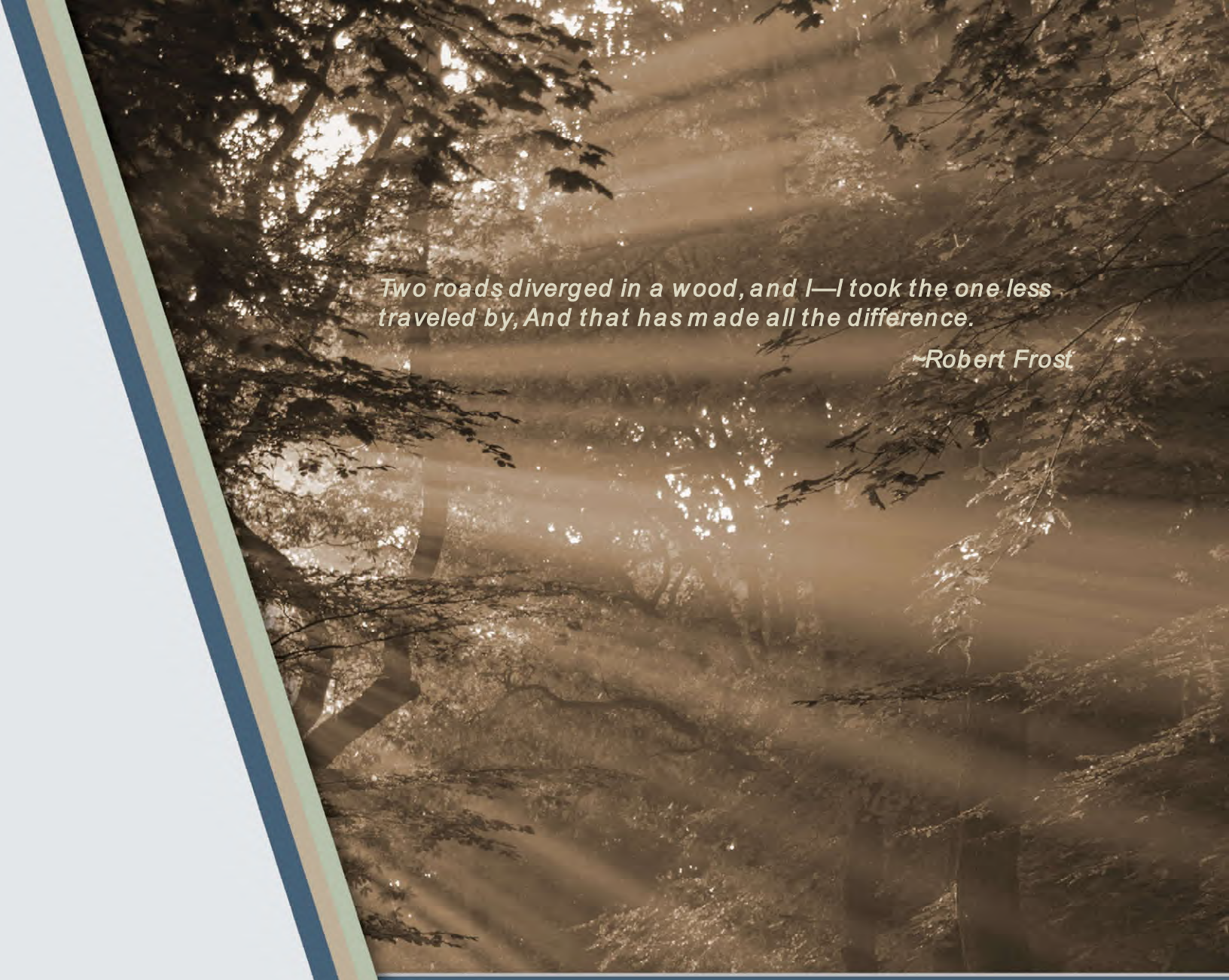

Teo Naw Mitigation Bank

Complete Prospectus – August 30, 2024

Prepared on Behalf of:

Specklebelly Mitigation LLC

For Submission to:
The U.S. Army Corp of Engineers
Galveston District
Mr. Sam Watson

ALLUVION RESOURCE COMPANY

ALLUVION RESOURCE COMPANY, LLC

Proposed Teo Naw Mitigation Bank

Name of Sponsor/Landowner Entity:
Specklebelly Mitigation LLC
Jim Bassett, Manager
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Project Introduction:

Alluvion Resource Company, LLC (ARC), on behalf of Specklebelly Mitigation LLC (SM/Landowner/Sponsor) is developing the Teo Naw Mitigation Bank (TNMB, Bank, or Project), in Chambers County, Texas. The Bank will be established in accordance with the requirements specified in CMLAR §332.8(d)(6) (hereinafter referred to as Mitigation Rule) in collaboration with the United States Army Corps of Engineers (USACE) and the Interagency Review Team (IRT). The TNMB is part of a larger consolidated landscape matrix comprised of diverse coastal wetland habitat conserved through the United States Fish and Wildlife Service's National Wildlife Refuge System, Texas Parks and Wildlife's designated Wildlife Management Areas and through privately funded conservation investments in ecological restoration (e.g., mitigation banks). The proximity/adjacency of the Project to other protected lands is a critical component of the site selection strategy utilized for this mitigation bank. The federal agencies and relevant regulations overtly recognize and the importance of siting bank projects in geographies conducive to other public or private conservation initiatives; thereby, achieving cumulative and additive ecological benefits through mutual sympatry in mission and purpose, even if penultimate to a return on investment.

The Project was formerly part of the Gulf Coastal Plains Mitigation Bank (GCPMB) approved in 2013, and identified at that time as Phases 6, 7, 8 & 13 (see embedded images from the approved GCPMB MBI, Figures 1 & 2). These phases (as well as several others) were not implemented as part of the GCPMB and have changed ownership since that time. SM seeks to continue pursuit of conservation outcomes similar to those previously envisioned for this property. Because of the history of the Project, this site and conceptual wetlands mitigation strategy is familiar to the Interagency Review Team through prior

permitting interactions. This includes, but is not limited to, prior approved jurisdictional determinations and baseline assessments, site specific evaluations and designs, site visits, and other communications. Components of the previously supplied but relevant GCPMB information may need to be updated for the Project; wetlands regulations have changed four times since 2013. Other components may be obsolete (but still useful for informational purposes). Irrespectively, contemporary land uses have not changed and continue to focus on commodity crop production (these fields therefore continue to be prior converted cropland). Further, the conceptual restoration designs for the Project will be developed to minimize mass grading, maximize wetland acres restored, incorporate microtopography, as well as target a diversity of wetland plant communities. The general scope of the restoration design is expected to include hydrologic restoration through multiple levee breaches (e.g., interior levees and along East Bay Bayou) and canal/ditch plugs. Further, microtopographic development (e.g., pit/mound relief and microberms) will be incorporated to facilitate diverse expressions of native plant communities across subtle changes in gradient.

The project is anticipated to result in the restoration (via reestablishment) and enhancement of approximately 537.0 acres of coastal wetland communities from prior converted cropland, existing wetlands, and reservoirs. Final Bank acreages will be determined upon completion of the draft mitigation banking instrument, when appropriate. However, targeted habitats of conservation interest to be restored within the TNMB are anticipated to incorporate predominantly freshwater hydraulic influences with minor components allowing for access for fresh/brackish tidal action at the southern end of the Project. Plant communities will target reestablishment of locally adapted native herbaceous species (as may be appropriate). Additional plant species may include riparian woody species more typical of the contemporary Texas Chenier Plain plant assemblages occurring along East Bay Bayou, as appropriate. Finally, designs will include low stature berms and microtopography mimicking wet coastal prairie/mima complexes and swales typical of historical natural conditions of this locale (see Figures 2 & 11).

As previously indicated, the Bank is adjacent to the Anahuac National Wildlife Refuge within the East Bay Conservation Initiative corridor, as well as other

conserved private lands (the approved GCPMB and the pending Anahuac Wetlands Mitigation Bank (Figure 3)).

Project Team:

Landowner/Sponsor:

- Specklebelly Mitigation LLC
    - Jim Bassett
    - Peter Partlow

Bank Permitting, Restoration Design, & Project Management

- Alluvion Resource Company, LLC
    - Keith Webb, PWS
    - Chance Kimbrough

Engineering and Hydraulic Design

- Engineering303, LLC
    - Kevin Tibbits, RLS
    - Zack Truelove, PE CFM

Prospective Long-term Stewardship Partners

- Texas Parks and Wildlife Foundation (Stewardship Fund Management)
- Galveston Bay Foundation (Conservation Easement Management and Defense)

The TNMB is one component of a multifaceted conservation-oriented landscape inclusive of both private and public stakeholders throughout the upper Texas coast. For the aforementioned reasons and others described hereinbelow, this Project represents an ideal candidate for coastal wetland reestablishment and conservation with high potential for successful restoration of valuable wetland communities.

Purpose and Goals of the Bank:

The purpose of the Bank is to provide USACE permit applicants the ability to compensate for unavoidable adverse impacts to the aquatic ecosystem through the utilization of more extensive, higher quality, and more cost-effective methods of protection of Waters of the U.S. and other aquatic resources than are typically achieved by other forms of compensatory mitigation. This will be accomplished through the enhancement, restoration, and/or preservation of the regulated wetland communities existing within the Bank. The Bank will be used for compensatory mitigation for unavoidable impacts to waters of the U.S., including wetlands, that result from activities authorized by said Acts, provided such use has met all applicable requirements and is authorized by the USACE.

The goals of the Bank are to successfully restore wetland functions associated with the lands occurring within the Bank; and to perpetually protect these restored habitats within the site. This will be accomplished through the development and approval of a Mitigation Banking Instrument (MBI) which will describe the specific details for the restoration, enhancement, and/or preservation of natural resources located within the Bank, including the long-term management and financing mechanism(s).

Project Location (Latitude and Longitude):

29.660769, -94.415234

Ecological Suitability of the Proposed Bank:

The Bank was carefully evaluated and strategically selected for reasons specific to 1) landscape scale and specific watershed protection priorities, 2) compatibility of adjacent or proximal land uses, and 3) site characteristics conducive to potential restoration and conservation outcomes in an area with limited availability of such tracts for compensatory mitigation purposes. Collectively, both the landscape scale/watershed need, and site-specific characteristics represent a focused, watershed-oriented, landscape approach espoused by the Mitigation Rule and various other conservation initiatives active in the East Bay Conservation Initiative corridor and the larger Galveston Bay system.

As indicated earlier, this Project consists of multiple phases that were previously included in the approved GCPMB, and was coordinated with the state and federal agencies comprising the IRT through the GCPMB review and approval process in 2013. Now, ten years later, the GCPMB represents a reference condition for a successfully restored former agricultural site with achievement of wetland functional lift and ecological performance. This validates the suitability of the Project for reestablishment of wetland function with a strong probability for successful and sustained achievement of ecological performance.

With regard to the TNMB, direct consideration is given to 1) the potential for restoration & enhancement, of historic wetland communities converted to agricultural cropland in a very rapidly developing part of the state and nation with limited availability of compensatory mitigation opportunities, 2) the acknowledgment that such sites represent exceptionally unique candidates for the restoration and enhancement of coastal wetland habitats adjacent to very large, federally-protected coastal wetland habitats, 3) the compatibility of this proposed conservation project with existing watershed plans, conservation initiatives, and adjacent land uses, 4) agricultural, industrial, and commercial land development trends within the watershed and 5) the limited availability of suitable mitigation sites within the watershed. These various conservation-worthy attributes include, but are not limited to, the following:

- Proximity to state, federal, private, or otherwise protected or conserved lands:
    - Anahuac National Wildlife Refuge
    - Gulf Coastal Plains Mitigation Bank
    - Anahuac Mitigation Bank (USACE 2023)

- Expansive potential for enhancement/restoration opportunities for both wetlands and riparian zones of East Bay Bayou in an area of the Texas Coast important to federally listed species and with known occurrences of eastern black rails (*Laterallus jamaicensis*) and whooping cranes (*Grus americana*), (USFWS and GBF pers. comm.). In fact, the restoration of wetlands within the Project is anticipated to benefit federally-listed threatened or endangered species as well as numerous other wetland dependent species of particular conservation interest. Many of the wetlands located near the Project are identified as Priority Protection Habitat Areas by the Texas General Land Office (TGLO) in consultation with Texas Parks and Wildlife Department and other public agencies, academic institutions, and private conservation advocacy groups, for numerous reasons including, but not limited to, “High use by wading birds, waterfowl (teal, wigeon, gadwall, etc.), all species of rails”. Notably, the project site is a high value target for acquisition by numerous non-governmental conservation organizations and resource agencies.

- The TGLO’s 2023 Texas Coastal Resiliency Master Plan has identified numerous priority or “tiered” initiatives to facilitate forward-looking ecological and economic resiliency (specifically

conservation acquisitions and wetland restoration & conservation) in the immediate vicinity of the Project. The Project is conducive to the fulfillment of objectives for these various actions and represents a partnership with other conservation organizations (such as Galveston Bay Foundation (GBF)) to address pressing environmental concerns (land change, flooding, and degraded water resources (TGLO 2023)). This initiative includes expansion of the Anahuac National Wildlife Refuge as well as facilitating conservation acquisitions by GBF.

Project Cutsheets | Region 1 | Chambers / Jefferson Counties

Anahuac NWR Conservation and Restoration *(10000)*

Estimated Project Cost: $25,000,000

ABILITY TO ADDRESS VULNERABILITIES

Land Change | Flooding | Degraded Water Resources

LOCATION:
National Wildlife Refuges within the Texas Chenier Plain ecosystem in Chambers and Jefferson counties

STATUS:
Shovel Ready

STAKEHOLDERS:
- ***U.S. Fish and Wildlife Service***
- Chambers County

ACTIONS:

PROJECT TYPE(S):
Land Acquisition: Habitat Creation and Restoration

Project Description

The Texas Chenier Plain Refuge Complex supports a collection of National Wildlife Refuges (NWRs), including Anahuac, McFaddin, Texas Point, and Moody. This project would involve the acquisition of 65,000 acres of additional riverine, subtidal, freshwater, and marine habitats to include in the Texas Chenier Plain Refuge Complex and subsequent restoration and/or management of the land to a more natural and resilient state. This land spans across Chambers, Jefferson, and Galveston counties and acquisition efforts have added several thousand acres to Anahuac NWR. Additional purchases have secured significant properties in Jefferson and Galveston Counties. Interior freshwater wetlands, moist soil units, rice fields, intermediate marsh and more than a mile of beach has been acquired. Proactively working to conserve these lands would improve the capability of natural resource agencies to protect the habitats and the various species that thrive in a healthy habitat now and in the future.

Project Need

The diverse coastal wetland habitats within the Texas Chenier Plain Refuge Complex are experiencing rates of decline along the Texas coast due to changing hydrologic conditions. These complexes are some of the largest along the coast but are also some of the most vulnerable with significant subsidence likely along the Chenier Plain.

POTENTIAL LOCAL BENEFITS

12	8	36
Endangered Species	Critical Facilities	Migratory Bird Species

2073 Trips on Evacuation Route (Daily)

1	✓
Critical Habitat	Avoided Future Flood Risk

1 Wetland Type

For more information on cost estimates and project benefits calculations, see page 132 of the 2023 Texas Coastal Resiliency Master Plan

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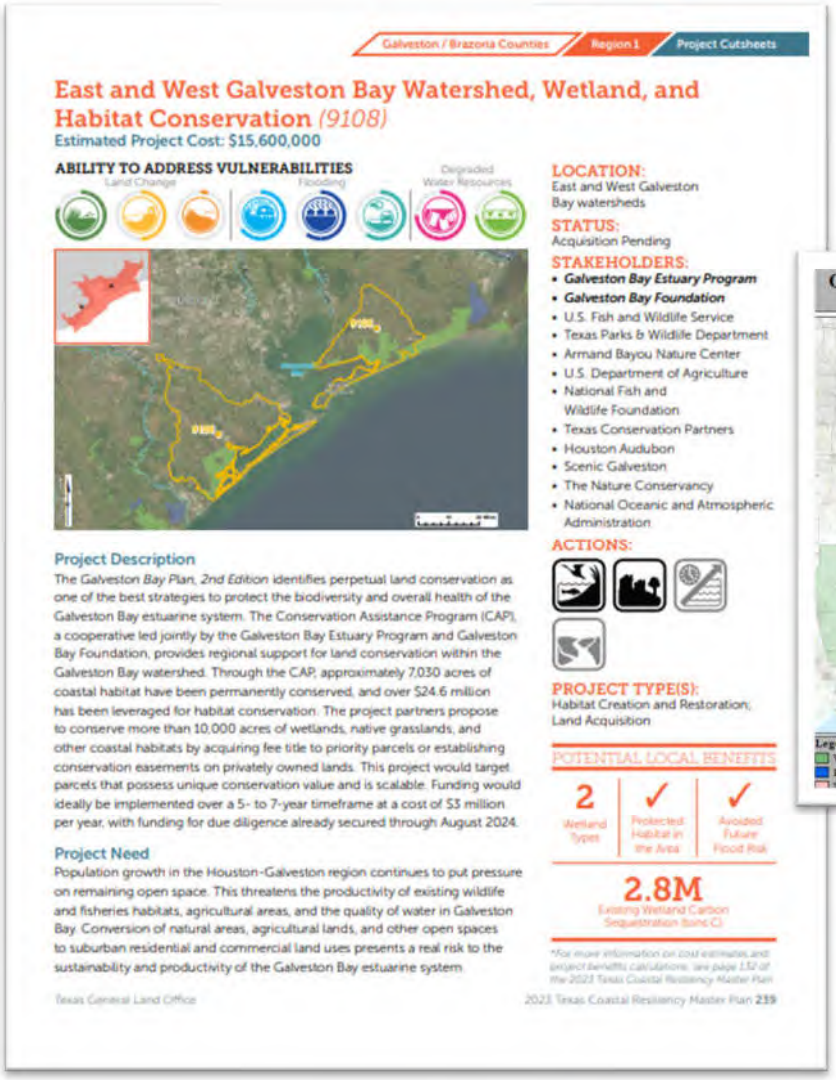
- While mitigation banks typically involve site protection in the form of perpetual conservation easements held by accredited land trusts like GBF, the Sponsor is exploring the financial feasibility

for a fee title transfer of the bank lands to either the ANWR or GBF. This Project meets the criteria as a target for acquisition due to its geographic location and the potential for restoration of wetland habitat.



Galveston / Brazoria Counties | Region 1 | Project Cutsheets

East and West Galveston Bay Watershed, Wetland, and Habitat Conservation *(9108)*

Estimated Project Cost: $15,600,000

ABILITY TO ADDRESS VULNERABILITIES

Land Change | Flooding | Degraded Water Resources

LOCATION:
East and West Galveston Bay watersheds

STATUS:
Acquisition Pending

STAKEHOLDERS:
- ***Galveston Bay Estuary Program***
- ***Galveston Bay Foundation***
- U.S. Fish and Wildlife Service
- Texas Parks & Wildlife Department
- Armand Bayou Nature Center
- U.S. Department of Agriculture
- National Fish and Wildlife Foundation
- Texas Conservation Partners
- Houston Audubon
- Scenic Galveston
- The Nature Conservancy
- National Oceanic and Atmospheric Administration

ACTIONS:

PROJECT TYPE(S):
Habitat Creation and Restoration; Land Acquisition

Project Description

The *Galveston Bay Plan, 2nd Edition* identifies perpetual land conservation as one of the best strategies to protect the biodiversity and overall health of the Galveston Bay estuarine system. The Conservation Assistance Program (CAP), a cooperative led jointly by the Galveston Bay Estuary Program and Galveston Bay Foundation, provides regional support for land conservation within the Galveston Bay watershed. Through the CAP, approximately 7,030 acres of coastal habitat have been permanently conserved, and over $24.6 million has been leveraged for habitat conservation. The project partners propose to conserve more than 10,000 acres of wetlands, native grasslands, and other coastal habitats by acquiring fee title to priority parcels or establishing conservation easements on privately owned lands. This project would target parcels that possess unique conservation value and is scalable. Funding would ideally be implemented over a 5- to 7-year timeframe at a cost of $3 million per year, with funding for due diligence already secured through August 2024.

Project Need

Population growth in the Houston-Galveston region continues to put pressure on remaining open space. This threatens the productivity of existing wildlife and fisheries habitats, agricultural areas, and the quality of water in Galveston Bay. Conversion of natural areas, agricultural lands, and other open spaces to suburban residential and commercial land uses presents a real risk to the sustainability and productivity of the Galveston Bay estuarine system.

POTENTIAL LOCAL BENEFITS

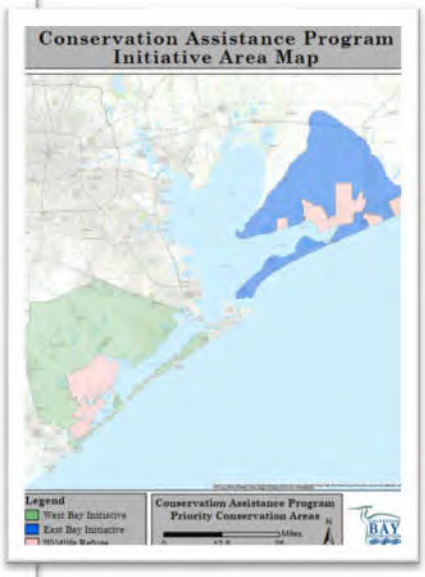
2 Wetland Types | ✓ Protected Habitat in the Area | ✓ Avoided Future Flood Risk

2.8M Existing Wetland Carbon Sequestration (tons C)

*For more information on cost estimates and project benefits calculations, see page 152 of the 2023 Texas Coastal Resiliency Master Plan

Texas General Land Office

2023 Texas Coastal Resiliency Master Plan 239



- The Bank conforms to a myriad of Galveston Bay system watershed plans and initiatives for coastal wetland conservation in addition to those previously mentioned; the Galveston Bay Estuary Program, NOAA's Texas Coastal and Estuarine Land Conservation Program Plan, Ducks Unlimited Texas Prairie Wetlands Project of the Gulf Coast Initiative, Texas Nature Conservancy's Gulf Coast Prairies and Marshes Ecoregional Plan, Trust for Public Land's Galveston Bay Land Conservation Initiative, TPWD's Texas Conservation Action Plan & Texas Wetlands Conservation Plan, the Gulf Coast Joint Venture, the East Bay Watershed Protection Project, and the Conservation Fund's Gulf Coast Conservation Vision Plan.

Aquatic Resource Type's and Estimated Amounts:

Prior AJD's (Attachment A) issued by the USACE in 2010 were for the entirety of the original GCPMB land base, which included the four phases (6, 7, 8, & 13) planned for this proposed Project. At that time (and

under a different set of regulations), the majority of the site was determined to be prior converted cropland (PCC), with non-jurisdictional ditches/canals, minor components of jurisdictional lacustrine fringe, and jurisdictional adjacent wetlands associated with reservoirs constructed along the eastern project area along East Bay Bayou. An updated AJD reissuance was requested in 2018 for several phases and issued for phase 8 (affirmed as PCC). It is unknown what became of the request for the other phases.

A reverification request was submitted to the USACE by ARC on December 19, 2023 and was finalized by the USACE on August 13, 2024 (Attachment B). Based on independent conversations with the USACE and EPA, ARC elected to bifurcate the JD request: a PJD for the culverted impoundments, and an AJD for the residual features. This was due to the presumption of jurisdiction of the culverted impoundments due to a continuous surface connection to East Bay Bayou through a flap gate and culvert in spite of the historic and contemporary agricultural uses of this feature for dewatering rice fields through manmade and maintained agricultural ditches. Secondarily, and due to the assessment that the manmade ditches were "relatively permanent" with a "continuous surface connection" to East Bay Bayou, these features were likewise determined to be jurisdictional (despite the origin, purpose, and agricultural use of these features). As it pertains to the wetland and open water features included in the AJD, the amendment to the "Revised Definition of the Waters of the Unites States" rule in response to the Supreme Court's decision on May 25, 2023, in Sackett v. EPA, resulted in a determination of non-adjacency (no continuous surface connection) and therefore non-jurisdiction. This is due to the history, purpose, and origin of these features (within the interior of leveed, off-channel reservoirs constructed and historically utilized for agricultural purposes (irrigation and aquaculture)). The wetland/non-wetland acreages and jurisdictional status is provided in Table 1, below.

Table 1. Preliminary bank acreages, jurisdictional status, baseline scores, and design strategy.

Project Component	Acres	PJD/AJD Status	HGMi Wetland Baseline	Design Strategy
Prior Converted Cropland	467.5	NONJD	0	Wetlands Restoration/Reestablishment
Man Made Ditch	17.6	JD	0	Wetlands Restoration/Reestablishment
Open Water	4.2	NONJD	0	Wetlands Restoration/Reestablishment
Wetlands	30.7	NONJD	0	Wetlands Restoration/Reestablishment
Wetland Fringe	3.0	NONJD	0	Wetlands Restoration/Reestablishment
Culverted Impoundment	1.3	JD	NA	Non-Credit
uplands/Berms	13.4	NONJD	NA	Non-Credit
Bank Total	537.5			

Conceptual Mitigation Workplan:

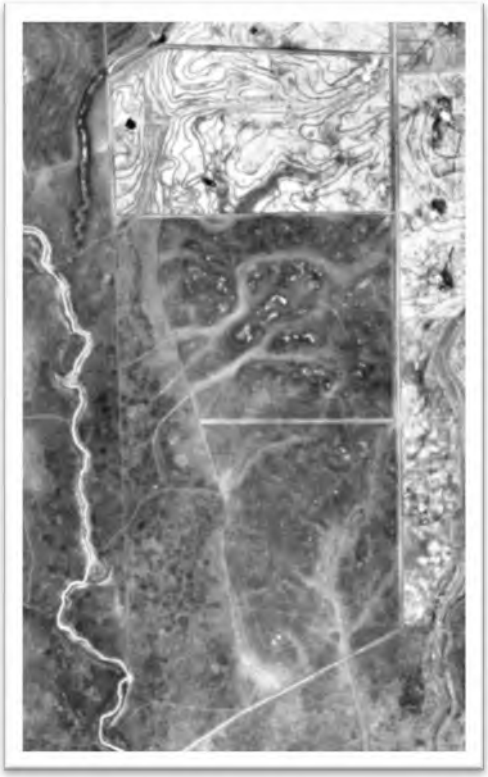
Restoration of PCC Fields via Reestablishment (approx. 467.5 ac)

Contemporary design considerations will focus on interrupting the agricultural disturbance regime (disking/plowing, planting & harvesting crops, "weed" management and control, irrigation, drainage, and force flooding), and then reinstituting more ecologically appropriate land uses conducive to sustaining wetland wildlife and plant communities and the myriad functions associated therewith. This will include reversal of the extensive water management control system associated with the farming and irrigation operation. Thus, more natural patterns of hydrology and hydraulic connectivity (riverine and tidal connectivity, as well as increases in residence time for diffuse overland flows from seasonal precipitation events) will be restored. This will include removal of water control structures, construction of levee

breaches & ditch plugs (where appropriate), development of berms, microtopography and floodplain roughness, and reestablishment of native plant communities throughout.

Wetland designs will be developed to minimize mass grading, where appropriate and practicable, to incorporate past IRT recommendations for improvements to the original designs utilized for the approved phases of the GCPMB. In this way, wetland functionality and sustainability can be maximized efficiently but with less obtrusive construction methodologies.

In examination of the 1941 historical aerial and in consideration of current prospects for hydraulic restoration, design considerations will include development of microrelief (pit/mound relief) along with microberms to maximize residence time of floodwaters, precipitation and storm events, and tidal events. This action will concomitantly increase the elevational and hydraulic gradient conducive to the establishment of a much higher diversity of plant species across that gradient.



Restoration of Wetlands, Ditches, & Open Waters (approx. 55.3 ac)

These areas will likewise benefit from the previously described actions. All potentially jurisdictional wetlands identified in the AJD issued in 2010, are entirely surrounded by berms/levees. This has completely excluded any access to natural hydrology from East Bay Bayou or even from field runoff, which is diverted into the canal/ditching system and either pumped or discharged through the culverted impoundments and into East Bay Bayou.

Thus, the level of impairment of these features and the resulting restoration potential is maximized.

Enhancement/modification of Culverted Impoundments (approx. 1.3 ac)

While these jurisdictional but non-credit generating features exhibit some basic level of functionality, these features are hydraulically constrained by the flap gates and culverts. These features are expected to be an integral component of reconnecting the restored wetlands directly to East Bay Bayou. Additional analyses will be conducted prior to development of the draft MBI, as appropriate, to determine the extent or type of modifications, if any, that may be required to facilitate the restoration design.

Construction Methods, Timing, & Sequence

At this stage, design options are being developed to effectively reestablish the maximum area of highly functioning wetland habitat in the Bank, while minimizing subsurface disturbance and mass grading. Scheduling of construction activities will commence upon approval of the final mitigation banking instrument, with construction taking place as soon as practicable, weather and site conditions permitting. Irrespective of the construction methods and schedule that will eventually be selected, the plans for timing and sequence will have “no effect” on any federally listed species (seasonally or otherwise) (Attachment C). It should be noted that the fields continue to be used to produce commodity crops under

an agricultural land management program with routine anthropomorphically induced perturbations. Further, due to the extensive and near continuous surface alteration from crop production and water management (leveling, levee and ditch construction, tillage, and recontouring), no sites eligible for listing in the National Register of Historic Places will be impacted by the design concepts currently under development.

The mitigation plan will include the protection and enhancement of any extant high quality native plant communities, as appropriate, and will include a non-native/noxious species abatement plan, and enforceable performance standards. Importantly, any earthmoving activity that may be prescribed will be limited in scope, scale, and location, to maximize the positive ecological effects of the project.

Proposed Service Area (Attachment D):

The proposed Primary Service Area is the 8-digit HUC in which the Project occurs (East Galveston Bay 12040202) wholly within the USACE Galveston District. The Secondary Service Area is the adjacent 8-digit HUCs within the same 6-digit HUCs to include the Sabine Lake (12040201), North Galveston Bay (12040203), & West Galveston Bay (12040204) HUCs, within the same Western Gulf Coastal Plain Level III Ecoregion (Omernik et al 2007), and wholly included in the USACE Galveston District. The Tertiary Service Area is the adjacent Lower Trinity (12030203) HUC, within the same Western Gulf Coastal Plain Level III Ecoregion (Omernik et al 2007), and wholly included in the USACE Galveston District. This Service Area rationale is based on the SWG Rule of Thumb and incorporates a watershed approach based on receiving and contributing water bodies within the Galveston Bay system that will benefit from conservation of the wetland and aquatic function within the Bank and will be appropriately prioritized for like-kind habitats (e.g., riverine herbaceous/shrub) within the Service Area.

General Need and Technical Feasibility:

Elements justifying the general need for the Project are discussed in the Ecological Suitability section of this prospectus. Additional supporting information that warrants development of the Project is provided herein below.

Excerpts below from West Bay Watershed Wetland and Habitat Protection Anahuac and Galveston, West Bay, Texas, Final Report: January 2017; GLO Contract No. 12-522-000-6749, TCEQ Contract No. 582-11-13166 provide an assessment of the general need for conservation of the habitats represented in the TNMB.

"Galveston Bay is the largest and most productive estuary in Texas, and second only to the Chesapeake Bay system among U.S. estuaries in fisheries productivity. Galveston Bay is the single defining geographic feature for the Houston metropolitan region, and serves as the foundation for its economy. Galveston Bay and its many waterways and diverse natural features afford an array of recreational opportunities for residents and visitors, and play an essential role in maintaining quality of life. Over five million people, or 75 percent of Texas' coastal population, reside in the five counties surrounding Galveston Bay. Human activities have significantly altered the ecosystem and affected its productivity, converting coastal wetlands to human uses, and fragmenting remaining coastal natural areas. The Houston metropolitan area is growing rapidly, and its population is expected to nearly double by 2035 (H-GAC, 2007). This growth will place increasing pressure on coastal natural resources, and likely result in additional coastal habitat loss and fragmentation. The U.S. EPA characterizes coastal wetland and associated habitat loss in Texas as severe (EPA, 1999), and this is a continuing concern because of the many important functions and

values these features provide. Wetland loss in the Galveston Bay system is greater than in other areas of the state. Many local scientists and resource managers believe that continued habitat loss poses the greatest single threat to the Galveston Bay ecosystem. GBEP's habitat loss studies primarily focus on wetlands. However, the bay system features a diversity of habitats, including extensive coastal prairie and woodland complexes that contribute to the health and productivity of the estuary, and provide many important functions and values to humans. The upland components of these habitat complexes receive limited regulatory protection, and are subject to significant loss and fragmentation. While minimal data exist on fragmentation and loss of these valuable upland features, the U.S. Fish and Wildlife Service (USFWS) reports that less than one percent remains of the once vast expanses of coastal prairie, and considers coastal prairie ecosystems to be "critically imperiled" (USFWS, 2000)."

Also, please see Attachment-Coastal Wetlands Initiative: Gulf of Mexico Review, Focal Watershed Review: East and West Galveston Bay, Texas, From the EPA's Coastal Wetlands Initiative: Gulf of Mexico Review for additional information supporting the general ecological need for the Bank (Attachment E).

Sea level rise, inland flooding, and land use changes due to climate change represents an extraordinarily complex problem for the entirety of the Texas coastline (and abroad) with no simple (silver bullet) solution. There is no one individual or entity that can carry this burden or be responsible for its remedy; rather, it is an endeavor that must be undertaken responsibly by every individual or entity within their respective sphere of capability and influence. Thus, tackling this broad set of issues requires a multidimensional and collaborative approach among the various concerned stakeholders and human institutions (e.g., state and federal agencies and the private sector) that should be unified in mission. The TNMB represents an excellent example for how these various groups can (and have) work(ed) together to enhance coastal habitat resilience, consolidate and conserve wetland functions, foster continued ecological contributions of value to society through collaboration, and that operate in tandem with the myriad other local, state, and national initiatives to reduce and minimize the potential effects of climate change on the Texas coast.

In fact, conservation of vulnerable coastal wetlands is considered to be among the top priorities for combating climate change and sea level rise (Patterson 2017). President Biden states in his Executive Order on Tackling the Climate Crisis at Home and Abroad:

> "America's farmers, ranchers, and forest landowners have an important role to play in combating the climate crisis and reducing greenhouse gas emissions, by sequestering carbon in soils, grasses, trees, and other vegetation and sourcing sustainable bioproducts and fuels. Coastal communities have an essential role to play in mitigating climate change and strengthening resilience by protecting and restoring coastal ecosystems, such as wetlands, seagrasses, coral and oyster reefs, and mangrove and kelp forests, to protect vulnerable coastlines, sequester carbon, and support biodiversity and fisheries."
>
> The Biden-Harris administration further speaks to the aforementioned issues in Conserving and Restoring America the Beautiful report (2021):
>
> "The investments in restoration, reforestation, reclamation, and other activities that improve the function and form of our natural systems—from the Everglades and the Great Lakes to the Chesapeake Bay—will not only bolster our nation's resilience to extreme wildfires, sea level rise, droughts, storms, and other climate impacts, but they will also create a new pathway to good-paying union jobs and provide economic benefits to communities across the nation."

The administration identifies six recommended areas for early focus by which this will be accomplished. These include the following:

- ***Expand Collaborative Conservation of Fish and Wildlife Habitats and Corridors****. Federal agencies should take several broadly supported steps to stem the decline of fish and wildlife populations and their habitats throughout the country.*
  - *First, agencies can work with States, Tribes, local communities, and private landowners to establish and expand upon promising initiatives to conserve and restore wildlife migration corridors through incentives and local collaboration. The Trump administration launched a promising effort to enhance the winter range and migration corridor habitat of elk, deer, and pronghorn on DOI-managed lands. This initiative could be expanded to include other land managers, to build partnerships with working ranches and other landowners, and to conserve corridors and seasonal ranges for other species.*
  - *Second, the U.S. Fish and Wildlife Service (FWS) should expand conservation efforts already identified through partnerships with external stakeholders, including fish passage projects in the National Fish Habitat Action Plan, conservation of at-risk species identified in State Wildlife Action Plans, and bird habitat conservation through the Migratory Bird Joint Ventures. FWS should also work with States, local communities, and others to explore where there is support to enhance the National Wildlife Refuge System, which provides important anchors for wildlife conservation throughout the nation. The Biden-Harris administration welcomes Congressional efforts to support on-the-ground habitat restoration for at-risk species through collaboration with State fish and wildlife agencies.*
  - *Third, NOAA should expand the National Marine Sanctuaries System and National Estuarine Research Reserve System. Through broad public engagement, NOAA can establish national marine sanctuaries that protect natural and cultural marine and Great Lakes resources and promote sustainable uses. The process to establish new national marine sanctuaries and accompanying management plans has already begun for sites in Wisconsin and New York, and several other sites have been nominated for potential future designation. Similarly, under authorities provided by the Coastal Zone Management Act, NOAA is exploring new designations for national estuarine research reserves in Connecticut, Wisconsin, and Louisiana. If approved, they would join a network of coastal sites managed in partnership with coastal states and local partners for the protection and research of estuarine systems. In addition, NOAA's Restoration Center should expand its work to conserve and restore habitats—like wetlands, rivers, and coral reefs—to boost fish populations, recover threatened and endangered species, and support resilient coastal communities.*

- ***Incentivize and Reward the Voluntary Conservation Efforts of Fishers, Ranchers, Farmers, and Forest Owners****. Federal agencies can and should advance conservation by supporting programs that incentivize voluntary conservation efforts and provide new sources of income for American farmers, ranchers, and forest stewards. Healthy rural economies are a key component of keeping working lands healthy, productive, and whole.*
  - *The USDA has an array of programs that offer effective strategies for advancing conservation on working lands, such as the Working Lands for Wildlife initiative and the Conservation Reserve Program. The reauthorization of the Farm Bill in 2023 provides a tremendous opportunity for the USDA and Congress to improve the effectiveness of relevant programs to conserve working lands.*
  - *Similarly, the FWS should enhance support for voluntary conservation efforts by private landowners through initiatives such as Conservation Without Conflict,* ***tools such as species credit trading (conservation banking)*** *[emphasis added] and Candidate Conservation Agreements with Assurances, and the Partners for Fish and Wildlife Program.*
  - *NOAA should continue its Species in the Spotlight initiative to provide immediate, targeted efforts to halt declines and stabilize populations of the species most at-risk of extinction in the near future,*

which could increase public awareness, marshal resources, and focus conservation actions, including through voluntary measures and public-private partnerships.

The TNMB is precisely the type of private sector investment that is to be incentivized by the federal agencies through past rule-making that continues to fulfill the "call to climate action" of the Biden-Harris administration. Federally promulgated credit trading programs (conservation banks and/or mitigation banks) reliant on private-sector investments serve as respectable and, in many cases, superior tactics to accomplish sustainability initiatives at ground level. Such initiatives work concomitantly with other publicly funded projects, or private voluntary conservation projects to achieve broader environmental goals.

The TGLO's TCRMP provides a brief but poignant mission statement that recognizes the explicit need for an economically and environmentally harmonious operational strategy if we are to have success in mitigating the potential effects of climate change:

The Texas coast is a blend of natural environments, human communities, wildlife habitats, and built infrastructure that must be preserved, because:

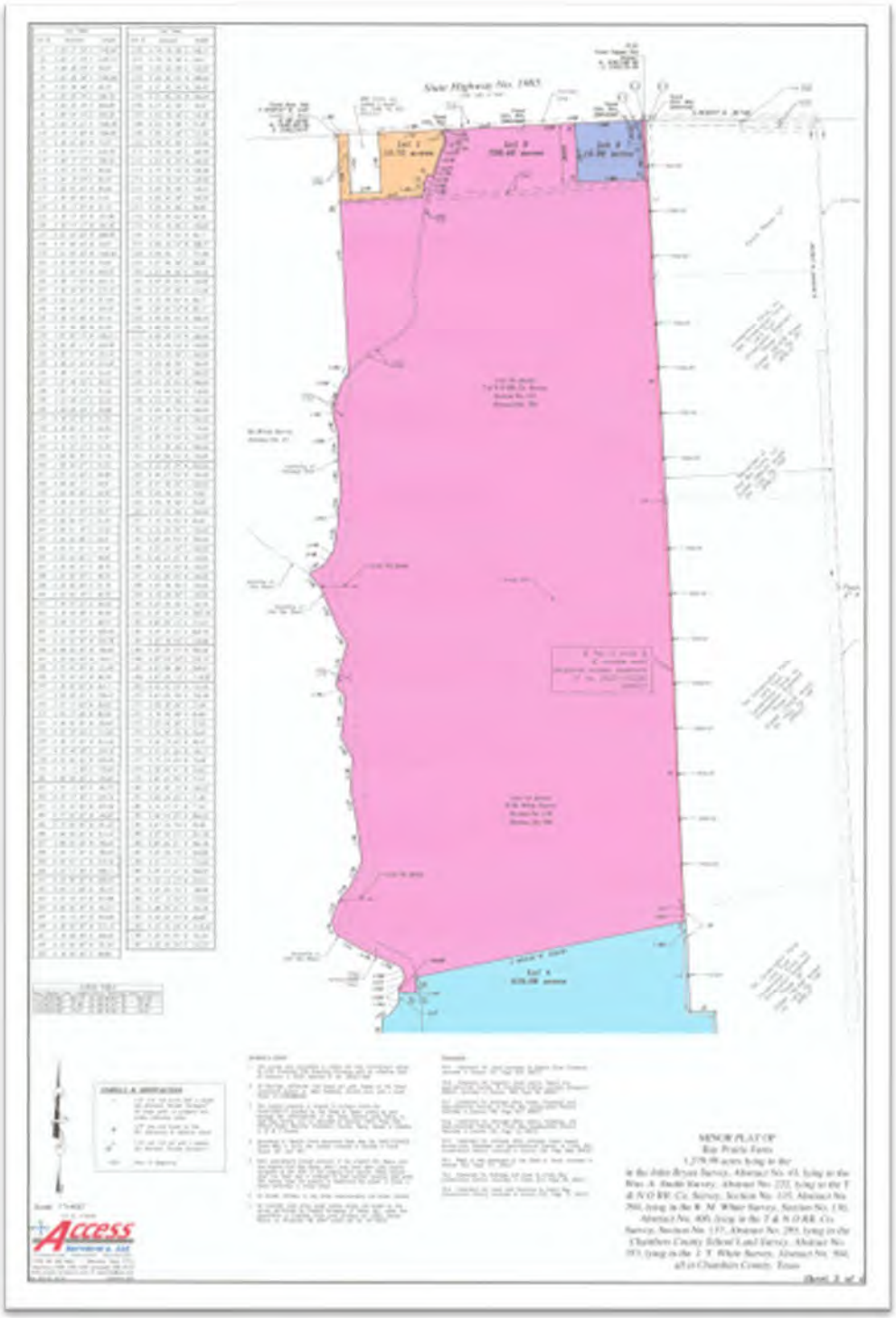
- *The state's natural coastal environments contribute invaluable cultural and recreational benefits, seafood, flood prevention, and habitat productivity that bolster business development, improve quality of life, and attract people to Texas.*
- *Human development along the coast provides the support services, transportation, and infrastructure that allow our communities, businesses, and families to grow and flourish.*
- *The Texas coast is a hub for trade, tourism, recreational opportunities, and energy production. However, the coastal region is also susceptible to the extreme impacts of natural disasters as well as the impacts from environmental, social, and economic pressures that have dire consequences such as widespread flooding, structural damage, erosion, high tide events, and fish kills. Working to defend our coast against these vulnerabilities is the main mission of the GLO Coastal Division.*

The Project is needed to service projected population growth coupled with an ever-increasing need for energy and petrochemical products, which are major drivers of industrial and domestic development within the Service Area. International commerce and infrastructure development associated with the Ports of Houston and Beaumont will continue to expand to service global needs. Further, such growth requires improvements in transportation systems to accommodate current and projected population growth, as well as expansion of distribution corridors to facilitate commerce between local, regional, national, and global economies. The conservation of ideally suited, high value tracts of land as mitigation banks in this area will support environmental sustainability and resource stewardship initiatives in a rapidly developing area, as well as promote economic stability and growth within the state of Texas (and beyond). Thus, there is a market need for bank credits that justifies the Sponsor's desire to develop this mitigation bank project in the Service Area.

As previously described, any restoration/reestablishment work will be minimized to the extent practicable to ensure the successful attainment of ecological uplift prescribed for the site. Any construction activities will be designed by experienced engineers and ecologists using commonly applied wetland restoration techniques and habitat management practices for similarly situated sites to increase functional capacity at self-sustaining levels over time while minimizing maintenance efforts.

Easements, Encumbrances, and/or Other:

Any non-compatible easements or encumbrances will be described in subsequent documentation based on title work and excluded from the creditable acreage of the TNMB. Title work and legal surveys have been completed for the Bank. Currently, there are no non-compatible easements, rights-of-way or encumbrances within the proposed bank footprint.



Proposed Ownership Arrangement and Long-term Management Strategy:

The surface estate for the Bank is owned by the Sponsor (Specklebelly Mitigation LLC). No mineral rights are owned by the Sponsor. A detailed Mineral's Management Plan will be included in a draft MBI, when appropriate.

Site protection and long-term management strategies include creating/supplementing a conservation-oriented landscape mosaic around the Anahuac National Wildlife Refuge and other conserved lands functioning as buffers, as described in the site selection approach in previous paragraphs. The property shall be managed by SM in accordance with any governing perpetual site protection instruments or restrictions connected therewith. The third-party conservation easement holder (e.g., Galveston Bay Foundation) will monitor and defend the easement area. SM shall manage the property included within the Bank in accordance with the mitigation banking instrument and USACE permit until such time as the Bank is closed. After bank closure, the long-term management phase of the Bank will begin. A long-term management plan, including funding amounts and schedules will be described in the forthcoming draft MBI. It is anticipated that Texas Parks and Wildlife Foundation will be the long-term stewardship fund manager. Initial coordination is underway with both TPWF and GBF. Finally, feasibility assessments regarding fee title transfer of the lands included in the Bank to either GBF or FWS are under consideration.

Qualifications of Sponsor & Sponsor's Agent:

Please see Attachment F

Establishment and Operation:

The Bank will be established in accordance with the standard operating procedures in place in the Galveston District, including the use of interim hydrogeomorphic models (HGMi) for assessing baseline conditions and credit generation. At this time, it is anticipated that all PCC designated areas and non-jurisdictional wetlands will have a zero-baseline score. In addition, the mitigation rule codified in the Federal Register, along with any locally derived and non-conflicting mitigation bank development policies and procedures, will govern the Bank review process, including the details for the establishment and operation of the TNMB. Notably, ecologically based performance standards will be developed to ensure that Bank goals and objectives are being met and for credit release events, as may be necessary. Such details will be provided in a forthcoming draft MBI document for review by the IRT, as and when appropriate.

Assurance of Water Rights:

The Sponsor possesses water rights associated with the TNMB (Attachment G).

Design concepts under consideration and further development do not require the diversion of state water resources from within the bed and banks of any state water body. Hydrology will be sustained solely by high water events associated with East Bay Bayou entering and exiting the site through constructed levee breaches, removal of water control structures, and conveyance of flood/high waters through existing drainage ditches. Direct precipitation and overland flows (diffuse surface water) will likewise contribute hydrology to the restored wetlands.

The current status of the sources of hydrology for the proposed TNMB eliminates the need for water rights for maintenance of wetland function. Current and historic wetland hydrology is a result of a) direct

precipitation, b) overland flows, c) inflows from East Bay Bayou and an unnamed tributary (colloquially called Hog Pen Slough), and d) limited tidal action. Natural hydrologic patterns will continue to provide wetland function on the site(s) for the reasonably foreseeable future as a result of restoration concepts proposed hereinabove.

Literature Cited:

Texas General Land office, March 2023. Accessed at: https://www.glo.texas.gov/coast/coastal-management/coastal-resiliency/index.html

U.S. Army Corp of Engineers, Galveston District. Accessed at: swg.usace.army.mil/Portals/26/docs/regulatory/PNMar/Prospectus_202100133.pdf?ver=cCVxR8Dhwmvk3hfIzBqhZQ%3d%3d

Attachments:

Attachment A Previous AJDs and HGMi Baseline
Attachment B USACE Issued PJD & AJD 2024
Attachment C T&E IPAC Reports
Attachment D Figures
Attachment E Coastal Wetlands Initiative Excerpt
Attachment F Sponsor Qualifications
Attachment G Water Rights Documentation

Attachment A

Previous AJDs and HGMi Baseline

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

March 29, 2018

Compliance Branch

SUBJECT: **SWG-2008-01091;** Gulf Coastal Plains Wetland Mitigation Bank, Approved Jurisdictional Determination, 91.86-Acre Phase 8 (Field 6) Mitigation Project Site, Chambers County, Texas

Ms. Pamela Fetterman
ecoGenesis, LLC.
4152 Independence Ct, C-7
Sarasota, Florida 34234

Dear Ms. Fetterman:

This letter is in response to your jurisdictional determination request dated December 11, 2017, on behalf of Gulf Coastal Plains Wetland Mitigation Bank (GCPWMB). The request was to "renew the expired jurisdictional determination for Phase 8 of the GCPWMB." This request involved a 91.86-acre project site. The site is located approximately 2.44 miles southwest of the intersection of Texas State Highway 124 and Whites Ranch Road, Chambers County, Texas (map enclosed).

The Corps reviewed the consultant-provided information, off-site documents, and the findings of a March 11, 2010 approved jurisdictional determination on the larger mitigation tract, which encompassed the subject site. Based on this evaluation, the Corps has determined the 91.86-acre project site contains NRCS mapped and verified prior converted croplands with appropriate cropping history. As per 33 CFR 328.3, "waters of the United States do not include prior converted cropland." As such, the site does not contain waters of the United States. Therefore, the site is not subject to Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act, and the discharge of fill material onto the tract does not require a Department of the Army permit.

This determination has been conducted to identify the limits of the Corps' Clean Water Act jurisdiction for the site identified in this request. However, this determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985 as amended. If you or your tenant are USDA program participants or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

This letter contains an approved jurisdictional determination for your subject site. If you wish to appeal the approved jurisdictional determination, please see the enclosed sheets regarding the administrative appeal process for jurisdictional determinations:

Notification of Appeals Process (NAP) fact sheet and Request for Appeal (RFA) form. If you object to this determination, you may request an administrative appeal under USACE regulations at 33 CFR Part 331. If you request to appeal this determination, you must submit a completed RFA form to the Southwestern Division Office at the following address:

Mr. Elliott Carman
Administrative Appeal Review Officer, CESWD-PD-O
U.S. Army Corps of Engineer Division, Southwestern
1100 Commerce Street, Room 831
Dallas, Texas 75242-1731
Telephone: 469-487-7061; FAX: 469-487-7199

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within **60 days** of the date of the NAP. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This approved jurisdictional determination is based on the subject area's "Prior Converted Cropland" (PCC) non-jurisdictional status. As such this determination is valid for 5 years from the last year the subject field was in FSA recorded, cropped, managed or maintained agricultural commodity production. As of the date of this determination, provided documents confirm the last agricultural commodity was planted on this tract in 2017, therefore the PCC designation will expire December 31, 2022. If the subject area were to remain in agricultural production, this determination would then be valid for 5 years, unless new information warrants a revision prior to the expiration date.

If you have any questions concerning this jurisdictional determination, please reference file number **SWG-2008-01091** and contact Ms. Emily Drastata at the letterhead address or by telephone at 409-766-3851. To assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0 and/or if you would prefer a hard copy of the survey form, please let us know, and one will be mailed to you.

Sincerely,

John Davidson
Team Lead, Compliance Branch

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: GULF COASTAL PLAINS MIT BANK	File Number: SWG 2008-01091	Date: 03/29/2018

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	XPRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

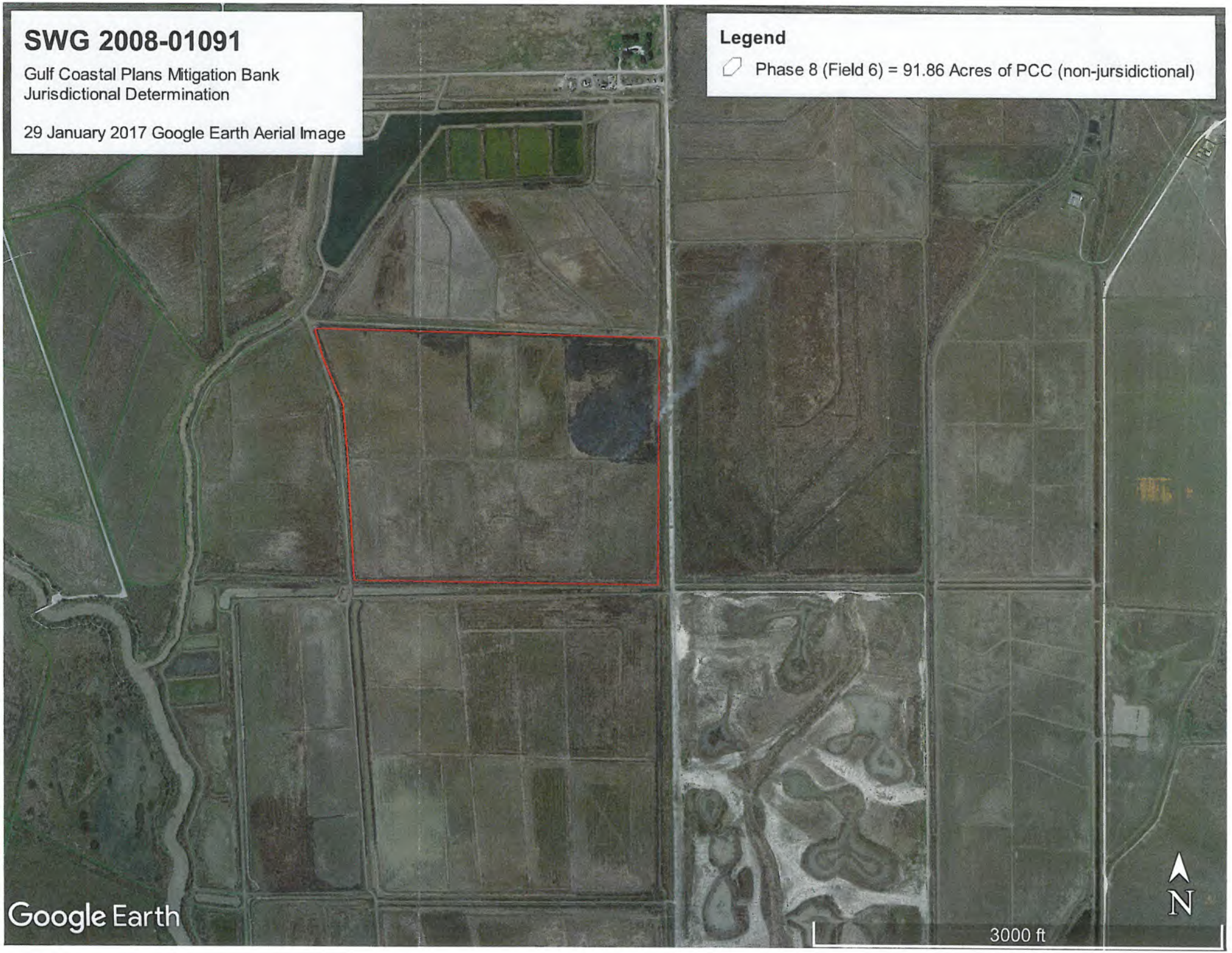
Ms. Emily Drastata
Regulatory Specialist
CESWG-RD-C
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229
409-766-3851 FAX: 409-766-3931

If you only have questions regarding the appeal process you may also contact:

Mr. Elliott Carman
Administrative Appeals Review Officer (CESWD-PD-O)
U.S. Army Corps of Engineers
1100 Commerce Street, Suite 831
Dallas , Texas 75242-1317
469-487-7061

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		


SWG 2008-01091
Gulf Coastal Plans Mitigation Bank
Jurisdictional Determination
29 January 2017 Google Earth Aerial Image
Legend
Phase 8 (Field 6) = 91.86 Acres of PCC (non-jursidictional)
Google Earth
N
3000 ft

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

REPLY TO
ATTENTION OF:

MAR 11 2010

Regulatory Branch

SUBJECT: SWG-2008-01091; Gulf Coastal Plains Wetland Mitigation Bank

Ms. Susie Alford
Berg♦Oliver Associates, Inc.
14701 St. Mary's Lane, Suite 400
Houston, Texas 77079

Dear Ms. Alford:

Pursuant to 33 CFR 332.8(d)(7) and Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. 19594, 10 April 2008), we are transmitting the attached Interagency Review Team (IRT) comments for the Gulf Coastal Plains Wetland Mitigation Bank - Draft Mitigation Banking Instrument (DMBI). The IRT review of the DMBI began on November 3, 2009.

The enclosed comments represent concerns which could lead to a formal objection from one or more of the IRT members. Therefore, the concerns raised must be given full consideration before we can make a decision to accept a final banking instrument. We need your information, including the full Interim Hydrogeomorphic report, to address the issues raised. You may submit additional information or revise your plans to help resolve the issues.

In addition, we have concluded the verification of the delineation of waters, including wetlands, and concur that there are 31.21 acres of adjacent wetlands, 17.59 acres of adjacent fringe wetlands of open waters and 13.21 acres of a redirected tributary of East Bay Bayou and Galveston Bay. Enclosed are a combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA to the Southwestern Division Office at the following address:

James E. Gilmore, Appeal Review Officer
US Army Engineer Division, Southwestern
1100 Commerce Street, Suite 831
Dallas TX 75242-1317
Telephone: 469-487-7061; FAX: 469-487-7190

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, meets the criteria for appeal under 33 C.F.R. Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination.

We look forward to working with you and the IRT in the evaluation of this proposal. If you have any questions, please reference file number SWG-2008-01091 and contact Mr. Sam J. Watson - IRT Chair, at the letterhead address, by telephone at 409-766-3946, or email at sam.watson@usace.army.mil.

Sincerely,

for Casey Cutler
Chief, Policy Analysis Section

Enclosures

Copies Furnished:

Ms. Moni Belton, US Fish & Wildlife Service, 17629 El Camino Real, Suite 211, Houston, Texas 77058

Mr. Jim Herrington, EPA, Region VI, Wetlands Section, TAMU AG Extension, 720 East Blackland Road, Temple, Texas 76502

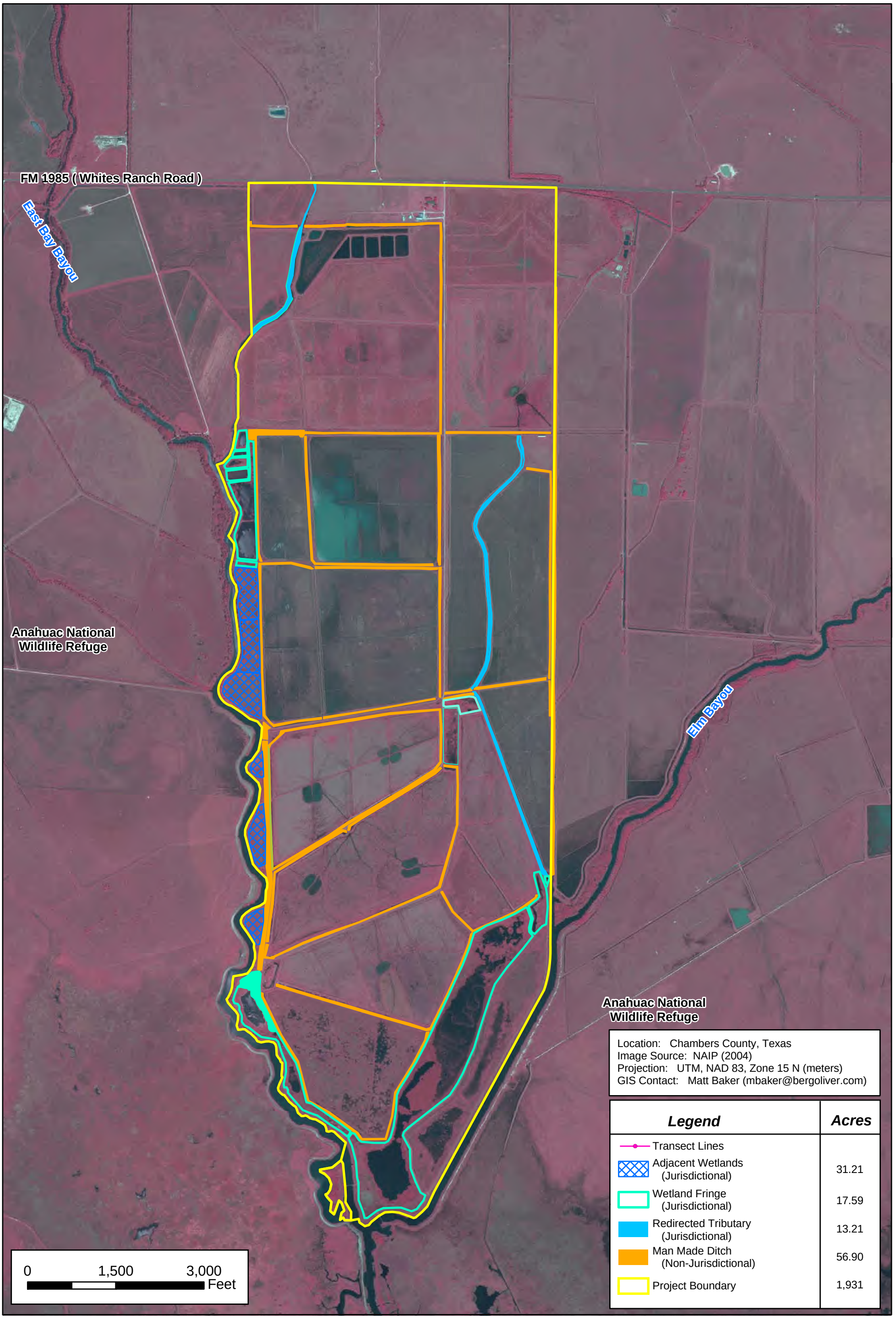
Mr. Rusty Swafford, National Marine Fisheries Service, 4700 Avenue U, Galveston, Texas 77550

Mr. Dan Kessee, Natural Resources Conservation Service, USDA-NRCS Texas, 101 South Main Street, Temple, Texas 76501

Mr. Jamie Schubert, Texas Parks & Wildlife Department, TPWD-Dickinson Marine Lab, 1502 East FM 517, Dickinson, Texas 77539

Mr. Tony Williams, Texas General Land Office, Coastal Coordination Council, 1700 North Congress Avenue, Austin, Texas 78701-1495

Mr. Mark Fisher, Texas Commission on Environmental Quality, Water Planning & Assessment Division, Mail Code 150, P.O. Box 13087, Austin, Texas 78711-3087



Location: Chambers County, Texas
Image Source: NAIP (2004)
Projection: UTM, NAD 83, Zone 15 N (meters)
GIS Contact: Matt Baker (mbaker@bergoliver.com)

Legend	Acres
Transect Lines	
Adjacent Wetlands (Jurisdictional)	31.21
Wetland Fringe (Jurisdictional)	17.59
Redirected Tributary (Jurisdictional)	13.21
Man Made Ditch (Non-Jurisdictional)	56.90
Project Boundary	1,931

GULF COASTAL PLAINS WETLAND MITIGATION BANK
WETLAND IDENTIFICATION MAP

Project #: 7998
For: Gulf Coastal Plains Wetland Mitigation Bank
Location: FM 1985 and SH 124
Chambers County, Texas

REVISIONS

BERG•OLIVER ASSOCIATES, INC.
ENVIRONMENTAL SCIENCE, ENGINEERING
& LAND USE CONSULTANTS
14701 ST. MARY'S LANE, SUITE 400
HOUSTON, TEXAS 77079 PHONE (281)589-0898 http://www.bergoliver.com

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

MARCH 30, 2018

Compliance Branch

SUBJECT: Acknowledgement of Request

Pamela J. Fetterman
EcoGENESIS, LLC
4152 Independence Ct., C-7
Sarasota, FL. 34234

This is to acknowledge receipt of your February 8, 2018 request for an approved jurisdictional determination/delineation verification for a site located southern Chambers County, Texas

We will use the information provided combined with other site-specific data/information to determine the presence and/or absence of aquatic resources on the site and their jurisdictional status as it pertains to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. For ease and future reference please note the following information has been assigned to this request:

File Number: **SWG-2008-01091**
Compliance Regulator **Mr. Ryan Schwartzengraber**
Telephone number **409-766-3120**
e-mail
ryan.l.schwartzengraber@usace.army.mil

By submitting this written request you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the jurisdictional determination. If you do not have this authorization you need to immediately notify the compliance regulator above.

This information may be shared with the Department of Justice and other federal , state and local governmental agencies, and the public and may be made available as part of a public notice as required by federal law. Your name and property location(s) where federal jurisdiction is to be determined will be included. Note that with approved jurisdiction determinations (AJD) this information will be made available to the public on the District's website and on the Headquarters USACE website. Submission of the requested information is voluntary; however if the information is not provided the request for an AJD cannot be evaluated nor can and AJD be issued.

It should be noted that at the present time our response time to finalize determinations often exceed 120 days. Please contact the Compliance regulator working on this request for any concerns and/or questions that you may have pertaining to this action.

February 8, 2018

Mr. John Davidson
United States Army Corps of Engineers
Regulatory Division
P. O. Box 1229
Galveston, Texas 77553-1229

SUBJECT: Gulf Coast Plains Wetland Mitigation Bank (GCPWMB) Phases 2-4, 6, 7, 9 & 12 Jurisdictional Determination Re-verification

Dear Mr. Davidson,

We are writing to request renewal of an expired, approved jurisdictional determination for Phases 2-4, 6, 7, 9 & 12 of the Gulf Coastal Plains WMB. On March 11, 2010, the Galveston District, United States Army Corps of Engineers (USACE) issued a comment letter for the Draft Mitigation Bank Instrument (DMBI) and the approved jurisdictional determination (JD) for all phases within the GCPWMB (refer to **Exhibit "A"**). The Sponsor (East Bay Farms), in discussions with Mr. Sam Watson of the USACE in early 2016 concerning Phase 11, was informed that the JD for the GCWPWMB expired and will require re-verification, and submittal of information confirming that site conditions have not changed since issuance of the original JD in March of 2011.

On behalf of the Sponsor, and per the USACE's request, ecoGENSESIS is requesting to renew the jurisdictional determination for Phases 2-4, 6, 7, 9 & 12 of the GCPWMB. The GCPWMB is in southern Chambers County, TX adjacent to the Anahuac National Wildlife Refuge (NWR). The site is accessed from FM 1985 via double gates. Please refer to the attached **Figure 1** for the general location of the GCPWMB and **Figure 2** for the specific locations of Phases 2-4, 6, 7, 9 & 12 within the GCPWMB and for the Phase center coordinates. The phases for which we are requesting a re-verification are labeled as "study area" on **Figure 2**.

Fieldwork was conducted from September 27th through October 2nd, 2017. During fieldwork, ecoGENSESIS staff and subcontractors performed a site review of the prior-converted farm fields and verified that site conditions have not changed. At the time of sampling, the fields were either under cultivation for organic rice or fallow. We sampled the original transect(s) established for the expired, approved JD for the remaining undeveloped bank phases of the GCPWMB, including Transect No. 1 that extends through Phase 12, Transect No. 3 that extends through Phase 7, Transect No. 4 that extends through Phase 6 and Transect No. 6 that extends through Phase 2. The original sampling transects from the expired GCPWMB determination were re-established in the field, with the exception of Transect 6. Transect 6 was shifted to

the south extending through Phase 2. For the re-determination sampling, the transects ended along the eastern boundary of Phases 2, 6, 7 & 12 due to construction of Phase 1. Total data points sampled within the agricultural fields are summarized in **Table 1** below (data sheets for Phases 2-4, 6, 7, 9 & 12 are available upon request). Three phases were not able to be sampled due to standing water still trapped in some fields from excessive rainfall during Hurricane Harvey that were not able to be pumped down prior to conducting the fieldwork.

Table 1

Number of Data Points Sampled

Phase	Transect No.	Data Points Per Phase
2	6	Not Sampled
3		Not Sampled
4		1
6	4	1
7	3	1
9		Not Sampled
12	1	1

Phases 2-4, 6, 7, 9 & 12 were previously determined by the NRCS to be prior-converted cropland and have remained in active commodity crop production. Please refer to the NRCS Wetland Conservation Determination, attached as **Exhibit "B"**. Phases 2-4, 6, 7, 9 & 12 were previously determined to be non-jurisdictional, prior-converted cropland by the previously issued approved JD (**Exhibit A**). The Farm Service Agency (FSA) cropping data for Phases 2-4, 6, 7, 9 & 12 verifies that they remained in active agricultural production for a commodity crop, thereby maintaining their prior-converted cropland status. **Exhibit C** provides FSA Reports from 2009 through 2017**.** **Figure 2** depicts both the PC field numbers as used on the FSA reports, and the GCPWMB phase numbers to facilitate timely review of the FSA reports and easily correspond the PC fields located in each phase.

Please advise me directly if you need any additional information, or if an on-site field inspection is required at (941)-351-0300, or at pfetterman@ecogenesisllc.com. We look forward to working with you to process this re-determination request.

Sincerely,

Pamela J. Fetterman
Principal Scientist
ecoGENESIS, LLC

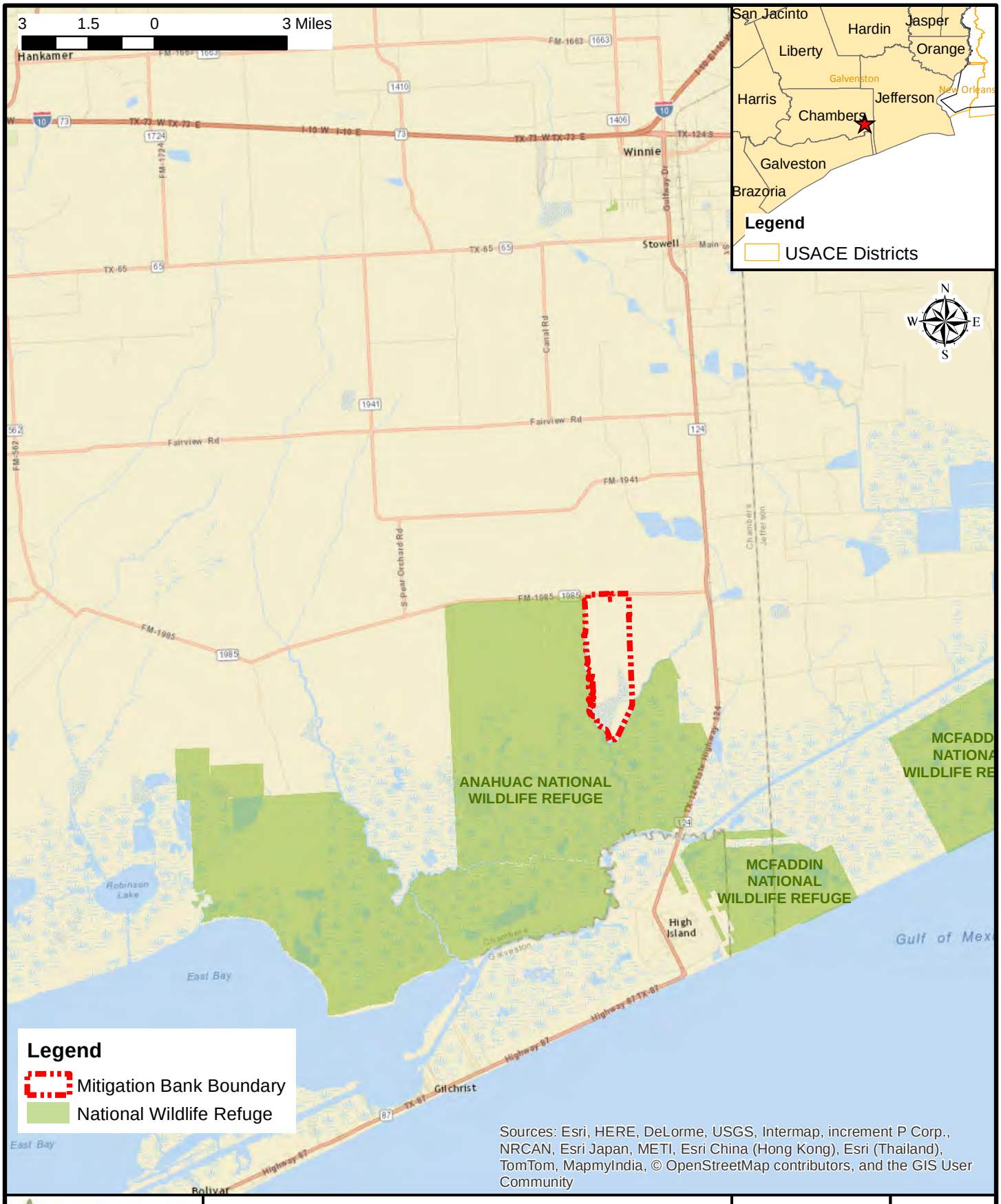
Enclosures:

Figure 1: GCPWMB Location Map
Figure 2: Phases 2-4, 6, 7, 9 & 12 Location Map
Exhibit A: GCPWMB Approved JD
Exhibit B: NRCS Wetland Determination
Exhibit C: FSA Reports 2009-2017

Cc w/enc:

Mr. Peter Partlow, P.E., E Sciences, Inc.
Mr. Stan Meador, Manager, East Bay Farms, LLC
Mr. Sam Watson, IRT Chair, USACE Galveston District
Mr. Robert Heinly, Regulation Manager, USACE Galveston District

Figures



ecoGENESIS
4152 Independence Ct, C-7
Sarasota, FL 34234
office: 941-351-0300
cell: 941-321-8107

Gulf Coastal Plains Wetland Mitigation Bank

Lat: 29.6544, Long: -94.4120
Chambers County, Texas

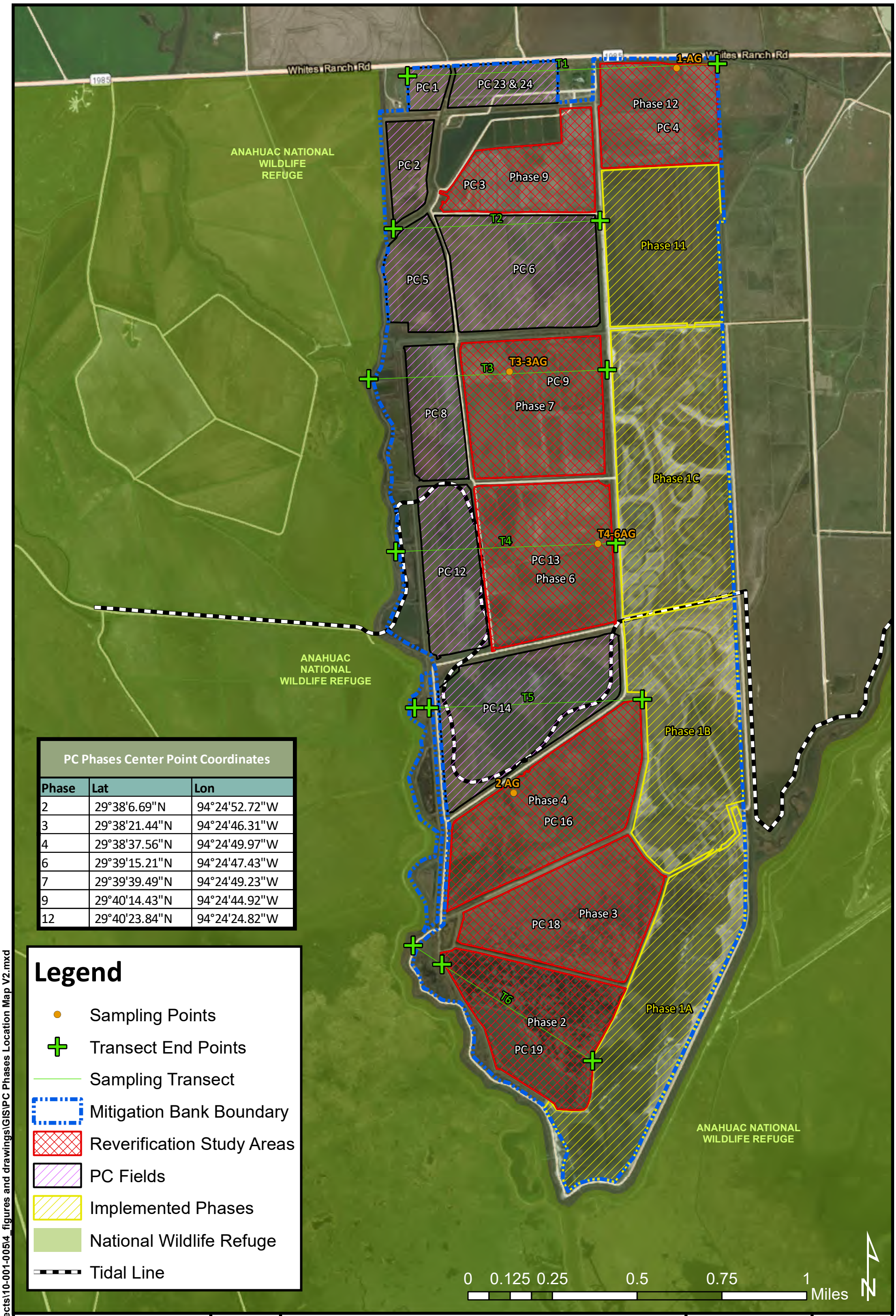
Location Map

Scale: 1" = 3 Miles

Date: 08-21-14

Figure **1**

Date: 8/21/2014 Time: 8:04:05 AM Document Path: S:\Projects\EcoGenesis\005-001_GCPMB\MXDs\Figure 1_Location Map_GCPMB.mxd



PC Phases Center Point Coordinates		
Phase	**Lat**	**Lon**
2	29°38'6.69"N	94°24'52.72"W
3	29°38'21.44"N	94°24'46.31"W
4	29°38'37.56"N	94°24'49.97"W
6	29°39'15.21"N	94°24'47.43"W
7	29°39'39.49"N	94°24'49.23"W
9	29°40'14.43"N	94°24'44.92"W
12	29°40'23.84"N	94°24'24.82"W

Legend

- Sampling Points
- Transect End Points
- Sampling Transect
- Mitigation Bank Boundary
- Reverification Study Areas
- PC Fields
- Implemented Phases
- National Wildlife Refuge
- Tidal Line

Project: Z:\Projects\10-001-0054_figures and drawings\GIS\PC Phases Location Map V2.mxd

ECOGENESIS
4152 Independence Ct., Ste C-7
Sarasota, FL 34234
office: 941-351-0300
cell: 941-321-8107

Drawn by: JAM
Reviewed by:
Revison:
Date: 2/5/2018

Gulf Coastal Plains Wetland Mitigation Bank

Chamber County, Texas

Phase Locations

1 in = 1,400 ft

Figure 2

Exhibit A

EXHIBIT "A"

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

REPLY TO
ATTENTION OF:

MAR 11 2010

Regulatory Branch

SUBJECT: SWG-2008-01091; Gulf Coastal Plains Wetland Mitigation Bank

Ms. Susie Alford
Berg♦Oliver Associates, Inc.
14701 St. Mary's Lane, Suite 400
Houston, Texas 77079

Dear Ms. Alford:

Pursuant to 33 CFR 332.8(d)(7) and Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. 19594, 10 April 2008), we are transmitting the attached Interagency Review Team (IRT) comments for the Gulf Coastal Plains Wetland Mitigation Bank - Draft Mitigation Banking Instrument (DMBI). The IRT review of the DMBI began on November 3, 2009.

The enclosed comments represent concerns which could lead to a formal objection from one or more of the IRT members. Therefore, the concerns raised must be given full consideration before we can make a decision to accept a final banking instrument. We need your information, including the full Interim Hydrogeomorphic report, to address the issues raised. You may submit additional information or revise your plans to help resolve the issues.

In addition, we have concluded the verification of the delineation of waters, including wetlands, and concur that there are 31.21 acres of adjacent wetlands, 17.59 acres of adjacent fringe wetlands of open waters and 13.21 acres of a redirected tributary of East Bay Bayou and Galveston Bay. Enclosed are a combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA to the Southwestern Division Office at the following address:

James E. Gilmore, Appeal Review Officer
US Army Engineer Division, Southwestern
1100 Commerce Street, Suite 831
Dallas TX 75242-1317
Telephone: 469-487-7061; FAX: 469-487-7190

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, meets the criteria for appeal under 33 C.F.R. Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination.

We look forward to working with you and the IRT in the evaluation of this proposal. If you have any questions, please reference file number SWG-2008-01091 and contact Mr. Sam J. Watson - IRT Chair, at the letterhead address, by telephone at 409-766-3946, or email at sam.watson@usace.army.mil.

Sincerely,

for Casey Cutler
Chief, Policy Analysis Section

Enclosures

Copies Furnished:

Ms. Moni Belton, US Fish & Wildlife Service, 17629 El Camino Real, Suite 211, Houston, Texas 77058

Mr. Jim Herrington, EPA, Region VI, Wetlands Section, TAMU AG Extension, 720 East Blackland Road, Temple, Texas 76502

Mr. Rusty Swafford, National Marine Fisheries Service, 4700 Avenue U, Galveston, Texas 77550

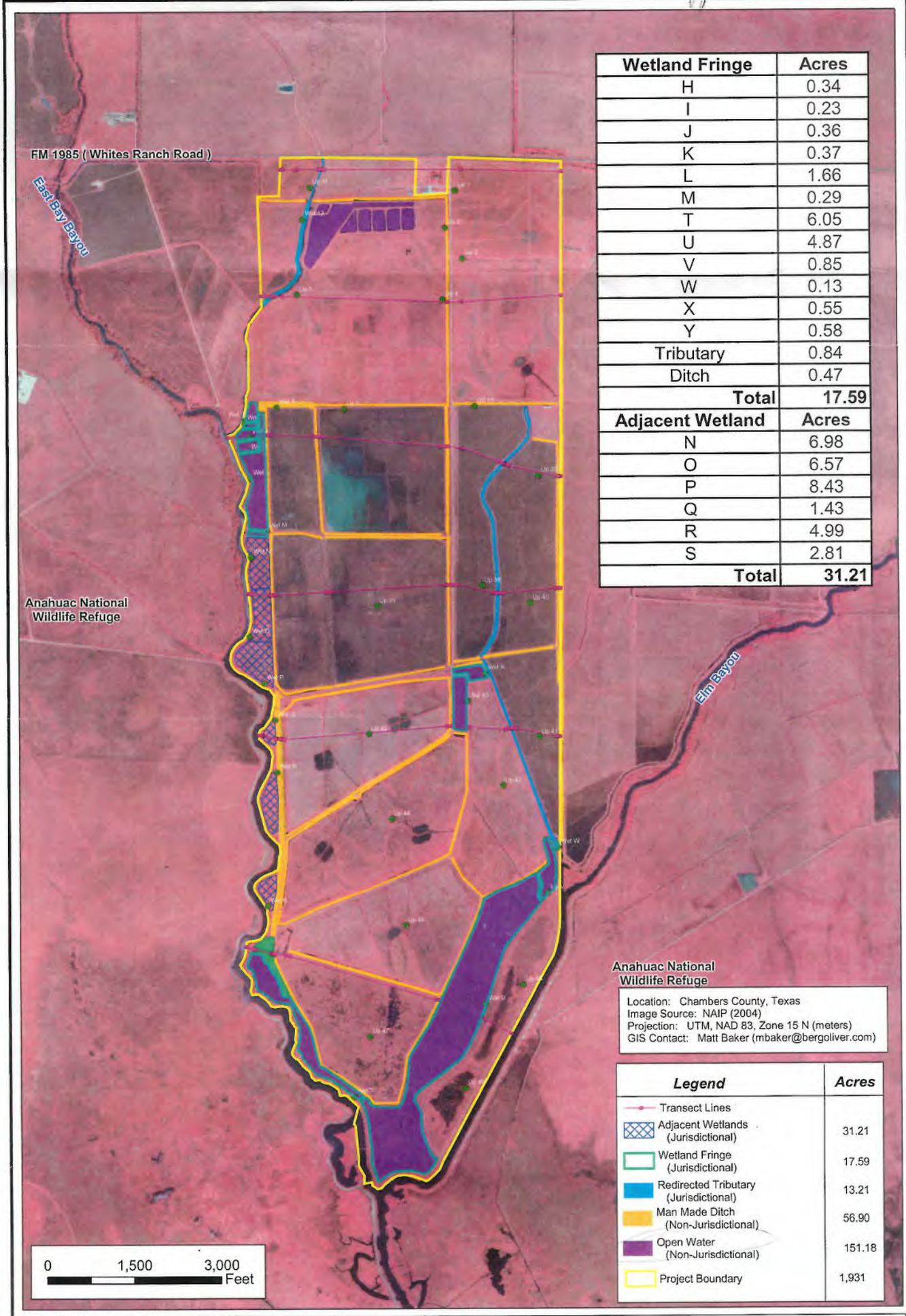
Mr. Dan Kessee, Natural Resources Conservation Service, USDA-NRCS Texas, 101 South Main Street, Temple, Texas 76501

Mr. Jamie Schubert, Texas Parks & Wildlife Department, TPWD-Dickinson Marine Lab, 1502 East FM 517, Dickinson, Texas 77539

Mr. Tony Williams, Texas General Land Office, Coastal Coordination Council, 1700 North Congress Avenue, Austin, Texas 78701-1495

Mr. Mark Fisher, Texas Commission on Environmental Quality, Water Planning & Assessment Division, Mail Code 150, P.O. Box 13087, Austin, Texas 78711-3087

From 2010 Approved JD Letter



Wetland Fringe	Acres
H	0.34
I	0.23
J	0.36
K	0.37
L	1.66
M	0.29
T	6.05
U	4.87
V	0.85
W	0.13
X	0.55
Y	0.58
Tributary	0.84
Ditch	0.47
Total	**17.59**
Adjacent Wetland	**Acres**
N	6.98
O	6.57
P	8.43
Q	1.43
R	4.99
S	2.81
Total	**31.21**

Location: Chambers County, Texas
Image Source: NAIP (2004)
Projection: UTM, NAD 83, Zone 15 N (meters)
GIS Contact: Matt Baker (mbaker@bergoliver.com)

Legend	*Acres*
Transect Lines	
Adjacent Wetlands (Jurisdictional)	31.21
Wetland Fringe (Jurisdictional)	17.59
Redirected Tributary (Jurisdictional)	13.21
Man Made Ditch (Non-Jurisdictional)	56.90
Open Water (Non-Jurisdictional)	151.18
Project Boundary	1,931

GULF COASTAL PLAINS WETLAND MITIGATION BANK
WETLAND IDENTIFICATION MAP

Project #: 7998
For: Gulf Coastal Plains Wetland Mitigation Bank
Location: FM 1985 and SH 124
Chambers County, Texas

REVISIONS
June 18, 2008 by MDB
August 19, 2008 by AWL
June 17, 2008 by ASE

BERG•OLIVER ASSOCIATES, INC.
ENVIRONMENTAL SCIENCE, ENGINEERING & LAND USE CONSULTANTS
14701 ST. MARY'S LANE, SUITE 400
HOUSTON, TEXAS 77079 PHONE (281)589-0898 http://www.bergoliver.com

Exhibit B

United States Department of Agriculture

Natural Resources Conservation Service

NRCS-CPA-026E 9/2000

EXHIBIT "B"

HIGHLY ERODIBLE LAND AND WETLAND CONSERVATION DETERMINATION

Name Address:	East Bay Farms, Owner BBB Farms LLC c/o William Beaty 33019 Londonderry Dr Waller, TX 77484		Request Date: 4/5/10	County:	Chambers
Agency or Person Requesting Determination:	FSA		Tract No: 391	FSA Farm No.:	120

Section I - Highly Erodible Land

Is a soil survey now available for making a highly erodible land determination?	Yes
Are there highly erodible soil map units on this farm?	No

Fields in this section have undergone a determination of whether they are highly erodible land (HEL) or not; fields for which an HEL Determination has not been completed are not listed. In order to be eligible for USDA benefits, a person must be using an approved conservation system on all HEL.

Field(s)	HEL(Y/N)	Sodbust(Y/N)	Acres	Determination Date
	-	-		
	-	-		
	-	-		
	-	-		
	-	-		

The Highly Erodible Land determination was completed in the-Field

Section II - Wetlands

Are there hydric soils on this farm?	Yes

Fields in this section have had wetland determinations completed. See the Definition of Wetland Label Codes for additional information regarding allowable activities under the wetland conservation provisions of the Food Security Act and/or when wetland determinations are necessary to determine USDA program eligibility.

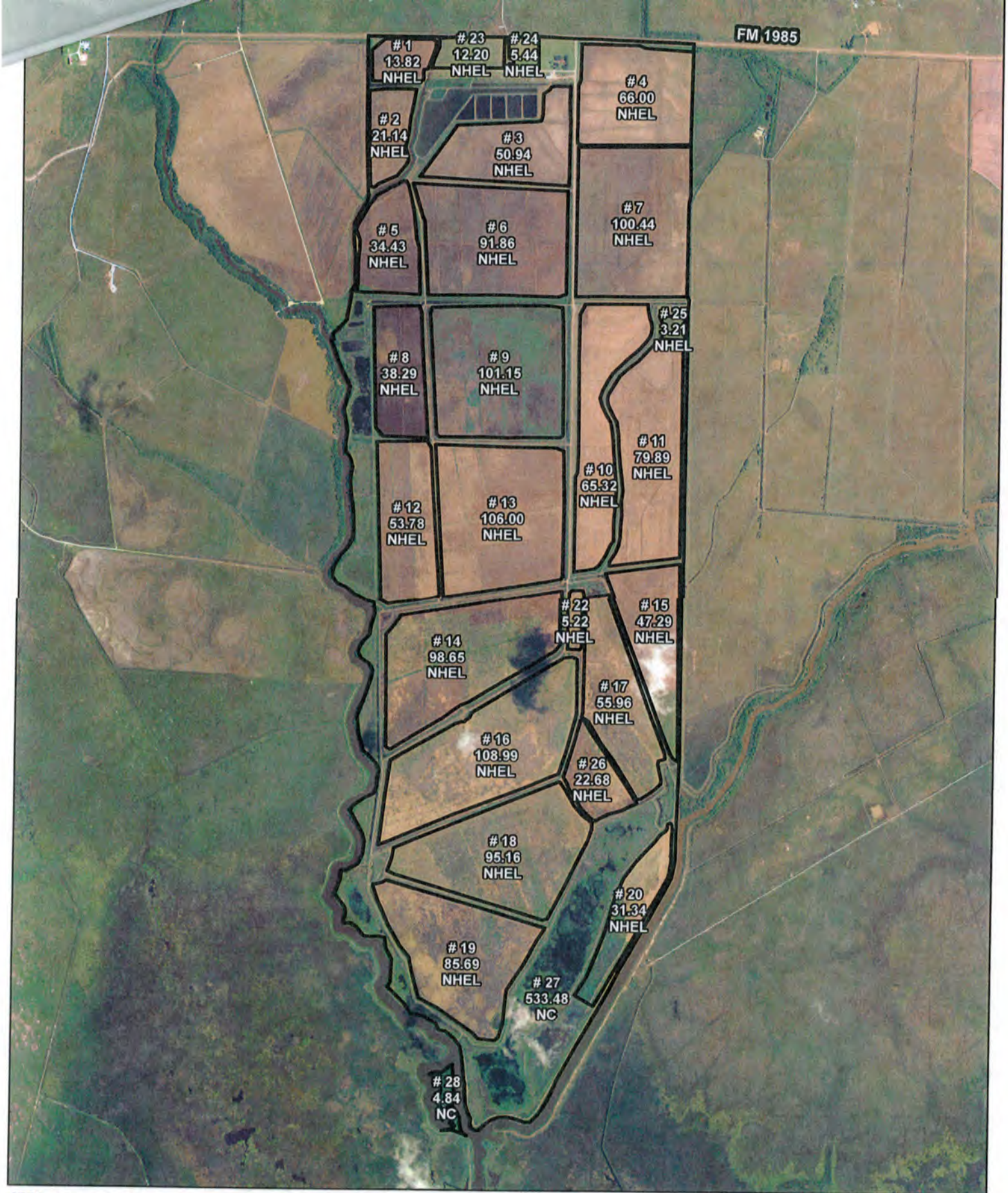
Field(s)	Wetland Label*	Occurrence Year (CW)**	Acres	Determination Date	Certification Date
27,28	W		286.1	4/20/2010	5/4/2010
20,27	FW		37.2	4/20/2010	5/4/2010
27	CWNA		55.5	4/20/2010	5/4/2010
All Remaining Fields	PC		1,498.7	4/20/2010	5/4/2010
	-				

The wetland determination was completed in the -Office It was -mailed to the person on 4/26/2010.

Remarks:	Field #20 and the edges immediately around it (partly Field #27) are Farmed Wetland (FW). Field #27 is Wetland except through the middle of the property (levees, roads, ditches). Those parts are PC (see map).Where Field #27 wraps around Field #2, it still meets Wetland. However, the part of Field #27 that is now a series of ponds to the east of Field #2 is Converted Wetland Non Agriculture (CWNA) since production is not possible. CWNA does not affect Farm Program eligibility. See map for a physical description/location of these areas. This tract has been evaluated entirely.

I certify that the above determinations are correct and were conducted in accordance with policies and procedures contained in the National Food Security Act Manual.

Signature Designated Conservationist	Date
[signature]	5/4/2010



USDA FSA

Farm: 120
Tract: 391
Chambers County

N W E S

Wetland Determination Identifiers
- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and labels, or contact NRCS.

Farmland Ac.: 1,933.21
Cropland Ac.: 1,394.89

0 740 1480 Feet

Crop Year: _____

Map Created: 04/05/2010

Certified Wetland Map

Date: 4/20/2010

Customer(s): WILLIAM R BEATY

District: TRINITY BAY SOIL & WATER CONSERVATION DISTRICT

Approximate Acres: 2043

Legal Description:

Field Office: ANAHUAC SERVICE CENTER

Agency: USDA-NRCS

Assisted By: DAVID MANTHEI

Legend

- Prior Converted Cropland (PC)
- Non Agricultural Conversion (CWNA)
- Farmed Wetland (FW)
- Wetland (W)
- Non Wetland (NW)
- road_tagc_l_tx071

,000 0 2,000 4,000 Feet

N

Exhibit C

Chambers, Texas

PROGRAM YEAR: 2009

FSA - 578 (02-01-91)

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

DATE: 3-3-2014
PAGE: 1

Farm Number: 120

Original: _____
Revision: _____
Cropland: 1,394.9
Farmland: 1,933.2

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

EXHIBIT "C"

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	End Date
391	1	GRASS	NAG	N	GZ		I	A	13.80		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	2	FALOW		N			I	A	21.20		Yes				2020
		Producer	AUBREY G JONES JR					Share 100.00			RMA Unit				
	3	FALOW		N			I	A	50.90		Yes				2020
		Producer	AUBREY G JONES JR					Share 100.00			RMA Unit				
	4	FALOW		N			I	A	66.00		Yes				2020
		Producer	AUBREY G JONES JR					Share 100.00			RMA Unit				
	5	FALOW		N			I	A	34.40		Yes				2020
		Producer	AUBREY G JONES JR					Share 100.00			RMA Unit				
	6	FALOW		N			I	A	91.90		Yes				2020
		Producer	AUBREY G JONES JR					Share 100.00			RMA Unit				
	7	FALOW		N			I	A	100.50		Yes				2020
		Producer	AUBREY G JONES JR					Share 100.00			RMA Unit				
	8	FALOW		N			I	A	38.30		Yes				2020
		Producer	AUBREY G JONES JR					Share 100.00			RMA Unit				
	9	GRASS	NAG	N	GZ		I	A	101.20		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	10	GRASS	NAG	N	GZ		I	A	65.30		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	11	GRASS	NAG	N	GZ		I	A	79.90		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	12	GRASS	NAG	N	GZ		I	A	53.80		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	13	GRASS	NAG	N	GZ		I	A	106.00		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	14	GRASS	NAG	N	GZ		I	A	98.70		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	15	GRASS	NAG	N	GZ		I	A	47.30		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	16	GRASS	NAG	N	GZ		I	A	109.00		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	17	GRASS	NAG	N	GZ		I	A	56.00		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	18	GRASS	NAG	N	GZ		I	A	95.20		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	End Date
	19	GRASS	NAG	N	GZ		I	A	85.70		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	20	GRASS	NAG	N	GZ		I	A	31.30		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	22	GRASS	NAG	N	GZ		I	A	5.00		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	23	GRASS	NAG	N	GZ		I	A	12.20		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	24	GRASS	NAG	N	GZ		I	A	5.40		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	25	GRASS	NAG	N	GZ		I	A	3.20		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	26	GRASS	NAG	N	GZ		I	A	22.70		Yes				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	27	GRASS	NAG	N	GZ		I	A	538.30		No				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	28	GRASS	NAG	N	GZ		I	A	4.80		No				2020
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				

Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated
GRASS	NAG	N	GZ	1534.80		FALOW		N		403.20							

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 1394.90 Reported on Cropland: 1394.90 Difference: 0.00 Reported on Non-Cropland: 543.10

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

REPORT OF COMMODITIES
FARM SUMMARY

PROGRAM YEAR: 2009

DATE: 3-3-2014
PAGE: 3

Original: _____
Revision: _____
Cropland: 1,394.9
Farmland: 1,933.2

NOTE: The authority for collecting the following information is Pub.L 107-76. This authority allows for the collection of information without prior OMB approval mandated by the Paperwork Reduction Act of 1995. The data will be used to determine eligibility for assistance. Furnishing the data is voluntary, however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the provisions of the Act.

Producer Name	C/C	Share	C/C	Share	C/C	Share	C/C	Share
AUBREY G JONES JR	FALOW	100.00						
WILLIAM R BEATY	GRASS	100.00						

Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
GRASS	NAG	N	GZ	1534.80		FALOW		N		403.20	

OPERATOR'S CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops and land uses listed herein are true and correct, and that all required crops and land uses have been reported for the farm as applicable. The signing of this form gives FSA representatives authorization to enter and inspect crops and land uses on the above identified land.

Operator's Signature (By)	Date

This program or activity will be conducted on a nondiscriminatory basis without regard to race, color, religion, national origin, sex, age, marital status, or disability.

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

PROGRAM YEAR: 2010

DATE: 3-3-2014
PAGE: 1

Original: _____
Revision: _____
Cropland: 1,394.9
Farmland: 1,933.2

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	End Date
391	1	FALOW		N			I	A	13.80		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	2	FALOW		N			I	A	21.10		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	3	RICE	LGR	I			I	A	50.90		Yes			4-13-2010	
		Producer	JOHN RHAME					Share 50.00			RMA Unit				
			ERIN B RHAME					50.00							
	4	RICE	LGR	I			I	A	66.00		Yes			4-3-2010	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH					Share 100.00			RMA Unit				
	5	FALOW		N			I	A	34.40		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	6	RICE	LGR	I			I	A	91.90		Yes			4-13-2010	
		Producer	JOHN RHAME					Share 50.00			RMA Unit				
			ERIN B RHAME					50.00							
	7	RICE	LGR	I			I	A	100.40		Yes			4-5-2010	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH					Share 100.00			RMA Unit				
	8	FALOW		N			I	A	38.30		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	9	FALOW		N			I	A	101.20		Yes				2012
		Producer	JOHN RHAME					Share 50.00			RMA Unit				
			ERIN B RHAME					50.00							
	10	FALOW		N			I	A	65.30		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	11	FALOW		N			I	A	79.90		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	12	RICE	LGR	I			I	A	53.80		Yes			4-20-2010	
		Producer	JOHN RHAME					Share 50.00			RMA Unit				
			ERIN B RHAME					50.00							
	13	RICE	LGR	I			I	A	106.00		Yes			4-20-2010	
		Producer	JOHN RHAME					Share 50.00			RMA Unit				
			ERIN B RHAME					50.00							
	14	FALOW		N			I	A	98.70		Yes				2012

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Farm Number: 120

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	End Date
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	15	FALOW		N			I	A	47.30		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	16	FALOW		N			I	A	109.00		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	17	FALOW		N			I	A	56.00		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	18	FALOW		N			I	A	95.20		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	19	FALOW		N			I	A	85.70		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	20	FALOW		N			I	A	31.30		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	22	GRASS	NAG	N	GZ		I	A	5.20		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	23	FALOW		N			I	A	12.20		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	24	FALOW		N			I	A	5.40		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	25	FALOW		N			I	A	3.20		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	26	FALOW		N			I	A	22.70		Yes				2012
		Producer	WILLIAM R BEATY					Share 100.00			RMA Unit				
	27	GRASS	NAG	N	GZ		I	A	533.50		No				2012
		Producer	EAST BAY FARMS LLC					Share 100.00			RMA Unit				
	28	GRASS	NAG	N	GZ		I	A	4.80		No				2012
		Producer	EAST BAY FARMS LLC					Share 100.00			RMA Unit				

Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated
RICE	LGR	I			469.00	GRASS	NAG	N	GZ	543.50		FALOW		N		920.70	

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 1394.90 Reported on Cropland: 1394.90 Difference: 0.00 Reported on Non-Cropland: 538.30

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

Operator Name and Address

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REPORT OF COMMODITIES
FARM SUMMARY

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NOTE: The authority for collecting the following information is Pub.L 107-76. This authority allows for the collection of information without prior OMB approval mandated by the Paperwork Reduction Act of 1995. The data will be used to determine eligibility for assistance. Furnishing the data is voluntary, however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the provisions of the Act.

Producer Name	C/C	Share	C/C	Share	C/C	Share	C/C	Share
EAST BAY FARMS LLC	GRASS	99.04						
GEORGE R WAY JR DBA WAY FARM AND RANCH	RICE	35.48						
JOHN RHAME	FALOW	5.50	RICE	32.26				
ERIN B RHAME	FALOW	5.49	RICE	32.26				
WILLIAM R BEATY	GRASS	.96	FALOW	89.01				

Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
RICE	LGR	I		469.00		GRASS	NAG	N	GZ	543.50	
FALOW		N		920.70							

OPERATOR'S CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops and land uses listed herein are true and correct, and that all required crops and land uses have been reported for the farm as applicable. The signing of this form gives FSA representatives authorization to enter and inspect crops and land uses on the above identified land.

Operator's Signature (By) | Date

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Chambers, Texas

PROGRAM YEAR: 2011

FSA - 578 (02-01-91)

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

DATE: 3-3-2014
PAGE: 1

Farm Number: 120

Original: _____
Revision: _____
Cropland: 1,394.9
Farmland: 1,933.2

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	SORGH	GRS	N	GR			I	A	13.80		Yes			4-13-2011		
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	2	RICE	LGR	I				I	A	21.10		Yes			4-15-2011		
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	3	RICE	LGR	I				I	A	50.90		Yes			5-1-2011		
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	4	GRASS	NAG	N	GZ			IN	A	66.00		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	5	SORGH	GRS	N	GR			I	A	34.40		Yes			4-25-2011		
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	6	SORGH	GRS	N	GR			I	A	91.90		Yes			4-13-2011		
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	7	GRASS	NAG	N	GZ			IN	A	100.40		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	8	GRASS	NAG	N	GZ			IN	A	38.30		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	9	GRASS	NAG	N	GZ			IN	A	101.20		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	10	RICE	LGR	I				I	A	65.30		Yes			4-17-2011		
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	11	RICE	LGR	I				I	A	79.90		Yes			4-21-2011		
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	12	SORGH	GRS	N	GR			IP	A	53.80		Yes					
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	13	SORGH	GRS	N	GR			IP	A	106.00		Yes					

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	14	GRASS	NAG	N	GZ			IN	A	98.70		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	15	GRASS	NAG	N	GZ			IN	A	47.30		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	16	GRASS	NAG	N	GZ			IN	A	109.00		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	17	GRASS	NAG	N	GZ			IN	A	56.00		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	18	SORGH	GRS	N	GR			I	A	95.20		Yes			4-25-2011		
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	19	SORGH	GRS	N	GR			I	A	85.70		Yes			4-25-2011		
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	20	SORGH	GRS	N	GR			I	A	31.30		Yes			4-25-2011		
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	22	GRASS	NAG	N	GZ			IN	A	5.20		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	23	SORGH	GRS	N	GR			I	A	12.20		Yes			4-25-2011		
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	24	SORGH	GRS	N	GR			I	A	5.40		Yes			4-25-2011		
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	25	GRASS	NAG	N	GZ			IN	A	3.20		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	26	GRASS	NAG	N	GZ			IN	A	22.70		Yes					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	27	GRASS	NAG	N	GZ			IN	A	533.50		No					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	28	GRASS	NAG	N	GZ			IN	A	4.80		No					2012
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	

Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated
RICE	LGR	I			217.20	GRASS	NAG	N	GZ	1186.30		SORGH	GRS	N	GR	529.70	

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 1394.90 Reported on Cropland: 1394.90 Difference: 0.00 Reported on Non-Cropland: 538.30

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

REPORT OF COMMODITIES
FARM SUMMARY

PROGRAM YEAR: 2011

DATE: 3-3-2014
PAGE: 3

Original: _____
Revision: _____
Cropland: 1,394.9
Farmland: 1,933.2

NOTE: The authority for collecting the following information is Pub.L 107-76. This authority allows for the collection of information without prior OMB approval mandated by the Paperwork Reduction Act of 1995. The data will be used to determine eligibility for assistance. Furnishing the data is voluntary, however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the provisions of the Act.

Producer Name	C/C	Share	C/C	Share	C/C	Share	C/C	Share
GEORGE R WAY JR DBA WAY FARM AND RANCH	RICE	76.57						
JOHN RHAME	SORGH	29.97	RICE	11.72				
WILLIAM R BEATY	GRASS	100.00	SORGH	40.06				
ERIN B RHAME	SORGH	29.97	RICE	11.71				

Crop/ Commodity	Variety/ Type	Irr Prac	Int Use	Rpt Exp	Det Exp	Rpt Pvt	Det Pvt	Rpt Vol	Det Vol
SORGH	GRS	N	GR			159.80			

Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
RICE	LGR	I		217.20		GRASS	NAG	N	GZ	1186.30	
SORGH	GRS	N	GR	369.90							

OPERATOR'S CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops and land uses listed herein are true and correct, and that all required crops and land uses have been reported for the farm as applicable. The signing of this form gives FSA representatives authorization to enter and inspect crops and land uses on the above identified land. A signature date (the date the producer signs the FSA-578) will also be captured.

Operator's Signature (By)	Date

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Chambers, Texas

PROGRAM YEAR: 2012

FSA - 578 (02-01-91)

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

DATE: 3-3-2014
PAGE: 1

Farm Number: 120

Original: _____
Revision: _____
Cropland: 1,394.9
Farmland: 1,933.2

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	GRASS	NAG	N	GZ			IN	A	13.80		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	2	GRASS	NAG	N	GZ			IN	A	21.10		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	3	GRASS	NAG	N	GZ			IN	A	50.90		Yes				01	2013
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	4	RICE	LGR	I				I	A	66.00		Yes			4-8-2012	01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	5	RICE	LGR	I				I	A	34.40		Yes			5-15-2012	01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	6	RICE	LGR	I				I	A	91.90		Yes			5-15-2012	01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	7	RICE	LGR	I				I	A	100.40		Yes			4-8-2012	01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	8	RICE	LGR	I				I	A	38.30		Yes			5-4-2012	01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	9	GRASS	NAG	N	GZ			IN	A	101.20		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	10	GRASS	NAG	N	GZ			IN	A	65.30		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	11	GRASS	NAG	N	GZ			IN	A	79.90		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	12	RICE	LGR	I				I	A	53.80		Yes			5-16-2012	01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	13	RICE	LGR	I				I	A	106.00		Yes			5-16-2012	01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
			ERIN B RHAME						50.00								
	14	GRASS	NAG	N	GZ			IN	A	98.70		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	15	GRASS	NAG	N	GZ			IN	A	47.30		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	16	GRASS	NAG	N	GZ			IN	A	109.00		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	17	GRASS	NAG	N	GZ			IN	A	56.00		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	18	GRASS	NAG	N	GZ			IN	A	95.20		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	19	GRASS	NAG	N	GZ			IN	A	85.70		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	20	GRASS	NAG	N	GZ			IN	A	31.30		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	22	GRASS	NAG	N	GZ			IN	A	5.20		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	23	GRASS	NAG	N	GZ			IN	A	12.20		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	24	GRASS	NAG	N	GZ			IN	A	5.40		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	25	GRASS	NAG	N	GZ			IN	A	3.20		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	26	GRASS	NAG	N	GZ			IN	A	22.70		Yes				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	27	GRASS	NAG	N	GZ			IN	A	533.50		No				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	28	GRASS	NAG	N	GZ			IN	A	4.80		No				01	2013
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	

Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated
RICE	LGR	I			490.80	GRASS	NAG	N	GZ	1442.40							

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 1394.90 Reported on Cropland: 1394.90 Difference: 0.00 Reported on Non-Cropland: 538.30

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

REPORT OF COMMODITIES
FARM SUMMARY

PROGRAM YEAR: 2012

DATE: 3-3-2014
PAGE: 3

Original: _____
Revision: _____
Cropland: 1,394.9
Farmland: 1,933.2

NOTE: The authority for collecting the following information is Pub.L 107-76. This authority allows for the collection of information without prior OMB approval mandated by the Paperwork Reduction Act of 1995. The data will be used to determine eligibility for assistance. Furnishing the data is voluntary, however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the provisions of the Act.

Producer Name	C/C	Share	C/C	Share	C/C	Share	C/C	Share
GEORGE R WAY JR DBA WAY FARM AND RANCH	RICE	41.71						
JOHN RHAME	GRASS	1.76	RICE	29.15				
ERIN B RHAME	GRASS	1.76	RICE	29.14				
WILLIAM R BEATY	GRASS	96.48						

Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
RICE	LGR	I		490.80		GRASS	NAG	N	GZ	1442.40	

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Operator's Signature (By)	Date

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Chambers, Texas

PROGRAM YEAR: 2013

FSA - 578 (02-01-91)

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

DATE: 3-3-2014
PAGE: 1

Farm Number: 120

Original: _____
Revision: _____
Cropland: 1,394.89
Farmland: 1,933.21

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	GRASS	NAG	N	GZ			I	A	13.82		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	2	RICE	LGR	I				I	A	21.14		Yes			5-26-2013	01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	3	SORGH	GRS	N	GR			IP	A	50.94		Yes				01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	4	GRASS	NAG	N	GZ			I	A	66.00		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	5	SORGH	GRS	N	GR			IP	A	34.43		Yes				01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	6	SORGH	GRS	N	GR			IP	A	91.86		Yes				01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	7	GRASS	NAG	N	GZ			I	A	100.44		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	8	GRASS	NAG	N	GZ			I	A	38.29		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	9	GRASS	NAG	N	GZ			I	A	101.15		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	10	RICE	LGR	I				I	A	65.32		Yes			5-26-2013	01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	11	RICE	LGR	I				I	A	79.89		Yes			3-23-2013	01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	12	SORGH	GRS	N	GR			IP	A	53.78		Yes				01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	
			ERIN B RHAME						50.00								
	13	SORGH	GRS	N	GR			IP	A	106.00		Yes				01	
		Producer	JOHN RHAME						Share 50.00			RMA Unit			NAP Unit	1336	

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
			ERIN B RHAME						50.00								
	14	GRASS	NAG	N	GZ			I	A	98.65		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	15A	RICE	LGR	I				I	A	41.00		Yes			3-23-2013	01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	15B	FALOW		N				I	A	6.29		Yes				01	
		Producer	GEORGE R WAY JR DBA WAY FARM AND RANCH						Share 100.00			RMA Unit			NAP Unit	20	
	16	GRASS	NAG	N	GZ			I	A	108.99		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	17	GRASS	NAG	N	GZ			I	A	55.96		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	18	GRASS	NAG	N	GZ			I	A	95.16		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	19	GRASS	NAG	N	GZ			I	A	85.69		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	20	GRASS	NAG	N	GZ			I	A	31.34		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	22	GRASS	NAG	N	GZ			I	A	5.22		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	23	GRASS	NAG	N	GZ			I	A	12.20		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	24	GRASS	NAG	N	GZ			I	A	5.44		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	25	GRASS	NAG	N	GZ			I	A	3.21		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	26	GRASS	NAG	N	GZ			I	A	22.68		Yes				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	27	GRASS	NAG	N	GZ			I	A	533.48		No				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	
	28	GRASS	NAG	N	GZ			I	A	4.84		No				01	2014
		Producer	WILLIAM R BEATY						Share 100.00			RMA Unit			NAP Unit	1305	

Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Farm Number: 120

Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated
RICE	LGR	I			207.35	GRASS	NAG	N	GZ	1382.56		SORGH	GRS	N	GR	337.01	
FALOW		N		6.29													

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 1394.89 Reported on Cropland: 1394.89 Difference: 0.00 Reported on Non-Cropland: 538.32

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

REPORT OF COMMODITIES
FARM SUMMARY

PROGRAM YEAR: 2013

DATE: 3-3-2014
PAGE: 4

Original: _____
Revision: _____
Cropland: 1,394.89
Farmland: 1,933.21

Operator Name and Address

WILLIAM R BEATY
33019 LONDONDERRY DR
WALLER, TX 77484-9784

NOTE: The authority for collecting the following information is Pub.L 107-76. This authority allows for the collection of information without prior OMB approval mandated by the Paperwork Reduction Act of 1995. The data will be used to determine eligibility for assistance. Furnishing the data is voluntary, however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the provisions of the Act.

Producer Name	C/C	Share	C/C	Share	C/C	Share	C/C	Share
JOHN RHAME	SORGH	50.00						
GEORGE R WAY JR DBA WAY FARM AND RANCH	FALOW	100.00	RICE	100.00				
ERIN B RHAME	SORGH	50.00						
WILLIAM R BEATY	GRASS	100.00						

Crop/ Commodity	Variety/ Type	Irr Prac	Int Use	Rpt Exp	Det Exp	Rpt Pvt	Det Pvt	Rpt Vol	Det Vol
SORGH	GRS	N	GR			337.01			

Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
RICE	LGR	I		207.35		GRASS	NAG	N	GZ	1382.56	
FALOW		N		6.29							

CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops/commodities and land uses listed herein are true and correct and that all required crops/commodities and land uses have been reported for the farms as applicable. Absent any different or contrary prior subsequent certification filed by any producer for any crop for which NAP coverage has been purchased, I certify that the applicable crop, type, practice, and intended use is not planted if it is not included on the Report of Commodities for this crop year. The signing of this form gives FSA representatives authorization to enter and inspect crops/commodities and land uses on the above identified land. A signature date (the date the producer signs the FSA-578) will also be captured.

Operator's Signature (By)

Date

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

PROGRAM YEAR: 2014

DATE: 7-22-2014
PAGE: 1

Original: LWM
Revision:
Cropland: 1,394.89
Farmland: 1,933.21

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	FALOW		N				I	A	13.82		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	2	FALOW		N				I	A	21.14		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	3	RICE	LGR	I				I	A	50.94		Yes			5-12-2014	01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	4	FALOW		N				I	A	66.00		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	5	FALOW		N				I	A	34.43		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	6	FALOW		N				I	A	91.86		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	7	FALOW		N				I	A	100.44		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	8	FALOW		N				I	A	38.29		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	9	SOYBN	COM	N	GR			I	A	101.15		Yes			6-14-2014	01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	10	GRASS	NAG	N	LS			I	A	65.32		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit			NAP Unit	1406	
	11	GRASS	NAG	N	LS			I	A	79.89		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit			NAP Unit	1406	
	12	FALOW		N				I	A	53.78		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	
	13	FALOW		N				I	A	106.00		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit			NAP Unit	1307	

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Farm Number: 120

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
	14	RICE	LGR	I				I	A	98.65		Yes			5-26-2014	01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	
	15	GRASS	NAG	N	LS			I	A	47.29		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit				NAP Unit 1406	
	16	RICE	LGR	I				I	A	108.99		Yes			5-25-2014	01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	
	17	GRASS	NAG	N	LS			I	A	55.96		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit				NAP Unit 1406	
	18	SOYBN	COM	N	GR			I	A	95.16		Yes			6-14-2014	01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	
	19	RICE	MGR	I				I	A	85.69		Yes			5-30-2014	01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	
	20	GRASS	NAG	N	LS			I	A	31.34		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit				NAP Unit 1406	
	22	GRASS	NAG	N	LS			I	A	5.22		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit				NAP Unit 1406	
	23	FALOW		N				I	A	12.20		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	
	24	FALOW		N				I	A	5.44		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	
	25	GRASS	NAG	N	LS			I	A	3.21		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit				NAP Unit 1406	
	26	GRASS	NAG	N	LS			I	A	22.68		Yes				01	2015
		Producer	EAST BAY FARMS LLC						Share 100.00			RMA Unit				NAP Unit 1406	
	27	GRASS	NAG	N	LS			I	A	533.48		No				01	2015
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	
	28	GRASS	NAG	N	LS			I	A	4.84		No				01	2015
		Producer	LANGLEY FAMILY FARMS						Share 100.00			RMA Unit				NAP Unit 1307	

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Farm Number: 120

Tract Number	CLU/ Field	Crop/ Commodity		Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured		Planting Date	Planting Period	End Date
Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated		Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	
GRASS	NAG	N	LS	849.23			RICE	MGR	I			85.69	RICE	LGR	I			258.58	
SOYBN	COM	N	GR	196.31			FALOW		N		543.40								

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 1394.89 Reported on Cropland: 1394.89 Difference: 0.00 Reported on Non-Cropland: 538.32

USDA United States Department of Agriculture
Farm Service Agency

Crop Acreage Reporting System (CARS)

CARS Home | About CARS | Help | Contact Us | Exit CARS | Logout of eAuth

CARS Menu

Welcome LEAH YATES
Role: County

State and County Selection
Acreage Report Search
Crop Acreage Reports
Tract Selection
Reports
Manage Crop Defaults

Certification

Year: 2014 **State:** Texas (48) **County:** Chambers (071)

- The selected crops have been certified.

Farm Information

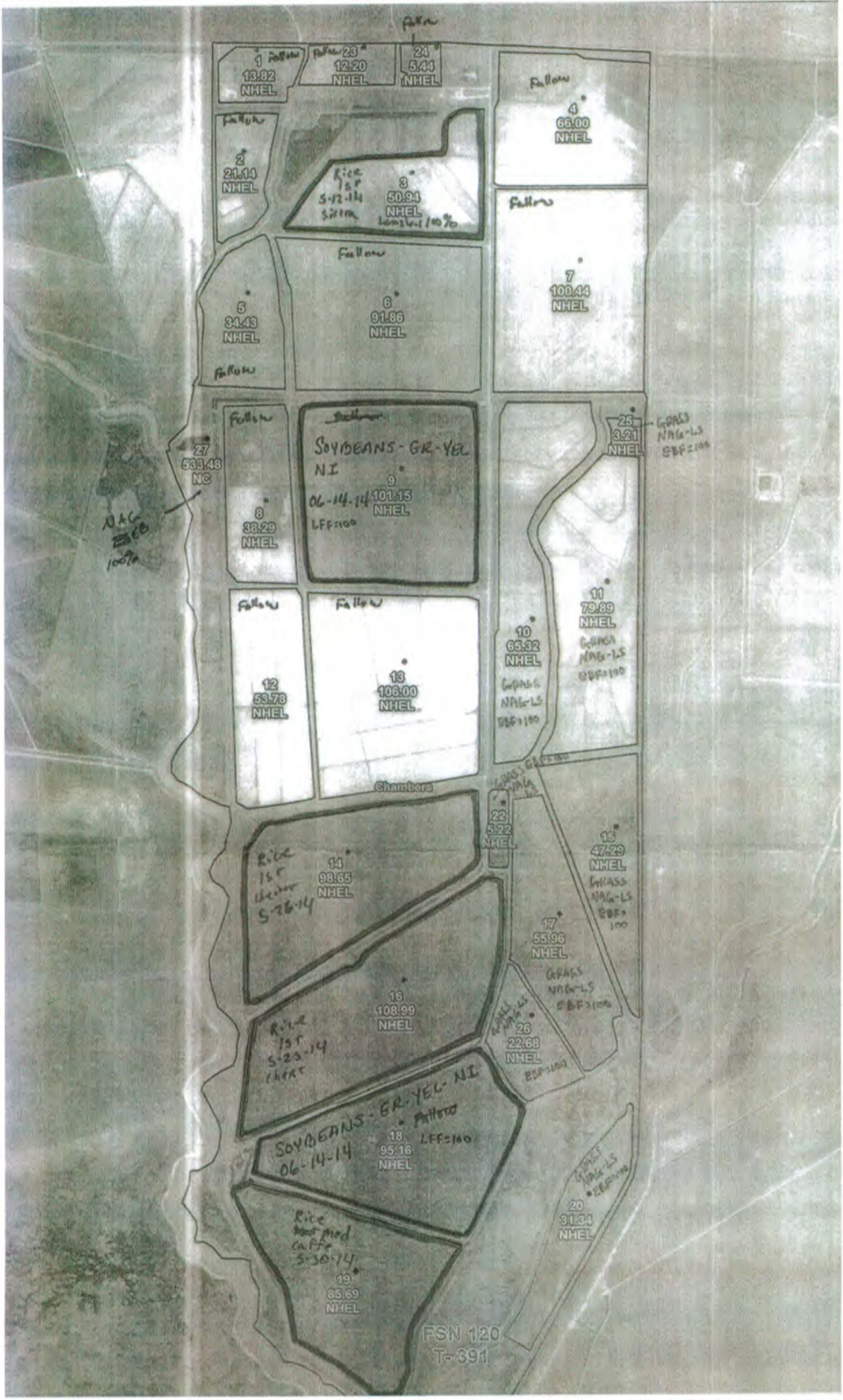
Farm Number: 120
Operator Name: EAST BAY FARMS LLC
Total Rpt Cropland: 1394.89 of 1394.89
Operator Tax ID(Last 4): 6258 E

Tract Information

Tract Number: 391
Tract Rpt Cropland: 1394.89 of 1394.89

Signature Date (MM/DD/YYYY) 07/22/2014

Tract Num	Field Num	Crop/ Comm	Var/ Type	Int Use	Irr Prc	Rpt Qty	Det Qty	Crop Status	Planting Period	Field ID	Certification Date
391	1	FALOW	-	-	N	13.82	-	I	01	-	07/11/2014
391	2	FALOW	-	-	N	21.14	-	I	01	-	07/11/2014
391	3	RICE	LGR	-	I	50.94	-	I	01	-	07/11/2014
391	4	FALOW	-	-	N	66.00	-	I	01	-	07/11/2014
391	5	FALOW	-	-	N	34.43	-	I	01	-	07/11/2014
391	6	FALOW	-	-	N	91.86	-	I	01	-	07/11/2014
391	7	FALOW	-	-	N	100.44	-	I	01	-	07/11/2014
391	8	FALOW	-	-	N	38.29	-	I	01	-	07/11/2014
391	9	SOYBN	COM	GR	N	101.15	-	I	01	-	07/22/2014
391	10	GRASS	NAG	LS	N	65.32	-	I	01	-	07/11/2014
391	11	GRASS	NAG	LS	N	79.89	-	I	01	-	07/11/2014
391	12	FALOW	-	-	N	53.78	-	I	01	-	07/11/2014
391	13	FALOW	-	-	N	106.00	-	I	01	-	07/11/2014
391	14	RICE	LGR	-	I	98.65	-	I	01	-	07/11/2014
391	15	GRASS	NAG	LS	N	47.29	-	I	01	-	07/11/2014
391	16	RICE	LGR	-	I	108.99	-	I	01	-	07/11/2014
391	17	GRASS	NAG	LS	N	55.96	-	I	01	-	07/11/2014
391	18	SOYBN	COM	GR	N	95.16	-	I	01	-	07/22/2014
391	19	RICE	MGR	-	I	85.69	-	I	01	-	07/11/2014



Fallow
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24
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Rice
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Fallow
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11
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GRASS
NAG-LS
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GRASS
NAG-LS
12
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13
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Rice
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NHEL
FSN 120
T-391

Chambers, Texas

PROGRAM YEAR: 2015

FSA - 578 (02-01-91)

REPORT OF COMMODITIES
FARM SUMMARY

DATE: 7-13-2015
PAGE: 3

Farm Number: 120

Original: _____
Revision: 3
Cropland: 983.54
Farmland: 1,933.23

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

NOTE: The authority for collecting the following information is Pub.L 107-76. This authority allows for the collection of information without prior OMB approval mandated by the Paperwork Reduction Act of 1995. The data will be used to determine eligibility for assistance. Furnishing the data is voluntary, however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the provisions of the Act.

Producer Name	C/C	Share	C/C	Share	C/C	Share	C/C	Share
LANGLEY FAMILY FARMS	RICE	100.00	FALOW	100.00	GRASS	100.00		

Crop/ Commodity	Variety/ Type	Irr Prac	Int Use	Rpt Exp	Det Exp	Rpt Pvt	Det Pvt	Rpt Vol	Det Vol	Rpt NA	Det NA
RICE	LGR	I	GR			258.09					

Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
RICE	LGR	I	GR	230.58		FALOW		N		494.87	
GRASS	NAG	N	LS	357.05							

CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops/commodities and land uses listed herein are true and correct and that all required crops/commodities and land uses have been reported for the farms as applicable. Absent any different or contrary prior subsequent certification filed by any producer for any crop for which NAP coverage has been purchased, I certify that the applicable crop, type, practice, and intended use is not planted if it is not included on the Report of Commodities for this crop year. The signing of this form gives FSA representatives authorization to enter and inspect crops/commodities and land uses on the above identified land. A signature date (the date the producer signs the FSA-578) will also be captured.

Operator's Signature (By) Carol J Freeman, Manager POA — POA / Authority Verified by — Date 7-13-15

This program or activity will be conducted on a nondiscriminatory basis without regard to race, color, religion, national origin, sex, age, marital status, or disability.

RECEIVED
JUL 13 2015
LIBERTY - HARDIN - CHAMBERS FSA

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

PROGRAM YEAR: 2015

DATE: 7-13-2015
PAGE: 1

Original: _____
Revision: J*
Cropland: 983.54
Farmland: 1933.23

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	FALOW		N				C	I	A	13.82		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	2	FALOW		N				C	I	A	21.14		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	3	RICE	LGR	I	GR			OC	IP	A	50.94		Yes				01	
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	4	RICE	LGR	I	GR			OC	I	A	66.00		Yes			5-12-2015	01	
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	5	RICE	LGR	I	GR			OC	I	A	34.43		Yes			5-30-2015	01	
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	6	RICE	LGR	I	GR			OC	I	A	91.86		Yes			6-6-2015	01	
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	8	RICE	LGR	I	GR			OC	I	A	38.29		Yes			6-1-2015	01	
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	9	RICE	LGR	I	GR			OC	IP	A	101.15		Yes				01	
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	12	FALOW		N				C	I	A	53.78		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	13	RICE	LGR	I	GR			OC	IP	A	106.00		Yes				01	
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	14	FALOW		N				C	I	A	98.65		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	16	FALOW		N				C	I	A	108.99		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		

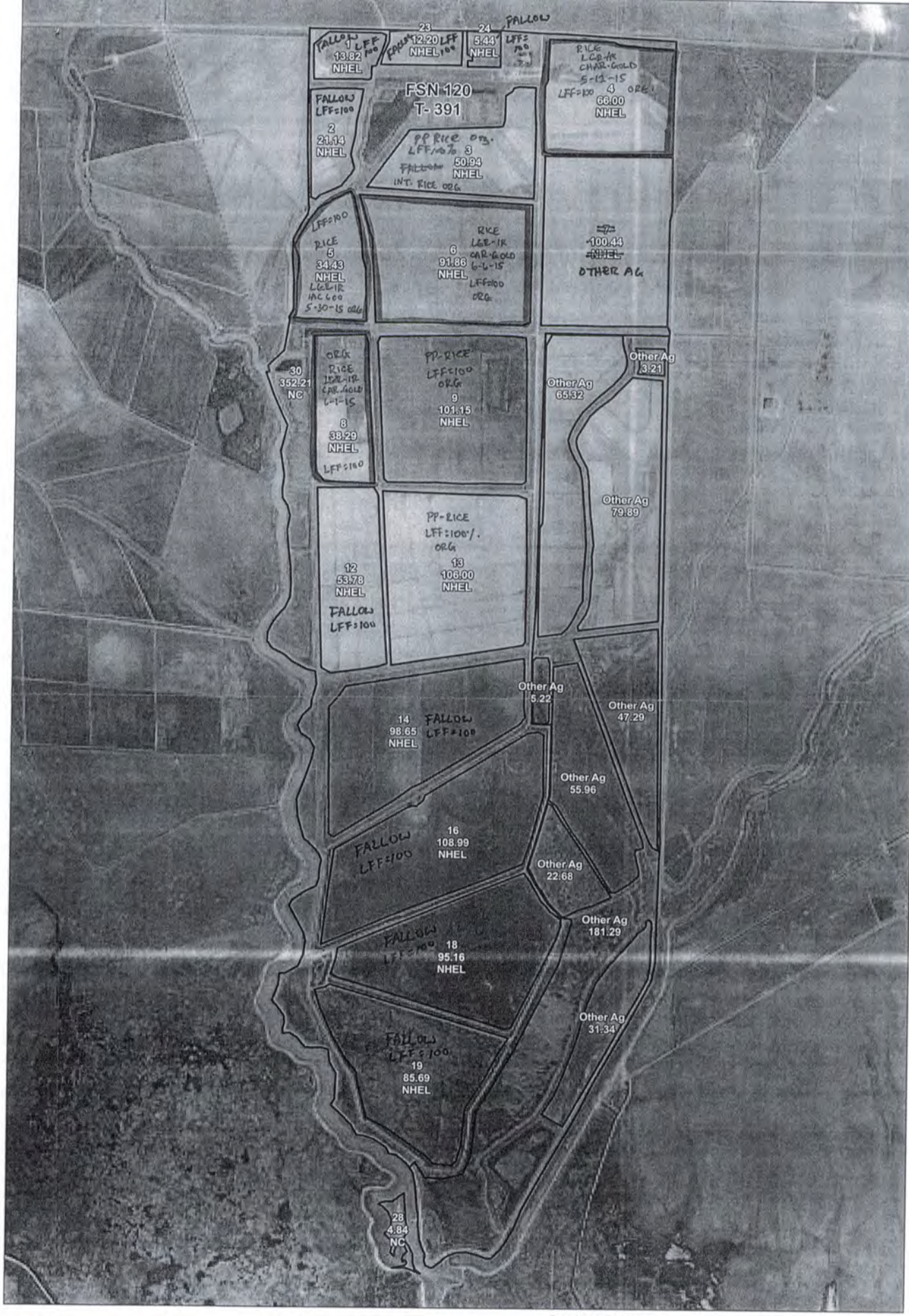
REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
	18	FALOW		N				C	I	A	95.16		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	19	FALOW		N				C	I	A	85.69		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	23	FALOW		N				C	I	A	12.20		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	24	FALOW		N				C	I	A	5.44		Yes				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	28	GRASS	NAG	N	LS			C	I	A	4.84		No				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		
	30	GRASS	NAG	N	LS			C	I	A	352.21		No				01	2016
		Producer LANGLEY FAMILY FARMS								Share 100.00		RMA Unit				NAP Unit 1307		

Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irrig	Irrigated
RICE	LGR	I	GR		488.67	FALOW		N		494.87		GRASS	NAG	N	LS	357.05	

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 983.54 Reported on Cropland: 983.54 Difference: 0.00 Reported on Non-Cropland: 357.05



USDA

Farm: 120
Tract: 391

Chambers County

Wetland Determination Identifiers

- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and labels, or contact NRCS

Crop Year 2015

Map Created: October 02, 2014

0 600 1,200 Feet

N

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

REPORT OF COMMODITIES
FARM SUMMARY

PROGRAM YEAR: 2016

DATE: 6-14-2016
PAGE: 3

Original: MM
Revision:
Cropland: 983.54
Farmland: 1,933.23

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

NOTE: The following statement is made in accordance with the Privacy Act of 1974 (5 USC 552a - as amended). The authority for requesting the information identified on this form is 7 CFR Part 718, the Farm Security and Rural Investment Act of 2002 (Pub. L. 107-171), and the Food, Conservation, and Energy Act of 2008 (Pub. L. 110-246). The information will be used to collect report of acreage and land use data needed to determine program eligibility. The information collected on the form may be disclosed to other Federal, State, Local government agencies, Tribal agencies, and nongovernmental entities that have been authorized access to the information by statute or regulation and/or as described in applicable Routine Uses identified in the System of Records Notice for USDA/FSA-2, Farm Records File (Automated). Providing the requested information is voluntary. However, failure to furnish the requested information will result in a determination of ineligibility for program benefits.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0560-0004. The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The provisions of criminal and civil fraud, privacy, and other statutes may be applicable to the information provided. RETURN THIS COMPLETED FORM TO YOUR COUNTY FSA OFFICE.

Producer Name	C/C	Share	C/C	Share	C/C	Share	C/C	Share
LANGLEY FAMILY FARMS	RICE	100.00	GRASS	100.00				

Planting Period	Crop/ Commodity	Variety/ Type	Irr Prac	Int Use	Rpt Exp	Det Exp	Rpt Pvt	Det Pvt	Rpt Vol	Det Vol	Rpt NA	Det NA
01	RICE	LGR	I	GR			414.79					

Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
01	RICE	LGR	I	GR	116.94		01	GRASS	NAG	N	LS	808.86	

CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops/commodities and land uses listed herein are true and correct and that all required crops/commodities and land uses have been reported for the farms as applicable. Absent any different or contrary prior subsequent certification filed by any producer for any crop for which NAP coverage has been purchased, I certify that the applicable crop, type, practice, and intended use is not planted if it is not included on the Report of Commodities for this crop year. The signing of this form gives FSA representatives authorization to enter and inspect crops/commodities and land uses on the above identified land. A signature date (the date the producer signs the FSA-578) will also be captured.

Operator's Signature (By) Carol J Freeman, POA — POA / Authority Verified — Date 6-14-2016

Chambers, Texas

FSA - 578 (02-01-91)

Farm Number: 120

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

PROGRAM YEAR: 2016

DATE: 6-14-2016
PAGE: 1

Original: MM
Revision:
Cropland: 983.54
Farmland: 1933.23

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	GRASS	NAG	N	LS			C	I	A	13.82		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	2	GRASS	NAG	N	LS			C	I	A	21.14		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	3	RICE	LGR	I	GR			OC	I	A	50.94		Yes			5-5-2016	01	
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	4	RICE	LGR	I	GR			OC	I	A	66.00		Yes			4-12-2016	01	
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	5	GRASS	NAG	N	LS			C	I	A	34.43		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	6	GRASS	NAG	N	LS			C	I	A	91.86		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	8	GRASS	NAG	N	LS			C	I	A	38.29		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	9	RICE	LGR	I	GR			OC	IP	A	101.15		Yes				01	
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	12	GRASS	NAG	N	LS			C	I	A	53.78		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	13	RICE	LGR	I	GR			OC	IP	A	106.00		Yes				01	
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	14	RICE	LGR	I	GR			OC	IP	A	98.65		Yes				01	
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	
	16	RICE	LGR	I	GR			OC	IP	A	108.99		Yes				01	
		Producer LANGLEY FAMILY FARMS						Share 100.00				RMA Unit					NAP Unit 1307	

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
	18	GRASS	NAG	N	LS			C	I	A	95.16		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share	100.00			RMA Unit					NAP Unit	1307
	19	GRASS	NAG	N	LS			C	I	A	85.69		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share	100.00			RMA Unit					NAP Unit	1307
	23	GRASS	NAG	N	LS			C	I	A	12.20		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share	100.00			RMA Unit					NAP Unit	1307
	24	GRASS	NAG	N	LS			C	I	A	5.44		Yes				01	2020
		Producer LANGLEY FAMILY FARMS						Share	100.00			RMA Unit					NAP Unit	1307
	28	GRASS	NAG	N	LS			C	I	A	4.84		No				01	2020
		Producer LANGLEY FAMILY FARMS						Share	100.00			RMA Unit					NAP Unit	1307
	30	GRASS	NAG	N	LS			C	I	A	352.21		No				01	2020
		Producer LANGLEY FAMILY FARMS						Share	100.00			RMA Unit					NAP Unit	1307

PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr
01	RICE	LGR	I	GR		531.73	01	GRASS	NAG	N	LS	808.86								

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 983.54 Reported on Cropland: 983.54 Difference: 0.00 Reported on Non-Cropland: 357.05

USDA United States Department of Agriculture
Farm Service Agency

Crop Acreage Reporting System (CARS)

CARS Home | About CARS | Help | Contact Us | Exit CARS | Logout of eAuth

CARS Menu

- Welcome LEAH YATES
- Role: County
- Nationwide Customer Service
- State and County Selection
- Acreage Report Search
- Crop Acreage Reports
- Tract Selection
- Reports
- Manage Crop Defaults
- NAP Application
- FSA Applications

Certify by Farm

Year: 2016 **State:** Texas (48) **County:** Chambers (071)

- **The selected crops have been certified.**

Farm Information

Farm Number: 120 Total Rpt Cropland: 983.54 of 983.54
Operator Name: EAST BAY FARMS LLC

Tract Information

Tract Number: 391 Tract Rpt Cropland: 983.54 of 983.54
Tract Owner(s): EAST BAY FARMS LLC

Signature Date (MM/DD/YYYY) 06/14/2016

Tract Num	Field Num	Crop/ Comm	Var/ Type	Int Use	Irr Prc	Organic Status	Rpt Qty	Det Qty	Crop Status	Planting Period	Field ID	Certification Date
391	1	GRASS	NAG	LS	N	C	13.82	-	I	01	-	06/14/2016
391	2	GRASS	NAG	LS	N	C	21.14	-	I	01	-	06/14/2016
391	3	RICE	LGR	GR	I	OC	50.94	-	I	01	-	06/14/2016
391	4	RICE	LGR	GR	I	OC	66.00	-	I	01	-	06/14/2016
391	5	GRASS	NAG	LS	N	C	34.43	-	I	01	-	06/14/2016
391	6	GRASS	NAG	LS	N	C	91.86	-	I	01	-	06/14/2016
391	8	GRASS	NAG	LS	N	C	38.29	-	I	01	-	06/14/2016
391	9	RICE	LGR	GR	I	OC	101.15	-	IP	01	-	06/14/2016
391	12	GRASS	NAG	LS	N	C	53.78	-	I	01	-	06/14/2016
391	13	RICE	LGR	GR	I	OC	106.00	-	IP	01	-	06/14/2016
391	14	RICE	LGR	GR	I	OC	98.65	-	IP	01	-	06/14/2016
391	16	RICE	LGR	GR	I	OC	108.99	-	IP	01	-	06/14/2016
391	18	GRASS	NAG	LS	N	C	95.16	-	I	01	-	06/14/2016
391	19	GRASS	NAG	LS	N	C	85.69	-	I	01	-	06/14/2016
391	23	GRASS	NAG	LS	N	C	12.20	-	I	01	-	06/14/2016
391	24	GRASS	NAG	LS	N	C	5.44	-	I	01	-	06/14/2016
391	28	GRASS	NAG	LS	N	C	4.84	-	I	01	-	06/14/2016
391	30	GRASS	NAG	LS	N	C	352.21	-	I	01	-	06/14/2016


FSN 120
T-391
13.82
NHEL
12.20
NHEL
5.44
NHEL
GRASS
NAG-LS
LFF=100
2
21.14
NHEL
RICE
ORG
LGR-IR
MEDIUM
5-5-16
3
50.94
NHEL
LFF=100%
4
66.00
NHEL
RICE
ORG &
LGR-IR
CHEMGRE
4-12-16
LFF=100%
Other Ag
100.44
5
34.43
NHEL
GRASS
NAG-LS
LFF=100%
6
91.86
NHEL
GRASS
NAG-LS
LFF=100
30
352.21
NC
GRASS
NAG-LS
LFF=100%
8
38.29
NHEL
9
101.15
NHEL
PP-ORG
RICE
LGR-IR
LFF=100%
Other Ag
3.21
Other Ag
65.32
Other Ag
79.89
12
53.78
NHEL
13
106.00
NHEL
PP-RICE
LGR-IR
ORGANIC
LFF=100%
Other Ag
5.22
Other Ag
47.29
PP-RICE
ORG
LGR-IR
14
98.65
NHEL
LFF=100%
Other Ag
55.96
16
108.99
NHEL
PP-RICE
LGR-IR
ORG
LFF=100%
Other Ag
22.68
Other Ag
181.29
18
95.16
NHEL
GRASS
NAG-LS
LFF=100
Other Ag
31.34
19
85.69
NHEL
GRASS
NAG-LS
LFF=100
28

Chambers, Texas

PROGRAM YEAR: 2017

FSA - 578 (09-13-16)

REPORT OF COMMODITIES
FARM SUMMARY

DATE: 6-15-2017
PAGE: 3

Farm Number: 120

Original: JM
Revision: _____
Cropland: 983.54
Farmland: 1,933.23

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

NOTE: The following statement is made in accordance with the Privacy Act of 1974 (5 USC 552a as amended). The authority for requesting the information identified on this form is 7 CFR Part 718, the Farm Security and Rural Investment Act of 2002 (Pub L. 107-171), and the Agricultural Act of 2014 (Pub. L. 113-79). The information will be used to collect producer certification of the report of acreage of crops/commodities and land use data which is needed in order to determine producer eligibility to participate in and receive benefits under FSA programs. The information collected on the form may be disclosed to other Federal, State, Local government agencies, Tribal agencies, and nongovernmental entities that have been authorized access to the information by statute or regulation and/or as described in applicable Routine Uses identified in the System of Records Notice for USDA/FSA-2, Farm Records File (Automated) and USDA/FSA-14, Applicant/Borrower. Providing the requested information is voluntary. However, failure to furnish the requested information may result in a denial of the producers request to participate in and receive benefits under FSA programs. According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0560-0175. The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The provisions of criminal and civil fraud, privacy, and other statutes may be applicable to the information provided. RETURN THIS COMPLETED FORM TO YOUR COUNTY FSA OFFICE.

Producer Name	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share
LANGLEY FAMILY FARMS	RICE	LGR	100.00	GRASS	NAG	100.00	FALOW		100.00			

Planting Period	Crop/ Commodity	Variety/ Type	Irr Prac	Int Use	Rpt Exp	Det Exp	Rpt Pvt	Det Pvt	Rpt Vol	Det Vol	Rpt NA	Det NA
01	RICE	LGR	I	GR			391.67					

Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
01	RICE	LGR	I	GR	159.93		01	FALOW		N		227.65	
01	GRASS	NAG	N	LS	561.34								

CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops/commodities and land uses listed herein are true and correct and that all required crops/commodities and land uses have been reported for the farm as applicable. Absent any different or contrary prior subsequent certification filed by any producer for any crop for which NAP coverage has been purchased, I certify that the applicable crop, type, practice, and intended use is not planted if it is not included on the Report of Commodities for this crop year. The signing of this form gives FSA representatives authorization to enter and inspect crops/commodities and land uses on the above identified land. A signature date (the date the producer signs the FSA-578) will also be captured.

Operator's Signature (By) Carol J Jones, POA — POA / Authority Verified — Date 6-15-17

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDAs TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English. To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov. USDA is an equal opportunity provider, employer, and lender.

RECEIVED
JUN 15 2017
LIBERTY - HARDIN - CHAMBERS FSA

Chambers, Texas

FSA - 578 (09-13-16)

Farm Number: 120

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

PROGRAM YEAR: 2017

DATE: 6-15-2017
PAGE: 1

Original: JH
Revision:
Cropland: 983.54
Farmland: 1933.23

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	Native Sod	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	GRASS	NAG	N	LS			C	N	I	A	13.82		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	2	GRASS	NAG	N	LS			C	N	I	A	21.14		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	3	RICE	LGR	I	GR			OC	N	I	A	50.94		Yes			5-30-2017	01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	4	GRASS	NAG	N	LS			C	N	I	A	66.00		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	5	FALOW		N				C	N	I	A	34.43		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	6	RICE	LGR	I	GR			OC	N	IP	A	91.86		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	8	FALOW		N				C	N	I	A	38.29		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	9	FALOW		N				C	N	I	A	101.15		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	12	FALOW		N				C	N	I	A	53.78		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	13	RICE	LGR	I	GR			OC	N	IP	A	106.00		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	14	RICE	LGR	I	GR			OC	N	IP	A	98.65		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	16	RICE	LGR	I	GR			OC	N	I	A	108.99		Yes			6-2-2017	01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Farm Number: 120

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	Native Sod	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	18	RICE	LGR	I	GR			OC	N	IP	A	95.16		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	19	GRASS	NAG	N	LS			C	N	I	A	85.69		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	23	GRASS	NAG	N	LS			C	N	I	A	12.20		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	24	GRASS	NAG	N	LS			C	N	I	A	5.44		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	28	GRASS	NAG	N	LS			C	N	I	A	4.84		No				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	30	GRASS	NAG	N	LS			C	N	I	A	352.21		No				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307

PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr
01	RICE	LGR	I	GR		551.60	01	FALOW		N		227.65		01	GRASS	NAG	N	LS	561.34	

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 983.54 Reported on Cropland: 983.54 Difference: 0.00 Reported on Non-Cropland: 357.05

Chambers, Texas

PROGRAM YEAR: 2017

FSA - 578 (09-13-16)

REPORT OF COMMODITIES
FARM SUMMARY

DATE: 6-26-2017
PAGE: 3

Farm Number: 120

Original: _____
Revision: WM
Cropland: 983.54
Farmland: 1,933.23

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

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Producer Name	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share
LANGLEY FAMILY FARMS	RICE	LGR	100.00	GRASS	NAG	100.00	FALOW		100.00			

Planting Period	Crop/ Commodity	Variety/ Type	Irr Prac	Int Use	Rpt Exp	Det Exp	Rpt Pvt	Det Pvt	Rpt Vol	Det Vol	Rpt NA	Det NA
01	RICE	LGR	I	GR			586.68					

Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
01	RICE	LGR	I	GR	159.93		01	FALOW		N		53.78	
01	GRASS	NAG	N	LS	540.20								

CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops/commodities and land uses listed herein are true and correct and that all required crops/commodities and land uses have been reported for the farm as applicable. Absent any different or contrary prior subsequent certification filed by any producer for any crop for which NAP coverage has been purchased, I certify that the applicable crop, type, practice, and intended use is not planted if it is not included on the Report of Commodities for this crop year. The signing of this form gives FSA representatives authorization to enter and inspect crops/commodities and land uses on the above identified land. A signature date (the date the producer signs the FSA-578) will also be captured.

Operator's Signature (By) Carol Thomas, POA — POA Authority Verified — Date 06-26-2017

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDAs TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English. To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov. USDA is an equal opportunity provider, employer, and lender.

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Chambers, Texas

PROGRAM YEAR: 2017

FSA - 578 (09-13-16)

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

DATE: 6-26-2017
PAGE: 1

Farm Number: 120

Original: _____
Revision: WM
Cropland: 983.54
Farmland: 1933.23

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	Native Sod	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	GRASS	NAG	N	LS			C	N	I	A	13.82		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	2	RICE	LGR	I	GR			OC	N	IP	A	21.14		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	3	RICE	LGR	I	GR			OC	N	I	A	50.94		Yes			5-30-2017	01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	4	GRASS	NAG	N	LS			C	N	I	A	66.00		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	5	RICE	LGR	I	GR			OC	N	IP	A	34.43		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	6	RICE	LGR	I	GR			OC	N	IP	A	91.86		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	8	RICE	LGR	I	GR			OC	N	IP	A	38.29		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	9	RICE	LGR	I	GR			OC	N	IP	A	101.15		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	12	FALOW		N				C	N	I	A	53.78		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	13	RICE	LGR	I	GR			OC	N	IP	A	106.00		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	14	RICE	LGR	I	GR			OC	N	IP	A	98.65		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307
	16	RICE	LGR	I	GR			OC	N	I	A	108.99		Yes			6-2-2017	01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location: Chambers, Texas					NAP Unit	1307

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

Farm Number: 120

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	Native Sod	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	18	RICE	LGR	I	GR			OC	N	IP	A	95.16		Yes				01	
		Producer	LANGLEY FAMILY FARMS						Share	100.00		FSA Physical Location:		Chambers, Texas				NAP Unit	1307
	19	GRASS	NAG	N	LS			C	N	I	A	85.69		Yes				01	2020
		Producer	LANGLEY FAMILY FARMS						Share	100.00		FSA Physical Location:		Chambers, Texas				NAP Unit	1307
	23	GRASS	NAG	N	LS			C	N	I	A	12.20		Yes				01	2020
		Producer	LANGLEY FAMILY FARMS						Share	100.00		FSA Physical Location:		Chambers, Texas				NAP Unit	1307
	24	GRASS	NAG	N	LS			C	N	I	A	5.44		Yes				01	2020
		Producer	LANGLEY FAMILY FARMS						Share	100.00		FSA Physical Location:		Chambers, Texas				NAP Unit	1307
	28	GRASS	NAG	N	LS			C	N	I	A	4.84		No				01	2020
		Producer	LANGLEY FAMILY FARMS						Share	100.00		FSA Physical Location:		Chambers, Texas				NAP Unit	1307
	30	GRASS	NAG	N	LS			C	N	I	A	352.21		No				01	2020
		Producer	LANGLEY FAMILY FARMS						Share	100.00		FSA Physical Location:		Chambers, Texas				NAP Unit	1307

PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr
01	RICE	LGR	I	GR		746.61	01	FALOW		N		53.78		01	GRASS	NAG	N	LS	540.20	

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 983.54 Reported on Cropland: 983.54 Difference: 0.00 Reported on Non-Cropland: 357.05

Chambers, Texas

FSA - 578 (09-13-16)

Farm Number: 120

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

REPORT OF COMMODITIES
FARM SUMMARY

PROGRAM YEAR: 2017

DATE: 9-19-2017
PAGE: 3

Original: _____
Revision: WM
Cropland: 983.54
Farmland: 1,933.23

NOTE: The following statement is made in accordance with the Privacy Act of 1974 (5 USC 552a as amended). The authority for requesting the information identified on this form is 7 CFR Part 718, the Farm Security and Rural Investment Act of 2002 (Pub L. 107-171), and the Agricultural Act of 2014 (Pub. L. 113-79). The information will be used to collect producer certification of the report of acreage of crops/commodities and land use data which is needed in order to determine producer eligibility to participate in and receive benefits under FSA programs. The information collected on the form may be disclosed to other Federal, State, Local government agencies, Tribal agencies, and nongovernmental entities that have been authorized access to the information by statute or regulation and/or as described in applicable Routine Uses identified in the System of Records Notice for USDA/FSA-2, Farm Records File (Automated) and USDA/FSA-14, Applicant/Borrower. Providing the requested information is voluntary. However, failure to furnish the requested information may result in a denial of the producers request to participate in and receive benefits under FSA programs. According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0560-0175. The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The provisions of criminal and civil fraud, privacy, and other statutes may be applicable to the information provided. RETURN THIS COMPLETED FORM TO YOUR COUNTY FSA OFFICE.

Producer Name	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share	Crop/ Commodity	Variety/ Type	Share
LANGLEY FAMILY FARMS	RICE	LGR	100.00	GRASS	NAG	100.00	FALOW		100.00			

Planting Period	Crop/ Commodity	Variety/ Type	Irr Prac	Int Use	Rpt Exp	Det Exp	Rpt Pvt	Det Pvt	Rpt Vol	Det Vol	Rpt NA	Det NA
01	RICE	LGR	I	GR			586.68					

Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity	Planting Period	Crop/ Commodity	Variety/ Type	Irrigation Practice	Intended Use	Reported Quantity	Determined Quantity
01	RICE	LGR	I	GR	159.93		01	FALOW		N		53.78	
01	GRASS	NAG	N	LS	540.20								

CERTIFICATION: I certify to the best of my knowledge and belief that the acreage of crops/commodities and land uses listed herein are true and correct and that all required crops/commodities and land uses have been reported for the farm as applicable. Absent any different or contrary prior subsequent certification filed by any producer for any crop for which NAP coverage has been purchased, I certify that the applicable crop, type, practice, and intended use is not planted if it is not included on the Report of Commodities for this crop year. The signing of this form gives FSA representatives authorization to enter and inspect crops/commodities and land uses on the above identified land. A signature date (the date the producer signs the FSA-578) will also be captured.

Operator's Signature (By)	Date
	9-19-2017

Chambers, Texas

FSA - 578 (09-13-16)

Farm Number: 120

Operator Name and Address

EAST BAY FARMS LLC
947 BROOKLINE
BATON ROUGE, LA 70809

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

PROGRAM YEAR: 2017

DATE: 9-19-2017
PAGE: 1

Original: _____
Revision: _____
Cropland: 983.54
Farmland: 1933.23

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	Native Sod	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	1	GRASS	NAG	N	LS			C	N	I	A	13.82		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	2	RICE	LGR	I	GR			OC	N	IP	A	21.14		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	3	RICE	LGR	I	GR			OC	N	IF	A	50.94		Yes			5-30-2017	01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	4	GRASS	NAG	N	LS			C	N	I	A	66.00		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	5	RICE	LGR	I	GR			OC	N	IP	A	34.43		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	6	RICE	LGR	I	GR			OC	N	IP	A	91.86		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	8	RICE	LGR	I	GR			OC	N	IP	A	38.29		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	9	RICE	LGR	I	GR			OC	N	IP	A	101.15		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	12	FALOW		N				C	N	I	A	53.78		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	13	RICE	LGR	I	GR			OC	N	IP	A	106.00		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	14	RICE	LGR	I	GR			OC	N	IP	A	98.65		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307
	16	RICE	LGR	I	GR			OC	N	IF	A	108.99		Yes			6-2-2017	01	
		Producer LANGLEY FAMILY FARMS							Share	100.00			FSA Physical Location:	Chambers, Texas				NAP Unit	1307

REPORT OF COMMODITIES
FARM AND TRACT DETAIL LISTING

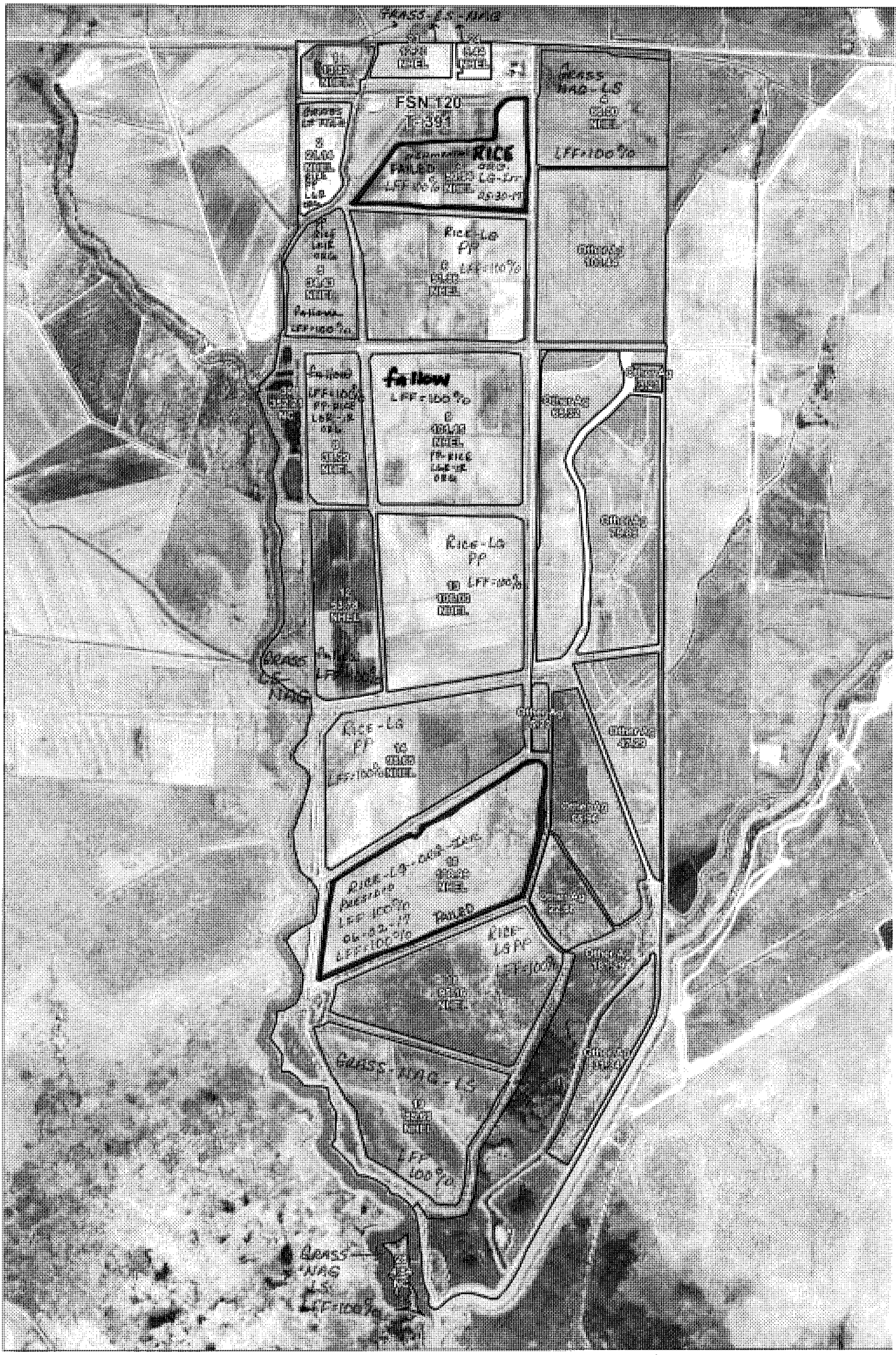
Farm Number: 120

Tract Number	CLU/ Field	Crop/ Commodity	Variety/ Type	Irr Prc	Int Use	Actual Use	Land Use	Organic Status	Native Sod	C/C Status	Reporting Unit	Reported Quantity	Determined Quantity	Crop Land	Field ID	Official/ Measured	Planting Date	Planting Period	End Date
391	18	RICE	LGR	I	GR			OC	N	IP	A	95.16		Yes				01	
		Producer LANGLEY FAMILY FARMS							Share	100.00		FSA Physical Location: Chambers, Texas						NAP Unit 1307	
	19	GRASS	NAG	N	LS			C	N	I	A	85.69		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00		FSA Physical Location: Chambers, Texas						NAP Unit 1307	
	23	GRASS	NAG	N	LS			C	N	I	A	12.20		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00		FSA Physical Location: Chambers, Texas						NAP Unit 1307	
	24	GRASS	NAG	N	LS			C	N	I	A	5.44		Yes				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00		FSA Physical Location: Chambers, Texas						NAP Unit 1307	
	28	GRASS	NAG	N	LS			C	N	I	A	4.84		No				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00		FSA Physical Location: Chambers, Texas						NAP Unit 1307	
	30	GRASS	NAG	N	LS			C	N	I	A	352.21		No				01	2020
		Producer LANGLEY FAMILY FARMS							Share	100.00		FSA Physical Location: Chambers, Texas						NAP Unit 1307	

PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr	PP	Cr/Co	Var/Type	Irr Prc	Int Use	Non-Irr	Irr
01	RICE	LGR	I	GR		746.61	01	FALOW		N		53.78		01	GRASS	NAG	N	LS	540.20	

Photo Number/Legal Description: S7/B2 S8/B1 S9/B1

Cropland: 983.54 Reported on Cropland: 983.54 Difference: 0.00 Reported on Non-Cropland: 357.05



USDA

Farm: 120
Tract: 391

Chambers County

Wetland Determination Identifiers

- ● Restricted Use
- ▽ Limited Restrictions
- ▨ Exempt from Conservation Compliance Provisions

Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and labels, or contact NRCS.

Crop Year 2017

Map Created: September 13, 2016

0 600 1,200 Feet

N

Attachment B

USACE Issued PJD & AJD 2024

DEPARTMENT OF THE ARMY
U. S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
2000 FORT POINT ROAD
GALVESTON, TEXAS 77550

August 13, 2024

Compliance Branch

SUBJECT: **SWG-2023-00754**; Bay Prairie Farms Mitigation Bank, Approved & Preliminary Jurisdiction Determination, High Island, Chambers County, Texas.

Mr. Keith Webb
Alluvion Resource Company, LLC
8010 Farm-to-Market 699
Joaquin, Texas 75954

Dear Mr. Webb:

This letter is in response to your letter, dated December 19, 2023, requesting an approved jurisdictional determination (AJD) and preliminary jurisdiction determination (PJD) on behalf of for Bay Prairie Farms Mitigation Bank totaling 537.45 acres. The Bay Prairie Farm Mitigation Bank is located east of Anahuac National Wildlife Refuge and two miles southwest of the intersection of Farm-to-Market 1985 and State Highway 124, near High Island, Chambers County, Texas (map enclosed).

The Corps of Engineers has the regulatory responsibility over two primary federal laws, Section 10 of the Rivers and Harbors Act (Section 10) which regulates work and/or structures in/or affecting navigable waters of the United States (U.S.) and Section 404 of the Clean Water Act (Section 404) which regulates the discharge of dredged and/or fill material into waters of the U.S., including navigable waters. If activities involved trigger either of these aforementioned federal regulations, a Department of the Army (DA) permit is required prior to those activities occurring.

Based on a review of federal regulations and a desk review, we determined the 30.65 acres of wetlands and 2.96 acres of fringe wetlands do not have any known continuous surface connection to any water of the United States and do not meet the definition of adjacent as defined in the pre-2015 regime post Sackett guidance. Furthermore, there are 4.15 acres of open water ponds with fringe wetlands in the mitigation bank and these ponds do not have any known continuous surface connection to any water of the United States. The ponds are not an impoundment of a tributary and do not flow to a Traditional Navigable Water (TNW); therefore, the ponds are not waters of the United States. Therefore, the discharge of dredged and/or fill material, work and/or structures in these wetlands and aquatic resources will not require a Department of the Army permit under Section 404 of the Clean Water Act nor Section 10 of the Rivers and Harbors Act.

There are 467.47 acres of prior converted cropland in the mitigation bank. These parcels were designated as prior converted cropland by the NRCS in 2010. The applicant submitted crop history dated from 2010 to 2022; therefore, the parcels have not been abandoned and still qualify for PCC designation. Therefore, the discharge of dredged and/or fill material, work and/or structures in these wetlands and aquatic resources will not require a Department of the Army permit under Section 404 of the Clean Water Act nor Section 10 of the Rivers and Harbors Act.

The man-made ditches within the project area have an ordinary high water mark, meet the definition of a tributary and are considered to be relatively permanent waters that flow into a TNW, East Bay Bayou. Therefore, the man-made ditches are subject to Section 404; therefore, the discharge of dredged and/or fill material will require a Department of the Army permit under Section 404 of the Clean Water Act.

Regarding the PJD areas on the subject tract, we have identified and determined that there are two (2) culverted impoundments totaling approximately 1.27 acres. PJDs identify the approximate locations and sizes of what appear to be aquatic resources on the tract. Computation of impacts to aquatic resources made on the basis of a PJD treat all potential aquatic resources that would be affected in any way by any activity on the site as if they are jurisdictional waters of the U.S. and the discharge of dredged and/or fill material into these aquatic resources requires a DA permit.

Areas of Federal Interests (federal projects, and/or work areas) may be located within this proposed project area. Any activities in these federal interest areas would also be subject to federal regulations under the authority of Section 14 of the Rivers and Harbors Act (aka Section 408). Section 408 makes it unlawful for anyone to alter in any manner, in whole or in part, any work (ship channel, flood control channels, seawalls, bulkhead, jetty, piers, etc.) built by the United States unless it is authorized by the Corps of Engineers (i.e., Navigation and Operations Division).

The delineation and/or jurisdictional determination included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

This letter constitutes both a PJD and an AJD for your subject site. The AJD is valid for five years from the date of this letter unless new information warrants a revision prior to the expiration date. For the purposes of this AJD, we have relied on Pre-2015 Regulatory Regime implemented consistent with *Sackett v. EPA* in evaluating

jurisdiction. If you object to the AJD portion determination, you may request an administrative appeal under USACE regulations at 33 CFR Part 331. You will find an enclosed Notification of Appeals Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination, you must submit a completed RFA form to the Southwest Division Office at the following address:

Mr. Jamie Hyslop
Administrative Appeals Review Officer
Southwest Division (CESWD-PR-O)
U.S. Army Corps of Engineers
1100 Commerce Street, Room 831
Dallas, Texas 75242-1317
Telephone: 469-216-8324
Email: Jamie.r.Hyslop@usace.army.mil

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP; noting the letter date is considered day 1. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

If you have any questions concerning this matter, please reference file number **SWG-2023-00754** and contact Ms. Kara Vick at the letterhead address or by telephone at 409-766-6354. To assist us in improving our service to you, please complete the survey found at https://regulatory.ops.usace.army.mil/customer-service-survey and/or if you would prefer a hard copy of the survey form, please let us know, and one will be mailed to you.

Sincerely,

Kara Vick

Kara Vick
Team Lead, Compliance Branch

Enclosure

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
2000 FORT POINT ROAD
GALVESTON, TEXAS 77550

CESWG-RD-C 13 August 2024

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023) ,[1] SWG-2023-00754 MFR 1 of 1

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.[2] AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.[3] For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),[4] the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of “waters of the United States” found in the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. This AJD did not rely on the 2023 “Revised Definition of ‘Waters of the United States,’” as amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in Texas due to litigation.

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[1] While the Supreme Court’s decision in *Sackett* had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.
[2] 33 CFR 331.2.
[3] Regulatory Guidance Letter 05-02.
[4] USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

1. SUMMARY OF CONCLUSIONS.

   a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).

      i. Prior Converted Cropland, 467.47 acres, non-jurisdictional, 29.659076, -94.414010

      ii. Wetlands, 30.65 acres, non-jurisdictional, 29.654494, -94.419981

      iii. Open Water, 14.81 acres, non-jurisdictional, 29.661247, -94.420546

      iv. Wetland Fringe, 2.96 acres, non-jurisdictional, 29.662261, -94.420356

      v. Man-made Ditches, 17.56 acres, jurisdictional, 29.658066, -94.415670

2. REFERENCES.

   a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).

   b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).

   c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)

   d. *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023)

3. REVIEW AREA. The Bay Prairie Farm Mitigation Bank is located east of Anahuac National Wildlife Refuge and two miles southwest of the intersection of Farm-to-Market 1985 and State Highway 124, near High Island, Chambers County, Texas. The coordinates for the 537.45-acre mitigation bank are 29.660217, -94.415213.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. East Bay Bayou[5]

[5] This MFR should not be used to complete a new stand-alone TNW determination. A stand-alone TNW determination for a water that is not subject to Section 9 or 10 of the Rivers and Harbors Act of 1899 (RHA) is completed independently of a request for an AJD. A stand-alone TNW determination is

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS. The man-made irrigation ditches flow from the project site through 2 culverted impoundments with a flap gate to East Bay Bayou. One impoundment is located at 29.658183, -94.420224 and the other impoundment is located at 29.650240, -94.419057. The impoundments are evaluated under a PJD.

6. SECTION 10 JURISDICTIONAL WATERS[6]: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.[7] N/A

7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the pre-2015 regulatory regime. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.

    a. TNWs (a)(1): N/A

    b. Interstate Waters (a)(2): N/A

    c. Other Waters (a)(3): N/A

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conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established.

[6] 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

[7] This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

d. Impoundments (a)(4): N/A

e. Tributaries (a)(5): The man-made irrigation ditches have an ordinary high water mark and are tributaries. Based on a review of Google Earth aerial photos, the ditches have water in them in every photo and therefore, are relatively permanent. The irrigation ditches are used to flood the rice fields for crop growth and are also used to de-water the rice fields prior to harvest. The water from the rice fields flows through the irrigation ditches to two impoundments that allow the water to flow into East Bay Bayou, a TNW. The ditches appear to be created from uplands and drain only PCC rice fields and not wetlands. The ditches are relatively permanent and flow in to a TNW. Therefore, the man-made irrigation ditches are tributaries subject to Section 404.

f. The territorial seas (a)(6): N/A

g. Adjacent wetlands (a)(7): N/A

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

a. Describe aquatic resources and other features within the review area identified as "generally non-jurisdictional" in the preamble to the 1986 regulations (referred to as "preamble waters").[8] Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water. N/A

b. Describe aquatic resources and features within the review area identified as "generally not jurisdictional" in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance.

c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. N/A

d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference

[8] 51 FR 41217, November 13, 1986.

2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland.

The Corps and EPA will continue to generally rely on valid prior-converted cropland (PCC) designations made by USDA-NRCS for making determinations of the applicability of the PCC exclusion, provided that the PCC has not been abandoned. However, the final authority regarding Clean Water Act (CWA) jurisdiction remains with EPA. There are 467.47 acres of prior converted cropland in the mitigation bank. These parcels were designated as prior converted cropland by the NRCS in 2010. The applicant submitted crop history dated from 2010 to 2022; therefore, the parcels have not been abandoned and still qualify for PCC designation.

e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in "*SWANCC*," would have been jurisdictional based solely on the "Migratory Bird Rule." Include the size of the aquatic resource or feature, and how it was determined to be an "isolated water" in accordance with *SWANCC*.

There are 4.15 acres of open water ponds with fringe wetlands in the mitigation bank. These ponds were constructed out of uplands before 1970 for aquaculture and then later used for irrigation. The ponds are not used for interstate or foreign travelers for recreational or other purposes, fish or shellfish are not taken and sold in interstate or foreign commerce and are not used for industrial purpose by industries in interstate commerce. The ponds are clay-lined; therefore, they do not have a shallow sub-surface connection to a Traditional Navigable Water. The ponds are not an impoundment of a tributary and do not flow to a Traditional Navigable Water, therefore, the ponds are not waters of the United States.

f. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the pre-2015 regulatory regime consistent with the Supreme Court's decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

Based on our desk review, the 30.65 acres of wetlands and 2.96 acres of fringe wetlands do not have any known continuous surface connection to any water of the United States. The wetlands and fringe wetlands are surrounded by clay berms; therefore, there is no shallow sub-surface connection to a Traditional Navigable Water. Visual inspection of the berms by Corps staff and the Inter-

agency review team on April 18, 2024, did not detect any breaks in the berms. There are no swales, erosional features, ditches, or culverts that would potentially serve as continuous surface connections to the wetlands and fringe wetlands. The LiDAR Digital Elevation Map (DEM) and Google Earth aerial photos do not show any continuous surface connection between the wetlands and fringe wetlands and any Traditional Navigable Water. No more than overland sheet flow would exit the wetlands. The wetlands and fringe wetlands do not meet the definition of adjacent as defined in the pre-2015 regime post Sackett guidance and are not waters of the United States.

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

   a. Site visit April 18, 2024

   b. Google Earth aerials 1970 and 2024

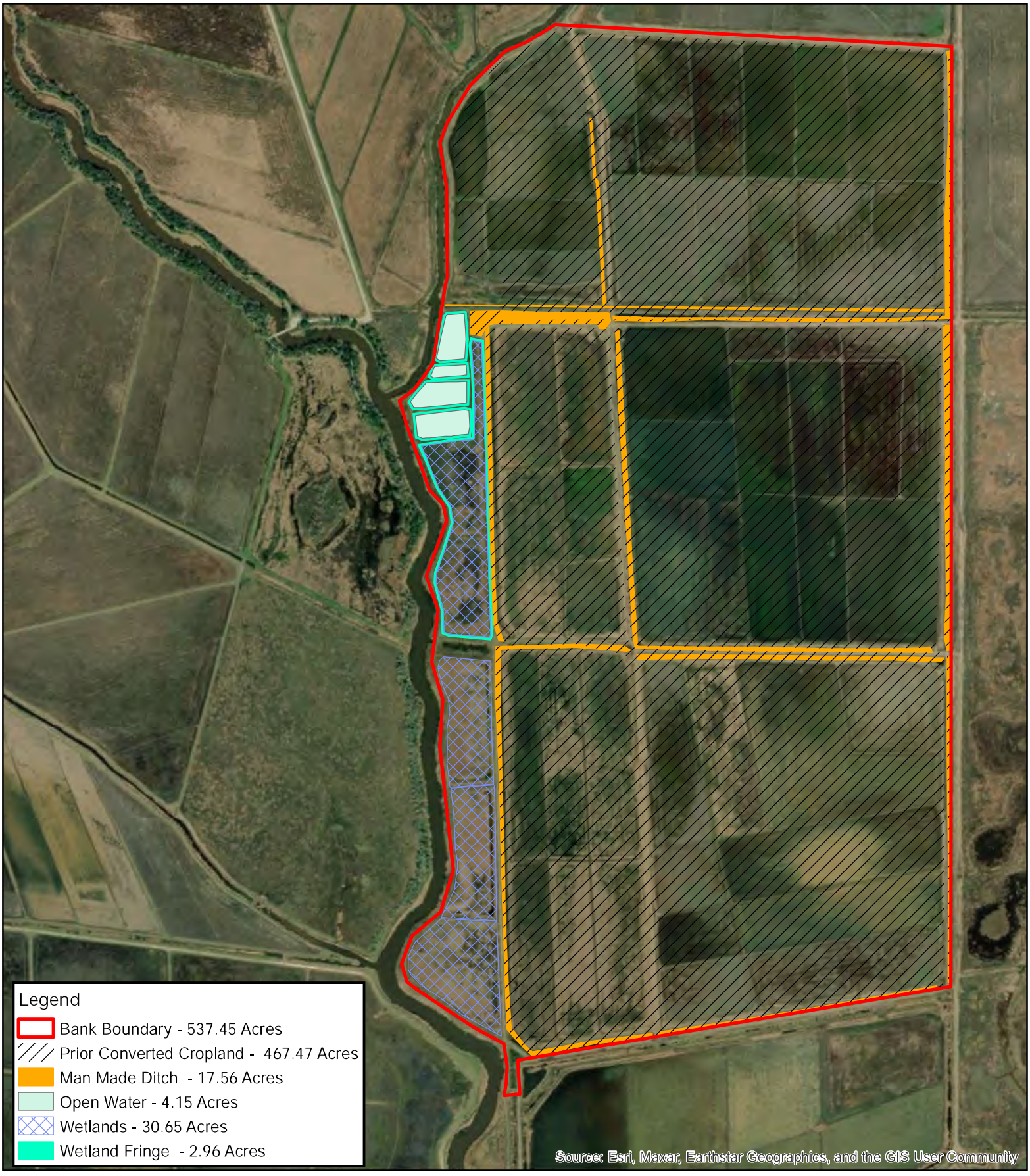
   c. Approved Jurisdictional Determination Report dated December 19, 2023, submitted by applicant.

   d. Prior Approved Jurisdictional Determinations dated March 11, 2010, and March 29, 2018

   e. United States Geological Survey Quadrangles: Sea Breeze, Texas 1943 (1955 edition) and Stanolind Reservoir, Texas 1994

10. OTHER SUPPORTING INFORMATION. N/A

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.



Approved Jurisdictional Determination

Bay Prairie Farm
Chambers County, TX

Figure 4B

0 80 160 320 Yards

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This map was generated using GIS (Geographic Information System) software.
No claims are made to the accuracy of completeness of the data depicted in this map or to the map's suitability or particular use.
The information depicted may contain inaccuracies and is provided "as is".

Date: 7/25/2024
Created By: KB

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: August 13, 2024

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Mr. Keith Webb Alluvion Resource Company, LLC 8010 Farm-to-Market 699 Joaquin, Texas 75954

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Galveston District,Bay Prairie Farm Mitigation Bank, SWG-2023-00754

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: Texas County/parish/borough: Chambers City: High Island

Center coordinates of site (lat/long in degree decimal format):

Lat.: 29.659076 Long.: -94.414010

Universal Transverse Mercator: NAD83

Name of nearest waterbody: East Bay Bayou

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date:

☒ Field Determination. Date(s): April 18, 2024

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
1	29.658183	-94.420224	0.86	non-wetland	Section 404
2	29.650240	-94.419057	0.41	non-wetland	Section 404
3					
4					
5					

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

☐ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: December 19, 2023.

☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report. Rationale: _____.

☐ Data sheets prepared by the Corps: _____.

☐ Corps navigable waters' study: _____.

☐ U.S. Geological Survey Hydrologic Atlas: _____.
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.

☐ U.S. Geological Survey map(s). Cite scale & quad name: Sea Breeze, Texas 1943 (1955 edition) and Stanolind Reservoir, Texas 1994.

☐ Natural Resources Conservation Service Soil Survey. Citation: _____.

☐ National wetlands inventory map(s). Cite name: _____.

☐ State/local wetland inventory map(s): _____.

☐ FEMA/FIRM maps: _____.

☐ 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)

☐ Photographs: ☒ Aerial (Name & Date): Google Earth 1970 and 2024.
or ☐ Other (Name & Date): _____.

☒ Previous determination(s). File no. and date of response letter: March 11, 2010 and March 29, 2018.

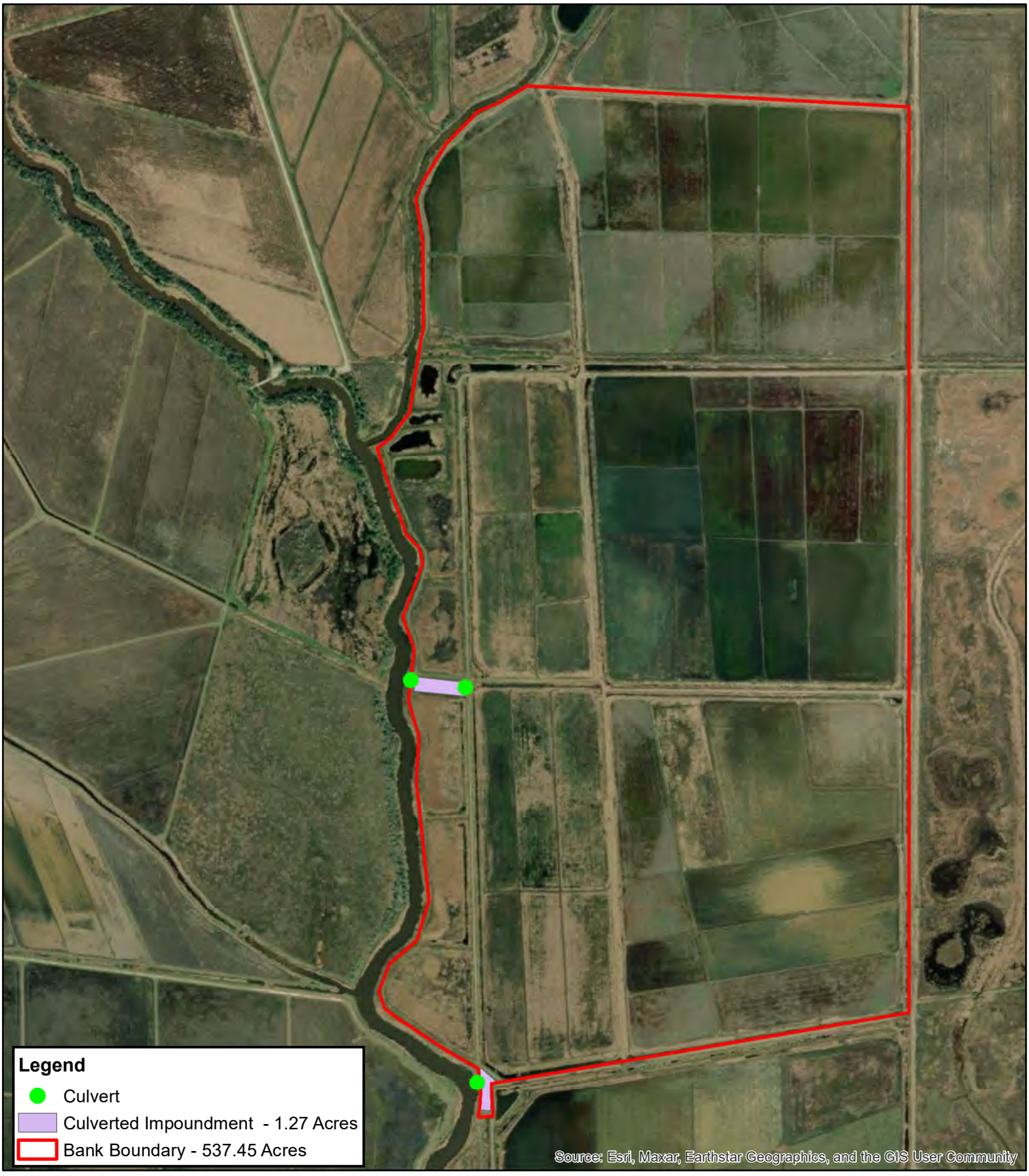
☒ Other information (please specify): LIDAR TWDB 2018.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Kara Vide
Signature and date of
Regulatory staff member
completing PJD

8/13/2024
Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



Preliminary Jurisdictional Determination

Bay Prairie Farm
Chambers County, TX

Figure 4A

0 80 160 320 Yards

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No claims are made to the accuracy of completeness of the data depicted in this map or to the map's suitability or particular use.
The information depicted may contain inaccuracies and is provided "as is".

Date: 6/21/2024
Created By: KB

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Alluvion Resource Company, LLC	File Number: SWG-2023-00754	Date: 13 August 2024

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL WITHOUT PREJUDICE	C
	PERMIT DENIAL WITH PREJUDICE	D
x	APPROVED JURISDICTIONAL DETERMINATION	E
x	PRELIMINARY JURISDICTIONAL DETERMINATION	F

SECTION I

The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/appeals/ or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C. PERMIT DENIAL WITHOUT PREJUDICE: Not appealable
You received a permit denial without prejudice because a required Federal, state, and/or local authorization and/or certification has been denied for activities which also require a Department of the Army permit before final action has been taken on the Army permit application. The permit denial without prejudice is not appealable. There is no prejudice to the right of the applicant to reinstate processing of the Army permit application if subsequent approval is received from the appropriate Federal, state, and/or local agency on a previously denied authorization and/or certification.

D: PERMIT DENIAL WITH PREJUDICE: You may appeal the permit denial
You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information for reconsideration

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

- RECONSIDERATION: You may request that the district engineer reconsider the approved JD by submitting new information or data to the district engineer within 60 days of the date of this notice. The district will determine whether the information submitted qualifies as new information or data that justifies reconsideration of the approved JD. A reconsideration request does not initiate the appeal process. You may submit a request for appeal to the division engineer to preserve your appeal rights while the district is determining whether the submitted information qualifies for a reconsideration.

F: PRELIMINARY JURISDICTIONAL DETERMINATION: Not appealable
You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision you may contact:

Kara D. Vick
Team Lead/Technical Expert
Compliance Branch
U.S. Army Corps of Engineers
2000 Fort Point Road
Galveston, Texas 77550
Phone: 409-766-6354
Email: Kara.D.Vick@usace.army.mil

If you have questions regarding the appeal process, or to submit your request for appeal, you may contact:

Mr. Jamie Hyslop
Administrative Appeals Review Officer
Southwestern Division (CESWD-PD-O)
U.S. Army Corps of Engineers
1100 Commerce Street, Suite 831
Dallas, Texas 75242-1317
Phone: 469-216-8324
Email: Jamie.r.hyslop@usace.army.mil

SECTION II – REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. Use additional pages as necessary. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:
Email address of appellant and/or agent:	Telephone number:

Attachment C

T&E IPAC Reports

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Texas Coastal & Central Plains Esfo
17629 El Camino Real, Suite 211
Houston, TX 77058-3051
Phone: (281) 286-8282 Fax: (281) 488-5882

In Reply Refer To: 08/30/2024 22:24:53 UTC
Project Code: 2023-0111140
Project Name: Teo Naw Mitigation Bank

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Texas Coastal & Central Plains Esfo
17629 El Camino Real, Suite 211
Houston, TX 77058-3051
(281) 286-8282

PROJECT SUMMARY

Project Code: 2023-0111140
Project Name: Teo Naw Mitigation Bank
Project Type: Management Plans Land Management/Restoration
Project Description: habitat restoration of prior converted cropland currently in crop production

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@29.658819299999998,-94.41547164799897,14z

Counties: Chambers County, Texas

ENDANGERED SPECIES ACT SPECIES

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Rufa Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane *Grus americana* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

REPTILES

NAME	STATUS
Green Sea Turtle *Chelonia mydas* Population: North Atlantic DPS There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Hawksbill Sea Turtle *Eretmochelys imbricata* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3656	Endangered
Kemp's Ridley Sea Turtle *Lepidochelys kempii* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/5523	Endangered
Leatherback Sea Turtle *Dermochelys coriacea* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

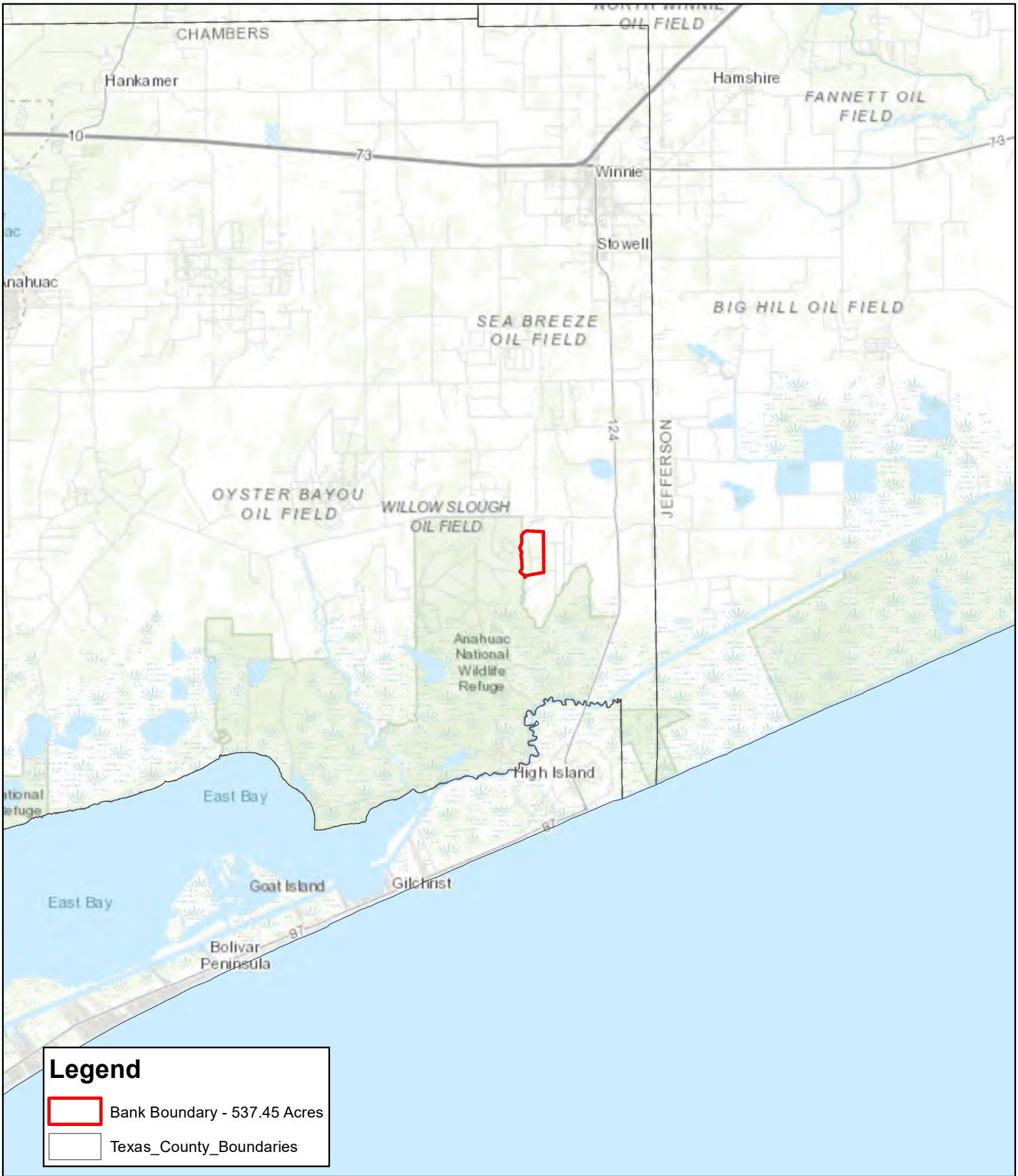
Agency: Private Entity
Name: Keith Webb
Address: 8010 fm 699
City: joaquin
State: TX
Zip: 75954
Email keith@alluvionrc.com
Phone: 9364888137

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Attachment D

Figures



Site Location

Teo Naw Mitigation Bank
Chambers County, TX

Figure 1

N
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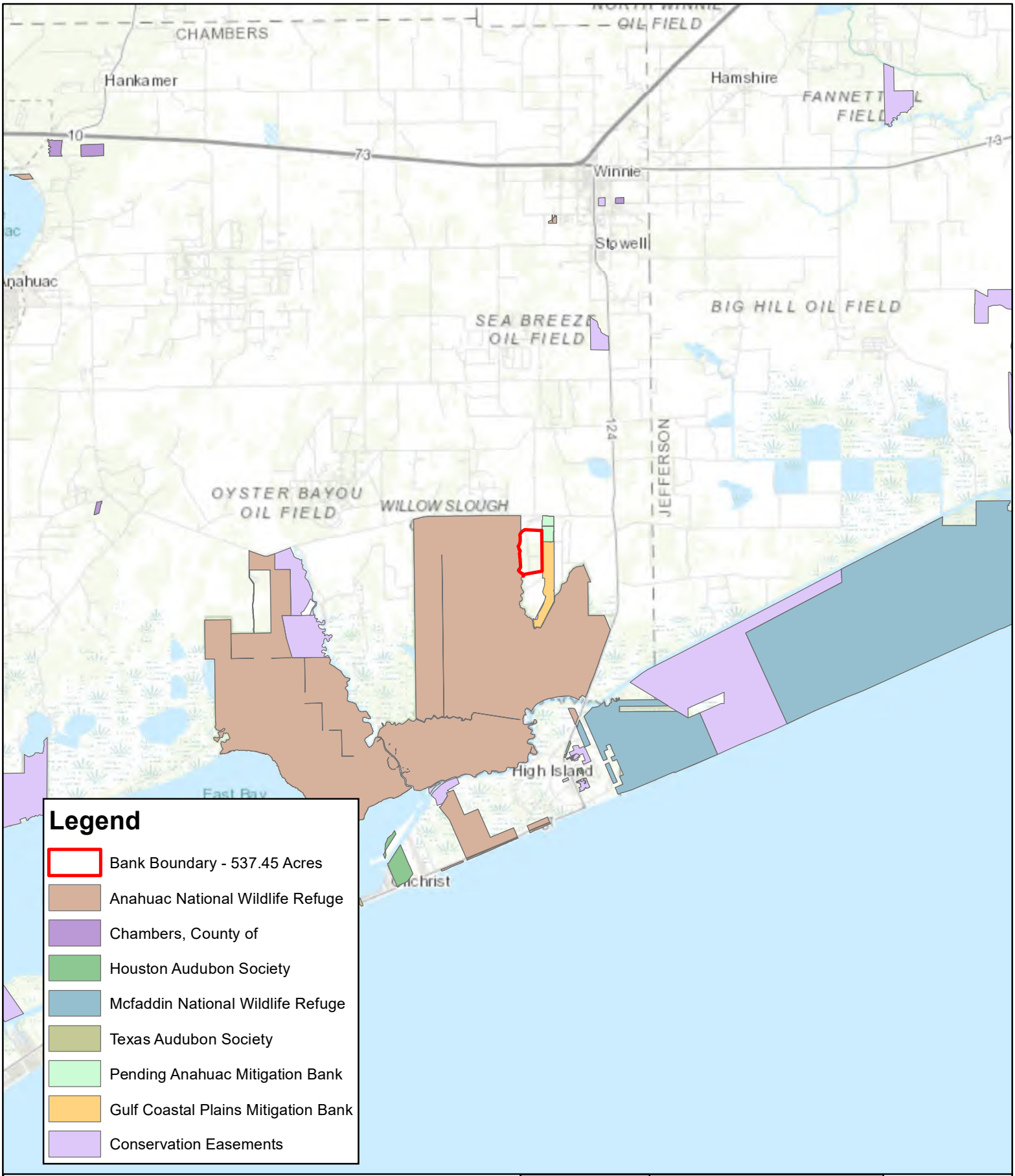
0 0.5 1 2 3 4 Miles

Created By: KB
Date: 8/30/2024

VIVUS VIRIDIS
ALLUVION RESOURCE COMPANY



Proximity to Conservaton Areas

Teo Naw Mitigation Bank
Chambers County, TX

Figure 2

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Date: 8/30/2024

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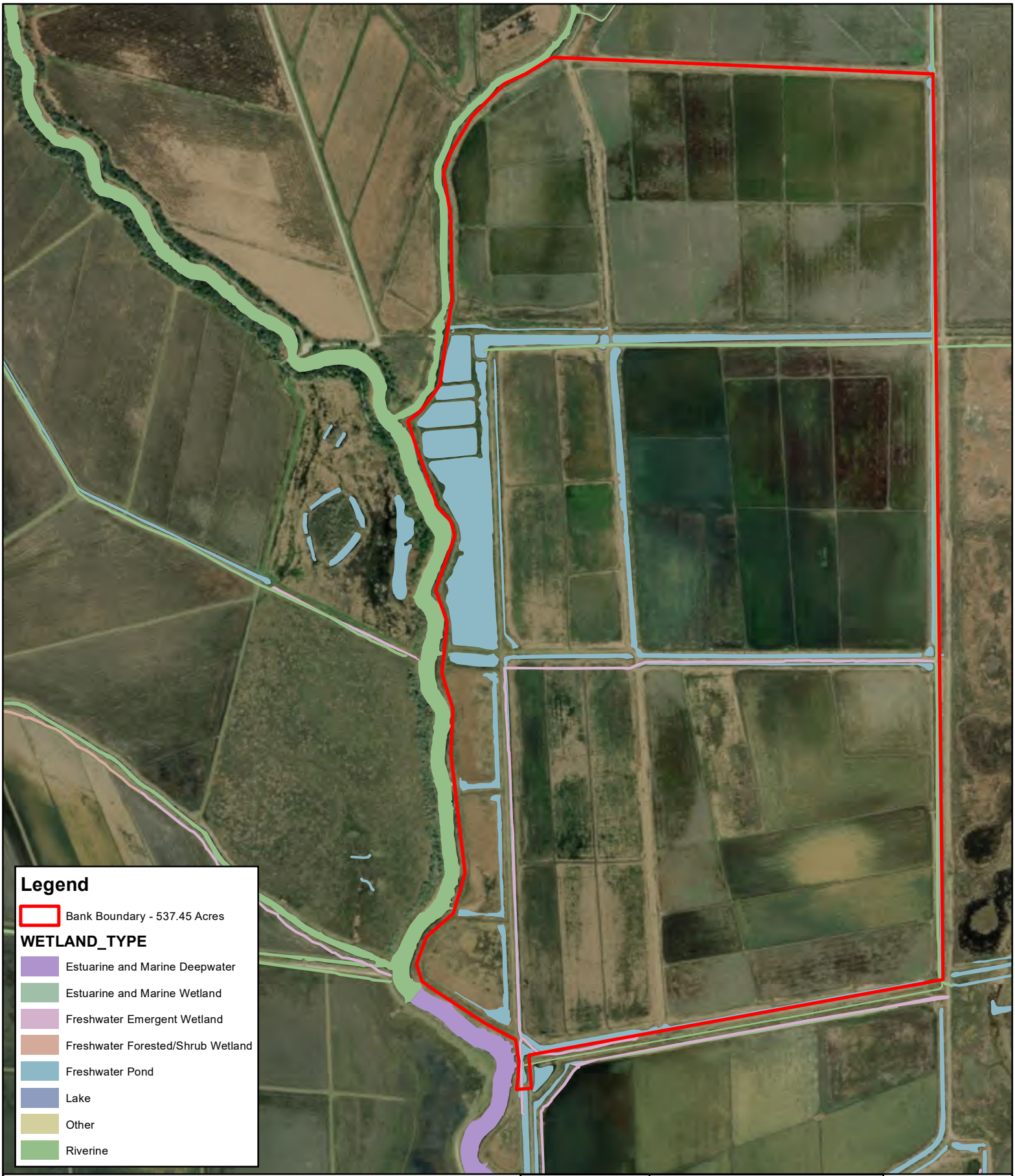
ALLUVION RESOURCE COMPANY



National Wetland Inventory

Teo Naw Mitigation Bank
Chambers County, TX

Figure 3

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Date: 8/30/2024

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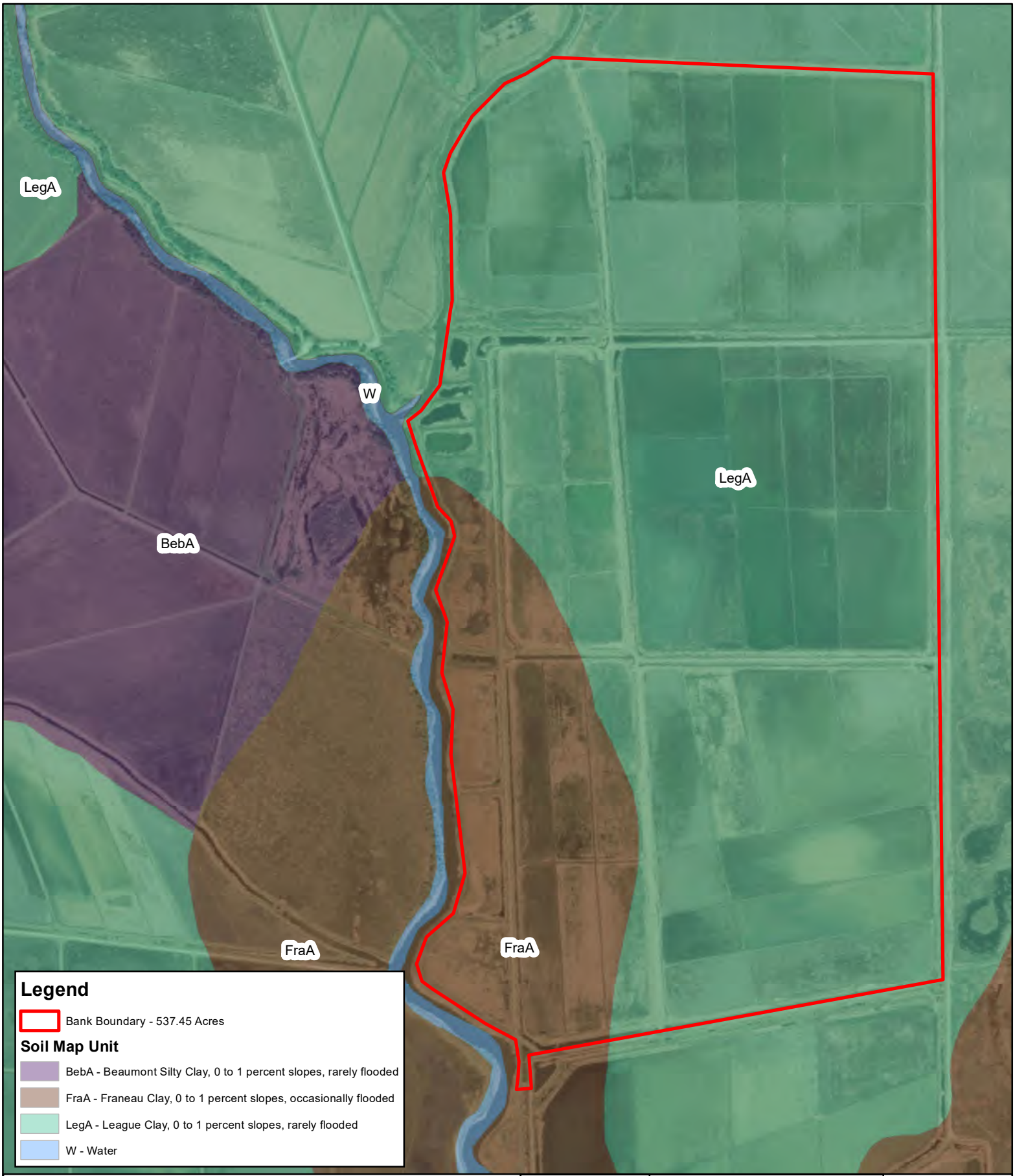

NRCS Soil Survey

Teo Naw Mitigation Bank
Chambers County, TX

Figure 4

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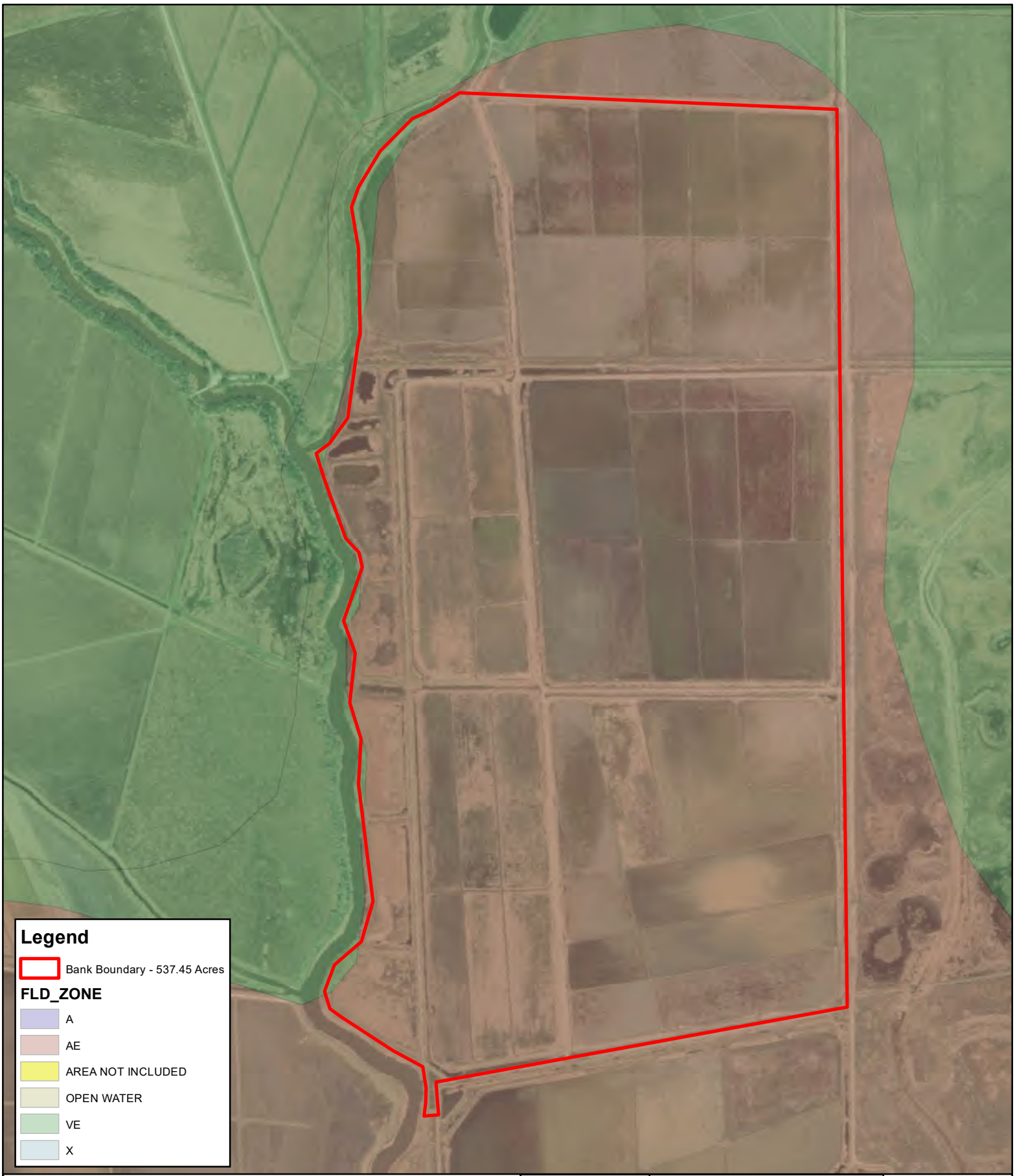

FEMA Floodplain

Teo Naw Mitigation Bank
Chambers County, TX

Figure 5

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Date: 8/30/2024

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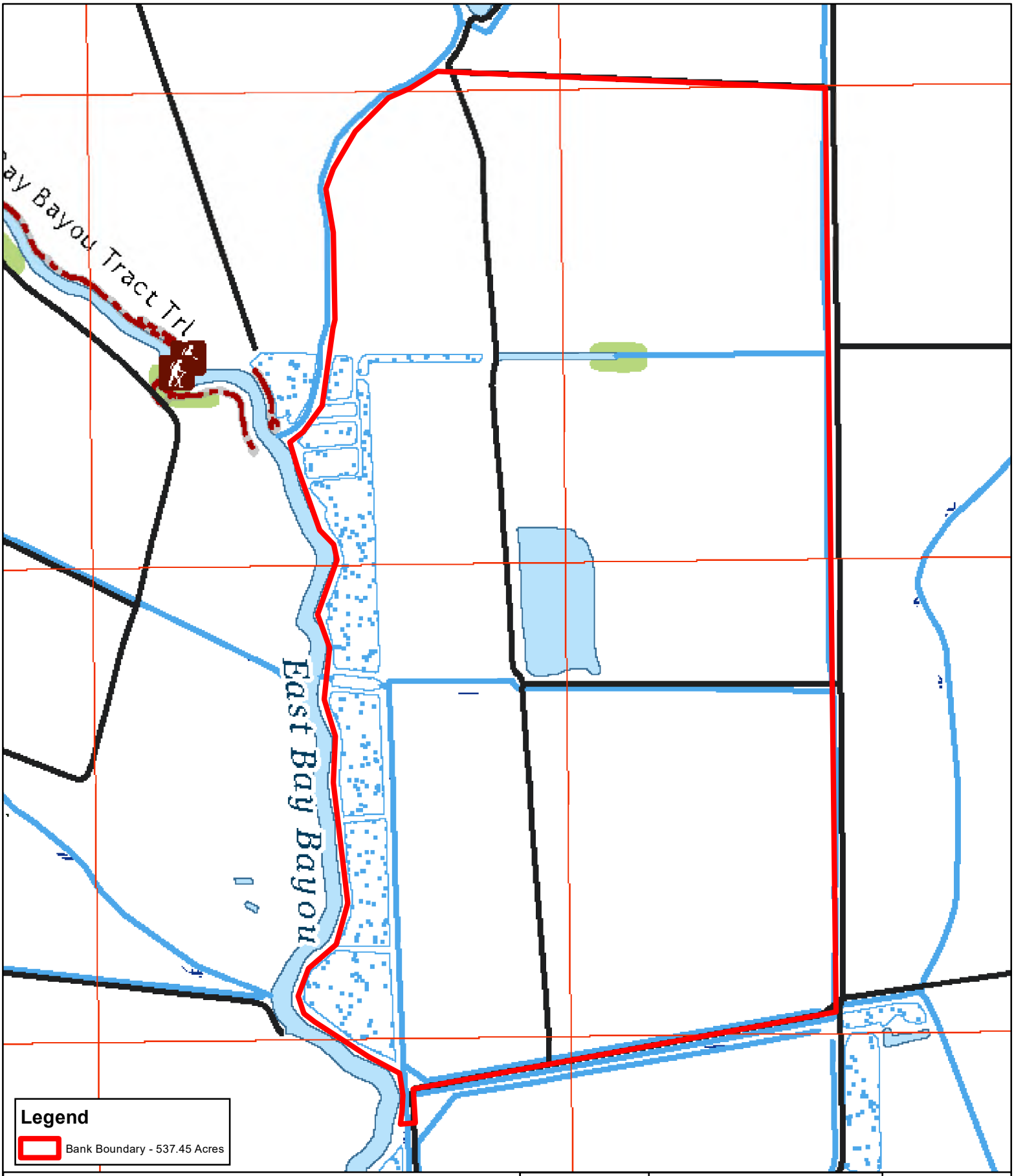
ALLUVION RESOURCE COMPANY



U.S. Topography
7.5 minute series 1:24,000 scare
Teo Naw Mitigation Bank
Chambers County, TX

Figure 6

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Date: 8/30/2024

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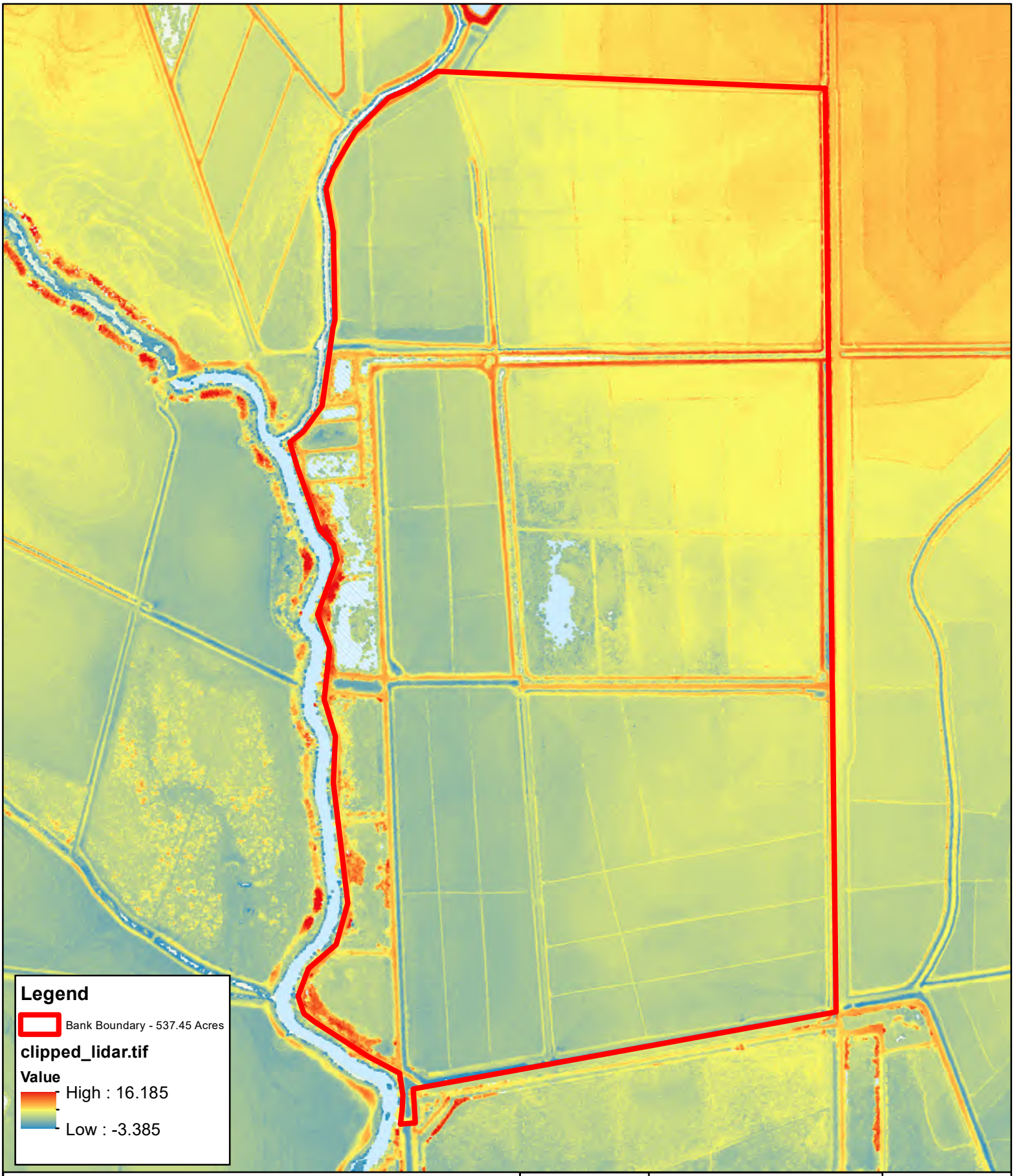
ALLUVION RESOURCE COMPANY



LiDAR

Teo Naw Mitigation Bank
Chambers County, TX

Figure 7

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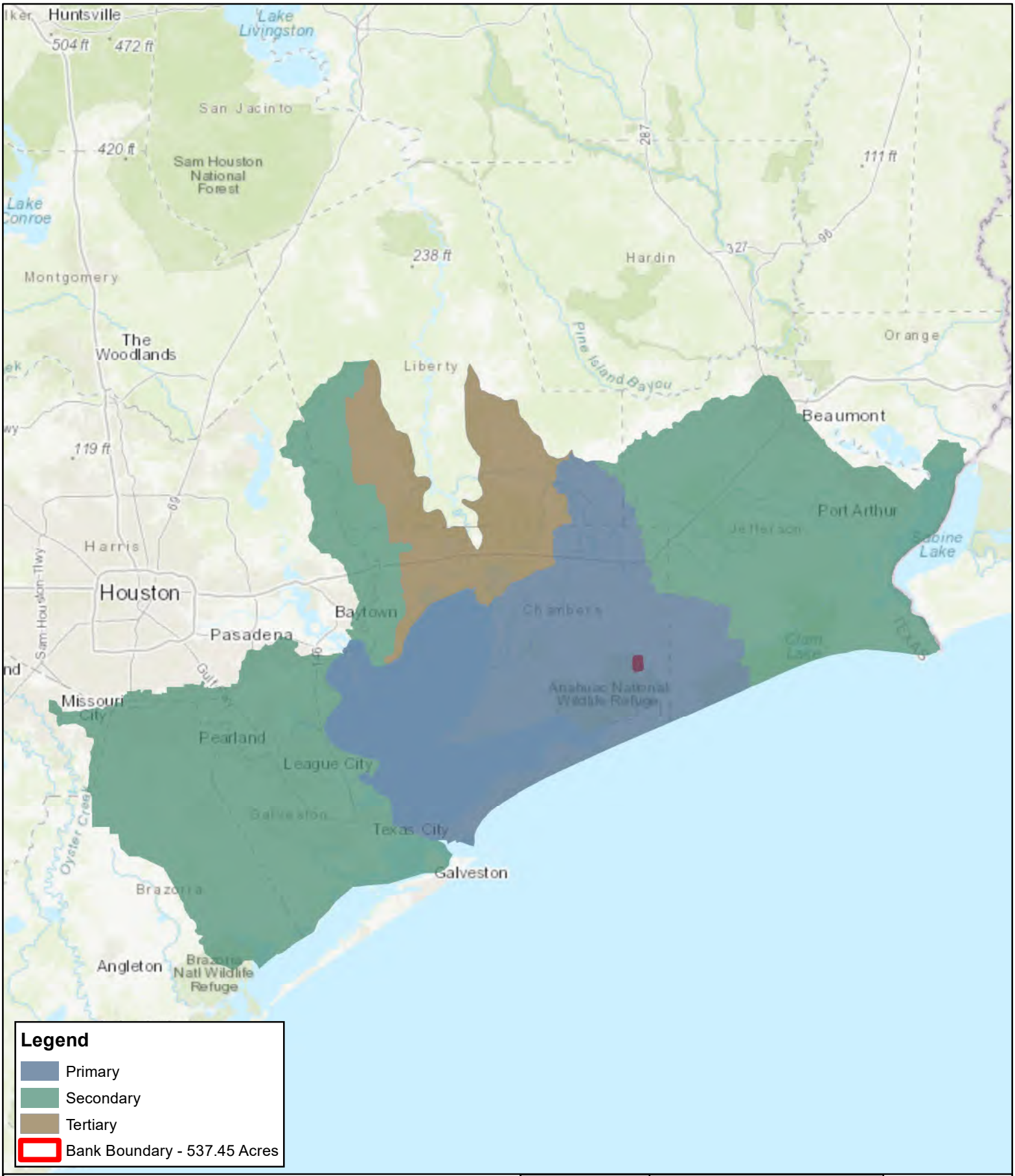
VIVUS VIRIDIS
ALLUVION RESOURCE COMPANY



Service Area

Teo Naw Mitigation Bank
Chambers County, TX

Figure 8

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0 2 4 8 12 16 Miles

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Date: 8/30/2024

VIVUS VIRIDIS
ALLUVION RESOURCE COMPANY

Attachment E

Coastal Wetlands Initiative Excerpt

Focal Watershed Review: East and West Galveston Bay, Texas

Introduction

The Texas coast extends 367 linear miles from Louisiana to Mexico. With over 3,300 miles of tidal shoreline (which includes the outer coast, islands, sounds, bays, and creeks to the head of tidewater), Texas hosts one of the most ecologically complex and biologically diverse regions in the Gulf. The Texas coast is also home to more than one-third of the state's population and about 70 percent of the state's industrial base (Moulton et al., 1997). The Texas coastal region includes three distinct areas distinguished by particular geomorphology, climatology, hydrology, and ecology: the upper, mid, and lower coasts.

In the East and West Galveston Bay watersheds, extensive salt marshes meet bays and lagoons protected by barrier islands (Moulton et al., 1997). Counties within the smaller West Galveston Bay watershed include Brazoria, Chambers, Fort Bend, Galveston, and Harris. Counties located within East Galveston Bay watershed are Chambers, Galveston, Jefferson, and Liberty. Although these two watersheds were the focus of the review, participants provided information and comments regarding the larger Galveston Bay region, which includes the metroplex of Houston and surrounding cities and municipalities. The entire Galveston Bay watershed, which extends up the Trinity River to the Dallas/Fort Worth area, encompasses 27,000 square miles of land, and nearly half of the population of Texas (Lester and Gonzalez, 2011).

The East and West Galveston Bay watersheds (Figure 4; HUCs 12040202 and 12040204), as their names suggest, drain into Galveston Bay. Galveston Bay is a subtropical, bar-built estuary fed by two rivers, the San Jacinto and the Trinity, and associated coastal streams and bayous (Lester and Gonzalez, 2011). Habitats in the watersheds include salt, brackish, and freshwater marshes, mudflats, submerged aquatic vegetation (SAV) beds, oyster reefs, bottomland and flatwood forests, scrub-shrub, and coastal prairies (EPA, 2007).

As of 2002, one-third of commercial fishing income and half of recreational expenditures in the entire state of Texas were from Galveston Bay (Lester and Gonzalez, 2002). Brown shrimp, blue crab, red drum, spotted sea trout, southern flounder, and Gulf menhaden are abundant here. Oyster reefs are of particular ecological and economic significance in Galveston Bay, which supports nearly 27,000 acres of oyster habitat and produces more oysters than any single U.S. water body (Galveston Bay Foundation, 2010). The Bay traditionally contained up to 80 percent of all

Figure 4. East and West Galveston Bay watersheds (cross-hatched areas).

Eastern oysters (worth approximately $10 million annually) harvested in Texas.[1] Oyster reefs have been surveyed in Galveston Bay since the 1950s, and comparative mapping shows that habitat location and abundance has shifted over time. When Hurricane Ike struck in 2008, it is estimated that sediment deposition associated with the storm surge covered about 60 percent of Galveston Bay's oyster reef habitat. Commercial oyster fishery landings in Matagorda Bay (located approximately 100 miles southwest of Galveston Bay) exceeded Galveston Bay for the first time in history in 2011.

The Galveston Bay watershed provides habitat for an impressive array of bird species, including great and snowy egrets, reddish egrets, piping plovers, roseate spoonbills, tricolored herons, and black skimmers. These include year-round resident, migratory, and wintering species, many of which are wetland dependent (Lester and Gonzalez, 2002; Eubanks et al., 2006). Approximately 430 species of birds overwinter, migrate, or reside here (Eubanks et al., 2006). This area is regarded as one of the top birding spots in the United States. Recreational fishing and bird watching contribute to a robust ecotourism economy.

Despite the value of wetlands to fisheries (providing food, shelter, breeding habitat, and pollutant removal) and the economy, Texas has lost 52 percent of its original wetland base (Mitsch and Gosselink, 1993). The Texas coastal plain experienced a loss of approximately 200,000 acres of wetlands between the mid-1950s and the early 1990s (from 4.1 million acres to 3.9 million acres). This loss equates to

[1] For more information, see http://www.tpwd.state.tx.us/huntwild/wild/species/easternoyster/.

an average annual net loss of about 5,700 acres (Moulton et al., 1997). Of 3.9 million acres remaining in the early 1990s, about 85 percent were freshwater wetlands (3.3 million acres) and about 15 percent were estuarine wetlands (0.6 million acres). The most common types of wetlands lost in Texas coastal areas during this time were freshwater emergent and freshwater forested wetlands.

In examining historical wetland losses within the focal watershed, a trend of continuing coastal wetland losses can be gleaned from a number of studies conducted over a variety of time periods. Although the studies are not directly comparable due to slightly different geographic scopes, methodologies, and study objectives, a downward trend in the areal extent of wetlands is nonetheless apparent. Going back to the 1950s, one study found that from the 1950s until 1989, there was a gross loss of more than 88,500 acres of emergent wetlands in Galveston Bay, 5,700 acres (6 percent) of which were converted to urban uses (White et al., 1993).

More recently, analysis of aerial imagery between 1992 and 2002 indicated that 9,124 acres of freshwater wetlands and 2,913 acres of estuarine marsh in the lower Galveston watershed alone were lost to development, which represents an average overall wetland loss of approximately 1,200 acres annually (an average annual loss of 912 acres of freshwater wetlands and 291 acres of coastal wetlands). Most of the wetlands lost in Galveston Bay watershed occurred in Harris County (Jacob and Lopez, 2005; EPA, 2007).

In preparation for the East and West Galveston Bay focal watershed review, the EPA coastal wetlands team worked with the NOAA C-CAP to develop a general characterization of recent wetland changes in the East and West Galveston Bay watersheds. C-CAP examines overall land use change, including wetlands, for the coastal regions of the United States. The program currently reports changes in wetland acreage only and does not measure change in wetland function. The C-CAP data were used to ensure consistency across all focal watersheds when comparing wetland acreage loss.

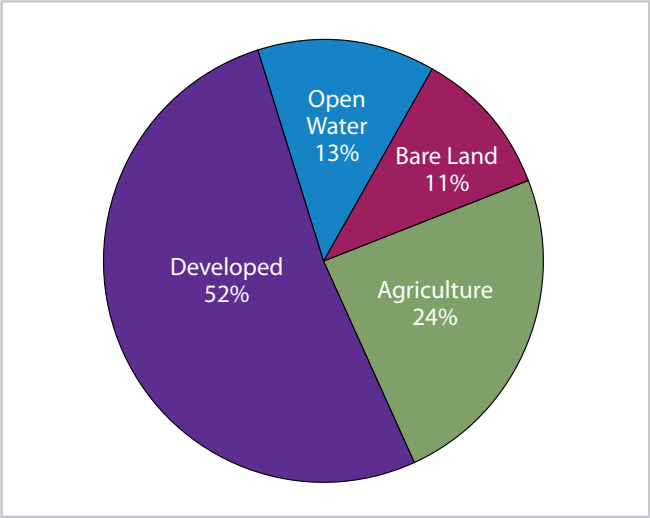

Figure 5. Wetland loss and changes in land cover, 1996-2006: East and West Galveston Bay. *Source: NOAA, 2011a.*

Table 3 and the accompanying pie chart (Figure 5) display C-CAP data for the areas of the two eight-digit hydrological unit code (HUC 8) watersheds that were the focus of the East and West Galveston Bay CWR (see Figure 4). According to the C-CAP analysis, more than 11,900 acres of wetlands were lost in this area between 1996 and 2006. This trend suggests an average loss of nearly 1,200 acres each year (similar to the results of the 1992–2002 analysis referenced above). The vast majority (more than 10,000

Table 3. Losses of Wetland Types to Other Land Uses (Acres) from 1996 to 2006, HUC 12040202 and 12040204

Wetland Types*	Developed	Agriculture	Bare Land	Open Water	Total
Palustrine forested	2,394.08	912.49	514.18	209.72	4,030.46
Palustrine scrub	2,230.84	381.63	120.98	86.29	2,819.75
Palustrine emergent	1,410.21	1,501.83	376.74	721.45	4,010.23
Estuarine forested	0.00	0.00	0.00	0.00	0.00
Estuarine scrub	0.00	0.00	0.22	0.00	0.22
Estuarine emergent	94.07	1.11	131.21	58.71	285.11
Unconsolidated shore	73.17	12.23	206.83	493.27	785.50
Total	**6,202.37**	**2,809.29**	**1,350.16**	**1,569.44**	**11,931.26**

* See Appendix D for wetland classification descriptions. *Source: NOAA, 2011a.*

acres or 90 percent) of wetlands lost in the focal watersheds were non-tidal, with woody freshwater wetlands (palustrine forested and palustrine scrub) constituting 57 percent of the total loss. The majority (63 percent) of overall wetland loss during this time period was attributed to development or conversion to bare land (which is often associated with, or a precursor to development).

It should be noted that the information below is based on the opinions and observations of participants, who provided feedback on draft versions of this document and supplemented statements with documentation, where available.

Stressors

In preparation for the focal watershed review, the Coastal Wetlands Team conducted a literature review to obtain a high-level snapshot of the most common coastal wetland stressors in the East and West Galveston Bay watersheds.

Discussion at the Galveston Bay CWR identified the following key contributors to coastal wetland acreage loss and degradation and confirmed, as well as emphasized and added to, the list of stressors identified during the literature review:

- Development (residential, commercial, infrastructure)
- Limitations of regulations
- Hydrologic modifications (including oil and gas activities, dredging, groundwater pumping, sand and gravel mining, freshwater diversions)
- Climate change, sea level rise, and coastal storms
- Oil spills
- Invasive species

Coastal development. Participants identified development as one of the top three primary stressors to coastal wetlands (particularly freshwater) in the focal watershed. In particular, they noted the lack of growth planning and controls in the greater Houston area (central Galveston Bay watersheds), which, while not specifically included in the geographic review area, were nonetheless of great concern to participants in terms of local wetland loss attributable to development (Figure 5). In addition to direct physical wetland alterations that result from filling and draining wetlands for development, increased development in coastal watersheds leads to increased impervious surfaces and associated hydrologic and water quality impacts on wetlands and associated aquatic systems. Increased impervious surfaces and traditional stormwater drainage infrastructure result in increased runoff during rainstorms (contributing to flooding) and (to a lesser extent, given low permeability of soils) decreased groundwater recharge. Groundwater recharge is needed to maintain water table elevation in wetlands during dry months. In addition to the hydrologic impacts of stormwater on wetlands, stormwater runoff results in water quality impacts due to pollution from nutrients, metals, sediment, and bacteria. Other development-related impacts to wetlands include increased drinking water withdrawals, which can lower water table elevation and impact wetland hydrology.

The impacts associated with population growth and the associated impacts from development sprawl are most pronounced in Harris County, which is part of the Houston–Sugar Land–Baytown metropolitan area and is partially located in West Galveston Bay watershed (see Figure 6). This county has experienced 20.3 percent growth (with a current population of more than 4 million) from 2000 to 2010 (U.S. Census Bureau, 2011a). According to the Texas State Demographer, the population in the Houston–Sugar

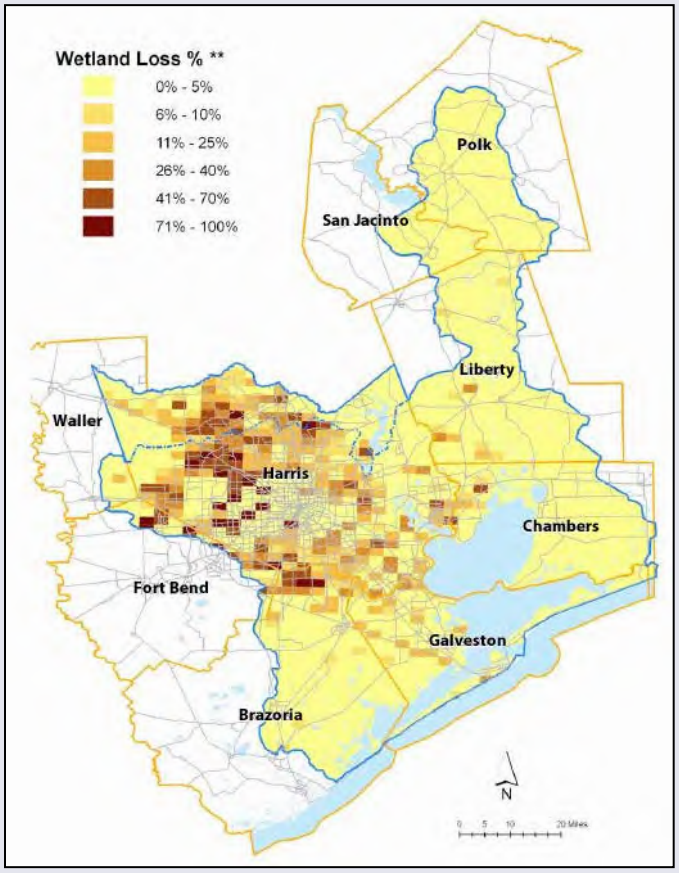

Figure 6. Percent of total freshwater wetlands lost to development (1992–2002), Lower Galveston Bay watershed (note that this area is broader than that chosen as the review area). *Source: Jacob and Lopez, 2005.*

Land–Baytown area is expected to grow to 7.9 million by 2035, an increase of approximately 3.2 million people compared to the 2000 census count (Texas State Data Center, 2008).

At the CWR, participants noted two other major impacts that have resulted from growth and development pressures in the watershed:

- **Shoreline hardening.** Participants noted that shoreline stabilization, which includes the construction of bulkheads, seawalls, and other artificial armoring structures (Figure 7), has impacted coastal wetlands in Galveston Bay. Impacts due to shoreline armoring include increases in erosion along seawall-adjacent marshes from diverted wave energy (Galveston Bay Foundation, n.d.[b]), which often prompts adjacent property owners to stabilize their shorelines, thereby creating a domino effect along the shoreline. In addition to increasing erosion, shoreline hardening impacts coastal wetlands in other ways, including filling of wetlands behind the armoring structure during construction and preventing inland migration of coastal wetlands in response to sea level rise. Hardening is also one factor contributing to decreases in biodiversity and scouring impacts on SAV, which serves as a critical nursery for fish and shellfish (Bilkovic et al., 2006; Bilkovic and Roggero, 2008). Erosion-induced scouring increases the depth of nearshore areas, thereby preventing SAV recruitment and growth (Sime, 2005).

Figure 7. Galveston Seawall (2005). *Source: Bob McMillan, Federal Emergency Management Agency.*

- **Nonpoint source pollution.** Multiple nonpoint sources of pollution, including runoff from impervious surfaces (including residential lawns, parking lots and driveways), oil runoff, septic systems, industrial runoff, and agricultural runoff, decrease the quality of coastal wetland habitats in the Galveston Bay watershed (EPA, 2007). As population and development increase, so too do these nonpoint sources of pollution.

Limitations of regulations. Federal, state, and local regulatory programs are essential tools for protecting coastal wetlands. However, participants identified jurisdictional limitations and implementation issues associated with wetland regulations as being impediments to effective protection. Additionally, participants felt that coordination could be improved between all levels of government, which could inform the development of an overarching policy to manage wetlands in light of projected future changes to coastal communities. While wetland regulation in Texas has traditionally been the primary responsibility of the federal agencies (Army Corps and EPA), state and local governments can use regulatory tools (including zoning, subdivision control, and water pollution regulations) to protect wetlands. Participants thought that heightened awareness of wetland laws among local officials could help steer development away from wetland areas or, at the very least, notify developers that compliance with wetland laws is an important aspect of project siting and design. Participants also expressed the opinion that tidal wetlands are more effectively protected than non-tidal wetlands. This observation is corroborated by C-CAP data, which show more than 90 percent of all wetland losses have occurred in freshwater wetlands (see Table 3).

- **Changes affecting federal jurisdiction.** A major issue raised by participants at the review was a lack of clarity regarding which wetlands are jurisdictional, particularly those that are "isolated." Participants expressed the view that the *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC)* and *Rapanos v. United States (Rapanos)* Supreme Court decisions have resulted in significant development of wetland areas within the Galveston Bay watershed that were previously regulated under Section 404 of the CWA. The participants believed that numerous acres of depressional welands located throughout the watershed are at

Figure 8. Example of development in depressional wetlands. *Photo courtesy of Tom Dahl, USFWS.*

high risk of development due to the potential for loss of protection under Section 404 of the Clean Water Act (see Appendix C, Clean Water Act Jurisdiction).

- **State regulatory role.** Some participants believe the state of Texas and/or local regulatory agencies could improve or create new regulatory programs to address wetland impacts. For example, participants indicated that Texas could use its 401 certification authority more effectively to regulate development in or near wetlands. CWA Section 401 allows states and tribes to condition or deny federal permits (including CWA Section 404 permits) that may adversely impact state water quality. A state can increase its 401 certification authority by attaching stricter conditions to its certifications and/or denying projects with negative water quality impacts. The Texas Commission on Environmental Quality (TCEQ) is the lead for most Section 401 certifications, and the Railroad Commission of Texas issues 401 certifications for activities regarding oil and gas exploration, development, and production operations. In 2001, to streamline the permitting process and focus limited resources on the most significant wetland impacts, TCEQ and the Army Corps executed a Memorandum of Agreement establishing tiered procedures for Section 401 certifications. Currently, developers of wetlands smaller than 3 acres (Tier I projects) are not typically required to seek an individual 401 certification review as long as Best Management Practices (BMPs) are included in their permit application (TCEQ, 2011a). Some review participants considered this minimal oversight to be a programmatic stressor to coastal wetland protection (see additional information under next bullet). Ecologically significant jurisdictional wetlands such as pitcher plant bogs, bald cypress and tupelo gum swamps, and mangrove marshes are not eligible for Tier I processing and must be reviewed under the more intensive Tier II process. Some participants also believed the state could be doing more to protect wetlands that are not covered by the CWA (such as certain isolated wetlands) through the development of state regulations.
- **Incremental losses.** Some participants thought the tiered Section 401 certification process described above could be leading to incremental wetland acreage losses due to the large number of developments affecting less than three acres of wetlands. Similarly, one participant expressed concern that the use of CWA Section 404 nationwide permits (NWPs) may allow incremental wetland losses due to numerous small development activities, each impacting jurisdictional wetlands without the benefit of public notice/review and a compensatory mitigation plan. Army Corps noted however that NWPs are only meant to permit projects that contribute no more than minimal individual and cumulative adverse effects on aquatic resources. Additionally, a number of NWPs have conditions that require pre-construction notification to the local Army Corps District and compensatory mitigation.
- **Mitigation.** Participants described a lack of mitigation site monitoring as a stressor in Galveston Bay. Unavoidable wetland acreage losses permitted under CWA Section 404 must be offset, to the extent appropriate and practicable, through compensatory mitigation (in order to prevent net wetland loss). However, participants expressed concern that mitigation is occurring outside the watershed where the impact occurs and therefore not truly replacing the loss. Additionally, some participants felt that uncompensated loss may be occurring when mitigation is not properly carried out and, therefore, additional monitoring and enforcement is needed. Note that compensatory mitigation requirements are designed to replace wetland functions, and therefore may not result in a one-to-one replacement of lost wetland acreage.
- **Unauthorized wetland loss.** Participants believed that illegal wetland fills may be occurring in the Galveston Bay watersheds due to lack of enforcement and a lack of knowledge on the developers' part. However, a portion of these fills may be occurring in wetlands outside the jurisdiction of the Clean Water Act or as a result of exempt activities, and therefore do not require authorization under CWA Section 404.
- **Rolling easement litigation.** Review participants noted that a Texas Supreme Court decision and ongoing litigation call into question the use of rolling easements to protect public beaches (see the "Tools and Strategies" section for a description of rolling easements), allowing them to potentially remain developed private property, and subject to armoring and other structures (ASWM, 2010). Results of the court decisions will potentially limit the ability to use rolling easements (in Galveston Bay and perhaps within the entire Gulf region) as a tool for protecting public interests in these dynamic coastal shorelines, which include important coastal habitats.

Highlight: Clean Water Act Jurisdiction and Evidence of Surface Connectivity for Texas Gulf Coastal Depressional Wetlands

Within the Galveston Bay watershed, there are wetlands for which the applicability of CWA protections has been difficult to determine. EPA and the Army Corps are responsible for issuing regulations and guidance regarding CWA jurisdiction, such as which wetlands are federally protected under the scope of the Act. In April 2011, EPA and the Army Corps announced the release of the "Draft Guidance Identifying Waters Protected by the Clean Water Act" for public comment and review. The draft guidance clarifies which waters are protected by the CWA and implements the Supreme Court's decisions in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* and *Rapanos v. United States*. These two court decisions have created uncertainty over which waters are protected by the CWA. Once final, the EPA/Army Corps guidance will replace previous guidance and provide more certainty and clarity to facilitate accurate field determinations.

The draft guidance includes several clarifications to current guidance documents:

- It clarifies "adjacent" wetlands as including ones in physical proximity to jurisdictional waters or ones with an unbroken surface or shallow sub-surface hydrologic connection.
- It clarifies that all wetlands within a wetland mosaic should be considered collectively when determining adjacency.
- It continues to include adjacent wetlands as per se jurisdictional where they are adjacent to either a traditional navigable water (TNW) or interstate water or where they abut a relatively permanent tributary of a TNW or interstate water.
- It continues to classify wetlands adjacent to non-relatively permanent tributaries as jurisdictional where they have a significant nexus to a TNW or interstate water.
- It clarifies that non-adjacent wetlands are jurisdictional where they individually have a significant physical, chemical, or biological nexus to a TNW water or interstate water.
- It clarifies that groups of waters (e.g., tributaries, adjacent wetlands, other waters) can be considered holistically on the watershed scale when evaluating significant nexus, rather than at a stream reach level.

Even with this EPA/Army Corps draft guidance for how to interpret recent Supreme Court cases, federal jurisdiction for certain waters, including wetlands, would need to be determined on a case-by-case basis to identify whether or not they have a significant nexus to a TNW or interstate water. To learn more about the guidance, visit http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm.

There has been ongoing research in Texas to address the nature of wetlands that became non-jurisdictional as a result of the court decisions. A recent study concluded that there are considerable hydrologic connections between certain Texas upper coast depressional wetlands and Galveston Bay and other navigable waters (Wilcox et al., 2011). The study quantified surface discharge characteristics of a wetland complex in the Armand Bayou Nature Preserve, southeast of Houston, on the Texas Gulf of Mexico Coastal Plain. It was found that surface runoff from the wetlands, although intermittent, occurred regularly and accounted for more than 17 percent of watershed precipitation over the 45-month study period. The wetland complex has a direct surface connection via a stream outlet to a tributary of Armand Bayou, a traditional navigable water. Due to this stream connection to Armand Bayou, the authors of this study have suggested that these wetlands should be considered "adjacent" wetlands, and thus could potentially be regulated under federal regulations, requiring a significant nexus evaluation. The results from the study are contrary to the "widespread perception that depressional wetlands on the Texas Gulf Coast are hydrologically isolated" (Wilcox et al., 2011). While exertion of federal jurisdiction upon wetlands must be determined on a case-by-case basis, field-based studies provide vital scientific support for these case-by-case determinations.

Figure 9. League City: example of a non-jurisdictional depressional-pimple-mound wetland complex surrounded by residential development. *Source: USWFS.*

Hydrologic modifications. Hydrologic modifications include the direct and indirect impacts associated with a number of activities, including freshwater diversions, channelizing streams to improve drainage, groundwater withdrawals, as well as extraction of other resources such as sand and gravel, gas, and oil. These activities can result in subsidence, as well as alterations of salinity and flow levels. Hydrologic modifications leading to saltwater intrusion can alter freshwater and forested wetlands and change wetland types. Some studies suggest that "many, and perhaps most, of Galveston Bay's fringing wetlands have been lost to human-induced subsidence, with no corresponding migration of wetlands landward because of the abrupt slopes surrounding most of the Bay" (Jacob and Showalter, 2008).

- **Alterations in freshwater flows.** Reduced freshwater inflows occur as a result of groundwater pumping and surface water diversions. Participants indicated that a reduction in freshwater flows has affected the San Jacinto and Trinity River deltas and riparian wetlands by altering the salinity levels of the Bay. Increased salinities of freshwater and brackish wetlands allow invasive species to spread and flourish. This population shift can decimate native species, including commercially valuable ones such as oysters (Galveston Bay Foundation, n.d.[a]). Increased salinities can also result in major shifts in wetland types to more saline conditions, with potential ecological consequences such as loss of cypress swamp in the Trinity delta. This in turn causes refuge and land managers to opt for structural marsh management, which can restrict access to the marshes for transient marine species and may actually accelerate marsh loss over time (R. Swafford, personal communication, May 16, 2012). Decreased freshwater inflow can also alter the wetland ecosystem by exposing anaerobic soils. Over time, upland plants will out-compete wetlands plants in these altered soil conditions (Texas GLO, 2010a). Conversely, increased flows from diversions and runoff can also be a problem. Inundation can alter a wetland, changing it into an open water habitat that cannot support wetland vegetation. An example is the Addicks Reservoir in Harris County, which is inundated by a combination of natural flows and stormwater runoff, and has controlled releases that affect vegetation downstream in Buffalo Bayou (HCFCD, n.d.[a]).
- **Alterations in sediment.** Sediment budgets play a large role in wetland formation and maintenance. Both increased and decreased flow regimes can lead to changes in sediment budgets and the loss of coastal wetland area. Hydrologic modifications, such as dams, can decrease water flow and restrict sediment and nutrient deposition that normally replenishes and helps to maintain a thick organic soil layer—essential for healthy wetlands. A study on the sediment budgets in the Trinity River indicated that sediment restriction from Livingston Dam has been offset by erosion in the lower coastal plain, which maintains supply to the Bay (Phillips et al., 2004). However, this restriction may lead to coastal wetland acreage loss, since increased sediment supply will be needed to match the rate of sea level rise (Lester and Gonzalez, 2011). Conversely, alterations such as dredging and channelization can increase flow velocity, scouring, and erosion of adjacent wetlands. The response to erosion in Galveston Bay has been development of armored shorelines, which prevent wetlands from migrating inland (Lester and Gonzalez, 2011). In the Galveston Bay area, alterations to water circulation and sediment flows caused by the Houston Ship Channel, the Texas City Dike, and coastal highways have reduced sediment deposition in West Galveston Bay (Lester and Gonzalez, 2011).
- **Flood management practices.** Flood management projects implemented by entities such as the Harris County Flood Control District are designed to improve drainage and prevent flooding, but participants noted that these projects can also significantly impact natural riparian systems. To improve conveyance of water, channels are widened, deepened, and cleared of vegetation. Detention basins are often built adjacent to channels to allow for storage of stormwater. These types of alteration can significantly affect hydrologic regimes, which in turn have direct and indirect effects on wetlands. Additionally, participants noted that herbicides are applied to control riparian vegetation along these modified channels and mosquitoes are treated aerially in some locations, which could have significant effects on wetland habitat.
- **Dredging.** Dredging for navigation, which creates deeper and more distinct channels, can change sediment deposition patterns, increase erosion (where increases in flow velocity occur), and change the freshwater/saltwater regime. In addition, the dredged material needs to be disposed of and, depending on the method of disposal, can either negatively or positively impact coastal habitats. Participants noted the Houston Ship Channel as an example of dredging impacts that have significantly changed Bay circulation and salinity (Lester and Gonzalez, 2011). Additionally, sediment in certain areas of the Houston Ship Channel has been shown to contain hazardous chemicals, such as PCBs, dioxin, DDT, and heavy metals (EPA, 2007; Lester and Gonzalez, 2011).

There are areas of the Houston Ship Channel where sediments are not contaminated, as well as other navigation channels that are not contaminated. These sediments, when dredged, can be used for beneficial purposes—for example, enhancing existing resource areas by restoring wetlands, islands, and beaches.

- **Sand and gravel excavation.** Review participants commented that sand and gravel mining operations occurring within floodplains outside of the state-owned riverbed (e.g., West and East forks of the San Jacinto River) result in direct loss of forested wetlands through excavation. In addition, mining operations can lead to the suspension of fine sediments in adjacent water, which reduces water clarity and can cover wetlands, indirectly resulting in acreage loss. The sand and gravel excavation itself is not a regulated activity in Texas. However, any related deposition of sediments into nearby waters of the United States requires a National Pollutant Discharge Elimination System (NPDES) permit from TCEQ and/or a CWA Section 404 dredge and fill permit from the Army Corps. TCEQ found that about half of mining facilities it investigated in the state were operating without a discharge permit in 2004, and a number were not meeting permit requirements such as implementation of BMPs and monitoring (TCEQ, 2004). Participants believed a CWA Section 404 exemption related to sand and gravel mining may be leading mining operators to believe they do not need a permit, though this exemption is actually for a narrowly defined set of activities.[2]
- **Groundwater pumping.** Groundwater pumping is partly responsible for the subsidence experienced in Galveston Bay over the last 100 years (Texas GLO, 2010a). Subsidence can affect wetland habitats by drowning vegetation, increasing the frequency of saltwater inundation events, and modifying drainage patterns (Coplin and Galloway, n.d.). Participants noted that groundwater withdrawals have decreased significantly around the Bay, but there are still areas, such as Jersey Village, that experience subsidence from groundwater withdrawals (Lester and Gonzalez, 2002; Engelkemeir et al., 2010). The rate of subsidence of the land around the Bay as a whole has decreased due to an increased use of surface water for municipal, agricultural, and industrial purposes (Texas GLO, 2010a).
- **Oil and gas extraction.** Oil and gas extraction historically caused localized land subsidence in upper Galveston Bay and the Bolivar Peninsula (Coplin and Galloway, n.d.). Some participants described how subsurface extraction led to more pronounced geologic faulting, specifically on the Bolivar Peninsula. With increased faulting land surface elevation dropped, and the marshes were left susceptible to inundation. Ten percent of the marsh habitat on the peninsula was lost from the 1950s through 2002 (White et al., 2004). Fluids (both oil and water) are still extracted from salt domes in the area, e.g., High Island. These domes often have wetland areas associated with them as the result of subsidence from faulting. Additionally, oil and gas extraction can introduce new erosive factors by removing established vegetative cover and introducing unimpeded hydrologic flow (e.g., installation of pipeline in an established marsh with a highly erosive substrate).
- **Seismic exploration.** Participants also identified impacts of seismic exploration as an ongoing problem. They observed a recent increase in frequency of these surveys within the study watersheds. Exploration can involve intersecting marshes with access roads, leading to fragmentation of the wetlands and a decrease in water and nutrient circulation and flow. The side cast borehole material covers vegetation and leads to marsh conversion. Three-dimensional seismic exploration is covered under a CWA Section 404 NWP and does not require pre-consultation with the Army Corps unless the activity is planned in a tidal area. Although Section 404 permitting for many survey activities is covered by NWP 6, a regional condition to the permit in the Army Corps' Galveston District requires that a permittee submit a pre-construction notification if three-dimensional seismic test discharges are to occur in the coastal zone.[3]

Climate change and sea level rise. Effects of climate change include inundation of coastal wetlands due to sea level rise, unpredictable or episodic nature of extremes

[2] The exemption pertains to discharge of dredged or fill material incidental to the emergency removal of sandbars, gravel bars, or other similar blockages that are formed during flood flows or other events, where such blockages close or constrict previously existing drainage ways and, if not promptly removed, would result in damage to or loss of existing crops or would impair or prevent the plowing, seeding, harvesting, or cultivating of crops on land in established use for crop production. Such removal does not include enlarging or extending the dimensions of, or changing the bottom elevations of, the affected drainage way as it existed before the formation of the blockage. Removal must be accomplished within a year of the discovery of such blockages in order to be eligible for exemption.

[3] For more information, see http://www.swf.usace.army.mil/pubdata/environ/regulatory/handouts/nwp%20rgnl%20cnd%20for%20tx.pdf.

in weather, and an impact on wetlands from increasing intensity and frequency of storm events (e.g., sediment and debris deposition). Related threats such as changes in precipitation patterns, timing and delivery of water and sediments, increases in atmospheric carbon dioxide, and higher temperatures also affect wetlands (Scavia et al., 2002).

- **Sea level rise.** Galveston Bay experienced a 0.6 meter rise in relative sea level in the 20th century (Yoskowitz et al., 2009). Land subsidence in the Galveston Bay watershed is likely to increase the impact of sea level rise. The most severe effects of sea level rise are predicted to occur in the East and West Bays and the Trinity River Delta where the greatest amount of marsh and swamp erosion is predicted to occur (Warren Pinnacle Consulting, Inc., 2011a).
- **Limited estuarine marsh migration opportunities.** Estuarine marshes can migrate inland as sea level rises, which can help sustain coastal wetlands and provide a buffer for inland properties. However, as global sea levels rises, it is unclear to what extent coastal marshes will move inland due to the location and quantity of development landward of the marshes (Warren Pinnacle Consulting, Inc., 2011a). Shoreline hardening can prevent wetlands from migrating and therefore result in loss of wetland area due to inundation and erosion. A study of sea level rise in Galveston Bay, commissioned by the Harte Research Institute in 2010, shows a significant portion of the Galveston Bay shoreline would be inundated during a 100-year storm given a projected increase in sea level of approximately 0.69 meters (2.3 feet; based on the IPCC A1F1 scenario) (see Figure 10).
- **Impacts to black mangrove.** Galveston Island is currently the northern limit for the black mangrove species due to its strict temperature requirements, a quality which makes it a good indicator of climate change. Increasing temperatures are allowing black mangrove to become more established in Louisiana, and the range of black mangrove is expected to expand northward in Texas as well. Additionally, inundation from increased hurricanes and from sea level rise will expose mangroves to changes in salinity and increased erosion (Montagna et al., 2011).
- **Hurricanes and storms.** Storms have caused damage to Galveston's coastal wetlands and resulted in coastal erosion that is exacerbated by prevailing winds, channelization, and ship traffic. Hurricane Ike (September 13, 2008) hit the coast east of Galveston Bay, causing a 5-meter storm surge, which traveled up to 10 miles inland (USGS, 2009). In addition to causing erosion, storm surges inundate freshwater wetlands with saline water, which can destroy a significant amount of freshwater vegetation (Lester and Gonzalez, 2011). If, as predicted, the intensity of such storms increases due to climate change (USGCRP, 2009), wetland loss associated with hurricanes can be expected to increase.

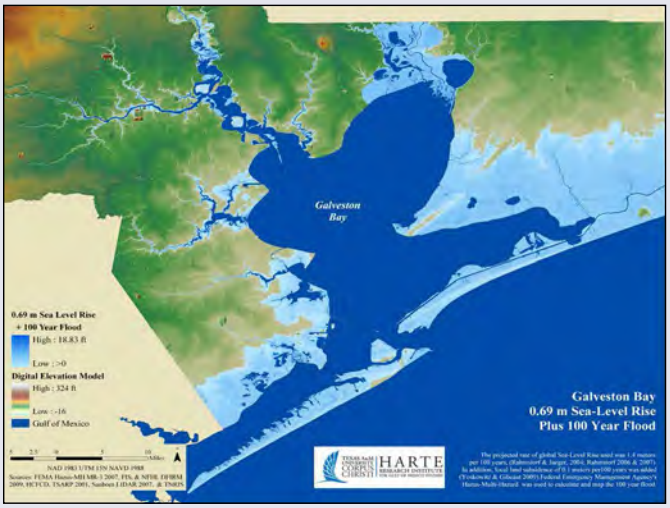

Figure 10. Land inundation given a 0.69 meter rise in sea level and a 100-year flood. *Source: Yoskowitz et al., 2009.*

Oil spills. Oil spills can negatively impact coastal wetlands and associated wildlife by coating the substrate and introducing toxins into the environment (Ober, 2010; Whigham et al., 2010). Although wetlands can recover from these spills, their ability to recover can be hindered by compounding stressors such as sea level rise and subsidence (Whigham et al., 2010).

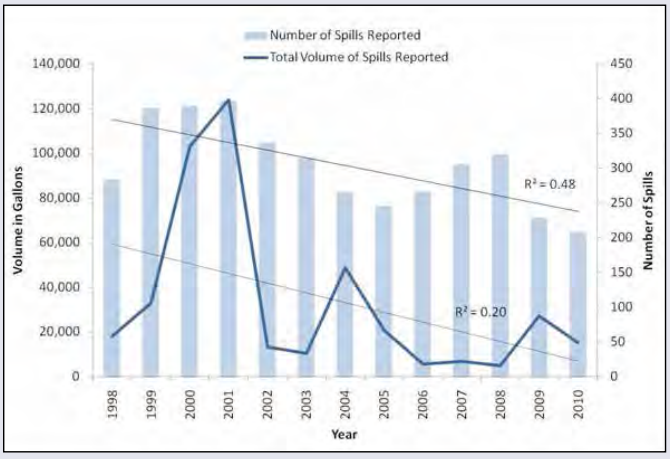

Figure 11. Number and volume of oil spills reported annually by the Texas General Land Office in the Lower Galveston Bay watershed, 1998–2010. *Source: Gonzalez and Lester, 2012; Texas GLO, 2010b.*

Participants noted that while oil spill data reported to the Texas General Lands Office (GLO) are available, there are probably more spills than are reported. Between 1998 and 2010, there were a total of 3,954 oil spills and over 431,000 gallons released in the Lower Galveston Bay watershed as reported by the Texas GLO with a trend of reduced spill incidents and volume over time (See Figure 11).

Invasive species. Participants described invasive vegetation as an important cause of coastal wetland functional loss in the review watersheds. Impacts include loss of species diversity, structural changes in the vegetation community, changes in nutrient cycling, and habitat changes. Participants noted that Chinese tallow tree (*Triadica sebifera*) is a species of particular concern since it has moved into freshwater marsh areas in great numbers within the Galveston Bay area. In addition, its spread has been documented throughout the upper Texas coast and down through other portions of the central coast (TexasInvasives.Org, 2011). A Houston urban forestry study using 2000 LANDSAT satellite data and 2002 field data showed that the Chinese tallow tree is the single most common species in the region, and represents a greater percentage of trees in the Houston area than all oak species combined (Nowak et al., 2005). The spread of such an aggressive species is a concern because it outcompetes native plants and can be a main cause of coastal wetland functional loss. Invasive vegetation can also cause changes in the types of fish and wildlife species present because of the changes in the type and abundance of food and shelter that the wetland vegetation provides. Deep-rooted sedge (*Cyperus entrerianus*) was noted as a plant that was once rare but now outcompetes native vegetation. Giant salvinia, water lettuce, and water hyacinth were mentioned as other examples of invasive vegetation impacting wetlands, along with invasive animals such as nutria and grass carp.

Funding at cross-purposes. Review participants noted some controversy around NRCS funding of projects that may result in unintentional wetland loss. Participants mentioned an instance where NRCS funded the Galveston County Consolidated Drainage District to remove downed trees from riparian zones of Dickson Bayou. Some participants viewed this activity as destruction of the riparian zone vegetation; others believed it restored the area to something closer to its natural state. Chambers County also funded similar riparian zone clearing activities along Double Bayou.

Tools and Strategies

In response to wetland losses, Texas uses several regulatory and non-regulatory programs to manage, protect and restore coastal wetlands. It primarily relies on Section 404 of the federal CWA (which regulates dredge and fill projects in waters of the United States) to protect its coastal and inland wetlands (see Appendix C for an explanation of CWA Section 404 authority and scope). In addition, TCEQ administers the state's Section 401 Certification Program. The program's goal is to ensure that activities requiring a federal permit (including CWA Section 404 permits) undergo state review for compliance with Texas' water quality standards. Since 1995, TCEQ has adopted a "no net loss" policy for preserving wetland functions and values, which is included in its water quality standards and mitigation policies. TCEQ is the lead state agency administering the Section 401 program; the Railroad Commission of Texas is responsible for overseeing oil and gas exploration activities, including issuance of Section 401 certifications for oil and gas development projects in wetlands.[4]

The Texas Coastal Management Program (CMP), within the Texas GLO, helps manage the state's coastal resources through interagency coordination and private/public partnerships. CMP activities include providing data on the health of Gulf waters, reviewing federal actions to ensure consistency with the state's CMP, and awarding grants (approximately $2.2 million annually) for protection and restoration of coastal resources. The Texas Parks and Wildlife Code requires that a State Wetlands Conservation Plan be developed for coastal wetlands (state-owned coastal wetlands exclude most non-tidal wetlands; see Texas Natural Resources Code §33.203). Among other things, the plan must establish a no net loss goal, inventory coastal wetlands, and guide mitigation policies and long-range navigational dredging and disposal plans. The plan for state-owned coastal wetlands was drafted in 1994 and approved in 1997 (Texas Parks and Wildlife, 1997).

In addition to these overarching tools and strategies, a number of effective tools and strategies exist or are under development in the Galveston Bay watersheds to address the stressors discussed in the section above.

[4] For more information, see http://www.tceq.texas.gov/nav/permits/water_qual.html.

Tools to address coastal development.

- **Compensatory mitigation for wetland impacts.** In order to receive a CWA Section 404 permit, developers and other applicants must compensate as appropriate and practicable for jurisdictional wetland loss that cannot be avoided. Compensatory mitigation in Texas, as required under the Army Corps CWA Section 404 program and TCEQ's CWA Section 401 certification program, is determined based on functional assessments or ratios as appropriate. Compensatory mitigation may occur through permittee-responsible on-site or off-site mitigation, mitigation banks, or in-lieu fee programs. For example, the Texas Department of Transportation (TxDOT) developed three wetland mitigation banks—the Anderson Tract with 2,243 acres, the Coastal Bottomlands Bank with 3,552 acres, and the Blue Elbow Swamp with 3,343 acres—in order to increase efficiency, to create long term ecological stability, and to site mitigation projects in high quality areas (FHWA, 2011).
- **Watershed plans.** Participants were enthusiastic about the potential to use watershed plans as a strategic tool for prioritizing problems and developing solutions to watershed-scale stressors. Participants particularly focused on the fact that these plans can serve to identify the location and type of projects that should be prioritized when there is a need for a compensatory wetland mitigation project within a given watershed. Watershed plans can be carefully designed to ensure that mitigation actions will address stressors that are currently degrading the aquatic resource and will sustain or improve the condition of aquatic resources in the watershed. Several participants were surprised and interested to learn that, according to the federal Compensatory Mitigation Rule (*Federal Register* Vol. 73, No. 70, April 10, 2008), watershed plans, where available, are to be considered as a factor in the Army Corps' mitigation decisions (once deemed appropriate by the Army Corps' District Engineer). They indicated that additional watershed plans should be developed to help guide mitigation decisions and noted that the Watershed Resources Assessment Team, a multi-agency state-federal partnership, may be able to help provide baseline information to inform watershed plan development. In the absence of a watershed plan, the Rule states that a watershed-based approach should still be used to determine appropriate compensatory mitigation for wetland impacts.

Highlight: Accomplishments of the Galveston Bay Estuary Program, 1995–2012

The Galveston Bay Estuary Program has made significant progress in improving water quality, restoring wetlands, protecting unique habitats, and educating the public. Those achievements included:

- Restoring and protecting approximately 20,615 acres of wetlands and coastal habitats.
- Using dredged material to restore more than 2,500 acres of wetlands and coastal habitats.
- Cultivating up to a half million wetland plants annually for wetlands restoration projects.
- Forming the Galveston Bay Freshwater Inflows Group to develop management strategies to balance the multiple uses of the estuary, the Invasive Species Work Group to help manage invasive species management in the Bay, and the West Bay Initiative to target conservation opportunities in the West Bay Watershed.
- Implementing BMPs for conservation landscaping, vegetative buffers, and stormwater management, and conducting workshops with local governments and developers on sustainable development practices.
- Conducting over 350 presentations and exhibits for schools, local community events, and workshops and conferences, reaching nearly 25,000 adults and students since 1995.
- Dedicating $10 million to resource conservation and education projects, leveraging an estimated $82 million.

» **Comprehensive Conservation and Management Plans.** One of the most significant watershed management plans for the area is the Galveston Bay Estuary Program's CCMP. The Galveston Bay Estuary Program, part of EPA's National Estuary Program, is implementing their CCMP, which guides the conservation and restoration of the estuary based on scientific research. The CCMP contains actions to acquire, manage, and protect wetlands, calling for improved coordination among the agencies involved in their management. It also includes measures to halt declines in coastal habitat quantity and quality, maximizing beneficial uses of dredged materials. In addition to and in support of the CCMP, the Galveston Bay Estuary Program, in

cooperation with TCEQ and the Houston Advanced Research Center, is undertaking a number of important initiatives to monitor, assess, and improve the health of the estuarine system, including publication of the "State of the Bay" report and a "Status and Trends" report, which included a number of indicators of the Bay's overall health.[5]

  - » **The Armand Bayou and Dickinson Bayou watershed plans.** The Armand Bayou Watershed Working Group, which was organized by the Texas Coastal Watershed Program in partnership with private organizations and the Texas Sea Grant program, was responsible for developing the Armand Bayou watershed plan. The plan examines the current state of the watershed, current management programs, and tools and strategies used to improve the ecological health of the watershed, including identification of habitat that could be designated as mitigation areas.

- **Total Maximum Daily Loads.** The CWA requires states to identify any waterbody that does not meet the water quality standards necessary to support its designated uses, and to create Total Maximum Daily Loads (TMDLs) for these waters. A TMDL is a calculation of the total amount of pollutant a waterbody can receive while still meeting water quality standards for the designated use of that waterbody, and how this budget will be divided between point and nonpoint sources. A state develops an implementation plan with strategies to meet the TMDL goal, which consists of both regulatory and non-regulatory programs. In 2009, TCEQ created fecal coliform TMDLs to meet water quality standards (for oyster water use) in six sub-bays of Galveston Bay. Fecal coliform, a type of bacteria, is an indicator of human and animal waste that can enter the Bay via wastewater discharges, stormwater runoff from urban areas, and other sources. TCEQ and the Galveston Bay Foundation have created a working group that develops and implements reduction measures such as public education campaigns, wastewater treatment facility improvements, and bans on boat discharges into the bay (Galveston Bay Foundation, 2012). This implementation plan contains strategies to minimize the impact that developed area has on surrounding resources.
- **Property buyouts.** Buyout programs are administered by the Federal Emergency Management Agency (FEMA) and funded by five different Hazard Mitigation Assistance Programs. Buyouts permanently keep land from redevelopment; land that is purchased with grant funds must remain as open space, recreational space, or managed wetlands. The Federal Hazard Mitigation Grant Program has a buyout program for municipalities, triggered by events such as natural disasters. Using FEMA funding, the Harris County Flood Control District implements buyouts for flood damage reduction programs (HCFCD, n.d.[b]). In 2009, Galveston County offered a property buyout and elevation program to specific flood-prone unincorporated areas in connection with Hurricane Ike. More than 700 parcels of land were bought out for more than $70 million through this grant program (T. Leugemors, personal communication, Beck Disaster Recovery, Inc., 2011).

Tools to address the limitations of regulations.

- **Research associated with federal jurisdiction.** Some recent research in Texas has been directed toward identifying hydrologic connections between geographically isolated wetlands and navigable or interstate waters (Forbes et al., 2010; Wilcox et al., 2011). Participants felt that these types of studies can provide a scientific basis for establishing federal protection for some "isolated" wetlands whose jurisdictional status was made uncertain by Supreme Court decisions.
- **Land management and conservation programs.** Some participants stated that existing regulations alone are insufficient to protect wetlands and that wetland acquisition and conservation programs are essential to slow coastal wetland loss. Land conservation was cited as one of the most effective strategies for protecting coastal wetlands in Texas. Special valuations, conservation easements, and the work of land trusts are all examples of programs designed to achieve this type of protection. Special valuation allows for landowners to pay property taxes based on significantly below market values. Texas offers special valuations for agricultural and open space lands, which can give landowners an incentive to maintain wetlands and other open areas rather than developing them (Dudensing and Jones, 2010).
  - » **Wetlands Reserve Program.** NRCS administers conservation easement programs and works with individual landowners and governing bodies, including the Farm and Ranch Lands Protection Program, the Grassland Reserve Program (GRP), and the Wetlands Reserve Program (WRP). These programs provide assistance for enhancing, creating, or maintaining wetlands,

[5] For more information, see http://www.gbep.state.tx.us.

riparian areas, and adjacent areas. The WRP is attractive to landowners along the upper Texas Coast because the program offers meaningful incentives and additional funds for wetland enhancements. In the Galveston Bay area, NRCS will pay up to $2,000 per acre for a perpetual easement in GRP. Lifetime easements and enhancements offer larger financial reimbursements than shorter easements.

» The bottomland hardwood forests of the upper Texas coast, known as the Columbia Bottomlands, occupy 72,000 hectares and provide critical stopover habitat for approximately 29 million migrant birds. A portion of the bottomlands has been protected through a land acquisition and conservation program administered by the USFWS, state agencies, and non-governmental partners. The Columbia Bottomlands Conservation Plan emphasizes cooperation with local conservation partners to promote private conservation efforts (Rosen et al., 2008). NRCS designated funds for the protection of the property with a conservation easement through the WRP (The Conservation Fund, 2012).

» **Land use planning.** Land use planning can be used to proactively address coastal wetland conservation. It facilitates the identification of high-value wetlands and priority areas for protection. Review participants noted that widespread land use planning will require more broad-based public and political support than currently exists in Texas, where limited land use regulation and private property rights are highly valued.

Although this tool is not often used in Texas, some Texas cities could serve as models for planning in the Galveston Bay area. For example, Denton has specific rules protecting environmentally sensitive areas, including riparian areas. Austin has the Balcones Canyonlands Preserve, created as a community-based solution to protect habitat of endangered species threatened by a planned development in western Travis County (USFWS, 1996). And, though it is not strictly a land use plan, the Chambers County Greenprint Plan is a proactive attempt for the county (which is located in Galveston Bay) to establish conservation goals, while still promoting community development. This plan includes several maps related to land conservation priorities that recognize the importance of preserving coastal wetlands and their functions for both the ecosystem's health and the county's economy (The Trust for Public Land, 2009).

» **Eco-Logical habitat map.** The Houston-Galveston Area Council and Texas Sea Grant created an online interactive tool, based on a Federal Highway Administration project that provides ecosystem information for proposed transportation projects. The tool can identify quality habitat areas greater than 100 acres in size, which is useful for identifying areas of environmental concern and potential conflict during the transportation planning process.[6] One participant noted that it could also be useful for identifying high-quality mitigation sites.

» **Conservation organizations.** Local land trusts and conservation organizations also contribute significantly to wetlands conservation through easements. The Bayou Land Conservancy has protected 188 acres of wetlands in its 544 acres of preserves and easements in the study watersheds. Similarly, the Galveston Bay Foundation holds conservation easements in the watershed, in addition to 3,000 acres of land that it owns outright.[7]

» **Conservation grants.** There are a variety of opportunities to apply for conservation grants, including funds to protect wetlands, through various state and federal agencies. Some non-governmental organizations (NGOs) also provide funding streams through grants. Some conservation grants available for wetland conservation include:

- The Coastal and Estuarine Land Conservation Program, administered by NOAA and the Texas GLO, offers funding for up to three projects per year at a maximum of $3 million per project. This funding is available to state and local governments to acquire coastal and estuarine lands considered important for their ecological, conservation, recreational, historical, or aesthetic value. Lands and conservation easements acquired with the program's funds are protected in perpetuity.[8]
- National Coastal Wetland Grant Program, administered by USFWS, offers funding to support state-led wetland conservation and restoration projects. Texas Parks and Wildlife Department and the Texas GLO have engaged multiple local partners to

[6] For more information, see http://www.h-gac.com/go/eco-logical.

[7] For more information, see http://www.galvbay.org/conservation_landtrust.html.

[8] For more information, see http://coastalmanagement.noaa.gov/land.

receive funding for a substantial number of projects in Galveston Bay that have received regional and national recognition.

- The Coastal Erosion Planning and Response Act (CEPRA) program, administered by the Texas GLO, implements coastal erosion projects and studies to reduce the effects of and understand coastal erosion processes. When funding is appropriated, the CEPRA program provides funding on a biannual basis toward projects such as dune restorations, habitat protection, and beneficial uses of dredged materials for habitat restoration. Since 2000, CEPRA has received $62 million in state funding and another $62 million in matching funds to implement more than 200 coastal erosion projects.[9]
- The Coastal Impact Assistance Program (CIAP) is a federal program funded through royalties collected from offshore oil and gas leases. CIAP funds are specifically made available to areas that have been impacted by offshore exploration and development. Projects for the conservation, protection, or restoration of coastal areas, including wetlands, are one category of activities funded by CIAP in Texas. In 2010, the state received an allocation of $35 million.[10]

» **Rolling easements.** Rolling easements, where land ownership boundaries migrate inland in response to natural events such as sea level rise, are a tool for protecting coastal wetlands. These easements ensure that beaches and vegetated dunes remain in public ownership, protect them from private development, and offer wetlands the opportunity to migrate inland with changing shorelines. The authority to implement rolling easements in Texas dates back to passage of the Texas Open Beaches Act (TOBA) in 1959. The Act was derived from common law "which recognized that Gulf beaches have been used by the public since 'time immemorial' and that barrier islands are constantly shifting" (Jacob and Showalter, 2007). TOBA requires maintenance of a rolling easement along Galveston Bay (and along most of the Texas Gulf shoreline) to protect public access to state-owned beaches. The state of Texas owns the shoreline that lies below mean high tide, which includes the intertidal zone and the beaches that lie therein. TOBA prohibits construction of any structures on private property that would interfere with the normal coastal shoreline's dynamic processes and would therefore impede public access should the beach shift inland. This restriction applies to buildings, which means that businesses and residences need to be removed or relocated if the shoreline changes to the extent that those buildings become an impediment to public access to the beach. The Texas courts and government are currently revising and refining how rolling easements apply to the coast (Titus, 2011).

Tools to address impacts of hydrologic modifications.

- **Beneficial use of dredged materials.** Sediment that is dredged from waterways within the watershed, such as from the Houston Ship Channel, can be used for coastal marsh restoration and creation projects (Figure 12). The Beneficial Use Group, formed in the early 1990s by the Army Corps, evaluates the possible beneficial uses of dredged material from Houston-Galveston Bay. Though dredged material from the Houston Ship Channel has been used for marsh restoration, review participants noted that there are additional opportunities to use sediments from around the Bay for more widespread coastal

Figure 12. Dredged material was used to restore Goat Island, seen here in an intermediate stage of restoration. *Photo courtesy of Beneficial Use Group.*

[9] For more information, see http://www.glo.texas.gov/what-we-do/caring-for-the-coast/coastal-erosion/index.html and http://www.glo.texas.gov/what-we-do/caring-for-the-coast/grants-funding/index.html.

[10] For more information, see http://www.glo.texas.gov/what-we-do/caring-for-the-coast/grants-funding/ciap/index.html.

wetlands restoration projects. Since 1995, navigational dredge material has been used to restore over 2,000 acres of wetlands and 500 acres of seagrass (GBEP, 2009, as cited in Lester and Gonzalez, 2011). As a result of the discharge of sediments on seagrass beds in West Bay in December 2011 and January 2012 and subsequent comments about this practice from recreational fishermen, the Galveston Bay Foundation, and state and local resource agencies, the Army Corps Galveston District is forming an interagency coordination team to better assess and review dredged material management before projects are initiated.

- **Regional sediment management plans.** The Gulf of Mexico Foundation (GMF) and Gulf of Mexico Alliance (GOMA) Habitat Conservation and Restoration Team have completed a draft of the first regional sediment management plan for West Galveston Bay. The plan includes information on sediment sources and how sediment moves through the system, and 24 regional sediment management recommendations that would support sustainable restoration projects. The draft plan is currently under review and will be finalized in 2012.
- **Flow standards.** Minimum flow standards can help prevent water diversions from resulting in coastal wetland loss. TCEQ adopted environmental flow standards for Galveston Bay in April 2011 (TCEQ, 2011b). These standards outline minimum outflow levels for the San Jacinto and Trinity rivers. The Galveston Bay Foundation is concerned, however, that the new standards are not protective enough and create a stress on the estuarine ecosystem by limiting the freshwater flow into the Bay to levels that are too low for oysters and other organisms. They believe standards should allow for greater freshwater influx, should include standards for the other tributaries—which make up 18 percent of flows into the Bay—and should account for seasonal flow requirements (Galveston Bay Foundation, n.d.[a]).
- **Use of wetlands for stormwater management and flood damage prevention.** The Harris County Flood Control District (HCFCD) uses constructed wetlands to filter stormwater runoff and to provide flood control value within watersheds. HCFCD's Greens Bayou Wetland Mitigation Bank is a 1,400-acre wetland site that combines wetland creation and natural stormwater runoff treatment (HCFCD, 2010b). Additionally, the Army Corps is partnering with the HCFCD on Project Brays, a major flood damage reduction project (Figure 13). This project will use marsh creation as one strategy to reduce the risks associated with flooding in this heavily urbanized watershed (HCFCD, 2010a).
- **Subsidence districts.** The establishment of the Harris Galveston Subsidence District in 1975 restricted the rates of groundwater pumping in Harris and Chambers Counties. The goal of the district is to ensure that withdrawals do not exceed recharge rates. This district could be a model for other coastal areas with subsidence impacts.

Tools to address climate change and sea level rise.

- **Living shorelines.** This management practice addresses shoreline erosion through the strategic placement of vegetation, stone, sand, and other structural and organic materials along the shore, creating a natural buffer that can help protect coastal development from flooding

Figure 13. Designed to reduce the risk of flooding, the Brays Bayou Flood Damage Reduction Project includes wetland creation to collect stormwater and improve water quality. *Photo courtesy of HCFCD.*

Figure 14. Galveston Island living shoreline. *Source: Galveston Bay Foundation, n.d.(b).*

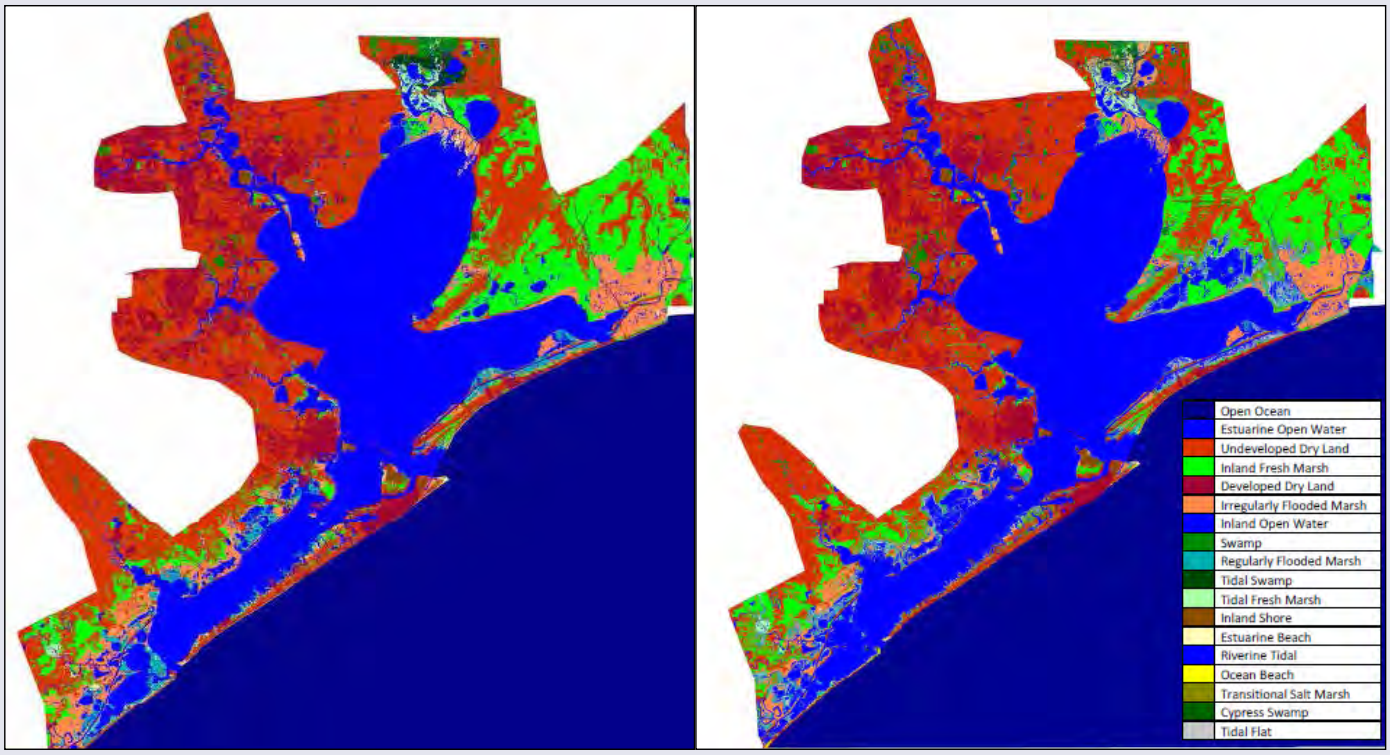

Figure 15. SLAMM for Galveston Bay. Initial conditions in 2004 (left) and under the 1 meter rise by 2100 scenario. *Source: Warren Pinnacle Consulting, Inc., 2011a.*

due to sea level rise (Figure 14). Living shorelines are a specific type of green infrastructure; they are considered to be a viable alternative to traditional shoreline stabilization techniques, which employ engineered structures such as seawalls, groins, and bulkheads. Participants indicated that incentives are needed to make green infrastructure and planning a priority. According to some participants, the use of living shorelines is not a common practice in Galveston Bay. Developers and their engineers have yet to embrace this design change, since they are familiar with more traditional shoreline armoring methods.

- **Modeling and habitat studies.** In 2010 and 2011, The Nature Conservancy and Warren Pinnacle Consulting, Inc., applied the Sea Level Affecting Marshes Model 6 (SLAMM) to assess the impacts of sea level rise on the marshes and other coastal habitats in Galveston Bay. Maps produced by the assessment show the effects predicted from specific sea level rise projections (see Figure 15). For example, the models predict a 67 percent loss of brackish (irregularly flooded) marsh area and an 84 percent loss of tidal swamp area under a projected 1 meter of sea level rise by 2100.[11] The data and maps produced by this SLAMM assessment can be used as a tool to inform managers of where sea level rise is expected to have particular effects on coastal marshes and improve decision-making (Warren Pinnacle Consulting Inc., 2011a). In addition, a study has been proposed that will complement the Galveston Bay Estuary Program's Status and Trends Report on wetlands by examining wetlands habitat changes from 1989 (published in a 1993 study) through 2009 using SLAMM outputs. The study will have a 50-year outlook.

Other tools to address coastal wetlands stressors.

- **Ecosystem services valuation.** The GMF/GOMA habitat team commissioned the Harte Research Institute (HRI) to conduct an analysis of how ecosystem services from marshes in Galveston Bay might be affected by sea level rise. The project will use the outputs from the SLAMM modeling project assessing sea level rise impacts to Galveston Bay marshes.
- **Revised shoreline classifications.** Texas GLO funded Texas A&M University and the HRI to work on a shoreline-mapping project of the upper Texas coast. The project will provide up-to-date, shoreline type classifications in the Environmental Sensitivity Index (ESI) ranking system, improving the accuracy and resolution

[11] 1-meter scenario was selected based on recommendation of a SLAMM model contact who believed this was a likely scenario for the watershed.

of the ESI data in the Texas GLO Oil Spill Planning and Response Atlas. The up-to-date shoreline classifications may also be used for shoreline change analysis and can be a tool for identifying changes in coastal wetland habitats, areas where erosion may be increasing, and areas that might be at greatest risk from sea level rise.

What's Needed? What's Missing?

Despite the array of tools and strategies for addressing stressors to coastal wetlands in the East and West Galveston Bay watersheds, participants identified several gaps in resources and programs, both regulatory and non-regulatory. They expressed the need to address these gaps to enable more effective application of tools and strategies to protect and restore the watersheds' wetlands.

Improve planning to control impacts of coastal development.

- **Land use planning.** Participants noted that the Galveston Bay watersheds lack an overarching policy for managing natural resources in light of expected population growth and development, and that a comprehensive strategy is needed to successfully address growth-related impacts. Review participants felt that land use plans could better guide development to minimize impacts on wetlands. In particular, land use planning at the watershed scale would most benefit wetland protection. Mechanisms to support such development and implementation of plans are lacking.
- **Local and county involvement in wetland protection.** Participants noted the importance of conserving and/or protecting depressional wetlands and suggested that municipalities and counties could play a role in regulating these wetlands. For instance, local authorities could ensure that CWA Section 404 permits are received, as needed, before local building permits are issued or to place restrictions on activities in buffer areas around wetlands.
- **Green infrastructure.** Review participants noted the need for better tools to encourage the use of green infrastructure, which can provide shoreline protection while minimizing impacts on adjacent habitats. As noted in the "Tools and Strategies" section, the development community is not very familiar with living shorelines methods. Examples and visual demonstrations would raise awareness in the development community and encourage these practices.
- **Nonpoint Source Pollution Control Program.** The Texas State Soil and Water Conservation Board administers the Texas Coastal Nonpoint Source Pollution Control Program. Like other Gulf of Mexico states, though, Texas has not received full approval from NOAA and EPA for its program.

Strengthen wetland regulatory programs.

- **Enforcement.** Review participants mentioned the need for the following additional tools to strengthen enforcement of wetlands protection regulations:
  - » Press coverage on wetland enforcement cases to increase the effectiveness of enforcement as a deterrence mechanism and thereby reduce illegal wetland fill activities.
  - » While it is not a replacement for on-site investigations, increased use of available aerial photography may enhance enforcement by detecting changes in wetlands that may not easily be accessed from the ground.
  - » Expansion of the use of field-level agreements, such as those between TxDOT, EPA, and the Army Corps, to improve efficiency of enforcement activities and to include local and state agencies as well. Pursuant to a 1989 Memorandum of Agreement between EPA and the Army Corps, the two agencies share the responsibility for enforcement of the CWA Section 404 program, and the EPA takes the lead on particular unauthorized activities, such as those that are completed by knowing, willful, and flagrant violators.
- **Clarifying CWA jurisdiction.** Participants noted a lack of on-the-ground field staff to verify the jurisdictional status of wetlands on a case-by-case basis. Studies of hydrologic connectivity of so-called isolated depressional wetlands can be used to aid jurisdictional determinations, and could possibly result in more positive jurisdictional determinations and protection of depressional wetlands. While some hydrologic studies already exist, participants noted that additional studies are needed to clarify the hydrologic connectivity of geographically isolated wetlands, and better inform jurisdictional determinations.
- **Increasing compliance.** Participants thought that project proponents that received local and/or county building permits, but failed to file for wetland permits, have filled jurisdictional wetlands without authorization. Increased education of landowners and those issuing the building permits could improve compliance with federal wetland regulations.

- **Increased transparency of CWA Section 404 permitting.** According to participants, it is currently difficult for those outside the permitting process to get information about CWA Section 404 permits and compensatory mitigation. State and local managers believe this information would allow them to more effectively track and document wetlands acreage loss and causes of the loss, as well as increase public participation. Although there is a public notice process during the development of all general permits and during the evaluation of each standard individual permit application, participants noted that a Freedom of Information Act request is needed to obtain detailed information on permit analysis (such as hydrologic calculations), statements of findings, and final permit conditions. Participants also believed that determinations regarding cumulative impacts of multiple permit actions are not transparent and that increased transparency and information availability could lead to better tracking of wetland loss, increased compliance, and targeted enforcement.

  A national-level spatial database, ORM2, has been used by all Army Corps Districts since July 2007. Districts had various degrees of success in converting pre-2007 data from many legacy systems; the Corps continues to refine the granularity and accuracy of the impact and mitigation data and has made significant advances since June 2009. Review participants suggested that all pertinent agencies—such as the Army Corps, EPA, and USFWS—should share one Section 404 permit tracking database, which should provide for applications to be submitted online and made publically accessible. They also suggested a mechanism for spatial tracking and assessment of permits (via GIS-based software) as part of this centralized system.

  It was noted that the Army Corps' new Regulatory In Lieu Fee and Bank Information Tracking System (RIBITS),[12] provides improved transparency for mitigation by allowing public access to information on mitigation banking and in-lieu fee programs across the country. Further, the Corps and USFWS signed an interagency agreement on the use of RIBITS in August 2010, and under this agreement, RIBITS has been modified to also include information on FWS conservation banking activities.

- **Permit coordination.** Participants expressed a desire for more coordination between agencies participating in the permitting process. Previously, the Texas Coastal Coordination Council had established a Permit Service Center and, through a pilot program, offered applicants the opportunity to take advantage of a joint permitting process, where a coordinated permit application could be submitted for a combination of state and federal wetlands permits. Permits eligible for the joint process were: TCEQ Section 401 certifications, Army Corps CWA Section 404 permits, and permits issued by the Texas Parks and Wildlife Department. The purpose of the joint permit application process was to better streamline and coordinate the wetland permitting process. The Coastal Coordination Council was phased out on August 30, 2011, and its powers were transferred to the Texas GLO and TCEQ. Regardless of whether this pilot program continues, participants suggested that before the issuance of local construction permits, applicants should be required to show they have consulted with the Army Corps to determine whether a CWA Section 404 permit is required.

- **Compensatory mitigation.** Review participants noted that the Compensatory Mitigation Rule (see Appendix C) establishes a preference for mitigation projects that focus on wetland restoration rather than preservation. However, they expressed a desire for more preservation of existing freshwater wetlands in circumstances where preservation may be preferred to restoration, such as when encroachment is likely to occur on high-quality wetlands or when the wetland function may be particularly difficult to restore (e.g., forested wetlands).

  Participants expressed concern about mitigation occurring out-of-area and out-of-kind (i.e., a different type of wetland than the one impacted), and thought that strategic regional mitigation planning would maximize the effectiveness of mitigation by expediting the construction process and strengthening the quality of mitigation projects. The Galveston District and the Interagency Review Team are reviewing two mitigation banks that are proposed to provide compensatory mitigation credits for authorized losses of waters in this watershed and a watershed approach will be incorporated into the development of those banking instruments.

- **State programs.** Noting that current federal laws do not protect isolated wetlands, some participants felt this gap could be filled by adopting state wetland protection regulations, or by implementing incentive programs to encourage the avoidance of isolated wetlands. Some

[12] For more information, see https://rsgis.crrel.usace.army.mil/ribits/f?p=107:2:3644572573481910::NO:RP:P27_BUTTON_KEY:9.

participants also noted a need for TCEQ to implement a more rigorous CWA Section 401 certification process. This could include the development of stricter water quality standards, which could give the state a stronger basis on which to review and approve, condition, or deny federal permits that result in a discharge to state waters, including wetlands.

- **Cumulative impacts.** Participants suggested that the CWA Section 404 permit process could benefit from increased permit data availability and increased time for permit review in order to better address cumulative impacts. The Army Corps, however, indicated that cumulative effects are appropriately evaluated pursuant to the National Environmental Policy Act under the current permit process.

Provide additional funding and collaboration for wetland programs (regulatory and non-regulatory).

- **Lack of funding.** Participants noted the lack of resources (both funding and staff) to adequately administer and enforce wetland laws, implement and fund more wetland restoration programs, and provide education and technical assistance to raise awareness and support for wetlands protection. An increase in CWA Section 401 certification fees would make more dedicated funds available to support coastal wetland restoration and protection activities; however, state legislation would be necessary to change the fee structure.
  - » **Conservation funding.** There is no state funding specifically and solely for conservation of coastal wetlands. Review participants noted that the current state legislature has shown little interest in supporting conservation despite public interest. Dedicated state funding for wetland conservation would allow Texas to compete more effectively for federal funds by providing non-federal match.
  - » **Flood control coordination.** Participants commented that flood control districts currently have limited authority to prevent hydrologic alterations that affect coastal wetlands. Cities have planning and zoning authority but are not required to comply with district plans (for example, League City allows development in the floodway and is not obligated to consider the Harris County Flood Control District plans). Participants felt that state funding should be tied to requirements that cities comply with flood control district plans. However, some participants noted that flood control districts can also cause hydrologic alterations that negatively impact wetlands and suggested that municipal floodplain administrators could be better informed about the coastal wetland impacts of specific hydromodification projects through more frequent interaction with wetland managers.
  - » **NGO and government cooperation.** Review participants mentioned that the Houston area does not have enough engagement and cooperation between government agencies and NGOs, and that competition for funding between agencies and NGOs, rather than cooperation, can be problematic.

Develop tools for climate change and sea level rise.

- **Sea level rise tools.** Participants mentioned a need to develop better tools to translate scientific knowledge regarding wetland loss (both area and function) to decision-makers and resource managers. Visualization and mapping tools that show expected sea level rise levels would be valuable. Active training about how to use available tools is also needed. In terms of regulation, some participants recommended revising the CWA Section 404 program to require consideration of the effects of sea level rise on coastal wetlands when evaluating permit applications. The Compensatory Mitigation Rule (*Federal Register* Vol. 73, No. 70, April 10, 2008) recognizes the importance of considering sea level rise when siting and designing mitigation projects. This would be of significance to the entire nation, but especially the Gulf coast.

Other gaps and needs to address multiple wetland stressors.

- **Wetland mapping.** The National Wetland Inventory (NWI) is a web-based tool that the public can use to obtain information on wetland locations. Review participants mentioned that the NWI GIS database is a valuable tool, but has limitations such as the coarse scale of available imagery, difficulty detecting some wetland types, and the possibility that some imagery is out of date. To help address these limitations, users can cross-reference NWI data with other information, such as the NOAA C-CAP data, USDA soil surveys, and local wetland mapping data (if available). For the purposes of jurisdictional determinations under CWA Section 404, the Army Corps has the legal authority to verify wetland delineations and finalize wetland determinations.
- **Beneficial use of sediment.** There are regulatory barriers to beneficial use of dredged material; requirements

to dispose of material in the least costly manner (the federal standard for determining disposal options) do not account for environmental costs and benefits. The Gulf Coast Ecosystem Restoration Task Force has identified this issue in its Gulf Coast Ecosystem Restoration Strategy (EPA, 2011) and the Gulf of Mexico Alliance has also identified beneficial reuse as a priority (Gulf of Mexico Alliance, 2010).

- **Monitoring.** Review participants mentioned that expanded wetlands monitoring is a tool that can be used to better evaluate wetland function at mitigation and restoration sites. For example, participants suggested WRP sites could be monitored on a longer-term basis to identify changes in function. It was also suggested that third party monitoring by certified experts could bolster local, state, or federal agency monitoring.
- **Ecosystem valuation information.** Review participants indicated that effectively communicating quantifiable information related to the economic value of services that are provided by natural systems would allow decision-makers to make more informed choices and examine trade-offs of development or other projects. For example, quantifying the lost benefits associated with channelizing streams in terms of impacts on fish and wildlife habitat—and the subsequent diminution of recreational, aesthetic, and commercial values—could serve to demonstrate that wetlands are vital economic resources (Engle, 2011).
- **Education and incentives.** Review participants felt there is a need for more educational programs that focus on state and local decision-makers and property owners, since public education and outreach currently tends to focus solely on students in K-12 schools. In addition, there is a need to provide incentives, such as tax breaks, for private landowners in order to increase the likelihood that wetlands are preserved.
- **Habitat assessment gaps.** It is difficult to determine the functions and services of wetlands, particularly in urban watersheds. Participants believed there is a need for more guidance regarding what wildlife and habitat characteristics should be assessed, particularly in heavily developed watersheds. There is a nationwide tool that assesses the threat to fish habitat nationwide, compiled through the National Fish Habitat Action Plan[13] that may provide helpful data. EPA also conducts a national coastal condition report, including coastal wetlands, which could be helpful.[14]

[13] For more information, see http://www.fishhabitat.org.

[14] For more information, see http://water.epa.gov/type/oceb/assessmonitor/nccr/index.cfm.

Attachment F

Sponsor and Agent Qualifications

James S. Bassett, PE

Mr. Bassett's background is in civil engineering, and he has extensive experience in the regulatory arena. He has significant experience in Mitigation Bank Permitting, NEPA studies and PD&E work, including social and economic impacts, cultural and historical resources, and natural and physical impacts as related to Type II Categorical Exclusion, Environmental Assessment/Finding of No Significant Impact, and Environmental Impact Statement projects.

Mr. Bassett participated in the development of some of the first mitigation banks in Central Florida in the 1990's, for the District Five of the Florida Department of Transportation. In an effort to offset wetland impacts from District Five's work program, four regional mitigation banks were developed across a nine county area, providing significant regional mitigation projects on public lands. The projects included Lake Monroe Mitigation Bank, Tosohatchee Mitigation bank, Three Lakes Mitigation Bank and Marion One Offsite Regional Mitigation Area.

Contact
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Years' Experience
30 years
Education
BS, Civil Engineering, Florida State University, 1993
Licensure
Registered Professional Engineer, Florida #53124
Registered Professional Engineer, West Virginia #24902
Certified FDEP Stormwater, Erosion & Sedimentation Control Inspector #1121 and Instructor #111

SELECT EXPERIENCE

Barberville Mitigation Bank

Barberville Mitigation Bank is a 366-acre mitigation bank project situated northwest of the intersection of State Road 40 and County Road 3 near Barberville, Volusia County, Florida. The bank is a joint venture project between Environmental Planning and Management (EPM) and Volusia County on land owned and managed by Volusia County. Mr. Bassett's company provided ecological services associated with the post-permit compliance monitoring required by the St. Johns River Water Management District and the U.S. Army Corps of Engineers. The monitoring was designed and implemented to demonstrate compliance with the ecological success criteria established in both mitigation bank permits. The tasks provided for this project included: Baseline, Semi-Annual, and Annual Monitoring over a five-year period and permit modification and agency coordination on an as-needed basis.

TM Econ Mitigation Bank

Mr. Bassett's company provided hydrological consulting services to recreate the historic flow regimes throughout the project site in order to enhance the biological and wildlife communities. During the course of the historical uses of the site, clear-cutting of forests, construction of roads and bridges, and, the installation of drainage ditches and culverts significantly altered the site hydrology along with reduced flood storage capacity and degradation of water quality. We performed a complete hydrologic analysis of the site and designed improvements required for submittal of a conceptual wetland mitigation bank permit document as well as a construction-level permit for the initial phase of the project.

Zachary Mitigation Bank

Mr. Bassett's company provided complete project management and implementation services for this multi-phase wetland restoration and mitigation banking project, which includes: feasibility analysis, market analysis, drafting and securing the umbrella mitigation banking instrument and restoration plan addenda for each phase, wetland delineation oversight, hydrologic analysis and site data collection, federal/state agency permitting support, modified Charleston and WVA wetland functional assessments, Phase I environmental analysis, construction and subcontractor oversight, monitoring and long-term site management. All four phases of the bank total almost 500 acres. The project involved restoration of prior-converted agricultural lands into their historic wetland habitat type of bottomland hardwood forest. This project required detailed GIS assessment and analysis of surrounding land use and impacts of surrounding land use within 50 and 500 feet of the bank boundaries as part of the WVA wetland functional assessment method utilized to determine available bank credits for each phase of the bank.

TG Lee Tract Offsite Mitigation Area

Mr. Bassett's company provided restoration and mitigation design, permitting, construction and planting contractor oversight and monitoring services for a 61-acre offsite mitigation area located on state forest managed lands. By working closely with the state forestry management and technical staff, a win-win restoration project was developed that will result in the hydrologic and vegetative re-establishment and enhancement of approximately 25 acres of an historic freshwater marsh and wet prairie complex interspersed between areas of historic flatwoods that existed prior to ditching and draining

of the site and conversion to improved pasture in the 1960s and 70s. Photo interpretation of historic aerials dating back to 1951, as well as in-field verification of remnant topographic edges was crucial to determining the potential restorable acreage. This project required a complete hydrologic evaluation of the site, as well as a cost-effective engineering design to successfully re-hydrate the area without incurring extensive modeling expense for the client. Ditching through historic wetland areas were cut to drain the site against the natural topographic gradient to a major conveyance drain bordering the northern, historic upstream boundary of the targeted restoration area, thus resulting in the complete conversion of 22 acres of historic wetland into upland, as well as drainage impacts to wetlands to the south on state forest property through redirection of runoff that historically drained into these wetlands to the north. We designed an effective restoration plan that will re-hydrate the targeted area and restore sheet flow to the south without impeding runoff or causing offsite flooding to residential areas to the east of the project.

Environmental and Protected Species Services, Volusia County, Florida

Mr. Bassett served as principal-in-charge for this continuing services contract with Volusia County. Through this contract, he has worked on a number of task assignments for the Engineering Department, Daytona Beach International Airport and Land Management Department. The tasks have included an evaluation of the available mitigation parcels and costs for Tymber Creek Road; wetland delineation projects; wildlife hazard management assessments and training at the airport, a gopher tortoise relocation and Barberville Mitigation Bank Phase Two Feasibility Assessment.

FDOT Habitat Prioritization and Acquisition Program, FDOT District Five, Florida

This project consisted of the evaluation of important wildlife habitat corridors in relation to proposed roadway projects. The project involves the identification of suitable wildlife habitat for potential acquisition utilizing the FWC Integrated Wildlife Habitat Ranking System. The acquisition program offset potential impacts to wildlife specifically related to the improvement of State Road 520 and State Road 44. The project required the coordination with the water management district; Brevard, Volusia, and Orange Counties, FWC, USACE; and FWS.

Farmton Mitigation Bank, Volusia and Brevard Counties, Florida

This project entailed a hydrologic evaluation and monitoring plan for a 29,000-acre private mitigation bank. Silviculture activities and a network of logging roads caused wetland impacts and altered the natural hydroperiod of many natural systems. A detailed drainage analysis of the property was conducted and a series of hydraulic structures were designed and installed.

Shreveport Mitigation Bank, Bossier Parish, Louisiana

Mr. Bassett's company designed and permitted a new wetland mitigation bank, with a drainage restoration plan consisting of a complex, cascading hydrologic design due to the integration of both stream and depressional wetland habitat types, as well as re-integration of the last remaining floodplain area. The challenging project is wholly within the FEMA Floodway and adjacent to a large tributary of the Red River known as the Red Chute Bayou. Detailed hydraulic and hydrologic modeling using ICPR was used to assure rehydration of the project area with no adverse impacts to adjacent roadways or properties. USACE Model HEC-RAS was used to elevate "No Rise" of the Floodplain and Floodways onsite, and wetland functional assessment was performed using the Charleston method. RES provided: feasibility analysis, market analysis, prospectus and MBI development, federal/state agency permitting support, wetland functional assessment using the Charleston method, restoration plan ecological and engineering design, implementation and construction oversight, monitoring and long-term management. Mr. Bassett provided principal oversight for this project.

Peter K. Partlow, PE

Peter K. Partlow, PE has experience on a variety of environmental and engineering related projects. His key strengths are in the areas of project management and QA/QC. His technical expertise includes water resource engineering, ecological and hydrologic restoration, wastewater collection system and treatment system design and construction; contamination assessment; remediation; potable water and wastewater treatment; and water quality; and project management. Project experience includes water resources and water quality studies and designs, , potable water and wastewater projects such as design, operations and maintenance, development feasibility analysis, and construction administration for municipal and industrial clients.

The following contains a brief summary of select mitigation projects. Mr Partlow has performed successful mitigation services, at multiple additional sites, in the role of engineer, manager and owner, similar to the ones listed below.

AT A GLANCE

Contact
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Years' Experience
35 years

Education
- MBA, University of Central Florida, 1995
- BS, Environmental Engineering, University of Central Florida, 1988

Licensure
- Registered Professional Engineer, Florida #47670
- Professional Engineer, Louisiana, #33404
-
- NASDS/PADI Basic & Open Water SCUBA
- OSHA 40 Hour HAZWOPER/ 8 Hour Site Supervisor

Gulf Coastal Plains Wetland Mitigation Bank, Chambers County, Texas

Mr. Partlow was the design engineer and one of the owners for a 1,950 acre wetland that transitioned from freshwater to saltwater and included tidal inundation. Mr. Partlow was responsible for the design of all wetland pools and streams. Particular attention was given to elevation details to ensure the hydrology supported appropriate wetland species and met the requirements of the wetland bank. The project will incorporate the restoration of an historic tidal channel, and re-establishment of cypress and bottomland hardwood strands along the major Bayous forming the eastern and western boundaries of the bank. The mitigation bank will re-establish historic coastal prairie and freshwater marsh wetlands and drainage features that existed prior to agricultural conversion, as well as re-establishing tidal connections and providing essential fish and invertebrate nursery habitat.

Spindletop Bayou Mitigation Bank, Liberty County, Texas

Mr. Partlow was one of the owners of the Spindletop Mitigation bank. In this role he was responsible for liaisoning with regulatory agencies development of mitigation concepts, coordination with other professionals and subconsultants, interaction with other owners. This site was approximately 500 acres along Spindletop bayou along the Chambers County and Liberty County line.

TM-Econ Ranch, Central Florida

Mr. Partlow provided senior design and Quality Assurance for this project that included the hydrologic modeling and analysis, engineering design, and permitting of a 5,000+ acre mitigation bank located in Central Florida. During the design process he was actively involved with the numerous state and federal agencies that are involved with the MBRT process and the ultimate permitting and approval of the Mitigation Bank. Currently, the Bank is selling its last remaining credits and will be transitioning to long term maintenance..

Zachary Mitigation Bank, Multiple Restoration Sites, East Baton Rouge Parish, Louisiana

Coppermill Bayou, Comite I, Comite II, Redwood Creek

Mr. Partlow provided Principal Engineering services and project management for this approximately 800-acre mitigation banking project consisting of several sites permitted under an Umbrella mitigation banking instrument (MBI). Mr. Partlow was responsible for managing the overall contract and all aspects of the project from the initial feasibility analysis, market analysis, and prospectus development to federal/state agency permitting, Wetland Value Assessment (WVA) and Modified Charleston Method (MCM) wetland functional assessment analysis, restoration plan formulation, construction oversight, monitoring and long-term site management. This bank is a bottomland hardwood restoration project on prior-converted improved pasture lands. Mr. Partlow was responsible for managing the formulation of detailed ecological and hydrological restoration plans for each site addendum to the MBI. This project required detailed GIS assessment and analysis of surrounding land use and impacts of surrounding land use within 50 and 500 feet of each restoration site's boundaries as part of the WVA method utilized to calculate total bank credits for each restoration site. Mr. Partlow was critical to successfully obtaining the signed umbrella mitigation banking instrument and approved restoration plan for four sites:

Copper Mill Bayou, Comite Flats I and Comite Flats II, and Redwood Creek. Mr. Partlow also provided bank implementation and management, monitoring, and as-built documentation and credit release services for these sites. Through his effective working relationship with the USACE New Orleans District, Mr. Partlow successfully and expeditiously obtained the construction and planting completion credit release for all permitted sites.

Missouri Loop Mitigation Bank, Morehouse Parish, Louisiana

Mr. Partlow was the principal engineer for this approximately 300-acre, phased, mitigation bank re-establishing historic bottomland hardwood floodplain forest on prior-converted row crop lands. Mr. Partlow was responsible for the overall contract and all aspects of project management from initial feasibility analysis through permitting, to construction oversight and monitoring and long-term management after final credit sales and bank closure. He worked with various staff to formulate the wetland restoration plan for this site and successfully coordinated permitting activities with our engineers and wetland scientists to obtain an approved MBI for the site, and construction, planting and monitoring of the first phase. He also worked with the neighboring National Wildlife Refuge (NWR) to create contiguous, high quality wetland habitat for migrating waterfowl as well as endangered mammals such as the Louisiana black bear that are known to utilize the bank and NWR area.

Shreveport Mitigation Bank, Bossier Parish, Louisiana

Mr. Partlow was the contract manager and principal engineer for this 290-acre bank along Red Chute Bayou near Bossier City, Louisiana. Mr. Partlow managed the MBI permitting process for the site from initial feasibility and site data collection to the wetland jurisdictional verification phases through to MBI approval from all participating IRT agencies. As with all other large-scale wetland restoration projects, coordination with adjacent landowners, federal, state and local government agencies is required to obtain all necessary approvals in a timely manner. Mr. Partlow, working in tandem with other RES engineers and scientists helped formulate the restoration plan for this bank, which included a hydrologic and vegetative restoration plan resulted in the enhancement of existing cypress-tupelo and bottomland hardwood remnant depressional areas, and restoration of bottomland hardwood depressional, floodplain flats and natural levee communities. The restoration plan involved a cascading hydrologic design that includes rehabilitation of a highly eroded surface water conveyance that provides one of the only remaining connections between the dredged Red Chute Bayou and its historic floodplain. This complex hydrologic design resulted in the-establishment of wetland hydroperiod durations and stages conducive to the forested wetland communities being restored, and effective hydrologic reconnection to Red Chute Bayou that allowed attenuation and storage of flood events yet was also able to abate highly damaging erosion during flooding of the site via the on-site surface water conveyance to Red Chute Bayou.

Bayou Chevreuil Mitigation Area, St James Parish, Louisiana

Mr. Partlow was the contract manager and principal engineer for this roughly 3,700-acre cypress-tupelo mitigation area. Services rendered by Mr. Partlow include prospectus development and federal/state agency permitting support, functional assessment analysis, construction oversight, monitoring and long-term site management. This project is hydrologically complicated and required extensive historic aerial analysis and mapping of canopy openings to document tree mortality over time and system failure as a result of over-inundation, subsidence and impoundment from spoil disposal and levees. Mr. Partlow worked with RES staff of engineers and scientists in formulating an innovative hydrologic and vegetative restoration plan, as well as an accompanying monitoring plan requiring sediment accretion analysis, micro-site monitoring for natural recruitment, and more extensive vegetative and hydrologic monitoring to determine system response to proposed mitigation treatments beyond those typically required for mitigation monitoring requirements.

Central Louisiana Mitigation Area, Rapides Parish, Louisiana

Mr. Partlow was the contract manager and principal engineer for the design, permitting and construction to establish a 277-acre, multi-phase bottomland hardwood and cypress-tupelo mitigation area near Alexandria, Louisiana. Prior to 1952 the site was bottomland hardwood floodplain forest within the alluvial plain of the Red River. Beginning in approximately 1952 the site was converted to agriculture, through traditional methods employed at the time. These alterations resulted in a prior-converted rice farm. The restoration plan focused on re-establishment of the site as a floodplain forested wetland over a series of four successive phases. The hydrologic design resulted in re-establishment and restoration of numerous perennial streams and sloughs that previously drained through the site before the site was converted. One of the purposes of the project was to provide valuable, additional stepping-stone habitat along Bayou Beouf for the movement of the endangered Louisiana Black Bear between areas of designated critical habitat within the proposed service area of the area to the east, west, north and south of the mitigation site.

Acadian-Haynesville Pipeline Offsite Mitigation Project, Rapides Parish, Louisiana

Mr. Partlow was the contract manager and Principal Engineer and senior technical oversight services for the permitting of this 170-acre permittee-responsible offsite bottomland hardwood mitigation project compensating for bottomland hardwood and cypress-tupelo wetland losses associated with the construction of an interstate pipeline. This site, also located in Rapides Parish and directly adjacent to the Central Louisiana Mitigation Bank Area, was an extremely time-sensitive project requiring a 2-week turnaround. Mr. Partlow effectively coordinated senior and engineering staff to produce a complete mitigation work plan to the client to enable them to submit their permit application prior to changes in New Orleans District functional assessment policy and complete timely public noticing of the project. Mr. Partlow also conducted final quality assurance coordination on the completion and submittal of a Nationwide 27 permit to the New Orleans District.

Tippen Bay, South Florida

Cherry Lake, South Florida

Alluvion Resource Company, LLC (ARC) was founded in 2018 by Keith Webb and Chance Kimbrough to fill an industry need for highly competent and experienced mitigation practitioners and permitting expertise. With over 30+ combined years underwriting, permitting, constructing, and monitoring wetland, stream, and species compensatory mitigation projects for project partners and ecosystem services investors, ARC Principals bring a unique breadth of knowledge and capability to the mitigation and ecosystem restoration space. This expertise includes, but is not limited to, WOUS delineations and determinations, threatened and endangered species surveys and analyses, cultural resource clearances, WOUS habitat conditional/functional assessments, habitat restoration designs, regulatory permitting and liaise, conservation easement development, bank credit sales and support, and long-term property stewardship. ARC Principals advise a wide range of clients, including mitigation providers, private individuals, investment firms, and environmental consulting firms. Our record of successful bank permits serves to validate our relationship-centric and results-oriented approach to conservation investments in compensatory mitigation.

Tribus Ecological Services, LLC (TES) was founded by Keith Webb, Chance Kimbrough, and Chris Adams in 2020 to provide more holistic natural resource management expertise to a variety of landowners. TES specializes in forest and natural resource assessments/valuations, multi-resource planning, forest product sales, reforestation and habitat restoration assistance, tax basis analyses, baseline assessments, habitat and vegetation monitoring on a multitude of projects. Dedicated to serving the broad and dynamic land management needs of private landowners, timberland investment groups, conservation groups and financial institutions, TES Principals have assisted landowners in producing carbon credit sales, forest management oversight on energy related projects (solar farms), agroforestry development, and compensatory mitigation projects.

Below is a comprehensive list of Mitigation Banking Projects with which ARC/TES Principals have been involved. Projects listed from 2004-March of 2018 were conducted prior to the creation of ARC/TES, and as employees of a previous employer. Projects include listed abbreviations for USACE district (i.e. Fort Worth District SWF, Tulsa District SWT, Little Rock District SWL, and Galveston District SWG) and status (if applicable):

November 2004 – March 2018

1. Big Woods on the Trinity, SWF
2. Martin Creek, SWF
3. Bunker Sands, SWF
4. Rattlesnake, SWF
5. Patroon Bayou, SWF
6. Scoober Creek, SWF

7. Murvaul Creek, SWF
8. Keystone, SWF
9. Fall-off Creek, SWF
10. Straus Medina, SWF
11. Bushneck Bayou, SWF-Louisiana
12. Wendell's Gulch, SWF
13. Excell Mitigation Center, SWT
14. Muddy Boggy Conservation Bank; American Burying Beetle (FWS-Oklahoma)
15. Davis Creek, SWL
16. Hartsugg Creek, SWL
17. Dutch Creek, SWL
18. Spellbottom, SWG
19. Daisetta Swamp, SWG
20. Gibbs Bros, SWG
21. Lost Creek Brake, SWG

March 2018 – September 2023

22. Buenaventura, SWF
23. Frentress-Johnson, SWG (Pending)
24. Packer Flats, SWG (Feasibility)
25. Anahuac Wetlands, SWG (Pending)
26. Tarkington Bayou, SWG
27. Houston Conroe, SWG
28. Gulf Coastal Plains, SWG
29. Spindletop Bayou, SWG
30. Gin City, SWG
31. Bayou Bend, SWG
32. Sibo Brake, SWG (Feasibility)
33. Clear Creek, SWG (pending)
34. Addicks-Barker, SWG (Feasibility)
35. Tradewinds, SWG (Feasibility)
36. Tehuacana Creek, SWF (Feasibility)
37. West Montgomery, SWG

Attachment G

Water Rights Documentation

SURFACE WATER RIGHTS CHANGE OF OWNERSHIP FORM

This Form is required to update the TCEQ ownership records of surface water rights in Texas. Submit a separate form for each water right. **See accompanying instructions regarding completion of this Form.** If you require additional assistance, you may contact the Water Rights Compliance Assurance Team (WRCAT) at (512) 239-4691.

1. Indicate: **Water Rights Permit No.**_____, *or* **Certificate of Adjudication No.** 07-4304

2. Provide the contact information for the person TCEQ may contact while processing this form. Please verify that the mailing address is recognized by the US Postal Service (USPS) on the USPS website at https://tools.usps.com/go/ZipLookupAction!input.action.

   Contact Name: Will Beaty

   Mailing Address: 33019 Londonderry Dr.

   City: Waller State: Texas ZIP Code + four: 77484

   Telephone No(s). Home: 8326271827 Office: _____ Fax: _____

   Email Address: huntcfo@aol.com

3. Provide the Full Legal Name of each new owner of the water right and the address information of each owner (for Notices and communications once the water right ownership has been updated) in the spaces below. ***Note - The names of the new owner(s) must match the legal recorded conveyance documents that prove the change of ownership. Additionally, if a new owner is an entity, the legal name must match the name as filed with the Texas Secretary of State, County, or any other legal documents forming the entity.***

   Please verify that the mailing address is recognized by the USPS website at https://tools.usps.com/go/ZipLookupAction!input.action.

   First New Owner's Name(s): BBB Farms, LLC (William Beaty)

   Mailing Address: 33019 Londonderry Dr.

   City: Waller State: Texas ZIP Code + four: 77484

   For additional new owners, submit address(es) below or on a supplemental sheet(s).

   Additional New Owner(s) Contact Information:

   Peter Partlow 34 East Pine St. Orlando, FL 31801

   William Barron 4220 Still Meadow Ln Pineville, LA 71360

   Danny Moran 4520 S. Sherwood Forest Blvd. #104-241 Baton Rouge, LA 70816

   a. Is any new owner a Corporation, a Limited Partnership, a Limited Liability Company, or Limited Liability Partnership registered with the Texas Secretary of State? Yes or No Yes.

      If yes, provide Secretary of State Filing Number(s): 11198546. You may verify an entity's name and filing number at http://www.sos.state.tx.us/corp/sosda/index.shtml

4. If a new owner is currently a customer with the TCEQ, provide the Customer Number (CN) below. You may search for an Owner's CN on the TCEQ website at http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

   CN:_____ (leave blank if the new owner does not yet have a CN).

5. Pursuant to Title 30 Texas Administrative Code (TAC) §§ 297.81-297.83, relating to Conveyances of Land and Water Rights, **the following additional items must be submitted or the Form may be returned without processing.**

   a. This **"Change of Ownership"** Form fully completed, signed, and notarized.

   b. Documents establishing a **complete chain of title** from the owner of record to the new owner. All such conveyance documents must be copies of **Certified** and/or **Recorded** documents on file in applicable county property records. (These documents usually consist of **deeds and other such conveyances or**, in case of an inheritance usually, the (a) **will**, (b) **probate order** and (c) **will inventory.**

   c. **$100 recording fee** for processing the Change of Ownership Form for the water right. Make your remittance payable to Texas Commission on Environmental Quality.

6. **Please Note** - if the water right is located in an area of a river basin under the jurisdiction of a TCEQ Watermaster, the water right may not be used if there are any outstanding penalties, fees, or interest related to the water right. You may contact the applicable Watermaster to verify there are no outstanding fees, penalties, and interest related to the water right. **Rio Grande Watermaster, (956) 430-6046; Concho Watermaster and South Texas Watermaster, (210) 490-3096; Brazos Watermaster, (254) 761-3006.**

_____
Name (sign)

William Beaty
Name (print)

Subscribed and sworn to me as being true and correct before me this 20 day of May, 20 20.

Tammy Tomczak
Notary Public, State of Texas

TAMMY TOMCZAK
MY COMMISSION EXPIRES
04/05/2022
NOTARY ID: 12417638-2

Submit this completed Form and all required items to:
Texas Commission on Environmental Quality
Water Rights Compliance Assurance Team (WRCAT)
PO Box 13088, MC-160
Austin, Texas 78711-3088
Telephone (512) 239-4691, FAX (512) 239-2214
WRAS@tceq.texas.gov

INSTRUCTIONS FOR:
SURFACE WATER RIGHTS CHANGE OF OWNERSHIP FORM

What is the purpose of this Form?
This Form is used for updating the TCEQ records of ownership of surface water rights in Texas, an administrative record-keeping function. This Form is not itself a conveyance document. The TCEQ does not have the authority to make final determinations of ownership. Such determinations are the jurisdiction of civil courts in Texas. Instead, TCEQ updates the records based upon copies of certified and/or recorded information provided to the TCEQ with this Form.

Please note, the TCEQ may correct ownership records if new information is subsequently received which contradicts or clarifies a previous update to the records.

When is a Surface Water Right Change of Ownership Required?
Whenever an individual or entity (corporations, partnerships, trusts, etc.) has acquired a surface water right through a legal conveyance (examples: inheritance, acquisition of a tract of land, purchase of the water right independent of the land), the owner or his agent must promptly notify the Texas Commission on Environmental Quality (TCEQ) of any transfer of water right or change of ownership. *See* Title 30 TAC §297.82.

Until the TCEQ receives and processes this Form, the owner of record remains responsible for any fees or regulatory obligations in connection with the water right, and an application by a new owner to amend a surface water right will not be processed.

Name Change for Individuals
If the current owner of record is an individual (not an entity) and requests to change their name in the ownership records (due to marital status or other legal name change), the owner is not required to complete a change of ownership form. Instead the owner should submit documentation such as a copy of their current driver's license with a name change request. There is no fee required for a name change request. Contact the WRCAT Team at (512) 239-4691 for assistance.

What Rules are Applicable to a Surface Water Right Change of Ownership?
The rules that govern the conveyance of a water right are found in Title 30 Texas Administrative Code (TAC) Subchapter H, *Relating to Conveyances of Land and Water Rights*, §§ 297.81 to 297.83. The TAC is available on the Texas Secretary of State Website: http://www.sos.texas.gov/tac/index.shtml.

Irrigation Water Rights
Surface water rights issued for agricultural irrigation purposes may be appurtenant to (belong to) the tract of land authorized for irrigation. Conveyance (legal transfer of property from one owner to another) of any portion of the irrigation land will also convey a proportionate share of an appurtenant water right unless the surface water right is specifically reserved in the conveyance document.

> Note: A water right does not attach to the irrigated land when held by a water corporation, water district, river authority, or governmental entity authorized to supply water to others. Those water rights can only be transferred by express written conveyance of the water right. See Title 30 TAC § 297.81(b), *General Rules of Conveyance*.

> Note: A water right may only be used in accordance with the conditions of the permit (place of use, diversion point, purpose of use, etc.). Therefore, if an **owner of an appurtenant water**

right reserves the water right in a conveyance so that it is not conveyed with the property or if the water right is conveyed separately from the land then, in addition to a surface water rights change of ownership form, the water right may also need to be amended to authorize a new place of use or diversion point prior to use. To determine if your water right requires an amendment contact the Water Rights Permitting Team at (512) 239-4691.

How do I complete the Change of Ownership form?

This Form requests information about the water right and the New Owner(s). Below is a list of the information that is requested in each section of this Form. **Incomplete Forms may be returned.**

Section 1:
There are two types of water rights, Certificates of Adjudications and Water Rights Permits. This section seeks the unique identifying number for the water right record to be updated. The Form requires that either a Certificate of Adjudication Number or a Water Right Permit Number be provided. Fill in the form based upon the type of right for the change of ownership sought.

Certificates of Adjudication typically have a two digit basin identifier, followed by a four digit water right number, and followed by a letter if the Certificate has been amended. **Example: Certificate of Adjudication No. 12-9999B.** This indicates water right number 9999, in basin 12 (Brazos River Basin). The "B" indicates the second amendment of the water right.

Water Rights Permits were issued after the adjudications and contain four or five numbers and possibly a letter if the right has been subsequently amended. **Example: Water Right Permit No. 5555A.**

Section 2:
Provide the contact information for the person TCEQ staff may contact during the processing of this Form. The contact may be: a new owner, a previous owner, a consultant, attorney, or any other person or agent authorized to act for a new owner or an owner of record.

Section 3:
This section seeks the name and mailing address for each new owner. TCEQ will update its records consistent with the names as they appear on legally recorded conveyance documents. Therefore, it is important that the names **exactly** match between the conveyance documents and the actual name of the person or entity. **Example:** The new owner is identified as "ABC Corp." in the conveyance documents, but the actual name of the company (per the Texas Secretary of State) is "ABC, LP". The owner should submit recorded conveyance documents with the correct name of the company (ABC, LP).

Complete subsection (a) if the new owner is an entity with a Texas Secretary of State Filing Number. Individual owners need not complete subsection (a). ***Note. Please DO NOT submit a social security number.**

Section 4:
This section requests the new owner to provide the TCEQ Customer Number (CN) if one has been assigned to the new owner previously. If the new owner has never received a TCEQ CN for the exact name on the conveyance documents, leave this section blank and the TCEQ will assign the new owner a CN. If you are unsure, you may search for a CN at:
http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

Section 5:
This section lists specific items required to be submitted with this Form. This Form may be returned without processing for failure to submit a completed form or failure to submit the items required in Subsection b.

Subsection a: requires that the form be signed and notarized. This Form may be signed by an Owner, or by the person submitting this Form on behalf of an Owner. This Form will not be processed unless it is complete, signed, and notarized.

Subsection b: requires documents establishing **a complete chain of title** showing all conveyances of the water right from the Owner of Record in the TCEQ records to the New Owner.

A chain of title consists of copies of legal instruments/documents which have been recorded in the county property records where the water right is located. For appurtenant water rights, the documents **must be recorded** in the county where the land is located. These documents usually consist of deeds and other such conveyances. Also include a copy of the metes and bounds (legal description of the land) and a plat map. All documents must be copies of recorded documents from the County Records – usually the local County Clerk's Office. TCEQ Staff will review the conveyance documents to verify that the water right has been conveyed, however, the TCEQ does not have the authority to make final determinations of ownership. Such determinations are the jurisdiction of civil courts in Texas. Instead, TCEQ updates the records based upon certified and/or recorded information provided to the TCEQ.

Documents needed for an Inheritance

If the current owner of record, or a previous owner in the chain of title, is deceased, the following documents are required to complete the change of ownership:

1. Copies of the probated Will (with the case number for the probate proceedings indicated);
2. The *Will Inventory* (otherwise referred to as the Inventory, Appraisement, and List of Claims); and,
3. The *Probate Order* (otherwise referred to as the Order Admitting Will to Probate).

If the deceased individual died intestate (i.e., without a will), provide a recorded copy of the *Affidavit of Heirship.*

If the estate was handled as a *Muniment of Title*, provide a copy of the Order Admitting Will to Probate as Muniment of Title, and a copy of the probated will.

Documents needed if a Trust is involved

A water right conveyed out of a trust requires a copy of the trust to establish the selling authority of the trustee(s). If the trust is created through a will, a copy of that will is required. If the trustee was replaced, and the successor trustee was not designated in the original document, a copy of the document establishing the successor trustee is required.

Other Conveyance Documents

Additional documents may be required when a divorce, bankruptcy, or foreclosure is included in the chain of title. In these instances, contact the WRCAT Team at (512) 239-4691 for assistance.

Tips for Completing Chain of Title

In order to know where to start with the water rights chain of title search, please follow this link: https://www.tceq.texas.gov/permitting/water_rights/wr-permitting/wrwud.
The excel document titled "active water rights" provides a searchable spreadsheet listing all active water rights in Texas. Begin your chain of title search beginning with the current owner of record.

A common place to obtain chain of title information is with the title or abstract company that drafted the conveyance documents. Such companies review the chain of title and retain copies of the conveyance documents on site. Additionally, some conveyance documents list the previous deed or conveyance and its citations (volume and page numbers) within the description of the property conveyed. With this information you may be able to find the previous conveyances.

There are online resources that provide electronic copies of conveyance documents from many counties in Texas. These sources may be searched by current owner or past owners of record, including most County Clerks offices which have websites available where documents may be searched for free and ordered by mail or as electronic documents for a fee.

Most County Appraisal Districts have online listings of property ownership that can be searched both by owner name and by survey and abstract. Within these records, there are commonly the last three deed transactions listed for reference. These may provide additional resources for determining chain of title.

Section 6:
This section reminds owners that any outstanding Watermaster fees, penalties, and interest must be paid prior to diversions of water in those basins.

Owners may contact the applicable Watermaster for more information.

Brazos Watermaster – (254) 761-3006;
Concho Watermaster and South Texas Watermaster – (210) 490-3096;
Rio Grande Watermaster – (956) 430-6046.

ADJUDICATED WATER RIGHT TRANSFER

This **ADJUDICATED WATER RIGHT TRANSFER** (this "***Transfer***"), dated as of May 6, 2020, is between **EAST BAY FARMS, L.L.C.**, a Texas limited liability company ("***Seller***"), and **BAY PRAIRIE FARM, LLC**, a Louisiana limited liability company ("***Buyer***").

WHEREAS, Seller and Buyer are parties to that certain Purchase and Sale Agreement (the "***Purchase Agreement***"), pursuant to which Buyer agreed to purchase approximately 1,279.99 acres of real property situated in Chambers County, Texas (the "***Real Property***"), which is more particularly described in Exhibit "A" attached to the Purchase Agreement;

WHEREAS, the Real Property is a portion of the approximately 1989.23 acres of land located in Chambers County, Texas (the "***Original Tract***") that was conveyed to Seller by Charles T. Jones and wife Glenda J. Jones and Bob G. Allen and wife Cheryl J. Allen, (collectively, "***Prior Owners***") by virtue of that certain Special Warranty Deed recorded in Vol 1024 at Page 428 of the Official Public Records of Chambers County, Texas;

WHEREAS, following the sale of the Real Property to Buyer, Seller will retain approximately 704.22 acres (the "***Retained Acreage***") of the Original Tract, as more particularly described in the Purchase Agreement; and

WHEREAS, in connection with the sale of the Real Property, Seller and Buyer have agreed to execute and deliver this Transfer for the purpose of transferring to and vesting in Buyer all of Seller's rights (if any) to appropriate waters of the State of Texas in the Neches-Trinity Coastal Basin (the "***Adjudicated Water Right***") as more particularly described in that certain Certificate of Adjudication Number 07-4304 ("***Certification of Adjudication***") attached hereto as Exhibit "A" and made a part hereof for all purposes, which Certificate of Adjudication was issued to the Prior Owners on June 9, 1985 by the Texas Water Commission.

NOW THEREFORE, Seller does hereby SELL, TRANSFER, ASSIGN and CONVEY to Buyer and Buyer's successors and assigns, without any warranty or representation of any kind, all of Seller's right, title and interest, if any, in and to the Adjudicated Water Right, including the proportionate amount of the Adjudicated Water Right that may be appurtenant to, and be deemed an undivided part of, the Retained Acreage, along with all of the rights, duties, and obligations of Seller, if any, described in (and subject to the terms of) the Certificate of Adjudication. Buyer agrees to accept the Adjudicated Water Right, in its "AS-IS," "WHERE-IS" condition.

Buyer hereby fully and forever waives, releases, discharges and acquits Seller from any and all claims, actions, costs, damages, expenses, fees, fines, liabilities, losses, obligations, penalties, and suits, known or unknown, foreseen or unforeseen, in any way relating to the use, ownership, sale or transfer of the Adjudicated Water Right.

Executed this 6th day of May, 2020.

SELLER:

EAST BAY FARMS, L.L.C.,
a Texas limited liability company

By: _____
Name: Jim Hayes
Title: CG Manager

By: The Earth Partners LP,
a Wisconsin limited partnership,
its AH Manager

By: TEP GP, Inc.,
a Wisconsin corporation,
its general partner

By: _____
Name: David Brian Tepper
Title: Chief Executive Officer

[*Signatures Continue on Page Following*]

Executed this 6th day of May, 2020.

SELLER:

EAST BAY FARMS, L.L.C.,
a Texas limited liability company

By: _____
Name: Jim Hayes
Title: CG Manager

By: The Earth Partners LP,
a Wisconsin limited partnership,
its AH Manager

By: TEP GP, Inc.,
a Wisconsin corporation,
its general partner

By: _____
Name: David Brian Tepper
Title: Chief Executive Officer

[*Signatures Continue on Page Following*]

BUYER:

BAY PRAIRIE FARM, LLC,
a Louisiana limited liability company

By: MRL, L.L.C.,
a Louisiana limited liability company,
its Manager

By: William C. Barron
Name: William C. Barron
Title: Manager and Sole Member

[*Notary Acknowledgement Page(s) Follow*]

Exhibit A

Certificate of Adjudication

[attached]

CERTIFICATE OF ADJUDICATION

CERTIFICATE OF ADJUDICATION: 07-4304

OWNERS: Charles T. Jones and Wife, Glenda J. Jones and Bob G. Allen and Wife, Cheryl J. Allen
P. O. Box 198
Winnie, Texas 77665

COUNTY: Chambers

PRIORITY DATES: May 5, 1943 and July 15, 1968

WATERCOURSE: East Bay Bayou, tributary of East Bay

BASIN: Neches-Trinity Coastal

WHEREAS, by final decree of the 344th Judicial District Court of Chambers County, in Cause No. 344-10865, In Re; The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the western portion of the Neches-Trinity Coastal Basin dated October 30, 1985 a right was recognized under Permit 1354A authorizing Charles T. Jones and Wife, Glenda J. Jones, and Bob G. Allen and wife, Cheryl J. Allen, to appropriate waters of the State of Texas as set forth below;

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the Neches-Trinity Coastal Basin is issued to Charles T. Jones and wife, Glenda J. Jones, and Bob G. Allen and wife, Cheryl J. Allen, subject to the following terms and conditions:

1. IMPOUNDMENT

Owners are authorized to maintain an existing 485 acre-foot capacity off-channel reservoir and impound therein not to exceed 485? ~~450~~ acre-feet of water. The reservoir is located in the T.& N.O. RR Co. Survey 137, Abstract 295, Chambers County, Texas.

2. USE

A. Owners are authorized to divert and use not to exceed 2240 acre-feet of water per annum from East Bay Bayou to irrigate a maximum of 648 acres of land out of a 1994.97 acre tract located in the John Bryan Survey, Abstract 43; the William A. Smith Survey, Abstract 222; the T.& N.O. RR Co. Survey 135, Abstract 294; the R. M. White Survey 136, Abstract 400; the T.& N.O. RR Co. Survey 137, Abstract 295; the James T. White Survey 2, Abstract 504 and the Jonathan Burleson Survey, Abstract 349, Chambers County, Texas, said 1994.97 acre tract being described as follows:

(1) BEGINNING at the northwest corner of the T.& N.O. RR Co. Survey 135, Abstract 294 and the northeast corner of the John Bryan Survey, Abstract 43;

(2) THENCE South, 2675.56 feet to the centerline of a drainage ditch;

(3) THENCE with the meanders of said ditch as follows: S 40°29'W, 120.7 feet; S 21°12'W, 150.0 feet; S 27°12'W, 130.0 feet; S 00°23'E, 150.0 feet; S 17°08'E, 120.00 feet; S 02°07'W, 150.0 feet; S 01°13'E, 465.0 feet; S 18°41W, 155.0 feet; S 07°33'E, 90.0 feet; S 10°36'W, 345.0 feet; S 39°04'W, 95.0 feet; S 28°52'W, 75.0 feet and S 60°21'W, 220.0 feet to the centerline of East Bay Bayou;

(4) THENCE down the center of said bayou with its meanders as follows: S 36°42'E, 185.0 feet; S 20°50'E, 555.0 feet; S 30°13'E, 135.0 feet; S 17°25'W, 490.0 feet; S 36°52'E, 155.0 feet; S 01°24'W, 115.0 feet; S 10°W, 350.0 feet; S 26°51'E, 260.0 feet; S 06°23'W, 347.0 feet; S 08°14'E, 315.0 feet; S 04°49'E, 490.0 feet; S 27°12'W, 290.0 feet;

S 42°08'W, 190.0 feet; S 23°41'W, 260.0 feet; S 15°37'E, 155.0 feet; S 56°43'E, 360.0 feet; S 64°09'E, 151.9 feet; S 63°10'E, 289.2 feet; S 26°55'E, 66.11 feet; S 10°E, 66.11 feet; S 33°53'W, 131.94 feet; South, 165.0 feet; S 40°35'W, 165.0 feet; S 64°45'W, 98.89 feet; S 05°25'W, 290.28 feet; S 53°30'E, 296.94 feet; S 11°30'E, 66.11 feet; S 28°05'W, 165.0 feet; S 10°E, 66.11 feet; S 06°20'W, 85.83 feet; S 28°30'W, 461.95 feet; S 12°30'E, 666.66 feet, S 50°34'E, 345.55 feet; S 09°50'W, 382.78 feet; S 82°40'W, 131.94 feet; S 62°W, 131.94 feet; S 45°05'W, 213.11 feet; S 10°30'W, 72.50 feet; S 29°E, 495.0 feet; South, 296.94 feet; S 25°30'W, 165.0 feet; S 82° W, 239.72 feet; S 19°45'W, 98.89 feet; S 00°10'E, 131.94 feet; S 19°15'W, 296.94 feet; S 36°20'E, 231.12 feet; S 01°25'E, 263.89 feet; S 63°15'E, 198.06 feet; S 54°40'E, 296.94 feet; East, 194.72 feet; S 22°23'E, 389.44 feet; S 10°W, 396.11 feet; S 43°24'E, 477.22 feet; S 19°30'E, 198.06 feet; S 87°50'E, 198.06 feet; S 65°10'E, 214.44 feet; S 15°E, 131.94 feet; S 75°e, 148.61 feet; S 45°E, 270.56 feet; S 30°W, 204.72 feet; S 60°W, 184.72 feet; S 87°55'W, 145.28 feet; S 15°W, 118.89 feet; S 45°E, 330.0 feet; S 35°32'W, 204.72 feet; S 29°30'E, 214.44 feet; S 08°15'W, 115.0 feet; S 42°50'E, 165.0 feet; East, 82.50 feet; N 30°E, 85.83 feet; North, 158.33 feet; N 31°55'E, 89.17 feet; S 75°E, 62.78 feet; S 45°E, 131.94 feet; S 21°10'E, 138.61 feet; S 06°40'E, 165.0 feet and S 50°40'E, 202.78 feet to the centerline of Elm Bayou;

(5) THENCE up said Elm Bayou with its meanders as follows: N 45°E, 66.11 feet; N 30°E, 98.89 Feet; East, 33.0 feet; S 28°30'E, 138.61 feet; N 87°30'E, 85.83 feet; N 30°E, 66.11 feet; N 01°W, 105.56 feet; N 66° 53'E, 211.11 feet; S 71°20'E, 283.89 feet; N 54°20'E, 330.0 feet; North, 31.39 feet and N 28°32'E, 4459.39 feet to a point in the east line of the T.& N.O. RR Co. Survey 137;

(6) THENCE North, 13,604.82 feet to the northeast corner of the T.& N.O. RR Co. Survey 135;

(7) THENCE West, 5280.00 feet to the place of beginning.

B. Owners are also to divert and use through a system of compartmented reservoirs not to exceed 5320 acre-feet of water per annum from East Bay Bayou for industrial (catfish farming) purposes.

3. DIVERSION

A. Location:
At two points on East Bay Bayou in the T.& N.O. RR Co. Survey 135, Abstract 294 and the T.& N.O. RR Co. Survey No. 137, Abstract 295, Chambers County, Texas.

B. Maximum combined rate: 55.56 cfs (25,000 gpm)

4. PRIORITY

The time priority of owners' right is May 5, 1943 for the diversion and use of the first 1288 acre-feet of water for irrigation purposes and July 15, 1968 for the remaining 952 acre-feet for irrigation purposes and for the diversion and use of the 5320 acre-feet of water for industrial purposes.

The locations of pertinent features related to this certificate are shown on Page 26 of the Lower Trinity River Segment Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Commission, Austin, Texas and the Chambers County Clerk.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 344th Judicial District Court of Chambers County, Texas, in Cause No. 344-10865, In Re: The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the western portion of the Neches-Trinity Coastal Basin dated October 30, 1985 and supersedes all rights of the owner asserted in that cause.

This certificate of adjudication is issued subject to senior and superior water rights in the Neches-Trinity Coastal Basin.

This certificate of adjudication is issued subject to the Rules of the Texas Water Commission and its continuing right of supervision of State water resources consistent with the public policy of the State as set forth in the Texas Water Code.

This water right is appurtenant to and is an undivided part of the above-described land within which irrigation is authorized. A transfer of any portion of the land described includes, unless otherwise specified, a proportionate amount of the water right owned by the owner or seller at the time of the transaction.

TEXAS WATER COMMISSION

Paul Hopkins

Paul Hopkins, Chairman

DATE ISSUED:

JUN 8 1988

ATTEST:

Mary Ann Hefner

Mary Ann Hefner, Chief Clerk

R. Kyle Ardoin
SECRETARY OF STATE

State of Louisiana
Secretary of State

COMMERCIAL DIVISION
225.925.4704

Administrative Services
225.932.5317 Fax
Corporations
225.932.5314 Fax
Uniform Commercial Code
225.932.5318 Fax

04/24/2020

ONLINE FILING
joe@deboltfamily.com

BAY PRAIRIE FARM, LLC

It has been a pleasure to approve and place on file your articles of organization. The appropriate evidence is attached for your files.

Payment of the filing fee is acknowledged by this letter.

In addition to email and text notifications, business owners now have the option to enroll in our secured business filings (SBF) service. This service is available online, at no charge, by filing a notarized affidavit. Upon enrollment, an amendment cannot be made to your entity without approval using your personal identification number. This is another way to protect your business from fraud and identity theft.

Please note that as of January 1, 2018, business owners in the following parishes will be required to file all available business documents online through geauxBIZ: Ascension, Bossier, Caddo, Calcasieu, East Baton Rouge, Jefferson, Lafayette, Livingston, Orleans, Ouachita, Rapides, St. Tammany, Tangipahoa and Terrebonne.

Online filing options are available if changes are necessary to your registration or if you need to file an annual report. Please visit our website at **GeauxBiz.com** for your future business needs.

Sincerely,

The Commercial Division
WEB

UNITED STATES OF AMERICA

State of Louisiana

R. Kyle Ardoin

SECRETARY OF STATE

As Secretary of State of the State of Louisiana I do hereby Certify that

a copy of the Articles of Organization and Initial Report of

BAY PRAIRIE FARM, LLC

Domiciled at PINEVILLE, LOUISIANA,

Was filed and recorded in this Office on April 24, 2020,

And all fees having been paid as required by law, the limited liability company is authorized to transact business in this State, subject to the restrictions imposed by law, including the provisions of R.S. Title 12, Chapter 22.

In testimony whereof, I have hereunto set my hand and caused the Seal of my Office to be affixed at the City of Baton Rouge on,

April 24, 2020

Secretary of State

WEB 43872284K

STATE OF LOUISIANA · UNION · JUSTICE · CONFIDENCE · SECRETARY OF STATE

Certificate ID: 11198546#VXM73

To validate this certificate, visit the following web site, go to **Business Services, Search for Louisiana Business Filings, Validate a Certificate**, then follow the instructions displayed.
www.sos.la.gov

R. Kyle Ardoin
SECRETARY OF STATE

State of Louisiana
Secretary of State

COMMERCIAL DIVISION
225.925.4704

Administrative Services
225.932.5317 Fax
Corporations
225.932.5314 Fax
Uniform Commercial Code
225.932.5318 Fax

April 24, 2020

The attached document of BAY PRAIRIE FARM, LLC was received and filed on April 24, 2020.

WEB 43872284K

STATE OF LOUISIANA

ARTICLES OF ORGANIZATION

(R.S. 12:1301)

1. The name of this limited liability company is:
BAY PRAIRIE FARM, LLC

2. This company is formed for the purpose of:
ENGAGING IN ANY LAWFUL ACTIVITY FOR WHICH LIMITED LIABILITY COMPANIES MAY BE FORMED

3. The duration of this limited liability company is: (may be perpetual):
PERPETUAL

4. The company is:
MEMBER-MANAGED

Other provisions:

The filing of a false public record, with the knowledge of its falsity, is a crime, subjecting the filer to fine or imprisonment or both under R.S. 14:133.

BY TYPING MY NAME BELOW, I HEREBY CERTIFY THAT I AM THE ORGANIZER.
ELECTRONIC SIGNATURE: WILLIAM BARRON (4/24/2020)
TITLE: MEMBER

LIMITED LIABILITY COMPANY INITIAL REPORT

(R.S. 12:1305 (E))

The name of this limited liability company is:
BAY PRAIRIE FARM, LLC

The location and municipal address (not a P.O. Box only) of this limited liability company's registered office:
4220 STILLMEADOW LANE
PINEVILLE, LA, 71360

Mailing Address:
PO BOX 3401
PINEVILLE, LA, 713613401

The full name and municipal address (not a P.O. Box only) of each of this limited liability company's registered agent(s) is/are:
WILLIAM BARRON
4220 STILLMEADOW LANE
PINEVILLE, LA, 71360

The name and municipal address (not a P.O. Box only) of the managers or members:
MRL, LLC (MEMBER)
4220 STILLMEADOW LANE
PINEVILLE, LA, 71360

5 NORTH BUMBY, LLC (MEMBER)

34 EAST PINE STREET
ORLANDO, FL, 31801

HOLCOMB RESOURCES, LLC (MEMBER)
4520 S. SHERWOOD FOREST BLVD
BATON ROUGE, LA

BBB FARMS, LLC (MEMBER)
33019 LONDONBERRY DRIVE
WALLER, TX, 77484

The filing of a false public record, with the knowledge of its falsity, is a crime, subjecting the filer to fine or imprisonment or both under R.S. 14:133.

BY TYPING MY NAME BELOW, I HEREBY CERTIFY THAT I AM THE ORGANIZER.
ELECTRONIC SIGNATURE: WILLIAM BARRON (4/24/2020)
TITLE: MEMBER

SECRETARY OF STATE

Agent Affidavit and Acknowledgement of Acceptance

Charter Number: 43872284K

Charter Name: BAY PRAIRIE FARM, LLC

The agent / agents listed below accept the appointment of registered agent for and on behalf of the Charter Name above.

Date Responded	Agent(s)	Agent(s) Electronic Signature
04/24/2020	WILLIAM BARRON	WILLIAM BARRON