

WBV HSDRRS IMPACTS TO HABITATS WITHIN JEAN LAFITTE NATIONAL HISTORICAL PARK & PRESERVE AND THE BAYOU AUX CARPES 404(c) AREA, AND PROPOSED MITIGATION FOR THESE IMPACTS

The West Bank and Vicinity (WBV) Hurricane and Storm Damage Risk Reduction System (HSDRRS) improvements have impacted wetland habitats within Jean Lafitte National Historical Park and Preserve (JLNHPP) and within the Bayou aux Carpes 404(c) area (the “404c area”). These habitats include fresh marsh, wet bottomland hardwoods (BLH-Wet), and swamp. Table 1 provides data for these impacts and for the mitigation project currently proposed as compensation for these impacts. The reader is cautioned that all data provided in Table 1 are preliminary and current as of November 8, 2011. The impact data provided in this table include both impacts to habitats within the JLNHPP boundaries and impacts to habitats situated within the 404c area but located outside the current JLNHPP boundaries. As used herein, the JLNHPP “boundaries” refers to lands owned by the National Park Service (NPS) within the JLNHPP Barataria Preserve unit. Much of the 404c area falls within the JLNHPP boundaries but portions are located outside these boundaries. Even though some of the 404c area impacts occurred outside the JLNHPP boundaries, these impacts are included in Table 1 since it is the US Army Corps of Engineers, New Orleans District’s (CEMNVN’s) objective to mitigate for these impacts within the JLNHPP boundaries and/or in lands authorized for future addition to JLNHPP. Table 2 provides information regarding the extent of habitat impacts within JLNHPP but outside the 404c area, those within the 404c area but outside JLNHPP, and those within the boundaries of both JLNHPP and the 404c area. Again, it is emphasized that the data in Table 2 are preliminary.

Table 1. Summary data for impacts and proposed mitigation (JLNHPP & 404c area, combined).

Habitat Type	Habitat Impacts		Proposed Mitigation		
	Acres	Net Loss AAHUs	Acres	Net Gain AAHUs	Mitigation Ratio
Fresh Marsh	14.50	3.20	14.5	7.69	1:1
Bottomland Hardwoods – Wet	2.51	2.07	5.7	3.59	2.3:1
Swamp	55.67	32.00	77.7	33.67	1.4:1

Notes:

AAHUs = Average Annual Habitat Units (as determined from Wetland Value Assessment models).

Mitigation Ratio = the ratio of the acres of mitigation proposed to each acre of habitat impacted.

The fresh marsh impact actually consisted of impacts to approximately 13.0 acres of fresh marsh habitat and approximately 1.5 acres of open water habitat.

Table 2. Segregation of habitat impacts (in acres) that were only within JLNHPP, only within the 404c area, and within both JLNHPP and the 404c area.

Habitat Type	Impacts Only Within JLNHPP (outside 404c Area)	Impacts Only Within 404c Area (outside JLNHPP)	Impacts Within both JLNHPP & 404c Area	Total Impacts
Fresh Marsh	14.50	0	0	14.50
BLH-Wet	0.13	0.28	2.10	2.51
Swamp	48.43	4.13	3.11	55.67

The limits of habitat impacts used to generate the data in Tables 1 and 2 were based on review of 100% project design plans, field observations, and aerial photo interpretation. Wetland Value Assessment (WVA) models were run on these impacts to determine the net loss of AAHUs (a means of expressing functional value). Since the limits of habitat impacts used in generating Individual Environmental Reports (IERs) were based on 65% design plans and the JLNHPP boundaries were not as precisely defined when the IERs were generated compared to the boundaries used currently, the data presented in applicable IERs concerning

anticipated impacts to habitats within JLNHPP and the 404c area do not necessarily agree with the data in Tables 1 and 2. One should further note that CEMVN intends to further refine the limits of these impacts based on as-built plans. This process could result in future changes to the impact data presented herein.

Current mitigation plans for the JLNHPP/404c area habitat impacts involve restoration of fresh marsh, BLH-wet, and swamp (cypress-tupelo) habitats as compensation for the impacts to fresh marsh, BLH-wet, and swamp habitats, respectively. These plans call for the mitigation features to be established within the current JLNHPP boundaries and in lands authorized for addition to the JLNHPP Baratavia Preserve unit.

The proposed mitigation project data provided in Table 1 are based on 35% design plans and WVA models that were run based on these plans. Although NPS staff and US Environmental Protection Agency (EPA) staff have assisted with the development of these plans, these agencies have not issued formal approval of the mitigation. CEMVN intends to further refine the mitigation design plans in coordination with NPS and EPA. Once this is accomplished, new WVA models will be run for the proposed mitigation features. This process, including obtaining written approval of the plans from NPS, EPA, and other agencies, will result in changes to the preliminary mitigation project data set forth in Table 1. Regardless of such changes, the final mitigation plans would ensure the functional values of the mitigation provided are equal to or exceed the functional values lost through habitat impacts (e.g. AAHUs gained via mitigation will equal or exceed AAHUs lost via impacts) and the acreage of the mitigation features will equal or exceed the acreage of habitats impacted (by habitat type).