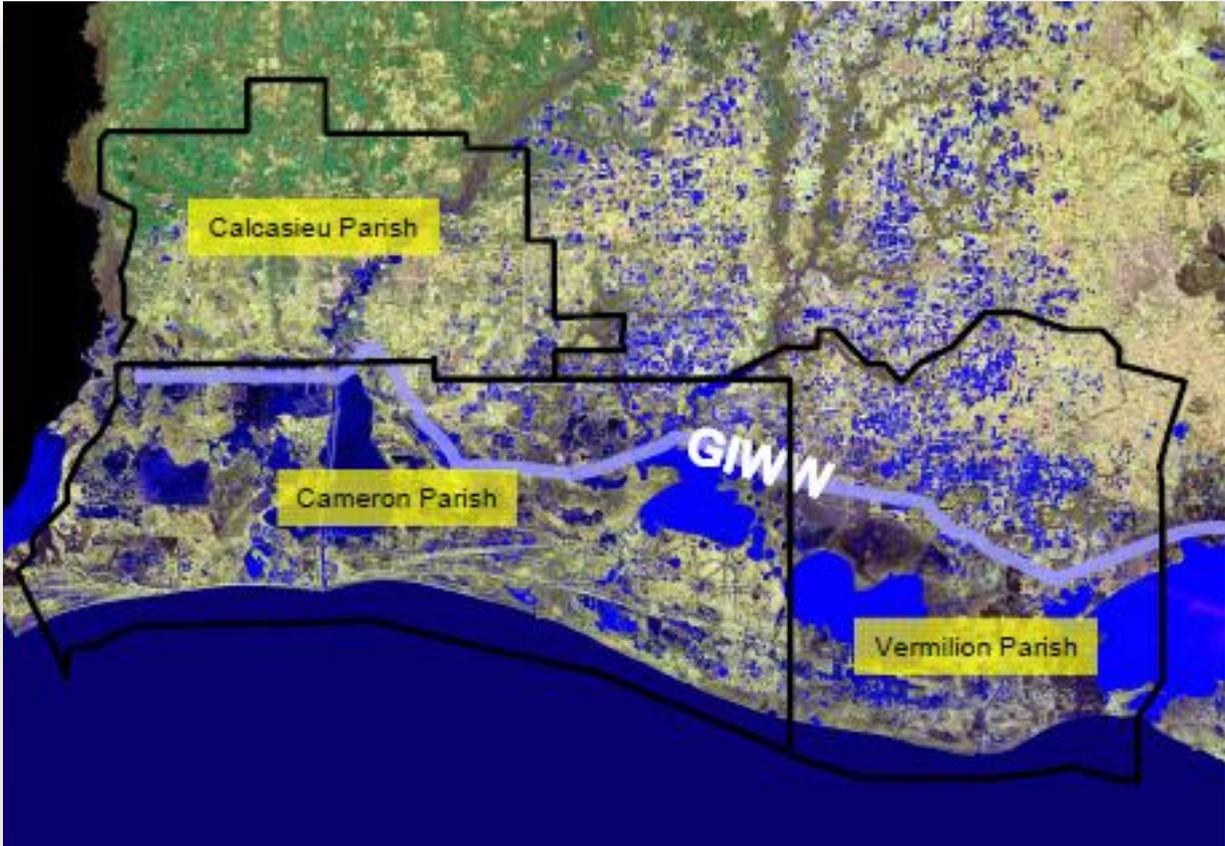




APPENDIX E
REAL ESTATE PLAN





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A. PURPOSE OF THE REAL ESTATE PLAN

This Real Estate Plan (REP) presents the real estate requirements and costs for the Integrated Final Feasibility Report and Environmental Impact Statement for the Southwest Coastal Louisiana Feasibility Study (SWC). The information contained herein is tentative in nature for planning purposes only. Design optimization and feature prioritization will be performed after project authorization; therefore, this Real Estate Plan may be revised upon further analysis. Detailed maps for access, staging and other specifics relating to project features may not be developed until each restoration measure undergoes more detailed design analysis.

The study purpose is to evaluate risk reduction for damages from hurricane storm surge and coastal ecosystem degradation in Cameron, Calcasieu, and Vermilion parishes in Louisiana. The intent is to develop risk reduction measures for hurricane storm surge damages and measures to address coastal ecosystem degradation.

B. PROJECT AUTHORIZATION

The Southwest Coastal Louisiana study has both National Economic Development (NED) and National Ecosystem Restoration (NER) components. This stems from two authorizations. The development of an NED plan was authorized pursuant to a Resolution of the Committee on Transportation and Infrastructure, U.S. House of Representatives, Docket 2747, on December 7, 2005, following the impact of Hurricane Rita in 2005, and included consideration of a plan for an armored 12-foot levee along the GIWW across Calcasieu, Cameron, and Vermilion Parishes:

“Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, that, in accordance with Section 110 of the River and Harbor Act of 1962, the Secretary of the Army is requested to survey the coast of Louisiana in Cameron, Calcasieu, and Vermilion Parishes with particular reference to the advisability of providing hurricane protection and storm damage reduction and related purposes to include the feasibility of constructing an armored 12-foot levee along the Gulf Intracoastal Waterway.” (December 7, 2005 – Committee on Transportation and Infrastructure, U.S. House of Representatives, Resolution Docket 2747, Southwest Coastal Louisiana)

The investigation of large scale ecosystem restoration concepts, including the Chenier Plain Freshwater Management and Allocation Reassessment Study (Chenier Plain Study), was recommended in the January 31, 2005 Chief’s Report for the Louisiana Coastal Area, Ecosystem Restoration. The Chenier Plain Study was one of six large-scale restoration concepts that were purported to have the ability to “significantly restore environmental conditions that existed prior to large-scale alteration of the natural ecosystem upon construction”. The Louisiana Coastal Area (LCA) program was authorized in Title VII of the Water Resources Development Act of 2007 (WRDA 2007). Guidance provided by the Director of Civil Works on December 19, 2008 states that “*the coastal restoration components proposed as part of the LCA Chenier Plain study will be evaluated as part of the Southwest Coastal Louisiana feasibility study*”.

C. STUDY AREA AND PROJECT PURPOSE

The overall study area is located in southwest Louisiana and includes Calcasieu, Cameron and Vermilion Parishes encompassing approximately 4,700 square miles. The area is rich in natural resources and industrial infrastructure. The economy of the coastal communities is centered on fishing, shrimping, and offshore oil services. The agricultural land located 30 to 40 miles inland is used for rice, sugar cane, and livestock production. The northernmost portion of the area is heavily forested and supports a substantial timber industry. Lake Charles, which is the population center of the region, is the home of large oil refineries, petro-chemical plants, a deep-water port,



McNeese State University, and casinos along the lakefront area. The Port of Lake Charles is a key center for international trade, and is among the top 15 busiest ports in the nation.

The low elevation of the land and proximity to the Gulf of Mexico put the area's unique environment and cultural heritage at risk due to damages from hurricane storm surge and coastal erosion. Land subsidence, combined with rising sea level, is expected to increase the potential for coastal flooding, shoreline erosion, saltwater intrusion, and loss of wetland and Chenier habitats. The NED purpose is to develop a plan to reduce damages caused by flooding associated with hurricane storm surge in Cameron, Calcasieu, and Vermilion parishes in Southwest Coastal Louisiana. The NER purpose is to evaluate coastal restoration components and develop a plan to reduce land loss and coastal erosion, and restore environmental conditions for the Chenier Plain ecosystem in Southwest Coastal Louisiana.

The Federal objective of water and related land resources planning is to contribute to national economic development while protecting the Nation's environment. There are two Recommended Plans described in this REP: (1) The NED RP, and (2) the NER RP.

D. PROJECT MAPS

Larger versions of the project maps displayed within this document, as well as additional maps showing project features, are located within Annex 1 (NED) and Annex 2 (NER).

E. NON-FEDERAL SPONSOR

A Feasibility Cost Share Agreement (FCSA) with the Coastal Protection and Restoration Authority of Louisiana, now known as the Coastal Protection and Restoration Authority Board of Louisiana (CPRAB), was executed for this study on January 14, 2009. It is anticipated that CPRAB will be the Non-Federal Sponsor (NFS) for the design, construction, operation, maintenance, repair, rehabilitation and restoration (OMRR&R) of the project. CPRAB as the NFS, is charged, among other things, with responsibility for the provision of all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; performing or ensuring the performance of all relocations; and constructing all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction and OMRR&R of the project (LERRDs). Although CPRAB does not have the authority to acquire and hold lands, its implementation and enforcement arm, the Coastal Protection and Restoration Authority (CPRA) has authority to acquire and hold immovable property and other land rights.

As the NFS for previous USACE projects, CPRAB, acting through CPRA has been found to be fully capable of acquiring LERRDs, based on its authority to perform acquisition, as well as its authority to partner with local agencies (*See*: La. R.S, 49:214.1, *et seq.*). Because the NED plan in the Final Report recommends voluntary participation by structure owners, it is not anticipated that CPRA will be required to exercise its condemnation authority for any of the LERRDs required for the NED Plan. However, if condemnation becomes necessary for acquisition of LERRDs for the NER Plan, it is noted that CPRA does not have "quick take" authority for acquisition of a real property interests for coastal restoration or creation of coastal wetlands, except with regard to the limited quick take authority provided under La. R.S. 49:214.61 relative to barrier island restoration, creation and protection which does not apply to the NER RP features. CPRA does have the authority to partner with another public agency, including but not limited to a levee district or parish government, pursuant to La. R.S. 38:301, La. R.S. 38:301.1 and La. R.S. 49:214.5.2, to acquire the lands needed for this project.

An Assessment of the NFS' Real Estate Acquisition Capability for CPRAB is attached as Annex 3. The NFS has been found to be highly capable of performing acquisition of the LER required for the project, conditioned upon its ability to enter into a Cooperative Endeavor Agreement with another public agency, political subdivision, or political entity that has quick-take condemnation authority, should it be necessary to acquire any



LERRDs for the NER project features through condemnation proceedings. In the event that quick-take authority should be necessary, the NFS has indicated its willingness to partner with another agency. The NFS has been notified in writing of the risks of acquiring LERRDs before execution of the PPA.

F. NED RECOMMENDED PLAN

The NED Recommended Plan (RP) consists of implementing nonstructural measures to reduce the risk of damages from hurricane storm surge to residential and non-residential structures that have first floor elevations at or below the 0-25 year flood plain based on hydrology predicted to occur in 2025. An assessment of at-risk properties has currently identified a total of 3,961 total structures (3,462 residential, 342 commercial and 157 warehouses) that appear to meet the preliminary eligibility criteria for participation in the Project.

The Nonstructural NED Plan consists of the following hurricane storm surge damage risk reduction measures:

1. Elevation to the 100-year base flood elevation (BFE) based on year 2075 hydrology of eligible residential structures. If the required elevation is greater than 13 feet above ground level, the structure would not be eligible for elevation.
2. Dry flood-proofing to the BFE generally means the use of a variety of techniques to reduce the risk of hurricane storm surge damage to a structure by making that structure resistant to flooding from hurricane storm surge.
3. Construction of localized storm surge risk reduction measures of less than 6 feet in height around warehouses.

Figure 1 below shows an overview of the locations of properties that are eligible for participation in the nonstructural program within the study area. Additionally, a larger map demonstrating the structures located within the 25 year flood plain is located within Annex 1.

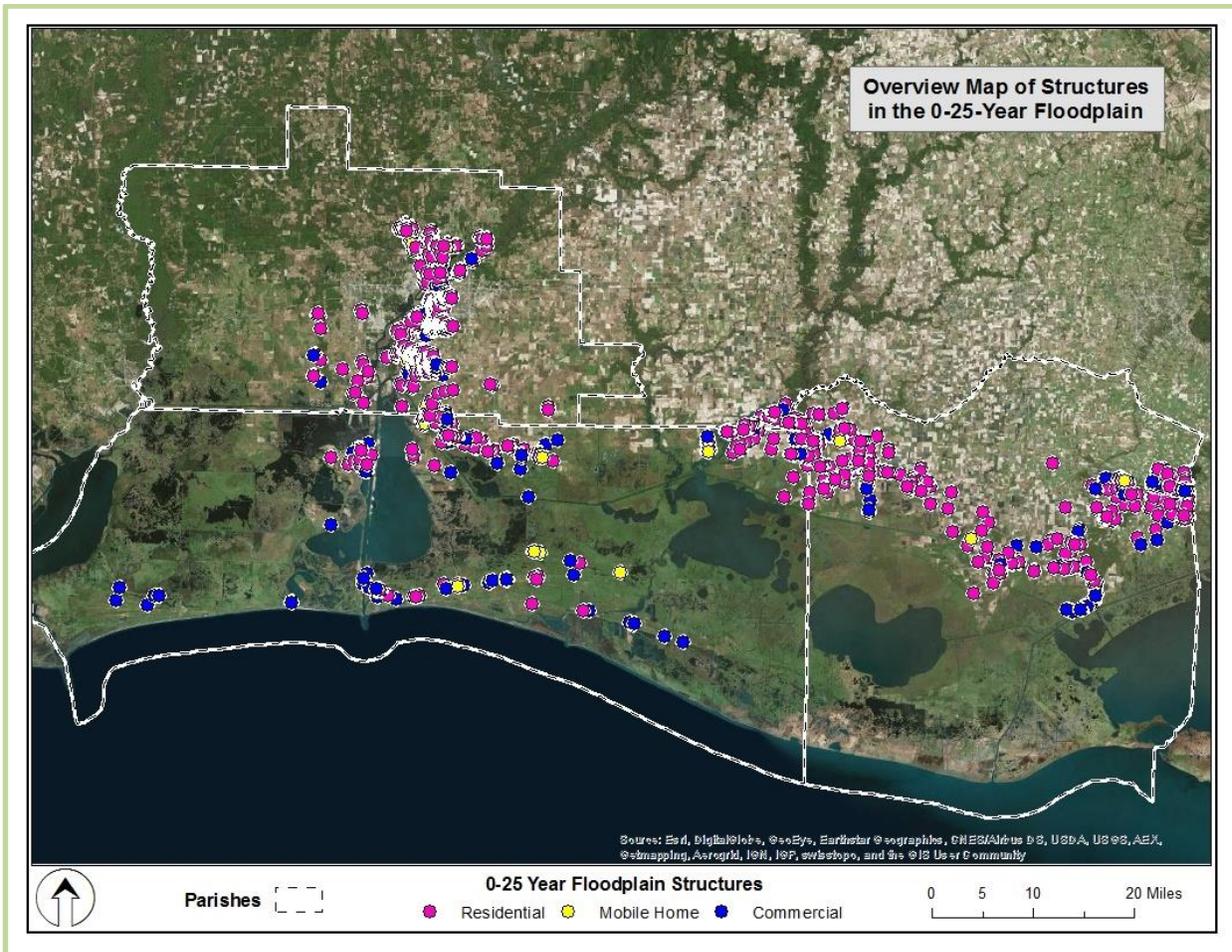


Figure 1: NED Overview Map of Eligible Nonstructural Program Properties

The District has prepared a Nonstructural Implementation Plan, which provides details regarding a possible method of program implementation (Refer to Appendix L). An overview discussion of the Nonstructural Implementation Criteria, as discussed in Appendix L, is also included this Real Estate Plan.

It is assumed that all properties have legal access by way of public streets or existing public right-of-way. Further it is assumed that residential and commercial properties participating in the program will have sufficiently large sites to accommodate staging of material and equipment. For the purposes of this report, the assumption is that no further real estate rights need to be acquired for access to the properties or staging. Should additional right-of-way be necessary, a standard Temporary Work Area Easement would be acquired.

1. RESIDENTIAL STRUCTURE ELEVATION

The following information is based on information contained in Appendix L of the Revised Integrated Feasibility Report and Environmental Impact Statement. More detailed information regarding the proposed implementation plan can be found in Appendix L. Some or all of this information may be modified as the implementation plan is finalized as a part of Planning, Engineering and Design (PED).

Each residential structure that is located within the 0-25-year floodplain will be considered for eligibility for elevation of the structure “in place”. Elevations will be voluntary in nature and will be available to willing landowners for structures that meet the eligibility criteria detailed in Appendix L. If after completion of the investigation of the property, USACE determines that the structure is eligible for elevation, the entire



foundation of the structure will be lifted and placed on a new foundation (i.e., columns, piers, posted or raised foundation walls) so that the lowest habitable finished floor is at or above the 100-year BFE predicted to occur in 2075. All utilities and mechanical equipment, such as air conditioners and hot water heaters, will also be raised to or above this elevation. Property owners may choose to raise the structure, utilities, and/or mechanical equipment in excess of the predicted 2075 100-year BFE; however costs attributable to elevations in excess of the minimum requirements set forth herein are not eligible and must be born solely by the property owner.

2. DRY FLOOD PROOFING OF NON-RESIDENTIAL STRUCTURES

Dry flood proofing consists of sealing all areas from the ground level up to approximately 3 ft of a structure to reduce the risk of damage from storm surge resulting from hurricanes of a certain magnitude, as described in this report, by making walls, doors, windows and other openings resistant to penetration by storm surge waters. Walls are coated with sealants, waterproofing compounds, or plastic sheeting is placed around the walls and covered, and back-flow from water and sewer lines prevention mechanisms such as drain plugs, standpipes, grinder pumps, and back-up valves are installed. Openings, such as doors, windows, sewer lines and vents, may also be closed temporarily, with sandbags or removable closures, or permanently. Some common flood proofing measures include:

- Backflow valves;
- Closures on doors, windows, stairwells, and vents--they may be temporary or permanent;
- Rearranging or protecting damageable property--e.g., relocate or raise utilities;
- Sump pumps and sub-drains; and
- Water resistant material; metal windows, doors and jambs; waterproof adhesives; sealants and floor drains.

3. CONSTRUCTION OF LOCALIZED STORM SURGE RISK REDUCTION MEASURES AROUND INDUSTRIAL FACILITIES AND WAREHOUSES

These measures are intended to reduce the risk of flooding from certain hurricane storm surge events, as described in this report. These measures involve the construction of localized storm surge risk reduction features that measure less than six feet in height around industrial complexes and warehouses that meet the Project's eligibility criteria. These risk reduction measures can be constructed of earth, concrete, masonry or steel and can be placed around a single structure or a contiguous group of structures. While each individual eligible warehouse and industrial structure will be evaluated for the most cost effective nonstructural measure, the government reserves the right to determine which measure shall be implemented at each structure location.

Each non-residential structure will be evaluated to determine the most cost effective method of flood proofing. At the time of this Report, it is anticipated that implementation of localized storm surge risk reduction measures will be through the Federal procurement of Indefinite Deliverable, Indefinite Quantity (IDIQ) contracts that will be implemented by the issuance of individual task orders for the implementation of flood proofing measures at each warehouse. The basis for this assumption is that the PDT has completed an inspection of the warehouse inventory. That inspection indicates that the geographic distribution of these warehouses and the inability to determine the schedule for voluntary participation do not comport with the clustering strategy whereby the rest of the NED RP will be implemented. For these reasons it is anticipated that an individual task order will be limited to a single warehouse to be flood proofed. The PDT anticipates that only a small amount of borrow would be needed for construction of the localized storm surge risk reduction measures for each warehouse being accomplished by separate task order. Based on this conclusion, it is foreseeable that commercial borrow sites would be used. As of the date of this Report, there are several commercial borrow sites within the project area that are readily available.



Real Estate regulations (ER. 405-1-12, paragraph 12-9d(3)) allow for small quantities of borrow material to be supplied by the construction contractor through the use of readily available commercial sites, if supported by an analysis conducted by the Government and the NFS, and if no other constraints exist. Since it has been determined that each IDIQ task order will address a single warehouse, for purposes of this Final Report, it has been assumed that the analysis performed pursuant to the above cited ER 405-1-12 will determine that the required borrow quantities constitute a small quantity that can be obtained through a commercial site that meets the Project requirements. Prior to issuing a construction task order, the Government will conduct the necessary analysis in accordance with ER 405-1-12. Contractors would be required to demonstrate that any proposed commercial borrow site is environmentally cleared and contains geotechnically suitable borrow material. In evaluating the suitability of the proposed commercial borrow site, impacts to wetlands or bottomland hardwoods would be prohibited. Costs of utilizing a commercial borrow site would be considered an item of construction cost, and not an item of LERRD cost.

4. NED PLAN – ESTATES

For properties that are eligible for elevation or dry flood proofing or localized storm surge risk reduction measures, an Agreement will be executed between the NFS and the landowner, which will serve as Right-of-Entry for the NFS and the U.S. for construction, inspection and OMRR&R of the Project. The agreement, as well as any required curative documents, subordination or release agreement(s), shall be recorded by the NFS in the public records of the Parish in which the property is located prior to commencement of the nonstructural improvements on the property. This Agreement is discussed in more detail in Appendix L. During PED, the necessary real estate rights for each of the measures will be determined, and if there is no standard estate applicable to the project, the rights required for construction will be drafted as non-standard estates (rights for residential elevations, dry flood proofing of eligible non-residential structures, and construction of localized storm surge risk reduction measures around warehouses). The draft estates will be submitted through CEMVD to CEHQ-RE as a Request for Approval of a Non-Standard Estate.

5. NED PLAN - UNIFORM RELOCATION ASSISTANCE (P.L. 91-646, TITLE II AS AMENDED)

Residential Elevations

Property owner/occupants of eligible residential structures who willingly participate in the residential elevation program are not considered displaced persons (in accordance with 49 CFR Part 24), and therefore are not entitled to receive relocations assistance benefits. However, displaced tenants of eligible residential structures to be elevated, are eligible for temporary relocations assistance benefits. Eligible tenants that temporarily relocate would be reimbursed for the cost of temporary alternate housing, meals and incidentals (such as laundry services), and the fees for disconnection and connection of utilities at the temporary residence. Alternate housing could be hotels or apartments, depending upon availability in the community. All temporary housing costs would need to be approved in advance by the NFS after first obtaining the prior written approval of USACE. Hotel costs would be reimbursed based on the General Services Administration per diem rates for Louisiana. Apartment costs would be based on market rents. All conditions of temporary relocation must be reasonable. Temporary relocation should not extend beyond one year before the person is returned to his or her previous unit or location. Any residential tenant who has been temporarily relocated for more than one year must be offered permanent relocation assistance which may not be reduced by the amount of any temporary relocation assistance previously provided. At a minimum, tenants shall be provided the following: reimbursement for all reasonable out-of-pocket expenses incurred in connection with the temporary relocation, including the cost of moving to and from the temporarily occupied housing, and any increase in monthly rent or utility costs at such housing. Tenants



are entitled to receive appropriate advisory services, including reasonable advance written notice of the following:

- Date and approximate duration of the temporary relocation;
- Address of the suitable decent, safe, and sanitary dwelling to be made available for the temporary period;
- Terms and conditions under which the tenant may lease and occupy a suitable decent, safe and sanitary dwelling in the building/complex upon completion of the project; and
- Provisions of reimbursement for all reasonable out of pocket expenses incurred in connection with the temporary relocation as noted above.
- In addition to relocation advisory services, displaced tenants may be eligible for other relocation assistance including relocation payments for moving expenses and replacement housing payments for the increased costs of renting or purchasing a comparable replacement dwelling.

All temporary housing costs must be approved in advance by the NFS. In order for the NFS to receive credit towards their cost-share obligations, USACE must provide prior written approval for those expenditures.

Dry Flood-Proofing of Non-Residential Structures and Construction of Localized Storm Risk Reduction Measures

It is assumed that for these measures, there will be no requirements for temporary relocation. In the event that relocations are required, in accordance with 49 CFR Part 24 (Subpart A, Section 24.2(a)(9)(ii)(D), property owner/occupants of non-residential structures who willingly participate in the program are not considered displaced, and therefore are not entitled to receive relocations assistance benefits. Additionally, businesses will not receive benefits for temporary loss of operation during construction. Business owners who are tenants of the structure, and who must relocate temporarily during construction, could receive relocation assistance advisory services and moving expenses, in accordance with 49 CFR Part 24.

6. NED PLAN - EXISTING FEDERAL PROJECTS WITHIN THE LER REQUIRED FOR THE PROJECT

There are numerous Federal projects located within the project study area. However, it is not anticipated that the structures identified for the NED nonstructural project features will be located within the boundaries of an existing Federal project.

7. NED PLAN - FEDERALLY OWNED LANDS WITHIN THE LER REQUIRED FOR THE PROJECTS

None of the structures identified for the NED nonstructural project features will be located on Federally owned lands.

8. NED PLAN - NON-FEDERAL SPONSOR OWNED LER

It is not anticipated that residential structures identified for the NED nonstructural project features will be located on NFS owned lands. However, there may be public buildings identified for flood proofing, or commercial buildings/warehouses that are located on public property, and the NFS will be required to obtain the rights necessary for construction.



9. NED PLAN – INDUCED FLOODING

There will be no induced flooding as a result of the Project.

10. NED PLAN – BASELINE COST ESTIMATES; CHART OF ACCOUNTS

Rough Order of Magnitude level cost estimates were prepared based on the assumption that there are a total of 3,961 structures to be included within the plan (3,462 residential, 342 non-residential and 157 warehouses). Real estate costs for the NED plan include administrative costs for execution of the agreement between the NFS and landowner, for elevations of residential structures and flood proofing of non-residential structures, and estimated relocation assistance costs for tenants. Costs of elevations and flood proofing are construction costs, and are not included as real estate costs. Appendix L of this report contains a listing of eligible and ineligible costs associated with the nonstructural NED measures. Figure 2 below shows the estimated real estate costs for the NED Plan:

SOUTHWEST COASTAL
NONSTRUCTURAL PLAN (0-25 YR FLOOD PLAIN)
REAL ESTATE COST ESTIMATES
3/25/2016

Total number of structures in the 0-25 yr flood plain **3961**

RESIDENTIAL ELEVATIONS AND OTHER NONSTRUCTURAL FEATURES

	<u>RESIDENTIAL ELEVATIONS</u>	<u>NON- RESIDENTIAL DRY FLOOD PROOFING</u>	<u>LOCALIZED STORM RISK REDUCTION MEASURES</u>	<u>TOTAL</u>
Estimated # of Structures	3462	342	157	3961
Land Values	\$0	\$0	\$0	\$0
Relocation Assistance	\$9,966,000	\$0	\$0	\$9,966,000
Administrative Costs	\$34,620,000	\$3,420,000	\$1,570,000	\$39,610,000
Condemnations	\$0	\$0	\$0	\$0
TOTAL REAL ESTATE COSTS	\$44,586,000	\$3,420,000	\$1,570,000	\$49,576,000
CONTINGENCIES - 25%	\$11,146,500	\$855,000	\$392,500	\$12,394,000
TOTAL PROJECT REAL ESTATE COSTS	\$55,732,500	\$4,275,000	\$1,962,500	\$61,970,000

Relocation assistance is estimated for tenants.

Minimal differences between costs presented here and those in the MCASES are due to rounding and not considered significant.

Note: This cost estimate is a worst-case scenario estimate, and assumes 100% participation. It is possible that the number of participating structures will be less, due to compliance with eligibility criteria requirements and based on the voluntary nature of participation.

Figure 2: NED Plan Real Estate Cost Estimates



These cost estimates are subject to revision during PED.

11. NED PLAN - TIMBER/MINERAL/ROW CROP ACTIVITY

The Louisiana Department of Natural Resources provides a Strategic Online Natural Resources Information System (SONRIS), which contains up-to-date information on oil & gas activity in the state of Louisiana. Review of this information indicated that there are active oil and gas wells within the study area within the justified reaches within the NED RP. Maps of specific locations of structures to be elevated/ flood proofed were not available at the time of this report. As this information is developed during more detailed design, research will be conducted to verify that mineral activity is not impacted by the project. It is not anticipated that there will be active mineral activity on lands where flood proofing measures will take place. Nonstructural project features are not expected to affect timber or crop activity within the project area.

12. NED PLAN - ZONING

It is anticipated that there may be amendments to land use regulations and building codes to prohibit new construction within the NED Project area. However, there will be no application or enactment of zoning ordinances in lieu of, or to facilitate, the nonstructural features of this project. During PED, planning and zoning regulations will be further reviewed and discussions will be conducted with the NFS regarding future land use regulations. The NFS will be required to coordinate these matters with local planning commissions.

13. NED PLAN - ACQUISITION SCHEDULE

The nonstructural project elevations and flood proofing features will require execution of an agreement between the landowner and the NFS. In addition, the following administrative functions, among others, will be required: title research, HTRW analysis, and structural condition analysis, and additional property inspections to determine eligibility. Temporary rights of entry will have to be obtained from the owners in order to perform some of these administrative duties. (Refer to Appendix L of the Integrated Feasibility Report and Environmental Impact Statement for more detailed discussion of the non-structural implementation plan.)

Tasks shown below would likely vary by property; therefore the schedule shown is the overall anticipated time for the total number of structures and assumes an overlap of tasks. The schedule is dependent upon a defined nonstructural implementation plan and assumes that project funding will be available every year. Therefore, this estimated schedule is expected to be refined as more information becomes available during PED and implementation of the NED RP.

Obtain Right-of-Entry for Investigations (To Determine Eligibility)	6-12 months	
Title research	40-60 months	
Preliminary Investigations (i.e. HTRW, structural, surveys, etc.)	36-60 months	
Execution of agreement between landowner and NFS and curative Documents for elevations or non-residential flood proofing	12-24 months	
Filing Agreement between landowner and NFS		12 months
Relocation of Displaced Tenants	12-24 months	

14. NED PLAN - FACILITY/UTILITY RELOCATIONS

At the time of this report, no facility/utility relocations have been identified, therefore no relocations are anticipated to be required for the NED features of the project. Should it be determined during PED that



facility/utility relocations are required, all costs associated with such relocations will be the responsibility of the NFS.

ANY CONCLUSION OR CATEGORIZATION CONTAINED IN THIS REPORT THAT AN ITEM IS A UTILITY OR FACILITY RELOCATION TO BE PERFORMED BY THE NON-FEDERAL SPONSOR AS PART OF ITS LERRD RESPONSIBILITIES 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.

15. NED PLAN - HAZARDOUS, TOXIC AND RADIOACTIVE WASTE

Current information suggests there will be no HTRW issues within the project area. An ASTM Phase I HTRW Environmental Site Assessment (ESA) and Asbestos Investigation (and a Phase II ESA, if necessary) will be conducted by the non-Federal sponsor for all participating properties during the PED/project implementation phase. At that time, a determination will be made as to whether this element of the eligibility criteria has been met for each given property.



G. NER RECOMMENDED PLAN

The NER RP consists of the following measures to be implemented in the area located south of the Gulf Intracoastal Waterway (GIWW):

- Marsh Restoration and Nourishment - 9 marsh restoration features consist of delivering sediments to former marsh areas and eroding marsh areas to restore 8,175 acres and nourish 3,439 acres, resulting in an estimated net 11,666 acres. Two marsh restoration features (124d and 3c1) are partially located on USFWS refuge lands. Although these features are part of the overall NER RP, USACE is recommending USFWS seek authorization and appropriation to construct these features.
- Shoreline Protection - 5 Gulf shoreline protection features primarily consisting of offshore breakwaters span approximately 251,528 linear feet resulting in 6,135 net acres.
- Chenier Reforestation Program – replanting of seedlings on 1,413 acres in Cameron and Vermilion parishes and removal of invasive species.

Maps showing the general location of each of the NER features are located in Annex 2. Restoration features would be constructed over a large extent of the study area across a variety of habitat types. Marsh restoration and nourishment features consist of delivering sediments to open water or eroding marsh areas in order to create new vegetated wetlands. These areas would have water levels of less than two feet and have been optimized to help preserve or restore critical geomorphologic features. The minimum acreage size per restoration site is 100 acres and dredged material for restoration could come from a variety of sources including nearby borrow sites, the Gulf of Mexico or the Calcasieu Ship Channel. Hydrologic and salinity control features serve as measures that prevent the flow of water into or out of certain areas. Their primary functions are to inhibit salinity excesses and to increase wetland productivity. Only features in this category that provided benefits of at least 500 net acres are recommended in the NER RP.

Shoreline protection features have been designed to reduce erosion of canal banks and shorelines in critical areas in order to protect adjacent wetlands. Only wetland areas in excess of 100 net acres are recommended as part of the NER RP. Shoreline protection primarily consists of segmented breakwaters using rock and rip-rap. Chenier restoration features consist of planting seedlings in areas greater than five feet in elevation and with low shoreline erosion rates as well as removal of certain invasive species. Features in this category are only recommended in the NER RP if existing canopy coverage is less than 50% or if nearby development would prevent achieving study.

Two marsh restoration measures, Features 124d and 3c1 are partially located on USFWS property (Sabine National Wildlife Refuge and Cameron Prairie National Wildlife Refuge, respectively) and are included in the NER RP. These features are vitally important to help preserve the Calcasieu Lake rim and prevent vast new expanses of open water from forming should the lake rim be breached by erosional forces. All NED and NER RP features (including those recommended for appropriation and construction by USFWS) represent the “Federal Plan”. Because USFWS is ultimately responsible for managing its refuge lands, USACE is not seeking authorization and funding for Features 124d and 3c1 (the USFWS features). The NED RP and the subset of NER features that are recommended for authorization and appropriation by USACE (all features minus 124d and 3c1) represent the “Corps Plan”. Rather, USACE supports USFWS in seeking its own authorization and appropriation to construct the USFWS features and offers USFWS the information that USACE developed under this study effort as a starting point for USFWS efforts to obtain independent authorization and funding for the USFWS features of the Federal Plan. These two USFWS features are not included in the LERRDs necessary for the construction and OMRR&R of the Corps Plan.



1. NER PLAN - LANDS, EASEMENTS & RIGHTS-OF-WAY (LER)

Table 1 below provides descriptions of the Project features, as well as the type of ownership and proposed estate to be acquired for the construction features of each of these features of the NER RP. Acquisition for each feature will occur as individual NER features are designed. Refer to Section 2 below for the language of estates to be acquired for the project.

a. ACCESS

Project access areas have been identified on the maps located in Annex 2. The access areas identified are located on public lands. If during PED, additional access areas are determined to be required on privately owned lands, a Perpetual Access Easement will be acquired for this portion of the project. (Refer to the Estates Section G-2 below for discussion regarding the Perpetual Access Easement.)

b. STAGING

Staging area locations have been identified on the maps located in Annex 2. The staging areas will be located primarily on public lands. Detailed maps will be prepared during PED. When additional staging areas are determined to be on privately owned lands, a standard Temporary Work Area Easement will be acquired for the additional right-of-way required for this portion of the project.

c. BORROW

Project features outlined in Table 1 below contain some descriptions of borrow areas identified for construction of the project. Borrow sources include the Calcasieu Ship Channel, and parts of the Gulf of Mexico. Both borrow sources are in State of Louisiana owned water bottoms. CPRAB, a state agency, is required to provide all lands, easements, and rights-of-way, relocations, disposal and borrow areas. The CPRAB will provide the necessary interests for the project as deemed necessary by the Government, and will be entitled to have the Government consider providing credit for the lands and real property interests that CPRAB provides to the project. CPRAB will be required to obtain the necessary agreements from any non-federal government entity, and provide Right-of-Entry to the Government.

Some project features will be implemented through beneficial use of dredged material associated with the ordinary maintenance dredging cycle at Calcasieu Ship Channel. At the present time it is anticipated that the dredged materials will be transferred via pipeline through the GIWW (Federal jurisdiction). This information is subject to change based on additional analysis. Should further analysis find that there is a need for an alternative borrow source located on private lands, additional HTRW and environmental analysis would be required, and a standard Temporary Work Area Easement would be acquired for borrow. Should it be determined during PED that renourishment would be required for project features, a standard perpetual borrow easement would be acquired.

d. DREDGED MATERIAL PLACEMENT

The marsh restoration features of the NER plan require transport of sediments from borrow sites to the various marsh restoration sites, which will be done via pipeline. OMRR&R for the NER Plan features consists of marsh re-nourishment to maintain wetland elevations. A standard perpetual Utility and/or Pipeline Easement will be acquired over privately owned lands. CPRAB, as the non-Federal sponsor, will provide the necessary interests for the project as deemed necessary by the Government and will be entitled to have the Government consider providing credit for the lands and real property interests that CPRAB provides to the project. CPRAB will be required to obtain the necessary agreements from any non-federal governmental entity, and will provide Right-of-Entry to the Government. Ownership of the areas to be used for pipeline placement is further described in Table 1 below.



e. MITIGATION

The intent of the NER measures is to restore ecosystems; therefore, it is not likely that wetland habitats will be destroyed. The assumption at this time is that no mitigation is necessary. If this assumption changes at a later date, revisions will be made to the REP.



Table 1: NER Recommended Plan LER for Construction and OMRR&R

Feature	Description	Ownership	Estate
MARSH RESTORATION – 11,748 TOTAL ACRES			
3a1	Beneficial Use of Dredged Material from Calcasieu Ship Channel. 599 acres of marsh restoration on privately owned wetlands in an area northwest of Calcasieu Lake along the southern bankline of the GIWW. Approximately 5,300,000 cubic yards of material will be borrowed from maintenance dredging of the Calcasieu Ship Channel. Refer to paragraph 1c above for information concerning borrow. Pipeline for dredged material on state water bottoms.	Private State	Fee, Excluding Minerals Right of Entry
47a1	Marsh Restoration using Dredged Material South of Highway 82. 933 acres of marsh restoration and 88 acres of marsh nourishment in a privately owned area south of Highway 82 near the town of Grand Chenier. Approximately 3,000,000 cubic yards will be borrowed from a borrow area in the nearby Gulf of Mexico (state water bottom). Refer to paragraph 1c above for information concerning borrow. Pipeline for dredged material will be located partially on private lands or state water bottoms.	Private State	Fee, Excluding Minerals/Perpetual Pipeline Easement Right of Entry
47a2	Marsh Restoration using Dredged Material South of Highway 82. 1,297 acres of marsh restoration and 126 acres of marsh nourishment in a privately owned area south of Highway 82 near the town of Grand Chenier. Approximately 8,800,000 cubic yards will be borrowed from a borrow area in the nearby Gulf of Mexico. Refer to paragraph 1c above for information concerning borrow. Pipeline for dredged material will be located partially on private lands or state water bottoms.	Private State	Fee, Excluding Minerals/Perpetual Pipeline Easement Right of Entry
47c1	Marsh Restoration using Dredged Material South of Highway 82. 1,304 acres of marsh restoration and 4 acres of marsh nourishment in a privately owned area south of Highway 82 near the town of Grand Chenier. Approximately 8,600,000 cubic yards will be borrowed from a borrow area in the nearby Gulf of Mexico. Refer to paragraph 1c above for information concerning borrow. Pipeline for dredged material will be located partially on private lands or state water bottoms.	Private State	Fee, Excluding Minerals/Perpetual Pipeline Easement Right of Entry
124c	Marsh Restoration at Mud Lake. 1,077 acres of marsh restoration and 708 acres of marsh nourishment in a privately owned area near Mud Lake, southwest of Calcasieu Lake. Approximately 11,100,000 cubic yards will be borrowed from a borrow area in the nearby Gulf of Mexico. Refer to paragraph 1c above for	Private State	Fee, Excluding Minerals/Perpetual Pipeline Easement Right of Entry



	information concerning borrow. Pipeline for dredged material will be located partially on private lands or state water bottoms.		
127c3	Marsh Restoration East Pecan Island. 832 acres of marsh restoration and 62 acres of marsh nourishment in a privately owned area east of Pecan Island and west of Freshwater Bayou. Approximately 7,300,000 cubic yards will be borrowed from a borrow area in the nearby Gulf of Mexico. Refer to paragraph 1c above for information concerning borrow. Pipeline for dredged material will be located partially on private lands or state water bottoms.	Private State	Fee, Excluding Minerals/Perpetual Pipeline Easement Right of Entry
306a1	Rainey Marsh Restoration - Southwest Portion (Christian Marsh). 627 acres of marsh restoration and 1,269 acres of marsh nourishment in a privately owned area within Rainey Marsh along the eastern bankline of Freshwater Bayou. Approximately 8,100,000 cubic yards will be borrowed from a borrow area in the nearby Gulf of Mexico. Refer to paragraph 1c above for information concerning borrow. Pipeline will placed on Freshwater Bayou, a state water bottom.	Private State	Fee, Excluding Minerals Right of Entry
SHORELINE PROTECTION – 6135 TOTAL ACRES			
5a	Holly Beach Shoreline Stabilization. Approximately 46,000 linear feet (8.7 miles) of shoreline protection using rock breakwaters offshore along the Gulf of Mexico shoreline from the western jetty of the Calcasieu Ship Channel to just west of the town of Holly Beach. Located within state owned water bottoms.	State	Right of Entry
6b1	Gulf Shoreline Restoration: Calcasieu River to Freshwater Bayou. Approximately 58,300 linear feet (11.1 miles) of shoreline protection using reef breakwaters with lightweight aggregate core approximately 150' offshore along the Gulf of Mexico shoreline of the Rockefeller Wildlife Management Area and Game Preserve.	State	Right of Entry
6b2	Gulf Shoreline Restoration: Calcasieu River to Freshwater Bayou. Approximately 42,800 linear feet (8.1 miles) of shoreline protection using reef breakwaters with lightweight aggregate core approximately 150' offshore along the Gulf of Mexico shoreline of the Rockefeller Wildlife Management Area and Game Preserve.	State	Right of Entry
6b3	Gulf Shoreline Restoration: Calcasieu River to Freshwater Bayou. Approximately 33,300 (7.1 miles) linear feet of shoreline protection using reef breakwaters with lightweight aggregate core approximately 150' offshore along the Gulf of Mexico shoreline of the Rockefeller Wildlife Management Area and Game Preserve.	State	Right of Entry



16b	Fortify Spoil banks of GIWW and Freshwater Bayou. Approximately 71,000 combined linear feet (13.4 miles) of bankline protection with rock dikes along three separate reaches of the Freshwater Bayou Navigation Canal. USACE owns 6,000 acres channel/disposal easements at Freshwater Bayou (state water bottoms).	State	Right of Entry
CHENIER REFORESTATION – 1413 TOTAL ACRES			
416	Reforestation of approximately 252 total acres of Grand Chenier Ridge in Cameron Parish.	Private	Fee, Excluding Minerals
509c	Reforestation of approximately 21 total acres of Bill Ridge in Vermilion Parish.	Private	Fee, Excluding Mineral
509d	Reforestation of approximately 8 acres of Chenier Au Tigre in Vermilion Parish.	Private	Fee, Excluding Minerals
510a	Reforestation of approximately 524 total acres of Blue Buck Ridge in Cameron Parish.	Private	Fee, Excluding Minerals
510b	Reforestation of approximately 149 total acres of Hackberry Ridge in Cameron Parish.	Private	Fee, Excluding Minerals
510d	Reforestation of approximately 459 total acres of Front Ridge in Cameron Parish.	Private	Fee, Excluding Minerals

2. NER PLAN - ESTATES

Standard Estates

The following estates will be required for the Project:

a. FEE EXCLUDING MINERALS (With Restriction on Use of the Surface)

The fee simple title to the land, subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; excepting and excluding all oil and gas, in and under said land and all appurtenant rights for the exploration, development, production and removal of said oil and gas, but without the right to enter upon or over the surface of said land for the purpose of exploration, development, production and removal therefrom of said -oil and gas.

This estate will be acquired for NER project features. The District is of the opinion that this estate provides all the rights necessary for the project as well as protects the integrity of the project features. There are no active oil and gas wells within the project area, but it is unknown whether there are marketable minerals under the surface of the impacted properties. The District recognizes that if oil or gas were discovered, there is a possibility that the owner could develop those minerals through directional drilling. The District consulted with Louisiana Geological Survey regarding the feasibility of this process and potential impact to the surface of the project area. Because of depths involved in the drilling process (approximately 5,000 feet below the surface), directional drilling for



minerals beneath the surface will have no impact on the surface. For a project of this size, directional drilling would be feasible. Given the acreages of the sites proposed for the project, the District verified that drilling to targets laterally can be achieved from up to 6 miles away. Extraction of minerals by existing conventional means would not impact the integrity of the project features.

Furthermore, the District believes that landowners may be less willing to sell the property if the mineral rights are acquired by the NFS. This in turn would require acquisition through condemnation which would increase the cost of the project. For planning purposes, we assume that the additional cost would be approximately \$20,000 in labor for each tract that requires condemnation, to include title, curative work, and preparation of condemnation assembly and assistance to Justice Department once the condemnation case is filed.

The risks to the project of not acquiring minerals are negligible; therefore, it is in the best interest of the Government to acquire Fee Excluding Minerals (with Restriction on Use of the Surface).

b. 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 (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.

c. BORROW EASEMENT

A perpetual and assignable right and easement to clear, borrow, excavate and remove soil, dirt, and other materials from (the land described in Schedule A) (Tract Nos. _____, _____ and _____); subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges in said land as may be used without interfering with or abridging the rights and easement hereby acquired.

d. TEMPORARY WORK AREA EASEMENT (NOTE: At the time of this report it is anticipated that all staging areas will be provided on lands owned by the State of Louisiana and will be provided to the project through a right of entry provided by CPRAB as the non-Federal Sponsor. If it is later determined that staging areas are required on privately owned lands, the Temporary Work Area Easement will be acquired on those lands.)

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 Coastal Protection and Restoration Authority Board of Louisiana for its use and for use by the United States of America and by the representatives, agents, and contractors of the Coastal Protection Restoration Authority Board of Louisiana and the United States of America as a work area, including the right to 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, 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.



d. PERPETUAL ACCESS EASEMENT (Non-Material Deviation from Standard Estate) (NOTE: At the time of this report it is anticipated that all access areas will be provided on lands owned by the State of Louisiana and will be provided to the project through a right of entry provided by CPRAB as the non-Federal Sponsor. If it is later determined that access areas are required on privately owned lands, the Perpetual Access Easement will be acquired on those lands.)

A perpetual non-exclusive and assignable easement is granted to the Coastal Protection and Restoration Authority Board of Louisiana for its use and for use by the United States of America and by the representatives, agents, and contractors of the Coastal Protection Restoration Authority Board of Louisiana and the United States of America as an access route and/or right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____); together with the right to construct, operate, maintain, alter and replace any improvements necessary for the use as an access route and/or right-of-way, and 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 owners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired, including the right to cross over the right-of-way as access to their adjoining land; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

Approval of the Perpetual Access Easement (Non-Material Deviation from Standard Estate) is attached as Annex 4.

3. NER PLAN – EXISTING FEDERAL PROJECTS WITHIN THE LER REQUIRED FOR THE PROJECT

Calcasieu Ship Channel

As stated in Section G(1)(c) above, borrow for one of the NER project features (3a1) will come from the existing Calcasieu Ship Channel. The channel is a part of the Calcasieu River and Pass project, authorized under the River and Harbor Act of July 14, 1960, House Document 436, 86th Congress, 2nd Session (P.L. 86-646). The government holds perpetual channel and disposal easements over 14,912 acres of the Calcasieu Ship Channel. Those easements were provided as an item of local cooperation via assurance agreements with the Lake Charles Harbor and Terminal District, to include the project construction and subsequent maintenance of the project. The existing perpetual easements would be sufficient and available for the needs of this project for circumstances in which dredged materials are obtained as a part of ordinary O&M dredging. However, the easements would not be sufficient to support obtaining borrow materials for dedicated dredging efforts, and a borrow easement would be required for any required dedicated dredging.

Gulf Intracoastal Waterway (GIWW)

Portions of the project (measures 3a1 and 16b) will transport the dredged material through pipelines to be laid on the GIWW bottoms. 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. The government holds perpetual channel and disposal easements over 60,000 acres for the GIWW. There are assurance agreements over some of the reaches of the GIWW, providing some of the lands as an item of local cooperation. However, the lands were provided by the Parish and not the NFS for this project. The GIWW is man-made waterway which is used by the public. It will be determined during PED if additional real property rights must be acquired for the temporary pipeline to be placed on GIWW water bottoms. If additional right-of-way is required, a temporary pipeline easement would be acquired.

Freshwater Bayou



Portions of the project (measures 16b and 306a1) will require use of the Freshwater Bayou, a 23.1-mile navigation channel. The project was authorized under the River and Harbor Act of July 14, 1960 and constructed between 1965 and 1967. The government owns perpetual channel and disposal easements at Freshwater Bayou, as well as 87 acres in fee at Freshwater Bayou Lock. At the time of this report, it is not known whether the existing easements will be sufficient and available for this project. It will be determined during PED if additional real property rights must be acquired for these project features. The access corridor for measure 16b will pass thru the Freshwater Bayou Lock, which is owned in fee by USACE.

4. NER PLAN - FEDERALLY OWNED LANDS WITHIN THE LER FOR THE PROJECT

Two marsh restoration measures, Features 124d and 3c1 are partially located on USFWS property (Sabine National Wildlife Refuge and Cameron Prairie National Wildlife Refuge, respectively) and are included in the NER RP. Because USFWS is ultimately responsible for managing its refuge lands, USACE is only seeking Congressional authorization and funding for the Corps Plan (which excludes Features 124d and 3c1, the USFWS features). For that reason, neither the USFWS features nor the real estate costs associated with the USFWS features, have been included in the LERRDs required for the Corps Plan features of the NER RP.

5. NER PLAN - NON-FEDERAL SPONSOR OWNED LER

Some of the NER features (such as shoreline stabilization along the Gulf Coast) lie within state owned lands or state claimed water bodies. It is noted that the NFS for this project is a State of Louisiana entity, but none of the required state lands are under the jurisdiction of CPRAB. CPRAB will be required to obtain the necessary agreements with state agencies which hold jurisdiction over the areas required for the project, and will provide Authorization for Entry over all non-Federal government owned and controlled lands.

6. NER PLAN - INDUCED FLOODING

There will be no induced flooding as a result of the project.

7. NER PLAN - BASELINE COST ESTIMATES/CHART OF ACCOUNTS (COAS)

A Chart of Accounts for the RP is included in Figure 3 below. The estimated total cost for Real Estate Acquisition for the NER Plan is \$10,130,000.

The costs for NER features include land payments as well as administrative costs and incremental costs associated with acquiring the real estate interests, as well as costs for potential condemnations.

Real estate land values are \$7,114,000, which is less than 1% of total project costs; therefore a gross appraisal was not prepared for this project. LER costs are based on cost estimates prepared for each measure by the Appraisal Branch in April, 2014. The appraiser determined that there was no need to update the cost estimate because the lands impacted by the NER plan are wetlands, woodlands and pasture, and the unit values of these types of properties have not changed since the estimate was prepared.



CEMVK-RE-E REAL ESTATE DIVISION		SOUTHWEST COASTAL LOUISIANA PROJECT REAL ESTATE COST ESTIMATE NER PLAN			October 2015		
BASED ON COST ESTIMATES PROVIDED IN APRIL, 2014							
				AMOUNT	CONTINGENCY	PROJECT COST	
					ROUNDED	10,130,000	
TOTAL PROJECT COSTS				8,103,350	2,025,850	10,130,200	
01	LANDS AND DAMAGES		CONTINGENCY	PROJECT COST	8,103,350	2,025,850	10,130,200
01B	ACQUISITIONS						
01B10	BY GOVERNMENT	0	0	0			
01B20	BY NON-FEDERAL SPONSOR (NFS)	1,101,800	275,450	1,378,250			
01B30	BY GOVT ON BEHALF OF LS	0	0	0			
01B40	REVIEW OF LS	598,550	149,650	748,200			
01C	CONDEMNATIONS						
01C10	BY GOVERNMENT	0	0	0			
01C20	BY LS	280,000	70,000	350,000			
01C30	BY GOVT ON BEHALF OF LS	0	0	0			
01C40	REVIEW OF LS	0	0	0			
01E	APPRAISAL						
01E10	BY GOVT (IN HOUSE)	0	0	0			
01E20	BY GOVT (CONTRACT)	0	0	0			
01E30	BY LS	288,000	72,000	360,000			
01E40	BY GOVT ON BEHALF OF LS	0	0	0			
01E50	REVIEW OF LS	144,000	36,000	180,000			
01F	PL 91-646 ASSISTANCE						
01F10	BY GOVERNMENT	0	0	0			
01F20	BY LS	0	0	0			
01F30	BY GOVT ON BEHALF OF LS	0	0	0			
01F40	REVIEW OF LS	0	0	0			
01R	REAL ESTATE PAYMENTS						
01R1	LAND PAYMENTS						
01R1A	BY GOVERNMENT	0	0	0			
01R1B	BY LS	5,691,000	1,422,750	7,113,750			
01R1C	BY GOVT ON BEHALF OF LS	0	0	0			
01R1D	REVIEW OF LS	0	0	0			
01R2	PL 91-646 ASSISTANCE PAYMENTS						
01R2A	BY GOVERNMENT	0	0	0			
01R2B	BY LS	0	0	0			
01R2C	BY GOVT ON BEHALF OF LS	0	0	0			
01R2D	REVIEW OF LS	0	0	0			
ASSUMES 158 LANDOWNERS							

Figure 3: NER Real Estate Cost Estimates

8. NER PLAN - UNIFORM RELOCATION ASSISTANCE (PL 91-646, TITLE II AS AMENDED)

At the time of this report, it was not known whether there could be any improvements, such as recreational camps, or items of personal property on the marsh restoration sites or chenier reforestation sites. The assumption made at this time, is that those sites are unimproved and that URA relocations would not be necessary for the NER project features. This information will be refined during PED.

9. NER PLAN - TIMBER/MINERAL/ROW CROP ACTIVITY

The Louisiana Department of Natural Resources provides a Strategic Online Natural Resources Information System (SONRIS), which contains up-to-date information on oil & gas activity in the state of Louisiana. Review of this information indicated that although there are oil and gas wells within the study area near the NER project features, there are no active wells within the projected RP NER alignment. This information



will be reviewed and confirmed in PED. In the event that design information indicates that there are active oil and gas wells within the vicinity of the NER project, the PDT determined that oil and gas wells will not be relocation items, and the alignments would be changed during the project Plans and Specifications (P&S) phase to avoid them.

With the exception of the acquisition of the standard Fee Excluding Minerals (With Restrictions on the Use of the Surface) estate, which has the potential to impact mineral rights over certain lands, the other estates have no impact on mineral rights and the Government will not acquire mineral rights to any of the LER required for the NER project. Over lands where the fee (excluding minerals) estate is being acquired, mineral rights will be subordinated. Estimated costs associated with subordination of mineral rights has been included in the real estate cost estimates for the NER plan. Mineral right owners can still explore for minerals through directional drilling.

There are approximately 1,413 acres of pasture/woodlands impacted by the project. For some of the NER project elements (specifically, within the chenier ridges), lands with potential farmland use may be removed from agricultural use. Refer to Chapter 3 for further discussion. Any timber present within required right of way is included in the overall appraised value of the land. In the event the pasture lands are cultivated, the owner will be allowed to harvest crops prior to acquisition. In the event that project schedules do not allow for such, the contributory value of crops will be included in the estimate of property value in the appraisal.

10. NER PLAN - OYSTER LEASES

Review of the SONRIS information provided by Louisiana Department of Natural Resources indicates there are no oyster leases within the project study area. No oyster leases will be acquired as a result of the project.

11. NER PLAN - ZONING ORDINANCES

There will be no application or enactment of zoning ordinances in lieu of, or to facilitate, acquisition of real estate rights for NER features of this project.

12. NER PLAN - ACQUISITION SCHEDULE

The following acquisition schedule for ecosystem project features is based on the premise that the project will impact approximately 135 landowners for the NER project features. It is assumed that the project will be constructed in sections. Chapter 4, Section 4.2.2 of the Integrated Feasibility Report and Environmental Impact Statement outlines the proposed implementation plan for the NER project features, demonstrating project features to be implemented in a tiered structure. The general schedule below would be applied for each Tier referenced within the implementation plan once the project is approved and funded for implementation. This tentative schedule provides the total amount of time to complete the acquisition of real estate rights for the construction of the ecosystem project features based on the preliminary information available at this time. Note that in some instances, an NER RP feature overlaps with a mitigation project. When overlap occurs, the NER RP features would not be constructed until the mitigation project satisfies its mitigation obligations—either under the requirements of the permit(s) applicable to the action that was mitigated and/or, where applicable, under the statutory and cost-sharing obligations for the Federal project associated with the mitigation measure. As such, implementation of these features would be deferred and would not proceed in accordance with the tiered plan of implementation. (See Chapter 4, Section 4.2.2 for more discussion on implementation of these NER RP features.) A detailed acquisition schedule will be prepared once the 95% plans and specifications are prepared for each section of the project. This schedule is only for purposes of the feasibility study.



1)	TOD, Mapping	1 year
2)	Obtain Title & Appraisals	2 years
3)	Negotiations	3 years
4)	Closing	1 years
5)	Eminent Domain Proceedings	3 years

13. NER - FACILITY/UTILITY RELOCATIONS

At this point in time, no facility/utility relocations are anticipated to be required for the NER features of the Project.

ANY CONCLUSION OR CATEGORIZATION CONTAINED IN THIS REPORT THAT AN ITEM IS A UTILITY OR FACILITY RELOCATION TO BE PERFORMED BY THE NON-FEDERAL SPONSOR AS PART OF ITS LERRD RESPONSIBILITIES 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.

14. NER PLAN - HAZARDOUS, TOXIC AND RADIOACTIVE WASTE

A Phase I Environmental Site Assessment was completed in February, 2015. There were no significant issues identified as a result of this assessment. Current information suggests there will be no HTRW issues within the Project area.

H. NAVIGATION SERVITUDE

The navigation servitude is the dominant right of the Government under the Commerce Clause of the U.S. Constitution to use, control and regulate the navigable waters of the United States and submerged lands thereunder for various commerce-related purposes. Portions of feature 3a1 will be constructed through beneficial use of dredged material from ordinary maintenance dredging at the Calcasieu Ship Channel. The USACE asserts the navigation servitude for these dredging operations. The navigation servitude will not be asserted for any other features of this Project.

I. LANDOWNER CONCERNS

The attitudes of the landowners who will be affected by construction of the NER Project features is not known at this time. Generally, community support for coastal restoration is high. It is expected that once further analysis is conducted for the NER Project features, landowner meetings will be held. At that time, landowner concerns and support for the NER measures will be assessed. Based on experience with other ecosystem restoration projects, it is expected that private landowners would prefer acquisition of a non-standard estate, rather than fee acquisition for the NER features.

It is anticipated that implementation of the NED non-structural portion of the Project could produce challenges (refer to Appendix L of the Revised Integrated Draft Feasibility Report and Environmental Impact Statement for more discussion). Public meetings were held in each Parish affected by the NED measures. The proposed NED plan has changed, since those public meetings were held. At the time of this report, the attitudes of landowners who will be affected by the nonstructural measures proposed in the NED Plan is not known. However, local Parish officials have indicated that many of their residents have expressed interest in and are highly supportive of structure elevations.



J. RISK LETTER

The Coastal Protection and Restoration Authority Board, through its implement arm, the Coastal Protection and Restoration Authority, was notified by letter dated 1 April 2016 of the risks associated with acquisition of real estate interests prior to project authorization by Congress and execution of the Project Partnership Agreement.

K. OTHER ISSUES

In the Integrated Final Feasibility Report and EIS, Appendix A, Annex F (State Historic Preservation Officer (SHPO) and Tribal Coordination Letters), it is noted that Programmatic Agreements will be executed with the SHPO and the Advisory Council on Historic Preservation to delay historic/cultural investigations until the PED Phase. Based on preliminary investigations, it is noted that there is a high probability there will be areas which have adverse effects. The Programmatic Agreement outlines actions that will be taken to minimize effects, including designation of a “no work” zone until a resolution process is set forth.

Prepared By:

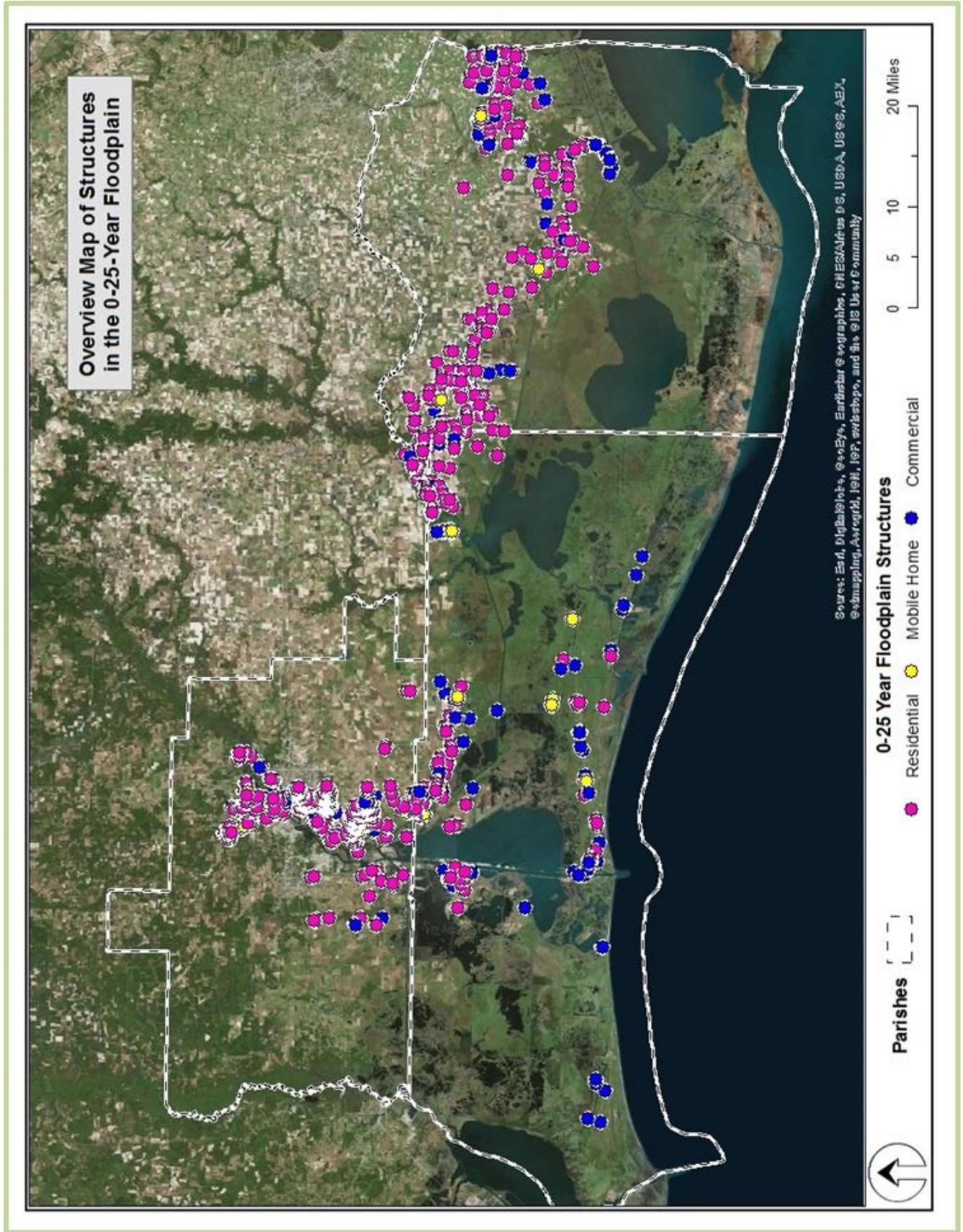
Karen E. Vance
Realty Specialist, Planning & Appraisal Branch
Real Estate Region South Division
April 1, 2016

Recommended for Approval By:

Judith Y. Gutierrez
Chief, Appraisal & Planning Branch
Real Estate Region South Division
April 1, 2016

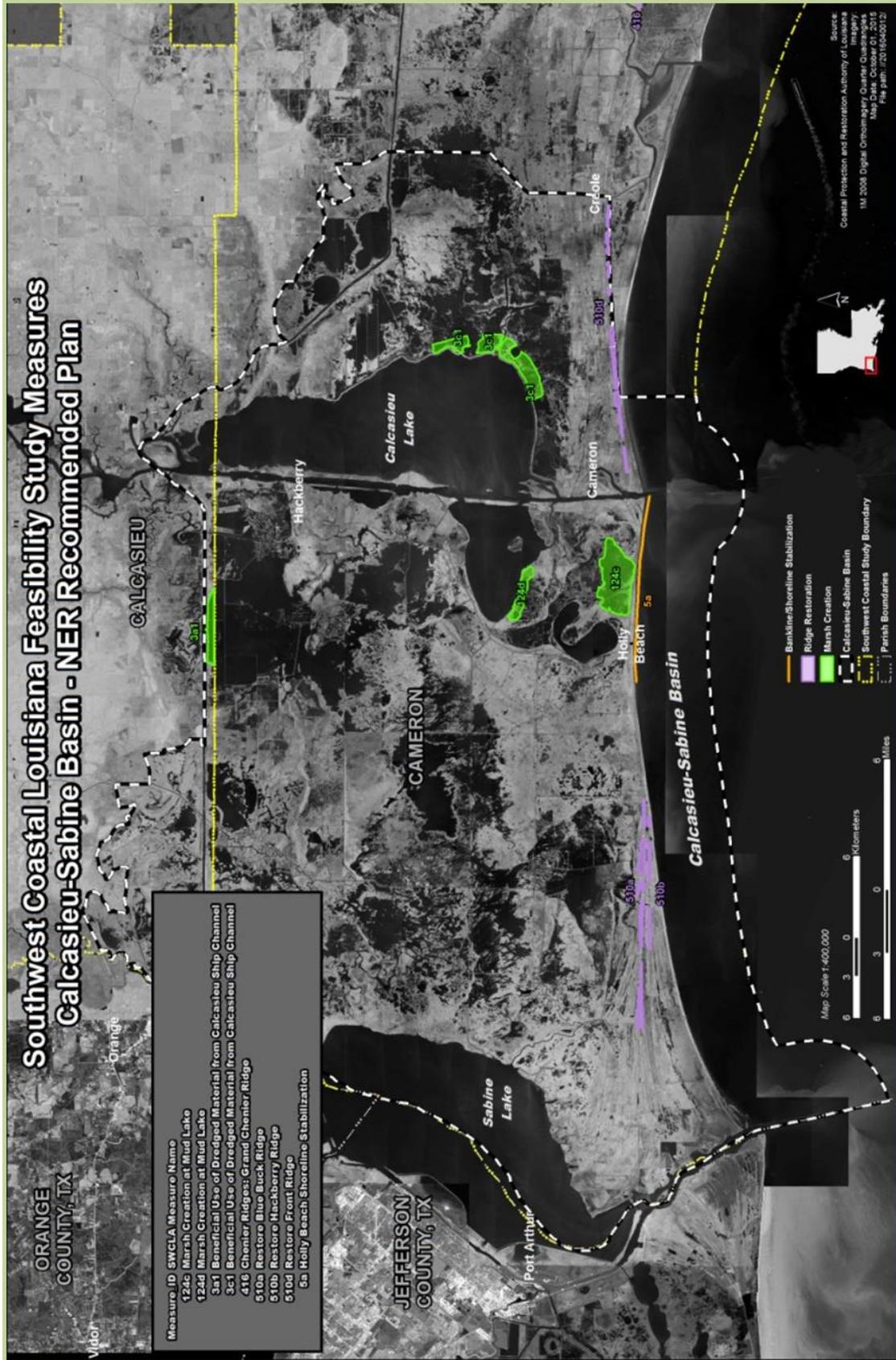


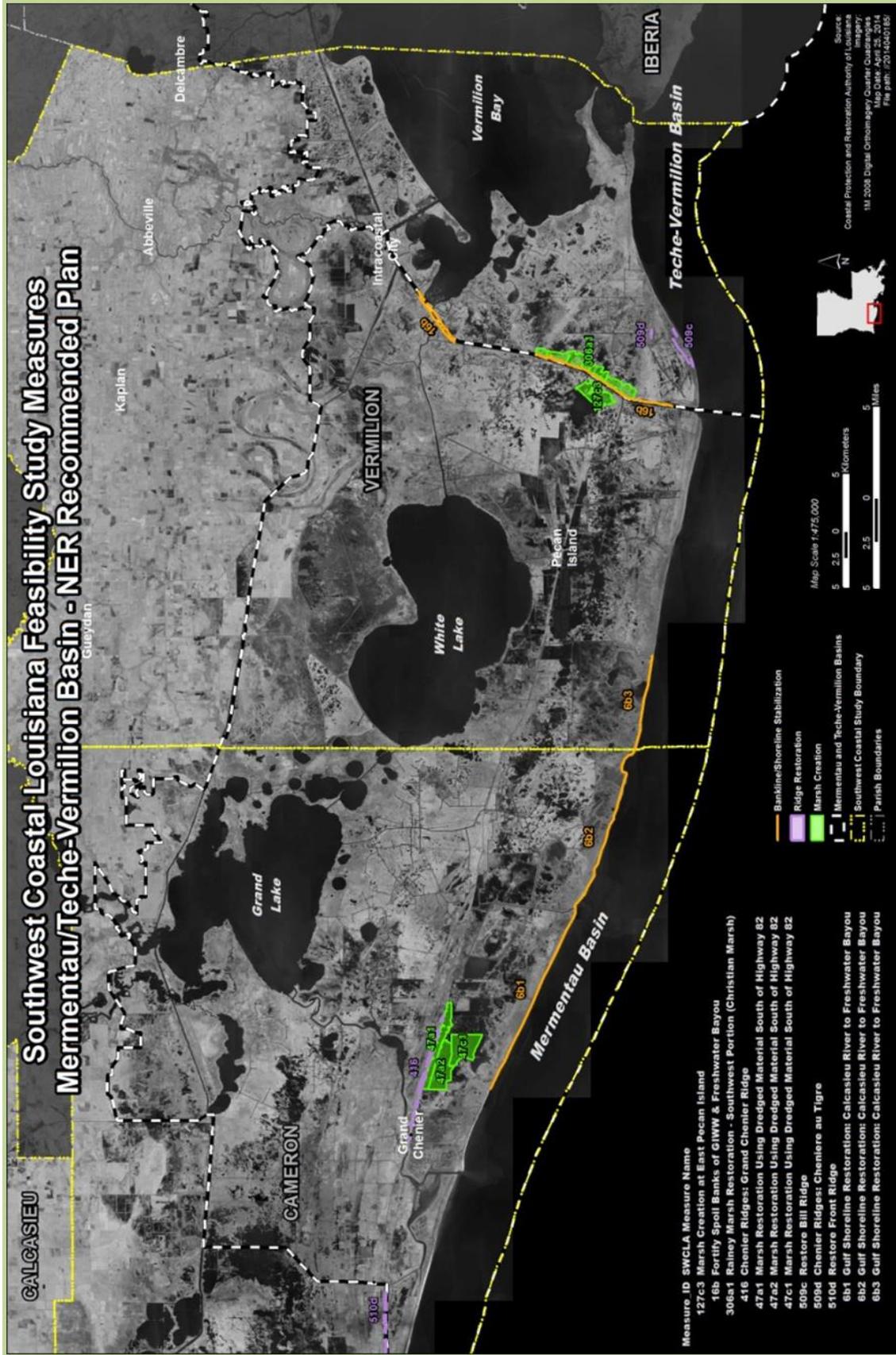
**ANNEX 1
PROJECT MAPS
NED PLAN**

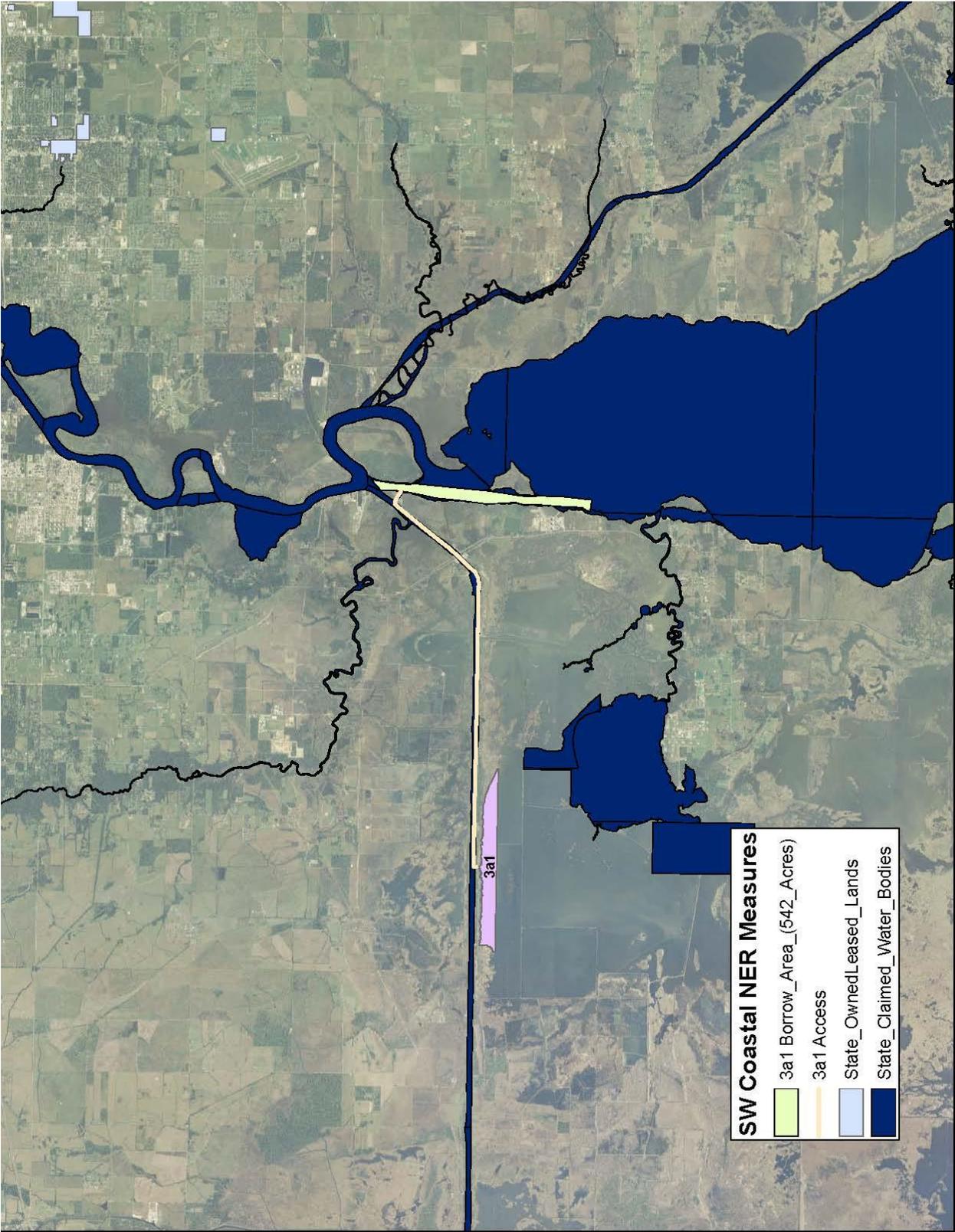




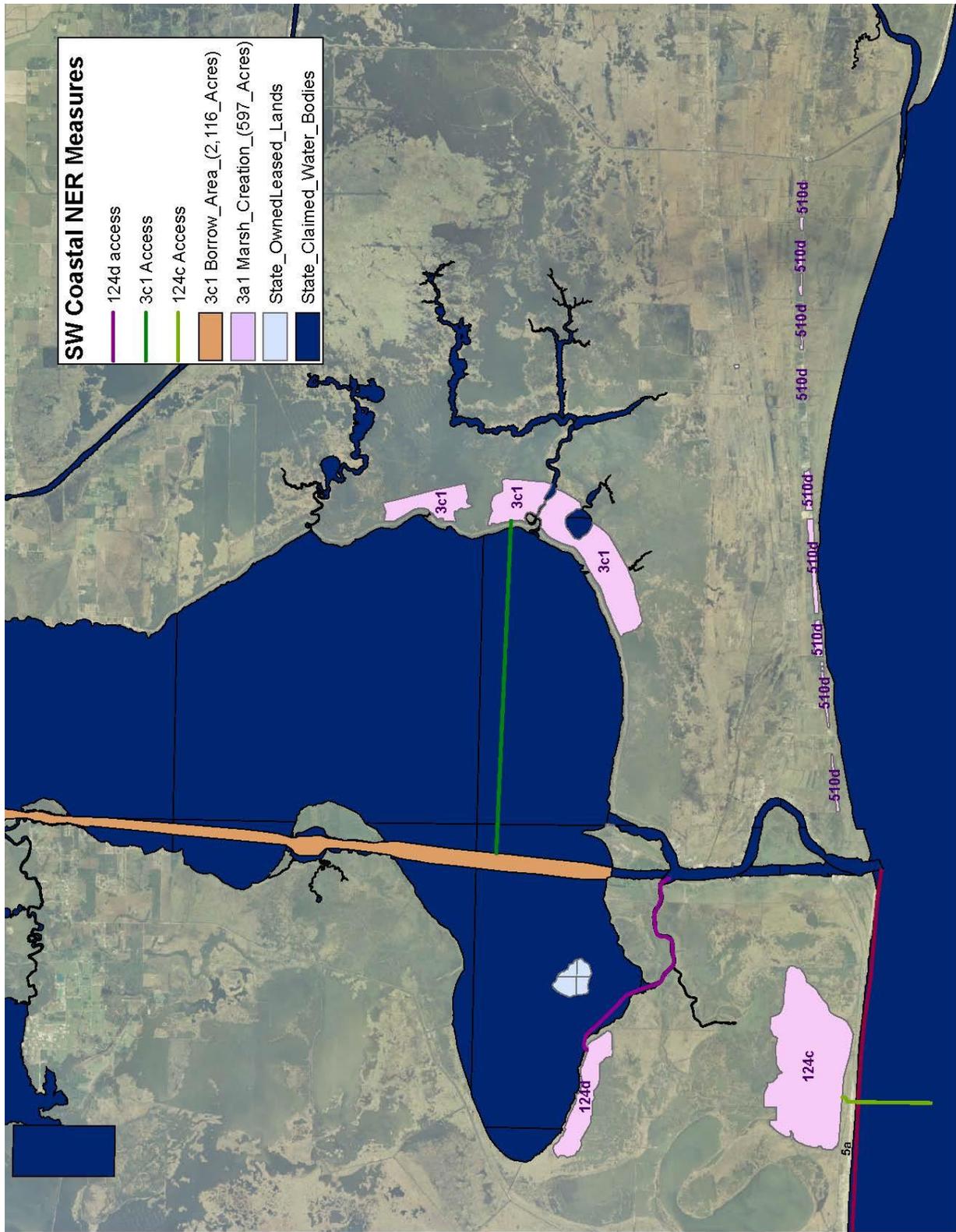
ANNEX 2
PROJECT MAPS
NER PLAN

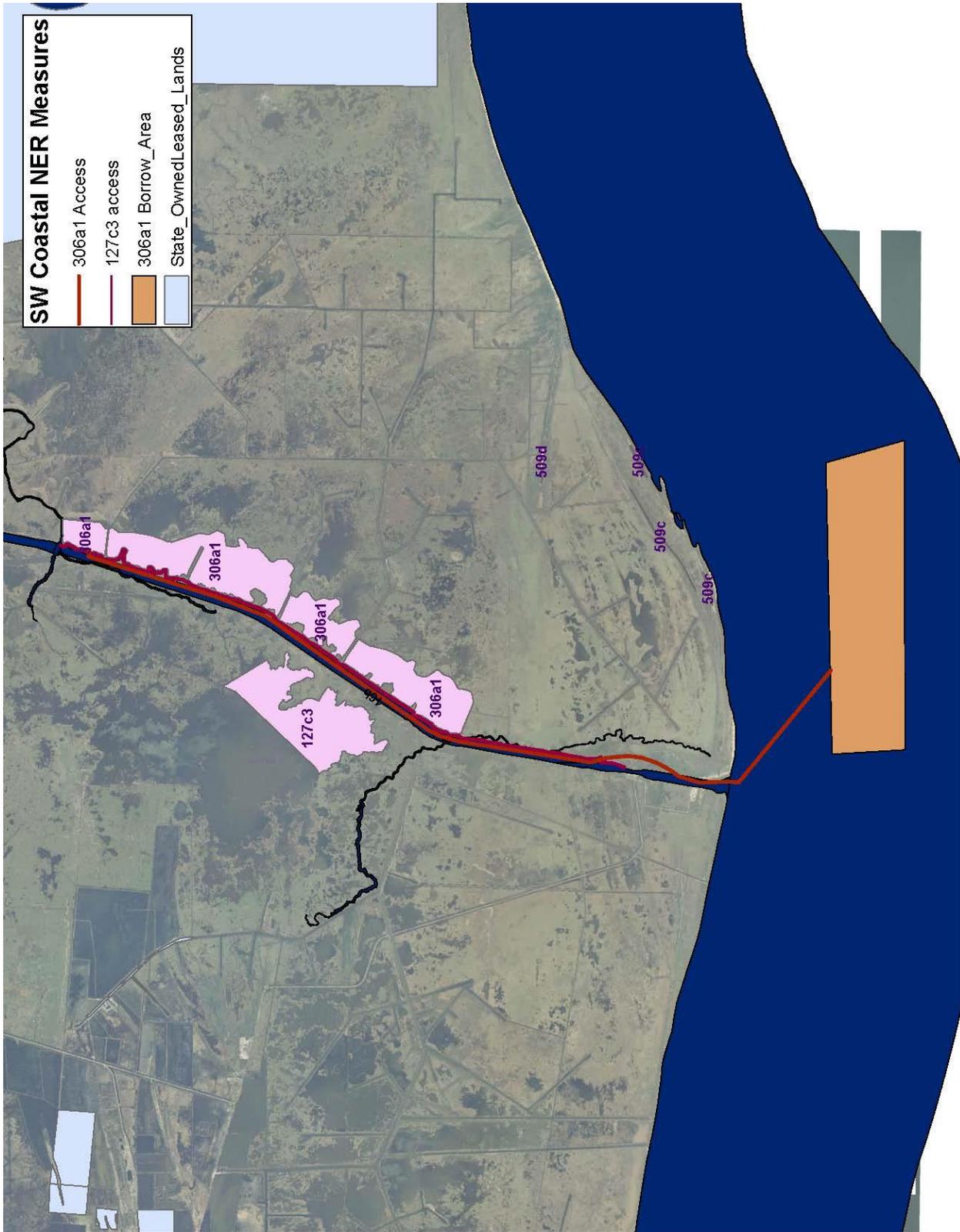


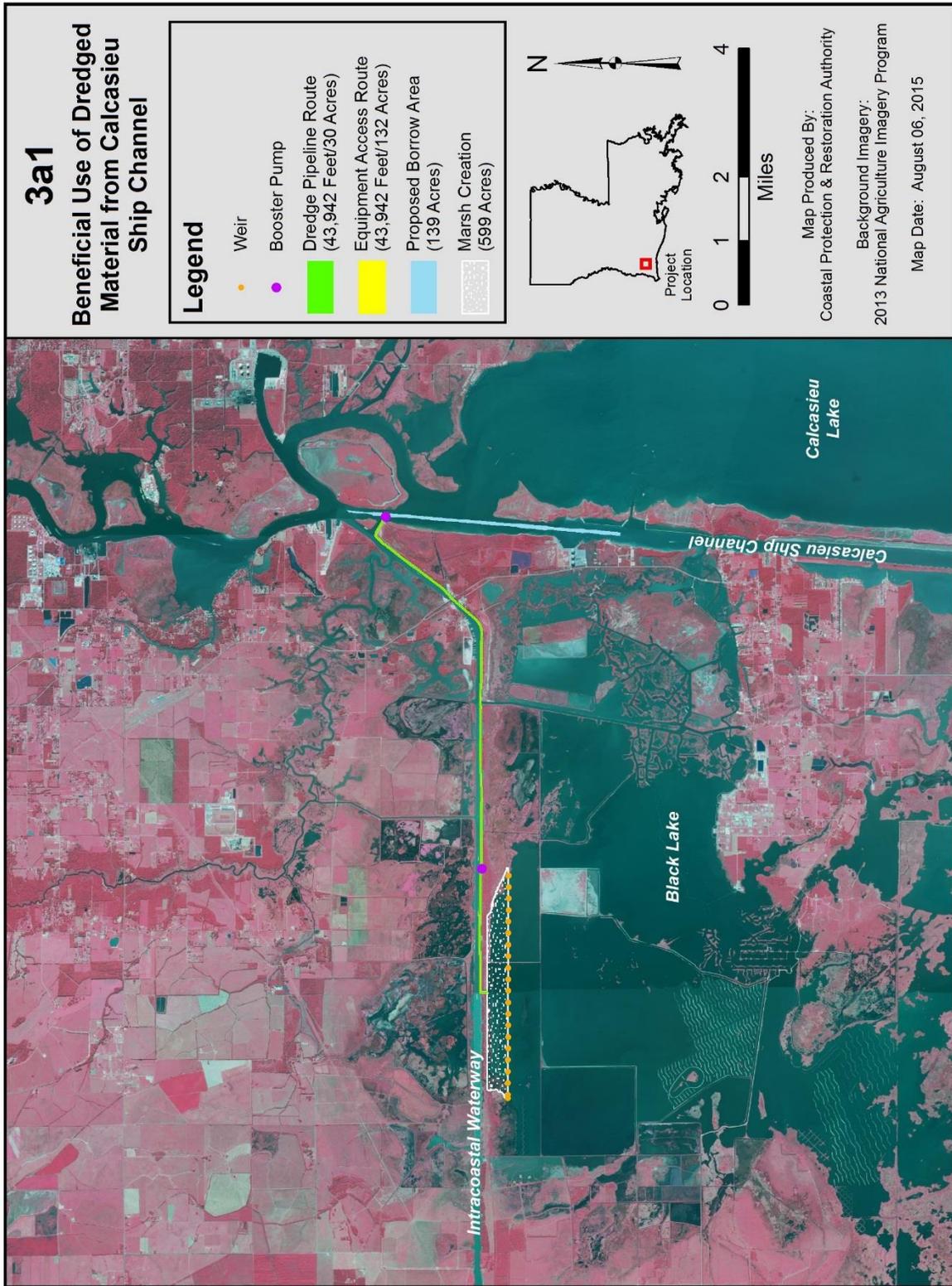


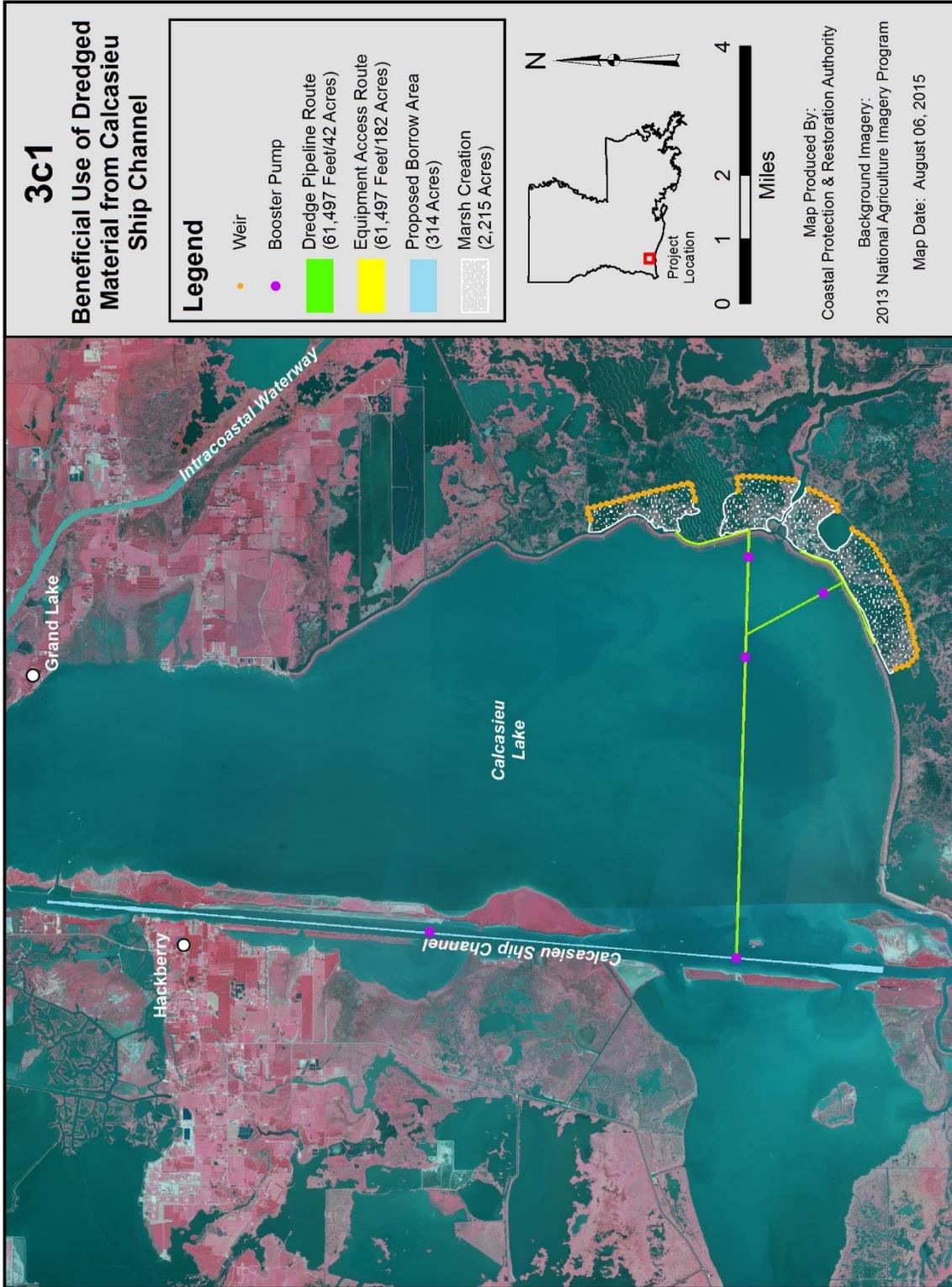




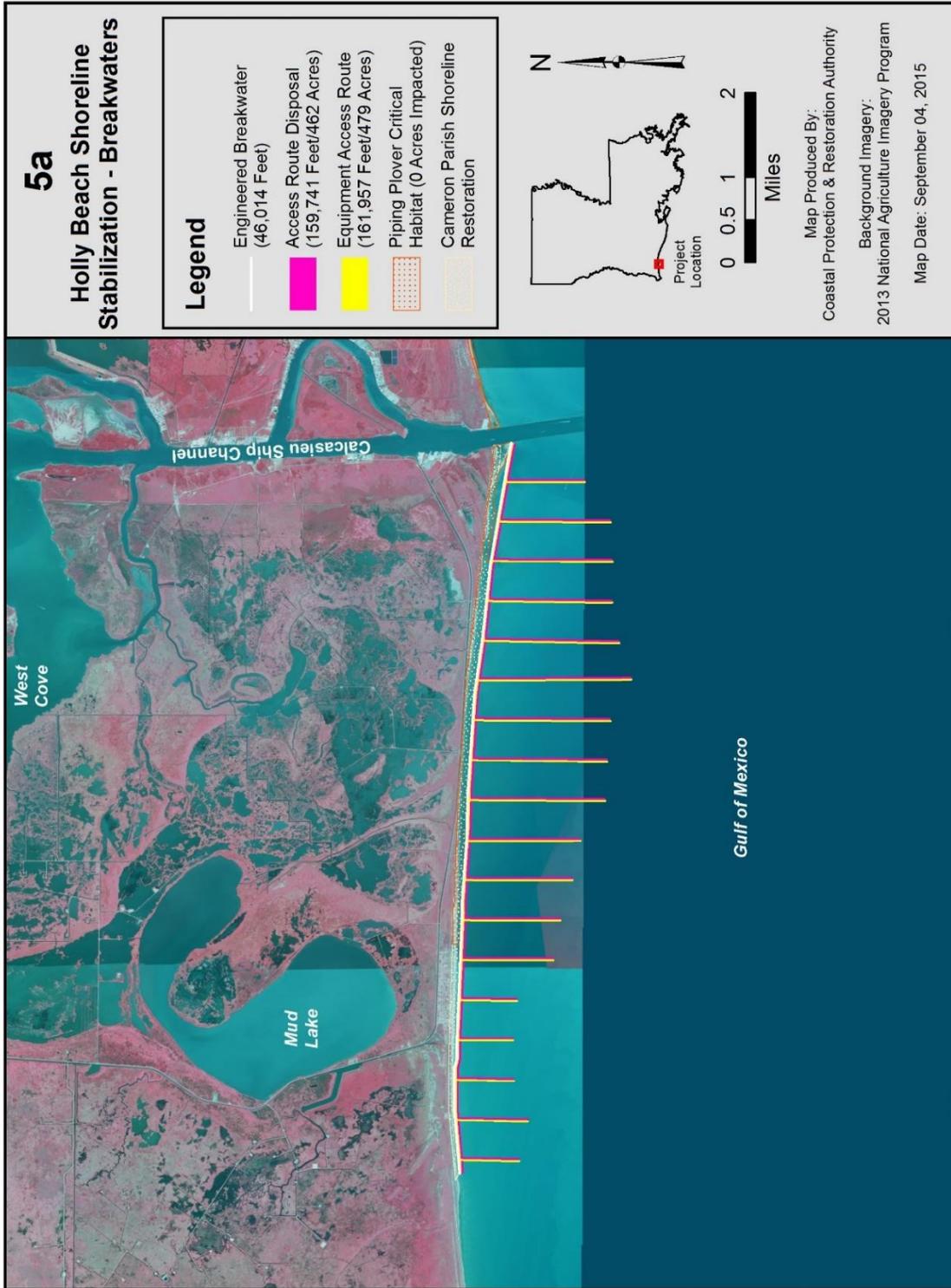


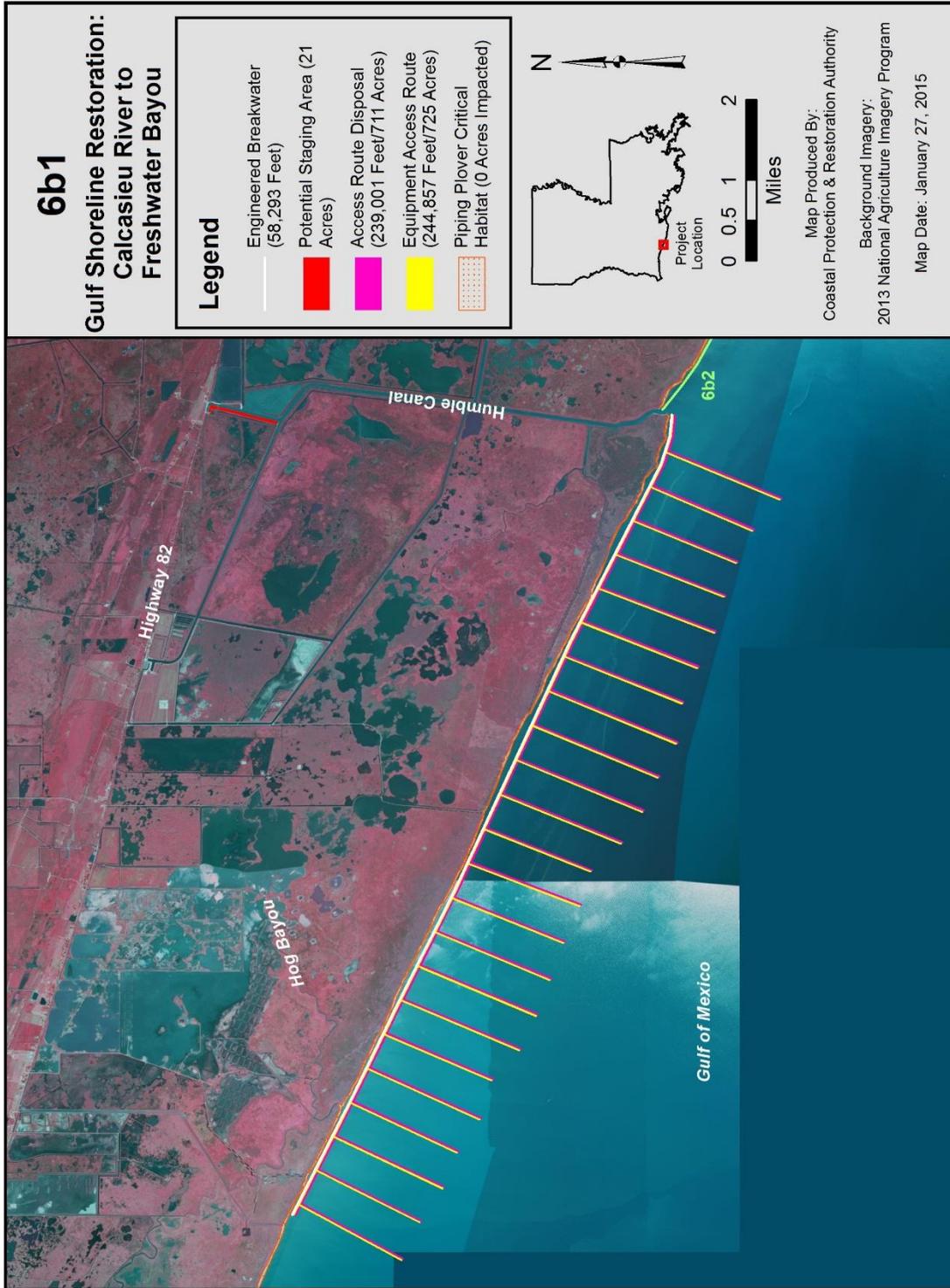


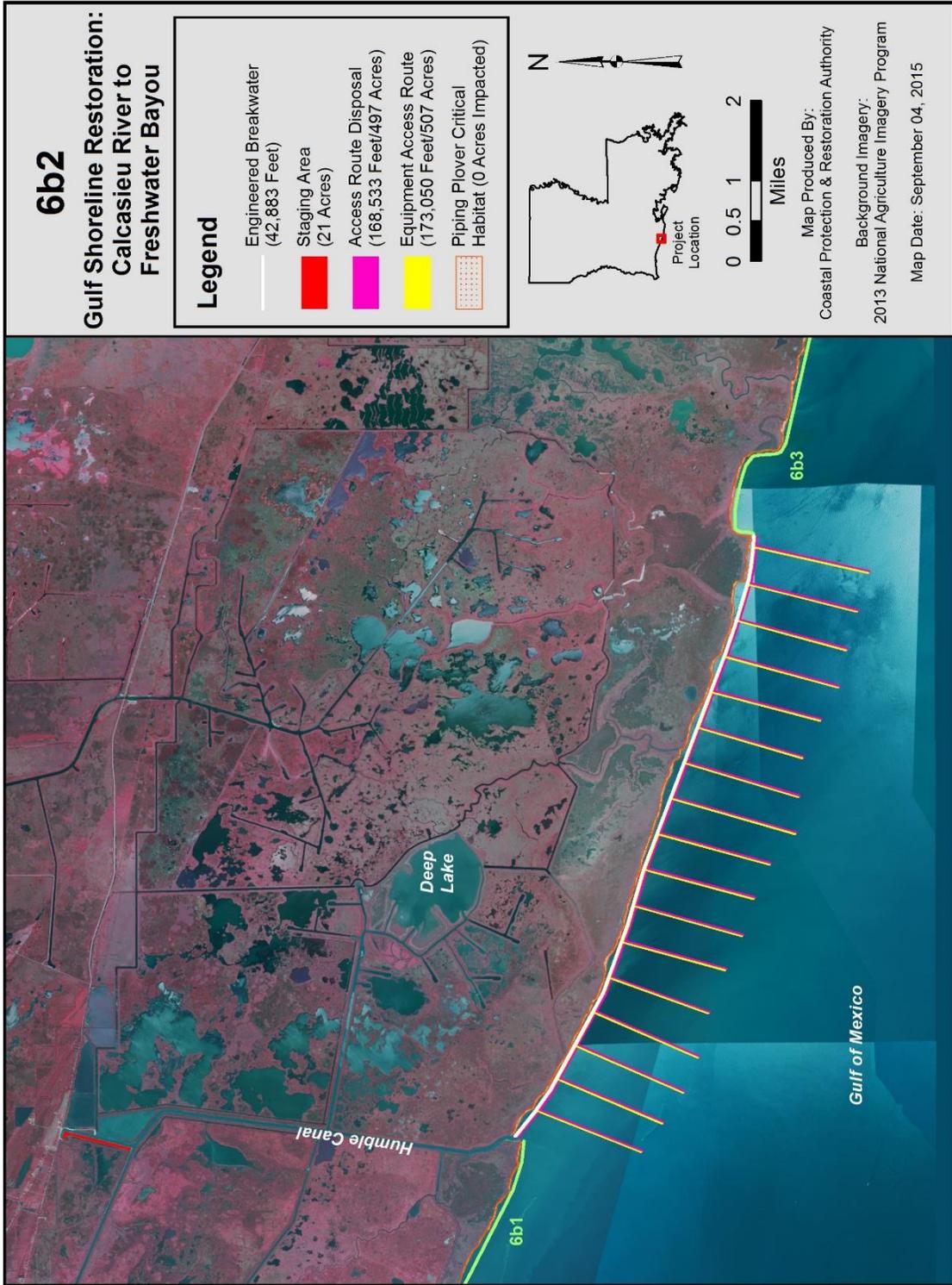


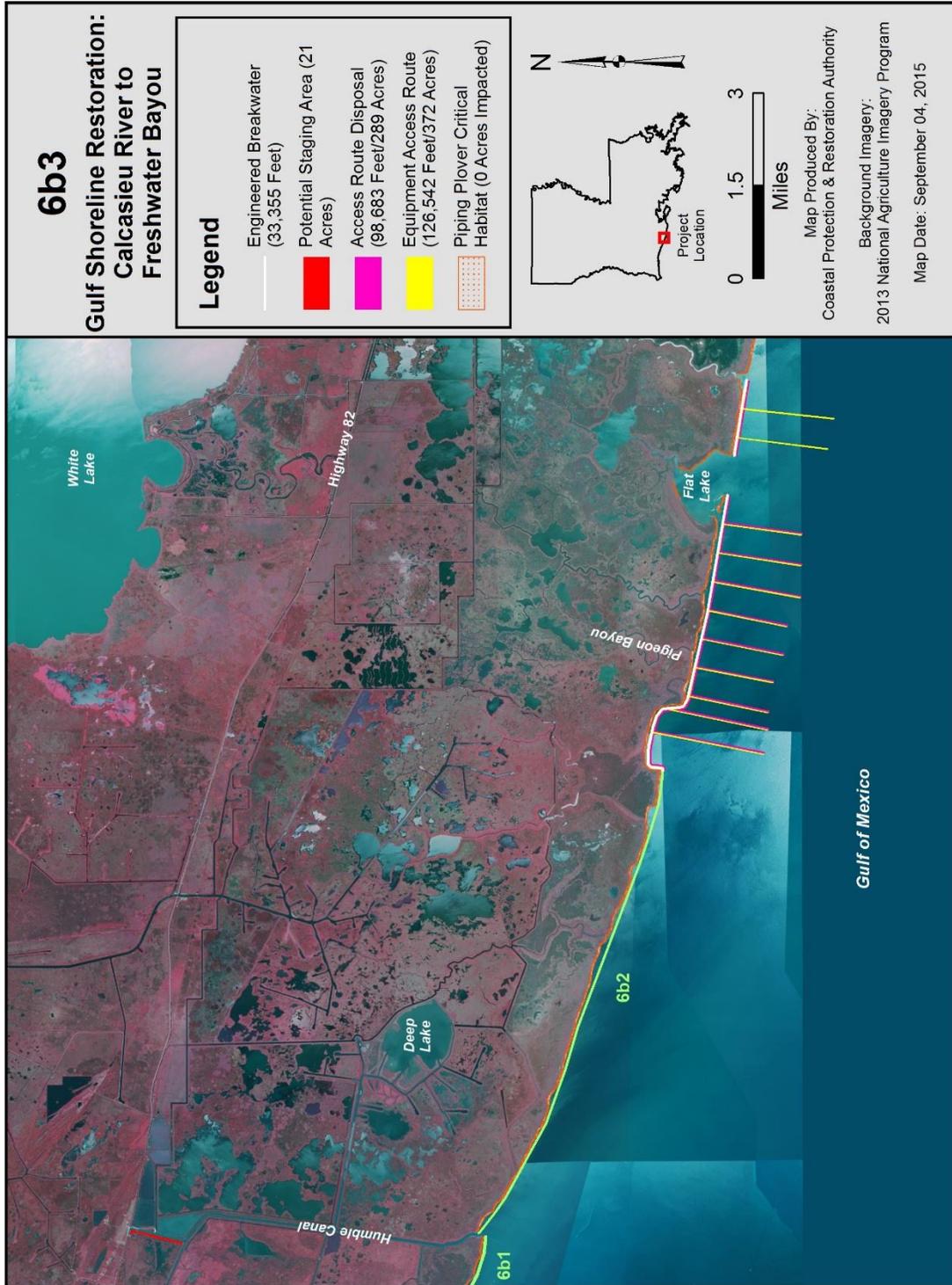


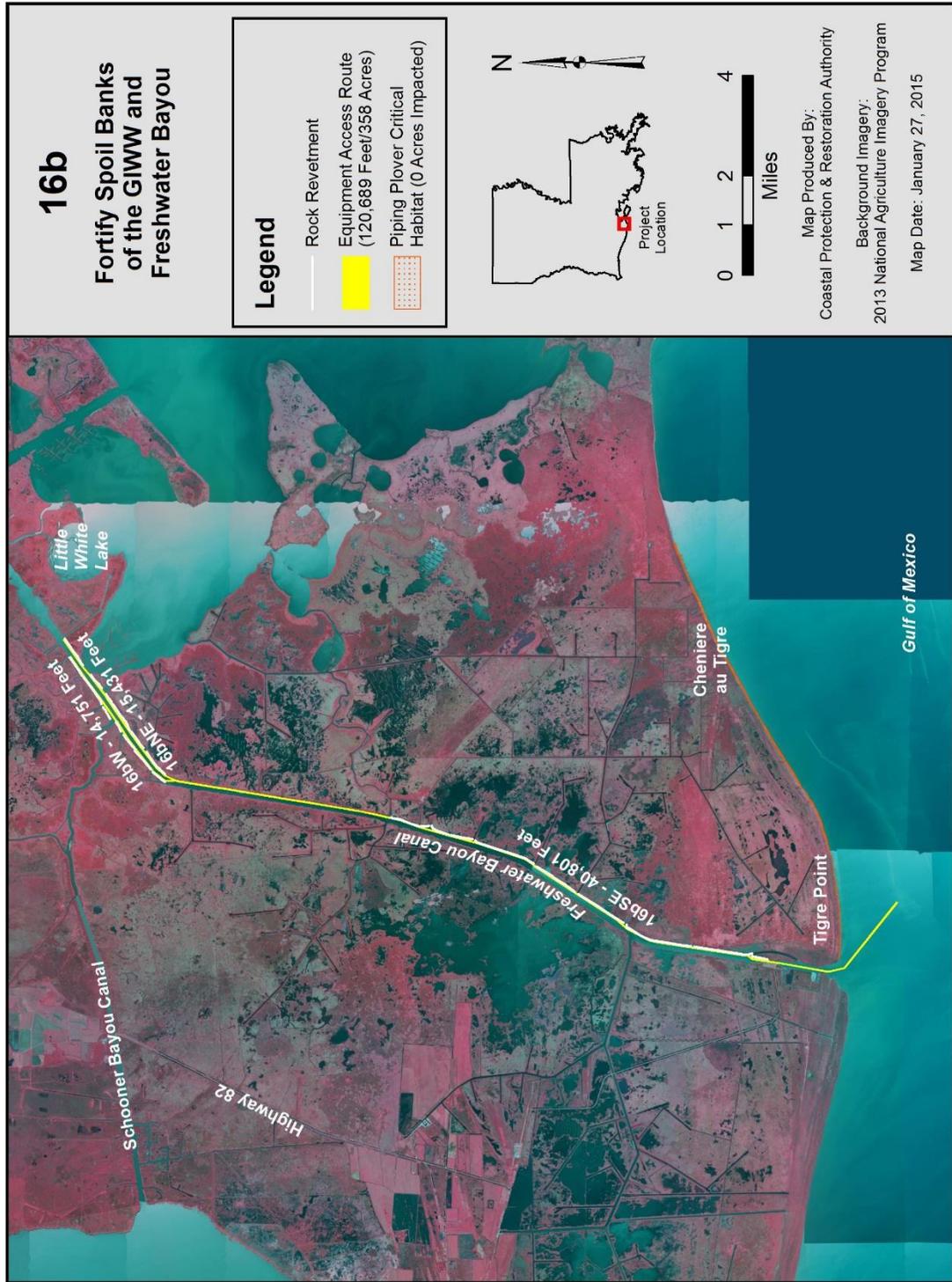
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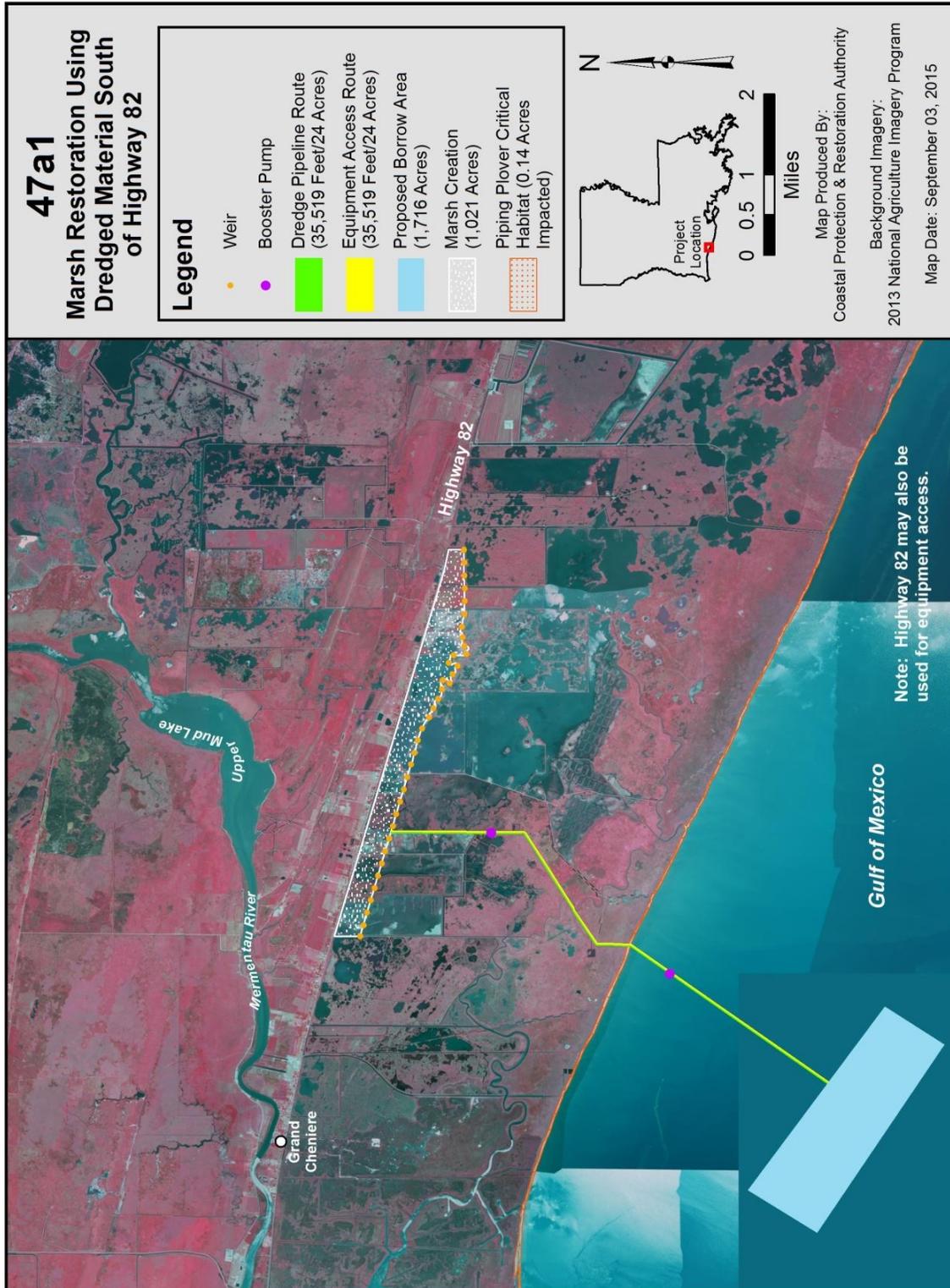


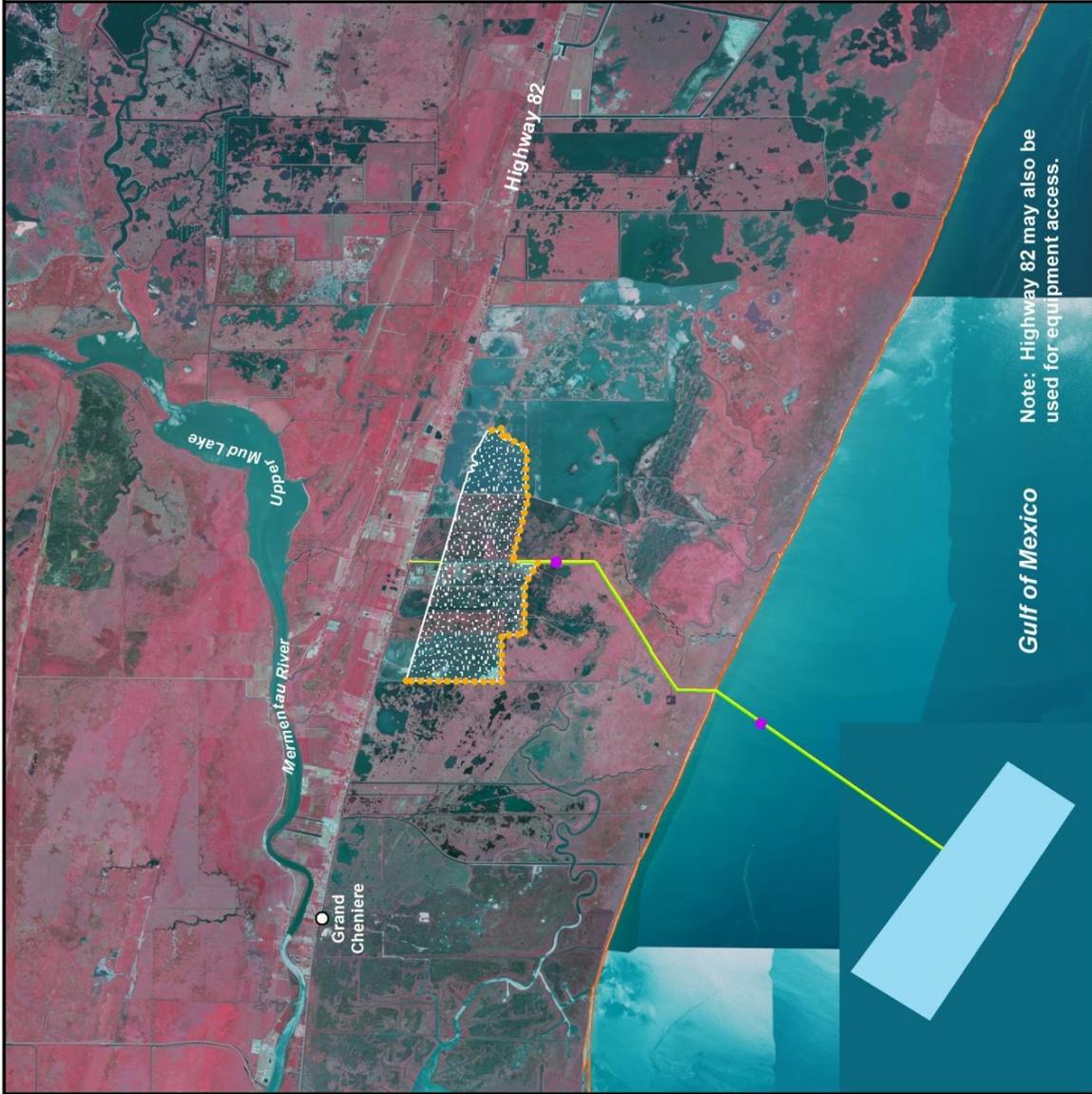
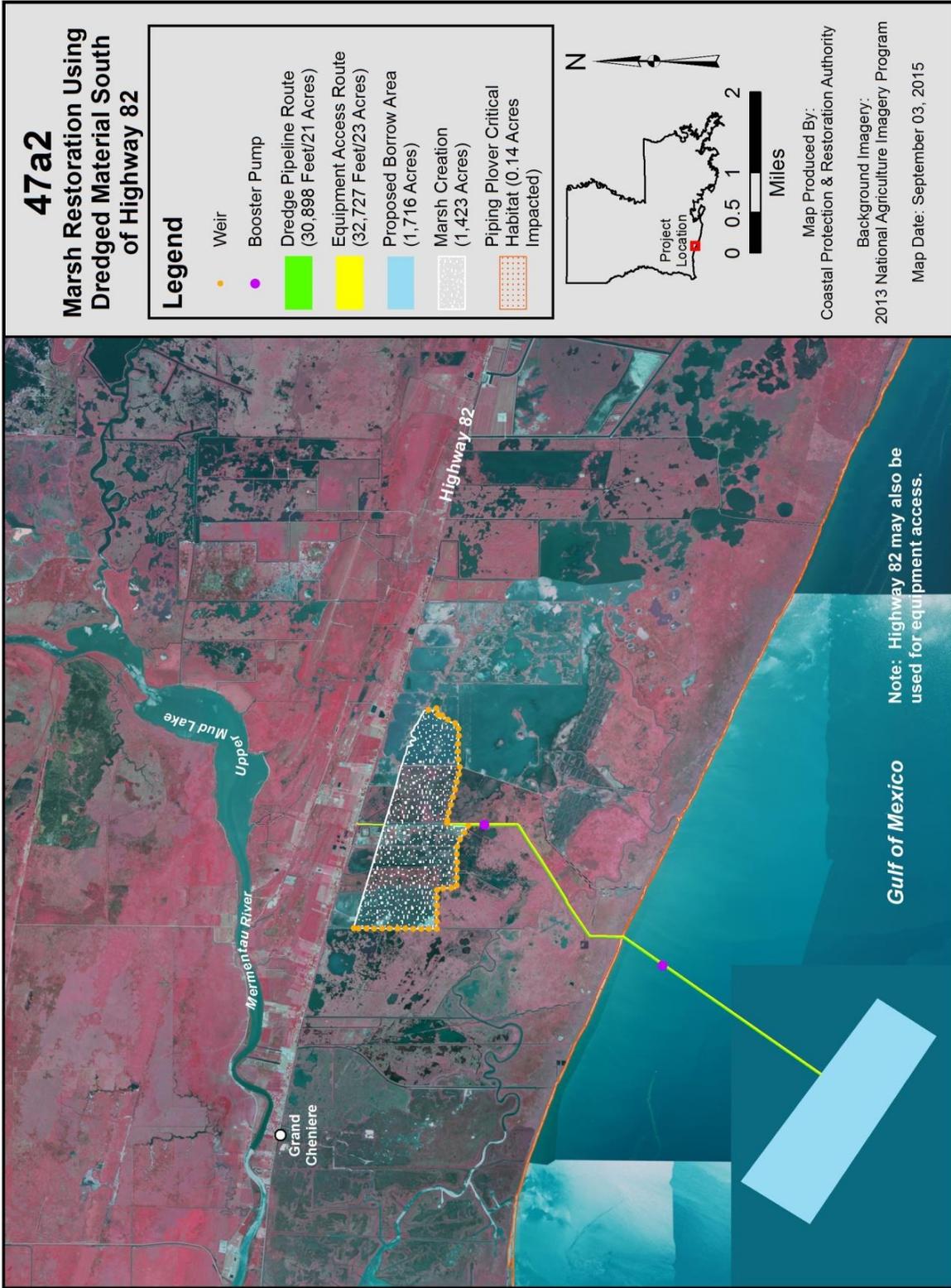


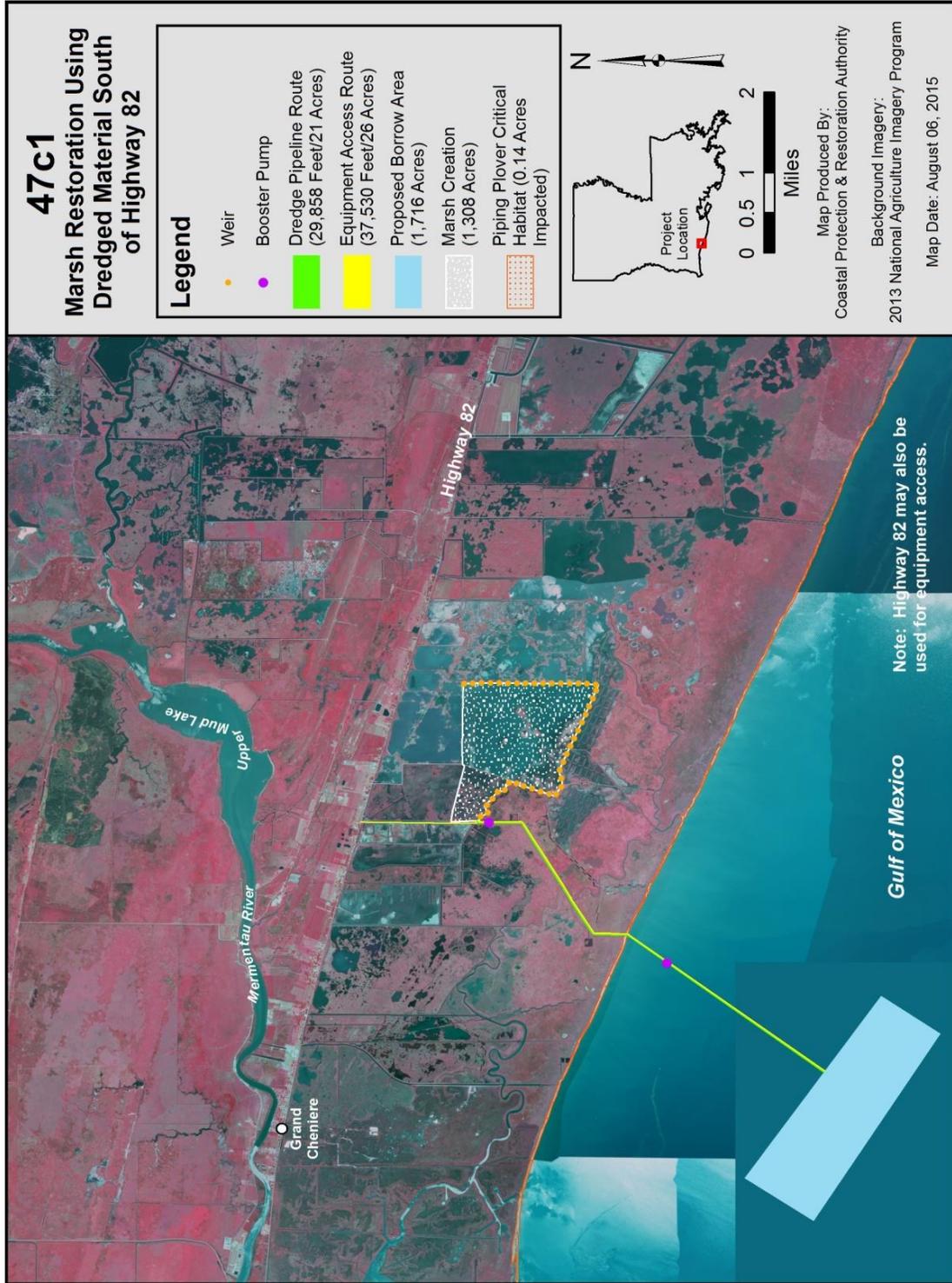


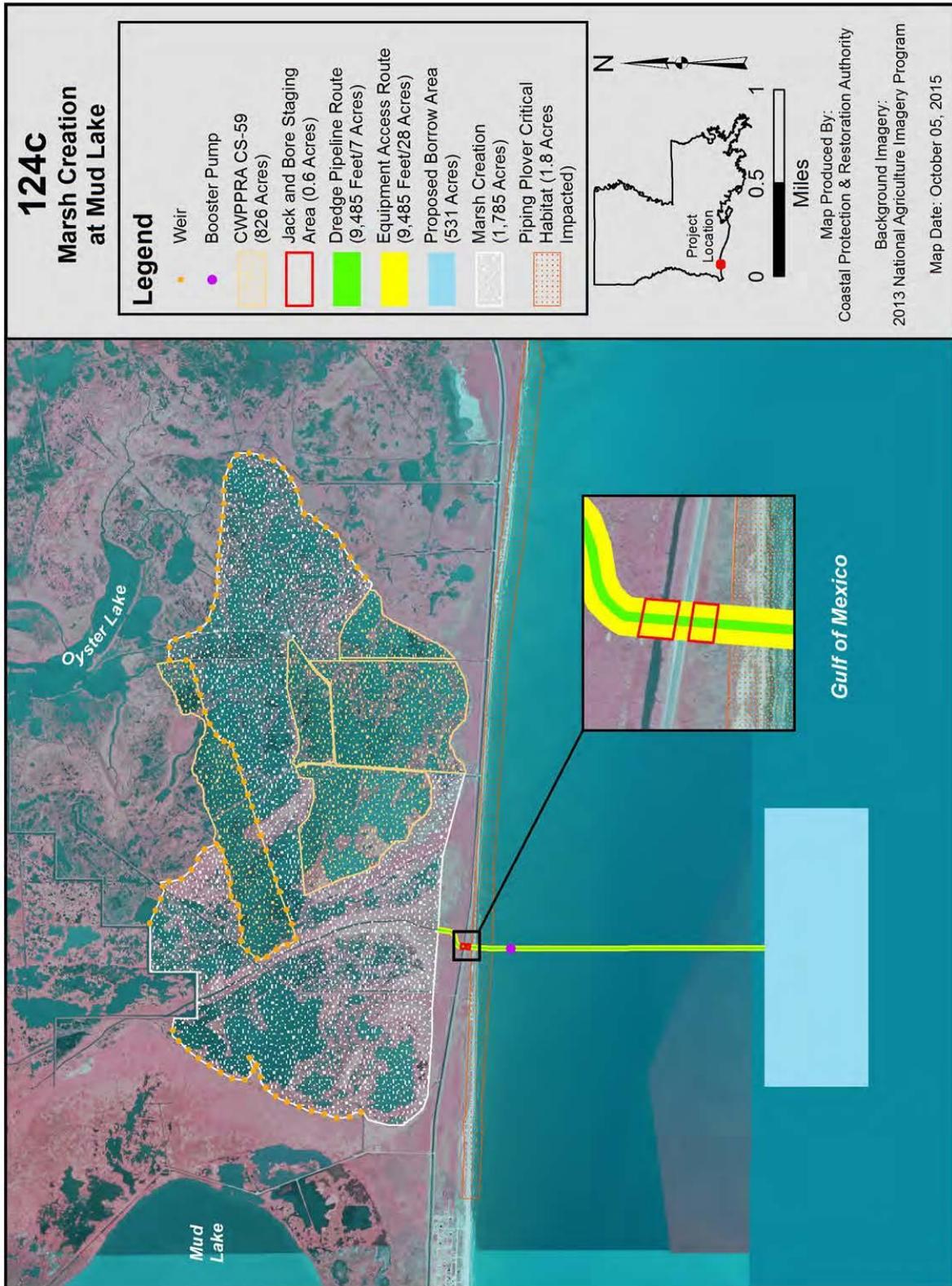


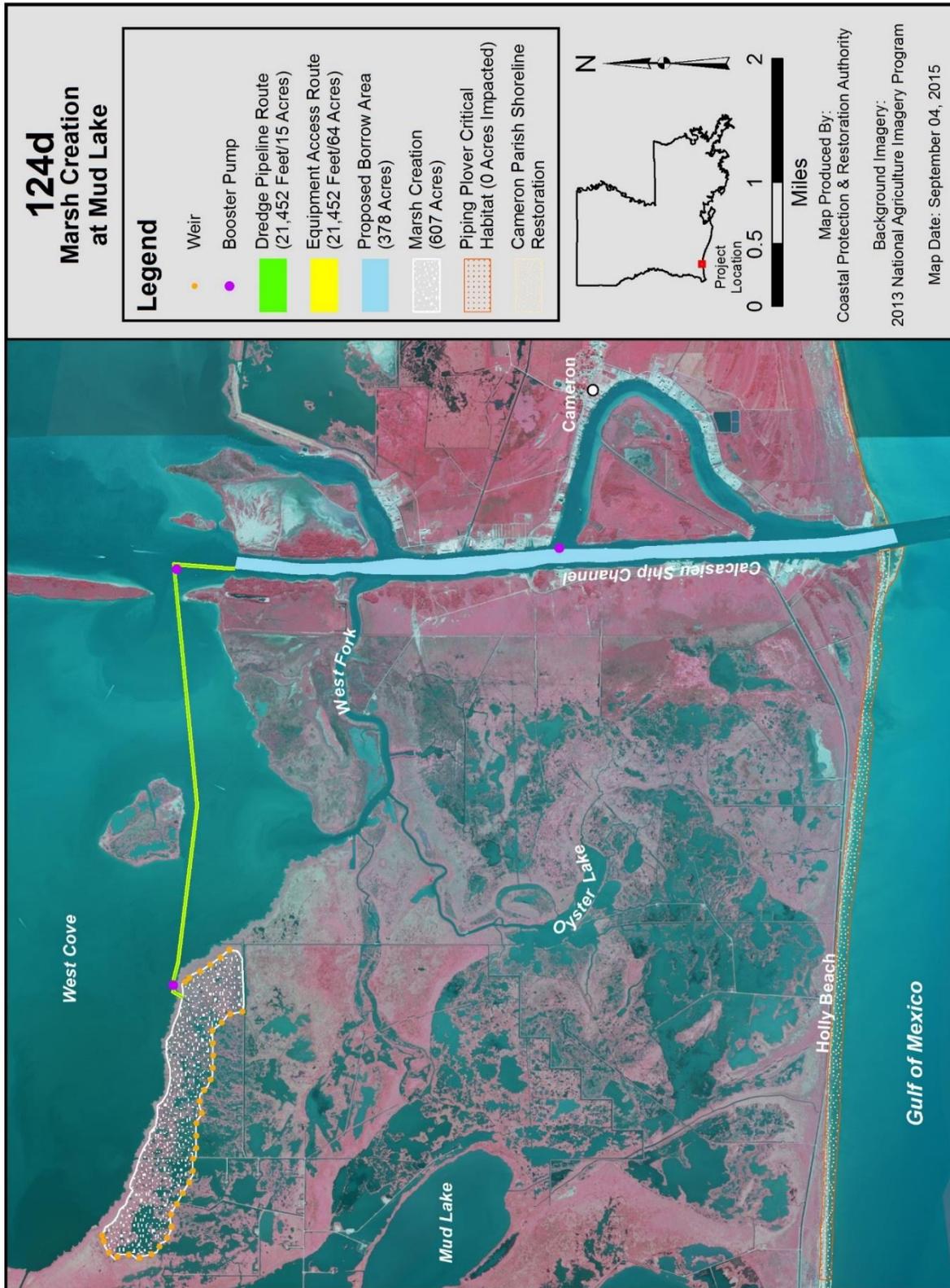




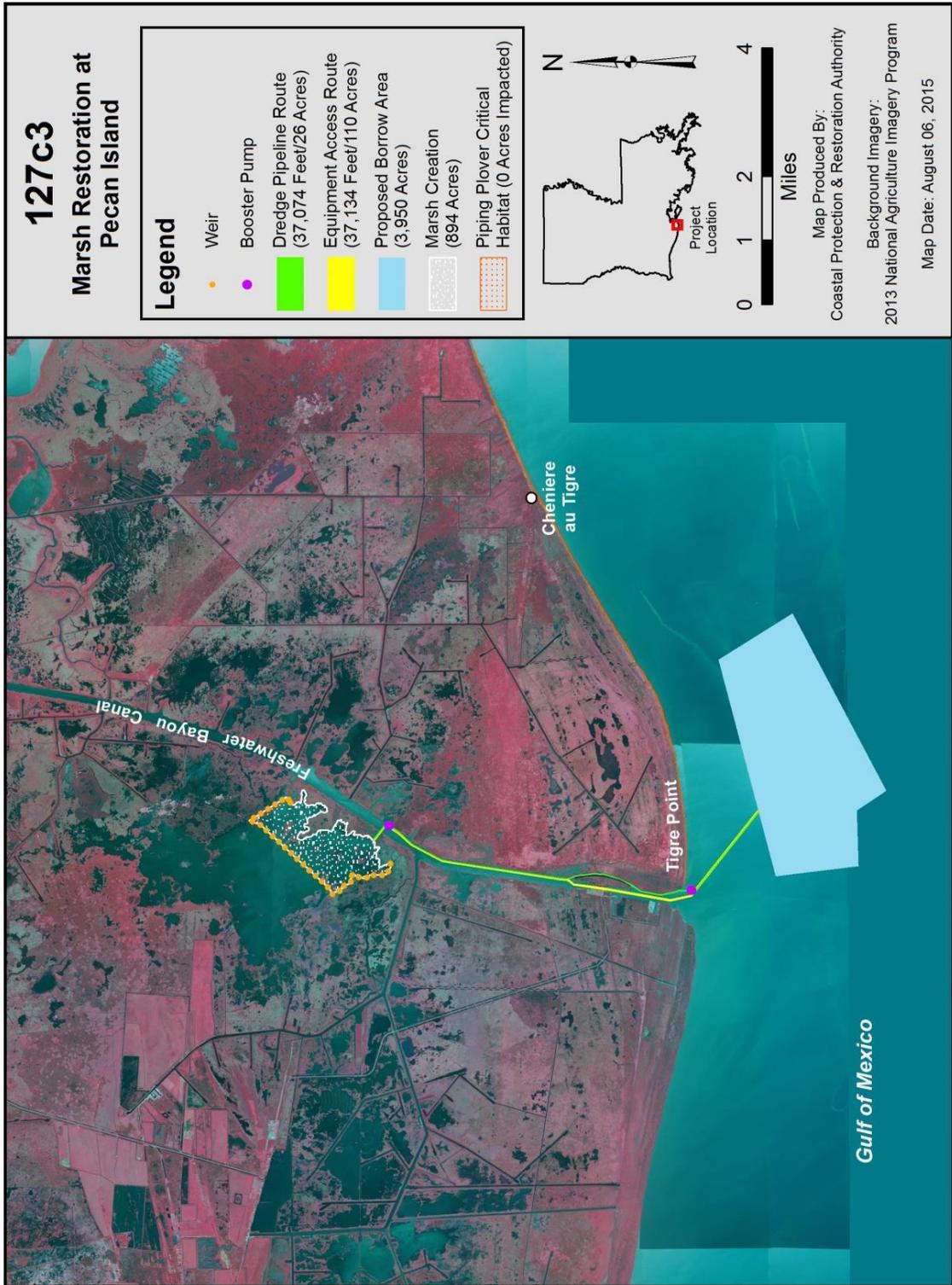


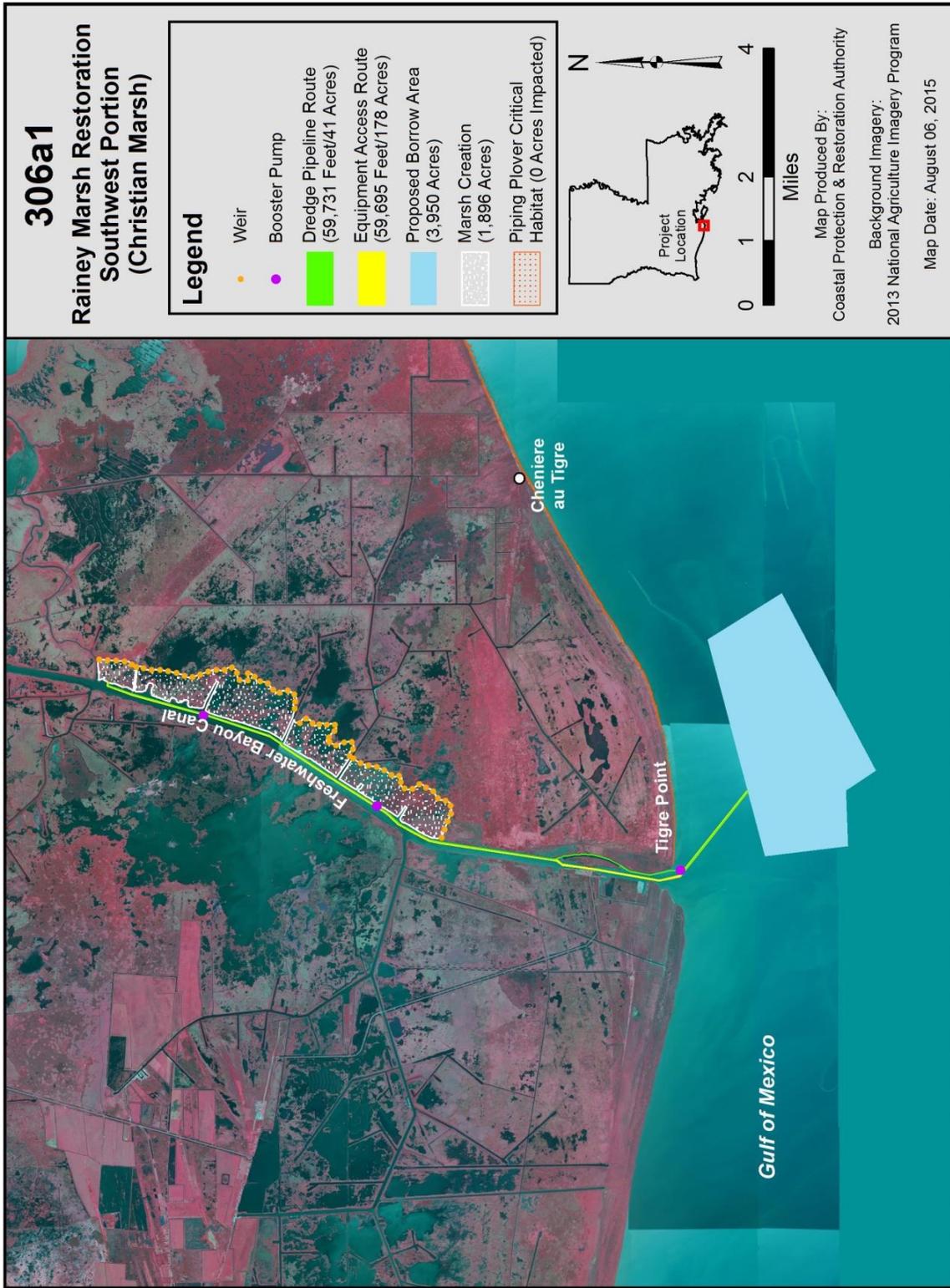


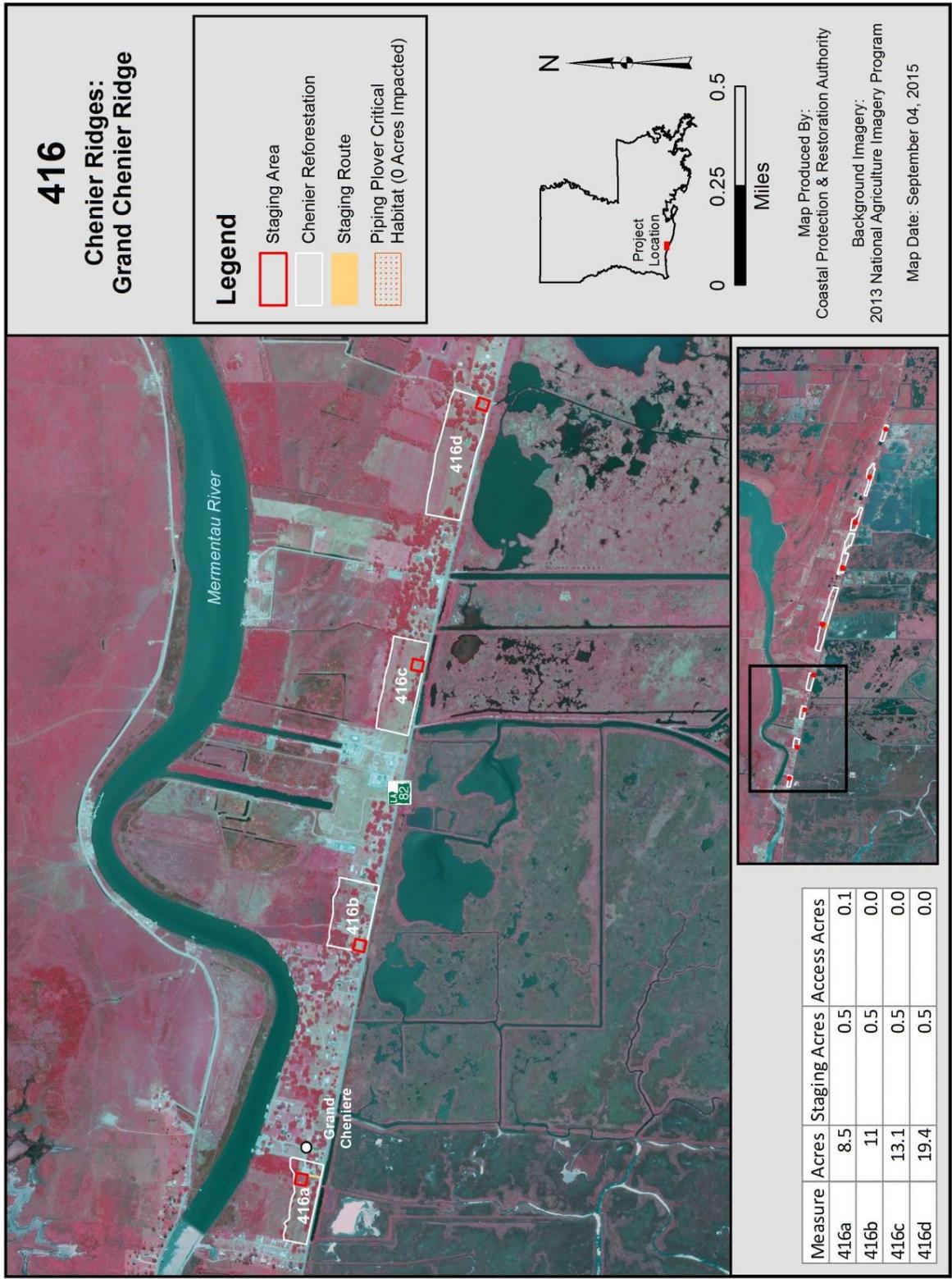




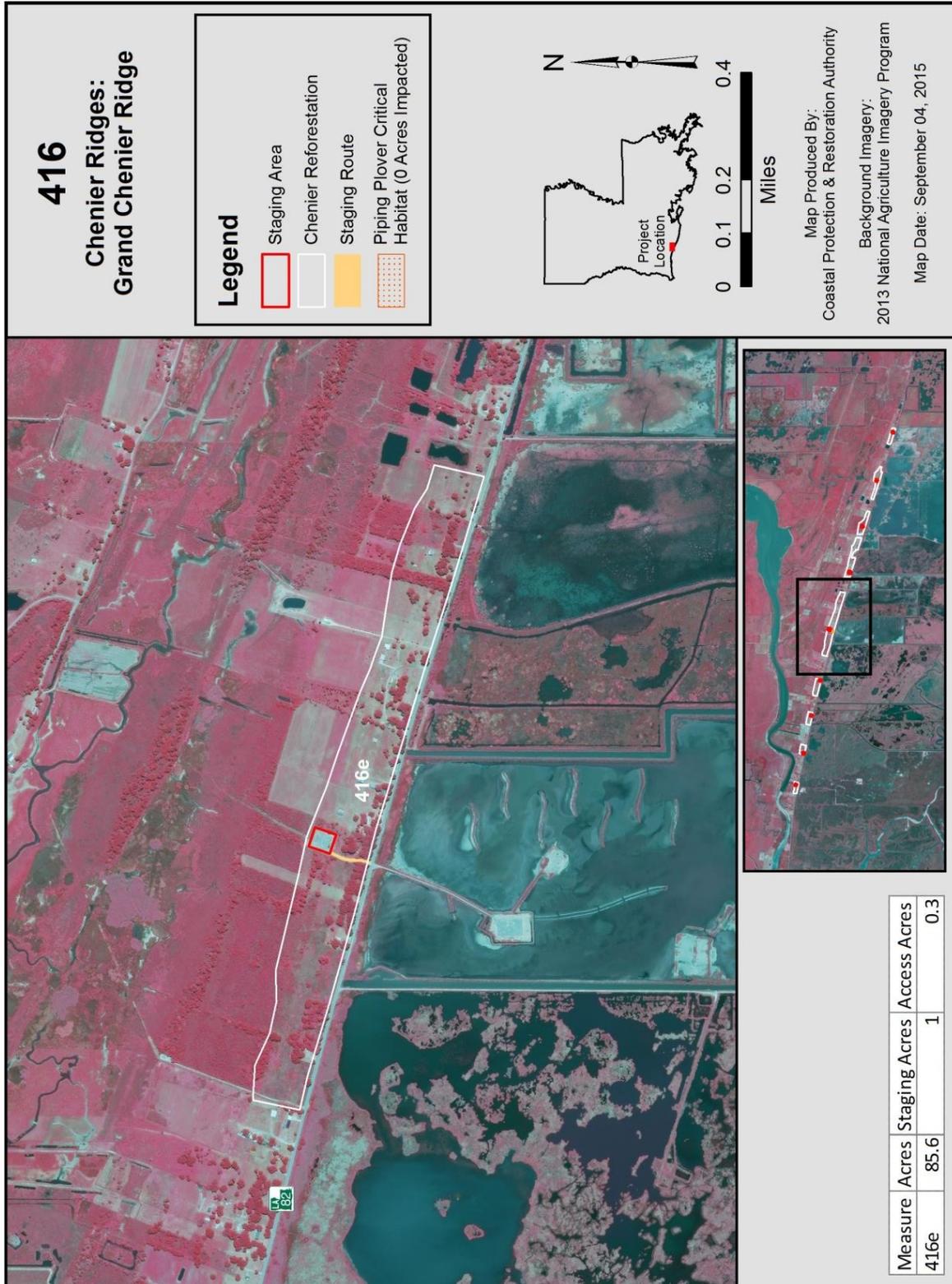
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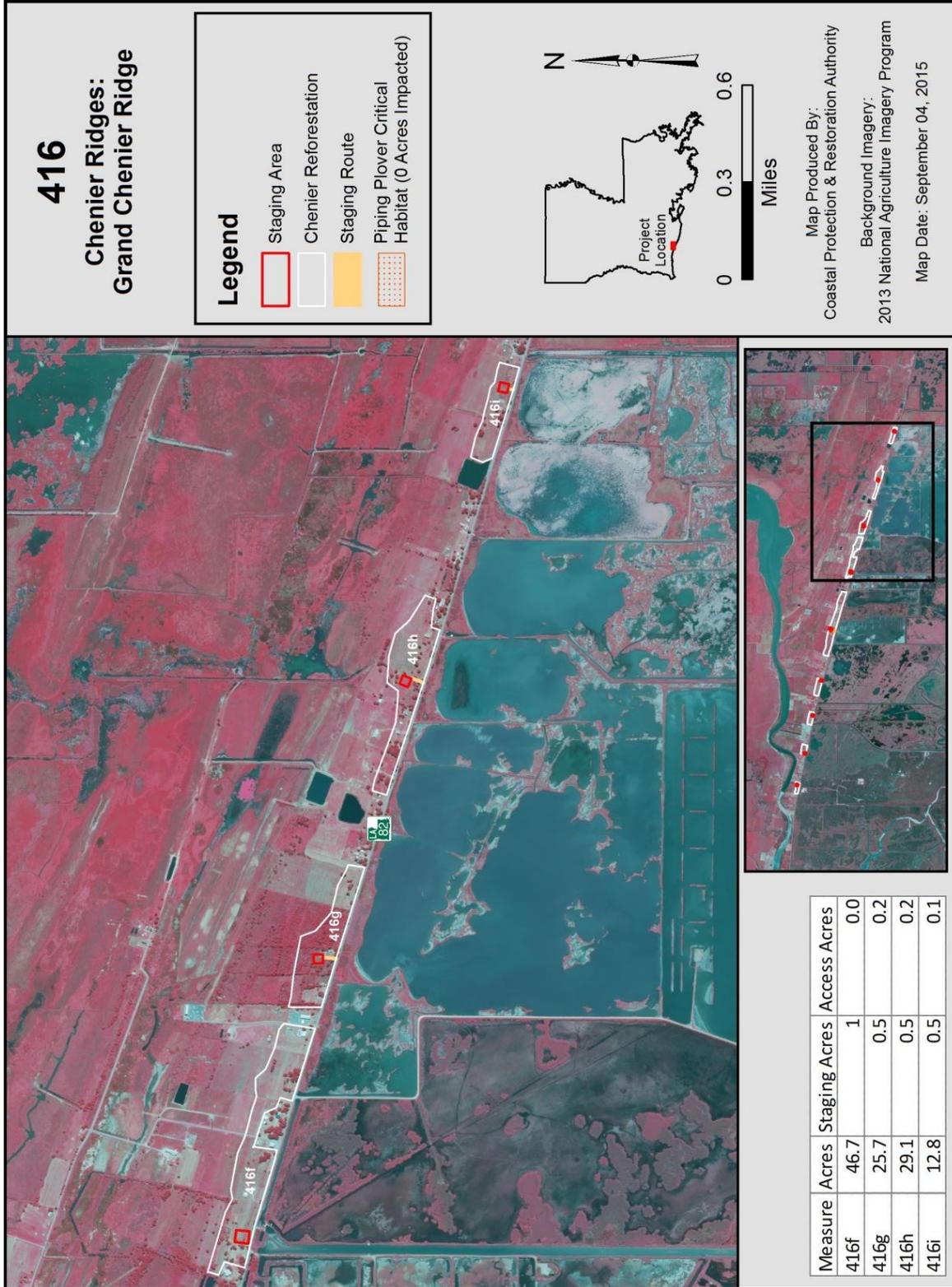


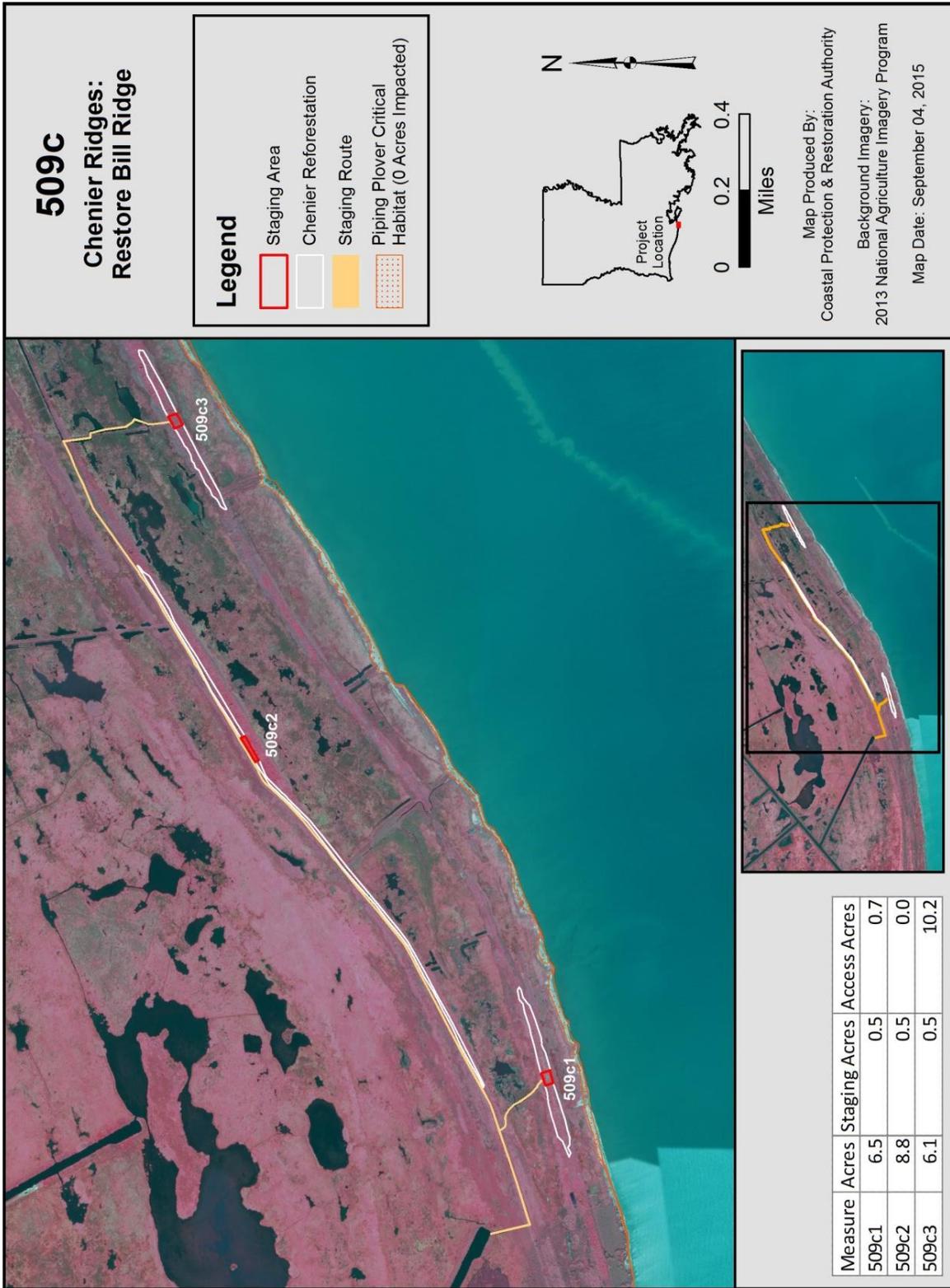


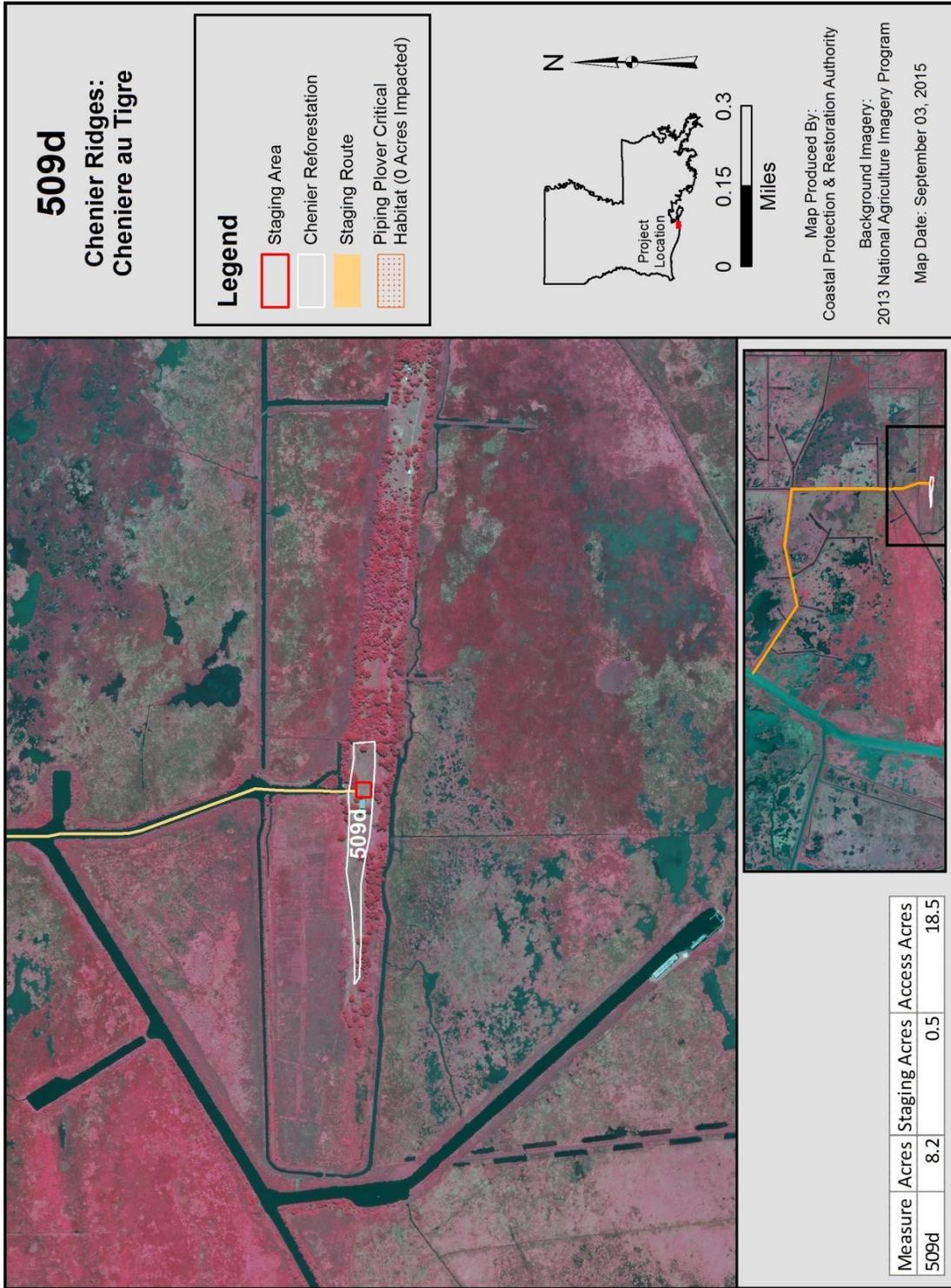


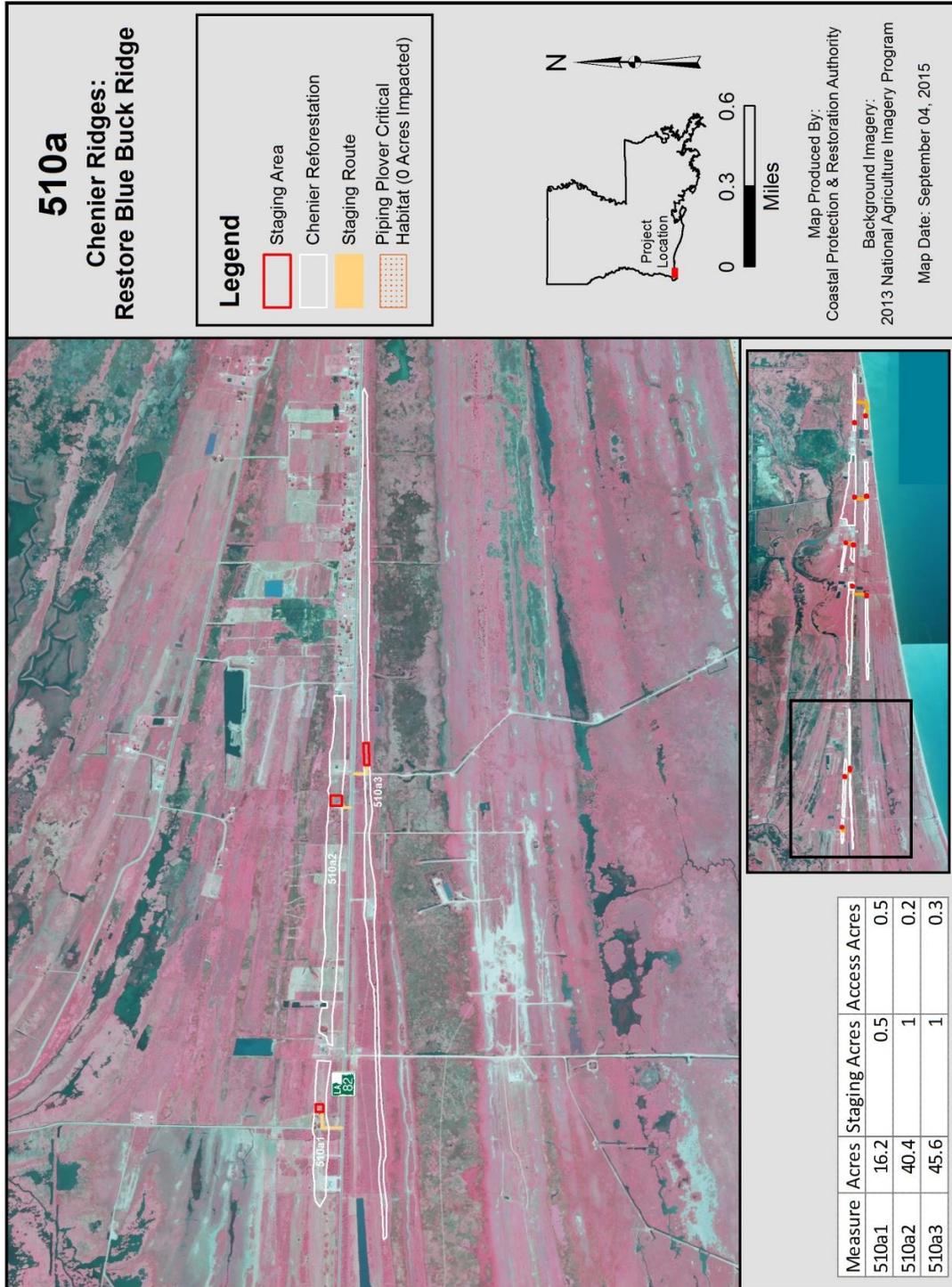
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416a	8.5	0.5	0.1
416b	11	0.5	0.0
416c	13.1	0.5	0.0
416d	19.4	0.5	0.0

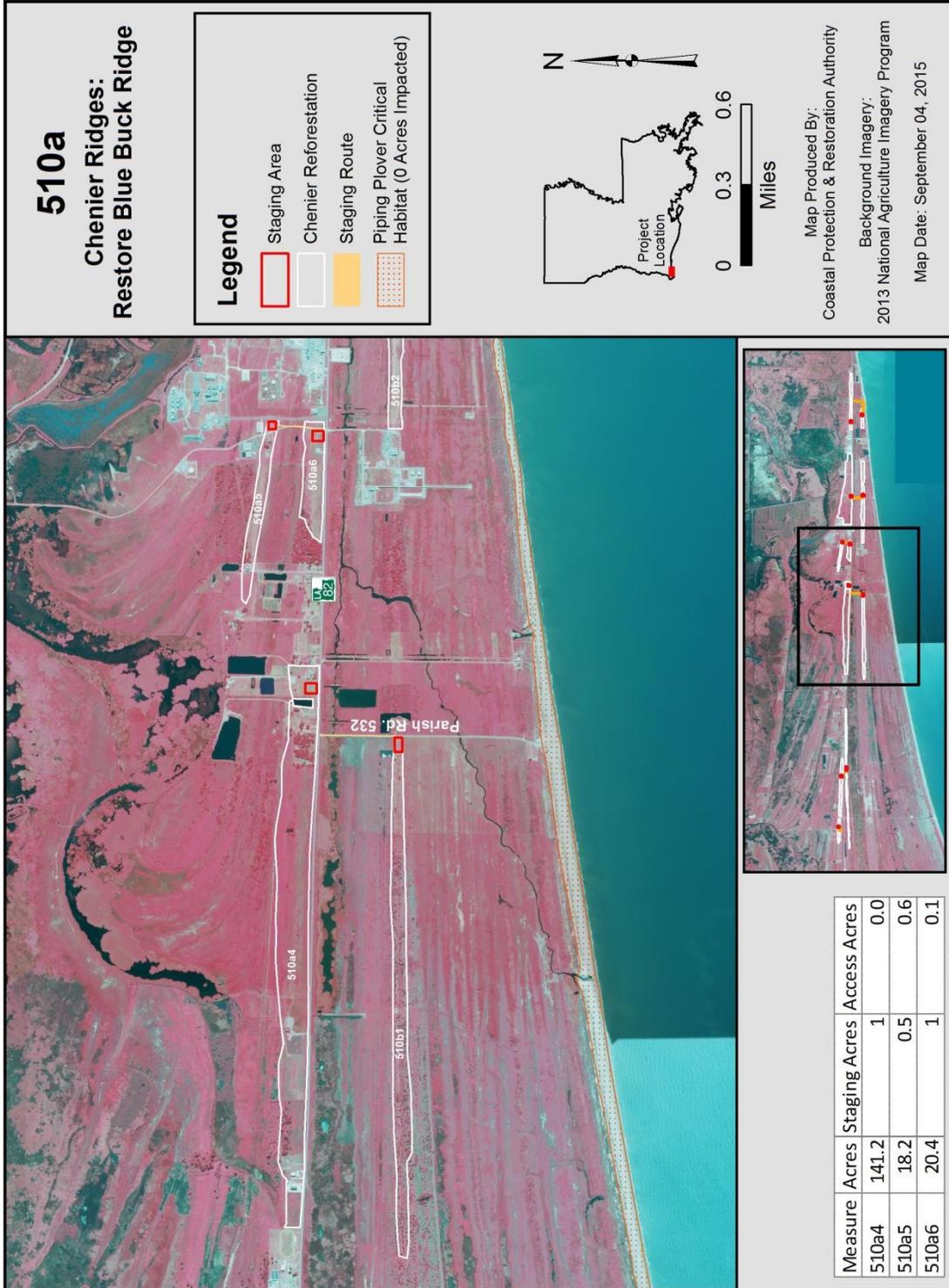


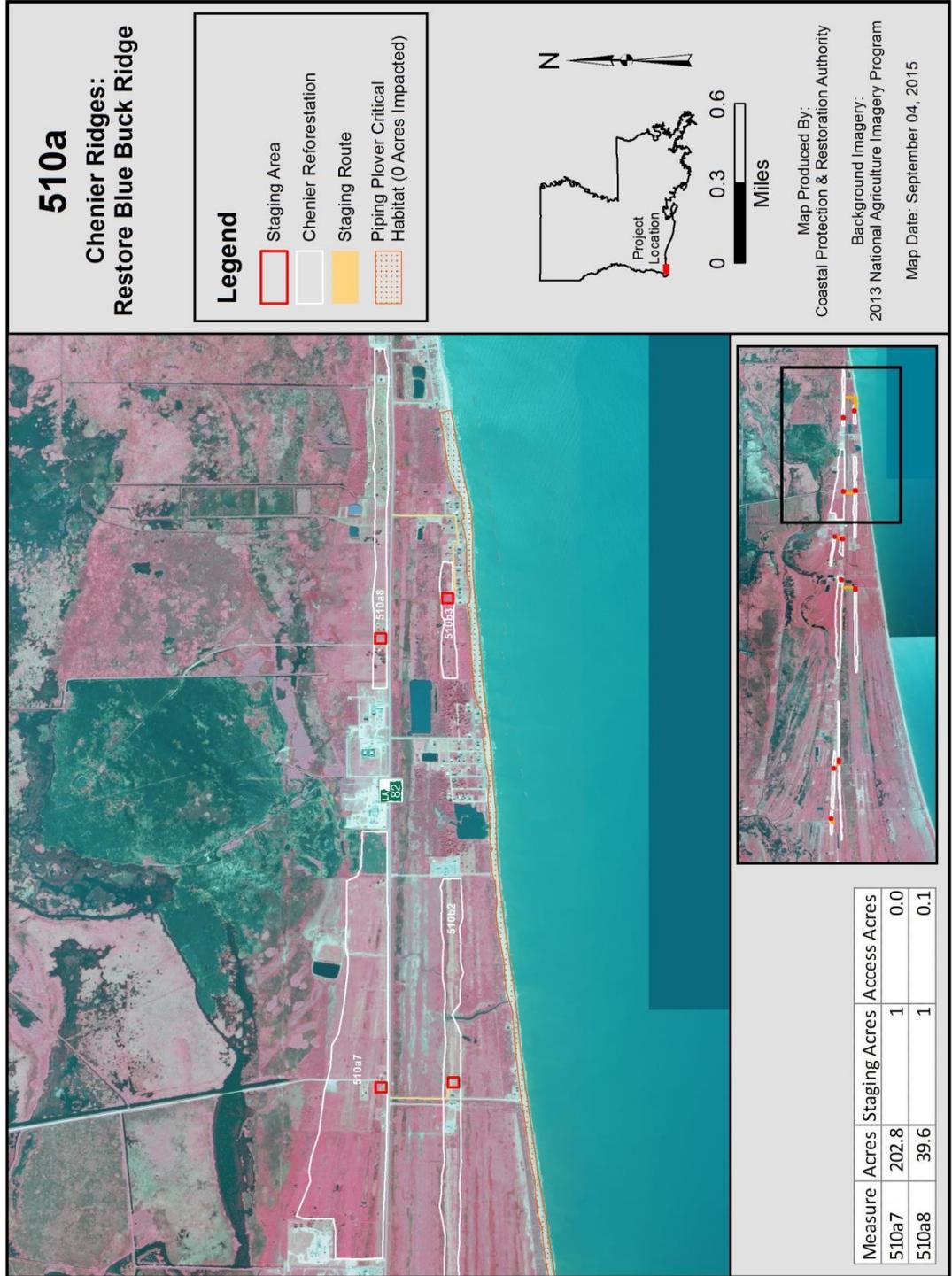


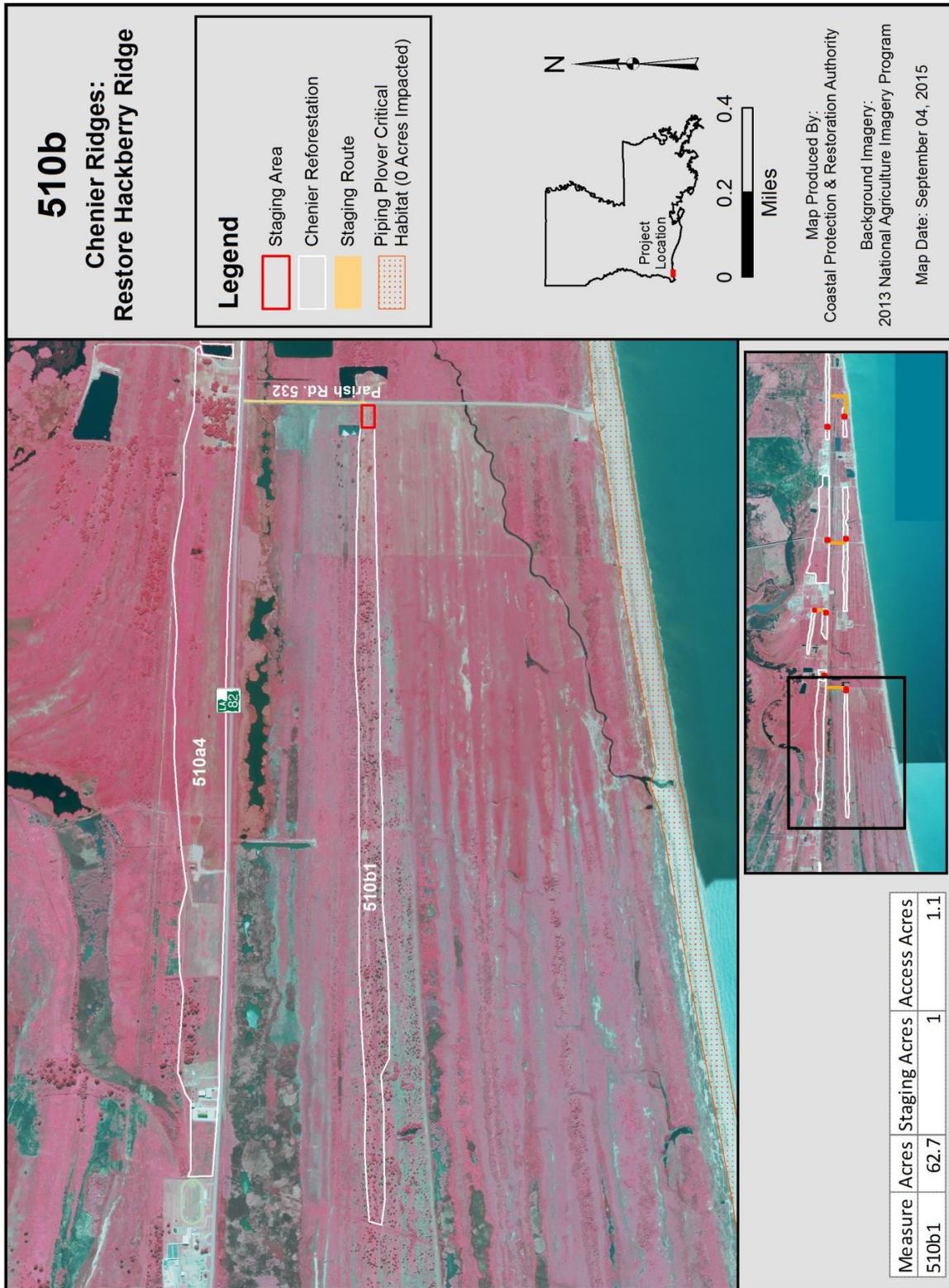




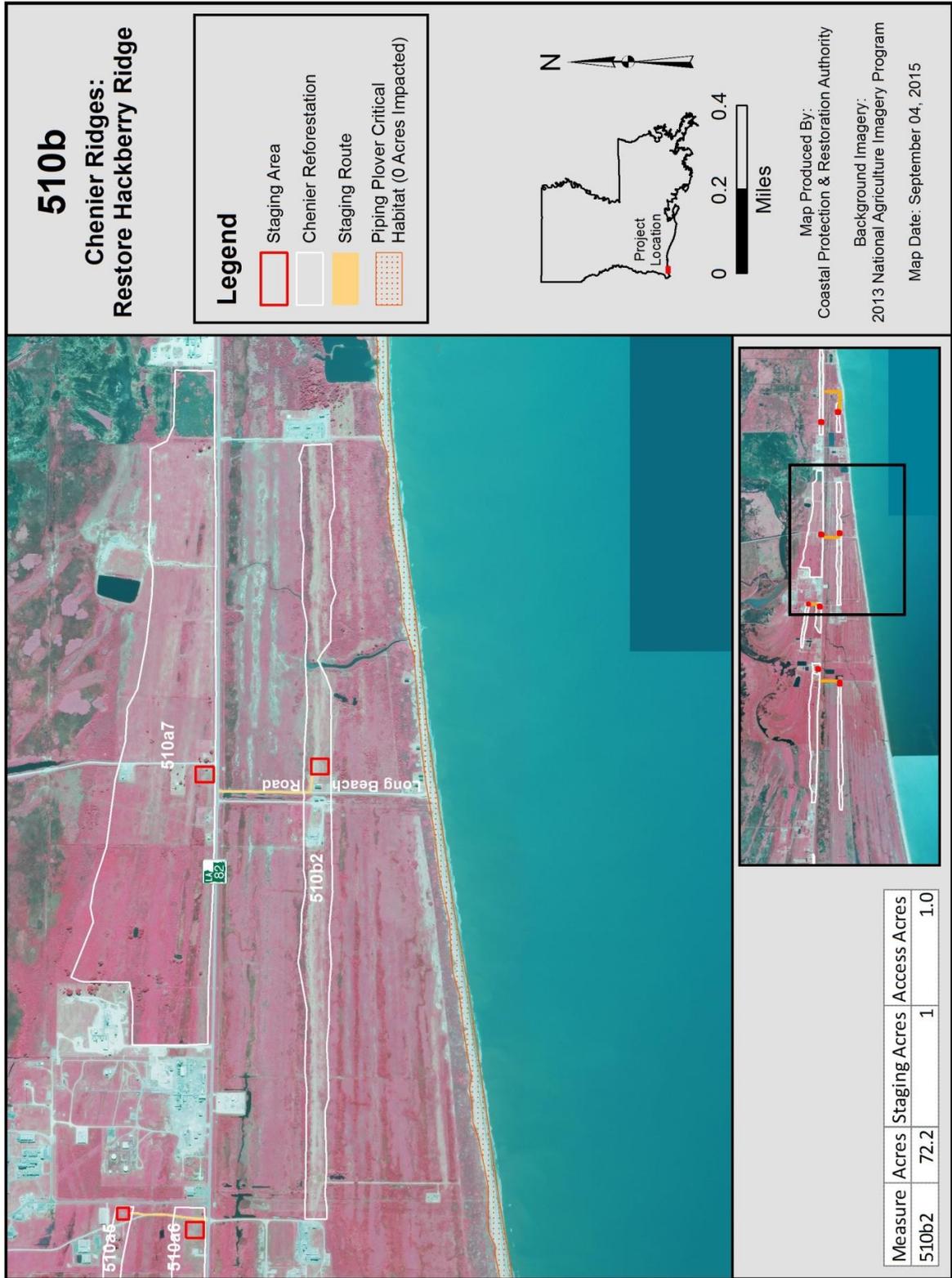




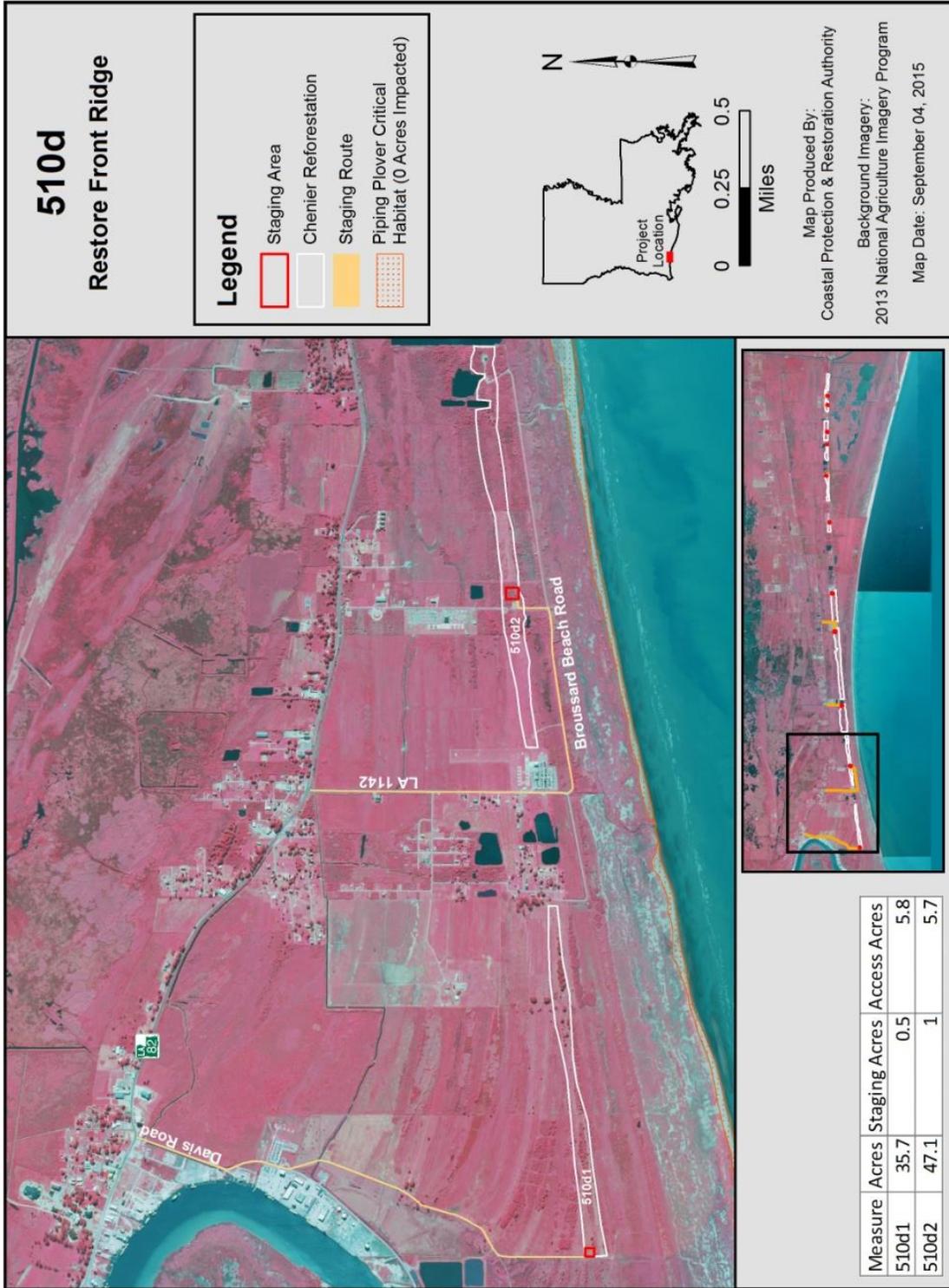


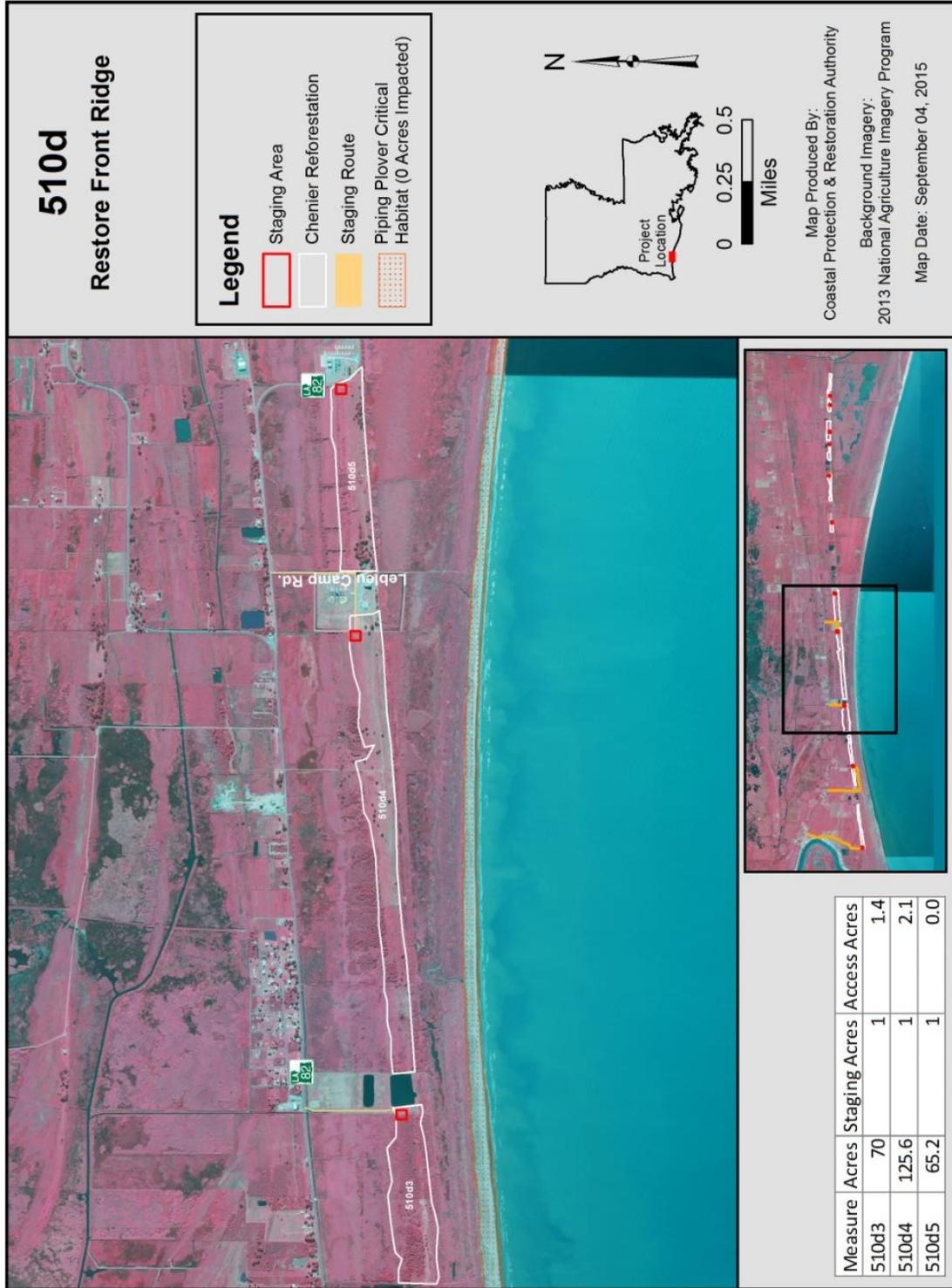


Measure	Acres	Staging Acres	Access Acres
510b1	62.7	1	1.1



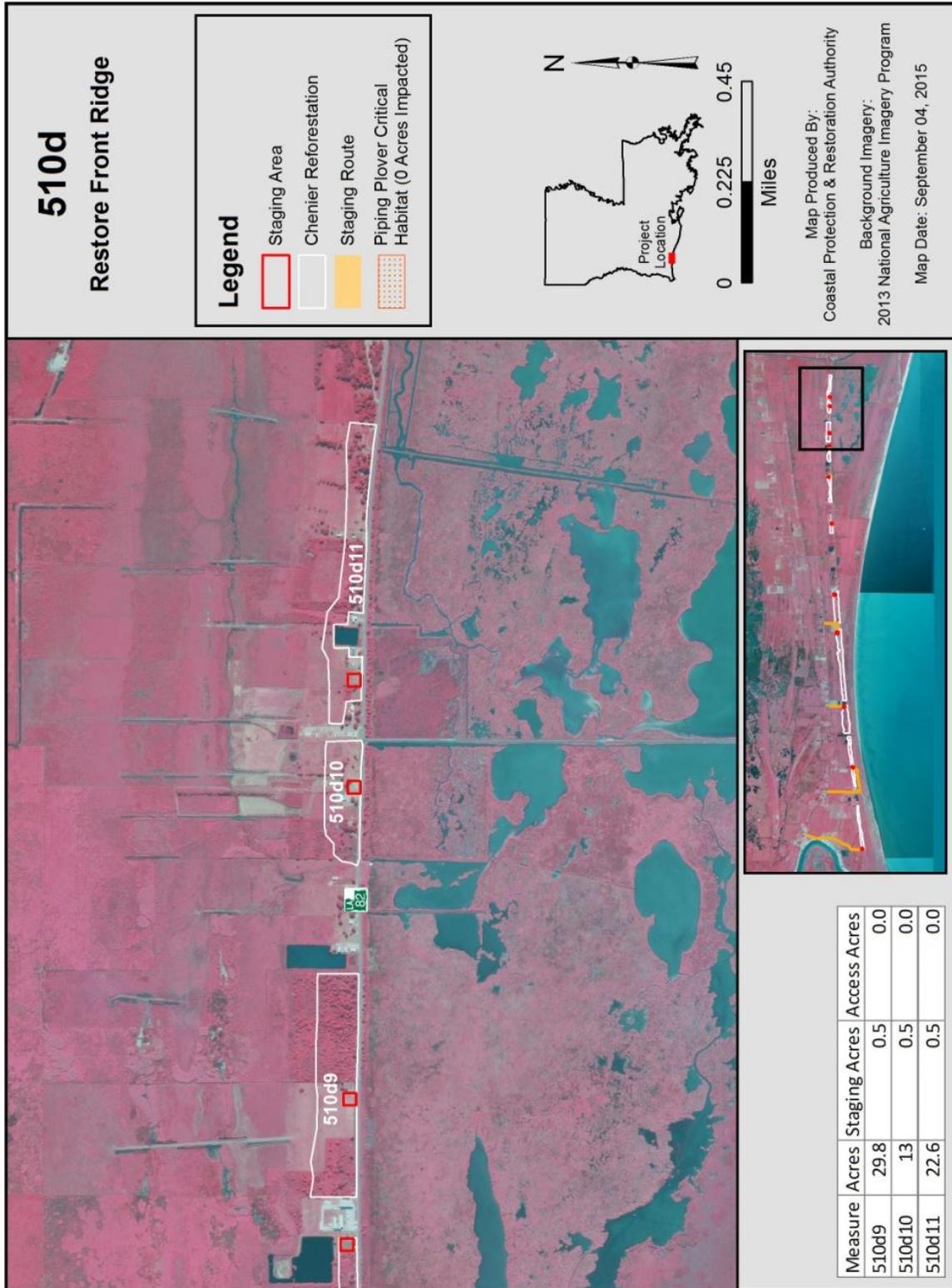








Measure	Acres	Staging Acres	Access Acres
510d6	12.3	0.5	0.0
510d7	22.4	0.5	0.3
510d8	15	0.5	0.0



Measure	Acres	Staging Acres	Access Acres
510d9	29.8	0.5	0.0
510d10	13	0.5	0.0
510d11	22.6	0.5	0.0



ANNEX 3
ASSESSMENT OF NON-FEDERAL SPONSOR'S
ACQUISITION CAPABILITY



**ASSESSMENT OF NON-FEDERAL SPONSOR'S
REAL ESTATE ACQUISITION CAPABILITY
COASTAL PROTECTION AND
RESTORATION AUTHORITY (“CPRA”), IMPLEMENTATION ARM OF
THE COASTAL PROTECTION AND RESTORATION AUTHORITY BOARD
 (“BOARD”)**

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? **NO, the Board does not have the ability to acquire and hold title to real property, however, CPRA, the implementation and enforcement arm of the Board, has the ability to acquire by purchase, donation, own, administer, or alienate, and otherwise disposes of all property, movable or immovable, corporeal and incorporeal,, for projects authorized by the Board. (See: La. R.S. 49:214.6.2).**
- b. Does the sponsor have the power of eminent domain for this project?
The NED plan is voluntary in nature; therefore the power of eminent domain should not be necessary. For the NER Plan, the sponsor, acting through its implementation arm, CPRA, has conventional eminent domain authority to acquire all real estate interests for integrated coastal protection projects pursuant to La.R.S. 49:214.6.2(D)(2), including for the restoration and creation of coastal wetlands. However, eminent domain acquisition in Louisiana requires a reservation of mineral rights to the landowner and thus, does not allow for acquisition of all subsurface real estate interests.
- c. Does the sponsor have “quick-take” authority for this project?
“Quick-take” authority will not be required for the NED Plan. For the NER Plan, immovable property may need to be acquired. CPRA does not have “quick take” authority, however, should this be needed for the Project, CPRA or the CPRA Board may partner with a Levee District or Parish Government that has quick-take authority in accordance with to La. R.S. 38:301, La. R.S. 38:301.1 and La. R.S. 49:214.5.2, pursuant to an intergovernmental agreement.
- d. Are any of the lands/interests in land required for the project located outside the sponsor’s political boundary? **NO.**
- e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? **Unknown.**

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 P.L. 91-646, as amended? **NO**
- b. If the answer to II.a. is “yes,” has a reasonable plan been developed to provide such training? **N/A**



- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? **YES**
- d. Is the sponsor's projected in-house staffing level sufficient considering its other workload, if any, and the project schedule? **Not at this time. However, CPRA has numerous contracts in place which provide ample resources.**
- e. Can the sponsor obtain contractor support, if required in a timely fashion? **YES, contracts are in place now.**
- f. Will the sponsor likely request USACE assistance in acquiring real estate? **It is unlikely that the Sponsor will request assistance.**

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? **YES.**
- b. Has the sponsor approved the project/real estate schedule/milestones? **At the feasibility level, there are too many unknowns to develop a definite project schedule. Once project designs are finalized, the Sponsor will be requested to provide an acquisition schedule.**

IV. Overall Assessment:

- a. Has the sponsor performed satisfactorily on other USACE projects? **YES.**
- b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. **Highly capable.**

V. Coordination:

- a. Has this assessment been coordinated with the sponsor? **YES.**
- b. Does the sponsor concur with this assessment? **YES.**

Prepared by:

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 Realty Specialist
 Appraisal & Planning Branch
 Real Estate Region South Division
 USACE

2/26/16
 Date

Approved by:

Michael Ellis
 Michael Ellis
 Executive Director
 Coastal Protection &
 Restoration Authority

2/26/16
 Date

Approved by:

Johnny Bradberry
 Johnny Bradberry
 Chairman
 Coastal Protection &
 Restoration Authority Board

2/26/2016
 Date



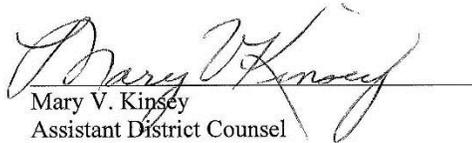
ANNEX 4
NON-MATERIAL DEVIATION FROM STANDARD
PERPETUAL ACCESS EASEMENT

**PERPETUAL ACCESS EASEMENT**

A perpetual non-exclusive and assignable easement is granted to the Coastal Protection and Restoration Authority Board of Louisiana for its use and for use by the United States of America and by the representatives, agents, and contractors of the Coastal Protection Restoration Authority Board of Louisiana and the United States of America as an access route and/or right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____); together with the right to construct, operate, maintain, alter and replace any improvements necessary for the use as an access route and/or right-of-way, and 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 owners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired, including the right to cross over the right-of-way as access to their adjoining land; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

In accordance with paragraph 12-10 c. of ER 405-1-12, the District Chief of Real Estate may approve a non-standard estate if it serves the intended project purpose, substantially conforms with and does not materially deviate from a corresponding standard estate, and does not increase the costs or potential liability of the Government. The foregoing estate complies with those requirements as it achieves the project purpose in as narrow a manner as practical, and is a minor modification of the standard Road Easement. The lands over which this easement will be acquired are wetlands or private water bodies over which roads cannot be constructed. Therefore, the standard road easement provides more rights than the project needs.

Reviewed by:


Mary V. Kinsey
Assistant District Counsel
New Orleans District

Approved by:


Linda Labure
Geographic Chief, Real Estate Region South Division