

## Alternatives Analysis

### **1. Alternative 1 – No Action**

The No Action Alternative means the proposed project would not go forward and the current sites would remain unused. This alternative does not meet the requirement for additional space to allow for a larger drilling rig and associated equipment and infrastructure to safely drill new exploration wells on the existing well pad sites. The proximity of the well pads (and associated oil field – Alligator Bayou) to the refining infrastructure located along the Gulf Coast allows for domestically produced energy resources to be utilized via easily accessible drilling locations. The cost to import crude oil from out-of-state is much greater than locally produced crude oil and the environmental impacts of producing locally are much less than the impacts from transporting domestically produced oil from out-of-state or foreign sources. While the No Action Alternative would be the least environmentally impactful, it does not fulfill the purpose and need of the project.

### **2. Alternative 2 – Offsite Drilling**

The second alternative would be to move the proposed project to another location to drill that would have the potential to not impact a USACE-regulated water. This alternative would not meet the purpose and need of the project, as Kingwood Exploration would have to move outside of their current lease area to drill. The nearest land from the proposed project location is approximately 1.0 mile to the east, approximately 1.0 mile to the north, and approximately 1.25 miles to the west. The land to the east is marsh land and would require that a well pad and access road be constructed and would impact jurisdictional coastal wetlands. The land to the north would negatively impact the environment as trees would need to be cleared, an access road would need to be built, and new well pads would need to be placed before drilling could begin. This would increase the loss of forested areas along the Gulf Coast and increase habitat fragmentation. The land to the west has been developed for residential purposes and the impacts from constructing new well pads and drilling new wells would include noise pollution and additional construction traffic on residential roads. Additionally, new pipelines or tank storage batteries would need to be constructed to collect and transport the crude oil during production. These environmental and community impacts make this alternative impracticable.

### **3. Alternative 3 – Expand Existing Well Pads in Dutton Lake – Preferred Alternative**

The preferred alternative is to expand the well pads currently in Dutton Lake to allow for the larger drilling equipment necessary to safely position on the well pads for the proposed drilling activities. This alternative allows Kingwood Exploration to drill within their lease on well pads while using access roads and a pipeline system that already exist. Producing oil at these locations would be beneficial for the local refineries by providing a cheaper and less impactful method of obtaining crude oil. The expansion of the well pads will be constructed to the minimum size necessary and would avoid impacts to any special aquatic sites (e.g., oyster reefs and seagrass beds) and coastal wetlands, as well as protected species. Additionally, the use of inflatable cofferdams during construction will greatly reduce turbidity that may occur during construction activities. Expanding the existing well pads within Dutton Lake would be the least environmentally damaging alternative that fulfills the purpose and need of the project; it is, therefore, the preferred alternative.