

CLEAR CREEK REGIONAL MITIGATION BANK PROSPECTUS

BRAZORIA COUNTY, TEXAS

HCFCF Project ID A700-01-00-Y001

Prepared for:

Harris County Flood Control District

9900 Northwest Freeway

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1 GENERAL INFORMATION

1.1 Bank Name and Sponsorship

The proposed mitigation bank will be known as the Clear Creek Regional Mitigation Bank (CCRMB). Harris County Flood Control District (HCFCD) is the Sponsor (owner and operator) of CCRMB. BGE, Inc. (BGE) will act as the Sponsor's authorized agent.

Contact information for the Sponsor and their Authorized Agent is as follows:

Sponsor/Landowner:

Harris County Flood Control District
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1.2 Sponsor Qualifications

The proposed CCRMB will follow the Greens Bayou Wetlands Mitigation Bank (GBWMB), the Katy Hockley Mitigation Bank, and the Crosby-Eastgate Mitigation Bank as the fourth wetlands mitigation bank proposed for development by the Sponsor. Approved by the U.S. Army Corps of Engineers (USACE) in 1995, GBWMB is a 1,400-acre tract containing a mosaic of riparian forest, forested wetlands, sloughs, and native herbaceous wetlands. To date, HCFCD has created or restored approximately 880 acres of the tract as productive wetland and upland buffers. For over 25 years, HCFCD has provided developers, state and local governments, and utility providers the opportunity to purchase credits from GBWMB, thereby satisfying statutory wetland mitigation requirements. Currently, HCFCD has also completed construction of the Katy-Hockley Mitigation Bank, is working on a revised Mitigation Banking Instrument (MBI) for the proposed Crosby Eastgate Mitigation Bank and is evaluating the potential for additional mitigation bank sites within Harris County.

BGE is a civil and environmental engineering firm founded in 1975 and headquartered in Houston, Texas. BGE has more than 45 years of experience bringing together multi-disciplinary teams to solve challenging, complex problems in communities throughout the southeastern U.S. The BGE Environmental Services team has more than 85 years combined experience in working for and with the USACE and public and private sector clients to conduct wetland and stream delineations and permitting, functional assessments, mitigation planning and monitoring, and general water resource consulting. The BGE team has worked with the USACE Galveston District, Fort Worth District, Albuquerque District, Tulsa District, Vicksburg District, and New Orleans District. BGE has partnered with Alluvion Resource Company, LLC (Alluvion) for specialized mitigation banking expertise to assist HCFCD in developing CCRMB.

Alluvion was founded by ecologists Keith Webb and Chance Kimbrough in 2018. As founding principals of the company, Keith and Chance have a combined 32 years of experience in the ecosystem services and compensatory mitigation space. They have considerable in-depth project-

related experience, including direct oversight of, and intimate involvement in, every aspect or stage of mitigation project development, site selection and origination, permitting and interagency coordination, work plan design and implementation, and monitoring/reporting. Together, they have evaluated mitigation suitability of hundreds of potential bank sites in multiple states and USACE districts throughout the U.S. and have successfully permitted and/or managed over 33 approved and/or pending mitigation banks and over 40 permittee-responsible mitigation projects in the Fort Worth, Tulsa, Little Rock, Galveston, and Memphis USACE Districts.

2 GOALS AND OBJECTIVES

The goal of the CCRMB is to establish, restore, and enhance self-sustaining, functional wetland resources sufficient to replace the function and values lost due to unavoidable adverse impacts to other wetlands within the service area through the sale of mitigation credits. Approved mitigation banks are the preferred option to mitigate for permitted, unavoidable aquatic resource impacts under the *Compensatory Mitigation for Losses to Aquatic Resources* rule (33 Code of Federal Regulations [CFR] Parts 325 and 332).

The primary objectives of creating the CCRMB are to protect the water quality of the downstream Clear Creek watershed and Galveston Bay; provide diverse habitat for fauna; protect genetic diversity of uncommon regional flora; establish, restore, and enhance stable forested communities resistant to invasive plant species; and protect both forested and non-forested communities in the CCRMB via long-term conservation measures.

These objectives will be achieved via the following measures:

- Restore approximately 166 acres of riverine forested (RF) wetlands;
- Enhance approximately 2 acres of RF wetlands;
- Establish approximately 83 acres of mixed RF and riverine herbaceous/shrub (RHS) wetlands;
- Re-establish site hydrology to allow for physical retention and chemical sequestration of local site runoff and Chigger Creek floodwaters; and
- Promote stand diversity via selective plantings and forest management techniques to increase site flora and fauna biodiversity.

3 BASELINE SITE DETAILS

3.1 Location

The project area is located in northeast Brazoria County, Texas, approximately 1 mile west of State Highway 35, 0.5 mile north of Heights Road (County Road 541), and 0.3 mile east of Pearland Sites Road (County Road 143). The project area is located within the Clear Creek watershed in the San Jacinto – Brazos River basin. Chigger Creek bisects the property, draining west to east approximately 6.1 miles to its confluence with Clear Creek. The approximate center of the site is located within the geographic limits of the Manvel, Texas U.S. Geological Survey (USGS) 7.5-minute quadrangle at approximately 29.482852 degrees latitude and -95.274085 degrees longitude (1983 North American Datum). See Appendix A, Figure 1 for a location map.

3.2 Historical Setting

The Clear Creek watershed is situated between the San Jacinto and Brazos River systems. This portion of the Gulf Coastal plain is associated with cyclical patterns of sediment deposition, repeated sea-level changes, and basin subsidence (Chowdhury and Turco 2006). The watershed is composed of relatively flat coastal plain with elevations varying from near sea level at Clear Lake on the eastern edge of the watershed to about 75 feet mean sea level on the western watershed boundary (USACE 2012). As a result, the landscape was shaped by a series of meandering channels and large floodplains creating inland deltas transporting and depositing sediments from northern geologic formations onto the relatively flat Beaumont Geological formations (Moulton and Jacob 2000).

The Clear Creek watershed occurs within a biological transition zone between the southern mixed hardwood forest, the coastal prairie, and the coastal salt marshes. The region contains remnants of remaining native tall-grass prairies, small areas of shallow tidal marshlands, and bottomland hardwood or riparian woodland areas (USACE 2012). The headwaters and interstitial areas between the San Jacinto and Brazos Rivers were predominately coastal prairies typified by vegetation communities consisting of brownseed paspalum (*Paspalum plicatulum*), bluestems (*Andropogon* spp.), little bluestem (*Schizachyrium scoparium*), indiangrass (*Sorghastrum nutans*), and rosette grass (*Dichanthelium* spp.) interspersed with depressional wetlands (Smeins et al. 1991). Typical tree species associated with floodplains on the upper Texas coast include willow oak (*Quercus phellos*), water oak (*Q. nigra*), overcup oak (*Q. lyrata*), cherrybark oak (*Q. pagoda*), bottomland post oak (*Q. similis*), green ash (*Fraxinus pennsylvanica*), sweetgum (*Liquidambar styraciflua*), cedar elm (*Ulmus crassifolia*), American elm (*U. americana*), black gum (*Nyssa sylvatica*), and American sycamore (*Platanus occidentalis*). Understories of these communities are largely dominated by dwarf palmetto (*Sabal minor*) but also consist of hollies (*Ilex* spp.), hawthorns (*Crataegus* spp.), white fringetree (*Chionanthus virginicus*), swamp privet (*Forestiera* spp.), and cherry (*Prunus* spp.).

Review of aerial imagery from the 1940-1970's reveals a conversion of the land surrounding Chigger Creek riparian forests to agriculture with a significant increase in land dedicated to rice production. See Appendix A, Figures 2 and 3 for a series of historical aerial imagery maps. Subsequently, the watershed has seen an increase in low-density residential development, industry, and conversion of rice fields to pastureland, improved hayfields, and sod farming. With anticipated future construction in and around southern Harris and northern Brazoria counties and expansion of development in the vicinity of the

proposed site, projects that preserve, restore, or create native upland and wetland habitats along Chigger Creek and Clear Creek will assist in maintaining ecological functions within the watershed.

3.3 Existing Conditions

The project area is located on a nearly level region of the Gulf Coastal Plain. Historical aerial imagery from EDR, Nearmap, and Google Earth Pro was evaluated, which uses information derived from the USGS, Texas General Land Office, U.S. Department of Agriculture, and the Houston-Galveston Area Council for the following years: 1944, 1955, 1969, 1974, 1982, 1989, 1995, 2005, 2008, 2012, 2016 – present. The project area appeared mostly agricultural in nature since at least 1944. Several dirt roads transected the subject property at this time. Much of the area was utilized for rice and soybean farming prior to development. Historic aerial photography indicates farming began on portions of the project area prior to 1944. Three irrigation reservoirs were excavated between 1944 and 1969 on the northern portion of the project area and were constructed to support agricultural production (rice farming).

One residence is present in aerial photography from 1989. This residence appears to have been cleared from the project site prior to 2008. Additionally, a mobile home was identified along with several school buses near the southeastern boundary of the subject property. No other buildings or structures were observed within the site. The adjacent properties have largely been undeveloped/agricultural in nature since at least 1944. Several residences are identified around the project area in 1969. Additional residential development encroaches the subject property from the southeast in aerial photography dating from 1989 and 1995. In aerial photography from 1995, the construction of several residences began west of the project area. The surrounding area is currently a mixture of residences and undeveloped/agricultural land. Other infrastructure such as canals, contour levees, and drainage ditches can still be observed within the project area and a transmission line corridor was constructed between 2002 and 2004. Currently, the project area primarily consists of exotic/invasive species—specifically Chinese tallow—as a result of the land management regime shifting from row crop agriculture to cattle grazing. See Appendix A, Figure 4 for a current aerial map.

A Phase I Environmental Site Assessment was conducted by BGE in September 2020 on the 329-acre tract in accordance with ASTM E1527-13. The report, dated September 14, 2020, concluded there are no Recognized Environmental Conditions within the project area.

A wetland delineation was completed in October 2021, which identified 17 palustrine forested (PFO) wetlands, 9 palustrine scrub-shrub (PSS) wetlands, 18 (PEM) palustrine emergent wetlands, and 3 palustrine, unconsolidated bottom (PUB) areas. Additionally, there is one perennial stream, and two upland drainage ditches. Of the mapped aquatic resources, 171.33 acres and 7,033 linear feet meet the criteria of a jurisdictional water and are therefore regulated by the USACE under Section 404 of the Clean Water Act. These results were verified by the USACE in its approved jurisdictional determination, issued September 30, 2022 (Appendix B). Six wetlands and two upland drainage ditches were determined by the USACE to be non-jurisdictional, totaling 46.74 acres and 2,381 linear feet. These features are not considered to be waters of the U.S. and are not regulated by the USACE or the U.S. Environmental Protection Agency (EPA) under Section 404 of the Clean Water Act.

Resource Type	Linear Feet in Project Area	Jurisdictional Linear Feet in Project Area	Acres in Project Area	Jurisdictional Acres in Project Area
PEM Wetland	N/A	N/A	15.22	5.98
PSS Wetland)	N/A	N/A	70.98	70.98
PFO Wetland	N/A	N/A	125.34	94.37
PUB Wetland	N/A	N/A	6.53	0.00
Perennial Stream	7,033	7,032	N/A	N/A
Upland Drainage Ditch	2,381	0	N/A	N/A
Totals:	9,414	7,032	218.07	171.33

Appendix A, Figure 5 illustrates the existing conditions of the CCRMB site, including soils, floodplains, and delineated aquatic resources.

3.3.1 Vegetation

The RHS wetlands were dominated by poison ivy (*Toxicodendron radicans*, facultative [FAC]), wax myrtle (*Morella cerifera*, FAC), soft rush (*Juncus effusus*, obligate [OBL]), bushy bluestem (*Andropogon glomeratus*, facultative wetland [FACW]), southern dewberry (*Rubus trivialis*, facultative upland [FACU]), annual marsh-elder (*Iva annua*, FAC), annual ragweed (*Ambrosia artemisiifolia*, FACU), Chinese tallow (*Triadica sebifera*, FAC), and sugarberry (*Celtis laevigata*, FACW). The RF wetlands were dominated by Chinese tallow, black willow (*Salix nigra*, OBL), loblolly pine (*Pinus taeda*, FAC), flowering dogwood (*Cornus florida*, FACU), sugarberry, soft rush, southern dewberry, and poison ivy.

3.3.2 Soils

The project area is underlain by the Beaumont Formation. Two soil series are mapped within the project area by the Natural Resources Conservation Service Soil Survey Geographic Database (NRCS 2021): Lake Charles clay, 0 to 1 percent slopes (24), and water (W). Lake Charles clay is moderately well drained with high runoff potential and low flooding/ponding potential and is considered hydric (NRCS 2016). Hydric and non-hydric soils observed in the field (0 to 18 inches deep) generally had matrix colors of 10YR 3/1, 10YR 4/1, 10YR 4/2, 10YR 4/3, and 10YR 5/1. Hydric soils observed included redoximorphic concentrations of 2 percent to 20 percent and colors of 7.5YR 4/4, 7.5YR 5/6, 10YR 4/6, 10YR 5/6, and 10YR 5/8. Soil textures of both hydric and non-hydric soils included clay and clay loam.

3.3.3 Hydrology

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Panel 48039C0135K, nearly all of the project area (approximately 303 acres) is within the mapped 100-year floodplain and the remainder is within the 500-year floodplain. In conjunction with the FEMA 100-year floodplain, a Typical Year Event (TYE) and a 4-inch rainfall event were modeled by BGE based on best available data and standard practices. The 4-inch rainfall event represents the amount of rainfall at which Chigger Creek would significantly overtop its banks.

The site is hydrologically connected to Chigger Creek and approximately 233 acres of the site are inundated in a TYE. Most of the site to the south of Chigger Creek becomes inundated in a TYE while

existing berms appear to limit some inundation to the north of Chigger Creek in this event. Theoretical storms were also modeled to determine the rainfall depth threshold at which channel banks are exceeded throughout the site. The results indicate significant channel overtopping begins at a rainfall depth of 4 inches in 24 hours. Using data from 1999 to 2020 for two rain gauges with the longest history near the project area for low rainfall, average rainfall, and high rainfall years, there were approximately 0.25 day per year, 1 day per year, and 1.9 days per year, on average, during which rainfall depths exceeded 4 inches and channel banks would have been overtopped in the project area.

Over the course of 7 days to 30 days without a TYE or 4-inch rainfall event, the water within project area is absorbed or evaporates such that there are pockets of standing water throughout the site typically less than 0.25 feet deep. The TYE results in standing water through day 30 both north and south of Chigger Creek while the 4-inch rainfall event results in standing water through day 30 mostly south of Chigger Creek. However, the majority of the site becomes dry by day 30 in both events. This variation is reflected in the baseline iHGM conditions whereby a portion of the project area has low variable sub index scores for both duration and frequency of flooding. The majority of the project area in an average year floods and/or ponds for 1 to 7 days (Vdur score of 0.1) and floods or ponds less than 2 out of 5 years (Vfreq score of 0.25). As such, the project area will benefit from restoring pre-channelization site hydrology.

3.3.4 Threatened and Endangered Species

Review of the Texas Parks and Wildlife Department's (TPWD) Natural Diversity Database and U.S. Fish and Wildlife Service (USFWS) data does not indicate any state- or federally listed threatened and endangered species will be adversely affected by restoration activities at the site. Rather, the CCRMB will restore and enhance diverse bottomland habitats with close proximity to remaining similar habitats associated with Chigger Creek, and create high-quality herbaceous habitats conducive to wildlife. BGE ecologists evaluated the project area for suitable wildlife habitat and individuals concurrent with the wetland delineation and functional assessment. Following both the desktop and field reviews, BGE determined preferred habitat for the eastern black rail (*Laterallus jamaicensis jamaicensis*), the white-faced ibis (*Plegadis chihi*), and the wood stork (*Mycteria americana*) are present within the project area. The preferred habitats for the remaining federally and state-listed threatened and endangered species that TPWD and USFWS indicated may be present within the project area are not present within the project area.

The eastern black rail prefers salt, brackish, freshwater marshes, pond borders, wet meadows, and grassy swamps, and nests in or along the edges of marshes, sometimes on damp ground, but usually on a mat of the previous year's dead grasses. The white-faced ibis is found in the Western Gulf Coastal plains ecoregion of Texas. It prefers freshwater marshes, sloughs, and irrigated rice fields; however, this species is currently confined to near-coastal rookeries in "hog-wallow prairies." The wood stork prefers to nest in large tracts of bald cypress (*Taxodium distichum*) or red mangrove (*Rhizophora mangle*) and forage in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water. The wood stork usually roosts communally in tall snags, sometimes in association with other wading birds (i.e., active heronries). They breed in Mexico and move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; however, there has been no breeding records of the wood stork in Texas since 1960.

Small patches of potentially suitable eastern black rail habitat are present within the project site but are limited to the RHS/open water interface north of Chigger Creek and a few small pockets of RHS wetlands in or abutting existing rights-of-way. These areas are potentially suitable habitat, as they exhibit the preferred vertical structure required by eastern black rail and have some standing water; however, they contain significant amounts of noxious invasive and exotic species and are not part of a broader patchwork of suitable habitat. These patches of potentially suitable habitat are surrounded within the project area by habitat with thick understories and canopies of Chinese tallow, and the nearby area is mostly agricultural and developed residential land uses. As such, the CCRMB would not likely adversely affect the eastern black rail, as impacts would likely be insignificant. In addition, the project will likely improve the existing potentially suitable habitat and may increase the amount of suitable habitat for the eastern black rail within the project site over the long-term.

The project area also contains small amounts of suitable foraging habitat for the white-faced ibis and the wood stork—suitable nesting or roosting habitat is not present for either species within the site. The restoration activities within the project area may enhance suitable foraging habitat for both species; as such, the CCRMB would not result in adverse impacts on the white-faced ibis or wood stork and may result in beneficial impacts on both species. No suitable habitat or individuals of any other federally or state-listed species was identified within the project area; therefore, the project would have No Effect on the federally listed species identified by the USFWS that may be present in the project area and would not impact the state-listed species identified by TPWD that may be present in the project area.

3.3.5 Cultural Resources

BGE completed a cultural resources survey of the project site. The project is in an undeveloped area that was historically used for rice farming and other agricultural activities and Chigger Creek traverses the project area roughly west to east. The project covers an area of approximately 134 hectares (330 acres), which constitutes the Area of Potential Effects (APE). There are no pre-recorded cultural resources within the APE and no cultural resources were identified during the survey conducted by BGE. The Texas Historical Commission reviewed the survey results and provided concurrence to HCFCD on February 25, 2022 that no historic properties are present or will be affected by the proposed project.

4 ESTABLISHMENT AND OPERATION

4.1 Bank Establishment

The Sponsor will procure the financial resources, planning, and scientific professional services required to successfully re-establish wetlands for CCRMB. The Sponsor will perform all restoration, provide for financial assurances (per 33 CFR 332.3 (n)) and long-term protection mechanisms (per 33 CFR 332.7 (a)), administer the sale and accounting of credits, and complete all record-keeping and reporting requirements for the CCRMB.

As part of the review process, the Sponsor will draft an MBI for review and approval by the USACE and the Interagency Review Team (IRT) in accordance with 33 CFR 332.8(d)(6-8). The MBI will establish and outline the operating agreement for the CCRMB. The MBI will detail the CCRMB's service area, accounting procedures, provisions stating the Sponsor's legal responsibility for providing compensatory mitigation upon secured credits, default and closure provisions, reporting protocols, mitigation plans, credit release schedules, and other information required for inclusion by the USACE.

4.2 Credit Determination

Credits will be determined using the iHGM Model for RF and RHS wetland communities. The iHGM functional assessment will evaluate the existing conditions of the site (baseline condition), then project the anticipated iHGM uplift of the targeted wetland communities based on conditions expected to occur following site restoration (post-activity). The calculated difference between the baseline condition and post-activity iHGM scores will determine the functional capacity index of each wetland area and subsequently the number of functional capacity units (FCU) that may be generated for sale through the CCRMB. Some upland buffer habitat may also be credited in accordance with historical crediting processes that have been used by the USACE Galveston District. In addition, the Sponsor anticipates developing a credit release schedule based on predefined milestones during operation, construction, and monitoring, and maintenance of the CCRMB that will be determined during the review process with the USACE and the IRT. The credit release schedule and defined monitoring benchmark schedule will be defined in the MBI.

4.3 Service Area

The service area for CCRMB is based on connectivity to the Chigger Creek floodway and ecoregion setting, also known as a watershed and ecoregion approach. Based on the size of the property and its location within the watershed, HCFCD proposes a primary service area of Clear Creek-Frontal Galveston Bay (Hydrologic Unit Code [HUC] #1204020401) and a secondary service area of Buffalo Bayou-San Jacinto River (HUC #1204010407), collectively referred to as the Service Area. The Service Area is encompassed entirely within the Western Gulf Coastal Plain Level III EPA Ecoregion. Impacts within the Service Area will be debited on a 1:1 basis for the primary service area and a 1:1.5 ratio for the secondary service area. See Appendix A, Figure 6 for a map of the proposed Service Area.

The Service Area excludes waters of the U.S., including wetlands, which are located on:

- lands owned in fee-simple by the State of Texas, including those leased by the State of Texas to TPWD, unless use of CCRMB is approved by TPWD or the State of Texas; and
- wetlands location on barrier islands and peninsulas.

5 ASSESSMENT OF NEED

Mitigation banks are considered preferable to other mitigation mechanisms, such as in-lieu fee and permittee-responsible mitigation. According to 33 CFR 332.3(b)(2):

Since an approved instrument (including an approved mitigation plan and appropriate real estate and financial assurances) for a mitigation bank is required to be in place before its credits can begin to be used to compensate for authorized impacts, use of a mitigation bank can help reduce risk and uncertainty, as well as temporal loss of resource functions and services. Mitigation bank credits are not released for debiting until specific milestones associated with the mitigation bank site's protection and development are achieved, thus use of mitigation bank credits can also help reduce risk that mitigation will not be fully successful. Mitigation banks typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation. Also, development of a mitigation bank requires site identification in advance, project-specific planning, and significant investment of financial resources that is often not practicable for many in-lieu fee programs. For these reasons, the district engineer should give preference to the use of mitigation bank credits when these considerations are applicable.

The southern and eastern portions of Harris County are expected to continue experiencing extensive development in the next several decades and public infrastructure improvements, including proposed flood damage reduction projects to provide relief for existing residents, are likely to lead to significant wetland impacts. Given predicted population increases and infrastructure development in Harris, Brazoria, and Galveston counties, the Sponsor believes that there is a clear need to develop additional mitigation credits within the West Galveston Bay watershed (HUC #12040204) and the Buffalo-San Jacinto watershed (HUC #12040104) to support future HCFCD flood damage reduction projects, and that the existing and other proposed banks will not likely be sufficient to provide enough credits to offset these needs.

The southeastern Harris County area is in need of additional mitigation banks to provide credits for future development projects for the rapidly growing region. Currently, there are four approved mitigation banks with credits available for private or county projects that share portions of the same service area as that proposed for the CCRMB (Appendix A, Figure 6; USACE 2022). The proposed primary service area of the CCRMB is the Clear Creek-Frontal Galveston Bay watershed (HUC# 1204020401), which is a subwatershed of the West Galveston Bay HUC.

GBWMB, which is located within Harris County and owned by HCFCD, currently has credits, but most are reserved for pending projects. The West Galveston Bay watershed lies outside of GBWMB's primary and secondary service area and is only able to offset impacts on a case-by-case basis. Gin City Mitigation Bank (Harris County) has a secondary service area that covers the Buffalo-San Jacinto watershed and, according to the USACE's Regulatory In lieu fee and Bank Information Tracking System (RIBITS, accessed September 2022), currently has FCUs for RF communities available. The Lower Brazos River Wetland Mitigation Bank (Fort Bend County) has a secondary service area that covers the West Galveston Bay watershed and according to RIBITS has RF and RHS credits available. The Gulf Coastal Plains Mitigation Bank (Chambers County) has a secondary service area that covers the West Galveston

Bay watershed and the Buffalo-San Jacinto watershed, and according to RIBITS has RHS and tidal fringe wetland credits available. The Sponsor is aware of three other pending mitigation banks in the region that could serve portions of the North Galveston Bay HUC (#12040203), Buffalo-San Jacinto HUC, and the West Galveston Bay HUC; however, only one of the pending banks has proposed the West Galveston Bay HUC as a primary service area and RHS wetlands. As such, these pending banks would not likely provide enough credits of the types needed for future HCFCD projects.

6 EASEMENTS AND ENCUMBRANCES

According to oil and gas well records reported by the Railroad Commission of Texas, there are no active wells located on the CCRMB site; there are five plugged oil wells and one dry hole. Furthermore, a title review of the site indicates that one transmission line easement 80 feet in width, one pipeline easement 30 feet in width, and two road easements each 20 feet in width occur within the project area (Appendix A, Figure 7). Existing easements, minerals management areas, and maintenance/access areas will not be credited.

7 OWNERSHIP AND LONG-TERM MANAGEMENT

The CCRMB is owned in fee simple by the Sponsor, HCFCD. HCFCD will work to maintain compliance with all restrictions set by the CCRMB MBI. HCFCD will manage the CCRMB directly and will be responsible for day-to-day operations. It is anticipated that the Galveston Bay Foundation, accredited by the Land Trust Accreditation Commission, will serve as the Conservation Easement holder for the CCRMB. A letter of intent is included in Appendix C. The Conservation Easement will act as a real estate instrument to ensure the land will remain in a state of conservation in perpetuity. A copy of the draft Conservation Easement will be provided with the submittal of the MBI.

The Sponsor will manage CCRMB to be self-sustaining with long-term management activities limited primarily to items such as inspections, annual monitoring, promotion of site biodiversity, controlling invasive species, and boundary maintenance. The Sponsor will ensure that the long-term management and monitoring plan, as well as the adaptive management plan (to be outlined in the MBI), will be implemented as appropriate and will ensure that the adaptive management plan, to be outlined in the MBI, will be enacted if necessary.

8 MITIGATION PLAN

8.1 Ecological Suitability

The CCRMB is situated within the Northern Humid Gulf Coastal Prairies sub-region of the greater Western Gulf Coastal Plain ecoregion of Texas. The Western Gulf Coastal Plains are characterized by relatively flat topography. Native vegetation consists of grassland, with some forests present along streams. Historic plant communities included big bluestem (*Andropogon gerardii*), little bluestem, yellow Indiangrass (*Sorghastrum nutans*), brownseed paspalum, gulf muhly (*Muhlenbergia capillaris*), and switchgrass (*Panicum virgatum*). The Northern Humid Gulf Coastal Prairies sub-region is characterized as a gently sloping coastal plain underlain by Quaternary-age (2.6 million years ago to present) deltaic sands, silts, clays, and gravels. Pimple mounds found across prairie terraces in the region were presumably caused by ant and termite populations in the hotter and drier climate prior to the Holocene epoch (11,650 years ago to present; Griffith et al. 2004).

This system also contains forests that vary based on the flooding regime as a result of local topography and proximity to surface water. Native species include water tupelo (*Nyssa aquatica*), swamp tupelo (*Nyssa biflora*), water honeylocust (*Gleditsia aquatica*), water hickory (*Carya aquatica*), pecan (*Carya illinoensis*), water elm (*Planera aquatica*), Carolina ash (*Fraxinus caroliniana*), laurel oak (*Quercus laurifolia*), swamp chestnut oak (*Q. michauxii*), sugar hackberry (*Celtis laevigata*), red maple (*Acer rubrum*), bald cypress, overcup oak, willow oak, green ash, sweetgum, bottomland post oak, water oak, cherrybark oak, cedar elm, and American elm. In open water, floating aquatics such as common duckweed (*Lemna minor*), pondweed (*Potamogeton* spp.), coontail (*Ceratophyllum demersum*), and American waterlily (*Nymphaea odorata*) may be present (TPWD 2014).

The site is largely located within the Chigger Creek floodway and has direct hydrological connection to both Chigger Creek and downstream Clear Creek. Due to long-term agricultural use, the site has been degraded over time and will benefit from restoration. The proposed restoration is likely to be successful because of the existing hydrologic connection to Chigger Creek; in addition, the proposed improvements have been designed to restore, as much as practicable, the natural hydrologic regime of the site. The wetland within the project area will continue to dissipate floodwaters and provide flood storage, as well as remove particulates, solubles, organic compounds, inorganic elements, nutrients, and toxins from floodwaters.

8.2 Resource Type and Amount

CCRMB will establish a mix of RF and RHS communities by restoring pre-channelization site hydrology. Primary site alterations will include four 50-foot-wide cuts within the existing berm along the northern bank of Chigger Creek, excavation of the northwest and a portion of the eastern side of the site, additional berm creation along the northern and western project boundaries, construction of weirs, and improvements/modifications to existing culverts. These activities will result in the hydrological reconnection of RF and RHS wetland communities. Existing RF wetlands will be restored and enhanced via control of Chinese tallow, forestry management techniques, and supplemental plantings and a mix of RF and RHS wetlands will be established in existing uplands and open water. See Appendix A, Figure 8 for a map of proposed wetland establishment, restoration, and enhancement areas.

Resource Type	Acres within CCRMB	Easements, rights-of-way	Restored Creditable Acres	Enhanced Creditable Acres	Established Creditable Acres
<i>Jurisdictional Wetland</i>					
Riverine forested	94.4	1.4	163.8	2.3	--
Riverine herbaceous/shrub	77.0	4.0	--	--	
Stream	4.4	4.4	--	--	--
<i>Non-jurisdictional Wetland</i>					
Riverine forested	31.0	1.1	--	--	37.7
Riverine herbaceous/shrub	9.2	1.5			
Open water °	6.5	--	--	--	6.5
Stream	1.6	1.6	--	--	--
<i>Upland</i>	104.9	29.0	--	--	40.1
Total	329.0	43.0	163.8	2.3	84.3

° Open water will be established as RHS wetland community.

8.3 Wetland Vegetation Establishment/Restoration/Enhancement

Several factors, including previous farming practices and the channelization of Chigger Creek, have resulted in altered site hydrology. HCFCD evaluated several proposed measures, both structural and non-structural, to increase the frequency and duration of inundation within the proposed CCRMB. The Sponsor anticipates increasing site hydrology through the addition of cuts within the existing berm along Chigger Creek to allow additional overbank flooding, excavation of two upland areas along with swales to convey water from Chigger Creek to the excavated areas, the construction of a weir to allow additional drainage, increasing the size of an existing culvert, and plugging another conveyance to retain water for a longer period.

In general, RF wetland restoration and enhancement activities will include the removal of noxious invasive and exotic species, specifically Chinese tallow (the dominant woody species occurring throughout the project area) and establishment of native, locally adapted woody species adapted to the targeted hydrological regimes. The Sponsor anticipates utilizing locally-sourced, bare root and containerized seedlings planted at a sufficient rate to effectively restore woody species diversity and naturally sustainable and high-functioning RF wetland communities. In areas with prolonged hydroperiods, the Sponsor will utilize native species especially suited for these conditions (e.g., bald cypress, water tupelo, green ash, red maple, swamp privet, buttonbush [*Cephalanthus occidentalis*]).

Mixed RF and RHS wetland establishment will be accomplished through the excavation of upland areas and connection of those areas via constructed swales to Chigger Creek. The Sponsor will plant locally-sourced native hydrophytic species in accordance with standard revegetation protocols and a manner

that will promote naturally sustainable and high-functioning RHS wetland communities. These species may include, but not be limited to, wax myrtle, soft rush, bushy bluestem, annual marsh-elder, buttonbush, smartweed, panic grass, *Ludwigia*, woolgrass, rushes, and various sedges.

The CCRMB MBI, which will follow this prospectus, will further describe performance standards, monitoring provisions, and reporting protocols to effectively evaluate the success of the mitigation bank in achieving the goals and objectives.

8.4 Potential Functional Lift

Establishment of native vegetation and hydrology to non-jurisdictional wetland habitat and existing upland habitat, as well as enhancement of plant communities and hydrology to existing wetland habitat will generate substantial improvements to the resources represented in the project area. Based on the preliminary hydrological analysis, the Sponsor anticipates these areas will meet the USACE requirement for wetland hydrology after implementation of the wetland mitigation work plan (to be described in detail in the MBI). The Sponsor anticipates functional uplift via restoration of approximately 166 acres of existing wetland areas by removal and control of noxious invasive and exotic species and increased frequency and duration of saturation, approximately 83 acres of established wetland habitat through earthwork/excavation and increased frequency and duration of saturation, and approximately 2 acres of enhancement to RF wetland communities in the northeast corner of the project area. HCFCD will provide functional lift projection calculations for the project as part of the MBI.

9 WATER RIGHTS

Texas surface water is owned and held by the State in trust for public use and protection. In 2007, the 80th Texas Legislature created the Environmental Flows Advisory Group, tasked with establishing appropriate environmental flow standards for each river basin and bay system in the state. TPWD, the Texas Commission on Environmental Quality (TCEQ), and the Texas Water Development Board jointly administer the Instream Flow Program. Importantly, Texas State law prohibits the issuance of water rights permits for instream flows for environmental needs (§ 11.0237, TX Senate Bill 3, Texas Water Code). Rather, “the TCEQ is required by the Texas Water Code to consider and provide for freshwater inflows necessary to maintain the viability of Texas bay and estuary systems in TCEQ’s regular granting of permits for the use of state waters...” These considerations are directly relevant to determining, on a case-by-case basis, the applicability of a water rights requirement for mitigation projects in Texas, whereby most mitigation projects are, by default, purposed towards conservation of ecological function dependent on naturally sustainable forms of hydrology. This is an integral component of the bank site selection process. Notwithstanding the forgoing, a distinction should be made between projects relying on artificial methods (e.g., irrigation, lift pumping) or highly managed systems for establishing and/or maintaining wetland hydrology versus those relying on existing hydrologic regimes resulting from one or more of the following: naturally occurring stream out-banking events, direct precipitation, overland flows/diffuse surface water, or tidal action.

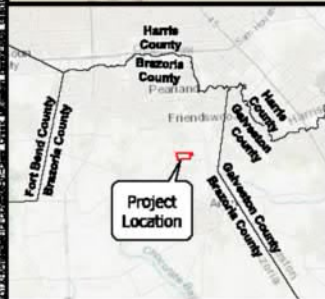
The hydrology of the proposed CCRMB will be reliant upon direct precipitation, overland flows/diffuse surface water (both onsite and from adjacent contributing drainage areas), and out-banking/flood events of Chigger Creek and associated channels. No diversion of state waters is proposed. Naturally recurrent and cyclical weather patterns and events are expected to provide naturally sustainable sources of hydrology for CCRMB for the long-term without any need for supplemental or artificial sources (e.g., pumping, diversion, irrigation). In consideration of the forgoing and based on the current design concepts under development, it is the Sponsor’s position that no water rights permit(s) will be required for the proposed mitigation bank.

10 CITATIONS

- Chowdhury, A.H. and M.J. Turco. 2006. Geology of the Gulf Coast Aquifer, Texas in Mace, R.E. et al. eds. *Aquifers of the Gulf Coast of Texas: Texas Water Development Board Report*.
- Griffith, G.E., Bryce, S.A., Omernik, J.M., Comstock, J.A., Rogers, A.C., Harrison, B., Hatch, S.L., and Bezanson, D. 2004. Ecoregions of Texas (color poster with map, descriptive text, and photographs). Reston, Virginia, U.S. Geological Survey (map scale 1:2,500,000).
- Moulton, D.S. and J.S. Jacob. 2000. *Texas Coastal Wetlands Guidebook*. Texas Sea Grant. 66pp. TAMU-SG-00-605. College Station.
- Neary, D.G., W.T. Swank, and H. Riekerk. 1989. An overview of nonpoint source pollution in the southern United States. In Hook, DD. And R. Lea eds. *Proceedings of the symposium: The forested wetlands of the Southern United States*. Gen. Tech. Report SE-50. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 168 pp.
- National Resources Conservation Service [NRCS]. 2021. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Site Accessed 31 August 2022.
- National Resources Conservation Service [NRCS]. 2016. Lake Charles Clay. https://soilseries.sc.egov.usda.gov/OSD_Docs/L/LAKE_CHARLES.html. Site Accessed 31 August 2022.
- Smeins, F.E., D.D. Diamond, and C.W. Hanselka. 1991. Coastal Prairie pages 269-290 in R.T. Coupland, ed. *Ecosystems of the World 8. A natural grasslands-introduction and Western Hemisphere*. Elsevier Press, New York, New York, USA.
- Texas Parks and Wildlife Department (TPWD). 2014. Descriptions of Systems, Mapping Subsystems, and Vegetation Types for Texas. https://tpwd.texas.gov/landwater/land/programs/landscape-ecology/ems/emst/texasecologicalsystemsdescriptions_2016.pdf. Site accessed 24 August 2022.
- U.S. Army Corps of Engineers. 2022. Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS). <https://rsgisias.crrel.usace.army.mil/ribits/>. Site accessed 31 August 2022.
- U.S. Army Corps of Engineers. 2012. Clear Creek, Texas Flood Risk Management Executive Summary. https://www.swg.usace.army.mil/Portals/26/docs/Planning/Archive/Clear%20Creek%20FGRR%20and%20FEIS%20Oct%202012/Clear_Creek_FGRR_Oct2012.pdf?ver=2012-10-02-150021-310. Site accessed 31 August 2022.

Appendix A

Figures



Datum: NAD 1983
 Projection: Texas State Plane
 Zone: 4204
 Units: Feet
 Basemap: ESRI Street Map

0 1 2 Miles
 0 1.5 3 Kilometers

 Project Boundary



BGE, Inc.
 10777 Westheimer, Suite 400, Houston TX 77042
 Tel: 281-558-6700 Fax: 281-558-6701

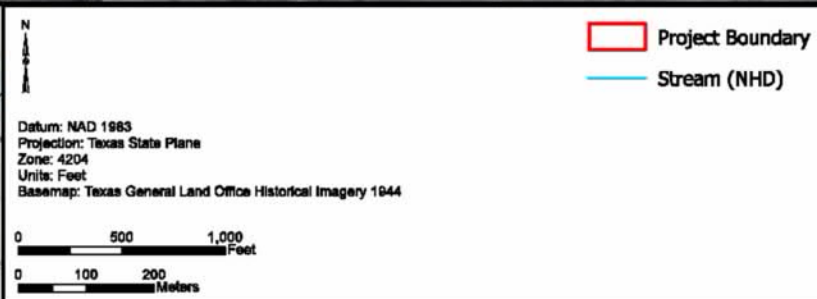
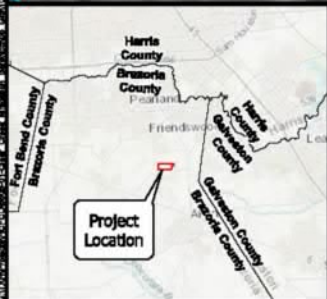
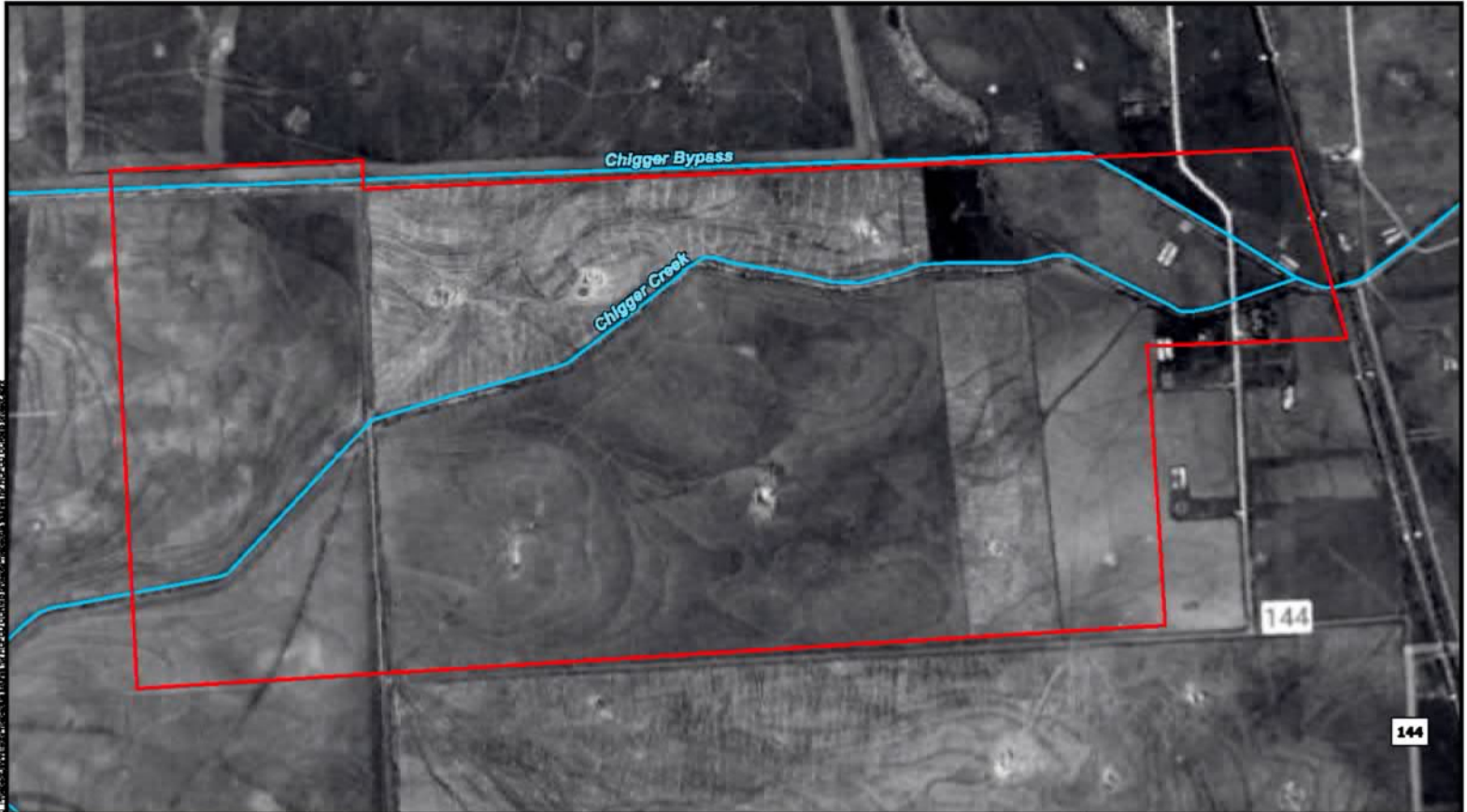
Figure 1 - Vicinity Map
 Prospectus for
 Clear Creek Regional Mitigation Bank
 Harris County Flood Control District
 Brazoria County, Texas
 HCFCFD Project ID:
 A700-01-00-Y001

Prepared By: BGE

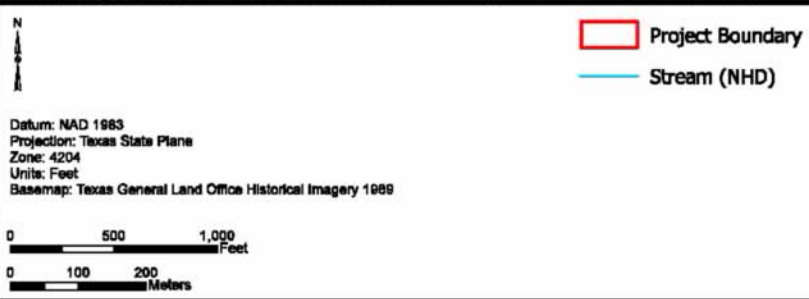
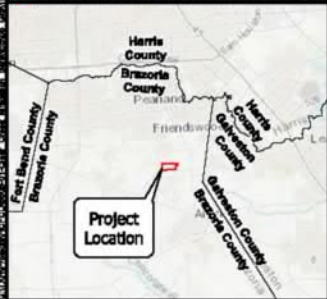
Scale: 1" = 10,000 Feet

Job No.: 6606-01

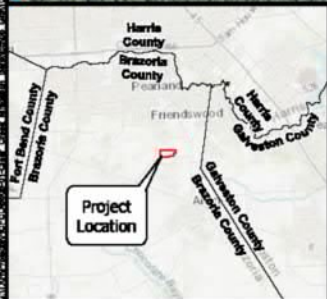
Date: August 2022



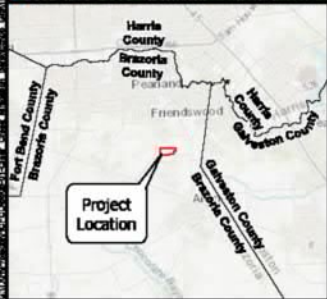
BGE, Inc. 10777 Westheimer, Suite 400, Houston TX 77042 Tel: 281-558-8700 Fax: 281-558-8701	
Figure 2 - Historical Aerial Photography Map Imagery Date: 1944 Prospectus for Clear Creek Regional Mitigation Bank Harris County Flood Control District Brazoria County, Texas HCFCD Project ID: A700-01-00-Y001	
Prepared By: BGE	Scale: 1" = 700 Feet
Job No.: 6506-01	Date: August 2022



BGE, Inc. 10777 Westheimer, Suite 400, Houston TX 77042 Tel: 281-558-6700 Fax: 281-558-9701	
Figure 3 - Historical Aerial Photography Map Imagery Date: 1969 Prospectus for Clear Creek Regional Mitigation Bank Harris County Flood Control District Brazoria County, Texas HCFCF Project ID: A700-01-00-Y001	
Prepared By: BGE	Scale: 1" = 700 Feet
Job No.: 6506-01	Date: August 2022



 BGE, Inc. 10777 Westheimer, Suite 400, Houston TX 77042 Tel: 281-558-6700 Fax: 281-558-9701	
Figure 4 - Aerial Photography Map Imagery Date: January 13, 2022 Prospectus for Clear Creek Regional Mitigation Bank Harris County Flood Control District Brazoria County, Texas HCFCF Project ID: A700-01-00-Y001	
Prepared By: BGE	Scale: 1" = 700 Feet
Job No.: 8506-01	Date: August 2022



Datum: NAD 1983
 Projection: Texas State Plane
 Zone: 4204
 Units: Feet
 Basemap: Neamap 2021

0 500 1,000 Feet
 0 100 200 Meters

- Project Boundary
- Stream (NHD)
- Soil Map Unit
- Elevation Contours
- Base Flood Elevation
- 100-year Floodplain

BGE BGE, Inc.
 10777 Westheimer, Suite 400, Houston TX 77042
 Tel: 281-558-6700 Fax: 281-558-9701

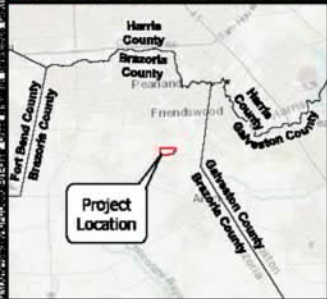
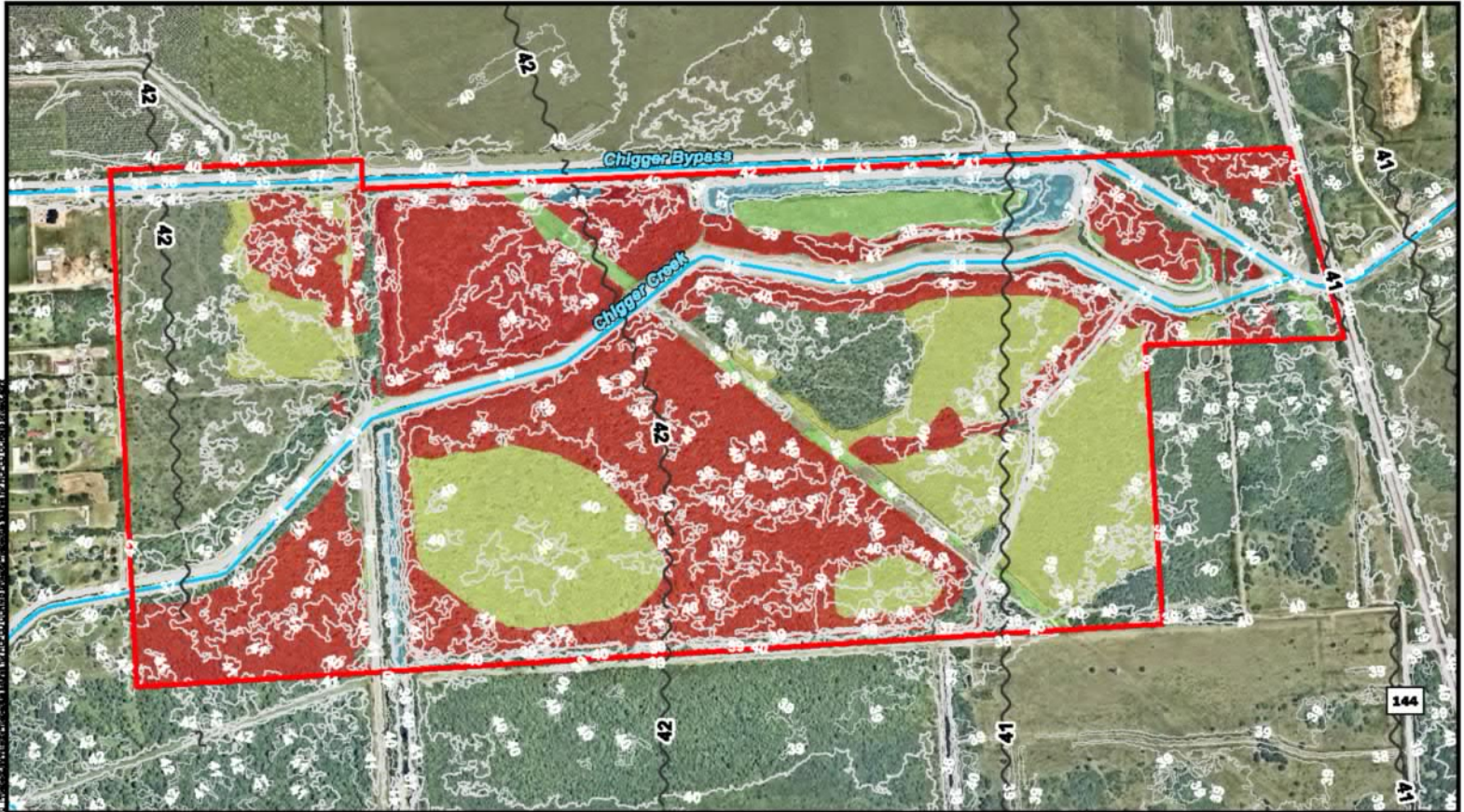
Figure 5a - Existing Conditions Map
 Floodplain and Soils
 Prospectus for Clear Creek
 Regional Mitigation Bank
 Harris County Flood Control District
 Brazoria County, Texas
 HCFCD Project ID:
 A700-01-00-Y001

Prepared By: BGE

Scale: 1" = 700 Feet

Job No.: 8506-01

Date: August 2022

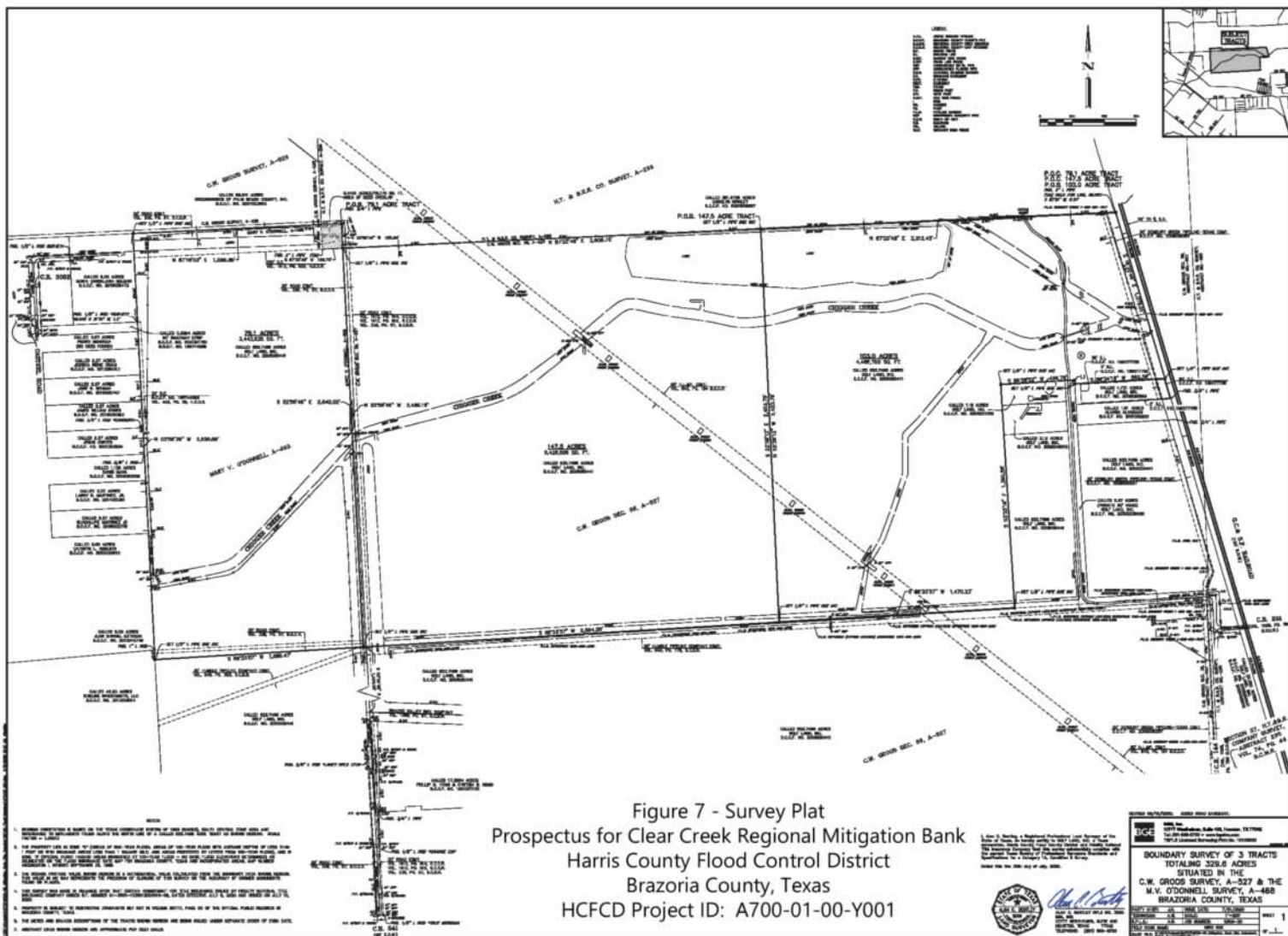


Datum: NAD 1983
 Projection: Texas State Plane
 Zone: 4204
 Units: Feet
 Basemap: Neamap 2021

0 500 1,000 Feet
 0 100 200 Meters

- Project Boundary
 - Stream (NHD)
 - Elevation Contours
 - Base Flood Elevation
- Mapped Wetland**
- PEM
 - PSS
 - PFO1
 - PUB

<div style="display: inline-block; vertical-align: middle; text-align: left;"> <p>BGE, Inc. 10777 Westheimer, Suite 400, Houston TX 77042 Tel: 281-558-6700 Fax: 281-558-9701</p> </div>	
<p>Figure 5b - Existing Conditions Map Wetlands Prospectus for Clear Creek Regional Mitigation Bank Harris County Flood Control District Brazoria County, Texas HCFCD Project ID: A700-01-00-Y001</p>	
Prepared By: BGE	Scale: 1" = 700 Feet
Job No.: 8506-01	Date: August 2022





144



Datum: NAD 1983
 Projection: Texas State Plane
 Zone: 4204
 Units: Feet
 Basemap: Nearmap Aerial (2022)

0 350 700 Feet
 0 100 200 Meters

- Project Boundary
- Future Excavation Area
- XXXX Easement

Proposed Wetland Areas

- Riverine Forested Enhancement
- Riverine Forested Restoration
- Mixed Riverine Forested/Herbaceous/Shrub Establishment

Mapped Stream

- Perennial Stream

<div style="display: inline-block; vertical-align: middle;"> <p>BGE, Inc. 10777 Westheimer, Suite 400, Houston TX 77042 Tel: 281-558-8700 Fax: 281-558-8701</p> </div>	
<p>Figure 8 - Proposed Wetland Areas Prospectus for Clear Creek Regional Mitigation Bank Harris County Flood Control District Brazoria County, Texas HCFCF Project ID: A700-01-00-Y001</p>	
Prepared By: BGE	Scale: 1" = 700 Feet
Job No.: 6506-01	Date: August 2022

Appendix B
Approved Jurisdictional Determination



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

September 30, 2022

Policy Analysis Branch

SUBJECT: SWG-2021-00775; Revision for an Approved Jurisdictional Determination (AJD),
Clear Creek Mitigation Bank, A700-01-00-Y001, Harris County, Texas

Harris County Flood Control District
Attn: Corinne Meinert
9900 Northwest Freeway
Houston, Texas 77092

Dear Mrs. Meinert:

This is in response to your August 24, 2022, request for a revision to the jurisdictional determination issued July 11, 2022, for the proposed Clear Creek Mitigation Bank, HCFCD Project ID B509-04-00-E001. The subject 330 acres located approximately 1 mile west of State Highway (SH) 35, 0.5 mile north of Heights Road, and 0.3 mile east of Pearland Sites Road, Brazoria County, Texas.

Based on federal regulations and our coordination with EPA and Corps' Headquarters we have determined the following:

1. Ditches S-1, S-2, W-4, W-5, W-7, W-8, W-9, W-13, and W-37 are not considered waters of the United States per the 1986 preamble and would not be regulated by the USACE and EPA under the Section 404 of the CWA.
2. Chigger Creek (4.39 ac) and adjacent wetlands (Table 1 total, 171.33 ac) are subject to our jurisdiction under the Section 404 of the CWA. The discharge of dredged and/or fill material into these areas does require a Department of the Army permit, prior to any discharge.

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 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.

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).

This determination has been conducted to identify the limits of the United States Army Corps of Engineers (USACE) CWA 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 approved jurisdictional determination is valid for 5 years from the date of this letter unless new information warrants a revision of the determination prior to the expiration date. This letter contains an approved jurisdictional determination for your subject site. This determination supersedes the determination dated July 11, 2022. 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:

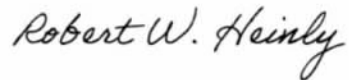
Mr. Jamie Hyslop
Appeal Review Officer, CESWD-PD-O
U.S. Army Corps of Engineer Division, Southwestern
1100 Commerce Street, Room 831
Dallas, Texas 75242-1731
Telephone: 469-216-8324; FAX: 469-487-7199

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 that the date of the letter is 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 AJD, please reference file number SWG-2021-00775 and contact me at the letterhead address, by email at Dwayne.Johnson@usace.army.mil, or by telephone at 409-766-6353. To assist us in improving our service to you, please complete the survey found at <http://per2.nwp.usace.army.mil/survey.html> and/or if you would prefer a hard copy of the survey form, please let us know, and one will be mailed to you.

FOR THE DISTRICT COMMANDER:

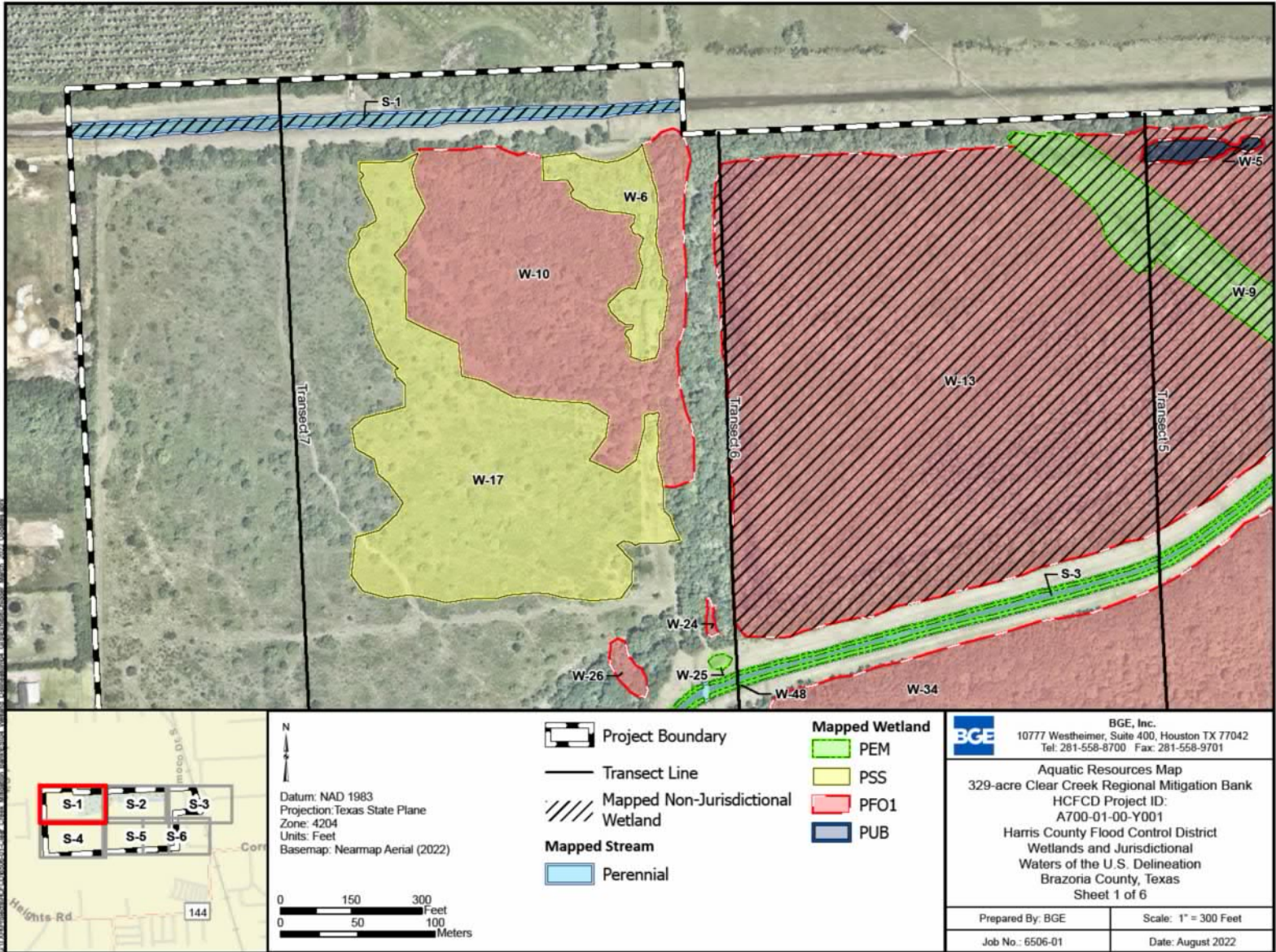
Sincerely,

A handwritten signature in cursive script that reads "Robert W. Heinly".

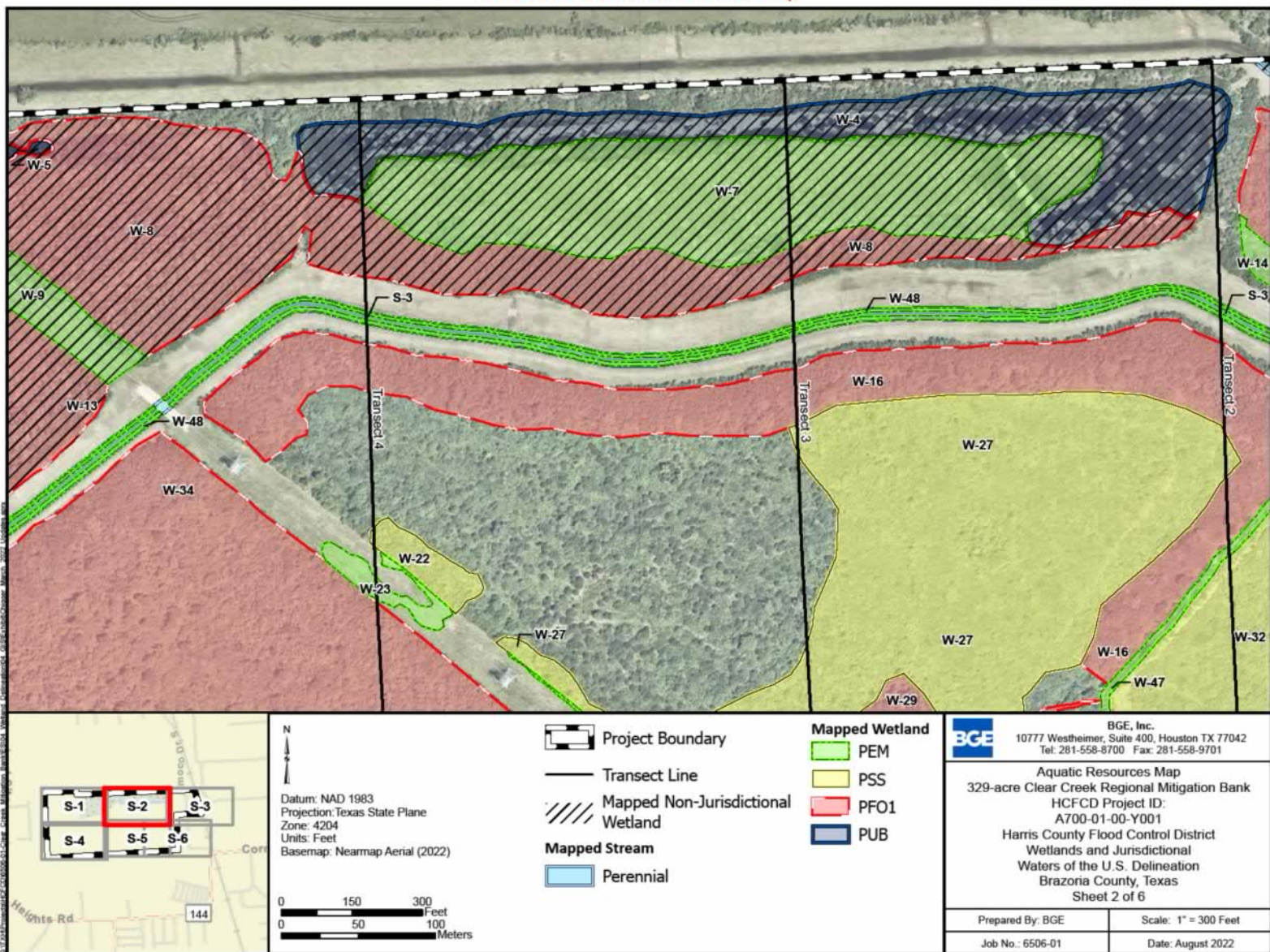
Robert W. Heinly
Chief, Policy Analysis Branch

Enclosures: NAP, Revised AJD form with table/map

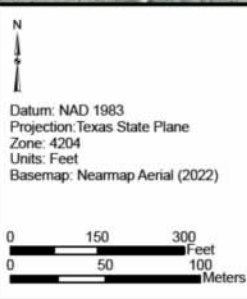
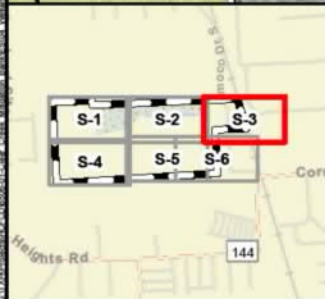
SWG-2021-00775 Revised AJD map



SWG-2021-00775 Revised AJD map



SWG-2021-00775 Revised AJD map

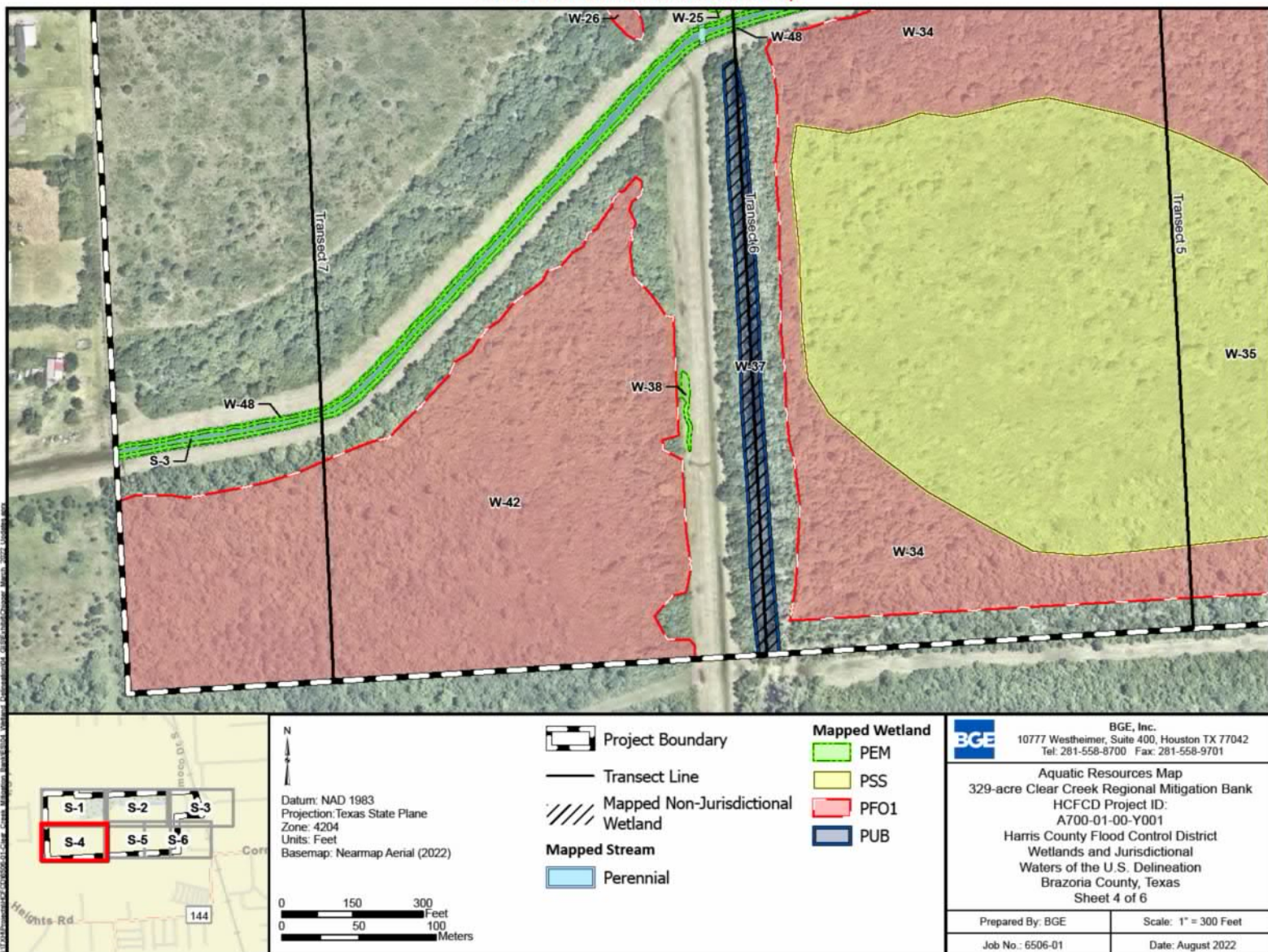


- Project Boundary
- Transect Line
- Mapped Non-Jurisdictional Wetland
- Mapped Stream
- Perennial

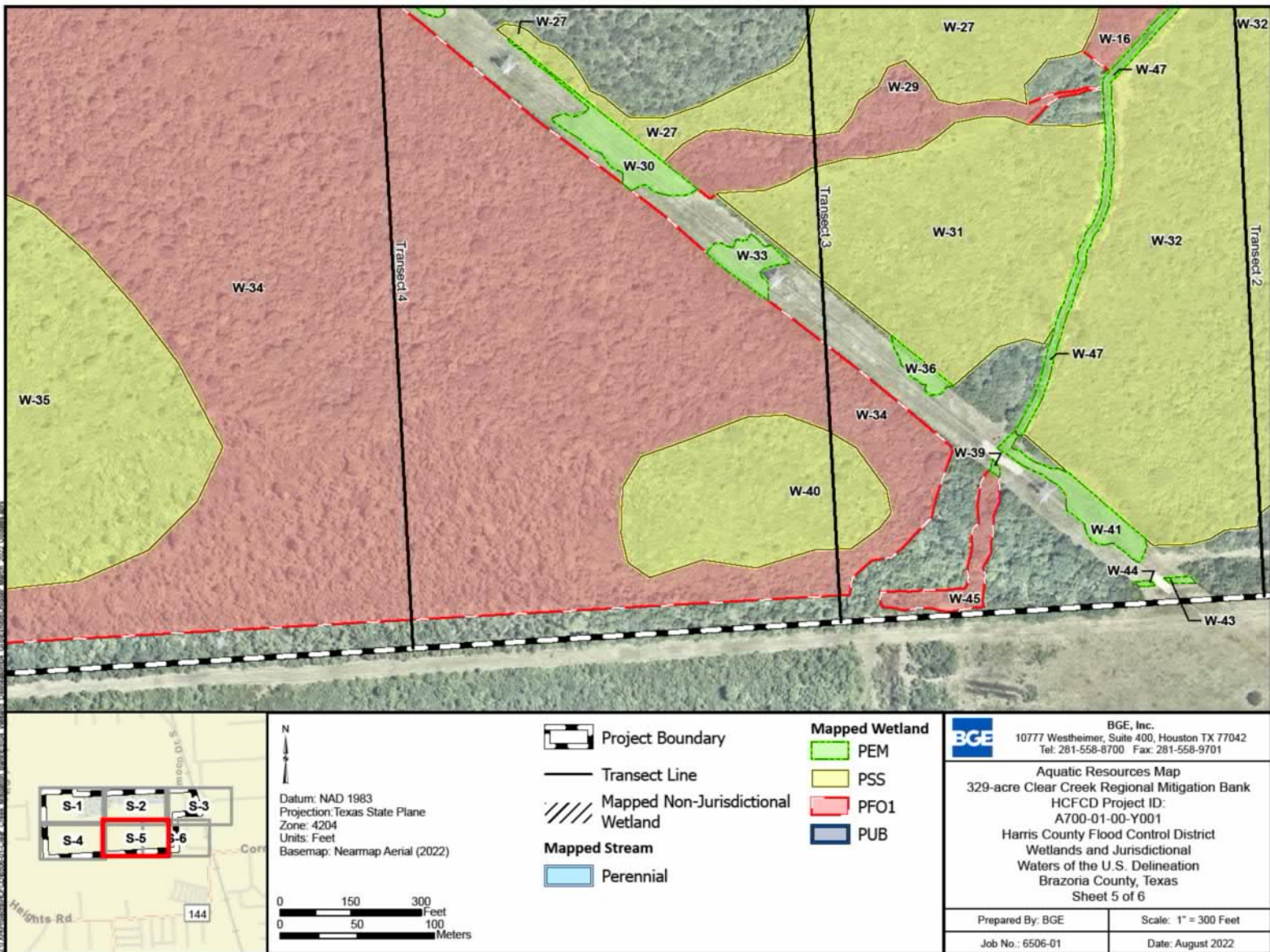
- Mapped Wetland**
- PEM
 - PSS
 - PFO1
 - PUB

	BGE, Inc. 10777 Westheimer, Suite 400, Houston TX 77042 Tel: 281-558-8700 Fax: 281-558-9701	
	Aquatic Resources Map	
	329-acre Clear Creek Regional Mitigation Bank	
	HCFCF Project ID: A700-01-00-Y001	
	Harris County Flood Control District Wetlands and Jurisdictional Waters of the U.S. Delineation Brazoria County, Texas Sheet 3 of 6	
Prepared By: BGE		Scale: 1" = 300 Feet
Job No.: 6506-01		Date: August 2022

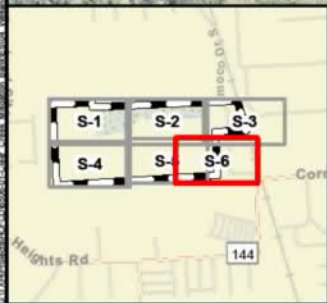
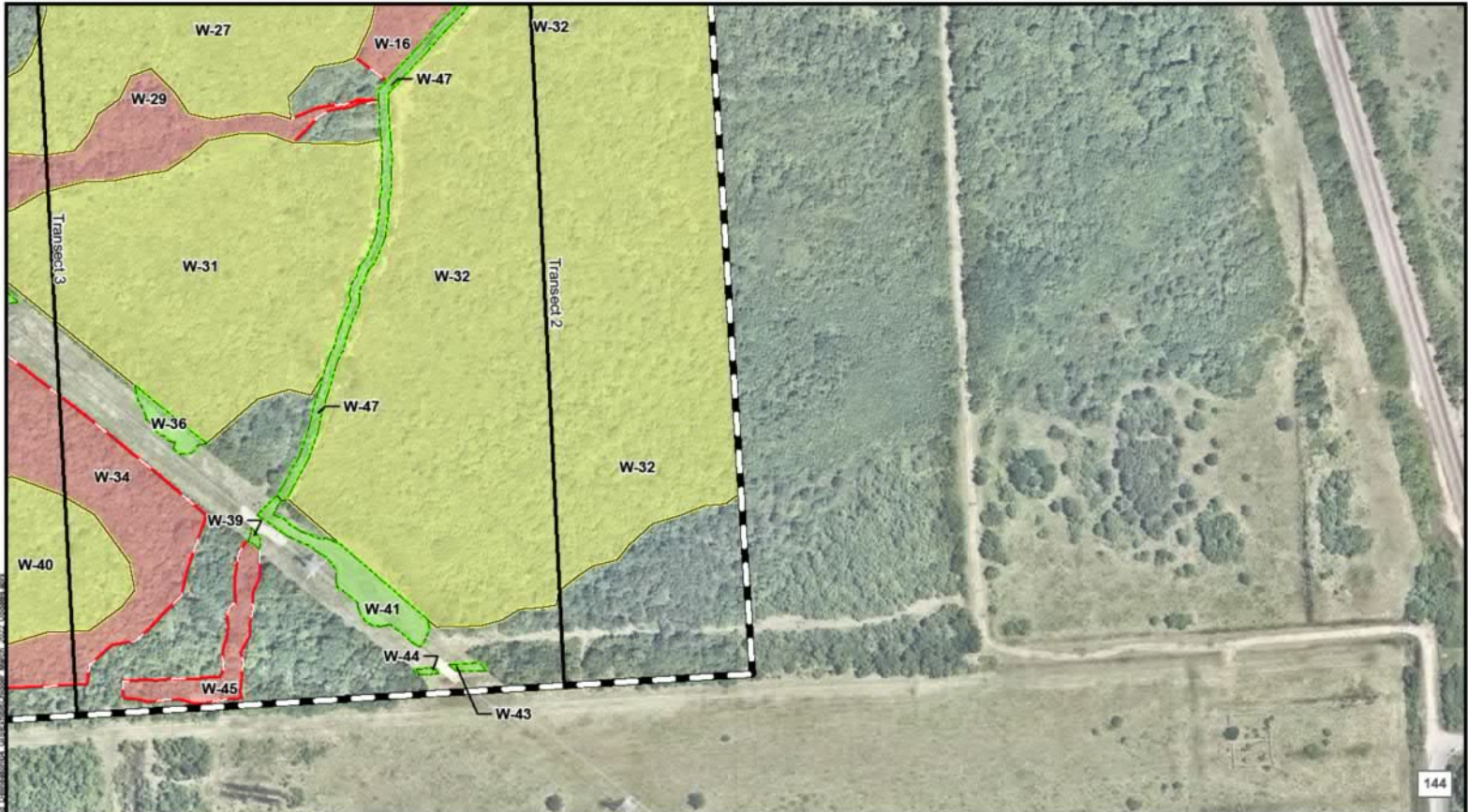
SWG-2021-00775 Revised AJD map



SWG-2021-00775 Revised AJD map



SWG-2021-00775 Revised AJD map



Datum: NAD 1983
 Projection: Texas State Plane
 Zone: 4204
 Units: Feet
 Basemap: Nearmap Aerial (2022)

0 150 300 Feet
 0 50 100 Meters

- Project Boundary
- Transect Line
- Mapped Non-Jurisdictional Wetland
- Mapped Stream
- Perennial

- Mapped Wetland**
- PEM
 - PSS
 - PFO1
 - PUB

	BGE, Inc. 10777 Westheimer, Suite 400, Houston TX 77042 Tel: 281-558-8700 Fax: 281-558-9701	
	Aquatic Resources Map 329-acre Clear Creek Regional Mitigation Bank HCFCF Project ID: A700-01-00-Y001	
	Harris County Flood Control District Wetlands and Jurisdictional Waters of the U.S. Delineation Brazoria County, Texas Sheet 6 of 6	
	Prepared By: BGE Job No.: 6506-01	Scale: 1" = 300 Feet Date: August 2022

Appendix C

Letter of Intent from Galveston Bay Foundation



GALVESTON BAY
FOUNDATION

Letter of Intent to hold Conservation Easement

September 8, 2022

HARRIS COUNTY FLOOD CONTROL DISTRICT
13105 Northwest Freeway, Ste 600
Houston, TX 77040
Email: corinne.meinert@hcfcd.hctx.net

Re: Clear Creek Regional Mitigation Bank

Ms. Corinne Meinert:

Galveston Bay Foundation, Inc ("GBF"), a 501(c)(3) non-profit corporation organized under the laws of the State of Texas located at 1725 Highway 146, Kemah, TX 77565, intends to work with **Harris County Flood Control District ("HCFCD")**, an entity with a principal address located at 13105 Northwest Freeway, Suite 600, Houston, TX 77040, in the establishment of Clear Creek Regional Mitigation Bank. GBF intends to establish, hold, and steward a perpetual conservation easement on the subject property and provide third-party protections against land uses that are incompatible with the Mitigation Banking Instrument and conservation values listed in the Conservation Easement.

Galveston Bay Foundation, an Accredited Land Trust established in 1987, has perpetually conserved more than 14,000 acres in the Galveston Bay watershed. The Clear Creek Regional Mitigation Bank proposes to restore wetlands functions on a 329-acre tract with frontage on Chigger Creek, located in Brazoria County, south of Pearland, TX. Habitat restoration associated with this project will provide ecosystem services for the Galveston Bay estuarine system and perpetual conservation of this land parcel will help promote GBF's mission to preserve and enhance Galveston Bay and its watershed.

Due diligence for this project will include:

- **Baseline Inventory:** HCFCD will provide funding for GBF to draft a report of current conditions of the subject property. This report will describe conservation values found within, significant ecological features, wildlife habitats, plant communities, and any other information relevant to long-term protection of this property.
- **Boundary Survey:** HCFCD will provide an acceptable property boundary survey at its cost, which will be used to determine the total acreage, provide a legal description, and identify any existing features such as existing structures, fences, roads, and easements.

- **Title Commitment and Title Insurance Policy:** Easement donor is responsible for the cost associated with title insurance.
- **Legal Review & Property Inspection:** Prior to closing, sufficient time will be allowed for legal review and inspection of the subject property.
- **Approval:** The completion of the Conservation Easement is subject to approval of GBF's Board of Directors.

We are aware that this letter serves as an expression of intent and not a contractual obligation and either party may discontinue project involvement at any stage of the process.

Sincerely,



Matt Singer, Director of Land Conservation
Galveston Bay Foundation, Inc.



-
- Sound Finances
 - Ethical Conduct
 - Responsible Governance
 - Lasting Stewardship
-