

Feature ID	Type	Latitude	Longitude	Temporary Impacts Area / Length	Permanent Fill Impacts Area / Length	Total Project Impacts Area / Length
W010PEM	PEM wetland	29.7592	-93.9356	3.36 acres	1.00 acres	4.36 acres
<b>Total Project Area</b>				<b>3.36 acres</b>	<b>1.00 acres</b>	<b>4.36 acres</b>

Notes: PEM = palustrine emergent; PER = perennial

To expedite the Individual Permit review, the Applicant requests a preliminary jurisdictional determination (“PJD”) for all wetlands and waterbodies delineated for the Project. A PJD form is located in Attachment E.

## Block 23. Description of Avoidance, Minimization, and Compensation

### Avoidance and Minimization

The Applicant identified and considered the below alternatives during the planning phase of the Project in an effort to avoid potential environmental impacts to the maximum extent practicable while still fulfilling the purpose and need of the Project. However, as a result of the required connection to existing water dependent infrastructure (i.e., Golden Pass LNG Terminal Facility), the spatial extent needed to safely construct and operate the infrastructure necessary to fulfill the Project purpose and need, and the need to create a stable foundation for the Project infrastructure, permanent impacts to approximately 1.00 acres of PEM wetlands are unavoidable.

### *Alternatives*

Alternatives were considered during the planning phase of the Project in an effort to practicably avoid and minimize potential environmental impacts associated with the Project (see Table 3). In consideration of the flexibility afforded by the Section 404(b)(1) Guidelines,<sup>1</sup> the alternatives analysis found that on-site alternatives are practicable because they are available to the Applicant, cost effective, and logistically and technically feasible. The critical factors considered during the alternatives analysis included the location of the site adjacent to existing NGPL infrastructure and the Trident pipeline, extent of impacts to WOTUS, and the extent of available property to develop the Project in a cost-effective manner, while meeting the Applicant’s purpose and need.

These criteria were used to identify reasonable/practicable alternatives for the Project. In accordance with 404(b)(1) Guidelines [40 Code of Federal Regulations [CFR] 230.10(a)] this section details the No-Action Alternative and Off-Site Alternatives, (all as described below in further detail) considered for the Project along with rationale for the Applicant’s identified least damaging practicable alternative.

### *No-Action Alternative*

Under the No-Action Alternative, the Applicant would not construct, install, modify, operate, or maintain an interconnect and meter station in Jefferson County, Texas. This alternative would not fulfill the request

<sup>1</sup> See 40 CFR 230.6(a) (*in pertinent part*: “[I]t is unlikely that the Guidelines will apply in their entirety to any one activity [...]]; and *id.* at § 230.6(b) (The Guidelines user ... must recognize the different levels of effort that should be associated with varying degrees of impact and require or prepare the commensurate documentation. The level of documentation should reflect the significance and complexity of the discharge activity.). See also, RGL 95-01 (extended by RGL-05-06).

made by current shippers and would not transport an additional 500,000 dekatherms per day (Dth/d) of natural gas across the NGPL Louisiana Lines No. 1 and No. 2 to provide more opportunity and flexibility to the natural gas and LNG facilities across the Texas/Louisiana Gulf Coast markets. This alternative would not result in potential impacts to WOTUS and would not affect threatened and endangered species habitat or cultural resources as a direct result of the Project. The No-Action Alternative was analyzed and eliminated since the No-Action Alternative would not meet the purpose and need of the Project. No USACE Individual Permit (“IP”) application would be submitted, and no coordination with U.S. Fish and Wildlife Service (“USFWS”) or State Historic Preservation Office (“SHPO”) would be required.

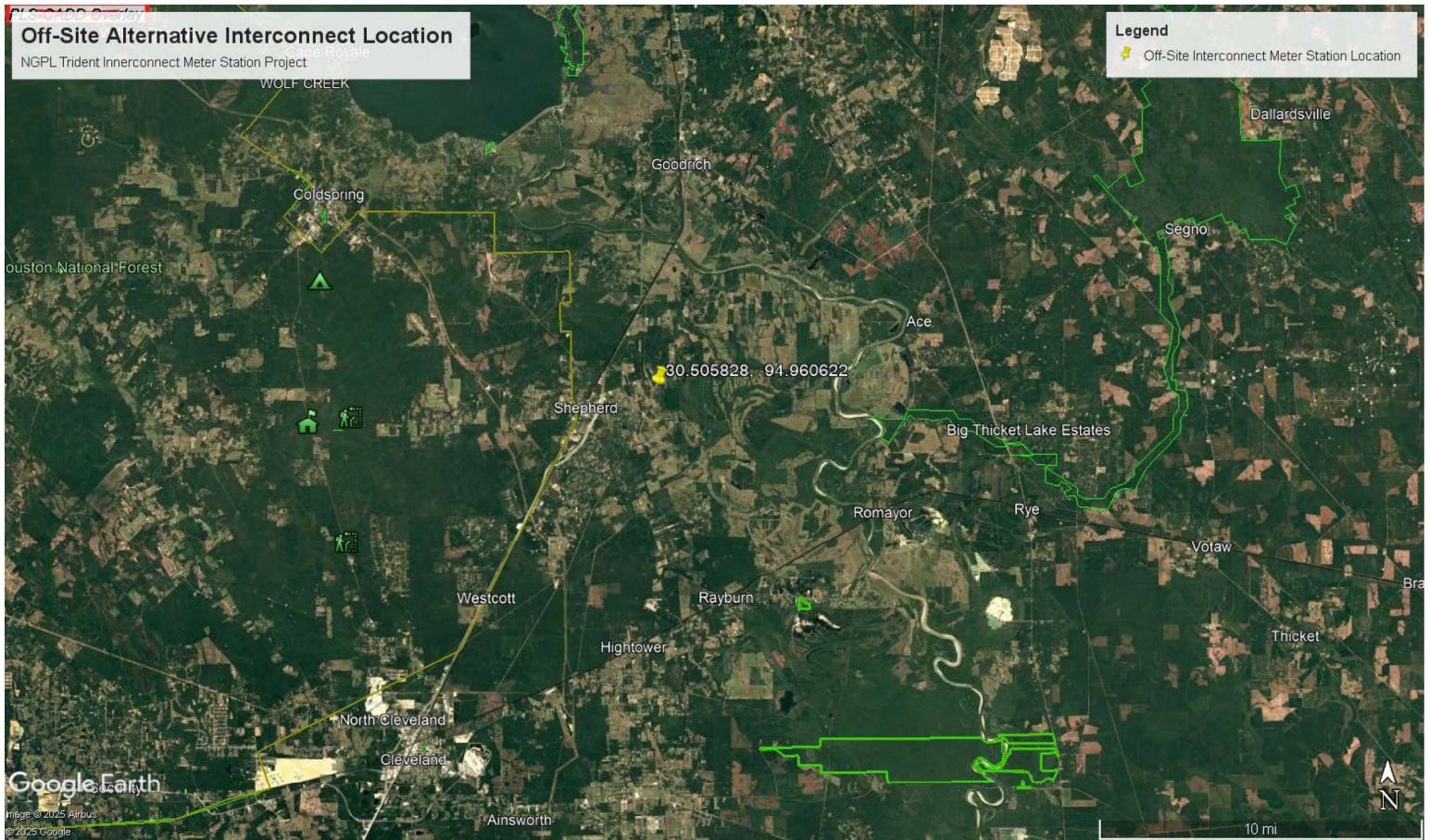
### *Off-Site Alternative*

40 CFR 230.10(a)(2) provides as follows:

*An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the project may be considered.*

There is one off-site alternative viable for the purpose of this project, which is the only other site where an NGPL and Trident interconnect could be constructed, coordinates 30.505828 N, -94.960622 W, as depicted in Image 1 below. This alternative was not selected because to deliver natural gas to the requested Texas/Louisiana Gulf Coast markets, NGPL would have to expand its Louisiana pipelines and install a midpoint compressor station in addition to a meter station (two stations as opposed to a single station in the preferred alternative). This alternative was not chosen because of the necessity of the additional infrastructure requirements in lieu of NGPL receiving natural gas from Trident immediately downstream of the Louisiana pipelines (preferred alternative) to provide the additional natural gas to the requesters in the Texas/Louisiana Gulf Coast markets.

Image 1. Off-Site Alternative Interconnect Location



### *On-Site Alternatives*

For this project, the interconnect between Trident and NGPL was the only viable on-site location to achieve the project purpose. The preferred alternative is located at the interconnect of the pipelines and the permanent infrastructure is located adjoining an existing third-party meter station. Any non-adjoining sites were not considered due to the need of additional length of carrier pipe, an access road, and a disjunct fill area for the meter station which is impractical and would lead to additional permanent WOTUS impacts and potential additional impacts to Threatened and Endangered species habitat. For these reasons, no additional on-site alternatives were considered for this project.

### *Applicant's Preferred Alternative*

Under the Applicant's Preferred Alternative, NGPL would move forward with constructing the Project as described in this IP application to meet the Project's purpose and need. According to the Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") data, the Project is located entirely within the 100-year floodplain (Zone A12 [EL 11]) (FEMA 1992). Due to the interconnect location, there are no other feasible areas outside of the floodplain or with fewer impacts to WOTUS within the vicinity of the Terminal Facility. Critical infrastructure (i.e., utility meters, isolation valves, measurement and control equipment) will be raised above the 100-year floodplain via the placement of 18-inch diameter helical piles. Furthermore, during the development of the Project, engineering was able to reduce the footprint, reducing the overall Project impacts to WOTUS. This alternative would require permanently

filling approximately 1.00 acres of PEM wetlands to construct the Project. Although the Project site design has been reduced to the maximum extent practicable to avoid and minimize impacts to WOTUS, the area is surrounded by wetlands, open waters, and/or already developed areas. There are currently no areas adjacent where the Project could be constructed that would avoid impacts to WOTUS and still meet the purpose and need of the Project. Additionally, the project is contingent on the location of the NGPL / Trident interconnect, and the meter station is being developed adjoining the existing third-party site to reduce impacts that would result from disjunct infrastructure development. Additionally, the preferred option enables NGPL to construct the tap site on an existing elevated rocked meter station; thus, reducing overall impacts to PEM wetlands.

SWCA conducted a threatened and endangered species evaluation and habitat assessment survey of federally listed and proposed for listing species for the proposed Project. The evaluation findings are documented in the attached threatened and endangered species report (Attachment F). The species evaluated for the Project were determined by obtaining a species list for the Project area via upload of the Project area to the USFWS Information for Planning and Consultation (“IPaC”) online system in September 2025 (included as Appendix C in the threatened and endangered species report). The species list included ten (10) species that are either federally listed or proposed for listing. These species included the proposed endangered tricolored bat (*Perimyotis subflavus*), threatened West Indian manatee (*Trichechus manatus*), threatened eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*), threatened piping plover (*Charadrius melodus*), threatened rufa red knot (*Calidris canutus rufa*), endangered whooping crane (*Grus americana*), threatened green sea turtle (*Chelonia mydas*), endangered hawksbill sea turtle (*Eretmochelys imbricata*), endangered Kemp’s ridley sea turtle (*Lepidochelys kempii*), and proposed threatened monarch butterfly (*Danaus plexippus*). As set forth in Attachment F, it is SWCA’s opinion that the Project will have *no effect* on five (5) federally listed species, *may affect*, *is not likely to adversely affect* three (3) federally listed species, and *is not likely to jeopardize the continued existence* of two (2) species proposed for federal listing. The IPaC species list did not identify wildlife refuges, fish hatcheries, or designated critical habitats in the Project area. This alternative is not anticipated to adversely affect any listed or proposed for listing species.

SWCA completed a cultural resources constraints analysis of this alternative (Attachment G). The analysis found no known cultural resources (including previously recorded archaeological, cemeteries, and historic standing structures) present in this alternative Project area or within a 0.6-mile (1.0-km) survey radius. The Project area historically has been an undeveloped marshland. Historical imagery shows a few structures on the boundaries of the Project area; however, it appears that these structures were replaced or no longer extant by 1989. Therefore, it is SWCA’s recommendation that the visual impacts associated with this alternative will not be adverse and a historic structure survey is not required. SWCA recommends that a cultural resources survey is NOT necessary and that historic properties are unlikely to be affected by the construction of this alternative.

Based on the above assessment, the Preferred Alternative is cost effective, logistically feasible, technically practicable, and would result in the least impacts to WOTUS while still meeting the purpose and need of the Project.

#### *Reasons for Recommended Least Environmentally Damaging Practicable Alternative*

The Applicant’s Preferred Alternative is the Least Environmentally Damaging Practicable Alternative (“LEDPA”) based on the following:

- This alternative meets the Project purpose and is located adjacent to NGPL infrastructure and the Trident pipeline;
- The landowner does not object to the Project;

- This alternative minimizes permanent impacts to WOTUS to the maximum extent practicable;
- This alternative provides minimal risks to threatened and endangered species (Attachment F);
- This alternative does not have the potential to impact cultural resources (Attachment G);
- This alternative would meet the Project purpose of fulfilling a request made by current shippers to expand the transportation volume with an additional 500,000 dekatherms per day (Dth/d) of natural gas across the NGPL Louisiana Lines No. 1 and No. 2 to provide more opportunity and flexibility to the natural gas and LNG facilities across the Texas/Louisiana Gulf Coast markets.

A summary comparison of the alternatives considered is provided in Table 3 along with the criteria factors required to render the Project practicable/feasible. Refer to Attachment B for the Project maps and Attachment C for the Project drawings.

**Table 3. Comparison of Alternatives**

Alternative	Criteria				Summary
	Cost-Effectiveness	Logistical Feasibility	Technical Achievability	Environmental WOTUS Impacts	
No-Action	Opportunity Costs	Feasible, but would not meet purpose and need	Achievable, but would not meet purpose and need	None	Would not meet the purpose and need of supplying the additional 500,000 dekatherms per day (Dth/d) of natural gas across the NGPL Louisiana Lines No. 1 and No. 2 to provide more opportunity and flexibility to the natural gas and LNG facilities across the Texas/Louisiana Gulf Coast markets
Off-Site NGPL / Trident Interconnect at 30.505828 N, - 94.960622 W	Not cost-effective, unreasonably expensive to the Applicant	Not feasible due to need for addition lines and compressor station	Technically achievable	Likely to exceed preferred alternative due to required additional infrastructure	Would technically meet needs and purpose of project but not feasible
On-Site Applicant's Preferred Alternative	Cost effective	Feasible, can construct adjoining existing NGPL infrastructure	Technically achievable	Approximately 1.00 acres of permanent loss of functions (impacts) to WOTUS	Applicant's Preferred Alternative due to location and feasibility

### Compensatory Mitigation

After implementing maximum practicable avoidance and minimization efforts, the Applicant's Preferred Alternative/LEDPA will result in unavoidable permanent impacts to 1.00 acres of PEM wetlands, and temporary impacts to 3.36 acres of PEM wetlands. NGPL proposes to provide compensatory mitigation for functional losses associated with the permanent filling of wetlands as identified in Table 4 which were

calculated by SWCA using the USACE Galveston District Riverine Herbaceous/Shrub interim hydrogeomorphic model (“iHGM”).

According to the USACE Regulatory In-lieu Fee and Bank Information Tracking System (“RIBITS”), the Project is located within the primary service area of the Anahuac Wetlands Mitigation Bank and the secondary service areas of the Sea Breeze and Spindletop Bayou Mitigation Banks. The Applicant proposes to purchase wetland credits from one (1) or more of these USACE-approved wetland mitigation banks (Anahuac Wetlands, Sea Breeze, or Spindletop Bayou) with overlapping service area coverage contingent on credit availability (USACE 2025).

**Table 4. PEM Wetland Impacts for which Mitigation is Proposed and Overlapping USACE-approved Wetland Mitigation Bank Service Area Coverage**

Wetland ID	Latitude	Longitude	Permanent Impact Acreage	Within Primary Service Area of Mitigation Bank	Within Secondary Service Area of Mitigation Bank
W010PEM	29.7592	-93.9356	1.00	Anahuac Wetlands	Sea Breeze, Spindletop Bayou
<b>Total</b>			<b>1.00</b>		

SWCA’s functional assessments of the wetlands to be permanently impacted is based on the data collected by Mott MacDonald during their site visits on September 27 and November 21, 2024, and review of recent and historical aerial images, topographic information, FEMA floodplain maps, and the U.S. Geological Survey 7.5-minute digital orthophoto quadrangles for Port Arthur South, Texas. Based on SWCA’s functional assessment calculations, NGPL proposes to purchase 0.666 physical (temporary storage of surface water (“TSSW”)), 0.583 biological (maintenance of plant and animal communities (“MPAC”)), and 0.680 chemical (removal and sequestration of elements and compounds (“RSEC”)) wetland mitigation credits for the permanent loss of 1.00 acres of PEM wetlands exclusive of any wetland mitigation bank secondary service area multipliers that may apply (Table 5). The wetland functional assessment forms are provided in Attachment H.

**Table 5. Summary of PEM Wetland Compensatory Mitigation Requirements**

Wetland ID	Permanent Impact Acreage	TSSW (physical)			MPAC (biological)			RSEC (chemical)		
		Pre-FCUs	Post-FCUs	FCUs Change	Pre-FCUs	Post-FCUs	FCUs Change	Pre-FCUs	Post-FCUs	FCUs Change
W010PEM	1.00	0.666	0.000	-0.666	0.583	0.000	-0.583	0.680	0.000	-0.680
<b>Total</b>	<b>1.00</b>			<b>-0.666</b>			<b>-0.583</b>			<b>-0.680</b>

FCUs = Functional Capacity Units  
 MPAC = maintenance of plant and animal communities  
 RSEC = removal and sequestration of elements and compounds  
 TSSW = temporary storage and detention of surface water