species (Figure 5). Alternative 4A also includes armoring of the GIWW in three (3) sections (Figure 6).

3. Purpose & Scope

The purpose of this study is to evaluate the ecosystem restoration problems and opportunities along the coast in Jefferson County, Texas and identify potential solutions that are economically justified and environmentally sound. The scope of this study is to define existing and future without project conditions, assess previously developed measures, identify new alternatives, and identify potential environmental opportunities that could beneficially utilize dredged material from the SNWW and in upland placement areas to reduce coastal and inland marsh erosion in Jefferson County, Texas.

3.1 Previous Studies

- Final Environmental Impact Statement, Maintenance Dredging, Gulf Intracoastal Waterway, Texas Section, Main Channel and Tributary Channels, Volumes 1-3, October 1975.
- GIWW Modifications, Texas Section 905(b) Analysis, U.S. Army Corps of Engineers, September 2000.
- Sabine-Neches Waterway Channel Improvement Project for Southeast Texas and Southwest Louisiana, March 2011.
- Sabine Pass to Galveston Bay Coastal Storm Risk Management and Ecosystem Restoration Feasibility Study, May 2017.

4. Non-Federal Sponsor

There are two Non-Federal Sponsors (NFS) for this project. The first is the Sabine-Neches Navigation District (SNND) and the second is Jefferson County. SNND's interest in this project is the beneficial use of dredged material from the SNWW. Jefferson County has the authority and

capability to furnish lands, easements and rights-of-way for the lands required for the project (Exhibit B). SNND will not be acquiring real estate for this project. Plans for the state- and federally-owned lands are addressed in sections 5 and 6.

5. Real Estate Requirements

5.1 Existing Real Estate Requirements

5.1.1 Existing USACE Interest

The Galveston District has many perpetual easements within the vicinity, however, holds no real estate interest within the project footprint. Real estate required for the project will be acquired by the NFS through a combination of estates outlined in Section 5.2.1.

5.2 New Real Estate Requirements

The six (6) restoration units, three (3) armoring areas, and pipeline corridors for movement of dredged material from the SNWW to the marsh cells affect 35 real estate tracts consisting of four (4) privately owned tracts, 25 State owned tracts, and six (6) Federally owned tracts (Figure 7). The federally owned tracts are addressed in Section 6 of the REP.

Four privately owned real estate tracts, consisting of undeveloped over five acres and real/vacant platted lots totaling 2.54 acres, are required for the GIWW Armoring portion of the project (Table 1 and Figure 4).

Table 1: Privately Owned Tracts

Property ID	Property Use Description	Total Parcel Tracts (Acres)	Impacted Area (Acres)
GIWW Armoring			
139888	Undeveloped Over 5 acres	62.50	0.53
140878	Real/Vacant Platted Lt.	259.38	0.45
142605	Undeveloped Over 5 acres	70.37	1.50
142642	Real/Vacant Platted Lt.	20.96	0.06
Grand Total			2.54

The J.D. Murphree Wildlife Management Area, which is owned by the State of Texas and managed by the Texas Parks and Wildlife Department (TPWD), is located within the proposed project footprint, consists of 5,644.97 acres and is listed in Table 2 and shown in Figure 8.

Table 2: Texas Parks and Wildlife Department Owned Tracts

Property ID	Owner	Management Area	Impacted Acres
138600*	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	1.55
139764	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	530.72
139789*	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	0.36
139804	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	225.08
139806	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	607.23
139810	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	172.44

139815	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	475.68
139816	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	553.12
140429	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	108.90
140430	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	186.53
142295	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	355.51
142640	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	53.49
142641	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	180.02
142648	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	256.11
142649	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	58.57
142692	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	293.07
142706	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	417.04
142720	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	18.56
142721	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	297.15
142722	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	162.20
142744	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	368.09
143029**	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	0.73
143160	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	68.96
143162	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	253.57
143319*	Texas Parks & Wildlife	J. D. Murphree Wildlife Management Area	0.29
Total			5,644.97

*Impacted by pipeline corridor only. Assumed 30 ft. width to calculate acreage.

**Impacted by GIWW Armoring only.

5.2.1 Estate Needed for New Requirements

There are six (6) restoration units affecting 6,347 acres including 35 tracts consisting of vacant/undeveloped land, a wildlife management area, and a national wildlife refuge. The required estate for ecosystem restoration projects per ER 405-1-12 is fee and Jefferson County has the ability to acquire private lands in fee. However, lands owned by the state and managed by TPWD in the J.D. Murphree Wildlife Management Area will not be conveyed to the NFS in fee. For the use of TPWD property, TPWD and the NFS will need to enter into an inter-local cooperation agreement, resulting in a non-standard estate requiring approval by USACE Headquarters as set forth in ER 405-1-12. The request for approval of the non-standard estate will be made by separate request to USACE HQ and can be reasonably anticipated to take three to six months.

TPWD's long-term management plan for the J.D. Murphree Wildlife Management Area prioritizes wetland restoration due to erosion. The mission of TPWD aligns with the purpose of this ecosystem restoration project, which should justify the non-standard estate and continuation of ownership by the State of Texas. As a result of the non-standard estate, the continuing care and maintenance of the project features will need to be addressed in the project partnership agreement (PPA).

The tentative plan for federal lands included in the project footprint is addressed in Section 6.

Non-Standard Estate

The granting clause and additional details regarding this non-standard estate will be updated when available. At 30-35% design, discussions regarding the specifics of the proposed non-standard estate are ongoing. Considerations at this time include a license or an interest similar to a conservation or ecosystem restoration easement for state-owned land. However, the final estate will be determined in Pre-Construction, Engineering, and Design (PED) phase.

Standard Estate #1. Fee

The fee simple title to (the land described in Schedule A) (Tracts Nos. _____, _____ and _____) subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

Standard Estate #13. Utility and/or Pipeline Easement

A perpetual and assignable easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for the location, construction, operation, maintenance, alteration; repair and patrol of (overhead) (underground) (specifically name type of utility or pipeline); together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

Standard Estate #15. Temporary Work Area Easement

A temporary easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for a period not to exceed _____, beginning with date possession of the land is granted to the United States, for use by the United States, its representatives, agents, and contractors as (borrow area) (work area), including the right to (borrow and/or deposit fill, spoil and waste material thereon) (move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the _____ Project, together _____ with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structure, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

Standard Estate #21. Bank Protection Easement

A perpetual and assignable easement and right-of-way in, on, over and across the land hereinafter described for the location, construction, operation, maintenance, alteration, repair, rehabilitation and replacement of a bank protection works, and for the placement of stone, riprap and other materials for the protection of the bank against erosion; together with the continuing right to trim, cut, fell, remove and dispose therefrom all trees, underbrush, obstructions, and other vegetation; and to remove and

dispose of structures or obstructions within the limits of the right-of-way; and to place thereon dredged, excavated or other fill material, to shape and grade said land to desired slopes and contour, and to prevent erosion by structural and vegetative methods and to do any other work necessary and incident to the project; together with the right of ingress and egress for such work; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however to existing easements for public roads and highways, public utilities, railroads and pipelines.

5.2.2 Access/Staging Areas

The assumption is that access and/or staging areas will be required for the project and will be identified prior to the signing of the PPA. An initial determination of the access and/or staging areas necessary to construct the project will be made when the project reaches at least 65% design during the PED phase. At the conclusion of the PED phase, when the project reaches 95% design, determinations can be finalized and the REP will be updated to include this information, as well as the duration for any temporary work areas easements necessary as described in section 5.2.1.

5.3 Mitigation

There are no mitigation requirements for this project.

5.4 Borrow Material

All material necessary for the project will be obtained during normal maintenance cycles or from new work construction from the SNWW. Engineering has confirmed the maintenance dredging volumes from the SNWW are of sufficient quantity and proximity to serve the borrow needs for the project, without having to utilize other sources. It is expected that a portion of the marsh nourishment would be included in each SNWW maintenance dredging contract, based on the amount of material dredged, eliminating the need for storage of material. The proposed alignment of Operation & Maintenance (O&M) Contract Awards and Marsh Cell Restoration appears in Table 3, with marsh cell references in Figure 9.

Table 3: Proposed O&M Dredging and Marsh Cell Restoration Alignment

Contract No.	O&M Contract Award Year	SNWW Dredge Location	Volume (MCY)	Marsh Cell To Be Restored	Volume for Marsh Construction (CY)	No. of Tracts Impacted by Contract (Ownership)	Property IDs
1	FY22	PA Junction & Taylors Bayou	1.5	1	165,040	2 (State)	140430, 142720
				2 (A)	1,334,960	5 (State)	140429, 142744, 139806, 142706, 142721
2	FY23	Pass Channel	0.7	6 (A)	700,000	7 (State)	142692, 142641, 143162, 142649, 139764, 142722, 143160
3	FY24	PA Junction + Taylors Bayou	1.5	2 (B)	690,750	4 (State)	139815, 139816
				3	186,340	1 (State) 1 (Federal)	139810, 139808
				4	196,990	2 (Federal)	139813, 139765

				5	425,920	3 (State) 2 (Federal)	142641, 143162, 142640, 143161, 139765
4	FY25	PA Canal (Full)	1.7	2 (C)	588,370	4 (State)	142692, 139815, 139816, 142648
				6 (B)	1,111,630	6 (State)	142721, 139764, 142722, 143160, 142648, 142295

5.5 Recreation Features

There are no recreation features proposed for this project.

6. Existing Federal Projects and Federally Owned Land

A small part of the project footprint impacts lands owned by the Federal Government. Portions of the pipeline corridors, all of marsh cell 4, and portions of marsh cells 3 and 5 impact six (6) tracts, totaling 701.17 acres, owned by the Federal Government and managed by the U.S. Fish and Wildlife Service (USFWS) (Table 4). The six (6) tracts are located within the McFaddin National Wildlife Refuge (Figure 10).

The sponsor would not acquire the tracts located within the National Wildlife Refuge (NWR), as the USFWS would seek their own appropriations for the project. USFWS is ultimately responsible for managing its refuge lands; USACE is only seeking Congressional authorization and funding for portions of the project occurring on private- and state-owned lands. For this reason, the real estate costs associated with USFWS land are not included in the Baseline Cost Estimate for Real Estate (Table 5). The intention is to work with the federal agency to align the ecosystem restoration project with their management plan. The initial coordination with USFWS to outline the joint agency implementation during the feasibility phase was positive and detailed coordination will continue during the PED phase of the project. Failure to reach an agreement on implementation, or conflicting USFWS priorities would result in USACE implementing a slightly smaller plan or refinements to the recommended plan. The final array of the alternatives was coordinated with the resource agencies.

Table 4: U.S. Fish and Wildlife Service Owned Tracts

Property ID	Owner	Division	Usage	Affected Acres
139765	United States of America	U. S. Fish & Wildlife Service	McFaddin National Wildlife Refuge	488.64
139766*	United States of America	U. S. Fish & Wildlife Service	McFaddin National Wildlife Refuge	1.70
139808	United States of America	U. S. Fish & Wildlife Service	McFaddin National Wildlife Refuge	64.26
139813	United States of America	U. S. Fish & Wildlife Service	McFaddin National Wildlife Refuge	45.54
143161	United States of America	U. S. Fish & Wildlife Service	McFaddin National Wildlife Refuge	98.50
325757*	United States of America	U. S. Fish & Wildlife Service	McFaddin National Wildlife Refuge	2.53
Total Acres				701.17

*Impacted by pipeline corridor only. Assumed 30' width of pipeline corridor to calculate acreage.

7. Navigation Servitude

Navigation Servitude stems from the Commerce Clause of the Constitution of the United States (U.S. CONST. art.I, Sec.8, cl.3), and is defined as the dominant right of the Federal Government to use, control, and regulate the navigable waters of the United States and submerged lands thereunder for various commerce-related purposes including navigation and flood control. In tidal areas, the servitude extends to all lands below the mean high water mark, whereas in non-tidal areas, the servitude extends to all lands within the bed and banks of a navigable stream that lie below the ordinary high water mark. The Navigation Servitude will be asserted where appropriate.

Marsh cell restoration features for this project are not within the navigable waters of the United States. However, it is estimated that portions of the GIWW armoring features are submerged. In the PED phase, field investigations will be conducted to determine the ordinary high water mark and subsequently, the applicability of navigation servitude. It is anticipated this work can be completed prior to the end of the PED phase to finalize the LER required for the project in advance of the signing of the PPA. No acquisition of real estate will be required for GIWW armoring occurring below the ordinary high water mark due to the navigation servitude.

8. Induced Flooding

There will be no induced flooding by virtue of the construction of the project.

9. Baseline Cost Estimate for Real Estate

The cost estimate listed below reflects the real estate costs for the recommended plan, excluding costs associated with USFWS lands. The baseline cost estimate is subject to change through the final draft. The land cost listed below is based on the gross appraisal completed 13 August 2018. Condemnations were determined by 10% of private ownerships. The condemnation figure does not include state- or federally-owned lands.

Table 5: Baseline Cost for Proposed Project

NON-FEDERAL COSTS						
Account	Description	Contract 1	Contract 2	Contract 3	Contract 4	TOTAL FOR ALL CONTRACTS
01	Acquisitions Labor (24 hrs. x \$100 per tract)	\$36,000.00	\$16,800.00	\$12,000.00	\$4,800.00	\$69,600.00
01	Condemnation (\$90,000 per tract, 10% of the private tracts)	\$90,000.00	\$0.00	\$0.00	\$0.00	\$90,000.00
01	Appraisals (\$2,050 per tract)	\$30,750.00	\$14,350.00	\$10,250.00	\$4,100.00	\$59,450.00
01	Survey (\$4,000 per tract)	\$60,000.00	\$28,000.00	\$20,000.00	\$8,000.00	\$116,000.00
01	Temporary work easements, ROW, Permits, License (\$500 per owner)	\$2,500.00	\$500.00	\$500.00	\$500.00	\$4,000.00
01	Project Related Administration (8 hrs. x \$75 per hr. per tract)	\$9,000.00	\$4,200.00	\$3,000.00	\$3,000.00	\$19,200.00
01	Land Cost*	\$858,428.33	\$594,550.47	\$482,301.02	\$235,045.57	\$2,170,325.39
01	LERRD Crediting (Admin \$500 per tract)	\$7,500.00	\$3,500.00	\$2,500.00	\$1,000.00	\$14,500.00
01	Title Policy (\$300 per tract)	\$4,500.00	\$2,100.00	\$1,500.00	\$600.00	\$8,700.00
	Total Admin and Payments	\$1,098,678.33	\$664,000.47	\$532,051.02	\$257,045.57	\$2,551,775.39
	Contingencies (25%)	\$274,669.58	\$166,000.12	\$133,012.76	\$64,261.39	\$637,943.85
	Non-Federal Total	\$1,373,347.91	\$830,000.59	\$665,063.78	\$321,306.96	\$3,189,719.24
FEDERAL COSTS						
Account	Description	Contract 1	Contract 2	Contract 3	Contract 4	TOTAL FOR ALL CONTRACTS
01	Acquisitions (Review RE Planning Documents & Mapping at 4.5 hrs. x \$125 per hour per tract)	\$8,437.50	\$3,937.50	\$2,812.50	\$1,125.00	\$16,312.50
01	Appraisals (5 hrs. x \$125 per hour per tract)	\$9,375.00	\$4,375.00	\$3,125.00	\$1,250.00	\$18,125.00
01	Project Related Administration (3 hrs. x \$125 per hour per tract)	\$5,625.00	\$2,625.00	\$1,875.00	\$750.00	\$10,875.00
01	LERRD Crediting and Real Estate Certification (2.25 hrs. x \$125 per hr. per tract)	\$4,218.75	\$1,968.75	\$1,406.25	\$562.50	\$8,156.25
	Total Admin and Payments	\$27,656.25	\$12,906.25	\$9,218.75	\$3,687.50	\$53,468.75
	Contingencies (25%)	\$6,914.06	\$3,226.56	\$2,304.69	\$921.88	\$13,367.19
	Federal Total	\$34,570.31	\$16,132.81	\$11,523.44	\$4,609.38	\$66,835.94
	GRAND TOTAL	\$1,407,918.23	\$846,133.40	\$676,587.21	\$325,916.34	\$3,256,555.18

*The Land Cost excludes the valuation of USFW lands (\$278,776.00).

10. Public Law 91-646 Relocation

There are no residential, nonresidential, commercial, industrial, or farm properties that would be subject to relocation pursuant with PL 91-646.

11. Mineral and Energy Activity

The type of mineral activity in the vicinity of the project is oil and gas exploration and production. The lands for marsh cell 2 (managed by TPWD) and marsh cell 3 (managed by TPWD and USFWS) contain a buried pipeline and several visible wells (Table 7 and Table 8). Approximately 10 active wells are located on the TPWD-managed property within the project footprint (Table 8) and are mapped in Figure 11. The wells appear on four tracts (parcel IDs: 139806, 140429, 142721, and 142744) totaling 1,381 acres.

The PDT believes the ecosystem restoration effort and the expected derived benefits can coexist with the existing ongoing oil and gas exploration and production for a number of reasons. The area was heavily exploited earlier and minimal further exploration is anticipated. As referenced in the section 4.6.2 of the main report, four well pads are not routinely maintained or used to due to the lack of well productivity. Secondly, excessive mineral extraction in past years resulting in major impacts have occurred already and the study accounted for these conditions. Finally, the PDT views the impact from subsidence as far less of a concern than impact from relative sea level rise. From an ecosystem restoration viewpoint, the PDT believes the acquisition of mineral rights for the sole purpose of protecting the project is not justified.

At this time, there are no expected impacts to the oil and gas industry during the restoration of the marsh cells. It is expected the ecosystem restoration efforts, such as marsh elevation development, removal of invasive species and planting of native species, was developed to avoid impacting subsurface rights and existing active wells within the proposed project footprint. The placement of dredged material to 65% fill in the marsh cell restoration units is not expected to impact buried pipelines. Repairs and maintenance to wells or pipelines by the oil and gas industry could potentially disrupt project features. However, mitigating solutions can be addressed through the non-standard estate and the Section 408 review process discussed in the following paragraphs.

It is the intention of the NFS to enter into an inter-local agreement resulting in a non-standard estate for the use of these lands for the project. The risk of mineral activities and maintenance of pipelines or wells impacting the project features should be noted by the NFS and will need to be addressed in the PPA. At this time, the current agreements between the well and pipeline owners and the State of Texas (TPWD) are unknown. Specific details regarding leaseholder access to the existing wells and responsibilities for the repair and replacement of project features in the event of disruption from mineral or energy activities will need to be addressed during the PED phase. It is expected that the non-standard estate developed during PED for the use of these lands will include language to restrict or prohibit new mineral activity from taking place on project lands.

At an estimated feasibility level design of 30-35%, the details regarding the protection of the project features from mineral activity through the non-standard estate and/or the PPA have not yet been finalized. It should be noted, however, that any third party request to conduct work on USACE project lands will be subject to the Section 408 review process, giving USACE the additional opportunity to ensure the project continues to provide its intended benefit. Approval through Section 408 could include the requirement that, after completing maintenance, the well or pipeline owner is required to restore the project to its pre-maintenance condition.

Once 65% design is reached in PED, additional research will be conducted to confirm ownership of the wells, as well as an investigation of the current rights of the well owners impacted by the project. Coordination between USACE Engineering and Real Estate teams, as well as the NFS, TPWD, and the well owners will be required. As discussions with all parties continue regarding the project features and requirements, responsibilities will be agreed upon and this section of the REP will be revised to reflect those agreements.

12. Assessment of Project Sponsor Land Acquisition Capabilities

The Non-Federal Sponsors, Sabine-Neches Navigation District and Jefferson County have the authority and capability to furnish lands, easements and rights-of-way. For the TSP footprint, Jefferson County has the authority and capability to furnish lands, easements, and rights of way. Once signed, a copy of the assessment of Jefferson County’s land acquisition capabilities will be included in Exhibit B. SNND will not be acquiring real estate for this project.

13. Zoning in Lieu of Acquisition

No zoning in lieu of acquisition is anticipated for this project.

14. Acquisition Schedule

The proposed plan is to acquire four privately owned real estate tracts totaling 2.54 acres and 25 state-owned tracts totaling 5,644 acres. The land acquisition schedule below outlines the milestones and approximate durations for the acquisition of each of the 29 tracts, which can be expected to take two to two and a half years (Table 6). The durations shown below are the estimated maximum durations, however milestones may move quicker if preceding tasks are completed sooner than expected. It should be noted that each of the 29 tracts should move along the acquisition schedule independently of the other tracts.

Table 6: Land Acquisition Schedule

Land Acquisition Schedule		
Milestone*	Predecessor	Maximum Duration
Transmittal of ROW drawings and instruction to proceed with acquisition along with required estate(s)	Immediately after PPA is signed	30 days
Obtain Surveys	Upon transmittal of ROW drawings and instruction to proceed with acquisition	120 days

Obtain Title Evidence	Upon completion of surveys	120 days
Development and Approval of Non-Standard Estate for State-Owned Tracts	Development of Non-Standard Estate granting clause/language can begin upon PPA execution. Non-Standard Estate approval package will not be submitted to HQ until obtaining title evidence and surveys.	365 days
Obtain Appraisals & Reviews	Upon obtaining title evidence	90 days
Authorization to Proceed with Offer	Upon obtaining appraisals and reviews	30 days
Conclude Negotiations	Upon obtaining authorization to proceed with offer	90 days
Begin Condemnations	Upon conclusion of negotiations	30 days
Conduct Closings	Upon concluding negotiations	90 days
Conclude Condemnations	Upon beginning condemnations	240 days
NFS Attorney Certifies Availability of LERRD	Upon conclusion of condemnation	30 days
Corps Certifies Availability of LERRD	Upon Attorney Certification of LERRD	30 days
Review LERRD Credit Request	Upon completion of the project and NFS submission of LERRD documentation	120 days
Approve or Deny LERRD Credit Requests	Upon conclusion of LERRD Credit documentation review	15 days

*Milestones are based on the Project Partnership Agreement (PPA) being signed.

15. Facility/Utility/Pipeline Relocations

No pipeline relocations are expected for this project. The lands for marsh cell 2 (managed by TPWD) and marsh cell 3 (managed by TPWD and USFWS) contain a buried pipeline and several visible wells.

Due to the nature of this ecosystem restoration, oil and gas wells will be avoided. Dredged material will be placed to 65% fill, which is not anticipated to affect buried pipelines. The other ecosystem restoration features (such as removal of non-native species and planting of native species) can be performed around the visible wells to avoid impact. As mentioned in Section 11 of the REP above, the risk of mineral and energy activities on the project lands should be noted by the NFS and the responsibilities for repair or maintenance of the project features will be addressed by the PPA. At this stage of design, these details have not been finalized. This section of the REP will be updated as agreements are determined.

Figure 11 provides a map of oil and gas wells and pipelines and their approximate locations. Table 7 identifies operations, commodity, system type, permit, status and diameter of the known pipeline within the project footprint. This information was obtained from the Railroad Commission of Texas and is subject to verification. Table 8 identifies operator, depth, permit, plug data, description, status, and X & Y locations if known for the oil and gas wells within the project footprint. This information was also obtained from the Railroad Commission of Texas and is subject to verification.

ANY CONCLUSION OR CATEGORIZATION CONTAINED IN THIS REAL ESTATE PLAN, OR ELSEWHERE IN THIS PROJECT REPORT, THAT AN ITEM IS A UTILITY OR FACILITY RELOCATION TO BE PERFORMED BY THE NON-FEDERAL SPONSOR AS PART OF ITS LERRD RESPONSIBILITY IS PRELIMINARY ONLY. THE GOVERNMENT WILL MAKE A FINAL

DETERMINATION OF THE RELOCATIONS NECESSARY FOR THE CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PROJECT AFTER FURTHER ANALYSIS AND COMPLETION AND APPROVAL OF FINAL ATTORNEY'S OPINIONS OF COMPENSABILITY FOR EACH OF THE IMPACTED UTILITIES AND FACILITIES.

Table 7: Pipeline within Project Footprint

Operator	Commodity	System Type	T4 Permit	Status	Diameter (inches)
Natural Gas P/L CO of Amer LLC	Natural Gas	Gas Transmission	00399	In Service	30

Table 8: Oil and Gas Wells within Project Footprint

Operator	Well Depth (ft)	Permit Number	Description	Wellbore Status	X (NAD27)	Y (NAD27)
Coalinga Corporation	8441	NA	Plugged Oil Well	Plugged	29.776501	-93.990637
Kingwood Exploration LLC	7085	827530	Oil Well	Open	29.774498	-93.984522
Shell Oil Company	7850	NA	Oil Well	Historic	29.773304	-93.985559
Kingwood Exploration LLC	7773	808438	Oil	Open	29.773095	-93.982399
Kingwood Exploration LLC	7773	808438	Permitted Location	Open	29.772199	-93.984308
Unknown	NA	NA	Dry Hole	Dry	29.767424	-93.982237
Kingwood Exploration LLC	8668	481972	Oil / Gas Well	Open	29.771881	-93.980298
Shell Oil Company	9174	NA	Gas Well	Historic	29.767517	-93.985199
Unknown	NA	NA	Dry Hole	Dry	29.777681	-93.989447
Kingwood Exploration LLC	6717	521197	Oil Well	Open	29.776068	-93.989416
Unknown	NA	273380	Permitted Location	Location	29.788974	-93.996152
Kingwood Exploration LLC	8600	NA	Injection / Disposal From Gas	Open	29.777409	-93.977396
Unknown	NA	NA	Dry Hole	Dry	29.769842	-93.995437
Kingwood Exploration LLC	7859	NA	Oil / Gas Well	Open	29.775170 (NAD83)	-93.985882 (NAD83)
Kingwood Exploration LLC	7085	827530	Permitted Location	Open	29.773894	-93.983232
Kingwood Exploration LLC	6356	817587	Oil Well	Open	29.774115 (NAD83)	-93.985300 (NAD83)
Kingwood Exploration LLC	7859	NA	Permitted Location	Open	29.776443	-93.980626

16. Hazardous, Toxic, and Radiological Waste or Other Environmental Considerations

No sites were found that had recognized HTRW environmental conditions. While pipelines and oil and gas wells are not classified as HTRW, project measures often must be designed around

oil and gas infrastructure. Jefferson County has several pipelines and oil and gas wells located in and near the proposed project footprint that have the potential to affect the proposed project if not adequately considered and evaluated.

17. Sponsor Notifications of Risk

The letter notifying the NFS of the risk in acquiring lands prior to signing of the PPA is shown in Exhibit C.

Exhibits A

Figures

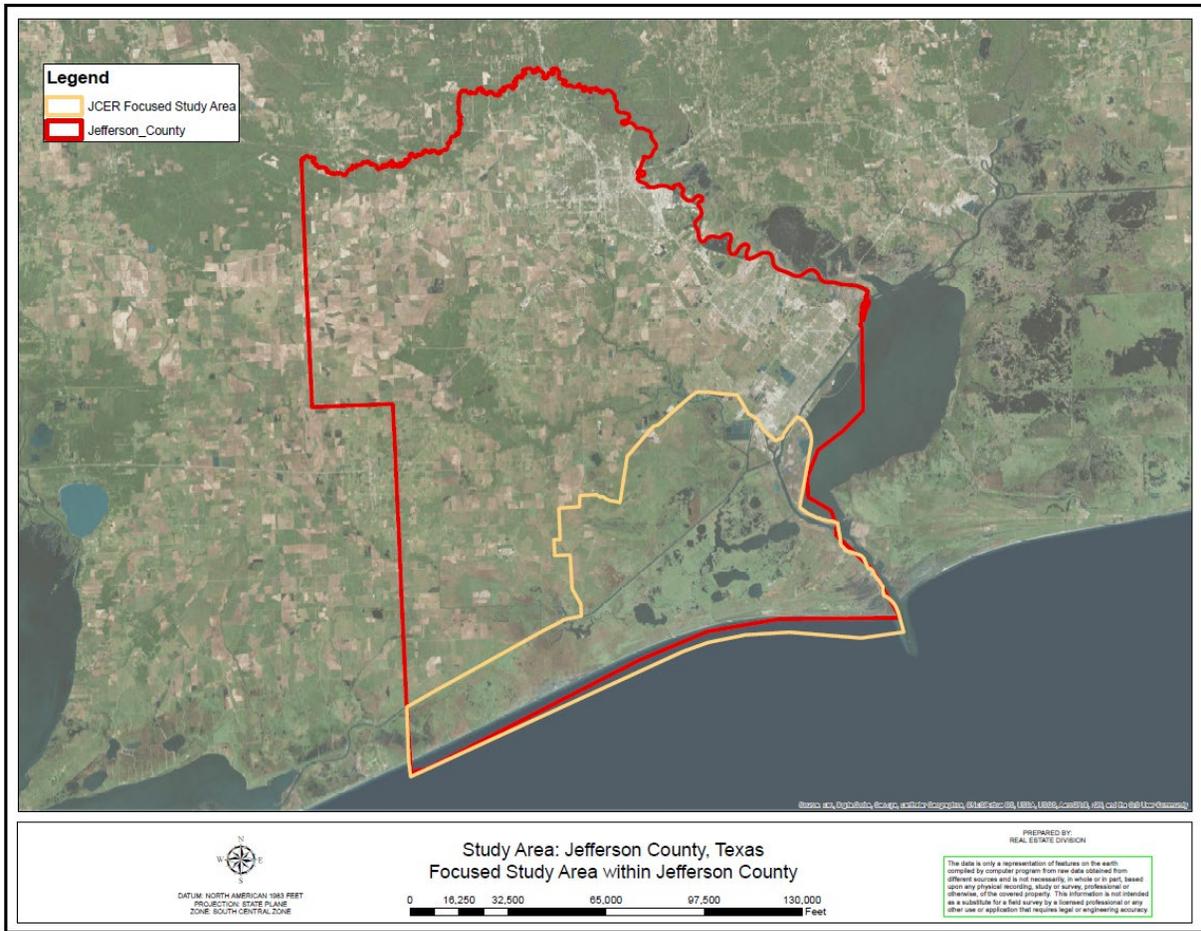


Figure 1: Focused Study Area within Jefferson County

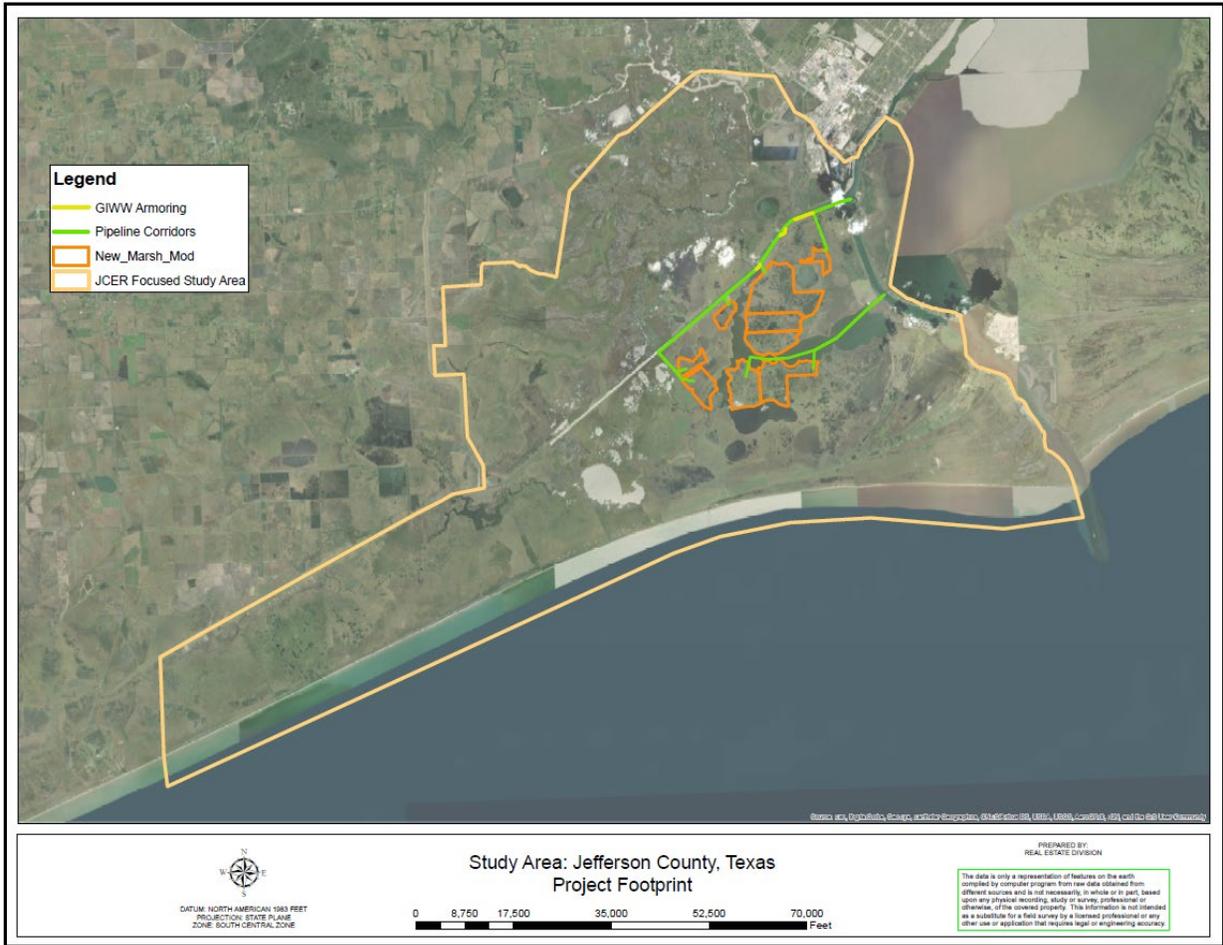


Figure 2: Project Footprint

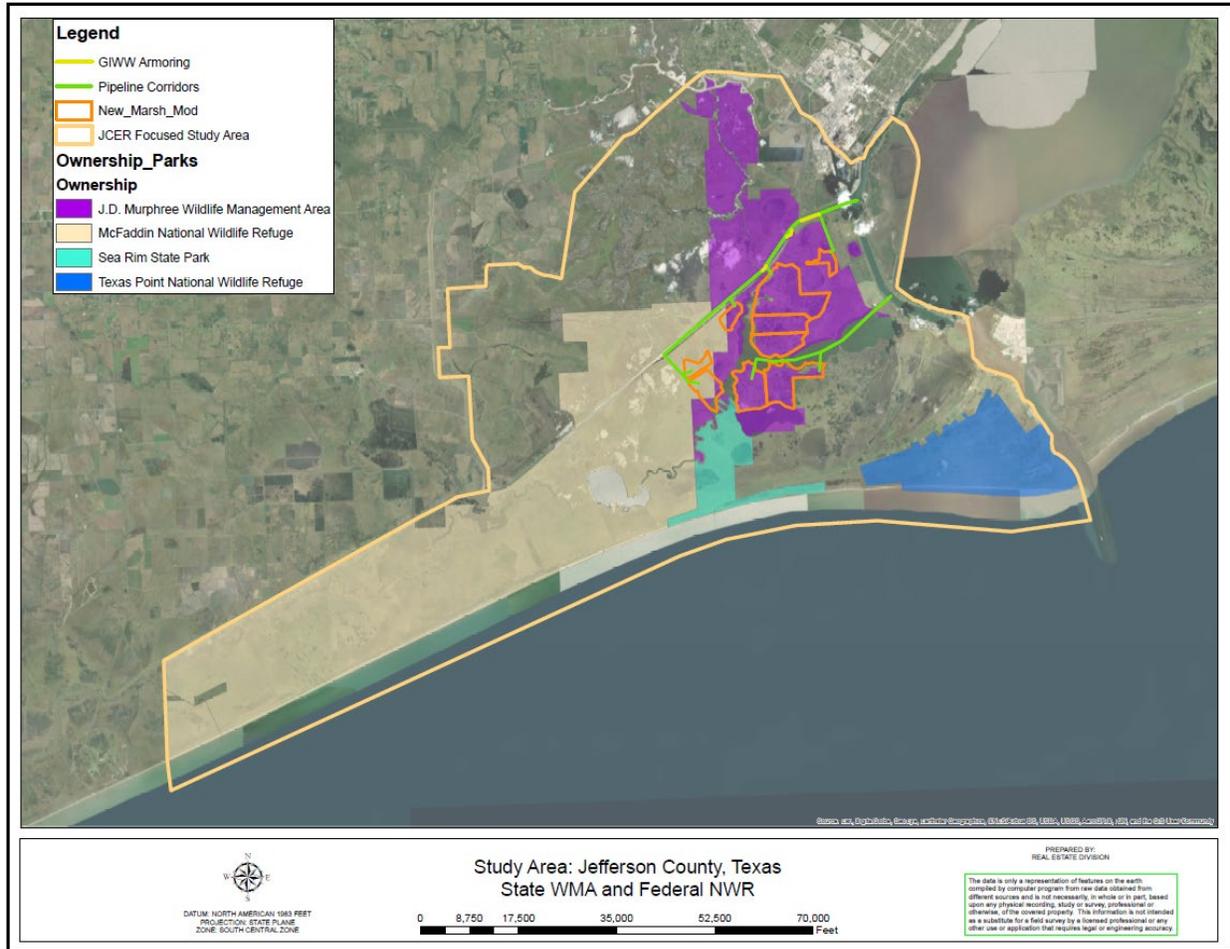


Figure 3: State Wildlife Management Areas (WMA) and Federal National Wildlife Refuge (NWR)

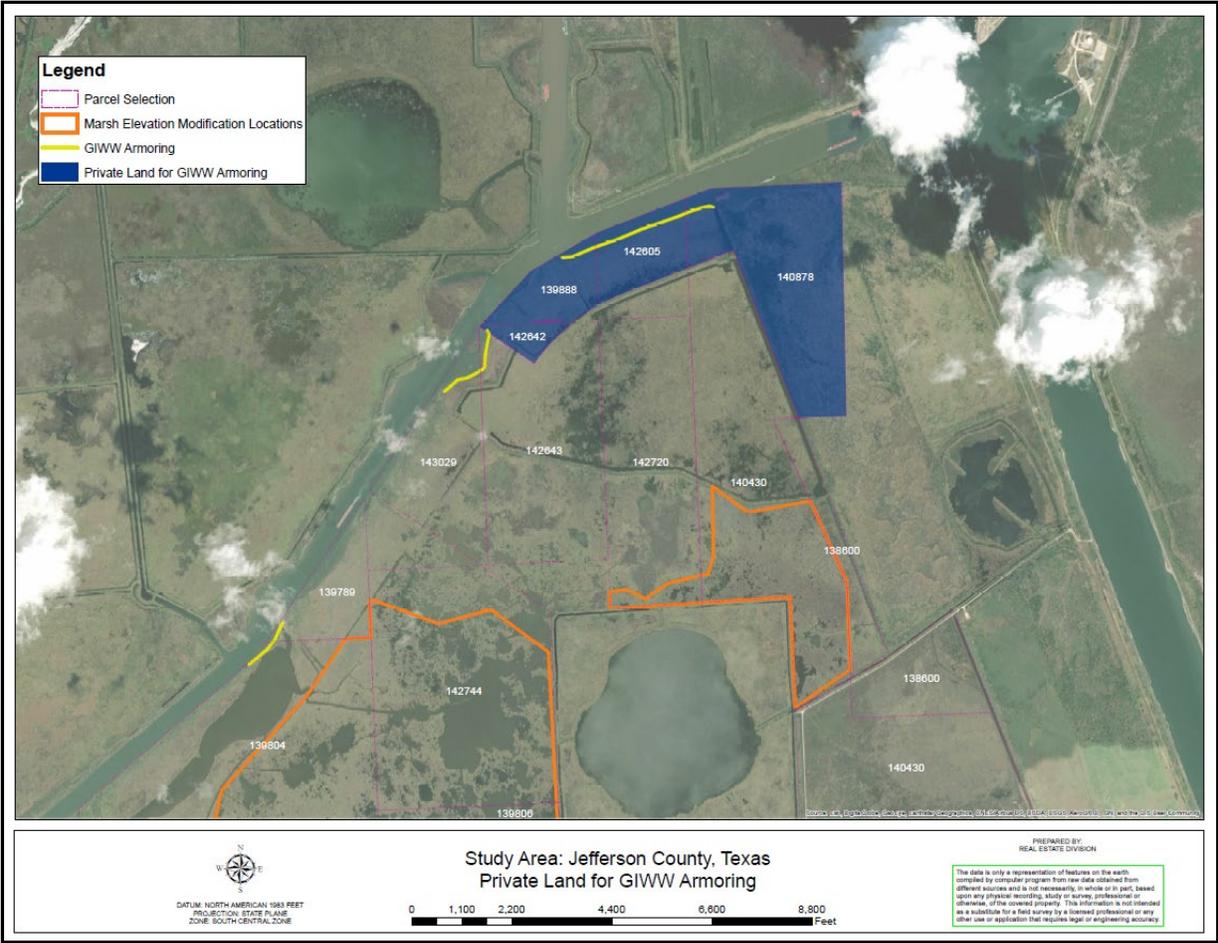


Figure 4: Private Land for GIWW Armoring

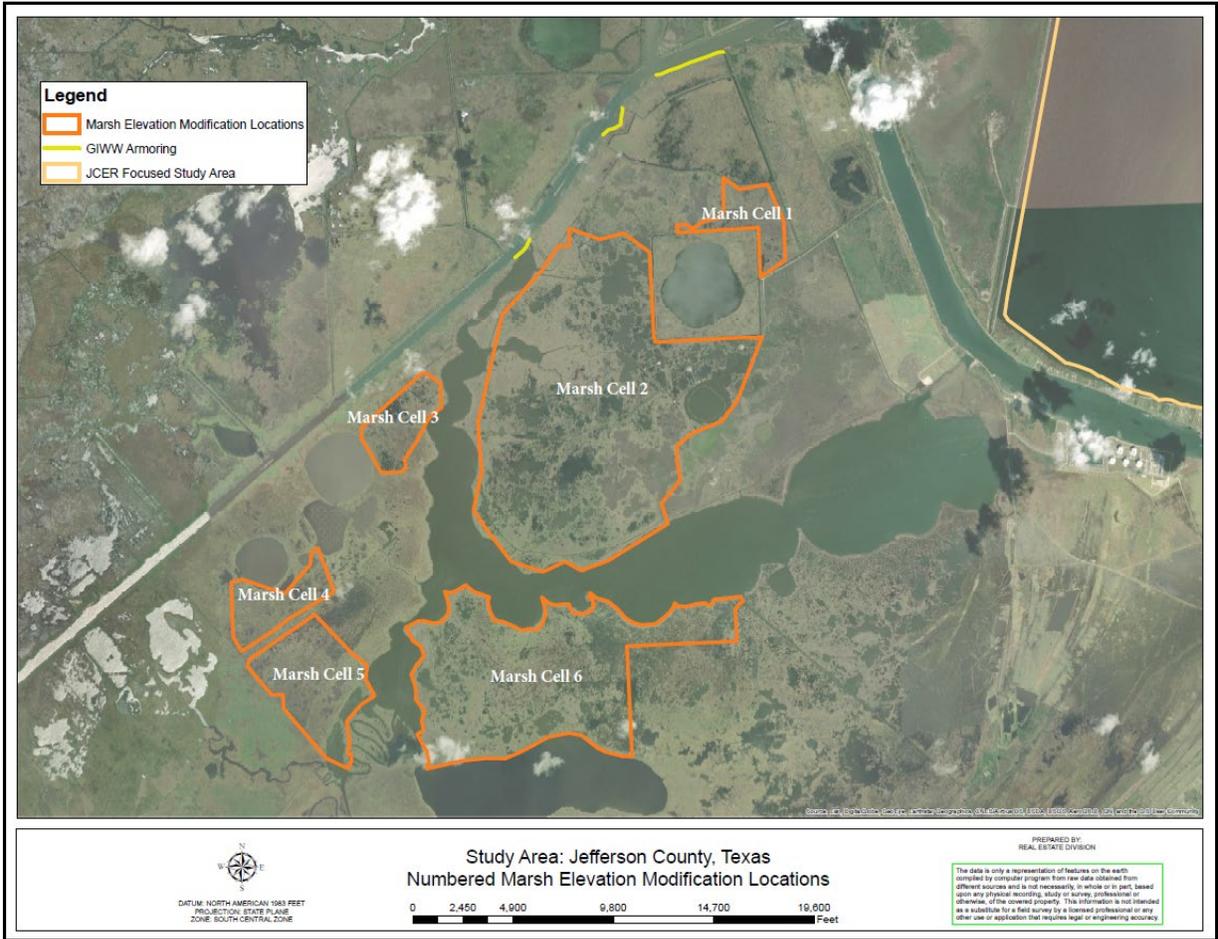


Figure 5: Numbered Marsh Elevation Modification Locations

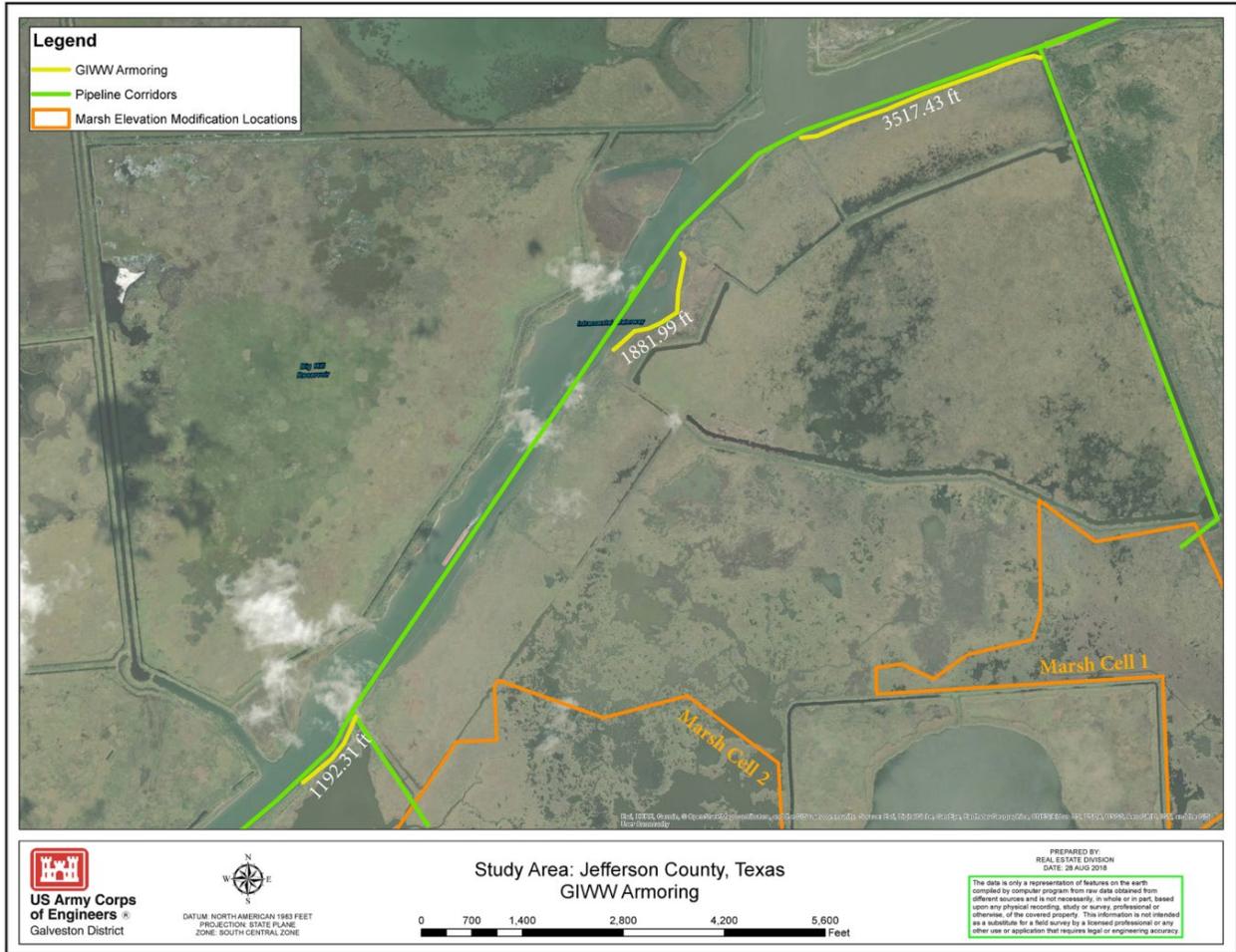


Figure 6: TSP GIWW Armoring

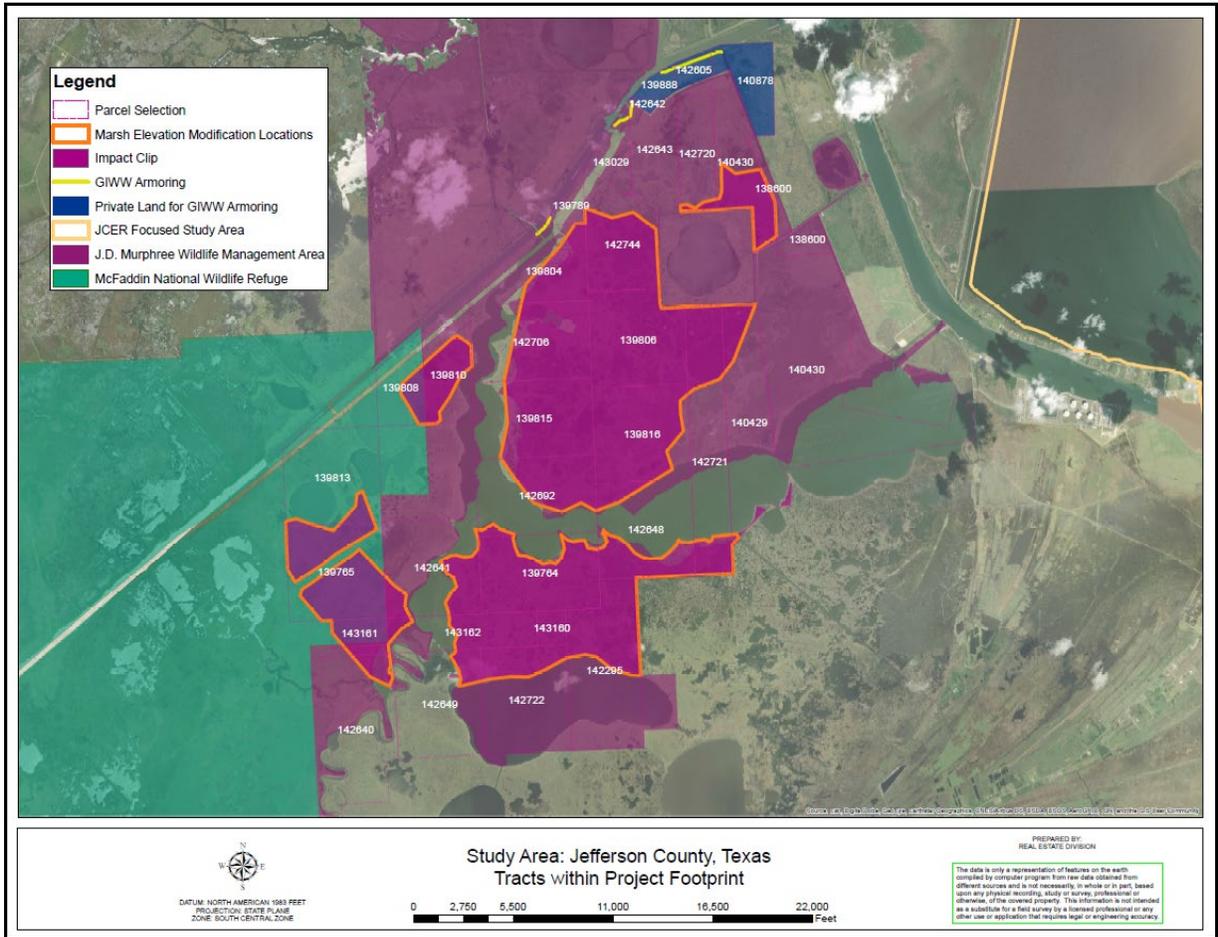


Figure 7: Tracts within Project Footprint

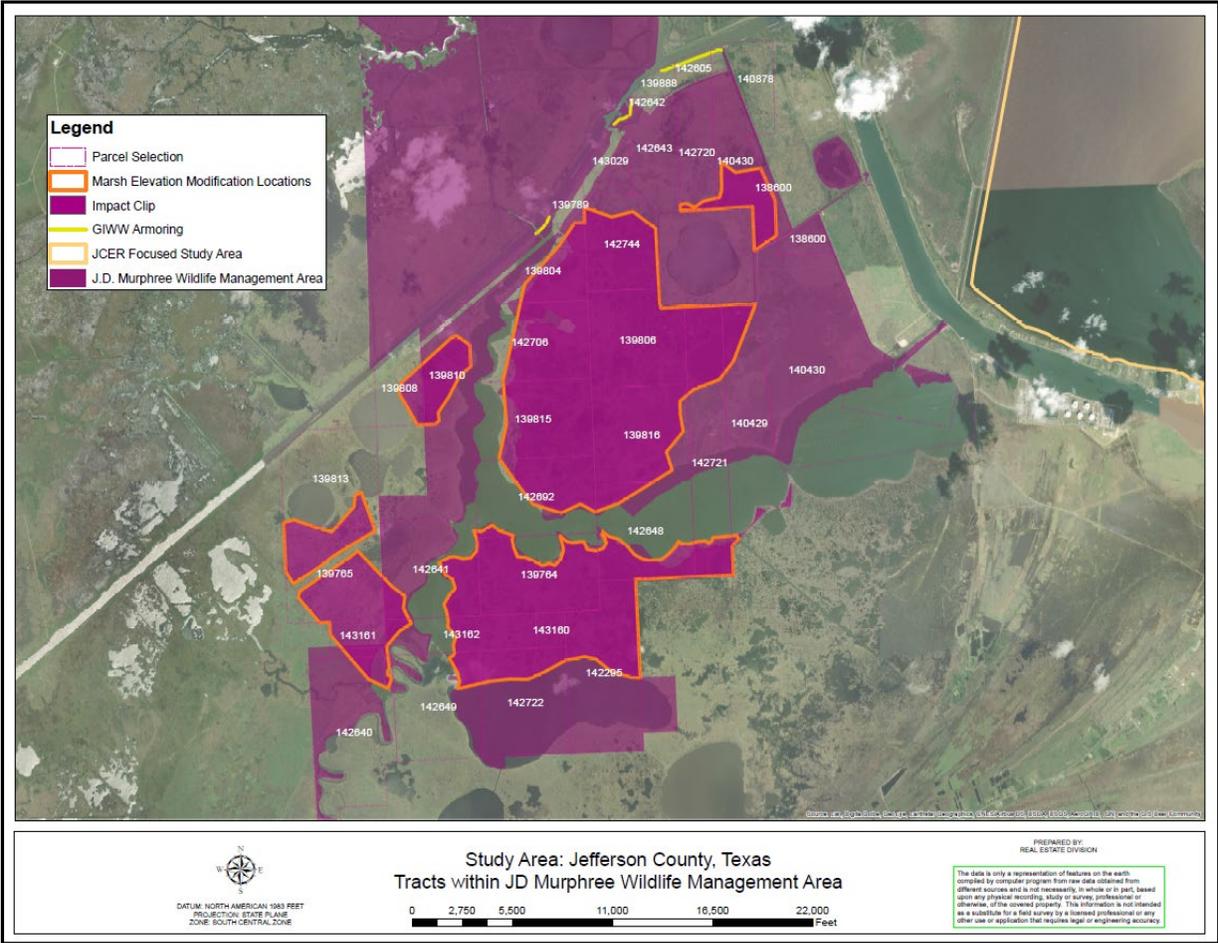


Figure 8: Tracts within JD Murphree Wildlife Management Area

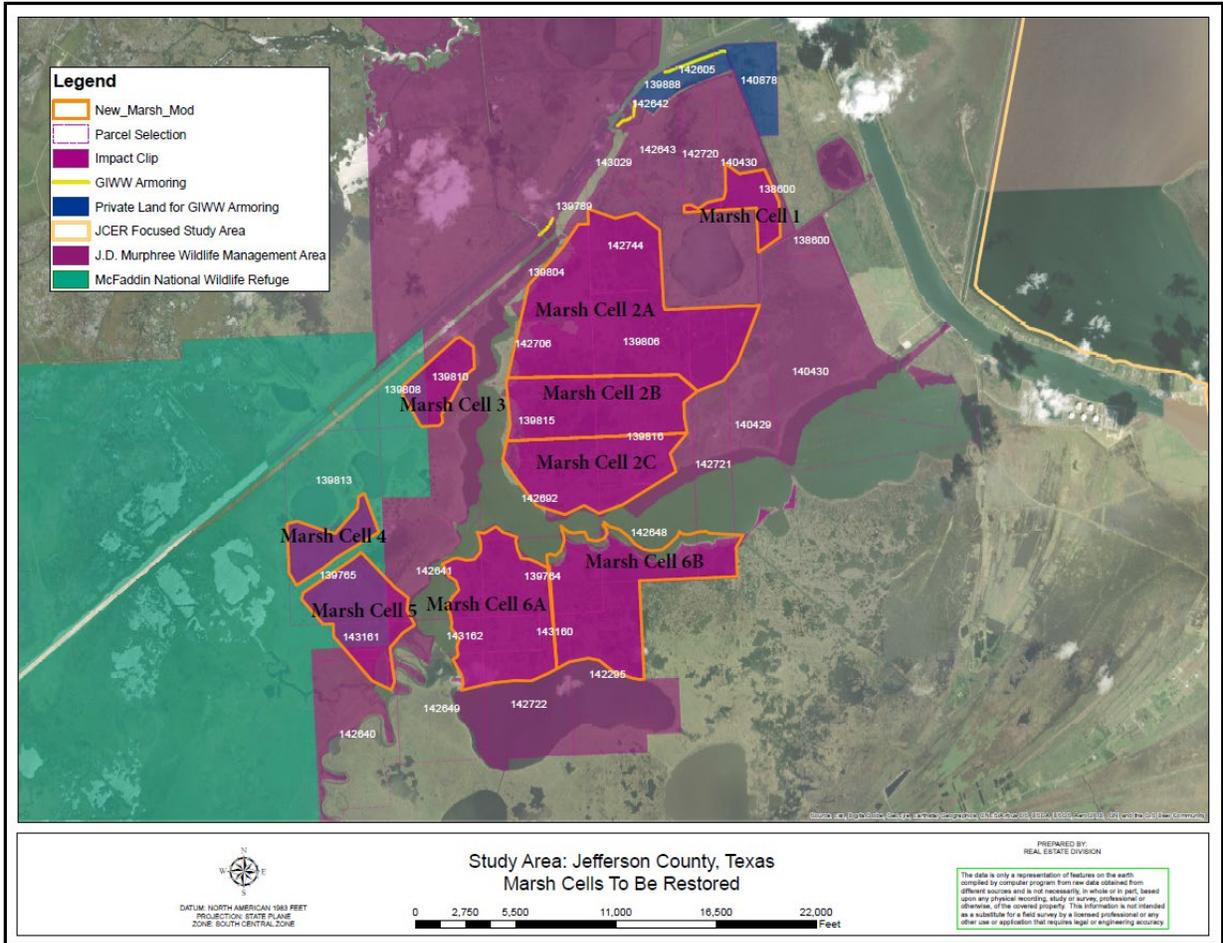


Figure 9: Marsh Cells to be Restored

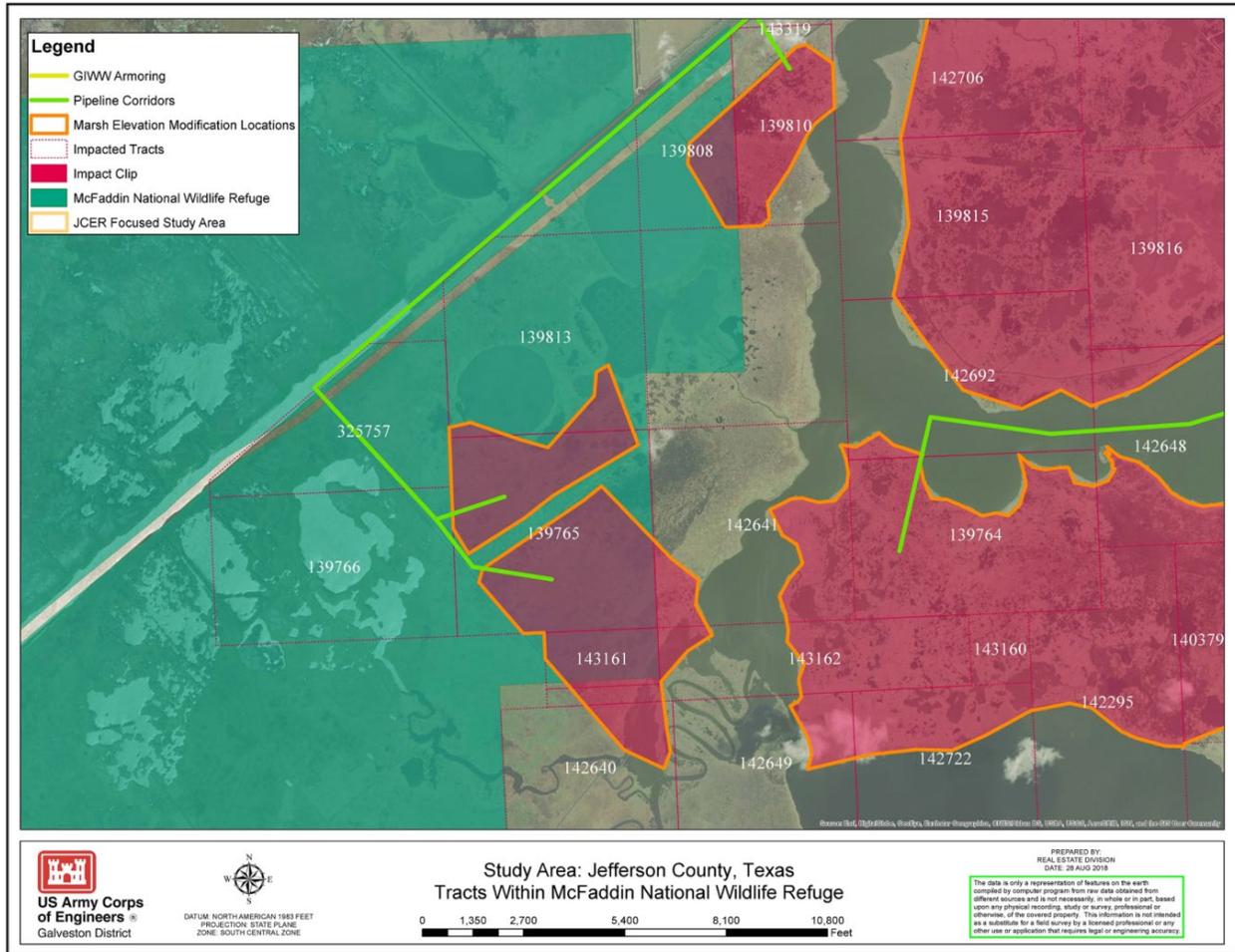


Figure 10: Tracts within McFaddin National Wildlife Refuge

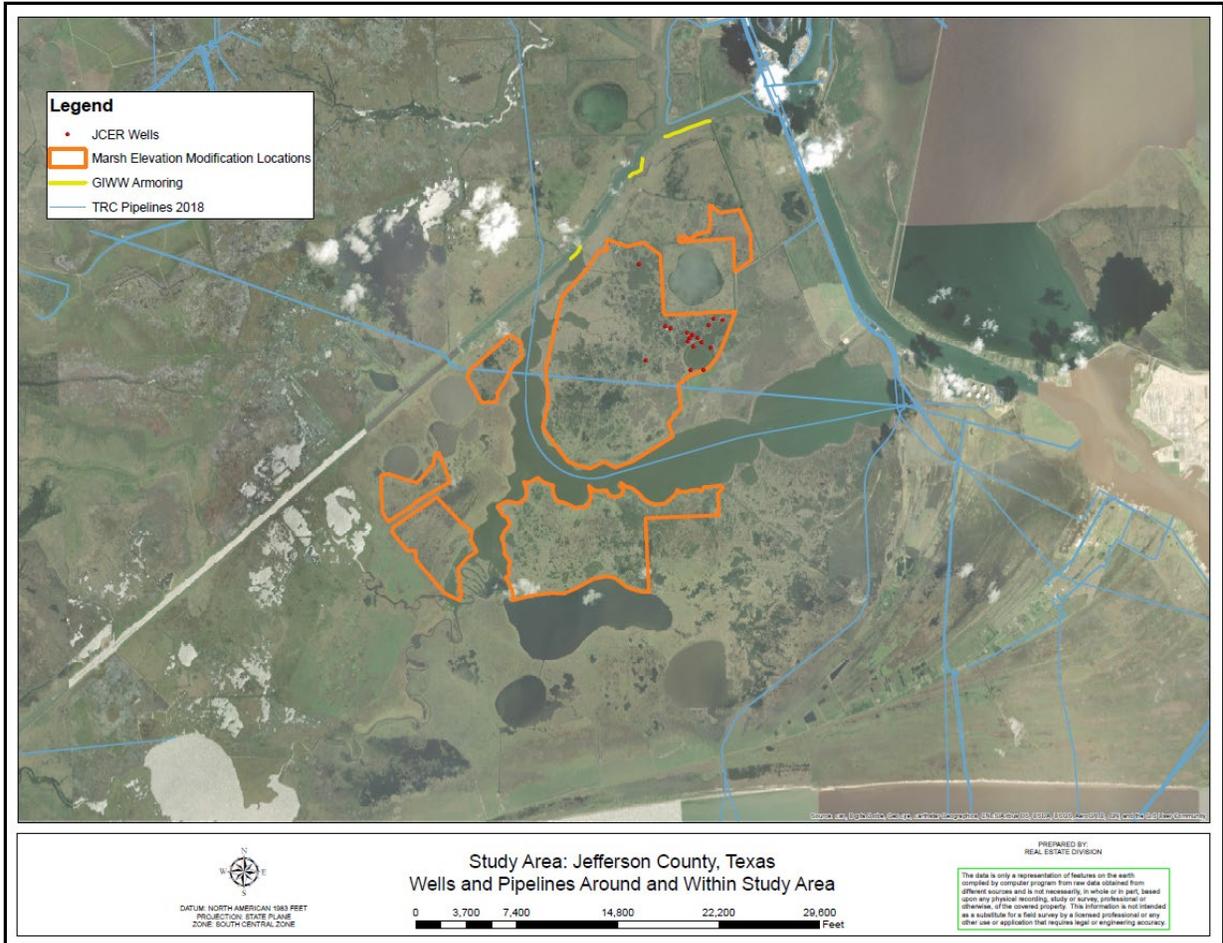


Figure 11: Wells and Pipelines Around and Within Study Area

Exhibit B

Assessment of Non-Federal Acquisition Capability

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1299
GALVESTON, TEXAS 77553-1299



REPLY TO
ATTENTION OF: USACE-SWG-RE

JEFFERSON COUNTY ECOSYSTEM RESTORATION FEASIBILITY STUDY
JEFFERSON COUNTY – NON FEDERAL SPONSOR

ASSESSMENT OF NON-FEDERAL
SPONSOR'S REAL ESTATE
ACQUISITION CAPABILITY

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? (yes/no)

YES. Jefferson County has numerous statutory authorities under eminent domain.

- b. Does the sponsor have the power of eminent domain for this project? (yes/no)

YES.

- c. Does the sponsor have "quick-take" authority for this project? (yes/no)

NO.

- d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary? (yes/no)

NO.

- e. Are any of the lands/interests in land required for the project unable to be condemned by the sponsor? (yes/no)

YES.

Lands owned by the United States of America (managed by U.S. Fish & Wildlife Service) as well as lands owned by the State of Texas (managed by Texas Parks & Wildlife) are not able to be acquired by Jefferson County. At the suggestion of SWG's Office of Counsel, the intent is for Jefferson County to enter into an inter-local agreement, resulting in a non-standard estate to be reviewed and approved by HQUSACE.

II. Human Resource Requirements:

- a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including Public Law 91-646 (Home Relocation Assistance), as amended? (yes/no)

YES.

- b. If the answer to II.a. is "yes," has a reasonable plan been developed to provide such training? (yes/no)

YES.

- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? (yes/no)

YES.

- d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? (yes/no)

YES.

- e. Can the sponsor obtain contractor support, if required in a timely fashion? (yes/no)

YES

- f. Will the sponsor likely request USACE assistance in acquiring real estate? (yes/no) (If "yes," provide description)

NO.

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? (yes/no)

YES.

- b. Has the sponsor approved the project/real estate schedule/milestones? (yes/no)

YES.

IV. Overall Assessment:

- a. Has the sponsor performed satisfactorily on other USACE projects? (yes/no/not applicable)

YES.

- b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/ insufficiently capable. (If sponsor is believed to be "insufficiently capable," provide explanation)

HIGHLY CAPABLE.

V. Coordination:

a. Has this assessment been coordinated with the sponsor? (yes/no)

YES

b. Does the sponsor concur with this assessment? (yes/no)

YES

Accepted by the Non-Federal Sponsor:



(Signature)

COUNTY JUDGE

(Title)

1/9/19

(Date)

Prepared by:



NICHOLE L. SCHLUND

Realty Specialist
Real Estate Division
Galveston District
US Army Corps of Engineers

Reviewed by:



BRIAN MURPHY

Branch Chief, Support Services Branch
Real Estate Division
Galveston District
US Army Corps of Engineers

Approved by:



TIMOTHY J. NELSON

Chief, Real Estate Division
Galveston District
US Army Corps of Engineers

3

Exhibit C
Risk Letter



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1229
GALVESTON, TEXAS 77553-1229

REPLY TO
ATTENTION OF:

Real Estate Division
Support Branch

18 June 2018

Honorable Jeff Branick
County Judge of Jefferson County
Jefferson County Courthouse
1149 Pearl Street
Beaumont, Texas 77701

Subject: Jefferson County Ecosystem Restoration Feasibility Study

Dear Judge Branick:

The intent of this letter is to formally advise Jefferson County, as potential Non-Federal Sponsor for the proposed project, of the risks associated with land acquisition prior to the execution of a Project Partnership Agreement (PPA) or prior to the Government's formal notice to proceed with acquisition. If a Non-Federal Sponsor deems it necessary to commence acquisition prior to an executed PPA for whatever reason, the Non-Federal Sponsor assumes full and sole responsibility for any and all costs, responsibility, or liability arising out of the acquisition effort.

Generally, these risks include, but may be not be limited to, the following:

- (1) Congress may not appropriate funds to construct the proposed project;
- (2) The proposed project may otherwise not be funded or approved for construction;
- (3) A PPA mutually agreeable to the non-Federal sponsor and the Government may not be executed and implemented;
- (4) The non-Federal sponsor may incur liability and expense by virtue of its ownership of contaminated lands, or interests therein, whether such liability should arise out of local, state, or Federal laws or regulations including liability arising out of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended;
- (5) The non-Federal sponsor may acquire interests or estates that are later determined by the Government to be inappropriate, insufficient, or otherwise not required for the project;

(6) The non-Federal sponsor may initially acquire insufficient or excessive real property acreage which may result in additional negotiations and/or benefit payments under P.L. 91-646 as well as the payment of additional fair market value to affected landowners which could have been avoided by delaying acquisition until after PPA execution and the Government's notice to commence acquisition and performance of Land, Easements, Right-of-Way, Relocations, and Disposals (LERRD);

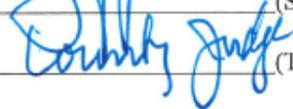
(7) The non-Federal sponsor may incur costs or expenses in connection with its decision to acquire or perform LERRD in advance of the executed PPA and the Government's notice to proceed which may not be creditable under the provisions of Public Law 99-662 or the PCA as referenced in *ER 405-1-12 (Change 31; 1 May 98) Section 12-31 Acquisition Prior to PCA Execution*.

Please acknowledge that the Non-Federal Sponsor for the proposed project has been notified and accepts these terms and conditions.

For any questions, please contact the Mrs. Lisa McCracken Mairs at lisa.m.mairs@usace.army.mil USACE Galveston District, Real Estate Division @ 409-766-3913.

Accepted on behalf of the Non-Federal Sponsor:



(Signature)


(Title)

Prepared by:



Timothy Nelson
Chief
Real Estate Division
Galveston District
U.S. Army Corps of Engineers