

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

#### **MEMORANDUM FOR JD SWG-2007-1769**

OFFICE OF WATER

**Subject:** Determination of Wetlands as Adjacent to Jurisdictional Waters and Contributing to a Significant Nexus to the Trinity River, Old River, and Lost Lake (TNWs) for Jurisdictional Determination (JD) SWG-2007-1769

## **Summary**

The United States government has determined that the wetlands at issue on the project site for JD SWG-2007-1769 are adjacent to jurisdictional waters and contribute to a significant nexus to the Trinity River, Old River, and Lost Lake, downstream traditional navigable waters (TNWs). This determination is consistent with the Clean Water Act (CWA), the Environmental Protection Agency (EPA) regulations (including 33 C.F.R. § 328.3 and 40 C.F.R. § 230.3), relevant case law, and existing guidance, including the June 5, 2007 joint EPA and Department of the Army legal memorandum entitled *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States* (Rapanos Guidance).

## Background

This Memorandum summarizes the results of the Headquarters (HQ) level review conducted by U.S. EPA and the U.S. Army Corps of Engineers (Corps) regarding the draft JD form prepared by the Corps Galveston District for case number SWG-2007-1769. The subject of the JD is the headwater wetlands of Labitt Creek on a proposed exploratory petroleum well site and access road in Liberty County, Texas. In the draft JD form, the Corps Galveston District initially determined that the wetlands were isolated non-jurisdictional waters with no substantial connection to interstate (or foreign) commerce. The review of this JD form was completed in accordance with the EPA and the Corps Memorandum for Coordination on Jurisdictional Determinations (JDs) under Clean Water Act (CWA) Section 404 in Light of the SWANCC and Rapanos Supreme Court Decisions, dated June 5, 2007 (Coordination Memo).

## **Location and Setting**

The site is located in Liberty County, Texas at coordinates 29.9087° N (Lat.) and -94.8129° W (Long.) and the project proposed is for a five acre well pad and an approximately 2,000 foot long (1.23 acre) access road as shown in Figure 1. The proposed well pad is located on the head of a man-made channel leading to Labitt Creek and surrounding wetlands. The proposed access road extends southwest from the well pad site to the FM 1409. The site is located in the Trinity River National Wildlife Refuge (TRNWR), recently transferred from The Conservation Fund in 2008.

The 6.23 acre project site is mostly wetlands, but is part upland micro-ridges. The whole site is part of a large seasonally flooded bottomland hardwood forested wetland system that extends from the project in all directions. In the wetland areas, Willow oak (Quercus phellos) is dominant with several primary and secondary hydrology indicators, and hydric soils are present that meet hydric soil indicator F3. In the southern part of the site (closer to the natural head of Labitt Creek) the forested wetlands become more dominant with few upland hummocks or ridges. Immediately surrounding the natural head of Labitt Creek is a small natural upland terrace of fluviomarine deposits with a high clay content. The well pad site is located on parts of two large, predominantly wetland tracts identified in the National Wetlands Inventory (NWI) totaling over 800 acres in size and extending east to within one mile of the Trinity River. These two NWI features and the well pad site are bisected by a man-made channel leading to Labitt Creek ("the channel"). The channel to Labitt Creek was dug between 1988 and 1995 (aerial photography record) through Labitt Creek's natural channel to a pipeline right of way approximately 3000 feet to the northwest as shown in Figure 1. It is unclear from available information whether the channel was dug to replace a previously-existing natural portion of Labitt Creek or whether the channel was dug for some other reason (e.g., drainage).

Labitt Creek is a relatively permanent water (RPW) that flows into the Cutoff, a perennial drainage that connects Old River with the Trinity River and Lost Lake. By flow path, the Trinity River is approximately 5.4 miles to the east, the Old River is approximately 2.1 miles to the southwest, and Lost Lake is approximately two miles to the south of the confluence of Labitt Creek and the Cutoff. Old River, Lost Lake and the Trinity River are all tidally influenced at their connection with the Cutoff; the Cutoff may also be affected by the ebb and flow of the tides.

A joint site visit by the Galveston District and EPA Region 6 staff was conducted on May 21, 2008. This site evaluation revealed that approximately fifty percent of the channel by length leading to Labitt Creek exhibited standing water and the remainder consisted of a saturated muddy bed. At the time of the site visit the area was in the middle of a 30 day period of low precipitation (50-90% of normal precipitation). The project site is near the top of the drainage area for Labitt Creek and prior to the site visit it rained four times in thirty days totaling approximately four inches of rain with the last event six days before the site visit. The grade across the site is essentially flat, and the soils are high in clay content with high moisture retention properties which release soil water very slowly. Primary drainage across the site is surface drainage to Labitt Creek and the channel. The channel leading to Labitt Creek is approximately four feet deep and appears to have been dug through the same wetlands that still exist on the well pad site and surrounding areas. Labitt Creek and the channel share an Ordinary High Water Mark (OHWM) that extends from the confluence with the Cutoff approximately 9,500 feet north to the project site. In the channel, the OHWM consists of bed and bank, lack of vegetation in the bed, some shelving and benching, and aquatic vegetation on its banks. Other indicators of Ordinary High Water in the bed of the channel were masked by the frequent use of the channel by feral pigs.

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<sup>&</sup>lt;sup>1</sup> Closest gauge information from Stations in Chambers, Texas. Report date between 4/21/2008 and 5/21/2008. http://www.cocorahs.org/ViewData/ListDailyPrecipReports.aspx.

# **Basis for Determination**

The channel to Labitt Creek shares an OHWM with, and was dug through, the natural head of Labitt Creek. The flow regime in Labitt Creek is perennial at the confluence with the Cutoff. Labitt Creek is a "reletively permanent water." The channel to Labitt Creek contained 50% pooled water and 50% saturated bed conditions (trampled by feral pigs) during a dry period. The pooled water and saturated bed together with the OHWM indicators suggests the channel to Labitt Creek itself may also be relatively permanent. It is unclear how much of the channel to Labitt Creek replaced the natural channel or was dug out of a similar mix of wetlands and uplands as found in the surrounding landscape.

According to the Corps and EPA regulations at 33 C.F.R. § 328.3(c) and 40 C.F.R. 230.3(b). "The term adjacent means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes, or barriers, natural river berms, beach dunes, and the like are 'adjacent wetlands.'." Many of the wetlands on the project site border (abut) the channel to Labitt Creek. The remaining wetlands on the project site that are separated from the channel to Labitt Creek by a micro ridge or berm or have a direct hydrologic connection to Labitt Creek are also adjacent. In addition, many of the wetlands identified by the NWI that are not on the project site are also adjacent to Labitt Creek and would be considered in combination with the project site wetlands and the relevant reach of Labitt Creek when assessing a significant nexus to downstream TNWs. Based on the site evidence it is unclear whether the channel to Labitt Creek is a man-altered extension of the natural channel which should be considered part of the same stream order as Labitt Creek or whether the extension is a man-made tributary of Labitt Creek and is a separate stream order than Labitt Creek. In either case, whichever relevant reach is used does not alter the conclusion that the project site wetlands in combination with the channel to Labitt Creek and the adjacent NWI wetlands have a significant nexus to the downstream TNWs less than seven stream miles away. These wetlands are a high quality bottomland hardwood forested wetland system that was targeted by The Conservation Fund and the TRNWR for protection. These wetlands naturally retain and filter precipitation and runoff from surrounding lands, protecting the physical, chemical and biological integrity of downstream TNWs. Labitt Creek and the surrounding wetlands also support quality habitat for aquatic and semi-aquatic life.

Labitt Creek flows to the Cutoff, another RPW, which connects with the Trinity River, Old River, and Lost Lake. Old River, Lost Lake and the Trinity River are all tidal at the connection with the Cutoff. The *Rapanos* Guidance clarifies that the term TNW refers to those waters that are under the jurisdiction of the Corps and EPA, pursuant to 33 C.F.R. § 328.3(a)(1) and 40 C.F.R. § 230.3(s)(1), (i.e., "[a]ll waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide"). The Trinity River, Old River and Lost Lake are all tidal where they connect with the Cutoff and therefore are TNWs.

## Conclusion

Wetlands on the project site are adjacent to the channel and/or to Labitt Creek (depending on whether the channel itself is an excavated extension of Labitt Creek) and have a direct hydrologic connection to three TNWs, the Trinity River, Old River, and Lost Lake. The channel to Labitt Creek provides for a direct hydrologic connection between the wetlands adjacent to the channel (including wetlands that directly abut the channel or are neighboring it) and the Trinity River, Old River, and Lost Lake. Similarly, it is clear that wetlands on the project site, in combination with the potentially hundreds of acres of wetlands adjacent to the channel to Labitt Creek, contribute to a significant nexus to the Trinity River, Old River, and Lost Lake – all tidal TNWs. Therefore, the United States government hereby determines that the wetlands in question on the project site are subject to the jurisdiction of Section 404 of the Clean Water Act, consistent with the *Rapanos* Guidance and under the agencies' regulations at 33 C.F.R. § 328.3(a) and 40 C.F.R. § 230.3(s). In addition, the District shall finalize this JD in accordance with this memorandum by identifying the wetlands on the project site that are adjacent to the channel to Labitt Creek.

Benjamin H. Grumbles

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U.S. Environmental Protection Agency

Date: June 13, 2008

Cimarex Energy Co. Trinity River System
Significant Nexus

