

7 January 2019

Mr. Sam Parigi  
Parigi Property Management, LTD  
445 N. 14<sup>th</sup> Street  
Beaumont, TX 77702

RE: **Pipkin Estate, 486-Acre Parcel, IH 10 at Major Drive  
Jefferson County, Texas  
Wetland Determination  
LJAES-1800001.001WD**

Dear Mr. Parigi,

Horizon Environmental Services, Inc. (Horizon) has evaluated the referenced site for potential wetland and non-wetland areas subject to regulation un Section 404 of the Clean Water Act. This letter and attachments provide the results of our investigation. The parcel has been subject to rice farming for many decades, including past several years. This has resulted in altered hydrology, plant communities, and soils disturbance (plowing) that has artificially created wetland characteristics throughout the site. As such, the delineation process has focused not only on the subject site, but on nearby sites of similar topography and position to Pevito Bayou that have not been recently farmed to use as reference sites. Historical aerial photography and USGS topography data have been relied on to help make this determination.

## **PROJECT LOCATION AND GENERAL DESCRIPTION**

The subject Property consists of an approximately 468-acre tract of rice farmland located just south of Major Drive along and on both sides of IH 10 in Beaumont, Jefferson County, Texas (see Figure 1). Current and historical use of the Property has been rice farming. The Global Positioning System (GPS) location is approximately 30.002580° Latitude and -94.195687° Longitude.

The Property's vegetation is characteristic of recently farmed rice fields in the area, being dominated, for the most part, by pioneer wetland plants including species of *Andropogon*, *Cyperus*, *Eleocharis*, *Persicaria*, *Erianthus*, *Oryza*, *Aster*, *Iva*, *Paspalum*, and others. One small area of remnant woodland composed of Chinese tallow, hackberry, cedar elm and pine is present on the northeast corner of the property.

## **JURISDICTIONAL DETERMINATION**

This determination of Section 404 jurisdiction consisted of a pre-field literature review and a site assessment conducted according to the general methodologies utilized by the U.S. Army Corps of Engineers (USACE) in making wetland determinations (1987 Wetland Delineation Manual and 2010 Gulf and Atlantic Coastal Plain Regional Supplement, and 2008 Rapanos Guidance). Due to the post-farming condition of the site with significant alterations to site vegetation, soils, and

Pipkin Estate JD

LJA Environmental Services, LLC – Austin, Texas Regional Office  
1507 South Interstate 35 – Austin, TX 78741  
(512)439-4788



hydrology, the determination relied heavily on historical aerial photo review, comparison of other mapping information (soils information, National Wetland Inventory mapping, and the previous NRCS Highly Erodible Land and Wetland Conservation Determination from 1990), as well as a comparison to other non-farmed properties in the watershed.

## **Pre-field Evaluation**

The literature evaluation included a review of the following sources of information:

1. US Geological Survey (USGS) topographic maps (Beaumont West and Fannett East, Texas, 1940s, 1960s, 2013),
2. Department of the Interior, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map (Wetland mapper accessed 20 December 2018),
3. Black and white and color historical aerial photography (1938, 1995, 2010, 2018),
4. US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey information (Web Soil Survey, accessed 20 December 2018).
5. Previous NRCS Highly Erodible Land and Wetland Conservation Determination (4-20-1990).

The above mentioned documents were utilized to evaluate the subject site for potential wetlands or non-wetlands. The USGS topo maps dating from the 1940s, 1960s, and current (2013) indicate that the subject site exhibits very little elevation differential. Several straight-line drainage ditches are on or adjacent to the site in addition to Pevito Bayou on the southern border.

The NWI map indicates the entire site to be farmed wetland

NRCS soil maps indicate the predominant soil present within the property is China clay. Soils within the northern portions of the site include Labelle clay loam, Labelle-Levac complex, and League clay soils. All soil types on the property are listed as hydric soils under criteria 2.

Review of historic and current aerial photographs only indicate the long, continuous history of agricultural production (rice farming) on the property. There are no specific or characteristic wetland signatures evident on the property in any of the aerial images reviewed other than obvious impoundment within leveed areas. However, review of a non-farmed reference site to the west along Pevito Bayou indicates several distinct wetland areas. We believe this site is likely most characteristic of the natural condition of lands along Pevito Bayou in the absence of agriculture.

The soils map, NWI map, USGS topo map, and various years of aerial photography are provided in Attachment A.

The NRCS made a certified Highly Erodible Land and Wetland Determination on the Property in 1990 for purposes of Food Securities Act compliance for farming practices. The subject tract was classified as prior converted (PC) (see Attachment B).



## Field Reconnaissance

Horizon personnel conducted a field investigation on 12 October 2018 to assess the site for potential wetlands and other water features. A total of 18 sample points were performed throughout the referenced Property (Figure 2).

The site was found to still have intact rice farming levees from the previous year's rice cropping and wetland vegetation was ubiquitous throughout the site due to the artificial hydrology that had been maintained during the rice farming. The months preceding the field investigation had seen very heavy rainfall rates, so the intact levees were artificially maintaining hydrology on the site. Pevito Bayou is located along the south boundary of the Property and has been deepened over the years for flood control. The bayou no longer communicates with the site except in very extreme events, but drainage from the site enters the bayou via several small field drains.

Based on the field investigation, wetland/non-wetland boundaries could not clearly be identified. The remnant characteristics of rice farming (levees and adventitious vegetation) masked the true nature of the site. It was decided to use one or more reference sites of similar topography and juxtaposition to Pevito Bayou that had not been recently rice farmed.

The reference sites were selected west of the subject property. The reference sites were determined similar based on aerial photography, topographic information, soils, and position relative to Pevito Bayou. Based on historic aerials, the reference sites had not been farmed since prior to 1989 and appeared to be utilized for grazing.

## DISCUSSION AND CONCLUSIONS

The NWI map and current site conditions indicate the property to be total wetland in a farmed condition. While the property is managed for wet agriculture, this representation of wetland extent does not make sense from a landscape perspective when looking at the surrounding region. Rice farming has been dominant throughout the region going back to the early 1900s. In the natural condition prior to agricultural manipulation of soils, hydrology, and vegetation, the landscape would likely have been characterized as upland prairie with scattered wetland depressions. The soil types typically have gilgai micro-topography in an undisturbed condition. Review of the NRCS Ecological Site Characterizations for these soils (Blackland 44-56" PZ and Loamy Prairie 44-56" PZ), indicates the native condition would have been tall- to mid-grass prairie with the gilgai micro-relief. Absent rice farming levees and dikes, these sites are usually moderately well drained. Dominant vegetation would have been little bluestem, Indiangrass, big bluestem, switchgrass, gamagrass, paspalums, tridens, dropseeds, bundleflower, and gayfeather. These species are strong wetland indicators in this area. Small wetland depressions would likely have been dominated by various sedges, rushes, and water tolerant forbs.

By analysis of multiple years of aerial photography (Google Earth) from 1938 to present and NWI mapping, we have made a general determination of potential wetland extent on the reference sites to the west (Figures 10-14, Attachment A). Potential wetlands lying in close proximity to Pevito Bayou (i.e., would have nexus if the floodplain was present as on the subject site) were measured for their extent from the bayou (Figure 15, Attachment A). Wetland widths ranged from an average of 350 ft to 1125 ft from the bayou for an average of 600 ft. Since we cannot determine



what the actual presence or extent of wetlands was on the subject site prior to agricultural manipulation, we have assumed that wetlands may have historically existed adjacent to Pevito Bayou with nexus due to touching the floodplain and extended landward up to 1000 feet. That representation of potential Section 404 jurisdiction is represented in Figure 16. Based on this representation, we would determine there to be 11.92 acres of jurisdictional wetlands adjacent to Pevito Bayou on the subject site.

If you have any questions or require additional information please contact me at 512-439-4788.

Sincerely,

A handwritten signature in blue ink that reads 'C. Lee Sherrod'.

C. Lee Sherrod  
Senior Project Manager  
Certified Professional Wetland Scientist - Emeritus



ATTACHMENT A  
EXISTING MAP DATA



Figure 1: NWI Map



Figure 2: Soils Map

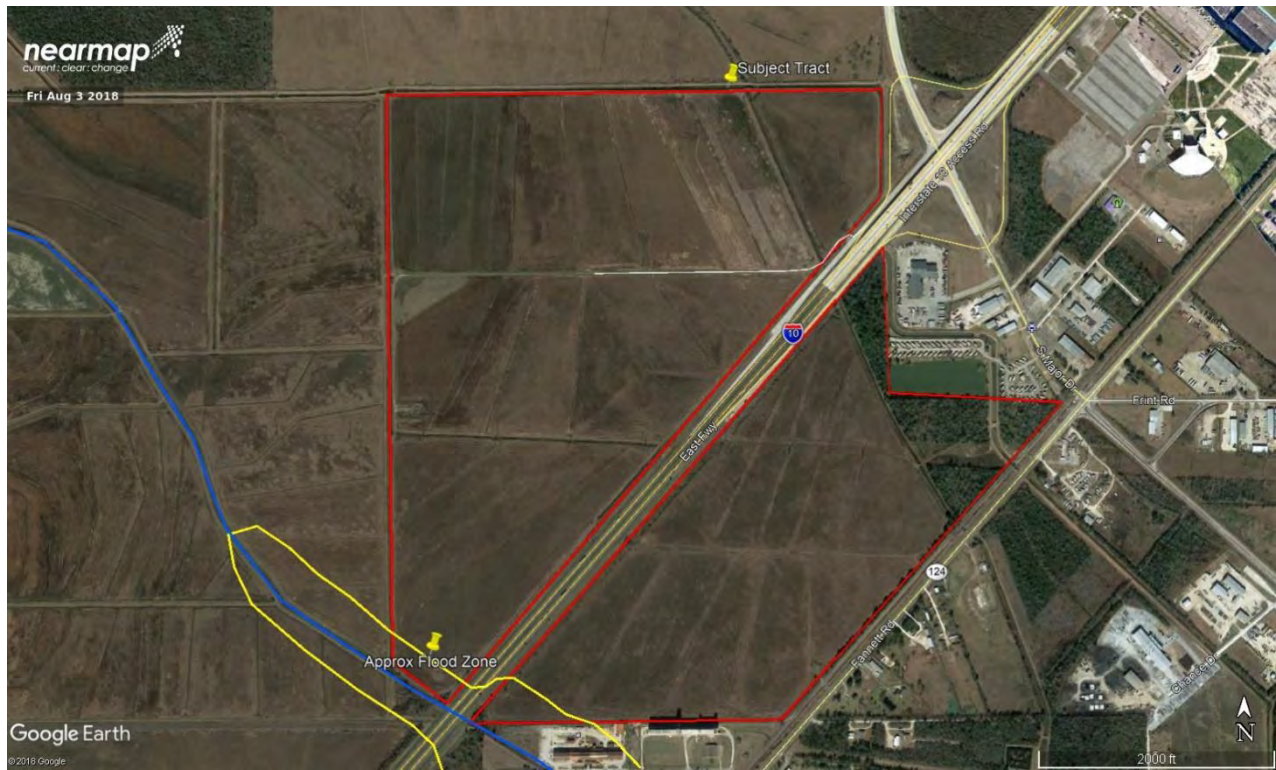


Figure 3: Floodplain Map



Figure 4: 1938 Aerial



Figure 5: 1989 Aerial



Figure 6: 1995 Aerial





Figure 7: 2010 Aerial

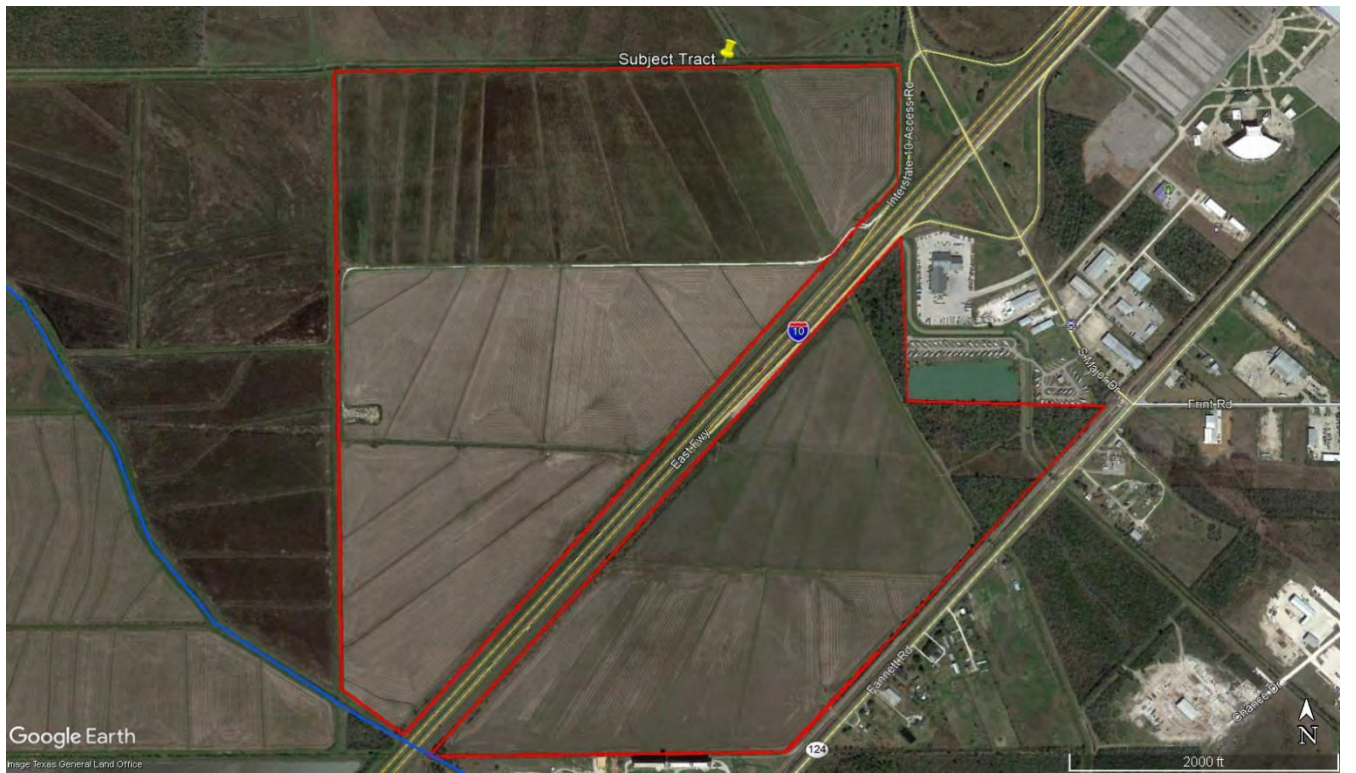


Figure 8: 2015 Aerial

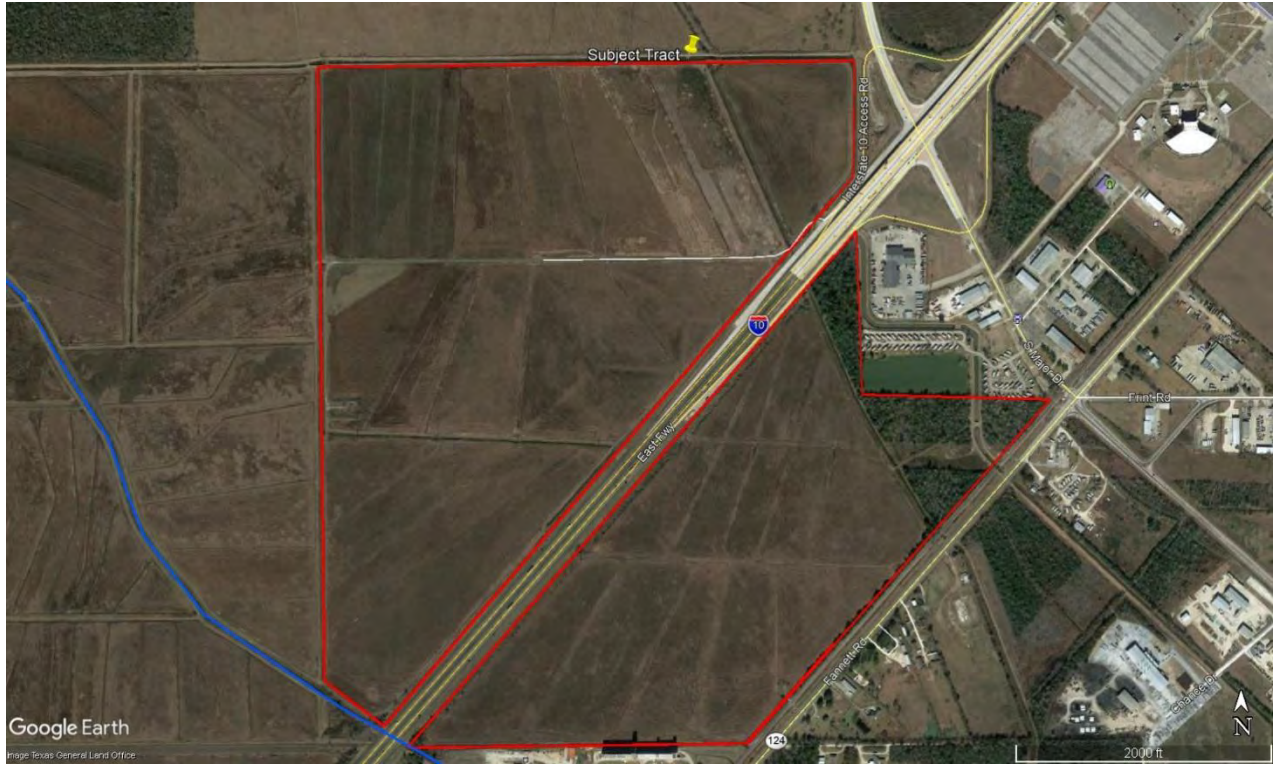


Figure 9: 2018 Aerial

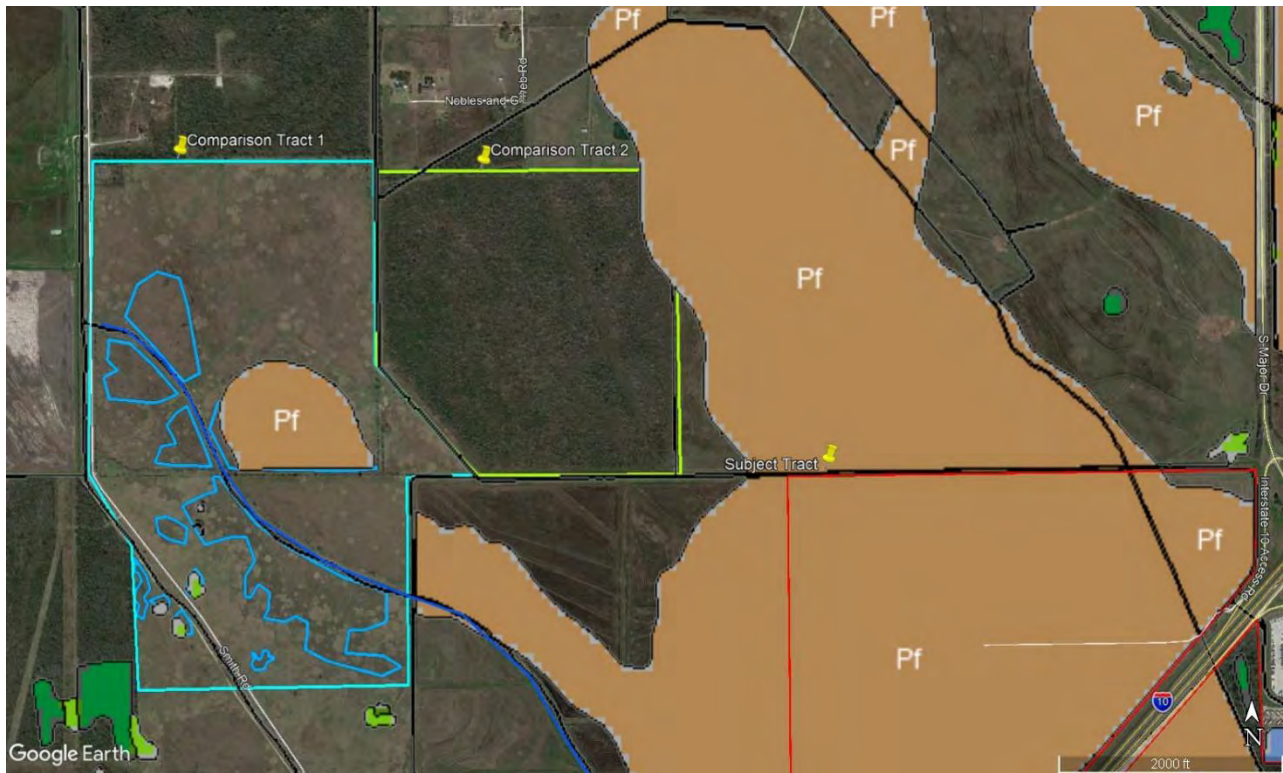


Figure 10: Site Comparison NWI



Figure 11: Site Comparison 1938



Figure 12: Site Comparison 1989



Figure 13: Site Comparison 2010

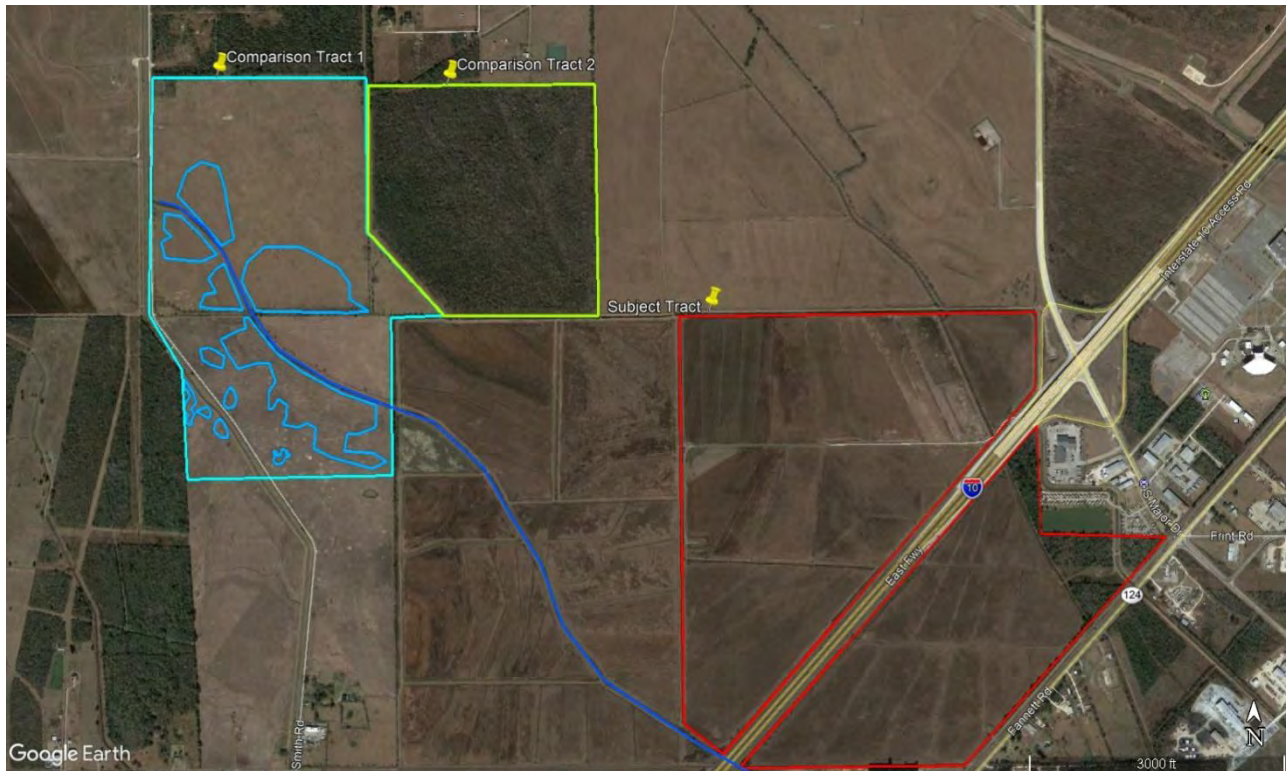


Figure 14: Site Comparison 2018



Figure 15: Wetland Measurements



Figure 16: Estimated Jurisdictional Wetlands for Subject Site



ATTACHMENT B  
NRCS WETLAND DETERMINATION

United States  
Department of  
Agriculture

Soil  
Conservation  
Service

150 Dowlen, Suite B  
Beaumont Tx 77706  
409-839-2675

---

November 08, 1989

Mr. David Korry  
Rt. 6 Bx 740  
Beaumont Tx 77705

Dear Mr. Korry:

We recently completed a Highly Erodible Land and Wetland Conservation Determination (form SCS-CPA-26) on your farm, as requested. Wetland Determinations have been made on all cropland fields.

Determinations made on each cropland field, are designated on the map by symbols such as "PC", "W", "CW", "N", etc. These symbols are defined on the Highly Erodible Land and Wetland Conservation Determination form SCS-CPA-26. The symbol "N" designates that the field has been determined to be neither a Wetland nor Highly Erodible Land. The "PC" symbol means that the field has hydric soils in it (as shown on the map) but is exempted from being a wetland due to the fact that it was converted to cropland prior to 12/23/85. (PC = Prior Converted)

On fields designated by the "PC" symbol, you will be required to manage or maintain the fields with the intent of future production of Agricultural Commodities if you do not produce a crop on it for five successive years or more. Any "PC" fields that are not used to produce an Agricultural Commodity or has not been managed or maintained for five years or more, could possibly be considered "ABANDONED" and revert back to a WETLAND designation.

If you have any fields or parts of fields that have been delineated and determined to be WETLANDS as shown by the symbol "W" on the enclosed map, you cannot drain, dredge, fill or otherwise alter the wetland characteristics to produce an agricultural commodity on that field or area. If you do, you will be considered to be SWAMPBUSTING and will make yourself ineligible to participate in any USDA programs.

If you have any questions about this determination, please call us at our office in Beaumont at 839-2675.

Sincerely,

Carl Hutcherson  
District Conservationist

**HIGHLY ERODIBLE LAND AND WETLAND  
CONSERVATION DETERMINATION**

1. Name and Address of Person  
David KORRA  
Route 6 Box 740  
Beaumont, TX 77705

2. Date of Request  
4/16/90

3. County  
Jefferson

4. Name of USDA Agency or Person Requesting Determination  
ASCS

5. Farm No. and Tract No.  
48 T38

**SECTION I - HIGHLY ERODIBLE LAND**

6. Is soil survey now available for making a highly erodible land determination?	Yes	No	Field No.(s)	Total Acres
	X			
7. Are there highly erodible soil map units on this farm?		X		
8. List highly erodible fields that, according to ASCS records, were used to produce an agricultural commodity in any crop year during 1981-1985.				
9. List highly erodible fields that have been or will be converted for the production of agricultural commodities and, according to ASCS records, were not used for this purpose in any crop year during 1981-1985; and were not enrolled in a USDA set-aside or diversion program.				
10. This Highly Erodible Land determination was completed in the: Office <input type="checkbox"/> Field <input checked="" type="checkbox"/>				

NOTE: If you have highly erodible cropland fields, you may need to have a conservation plan developed for these fields. For further information, contact the local office of the Soil Conservation Service.

**SECTION II - WETLAND**

11. Are there hydric soils on this farm?	Yes	No	Field No.(s)	Total Wetland Acres
	X			
List field numbers and acres, where appropriate, for the following :				
12. Wetlands (W), including abandoned wetlands, or Farmed Wetlands (FW). Wetlands may be farmed under natural conditions. Farmed Wetlands may be farmed and maintained in the same manner as they were prior to December 23, 1985, as long as they are not abandoned.			—	—
13. Prior Converted Wetlands (PC) - The use, management, drainage, and alteration of prior converted wetlands (PC) are not subject to FSA unless the area reverts to wetland as a result of abandonment. You should inform SCS of any area to be used to produce an agricultural commodity that has not been cropped, managed, or maintained for 5 years or more.			1, 2, 3, 4, 5, 6	
14. Artificial Wetlands (AW) - Artificial Wetlands includes irrigation induced wetlands. These Wetlands are not subject to FSA.			—	
15. Minimal Effect Wetlands (MW) - These wetlands are to be farmed according to the minimal effect agreement signed at the time the minimal effect determination was made.			—	
16. Converted Wetlands (CW) - In any year that an agricultural commodity is planted on these Converted Wetlands, you will be ineligible for USDA benefits. If you believe that the conversion was commenced before December 23, 1985, or that the conversion was caused by a third party, contact the ASCS office to request a commenced or third party determination.			—	—
17. The planned alteration measures on wetlands in fields <u>W/A</u> are considered maintenance and are in compliance with FSA.				
18. The planned alteration measures on wetlands in fields <u>N/A</u> are not considered to be maintenance and if installed will cause the area to become a Converted Wetland (CW). See item 16 for information on CW.				
19. This wetland determination was completed in the: Office <input type="checkbox"/> Field <input checked="" type="checkbox"/>				
20. This determination was: Delivered <input type="checkbox"/> Mailed <input checked="" type="checkbox"/> To the Person on Date: <u>4/20/90</u>				

NOTE: If you do not agree with this determination, you may request a reconsideration from the person that signed this form in Block 22 below. The reconsideration is a prerequisite for any further appeal. The request for the reconsideration must be in writing and must state your reasons for the request. The request must be mailed or delivered within 15 days after this determination is mailed to or otherwise made available to you. Please see reverse side of the producer's copy of this form for more information on appeals procedure.

NOTE: If you intend to convert additional land to cropland or alter any wetlands, you must initiate another Form AD-1026 at the local office of ASCS. Abandonment is where land has not been cropped, managed, or maintained for 5 years or more. You should inform SCS if you plan to produce an agricultural commodity on abandoned wetlands.

21. Remarks  
*PC Cropland fields are managed and maintained with the intent for Agricultural production and have not been abandoned.*

22. Signature of SCS District Conservationist  
*Carl Jefferson*

23. Date  
4/20/90



96-

T-38

48

PC

PC

2  
19.0

1  
108.6

PC

3  
88.5

PC

✓

5  
63.6

4  
68.5

PC

PC

6  
79.2

+

E-5

NOT TO SCALE

