



United States Department of the Interior

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March 20, 2008

Colonel David C. Weston
U.S. Army Corps of Engineers, Galveston District
P.O. Box 1229
Galveston, TX 77553

Dear Colonel Weston:

This Fish and Wildlife Coordination Act Report (CAR) provides the U. S. Fish and Wildlife Service's analysis of impacts and mitigation for important fish and wildlife resources related to the proposed land disposal plan for the Freeport Channel Deepening and Widening Project. It is in fulfillment of our joint Scope of Work on this project, dated August 2005. The Fish and Wildlife Coordination Act (Public Law 85-624; 16 U.S.C. 661 - 666) requires that the U.S. Army Corps of Engineers (Corps) coordinate with the Department of Interior U.S. Fish and Wildlife Service (Service) to give equal consideration to fish and wildlife resources, and requires that measures to conserve these resources be taken.

Our previous Planning Aid Letter, submitted April 5, 2007, provided an initial analysis of important native fish and wildlife resources potentially affected by the proposed land disposal plans and furnished a draft mitigation plan based on a Habitat Evaluation Procedures (HEP) analysis. The plan was developed following coordination with Corps and Texas Parks and Wildlife Department (TPWD) staff and Port of Freeport (Port) environmental personnel. The present CAR finalizes the Service's recommendations following our review of the Corp's *Preliminary Draft Environmental Impact Statement for the Freeport Harbor Deepening and Widening Channel Improvement Project Brazoria County, Texas* (PDEIS). This document provided the Service with the Corps's draft mitigation plan for review. It must be noted that we are presently unsure whether Alternative Plan A1B0C0 alone, as proposed in Appendix C-2 of the PDEIS constitutes the recommended mitigation plan.

We analyzed existing resources at proposed terrestrial disposal sites Placement Areas (PA) 9 and PA 8. We have also provided a recommended mitigation plan for unavoidable damages to wet coastal prairie and riparian forest habitat at these sites, and have quantified damages and habitat compensation values using HEP methodology. Data for HEP analysis were gathered during joint agency field trip(s) by the Corps, TPWD, and Service biologists in September and December 2006. The Service's Draft PAL and mitigation recommendations were reviewed by TPWD and Corps environmental personnel.



PA 8 lies immediately north of State Highway 36 and west of the Brazos River (Figure 1). The portion within the proposed PA boundaries is approximately 168 acres. It is lightly grazed pastureland bisected by a shallow wetland swale and at least three manmade or altered semi-permanent ponds. Total wetland acreage, as estimated using GIS data from 2004, 1:24:000 aerial DOQQ's, was 100 acres. However, field inspections during our December, 2006 interagency field trip showed this to be an overestimate. Although drier than previously categorized, for purposes of the HEP analysis, the Service still considered the entire tract as wet coastal prairie. The species list (primarily native herbaceous species), vegetation type, and wildlife observed support this classification. Corps Environmental Branch biologists categorized most of the site as grazed pasture.

Prospective PA 9 lies immediately north of the small county road bisecting the two PAs and is west and south of the Brazos River. The 254-acre tract was classified as having 21 acres of riparian forest and 229 acres of wet coastal prairie, including 16 wetland acres, in our original GIS assessment. Field inspection showed the site to be drier and more overgrazed than previously thought, which is reflected by the HEP analysis. Herbaceous plants identified were similar to PA 8, but ground cover was sparser. Invasive non-native pasture grasses were also present, though they were not dominant.

The 21-acre forested portion of PA 9 consists of second-growth woods and is contiguous with a larger woodland to its north. It is a mixed-species woodlot, approximately 40 years in age, somewhat open with a grazed understory. The height of this mixed species canopy reaches 35 feet. The density, maturity, diversity, and location (along the Brazos River very near the Gulf of Mexico) of the forested area add to its' value as a neotropical migrant songbird "fallout" site.

The plant and wildlife components of these sites and the table of HEP assumptions and computed values were provided in our April 5, 2007 PAL. In the present CAR, we summarize these findings and recommendations, again show the proposed PAs and mitigation site(s) (Figure 1), and summarize the Corps' HEP analysis and assumptions. We also summarize the differences between the Corps' and the Service's HEP and mitigation analyses.

Criteria we used in developing a hypothetical mitigation plan were: 1) practicability (proximity, availability, etc.), 2) habitat type (high-priority, i.e. wetlands, prairie, riparian forested, etc.), and 3) habitat quality/value. We selected, following discussions with TPWD, Corps, and Port personnel, the adjacent, partially wooded tract immediately north of PA 9, lying between the proposed northern levee alignment and the Brazos River (Figure 1) as a hypothetical mitigation site. Preliminary calculations indicated that approximately 172 acres were available in this tract, approximately 140 of which are lightly forested and 32 of which could be classified as wet prairie/grazed pasture (Figure 1). In terms of value to native fish and wildlife populations, the Service considers the riparian forest portion of the study area to be of higher value than the wet coastal prairie portion because of its potential as high-quality neotropical migrant songbird habitat. While coastal prairie is a valuable and declining wildlife resource, the overgrazed condition, particularly of PA 9, and its fragmentation diminish its value. The results of the Service's HEP analysis of project impacts and of the mitigation plan are presented in Table 1.

Potential management measures for the hypothetical mitigation habitats were outlined in the PAL. These management measures were reflected in assumptions made in the hypothetical HEP Mitigation Area runs. Habitat improvements were assumed to manifest themselves by altering habitat variables in years 1 – 15 and to accelerate in years 16 – 50 for the prairie and wetland components (of both the prairie and forest) and for the forest. However, it was emphasized throughout the planning process that the Service considered the ENTIRE 132-acre semi-wooded tract north of PA 9 (Site 1 in the EIS) as the mitigation tract for HEP computation purposes.

According to Service HEP results:

1. Losses to coastal wet prairie habitat in PA 8 and PA 9 are only partially recouped in the mitigation area under the Service's mitigation plan, even considering values gained by habitat conservation and restoration in the "prairie" portion of Site 1.
2. Losses to riparian forest in PA 9 are not only recouped, there are additional habitat gains in the mitigation area under the Service's mitigation plan.

According to Corps HEP results:

1. Losses to forest ("woodlands") at PA 9 would be recouped by planting 150 tree seedlings on 21 acres at Site 1 and by maintaining invasive plant control over this (21-acre ?) site over the project life.
2. Losses to wetlands at PAs 8 and 9 would be recouped by creating two 1.5 acre shallow wetland ponds, for a total of 3 acres of "wetland" mitigation.

Corps mitigation results in the PDEIS were based on different assumptions made on both habitat values and slightly different methodology during the Corps' planning process. Also, the Corps uses a "Best Buy Plan" methodology in evaluating combinations of potential mitigation scenarios. As stated earlier, the Service is presently unsure whether Alternative Plan A1B0C0 alone, as proposed in Appendix C-2 of the PDEIS, constitutes the recommended mitigation plan.

While the Service and TPWD considered all of PA 8 and most of PA 9 to be "wet coastal prairie," the Corps considered only the wetlands portion as mitigable habitat. The Service agreed with the Corps that much of the "prairie" area, particularly in PA 9, was of marginal quality due to existing grazing pressure. Nevertheless, it did constitute coastal prairie habitat with good management potential due to its location along the Brazos River within 6 miles of the Gulf of Mexico. In addition, its unaltered topography would facilitate restoration. It should be emphasized that PA 9's existing, degraded condition was reflected in diminished HEP values for the prairie species. Therefore, the hypothetical mitigation requirements were lessened.

The Service considers neotropical migrant songbird habitat in the upper Texas coastal zone to be of highest conservation priority. Therefore, though technically "out of kind" in some respects according to calculated HEP values alone, we find the type and magnitude of compensation for project impacts originally proposed in the PAL appropriate. Likewise, the plan proposed by the

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Corps in the PDEIS would be acceptable to the Service provided that the entire 132-acre (semi) wooded tract within which the habitat measures are located is included in a permanent conservation easement, to be held in perpetuity by a recognized conservation entity. The 21-acre woodland improvement and 3 acre wetland creation feature(s) alone would not compensate for present and potential future native wildlife and wetland benefits lost on these two sites totaling 422-acres in size, and thus are unacceptable to the Service.

Thank you for the opportunity to provide input to assist the Corps of Engineers in planning Federal projects which protect and restore these important Texas coastal habitats. Please contact me or Phil Glass, staff biologist at 281/286-8282 if you have questions concerning these recommendations.

Sincerely,

Stephen D. Parris
Field Supervisor, Clear Lake ES Field Office

cc:

Cherie O'Brien, Texas Parks and Wildlife Department, Dickinson, TX
Gary McMahon, Texas General Land Office, LaPorte, TX
Mark Fisher, Texas Commission on Environmental Quality, Austin, TX
Jim Herrington, Environmental Protection Agency, Dallas, TX

Table 1. Summary of Service Habitat Evaluation Procedures (HEP) Results
Habitat Units With and Without Project Impacts and With Hypothetical Mitigation Plan

	HU's PA8	HU's PA9	Total HU's lost	HU's gained, Hypo. Mitig. Plan	Hypo. Mitig. Plan net change
Mottled duck	2,016	0	2,016	896	-1,120
Great egret	4,368	572	4,940	896	-4,044
Eastern meadowlark (weighted X .2)	916	620	<u>1,536</u>	<u>192</u>	<u>-1,344</u>
Total wet coastal prairie HU's			8,492	1,984	-6,508
Gray squirrel		231	231	5,446	+5,215
Veery		472	<u>472</u>	<u>3,920</u>	<u>+3,448</u>
Total forest HUs			703	9,366	+8,663
HU Totals			9,195	11,350	+2,155