

## PRELIMINARY ENVIRONMENTAL ASSESSMENT OF ALTERNATIVES

### ALTERNATIVE 2 – Preferred

Items or concerns	Site A: Hebert Canal	Site B: Meaux’s Ditch	Site C: “Unnamed Canal”	GIWW Levee
	Install water control structure  Location: Hebert Canal near LA 333 and GIWW	Install water control structure  Location: Meaux’s Ditch along LA 333	Install water control structure  Location: About 1 mile South of Meaux’s ditch along LA 333	Restore .5 miles of Levee along GIWW and LBL
<b>Fisheries</b>	<p>Designing a structure to reduce the Hebert Canal cross section the least amount possible and leaving that structure open most of the time, except for that needed for flood control, would provide the least impacts to fisheries access and vegetative changes. Relocating this structure to the GIWW could impact fisheries access to over 13,000 acres of intermediate and fresh marsh. (Most Impacting)</p> <p>Installing a control structure on Meaux’s Ditch eastward to the Hwy 333 intersection near the Vermilion River likely causes minimal impact to fisheries due to the presence of levees north and south of that ditch.</p> <p>Fish are not able to access the Unnamed Canal due to plugs and pump offs.</p> <p>If refurbishment of an existing levee that currently blocks fisheries access to the intermediate marshes north and west of that levee, then the impacts may be low, except for impacts to intermediate marsh by placement of spoil on existing marsh.</p>			
<b>Wetlands</b>	<p>Impacts to wetlands and riparian habitat from the construction and operation of the proposed action may be both short- and long-term (more than 5 years).</p> <p>Minimal long-term impacts (control structures). The proposed installation of a water control structure and the additional control structure within the unnamed canal should pose minimal long-term impacts to wetlands as most of the footprint will occur over waters and not affect adjacent wetland areas</p>			

	<p>The reinforcement of the levee along the Gulf Intracoastal Waterway (GIWW) may result in a long-term loss of wetlands if the footprint of the levee is expanded to the north or if the material used to reinforce the levee are excavated from wetland areas. The habitat to the north of the proposed GIWW levee reinforcement is classified as estuarine and marine wetland habitat (E2EM5P and E2EM1P). Construction and ground disturbance could result in the introduction or spread of invasive vegetation into adjacent wetland and riparian habitats. The extent of mitigation required is dependent on the amount of direct impacts to these wetland areas.</p> <p>It is recommended that no impacts occur in this area. Material used for levee reinforcement should be excavated from non-wetland areas on the south side of the project or from the existing Gulf Intracoastal Waterway. Levee reinforcement should not result in an indirect loss to wetland habitats or functions</p>
<p><b>Cultural Resources</b></p>	<p>SHPO determined <i>no effect</i> on cultural and historic sites</p>