Office of
Energy Projects

September 2025

Golden Pass LNG Terminal LLC

Docket Nos. CP25-205-000,
CP25-205-001

Supply Lateral Project

Environmental Assessment

Washington, DC 20426

NEPA Unique ID: EAXX-019-20-000-1756911850

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:
OEP/DG2E/Gas 2
Golden Pass LNG Terminal, LLC
Supply Lateral Project
Docket Nos. CP25-205-000 and CP25-205-001

TO THE INTERESTED PARTY:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) have prepared an environmental assessment (EA) for the Supply Lateral Project (Project), proposed by Golden Pass LNG Terminal, LLC (Golden Pass LNG) in the above referenced dockets.[1] The Project would consist of approximately 0.22 mile of 42-inch-diameter pipeline supply lateral, a receipt interconnect, two meter station pads, and appurtenant facilities, all located within the Golden Pass LNG property boundary in Jefferson County, Texas. The proposed facilities are designed to facilitate interconnections with one intrastate pipeline and one interstate pipeline and transport up to 2.6 million dekatherms per day to the Golden Pass LNG Terminal with the purpose of providing flexibility and security of feed gas supply.

The EA assesses the potential environmental effects of the construction and operation of the Project in accordance with the requirements of the National Environmental Policy Act (NEPA). FERC staff concludes that approval of the proposed Project would not constitute a major federal action significantly affecting the quality of the human environment.

The Commission mailed a copy of the *Notice of Availability* of the EA to federal, state, and local government representatives and agencies; elected officials; environmental and public interest groups; Native American tribes; potentially affected landowners and other interested individuals and groups; and newspapers and libraries in the Project area. The EA is only available in electronic format. It may be viewed and downloaded from FERC's website (www.ferc.gov), on the natural gas environmental documents page (https://www.ferc.gov/industries-data/natural-gas/environment/environmental-documents). In addition, the EA may be accessed by using the eLibrary link on FERC's website. Click on the eLibrary link (https://elibrary.ferc.gov/eLibrary/search) select "General Search" and enter the docket number in the "Docket Number" field (i.e. CP25-205). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at FercOnlineSupport@ferc.gov or toll free at (866) 208-3676, or for TTY, contact (202) 502-8659.

[1] For tracking purposes under the National Environmental Policy Act, the unique identification number for documents relating to this environmental review is EAXX-019-20-000-1756911850.

The EA is not a decision document. It presents Commission staff's independent analysis of the environmental issues for the Commission to consider when addressing the merits of all issues in this proceeding. Any person wishing to comment on the EA may do so. Your comments should focus on the EA's disclosure and discussion of potential environmental effects, measures to avoid or lessen environmental effects, the completeness of the submitted alternatives, and information and analyses. The more specific your comments, the more useful they would be. To ensure that the Commission has the opportunity to consider your comments prior to making its decision on this Project, it is important that we receive your comments in Washington, DC on or before **5:00pm Eastern Time on October 14, 2025**.

For your convenience, there are three methods you can use to submit your comments to the Commission. The Commission encourages electronic filing of comments and has staff available to assist you at (866) 208-3676 or FercOnlineSupport@ferc.gov. Please carefully follow these instructions so that your comments are properly recorded.

1) You can file your comments electronically using the eComment feature on the Commission's website (www.ferc.gov) under the link to FERC Online. This is an easy method for submitting brief, text-only comments on a project;

2) You can file your comments electronically by using the eFiling feature on the Commission's website (www.ferc.gov) under the link to FERC Online. With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on "eRegister." If you are filing a comment on a particular project, please select "Comment on a Filing" as the filing type; or

3) You can file a paper copy of your comments by mailing them to the Commission. Be sure to reference the Project docket numbers (CP25-205-000 and CP25-205-001) on your letter. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852.

Filing environmental comments will not give you intervenor status, but you do not need intervenor status to have your comments considered. Only intervenors have the right to seek rehearing or judicial review of the Commission's decision. At this point in this proceeding, the timeframe for filing timely intervention requests has expired. Any person seeking to become a party to the proceeding must file a motion to intervene out-of-time pursuant to Rule 214(b)(3) and (d) of the Commission's Rules of Practice and Procedures (18 CFR 385.214(b)(3) and (d)) and show good cause why the time limitation should be waived. Motions to intervene are more fully described at https://www.ferc.gov/how-intervene.

Additional information about the Project is available from the Commission's Office of External Affairs, at **(866) 208-FERC**, or on the FERC website (www.ferc.gov) using the

eLibrary link. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

The Commission's Office of Public Participation (OPP) supports meaningful public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, community organizations, Tribal members and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502-6595 or OPP@ferc.gov.

In addition, the Commission offers a free service called eSubscription that allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. Go to https://www.ferc.gov/ferc-online/overview to register for eSubscription.

Commission Staff Page Limit and Deadline Certifications

I certify that Commission staff has considered the factors mandated by the National Environmental Policy Act (NEPA) and that this environmental document represents a good-faith effort to disclose the most important considerations required by NEPA within the statutory page limit (42 U.S.C. § 4336a(e)) and the statutory deadline (42 U.S.C. § 4336a(g)). This certification reflects staff's expert judgment that the analysis contained within this environmental document is an accurate representation of the potential environmental effects of the proposed action and the analysis is substantially complete. In staff's judgment, any considerations addressed briefly or left unaddressed would not meaningfully inform the assessment of environmental effects.

Gertrude Fernandez Johnson,
Director, Division of Gas –
Environment and Engineering

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TECHNICAL ABBREVIATIONS AND ACRONYMS

APE	area of potential effects
AQCRs	air quality control regions
CAA	Clean Air Act
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_{2e}	carbon dioxide equivalents
Commission	Federal Energy Regulatory Commission
CWA	Clean Water Act
dBA	A-weighted decibel
DOT	U.S. Department of Transportation
EA	environmental assessment
EI	environmental inspector
USEPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
GHG	greenhouse gas
Golden Pass LNG	Golden Pass LNG Terminal, LLC
GWP	global warming potential
HAPs	hazardous air pollutants
hp	horsepower
KMLP	Kinder Morgan Louisiana Pipeline
L_{dn}	day-night sound level
L_{eq}	equivalent sound level
LNG	liquified natural gas
MMDth/d	million dekatherms per day
MTPA	million metric tonnes per annum
MP	milepost
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NGA	Natural Gas Act
NLCD	National Land Cover Database
NOA	Notice of Application
NOA2	Second Notice of Application
NOS	*Notice of Scoping Requesting Comments on Environmental Issues for the the Proposed Supply Lateral Project*
Notice	*Notice of Schedule for the Preparation of an Environmental Assessment for the Supply Lateral Project*

NO_x	nitrogen oxides
NRHP	National Register of Historic Places
NSA	Noise sensitive area
OEP	Office of Energy Projects
O_3	ozone
PAR	permanent access road
PHMSA	Pipeline and Hazardous Materials Safety Administration
Plan	FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan*
Procedures	FERC's *Wetland and Waterbody Construction and Mitigation Procedures*
Project	Supply Lateral Project
ROW	right-of-way
Secretary	Secretary of the Commission
SHPO	State Historic Preservation Officer
SILs	Significant Impact Levels
SO_2	sulfur dioxide
SPCC Plan	Spill Prevention Control and Countermeasure Plan
TAR	temporary access road
Terminal	Golden Pass LNG Terminal
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
tpy	Tons per year
TPWD	Texas Parks and Wildlife Department
TWS	temporary workspace
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USGS	U.S. Geological Survey
VOC	volatile organic compound

A. PROPOSED ACTION

1. Introduction

The staff of the Federal Energy Regulatory Commission (Commission or FERC) prepared this environmental assessment (EA) to analyze the effects associated with the Supply Lateral Project (Project), proposed by Golden Pass LNG Terminal LLC (Golden Pass LNG) in Docket Nos. CP25-205-000 and CP25-205-000.[1]

On April 11, 2025, Golden Pass LNG filed an application under Section 3 of the Natural Gas Act (NGA) to amend the Commission's December 21, 2016 Order in Docket No. CP14-517-000 (2016 Order). The 2016 Order authorized Golden Pass LNG, under section 3 of the NGA, to construct and operate facilities for the export of liquefied natural gas (LNG) at the Golden Pass LNG Terminal (Terminal) in Sabine Pass, Texas. On August 1, 2025, in Docket No. CP25-205-001, Golden Pass LNG filed to revise the April 11, 2025 amendment application to a new preferred route that would consist of approximately 0.22 mile of 42-inch-diameter pipeline supply lateral, a receipt interconnect, two meter station pads, and appurtenant facilities. All proposed facilities would be located within the Terminal property boundary. The proposed facilities are designed to transport up to 2.6 million dekatherms per day (MMDth/d) to the Terminal.

2. Project Purpose and Need

Golden Pass LNG states that the Project purpose is to enable the Terminal to receive feed gas quantities from alternative supply sources it currently cannot access in the event of an operational disruption on or upstream of its primary supply. This flexibility would help prevent disruptions of operations or other issues, which could affect the Terminal's existing supply source, Golden Pass Pipeline. The proposed facilities would interconnect the Terminal's feed gas system with a new intrastate pipeline being developed by Trident Intrastate Pipeline LLC and a future, planned interstate header being developed by Kinder Morgan Louisiana Pipeline LLC (KMLP).[2] No increase in the previously authorized capacity or throughput at the Terminal would result from Project implementation. The Project would tie into the existing facilities and not result in material changes to the operation, or currently authorized service levels.

Under Section 3 of the NGA, the Commission is responsible for authorizing the siting, modification, and construction of onshore and near-shore LNG import or export facilities. As part of its decision whether to authorize NGA Section 3 facilities, the Commission considers all factors bearing on the public interest.

[1] For tracking purposes under the National Environmental Policy Act, the unique identification number for documents relating to this environmental review is EAXX-019-20-000-1749464402.

[2] *See* Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 1 at pg 4 and 15. Kinder Morgan is developing the Trident Intrastate Pipeline Project, a 216-mile pipeline that will provide approximately 1.5 billion cubic ft per day of natural gas capacity from Katy, Texas, to LNG facilities in the Port Arthur, TX area. The Trident Interstate Pipeline Project is regulated by the Texas Railroad Commission. In addition, Golden Pass LNG states that KMLP plans to file for a Certificate of Public Convenience and Necessity from the Commission pursuant to Section 7(c) of the NGA for the referenced interstate header; however, as of the publication of this EA, no application has been filed.

2.1 Scope of This Environmental Assessment

Our principal purposes in preparing this EA are to:

- identify and assess the potential effects on the natural and human environment that would result from the construction and operation of the Project;
- describe and evaluate reasonable alternatives to the Project that would avoid or minimize adverse effects on environmental resources;
- recommend mitigation measures, as necessary, that could be implemented by Golden Pass LNG to reduce effects on specific environmental resources; and
- encourage and facilitate involvement by the public and interested agencies in the environmental review process.

This EA addresses topics including Project alternatives; geology; soils; water resources; wetlands; vegetation; wildlife and aquatic resources; special status species; land use and visual resources; socioeconomics; cultural resources; air quality and noise; reliability and safety; and cumulative effects. This EA describes the affected environment as it currently exists and analyzes the environmental consequences of the proposed Project. This EA also presents our conclusions and recommended mitigation measures.

Our description of the affected environment is based on a combination of data sources, including desktop resources such as scientific literature and regulatory agency reports, information from resource and permitting agencies, scoping comments, and field data collected by Golden Pass LNG and its consultants.

2.2 Public Participation and Comments

Golden Pass LNG filed its formal FERC application for a limited amendment on April 11, 2025 in Docket No. CP25-205-000. On April 24, 2025 the FERC issued a Notice of Application (NOA) that described ways to become involved in the Commission's review of the Project. The comment period to respond to the NOA for CP25-205-000 closed on May 15, 2025. We received no comments on the NOA.

On May 8, 2025, the Commission issued in CP25-205-000 a *Notice of Scoping Period Requesting Comments on Environmental Issues for the Proposed Amendment to the Certificate of Public Convenience and Necessity for the Supply Lateral Project* (NOS) requesting comments by June 9, 2025. We received one comment in response to the NOS; on June 6, 2025 the Texas Commission on Environmental Quality (TCEQ) recommended the EA address waste disposal, surface and groundwater contamination, and general conformity.[3] These comments are addressed in section A.6, B.3, and B.8 of this EA.

On June 9, 2025, the Commission issued a *Notice of Schedule for the Preparation of an Environmental Assessment for the Supply Lateral Project* (Notice). The Notice announced that the Commission would issue an EA for the Project and provided the anticipated issuance date for the NEPA document.

[3] All written comments are part of the FERC's public record for the Project and are available for viewing in e-library under docket numbers CP25-205-000; CP25-205-001.

On August 1, 2025, Golden Pass LNG filed an amendment to its April 11, 2025 application to propose an alternative preferred route for the Project that would minimize the infrastructure needed to interconnect with a third-party shipper. On August 15, 2025 the FERC issued a second Notice of Application (NOA2) for the revised amendment under CP25-205-001. The NOA2 provided the same opportunities as discussed above for the NOA.

On September 5, 2025, Our Children's Trust filed comments in response to the NOA2, noting its opposition to fossil fuels and its effects on public health and contribution to climate change.[4] These comments are addressed in section B.8.

3. Proposed Action

Golden Pass LNG proposes to construct the Project in two Phases. Phase I consists of a new 0.22-mile, 42-inch-diameter supply lateral pipeline, a receipt interconnect, a meter station pad to support a meter station/interconnect to the Trident Intrastate Pipeline Project, a permanent access road, and appurtenant facilities. As part of Phase I construction, the proposed supply lateral would connect to the non-jurisdictional Trident Intrastate Pipeline and receipt manifold (GPLNG Header) at its receipt point. The supply lateral would then connect to tie-in facilities located within the terminal battery, and would include a 258-foot-long aerial pipeline support bridge to facilitate crossing of the levee surrounding the Terminal. The facilities are designed for one-way flow into the Terminal, to allow for diversity and security of supply. The proposed Project facilities, including the approximate 0.2-mile lateral, would be located entirely within the Terminal property boundary.

Phase II construction would include construction of a meter station pad, built to support a future, planned interstate receipt manifold and meter station to be built by a third party, identified as Kinder Morgan Louisiana Pipeline. The proposed facilities would be located entirely within the Terminal property boundary.

Figure 1 shows the general location of the Project facilities.

4. Land Requirements

Golden Pass LNG proposes to utilize approximately 28 acres[5] of land during construction, of which, approximately 5 acres would be utilized during operation. In addition, approximately 11 acres would be affected for minor improvements to two existing permanent access roads and construction of 1 new permanent access road.

Golden Pass LNG would typically utilize a 75-foot-wide construction right-of-way that would include 50 feet of permanent right-of-way, 10 feet of temporary workspace (TWS) on the southern working side of the right-of-way, and 15 feet of TWS on the northern and western working sides of the right-of-way. Following construction, Golden Pass LNG would maintain a 50-foot-wide permanent right-of-way for operation and maintenance of the pipeline.

The Project would not require the use of contractor yards for construction. All contractor staging would occur within additional temporary workspaces (ATWS), totaling approximately

[4] Our Children's Trust September 5, 2025 Comment. eLibrary Accession No. 20250905-5053

[5] Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 1. eLibrary Accession No. 20250801-5212.

11.75 acres of land use. Any TWS and ATWS would return to pre-construction land uses post-construction.

Access Roads

Access to the Project would be achieved via maintained State Highway 87 and two existing, privately owned permanent access roads (PARs). PAR 07 would be permanently widened and extended and minor modifications would be required at PAR 06 which could include placement of gravel entry and exit pads at road junctures; otherwise, no improvements to existing access roads beyond maintenance of the road throughout construction would occur. Golden Pass LNG also proposes one new PAR to the receipt interconnect site and aboveground aerial support bridge. All roads would be maintained after construction to access the right-of-way and aboveground facilities for operations and maintenance purposes (e.g., periodic inspections, right-of-way maintenance, facility access).

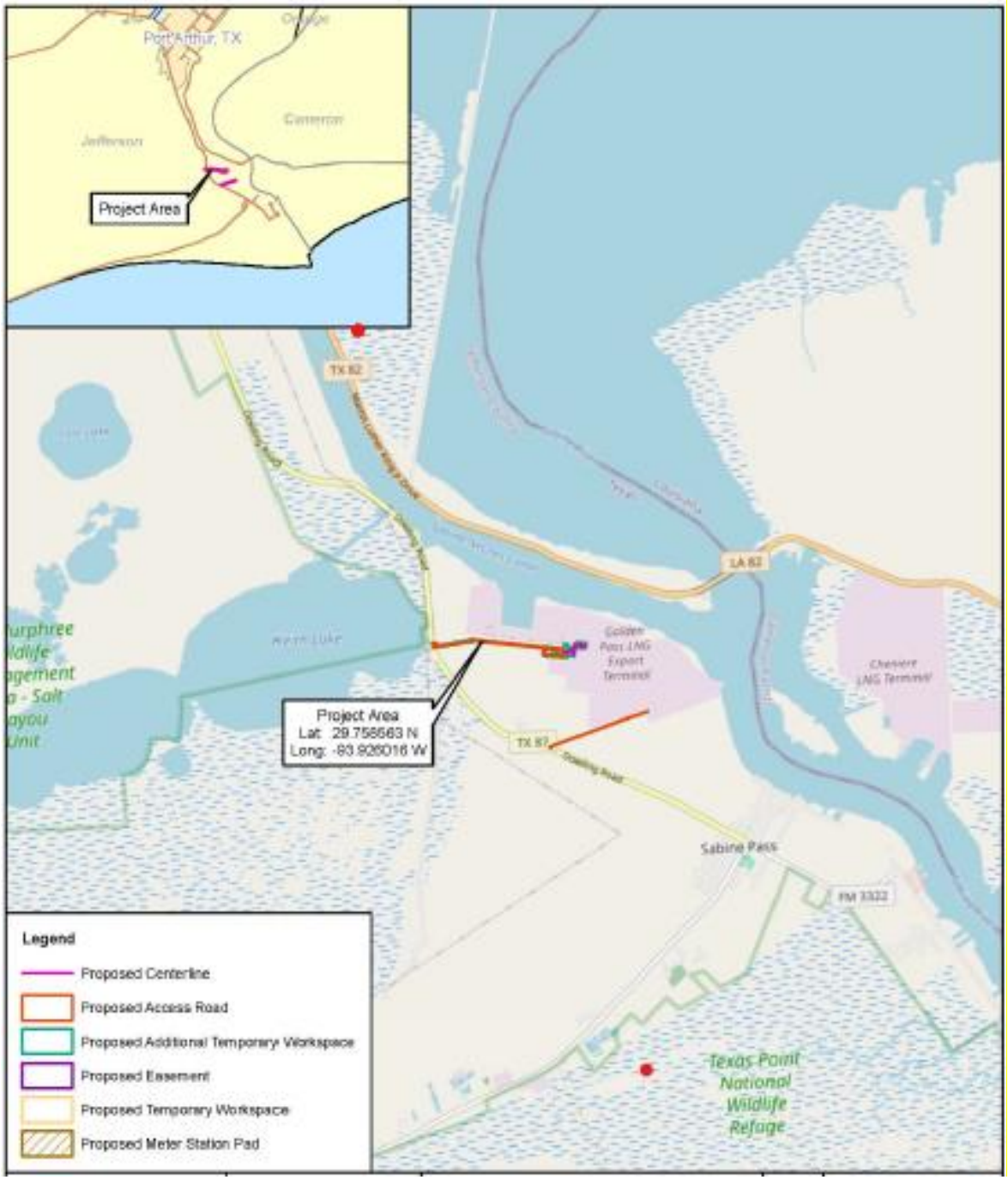
Table 1 summarizes the land requirements for aboveground facilities related to the Project.

Table 1: Proposed Facilities Land Requirements

	Project Component	Permanent ROW (acres)	Aboveground Facilities (acres)	Temporary Workspace (acres)	Additional Temporary Workspace (acres)	Temporary Access Roads (acres)	Permanent Access Roads (acres)	Totals (acres)
Phase I	Pipeline	1.13	--	0.62	0.48	--	2.12	**4.35**
	Meter Station	--	1.23	--	1.96	--	8.63	**11.82**
	GPLNG Header	--	0.49	--	2.62	--	--	**3.11**
	Appurtenant Facilities within GPLNG Terminal	--	--	--	1.52	--	--	**1.52**
	Aerial Pipeline Support Bridge	0.08	0.06	--	5.16	--	--	**5.3**
	Subtotal Phase I	1.21	1.78	0.62	11.74	--	10.75	**26.1**
Phase II	Meter Station Pad	--	1.63	--	--	--	--	**1.63**
	Subtotal Phase II		*1.63*	--	--	--	--	***1.63***
	TOTALS	**1.21**	**3.41**	**0.62**	**11.74**	**0.00**	**10.75**	**27.73**

Data Source: Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 1, table 1.2.

Figure 1: Project Overview Map



5. Construction Workforce and Schedule

Golden Pass LNG proposes to begin construction in second quarter of 2026, subject to receipt of all necessary regulatory approvals and permits, and place its facilities into service by the second quarter of 2027. Construction and restoration of the Project is anticipated to take approximately 15 months, with final restoration in the third quarter of 2027. Golden Pass LNG anticipates the average workforce for the Project would be 90 individuals, with anticipated peak workforce of approximately 170 individuals. Operation and maintenance of the Project would not require permanent employees, as Golden Pass LNG has existing personnel at the Terminal to operate the new facilities. Construction activities would occur during the day as Golden Pass LNG does not anticipate requiring nighttime construction.

6. Construction Methods

The Project would be designed, constructed, operated, and maintained in accordance with applicable requirements defined by U.S. Department of Transportation (USDOT) regulations in 49 CFR 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*; by FERC's Siting and Maintenance Requirements in 18 CFR 380.15; and by other applicable federal and state safety regulations. Golden Pass LNG would implement FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures). Golden Pass LNG requested site-specific deviations from the FERC Procedures, as further discussed in section B.3.2 of this EA.

The Project would be located within estuarine emergent wetlands, which would require Golden Pass LNG to utilize special construction techniques to compensate for these conditions. Emergent vegetation is dominant in marshes, which are characterized by wet, unstable soil conditions. Therefore, extensive clearing of vegetation is generally unnecessary, since the machinery used to dig the trench can accomplish both tasks simultaneously.

Golden Pass LNG would operate and maintain all facilities associated with the Project in accordance with applicable federal and state requirements. Operational activities would include maintenance of the right-of-way and inspection, repair and cleaning of the pipeline. These activities would be infrequent and may result in a temporary increase in noise level over ambient levels in the immediate vicinity of the pipeline (see section B.8.4). Operational effects would include the effects to maintain the permanent easement, aboveground facility permanent footprints, and permanent access roads.

Golden Pass LNG has established a comprehensive operations and maintenance program for the proposed facilities to prevent operational incidents and to effectively respond to any incident that would occur. Golden Pass LNG's operations and maintenance program includes corrosion control, leak inspection surveys, and regularly scheduled ground patrols of the pipeline right-of-way. TCEQ's comment related to the use of authorized facilities for all debris or waste disposal generated by construction activities. Once construction and restoration is complete, Golden Pass LNG would remove surplus materials and equipment. All trash, litter, and debris would be collected for disposal in an approved solid waste disposal facility.

Pipeline Facilities

Golden Pass LNG proposes to construct approximately 0.22 mile of new 42-inch-diameter pipeline extending from the proposed receipt interconnect to a new meter station within the Terminal. The proposed pipeline would parallel the existing Golden Pass Pipeline, LLC and Kinder Morgan's Natural Gas Pipeline Company of America corridors. Golden Pass LNG would install the pipeline with a minimum of three feet to the top of the pipeline, which is compliant with the USDOT's pipeline burial requirements. Approximately 240 feet of the proposed pipeline would be aboveground, supported on an aerial bridge to cross a flood control levee surrounding the Terminal.

Aboveground Facilities

Golden Pass LNG proposes to construct five aboveground facilities for the Project. Aboveground facilities associated with the Project would include the Phase I meter station pad, GPLNG header, appurtenant facilities within the Terminal, a pipeline aerial support bridge, and the Phase II meter station pad. The aboveground facilities would be designed, constructed, tested, operated, and maintained to conform or exceed the requirements of 49 CFR 192 and other applicable governmental regulations.

7. Environmental Compliance and Monitoring

Golden Pass LNG would assign an environmental inspector (EI) at each facility for the Project. Golden Pass LNG would provide training for its EIs and would conduct an environmental training session for all its construction management and contractor personnel prior to and during installation of the Project facilities.

The EIs would oversee construction and restoration activities. The EIs would have peer status with all other activity inspectors and would report directly to the Resident Engineer/Chief Inspector. The EIs' duties would be consistent with our Plan and Procedures and would have the authority to stop activities that violate the environmental conditions of the FERC Authorization and other federal and state permits or landowner requirements, and to order corrective action.

In addition to Golden Pass LNG's efforts to ensure environmental compliance, FERC staff or its representatives would monitor construction activities and may conduct periodic inspections to ensure Golden Pass LNG's compliance with its commitments and any conditions of a Commission order.

8. Permits, Approvals, and Regulatory Consultations

Table 2 provides a list of major federal and state environmental permits, approvals, and consultations for the Project. Golden Pass LNG would be responsible for obtaining all permits and approvals to construct and operate the Project, regardless of whether they appear in this table.

Table 2: Golden Pass LNG Anticipated Environmental Permits, Approvals, and Consultation		
Agency	**Permit, Approval, or Consultation**	**Status (Anticipated Date)**
FEDERAL		
Federal Energy Regulatory Commission	Amendment Authorization under Section 3 of the Natural Gas Act	Pending
U.S. Army Corps of Engineers (USACE) - Galveston	Clean Water Act (CWA), Section 404 Amendment of permit #SWG-2004-02118	(December 2025)
U.S. Environmental Protection Agency (USEPA) (Region 6)	CWA, National Pollution Discharge Elimination System (NPDES) authorization for hydrostatic test discharges (in waters of the U.S.)*	(March 2026)
U.S. Department of Interior Fish and Wildlife Service (USFWS) Austin, Texas	Consultation regarding compliance with Section 7 of the Endangered Species Act (ESA) Migratory Bird Consultation under Migratory Bird Treaty Act 16 U.S.C. 703-711 and Section 3 of Executive Order 13186, Bald and Golden Eagle Protection Act	(December 2025)
State of Texas		
Texas Historical Commission/SHPO	Consultation under Section 106 of the National Historical Preservation Act (NHPA)	September 2, 2025
Texas Parks and Wildlife Department (TPWD)	State listed species consultation	Complete
Texas Commission on Environmental Quality (TCEQ)	Water Permit Division TXG104000: Temporary Surface Water Use Permit* (major permit activities)	(December 2025)
Railroad Commission of Texas (RRC)	Texas Natural Resource Code Section 91.101 and Texas Water Code Section 26.131; CWA Section 401 Water Quality Certification T-4 Permit: Application for permit to operate a pipeline in Texas P-5: Organization Report PS-48: New Construction Commencement Report Hydrostatic Test Discharge Permit (uplands) – (TXG670000)*	(September 2025) (September 2025) (September 2025) (March 2026) (February 2026)
County/Local		
Jefferson County	Application for Pipeline Permit	(October 2025)
Notes: (*) Denotes a permit that may not be required for the Project should certain conditions be met during final design. Data Source: Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 1, table 1.7.		

9. Non-Jurisdictional Facilities

Occasionally, proposed projects have associated facilities that do not come under the jurisdiction of the Commission. These non-jurisdictional facilities may be integral to the need for the proposed facilities (e.g., a gas-fueled power plant at the end of a jurisdictional pipeline) or

they may be minor, non-integral components of the jurisdictional facilities that would be constructed and operated as a result of the proposed facilities.

The Project includes construction of a meter station pad/interconnect to the Trident Intrastate Pipeline Project, a 216-mile natural gas pipeline from Katy, Texas, to LNG facilities in the Port Arthur, TX area. The Trident Intrastate Pipeline Project will provide approximately 1.5 billion cubic ft per day (Bcf/d) of natural gas capacity, currently in development by Kinder Morgan and is regulated by the Texas Railroad Commission. The Trident Intrastate Pipeline facilities would be non-jurisdictional to FERC. The facilities would require installation of electric power and communications lines. The electrical line would be permitted, constructed, owned and operated by Entergy Texas, Inc. The Project receipt interconnect would utilize these power and communications lines for their connections. These non-jurisdictional facilities are discussed in section B.10 of this EA.

B. ENVIRONMENTAL ANALYSIS

This section of the EA describes the affected environment as it currently exists and discusses the environmental consequences of the proposed Project. The environmental consequences of constructing and operating the proposed gas storage facilities (e.g., temporary, short-term, long-term, and permanent). Temporary effects generally occur during construction with the resource returning to a similar condition to that prior to construction, almost immediately following construction activities. Short-term effects could continue for up to 3 years following construction. Effects were considered long-term if the resource would require more than 3 years to recover. A permanent effect could occur as a result of any activity that modifies a resource to the extent that it would be affected for the life of the Project. In the following sections, we address direct and indirect effects, by resource.

The analysis contained in this EA is based upon Golden Pass LNG's application and supplemental filings, and our experience with the construction and operation of natural gas infrastructure. However, if the Project is approved and proceeds to the construction phase, it is not uncommon for a project proponent to require modifications (e.g., minor changes in workspace configurations). These changes are often identified by a company once on-the-ground implementation work is initiated. Any Project modification would be subject to review and approval from FERC's Director of the Office of Energy Projects (OEP) and any other permitting/authorizing agencies with jurisdiction.

1. Geology

1.1 Geologic Setting

The Project is within the West Gulf Coastal Plain section of the Coastal Plain Physiographic Province, which stretches from western Arkansas and Louisiana to the United States-Mexico border (National Park Service [NPS], 2017). The Project's region is characterized by a thick section of Quaternary alluvial and shoreline sediments comprised of sand, clay, and gravel deposits (U.S. Geological Survey [USGS], 2005).

In 2007, Golden Pass LNG completed a geotechnical investigation in the vicinity of the Project location. The investigation identified 6 feet of surficial clay fill overlying clay soils with organic material. Bedrock was not encountered in the investigation.

1.2 Geologic Hazards

Geologic hazards are natural, physical conditions that can result in damage to land and structures or injury to people. In the Project area these hazards are primarily related to land subsidence and flooding from storms. The Project is in a flat-lying area of low seismic risk and is not anticipated to be significantly affected by landslides or seismic activity.

Ground subsidence can occur due to natural geologic or human processes, such as karst formation, groundwater withdrawal, withdrawal of fluids from salt domes, or underground mine collapse. No salt domes or karst terrain (Aronow, 1971; USGS, 2021) were identified in the Project area, and no active or abandoned mines or quarries were identified within 0.25 mile of the Project. We conclude that the risk is low that the Project would be significantly affected by ground subsidence.

The Project area is located entirely within Federal Emergency Management Agency (FEMA) Zone A 100-year floodplain (FEMA, 2024a) about six miles north of the Gulf of America, and the Project area may be affected by tropical storms. The Project area has potential to be inundated by up to nine feet of water during a Category 5 storm (National Oceanic and Atmospheric Administration-National Hurricane Center [NOAA-NHC], 2024). Golden Pass LNG would mitigate the effects of high energy storms on the proposed Project infrastructure by constructing protective measures such as berms and armoring around new facilities. Given these mitigation measures, we conclude that the risk is low that the Project would be significantly affected by storm related flooding.

2. Soils

Based on the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey (USDA-NRCS, 2024), the Project area soils generally consist of sandy, silty, and clayey soils. Ground disturbance associated with the Project potentially could adversely affect soil resources and inhibit the restoration potential of areas disturbed by clearing, grading, trenching, movement of heavy equipment, and clean-up activities. Golden Pass LNG would minimize effects from construction activities by following measures from FERC's Plan and Procedures and Golden Pass LNG's Erosion and Sedimentation Control Plan (ESCP), such as installing and maintaining temporary erosion control devices (ECD), placing timber mats to minimize rutting and compaction in saturated or compactible soils, and restoring disturbed soils as soon as feasible following completion of construction activities.

We did not identify any sites of known soil or groundwater contamination within 0.25 mile of the Project (U.S. Environmental Protection Agency [USEPA], 2025a; USEPA, 2025b; USEPA, 2025c; Texas Commission on Environmental Quality [TCEQ], 2025). Golden Pass LNG does not anticipate encountering contaminated media during ground disturbance activities as part of the Project. Contamination from spills or leaks of fuels, lubricants, or coolant from construction equipment could adversely affect the soils. Golden Pass LNG would prevent or minimize the risk of spills or leaks of fuel, lubricants, coolants, or solvents by implementing mitigation measures found in its Spill Prevention Control and Countermeasures Plan (SPCC Plan), such as performing daily inspections of all equipment and storage tanks and maintaining a spill kit for each piece of powered equipment. In the event unknown soil contamination is encountered or spills occur, Golden Pass LNG would follow measures from its SPCC Plan, which specifies containment and cleanup procedures.

Given that Golden Pass LNG would follow measures in the Project ESCP and SPCC Plan, as well as FERC's Plan and Procedures, we conclude effects on soils in temporarily disturbed areas would be short-term (lasting until vegetation were reestablished) and would not be significant.

3. Water Resources

3.1 Groundwater

The Project is within the Gulf Coast Major Aquifer system which parallels the Gulf of America coastline in Texas and stretches from the border of Louisiana to Mexico (Texas Water District Board [TWDB], 2016). The Gulf Coast Major Aquifer consists of four water producing formations, from deepest to shallowest: the Catahoula, Jasper, Evangeline, and Chicot aquifers. The Project proposes only shallow ground disturbance that would not result in significant effects to the aquifers.

No water supply wells were identified within 150 feet of the Project (TWDB, 2025a). If Golden Pass LNG encountered unknown water supply wells during construction activities, they would coordinate with landowners regarding pre- and post-construction sampling of the wells and would provide a temporary water supply if needed to any affected landowner while their well is repaired or replaced.

Shallow groundwater may be encountered during trenching activities. In the event that dewatering is necessary it would result in a temporary fluctuation in groundwater levels near the trench. Golden Pass LNG would adhere to mitigation measures from our Plan and Procedures, which require groundwater pumped from the trench to be discharged into well-vegetated upland areas or filtered through properly constructed dewatering structures. Therefore, no long-term effects to the water table are anticipated from the proposed replacements at the Project.

TCEQ recommended that our assessment address actions that would be taken to prevent ground water contamination from the Project. Given that Golden Pass LNG would follow mitigation measures and dewatering methods included in the Project E&SCP and consistent with FERC's Plan and Procedures, we conclude that the Project would not significantly affect groundwater resources.

3.2 Surface Water

The USGS defines watersheds by regions, sub-regions, accounting units, and cataloging units. Each watershed is identified by a unique hydrologic unit code (HUC) consisting of 2 to 14 digits. The Project crosses the Salt Bayou (120402010300) and Gulf of Mexico (120402020500) hydrologic unit code 12 watersheds. The Project would cross one roadside ditch. The proposed permanent access road would cross the roadside ditch using culvert.

Potential effects from waterbody crossings include increased sedimentation, turbidity, temporary loss of habitat, and erosion. Potential spills could also negatively affect waterbodies. Golden Pass LNG would minimize potential effects to waterbodies by following the FERC Plan and Procedures with approved deviations, and its SPCC Plan. Some of these measures in these plans include installing erosion and sedimentation controls and utilizing secondary containment around hazardous material.

TCEQ recommended that our assessment address actions that would be taken to prevent surface water contamination from the Project. Given that Golden Pass LNG would commit to implementing our Plan and Procedures, and SPCC, we conclude that the reasonably foreseeable effects on surface water would not be significant.

Water Use

Golden Pass LNG has not finalized hydrostatic test water use amounts or sources. Golden Pass LNG is working on its hydrostatic test plans and stated it would submit the plan to FERC for review ahead of hydrostatic testing. However, given the small scale of proposed facilities (0.22-mile of pipeline and receipt interconnects), the volumes of hydrostatic test water are expected to be minimal. Golden Pass LNG determined hydrostatic test water would be discharged either through existing Terminal outflows or well vegetated upland areas through an energy-dissipating device(s) such as a splash plate. Additionally, Golden Pass LNG would use temporary straw bales to contain discharges to dissipate energy, reduce velocities, and spread

waterflow to avoid erosion and promote penetration. Given that Golden Pass LNG would adhere to section VII of the FERC Procedures, we conclude that water used during Project activities would not result in significant effects on water resources.

3.3 Wetlands

Golden Pass LNG conducted wetland delineations in November 2024 to identify wetlands in the Project area. During these surveys Golden Pass LNG identified two palustrine emergent (PEM) wetlands. Construction activities would affect a total of 17.5 acres of PEM wetlands including 7.1 acres of temporary effects and 10.4 acres of permanent effects. Permanent effects include filling of wetlands for aboveground facilities.

Golden Pass LNG requested site-specific deviations from the FERC Procedures. These deviations are presented in table 3. We have reviewed these deviations and find them acceptable. Golden Pass LNG would adhere to the FERC Procedures with approved deviations and use erosion control devices to minimize effects on wetlands. Specifically, Golden Pass LNG would adhere to the rest of FERC's Procedures and relevant permits to minimize effects on wetlands. Additionally, Golden Pass LNG has designed the Project's footprint to minimize effects on wetlands and the Project Environmental Inspector would monitor all activities in wetlands, including access road maintenance and its use. Therefore, we conclude the Project would not significantly affect wetland resources.

Table 3: Proposed Deviations to the Procedures

Procedures Section	Description	Proposed Deviation	Site-Specific Justification
VI. A. 6.	Do not locate aboveground facilities in any wetland, except where the location of such facilities outside of wetlands would prohibit compliance with U.S. Department of Transportation regulations.	Allow the siting of aboveground facilities within wetlands on land owned by Golden Pass LNG.	Avoidance of wetlands is not practicable for siting in above ground facilities, as the entire Project area and land that surrounds the Golden Pass LNG facility are considered wetlands. There is insufficient space to locate the proposed facilities within the existing Golden Pass LNG facility site.
VI. B. 1. a	Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.	Allow extra work areas within wetlands on land owned by Golden Pass LNG.	The Project's location requires construction within a reasonable distance of the existing Golden Pass LNG Terminal, which is surrounded by wetland habitat. Siting ATWS within wetlands is necessary to safely construct around exiting facilities such as levees, operating pipelines and other utilities.
VI. B. 1. c.	In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing	Additional workspace and access roads within wetland	Avoidance of wetlands is not possible for construction equipment that would require multiple passes through the wetland.

Table 3: Proposed Deviations to the Procedures			
Procedures Section	**Description**	**Proposed Deviation**	**Site-Specific Justification**
	shall use access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, limit all other construction equipment to one pass through the wetland using the construction right-of-way	boundary may be utilized for construction equipment where upland access road use is not practical.	
VI. B. 1. d.	The only access roads, other than the construction ROW, that can be used in wetlands are those existing roads that can be used with no modifications or improvements, other than routine repair, and no impact on the wetland.	Golden Pass LNG would construct a new permanent access road within wetlands.	A new permanent access road would be built within the wetland to provide access for future operations and maintenance of the aboveground facilities. This access road would be utilized during pipeline construction. Existing access roads for the LNG Terminal cannot be used due to security restrictions.
Data Source: Golden Pass August 1, 2025 Application Amendment. eLibrary Accession number 20250801-5214.			

4. Fisheries, Wildlife and Special Status Species

4.1 Fisheries

The Project would not directly cross any waterbodies capable of supporting fisheries or any essential fish habitat. The wetlands in the Project vicinity are hydrologically connected to waterbodies and Essential Fish Habitat is present in waterbodies that surround the Project area. Potential effects on fisheries and aquatic resources include increased sedimentation and erosion into nearby waterbodies. However, Golden Pass LNG would use erosion control devices and follow the Procedures to prevent effects on surrounding fishery resources and essential fish habitat. Therefore, we conclude the Project would not affect fishery resources.

4.2 Vegetation

During Golden Pass LNG's field surveys, it identified mostly wetland herbaceous vegetation such as bulrush, saltgrass, common carpetgrass, sturdy bulrush, and big cordgrass. The Project would temporarily clear 20.7 acres of wetland vegetation and permanently affect 13.4 acres of wetland vegetation.[7] Potential effects on the existing vegetation communities would occur from clearing, grading, and the potential spread of invasive plant species.

[7] Golden Pass LNG August 12, 2025, Data Response. eLibrary Accession number 20250812-5131. Wetland vegetation number differs from Section 3.3 as wetlands in section 3.3 were defined by wetland vegetation, soil characteristics and hydrology during Golden Pass LNG's delineations.

Additionally, permanent effects would occur from the conversion of the herbaceous vegetation to impervious surfaces.

Golden Pass LNG did not identify any noxious weeds or invasive plant species during field surveys. Additionally, Golden Pass LNG would adhere to its Noxious Weed Control Plan to reduce the introduction and spread of invasive species and noxious weeds. Specific measures including cleaning construction equipment prior to entering project workspaces, monitoring workspaces, and removing invasives as appropriate. Golden Pass LNG would restore and revegetate Project workspaces following construction in accordance with the FERC Plan and Procedures. Therefore, we conclude the Project would not significantly affect vegetation resources.

4.3 Wildlife and Migratory Birds

Wildlife

Wildlife commonly found in the Project area include crabs, amphibians, white-tailed deer, racoons, nutria, and alligators. The nearest state wildlife management area is 0.25 mile west of the Project and the nearest state park is 0.75 mile east of the Project. Additionally, there are six known waterbird rookeries within 3 miles of the Project with the closest 0.5 miles north of the Project.[8]

Increased noise, lighting, and human activity from construction could result in abandoned or delayed reproductive efforts, displacement from the area, and complete avoidance of the area. Clearing and grading could lead to direct mortality of some small less mobile species, but these would not be a population level effect. Additionally, most of the Project area would only be temporarily cleared and temporarily decrease the amount of available habitat. Permanent effects on wildlife habitats would be limited to the 14.2 acres utilized for aboveground facilities and permanent access roads.[9] Mobile species would likely relocate to available adjacent habitat during abandonment activities. Therefore, we conclude the Project would not significantly affect wildlife species.

Migratory Birds

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA); bald and golden eagles are additionally protected under the Bald and Golden Eagle Protection Act. Executive Order (EO) 13186 (66 FR 3853) directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and to avoid or minimize adverse effects on migratory birds through enhanced collaboration with the U.S Fish and Wildlife Service (USFWS). EO 13186 was issued in part to ensure that environmental analyses of federal actions assess the effects of these actions on migratory birds. It also states that emphasis should be placed on species of concern, priority habitats, and key risk factors, and it prohibits the take of any migratory bird without authorization from the USFWS.

[8] Golden Pass LNG August 1, 2025 Application Amendment, eLibrary Accession number 20250801-5214.
[9] *Id.*

The MBTA, as amended, prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests.

In March 2011, FERC entered into a Memorandum of Understanding with the USFWS, which focuses on avoiding or minimizing adverse effects on migratory birds and strengthening migratory bird conservation through enhanced collaboration between the two agencies.

Golden Pass LNG used the USFWS's Information for Planning and Consultation (IPaC) system to identify birds of conservation concern that could potentially occur in the Project area. There are 38 birds of conservation concern with potential to occur in the vicinity of the Project area. The Project area contains suitable habitat for many of the ground nesting species, but it lacks suitable nesting habitat for most raptors and tree nesting species.

The primary concern for effects on migratory birds, including bald eagles, is mortality of eggs and/or young, as mature birds could avoid active construction. Vegetation clearing and ground disturbing activities could cause disturbance during critical breeding and nesting periods, potentially resulting in the loss of nests, eggs, or young. Construction activities and increase noise could displace individuals to similar, adjacent habitats, and cause direct mortality of some individuals.

While Golden Pass LNG did observe migratory birds such as mourning doves, boat-tailed grackle, and the great tailed grackle during field surveys, none of these species are birds of conservation concern and no birds of conservation concern were observed. Additionally, Golden Pass LNG did not observe any bald eagles or bald eagle nests during field surveys. Golden Pass LNG would conduct nest surveys within the Project area immediately prior to clearing activities to prevent direct affects to avian species. If Golden Pass LNG identifies active nests during the survey, it would establish a buffer around nests and monitor the nests for fledgling or failure. Golden Pass LNG would consult with USFWS and Texas Parks and Wildlife Department (TPWD) to determine specific survey methods and buffers. Additionally, Golden Pass LNG would conduct migratory bird training prior to construction with inspectors, contractors, and construction crews. Therefore, we have determined that the Project would not result in population-level effects on migratory birds or measurable negative effects or their habitat and would not significantly affect bald eagles.

4.4 Threatened, Endangered, and Special-Status Species

Federally Listed Species

The Commission is required by Section 7 of the Endangered Species Act (ESA) to ensure that the Project would not jeopardize the continued existence of a federally listed threatened or endangered species or result in the destruction or adverse modification of the designated critical habitat of a federally listed species. Golden Pass LNG, acting as our nonfederal designee, used USFWS's IPaC system and the National Oceanic and Atmospheric Administration the Southeast Region ESA Section 7 Mapper. Golden Pass LNG identified the federally threatened West Indian Manatee (*Trichechus manatus*), the federally threatened Eastern Black Rail (*Laterallus jamaicensis ssp. jamaicensis*), the federally threatened piping plover (*Charadrius melodus*), the federally threatened rufa red knot (*Calidris canutus rufa*), the federally endangered whooping crane (*Grus americana*), the federally threatened green sea turtle (*Chelonia mydas*), the federally

endangered hawksbill sea turtle (*Eretmochelys imbricata*), the federally endangered Kemp's Ridley sea turtle (*Lepidochelys kempii*), the loggerhead sea turtle (*Caretta Caretta*), the proposed for listing tricolor bat (*Perimyotis subflavus*) and the proposed for listing monarch butterfly (*Danaus Plexippus*). The Project would have *no effect* on the piping plover, rufa red knot, West Indian manatee, green sea turtle, Atlantic hawksbill sea turtle, Kemp's Ridley Sea turtle, and loggerhead sea turtle due to lack of suitable habitat in the Project area. Additionally, the Project area does not contain suitable habitat for the monarch butterfly or the tri-colored bat. Therefore, the Project *would not jeopardize the continued existence* of either proposed species.

Eastern black rail nests between April 1 through August 31 in the top center of dense clumps of marsh grasses, most commonly cordgrass species in Texas. The Salt marsh habitat within the Project area is suitable to provide for both forage and nesting habitat. No individuals or nests were observed during field surveys. Additionally, the Project area is not the ideal habitat for Texas populations of eastern black rails because it does not contain homogenous stands of cordgrass. However, there is potential for the eastern black rail to occur in the Project area year-round. Prior to construction, Golden Pass LNG would use qualified scientists to conduct pre-construction avian surveys using passive observation and playback calls to determine presence within the Project area. If construction occurs within an April 1 – October 7 breeding period (encompassing nesting, chick maturation and adult post-breed molting), qualified scientists would conduct nest searches immediately prior to construction. If Golden Pass LNG identifies eastern black rail nests during surveys, Golden Pass LNG would establish a buffer around the nests until such a qualified scientist determines that the nest has fledged, and the birds have left the area. Due to Golden Pass LNG's proposed mitigation measures we conclude we the Project *may affect, but it not likely to adversely affect* the eastern black rail.

The whooping crane is North America's tallest bird and one of its rarest. The crane winters in marshes along the Gulf Coast from November to March, mostly in Aransas National Wildlife Refuge (ANWR) located roughly 200 miles southwest of the Project area. The population associated with ANWR is natural, migratory, self-sustaining, approximately 540 strong and does not breed in Texas. Approximately 80 birds are associated with Louisiana's White Lake Wetland Conservation Area (WLWCA) located roughly 80 miles east of the Project area. Cranes associated with the ANWR flock are highly unlikely to occur in the Project area given the distance from ANWR and the crane's strong homing instinct which limits its dispersal. The introduced cranes associated with the WLWCA are relatively more likely to occur in the Project area. Many of the cranes associated with the WLWCA are non-migratory and known to breed along the Gulf Coast, some in Jefferson County, Texas. The breeding period for these birds occurs between January and July and they are relatively more dispersed than the ANWR flock.

Marshes favored by the whooping crane in Texas are dominated by salt grass, cordgrass species, and glassworts with areas of open water; here they roost in shallow water and are omnivorous wading birds feeding on a variety small animals and plants. The whooping crane nests in wetlands pockmarked with areas of shallow, open water where it maintains a nesting territory roughly 2.5 square miles on average. No individuals or nests were observed during field surveys, but the Project area does provide suitable nesting and habitat. Prior to construction, Golden Pass LNG would use qualified scientists conduct pre-construction avian surveys using passive observation and playback calls to determine presence within the Project

area. If construction were to occur within a January 1 – July 31 breeding period (associated with the introduced WLWCA population), qualified scientists would conduct nest searches immediately ahead of construction until the suitable habitat within the construction footprint is removed. If a whooping crane nest were to be identified during nest searches, a buffer would be established until a qualified scientist determines that the nest has fledged, and the birds have left the area. Due to Golden Pass LNG's proposed mitigation measures we conclude we the Project *may affect, but it not likely to adversely affect the* whooping crane.

Golden Pass LNG acting as FERC's non-federal representative for the purpose of complying with section 7 of the ESA, initiated informal consultation with the USFWS Texas field office on April 3, 2025. Golden Pass LNG concluded that the Project *may affect but is not likely to adversely affect* the whooping crane and eastern black rail. We agree. We are requesting USFWS concurrence with our determinations of effect. The USFWS response is pending, and consultation is ongoing for this species. To ensure the section 7 ESA consultation process is complete prior to construction, **we recommend that the following measure be included as an environmental condition in the Commission's Order:**

- **Golden Pass LNG shall <u>not begin</u> construction activities <u>until</u>:**
  a. **FERC staff receives comments from the USFWS regarding the proposed action;**
  b. **FERC staff completes ESA consultation with the USFWS; and**
  c. **Golden Pass LNG has received written notification from the Director of OEP, or the Director's designee, that construction or use of mitigation may begin.**

State Listed Species

Golden Pass LNG used the TPWD's Rare, Threatened and Endangered state species web applications and through Texas Natural Diversity Database (TXNDD) geospatial data to identify state listed species with the potential to occur in the Project area. Golden Pass LNG identified the following state listed species as potentially occurring in the Project area: salt marsh snake, eastern black rail, American eel, southern flounder, scarlet catchfly, corkwood, western chicken turtle, Kemp's Ridley sea turtle, piping plover, and the West Indian manatee. The eastern black rail, Kemp's Ridley sea turtle, piping plover, and the West Indian manatee were previously discussed under federally listed species and will not be discussed further. The Project area lacks suitable habitat for and would not affect the southern flounder, the American eel, scarlet catchfly, corkwood, or the western chicken turtle.

Salt marsh snake's preferred habitat includes brackish waters, tidal mudflats, and saltwater estuaries. The spatial data provided by TXNDD displayed salt marsh snake habitat approximately 1.3 miles north of the Project area. Golden Pass LNG identified potentially suitable habitat for the salt marsh snake during field surveys. Golden Pass LNG did not identify any salt marsh snakes during surveys. Salt marsh snakes are nocturnal and not likely to be active in the construction area during most of the construction workday. Therefore, we conclude the Project is not likely to have an adverse effect on this state listed species.

5. Cultural Resources

In addition to accounting for effects on cultural resources under NEPA, Section 106 of the National Historic Preservation Act (NHPA), as amended, requires FERC to take into account the effects of its undertakings on historic properties listed, or eligible for listing on the National Register of Historic Places (NRHP),[10] and to afford the Advisory Council on Historic Preservation an opportunity to comment. Golden Pass LNG, as a non-federal party, is assisting FERC in meeting our obligations under Section 106 and its implementing regulations at 36 CFR 800. The Section 106 process is coordinated at the state level by the State Historic Preservation Office. In Texas, the Texas Historical Commission serves as the State Historic Preservation Office (SHPO).

5.1 The Area of Potential Effects

The area of potential effects (APE) is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16(d)). The direct APE for archaeological sites includes all areas of potential effects where ground-disturbing activities are possible, while the indirect APE is considered to be the geographic areas from which any permanent infrastructure has the potential to impact, diminish or alter the visual, auditory, vibratory, or atmospheric setting of a NRHP-listed or NRHP-eligible property.

The direct APE totals approximately 27.75 acres and would include the development of a 0.22-mile pipeline corridor and receipt interconnect. Since no changes to the existing viewshed would occur from construction activities, if approved, there would be no indirect effect to cultural resources from the proposed Project. The APE is sufficient to account for all potential effects to historic properties by the proposed Project.

5.2 Cultural Resources Investigations

Golden Pass LNG conducted a cultural resources desktop analysis to identify historic properties within the APE and to account for any direct effects to those properties by the proposed Project. The background study included examination of records on file on the SHPO's online *Texas Archeological Sites Atlas* and historical topographic maps and aerial photographs available online at Nationwide Environmental Title Research's Web site. NRCS soil maps also were examined. This research identified three previously conducted surveys located within the proposed Project area. This archival research revealed that one shipwreck, located out in Sabine Bay to the northeast, has been recorded within 1.0 mile of the project area. No known cultural resources, including any archeological sites, cemeteries, or historic properties listed on the NRHP or designated as State Antiquities Landmark sites are present within or in the immediate vicinity of the Project area.

On April 11, 2025, Golden Pass LNG submitted its results to the SHPO by letter, recommending a finding of no historic properties affected and no further archaeological study

[10] In accordance with 36 CFR 800.16(l)(1), a historic property is any prehistoric or historic district, site, building, structure, object, or property of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization, included in, or eligible for inclusion in, the NRHP. This term includes artifacts, records, and remains that are related to and located within such properties.

necessary within the APE. On September 2, 2025, the SHPO agreed with Golden Pass LNG's findings.

5.3 Tribal Outreach

On April 3, 2025, Golden Pass LNG contacted the following federally recognized Tribes regarding the Project: Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Apache Tribe of Oklahoma, Coushatta Tribe of Louisiana, and the Wichita and Affiliated Tribes (Wichita, Keechi, Waco, and Tawakonie). We sent our Notices to these same Tribes. To date, there have been no comments filed.

5.4 Unanticipated Discoveries Plan

Golden Pass LNG developed a Project-specific plan titled *Supply Lateral Project Unanticipated Discovery Plan* (Unanticipated Discovery Plan), which outline the procedures to follow, in accordance with state and federal laws, in the event that unanticipated cultural resources or human remains are discovered during construction of the Project, including consultation with FERC, the SHPO, and tribes regarding discoveries. The Unanticipated Discovery Plan was submitted to FERC and the SHPO. We find the Unanticipated Discovery Plan acceptable.

5.5 Compliance with the National Historic Preservation Act

FERC has completed its compliance requirements with Section 106 of the NHPA for the Project.

6. Land Use

The Project would affect a total of approximately 27.7 acres during construction, which includes 14.2 acres of permanent effects during operation.[11] All land crossed by the Project facilities is privately owned by Golden Pass LNG. The pipeline would generally not change existing land uses as the right-of-way and would be restored to preconstruction conditions and uses following construction. Table 4 provides a summary of the land use categories affected by the Project. Project modifications and facility components would be installed mostly within the fenced boundary entirely within the parcels owned by Golden Pass LNG. Temporary workspaces, including open land maintained as lawn within the existing facilities, would be restored after construction, except for areas converted to developed land for new facilities. PARs would be located on property owned by Golden Pass LNG and other private landowners.

6.1 Open Land

All non-industrial land use was identified as emergent herbaceous wetlands by the National Land Cover Database (NLCD). These areas included perennial herbaceous vegetation where greater than 80 percent of vegetative cover and the soil or substrate is periodically saturated with or covered with water. Based on the total acreage impacts for the Project, the Project would cross 75 percent of

[11] Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 8 at pg 6. eLibrary accession number 20250801-5212.

land characterized as emergent herbaceous wetlands. Construction of the pipeline would not result in permanent effects to emergent herbaceous wetlands; however, construction of the meter station pads and permanent access roads would result in a permanent effect to emergent herbaceous wetlands.

The Project would require the use of approximately 20.7 acres of open land during construction. Operation of the Project facilities would require the use of approximately 13.4 acres during operations.[12] Given that the Project facilities would be constructed on lands already developed for oil and gas production and workspaces would be temporary, lasting only until restoration activities commence, the effects to open lands from Project implementation is not expected to be significantly affected by the Project.

Table 4: Project Effects on Land Use Types

Facility	**Industrial (acres)**		**Open (acres)**		**Total (acres)**	
Phase I	**Const.**[1]	**Oper.**[2]	**Const.**[1]	**Oper.**[2]	**Const.**[1]	**Oper.**[2]
Pipeline [1]	2.37	0.58	8.49	8.05	**10.86**	**8.63**
Meter Station Pad	0.12	0.12	5.19	3.23	**5.31**	**3.35**
GPLNG Header	1.04	0	2.07	0.49	**3.11**	**0.49**
Appurtenant Facilities within GPLNG Terminal	1.52	0	0	0	**1.62**	**0**
Aerial Pipeline Support Bridge	1.94	0.04	3.36	0.02	**5.3**	**0.06**
Phase II						
Meter Station Pad	0	0	1.63	1.63	**1.63**	**1.63**
Totals	**6.99**	**0.74**	**20.74**	**13.42**	**27.73**	**14.16**

Notes:
Data source: Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 8 at table 8.2. eLibrary Accession Nos. 20250801-5212
Const = construction effects
Oper = operations effects;
[1]Construction effects equal all effects due to construction and operation (including permanent easement, TWS, ATWS, aboveground facility permanent footprints, and construction workspace access roads).
[2] Operation effects include the effects to operate the Project (including aboveground facility permanent footprints, permanent fill, and permanent access roads; excluding permanent easement areas, which will be restored to predisturbed land use conditions)

6.2 Industrial Land

Based on the total acreage impacts from the Project, approximately 25 percent of the effects from construction of the Project would be on land characterized as industrial. A total of approximately 7 acres of industrial land would be utilized during construction of the Project, of which 0.7 acre would be required for operations. Industrial land is considered developed land that is not residential. Industrial land uses include existing industrial and commercial facilities and existing roads and railroads. This land use type includes developed and paved areas, existing compressor stations, existing contractor yards, existing roads, and various existing manufacturing, commercial, and retail facilities. Industrial/commercial land areas are typically sparsely vegetated or lack vegetation due to the presence of impervious cover such as existing buildings, facilities, pavement, and/or gravel.

[12] Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 8 at pg 6. eLibrary accession number 20250801-5212

We conclude there would be no long-term or significant effects on industrial use of the lands during the construction or operation of the Project.

6.3 Visual and Aesthetic Resources

There are no special or unique scenic features or designated scenic areas or viewsheds in the Project area. Visual and aesthetic effects associated with the Project would be limited to the period of active construction, which would consist of clearing, trench and foundation excavation, grading, spoil stockpiling, and erection of structures. Visual and aesthetic effects may include elevated noise and dust associated with the use of construction equipment. However, given the absence of nearby residences and the fact that the Project area is remote and essentially inaccessible to the public, visual and aesthetic effects during construction are not expected.

No federally managed public or conservation lands, including national historic landmarks, national forests, national parks, national recreational trails, national wild and scenic rivers, or tribal lands, are crossed by or within 0.25 mile of the Project. No state-managed lands, including historic sites, natural and scenic rivers, state parks, preservation areas, or other state-recognized public areas, are within 0.25 mile of the Project (Texas State Historic Preservation Office, 2025). Given the presence of existing structures at the proposed facility location and the distance between accessible viewpoints and the Project area, we conclude that the new structures would not change the visual character of the area and no specific mitigation would be required. We conclude that the visual effects resulting from the Project would not be significant.

7. Socioeconomics

Construction and operation of the Project could affect socioeconomic conditions in the project area. Potential socioeconomic effects of construction and operation of the Project include changes in population levels or local demographics, increased employment opportunities, increased demand for housing and public services, tourism and transportation effects, and an increase in government revenue associated with sales, payroll, and property taxes. The socioeconomic study area considered for the analysis of the Project includes Jefferson County in Texas.

Golden Pass LNG anticipates that construction and restoration of the Project would take approximately 15 months, with full revegetation by Q4 2027. Therefore, for the purpose of this analysis it is assumed that the construction period would be from June 2026 through September 2027, (the time for which heavy construction activities would occur).

7.1 Population and Housing

Jefferson County, Texas has an estimated population of 251,496. Golden Pass LNG anticipates a peak workforce of 170 with an average number of workers estimated to be 90. Golden Pass LNG anticipates that less than 30 percent of the construction workers would be considered a local resident, and most of the workers would be non-local. The temporary influx of workers (approximately 119 non-local workers) would represent a minor temporary increase in population of Jefferson County. Therefore, the Project would result in a less than significant temporary effects on the local population.

7.2 Economy and Employment

The approximately 119 non-local construction workers would most likely spend a portion of their pay in local communities on items such as housing, food, automobile expenses, entertainment, and miscellaneous other items. The number of temporary, indirect jobs in the study area could increase as purchases for goods and services would increase along with the influx of the construction workforce to the area. Indirect employment, including hiring additional staff in the retail and service industries to accommodate the increase in demand for food, clothing, lodging, gasoline, and entertainment, along with an increased demand for goods and services would have a temporary stimulating effect on local economies. Indirect jobs would represent a temporary, minor increase in employment opportunities in the study area.

Given the population of the county (251,496) and the relatively short duration of construction of 15 months, we anticipate that the Project would have a temporary and negligible positive effect on unemployment rates in the Project area and a minor effect on the industries in the Project area.

7.3 Public Service

Due to the relatively short duration of construction (15 months), construction workers are unlikely to relocate their families. The construction workers would likely reside at locations throughout the Project area, resulting in a minor increase in the demand for public services during construction of the Project. This may include a minor temporary increase in the demand for emergency medical and police services associated with the increased traffic and worksite-related accidents. Given the limited influx of construction workers and duration of construction, we conclude that the Project would not result in significant effects on public services.

7.4 Traffic

Golden Pass LNG would use existing public roads to access the Project area during construction. If necessary, Golden Pass LNG would apply for road crossing permits from the appropriate jurisdiction. Golden Pass LNG does not anticipate the need for a Traffic Management Plan; however, if coordination with the local jurisdictions determines otherwise, a Traffic Management Plan would be developed. We expect construction traffic would be limited and minor and therefore we conclude that the Project would not result in significant effects on traffic.

8. Air Quality and Noise

8.1 Air Quality

The term “air quality” refers to relative concentrations of pollutants in the ambient air. Air quality would be affected by emissions from construction and operation of the Project. This section summarizes federal and state air quality regulations that are applicable to the proposed facilities; characterizes the existing air quality; describes potential effects the facilities may have on air quality; and identifies proposed mitigation measures.

The Project is located in Jefferson County, Texas, which is in the Southeast climate region of the United States. Texas climate is characterized by hot summers and mild to cool winters, influenced by the Rocky Mountains block intrusions of moist Pacific air from the west and tend to channel arctic air masses southward during the winter; the relatively flat central North American continent allows easy north and south movement of air masses; and the Gulf of

America serves as the primary source of moisture. As a result of these factors, the state exhibits large east-west variations in precipitation and is subject to frequent and varied extreme weather events, including hurricanes, tornadoes, droughts, heat waves, cold waves, and extreme precipitation averaging 60 inches per year.

In response to the NOA2, we received comments from Our Children's Trust regarding the air quality and human health impacts of the Project. We address those in this section.

Existing Air Quality

The Federal and state air quality standards are designed to protect human health and welfare. Ambient air quality is protected by the Clean Air Act (CAA) of 1970, as amended in 1977 and 1990. The USEPA has developed National Ambient Air Quality Standards (NAAQS)[13] for criteria pollutants carbon monoxide, lead, oxides of nitrogen (NO_x), ozone, particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), and sulfur dioxide (SO_2). Volatile organic compounds (VOC) are also regulated by the EPA to prevent the formation of ozone, a constituent of photochemical smog. Hazardous air pollutants (HAP) are also emitted during fossil fuel combustion and are chemicals known to cause cancer and other serious health effects. The USEPA defines air pollution to include the mix of the following six long-lived greenhouse gases (GHG), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs produced by fossil-fuel combustion are CO_2, CH_4, and N_2O, and are generally non-toxic and non-hazardous at normal ambient concentrations. Emissions of GHGs are quantified and regulated in units of carbon dioxide equivalent (CO_2e). The CO_2e unit of measure factors in the global warming potential (GWP) of each GHG over a specified timeframe.[14] There are no NAAQS or established significance thresholds for GHG.

Air Quality Control Regions (AQCRs) are areas established for air quality planning purposes in which State Implementation Plans (SIP) describe how ambient air quality standards would be achieved and maintained. AQCRs were established by the USEPA and local agencies, in accordance with Section 107 of the Clean Air Act and its amendments, to implement the Clean Air Act and comply with the NAAQS through SIP. The AQCRs are intrastate and interstate regions, such as large metropolitan areas, where the improvement of the air quality in one portion of the AQCR requires emission reductions throughout the AQCR. Areas in compliance or below the NAAQS are designated as attainment, while areas not in compliance or above the NAAQS are designated as nonattainment. Areas previously designated as nonattainment that have since demonstrated compliance with the NAAQS are designated as maintenance for that pollutant. Areas that lack sufficient data to determine attainment status are designated unclassifiable and treated as attainment areas. The Project is located within Jefferson County, which is part of the Southern Louisiana-Southwest Texas Interstate AQCR. Jefferson County is included in the SIP to improve air quality in the Beaumont-Port Arthur area. According to the Texas Commission on Environmental Quality, the Beaumont-Port Arthur area is currently designated as attainment/unclassifiable for all criteria pollutants.

[13] The current NAAQS are listed on the USEPA's website at https://www.epa.gov/criteria-air-pollutants/naaqs-table.
[14] Table A-1 of 40 CFR 98: CO_2 has a GWP of 1, CH_4 has a GWP of 25, and N_2O has a GWP of 298 on a 100-year timescale.

Our Children's Trust expressed concerns regarding fossil fuels, maintaining that no regulation should be permitted that allows for any new sources of fossil fuel GHG emissions. Section B.9 of this EA acknowledges that construction and operation of the Project facilities would increase the atmospheric concentration of GHGs and contribute to climate change; however, there is no accepted standard to determine the significance of GHG emissions. In addition, we note that opposition to fossil fuels in general is outside the scope of this EA. The Commission, in exercising its authority under the NGA, will consider project need in its Order and will decide whether the Project is an environmentally acceptable action. Our Children's Trust also comments that modifying the existing authorization and permitting the Supply Lateral Project would result in adverse health effects caused by fossil fuel pollution. Section B.8.2 and B.8.3, below, quantify the minor construction and operational emissions from the Project, as well as emissions mitigation measures, and we conclude Project emissions would not cause or contribute to a violation of any applicable ambient air quality standard. Through the implementation of the work practices described below and compliance with federal and state air regulations, the temporary emissions during construction of the Project would be minor, and the impact of these emissions would be localized. There are no operational sources of emissions associated with the Project other than minor fugitives. Additionally, the Project would not trigger any requirements under the Prevention of Significant Deterioration air permit program and does not require a General Conformity Determination. Therefore, we conclude that emissions generated during construction and operation would not have a significant impact on regional air quality and public health.

TCEQ filed comments regarding the TCEQ evaluation of the South Coast Air Quality Management District and potential for reinstating general conformity requirements. Should these regulatory thresholds be reinstated, we do not anticipate the Project would trigger any general conformity thresholds based on the minor amount of estimated Project emissions, as further quantified below.

Regulatory Requirements

The CAA is the basic federal statute governing air pollution in the United States. Based on Project activities, we have reviewed the following federal requirements and determined that they are not applicable to the proposed Project:

- General Conformity;
- New Source Review- Prevention of Significant Deterioration;
- New Source Review - Non-attainment New Source Review;
- New Source Performance Standards;
- National Emission Standards for Hazardous Air Pollutants; and
- Title V Permitting- Project equipment would fall under Golden Pass LNG facility Title V permit.

Mandatory Greenhouse Gas Reporting Rule

The USEPA's Mandatory Reporting of Greenhouse Gases Rule, codified under 40 CFR 98 requires reporting from applicable operational sources of GHG emissions if these sources, in total, emit greater than or equal to 25,000 metric tons of GHG (as CO_2e) in 1 year. The

Mandatory Reporting Rule does not require emission control devices and is strictly a reporting requirement for stationary sources based on actual emissions. The expected GHG emissions from the proposed new Project facility would be below this threshold and mandatory GHG reporting would not be required. Although the rule does not apply to construction emissions, we have provided GHG construction emission estimates, as CO_2e, for disclosure purposes under construction emissions.

8.2 Construction Emissions

Construction of the Project facilities would result in short-term increases in emissions of some air pollutants due to the use of equipment powered by diesel fuel or gasoline and the disturbance of soil and other dust-generating activities over 15 months of construction activities beginning in the second quarter of 2026. Construction activities would result in the temporary generation of fugitive dust (large particles as well as PM_{10} and $PM_{2.5}$) due to land clearing and grading, ground excavation, and driving on unpaved roads. Exhaust emissions would be generated by the use of heavy equipment and trucks powered by diesel or gasoline engines on-site, and delivery vehicles and construction workers commuting to and from work areas. The amount of dust generated would be a function of construction activity, soil type, soil moisture content, wind speed, precipitation, vehicle traffic and types, and roadway characteristics. Emissions would be greater during dry periods and in areas of fine-textured soils subject to surface activity. Construction emission estimates are based on the fuel type and anticipated frequency, duration, capacity, and levels of use of various types of construction equipment. Construction emissions were estimated using the EPA's Motor Vehicle Emission Simulator (MOVES3) model and EPA AP-42 emission factors. Table 5 provides the Project construction emissions, including exhaust emissions and fugitive dust from on-road and off-road construction equipment and vehicles, exhaust emissions from construction worker vehicles for commuting, and vehicles used to deliver equipment and materials to each of the construction sites.

To reduce fugitive dust emissions, Golden Pass LNG would utilize the Project Dust Control Plan, which we have reviewed and find acceptable. Measures include applying water, as necessary, to affected unpaved roads, reduce vehicle speeds on all unpaved roads, and unpaved haul and access roads, cover haul truck loads or maintain at least six inches of freeboard space in each cargo compartment, and construct and maintain construction entrances to prevent tracking mud and soil onto paved roads. To mitigate exhaust emissions during construction, Golden Pass LNG would construct the Project in accordance with applicable regulations and manufacturers recommendations for each piece of equipment, and limit vehicle idling. Construction emissions are presented in table 5.

Table 5: Construction Emissions (tpy)[1]

Source	NOx	CO	SO2	VOC	PM_{10}	$PM2.5$	CO_2e	HAPs
Construction Equipment[2]	0.18	0.09	<0.01	0.02	0.03	0.03	210.19	0.12

On-Road Vehicle Travel[3]	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	5.74	<0.01
Fugitive Dust	--	--	--	--	11.65	1.17	--	--
Total	**0.19**	**0.14**	**<0.02**	**0.03**	**11.69**	**1.21**	**215.93**	**0.13**

Notes:
Data Source: Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 9 at page 11, eLibrary accession no. 20250801-5212.
Reviewed and confirmed by analyst 9/1/2025
[1.] Tons per year
[2].Emissions from construction equipment engines.[3.] Includes commuting traffic.

Given the temporary, intermittent, and limited nature of construction emissions, we find that emissions from construction-related activities for the Project would not be expected to cause or significantly contribute to a violation of any applicable ambient air quality standard, or significantly affect local or regional air quality.

8.3 Operational Emissions

Fugitive operational emissions would be limited to vehicle emissions during pipeline and right-of-way inspections and maintenance, as well as potential fugitive valve leaks. Golden Pass LNG employs a Leak Detection and Repair program (LDAR) for facilities previously authorized; all equipment installed and/or operated by Golden Pass LNG would be incorporated into the facility LDAR program. Table 6 presents the annual operational emissions associated with the Project.[15]

Table 6: Operational Emissions
(tpy)

Source	**NOx**	**CO**	**SO_2**	**VOC**	**PM_{10}**	**$PM_{2.5}$**	**CO_2e**	**HAPs**
On-Road Maintenance Vehicle[1]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.06	<0.001
Fugitive Leaks[2]	-	-	-	-	-	-	0.07	-
Emergency Release[3]	-	-	-	-	-	-	770.91	-
Total Annual	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.14	**<0.001**
Total Annual with Emergency	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**771.18**	**<0.001**

Notes:
Data source: Golden Pass LNG August 22, 2025 supplemental filing, eLibrary Accession No. 20250825-5009
Reviewed and confirmed by analyst 9/1/2025
.
1. Incudes estimated commute time; Assumes one maintenance vehicle for one pipeline inspection yearly. Calculated using MOVES5 (EPA 2024).
2. Includes all potentially leaking components associated with the Project. Assumes 140 standard cubic feet leaked per stroke with one stroke per year. Assumes no leaks from manually operated valves.
3. Calculation represents a worst-case scenario in the unlikely event of an emergency shut down requiring release of total natural gas from the -1100' Supply Lateral.

[15] Golden Pass LNG August 22, 2025 supplemental filing, eLibrary Accession No. 20250825-5009.

Based on the minor operational emissions estimated above, we find that emissions for the Project would not be expected to cause or significantly contribute to a violation of any applicable ambient air quality standard or significantly affect local or regional air quality.

8.4 Noise

Construction of the Project would affect the local noise environment in the Project area. The ambient sound level of a region, which is defined by the total noise generated within the specific environment, is usually composed of sounds emanating from both natural and artificial sources. At any location, both the magnitude and frequency of environmental noise may vary considerably over the course of the day and throughout the week, in part due to changing weather conditions and the effects of seasonal vegetative cover.

In 1974, the EPA published its Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Two measurements used to relate the time-varying quality of environmental noise to its known effects on people are the 24-hour equivalent sound level (Leq) and the day-night average sound level (Ldn). The Leq is an A-weighted sound level containing the same sound energy as the instantaneous sound levels measured over a specific time period. Noise levels are perceived differently depending on length of exposure and time of day. The Ldn takes into account the duration and time the noise is encountered. Specifically, in the calculation of the Ldn, late night to early morning (10:00 p.m. to 7:00 a.m.) noise exposures are penalized +10 decibels (dB) to account for people's greater sensitivity to sound during the nighttime hours. The EPA has indicated that an Ldn of 55 dBA protects the public from indoor and outdoor activity interference. Due to the 10 decibels on the A-weighted scale (dBA) nighttime penalty added prior to calculation of the Ldn, for a facility to meet the 55 dBA Ldn limit established by the EPA to protect the public from indoor and outdoor activity interference, a facility must be designed such that the constant 24-hour noise level does not exceed an Leq of 48.6 dBA at any Noise Sensitive Area (NSA). The A-weighted scale (dBA) is used because human hearing is less sensitive to low and high frequencies than mid-range frequencies. For an essentially steady sound source that operates continuously over a 24hour period and controls the environmental sound level, the Ldn is approximately 6.4 dB above the measured Leq.

We have adopted the EPA's 55 dBA Ldn criterion and use it to evaluate the potential noise effects from the proposed Project at NSAs, such as residences, schools, or hospitals. Also, in general, a person's threshold for a perceivable change in loudness on the A-weighted sound level is about 3 dBA, whereas a 5 dBA change is clearly noticeable, and a 10 dBA change is perceived as either twice or half as loud.

There are no state or local noise ordinances more restrictive that FERC criterion that apply to the Project.

Construction Noise

Noise would be generated during construction of the Project facilities. Noise levels would be highest in the immediate vicinity of construction activities and would diminish with distance from each work area. These effects would be localized and temporary, with sound levels changing depending on the type of equipment used, the duration of use for each piece of equipment, the number

of construction vehicles and machines used simultaneously, and the distance between the sound source and receptor.

The nearest NSAs is 0.4 mile of the construction workspace. Based on the scope of construction activities, distance to nearest NSA, we conclude that noise effects from construction activities would not be significant.

To further mitigate construction noise, Golden Pass LNG proposes to limit activities to occur during daytime hours, which FERC considers to be between 7:00AM and 7:00PM.

Operational Noise

There would be no changes in operational noise due to the Project. Based on the limited scope of modifications and lack of operational noise associated with the Project, we conclude that the noise attributable to operation of the Project would not cause a significant effect.

9. Reliability and Safety

The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas. The greatest hazard is a fire or explosion following a major pipeline rupture. Methane, the primary component of natural gas, is colorless, odorless, and tasteless. It is not toxic, but is classified as a simple asphyxiate, possessing a slight inhalation hazard. If breathed in high concentration, oxygen deficiency can result in serious injury or death.

The facilities associated with the project must be designed, constructed, operated, and maintained in accordance with the USDOT Minimum Federal Safety Standards in 49 CFR Part 192, including the provisions for written emergency plans and emergency shutdowns. The regulations are intended to ensure adequate protection for the public and to prevent natural gas facility accidents and failures. Golden Pass LNG would provide the appropriate training to local emergency service personnel before the facilities are placed in service.

The USDOT pipeline standards are published in Parts 190-199 of Title 49 of the CFR. For example, Part 192 of 49 CFR specifically addresses natural gas pipeline safety issues, prescribes the minimum standards for operating and maintaining pipeline facilities. Part 192 also requires a pipeline operator to establish a written emergency plan that includes procedures to minimize the hazards in a natural gas pipeline emergency. The operator must also establish a continuing education program to enable customers, the public, government officials, and those engaged in excavation activities to recognize a gas pipeline emergency and report it to appropriate public officials.

With adherence to USDOT pipeline standards, we conclude that the Project facilities construction and operation would represent a minimum increase in risk to the public.

10. Cumulative Effects

We identified other actions in the vicinity of the proposed Project and evaluated the potential for cumulative effects on the environment. A cumulative environmental effect is one that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions regardless of the agency or party undertaking such other actions. Cumulative effects

can result from individually minor, but collectively significant actions, taking place over time. Our cumulative effects analysis focuses on the current aggregate effects of past actions without delving into the historical details of individual past actions.

In this analysis, we consider the effects of past projects within defined geographic scopes as part of the affected environment (environmental baseline). However, present effects of past actions that are relevant and useful are also considered. Our cumulative effects analysis focuses on potential effects from the proposed Project on resource areas or issues where the incremental contribution could result in cumulative effects when added to the potential effects of other actions. To avoid unnecessary discussions of insignificant effects and projects and to adequately address and accomplish the purposes of this analysis, an action must first meet the following three criteria to be included in the cumulative analysis:

- affects a resource also potentially affected by the Project;
- causes this effect within all, or part of, the Project area defined by the resource specific geographic scope; and
- causes this effect within all, or part of, the time span of the Project's estimated effects.

Based on the effects of the Project as identified and described in this EA, we have determined that the resource-specific geographic scopes described below in table 7 are appropriate to assess cumulative effects. Given our determination of no effect to cultural resources, no effect to fisheries, and the lack of operational noise or emission sources (aside from minor fugitives), those topics are not addressed further in this cumulative effects discussion.

The actions considered in our cumulative effect analysis may vary from the Project in nature, magnitude, and duration. These actions are included based on the likelihood of their effects coinciding with the Project, meaning the other actions have current or ongoing effects or are "reasonably foreseeable." The actions we considered are those that could affect similar resources during the same time frame as the Project. Table 8 provides a list of identified past and reasonably foreseeable actions (federal, non-federal, and private) in the vicinity of the Project. As described in table 8, we identified nine projects with the potential to contribute to cumulative effects together with the proposed Project. The reasonably foreseeable cumulative effects for each resource area are discussed in the following sections.

Table 7 8: Geographic Scope by Resource for Cumulative Effects

Resource	Geographic Scope	Justification
Geology and Soils	Construction workspaces	Effects on soils and surficial geology are not expected to extend beyond the area of direct disturbance associated with the Project. Effects on subsurface geology would be limited to shallow excavations along the trenchline and equipment foundations.
Groundwater, Surface Water, and Wetlands	HUC-12 watersheds	Watersheds are natural, well-defined boundaries for surface water flow and commonly contribute to the recharge of groundwater resources. Effects on groundwater, surface water resources, wetlands, and aquatic resources could reasonably extend throughout a HUC-12 watershed.

Table 7 8: Geographic Scope by Resource for Cumulative Effects		
Resource	**Geographic Scope**	**Justification**
Vegetation, Wildlife, and Special-Status Species	HUC-12 watersheds	Consideration of effects within a HUC-12 watershed sufficiently accounts for effects on vegetation and wildlife (including fisheries, migratory birds, and special-status species) that would be directly affected by construction activities and for indirect effects, such as changes in habitat availability and displacement of transient species.
Land Use and Visual Resources	Within 1.0 mile of construction workspaces	Effects on general land uses would be restricted to the construction workspaces and the adjacent landscape up to 1 mile where indirect effects could occur. Assessing the effect based on the viewshed allows for the effect to be considered with any other feature that could have an effect on visual resources.
Socioeconomics	Jefferson County	The geographic scope of potential effect for socioeconomics was considered to include the county affected by project where most workers would be expected to reside during construction and operation of the Project. Affected counties would experience the greatest effects associated with employment, housing, public services, transportation, traffic, property values, and economy and taxes.
Air Quality – Construction	Within 0.25 mile of all active construction	Air emissions during construction would be limited to vehicle and construction equipment emissions and dust and would be localized to the Project's active construction work areas and areas adjacent to these active work areas.
Noise – Construction	NSAs within 0.25 mile of construction activity	Areas in the immediate proximity of pipeline would have the potential to be affected by construction noise.

Table 9: Projects with the Potential to Result in Cumulative Effects				
Project Name	**Project Description**	**Anticipated Date of Construction/ Status**	**Distance from Project (miles)**	**Potentially Affected Resources**
Golden Pass LNG Terminal[1]	LNG Terminal	Ongoing construction	Collocated	Water, Vegetation, Wildlife, Socioeconomics, Geology, Soils, Land Use, Air Quality, Noise
Kinder Morgan Trident Intrastate Pipeline Project[1]	216-mile-long natural gas pipeline and interconnect station	2026	Collocated	Water, Vegetation, Wildlife, Socioeconomics, Geology, Soils, Land Use, Air Quality, Noise
Kinder Morgan LP Delivery Station[1]	Natural gas pipeline and interconnect station	2027	Collocated	Water, Vegetation, Wildlife, Socioeconomics, Geology, Soils, Land Use, Air Quality, Noise

Table 9: Projects with the Potential to Result in Cumulative Effects

Project Name	Project Description	Anticipated Date of Construction/ Status	Distance from Project (miles)	Potentially Affected Resources
Golden Pass NGPL Spur/Sabine Spur[1]	Natural gas transmission	Operational (installed 2024)	≤0.01	Water, Vegetation, Wildlife, Socioeconomics, Soils, Land Use
Cheniere Midstream Services, LLC[1]	Unspecified Natural Gas Liquid transmission pipeline	Under development	0.09	Water, Vegetation, Wildlife, Socioeconomics, Soils, Land Use
Cheniere Energy, Inc. Sabine Crossing[1]	Natural gas transmission line	Under development	0.05	Water, Vegetation, Wildlife, Socioeconomics, Land Use
Kinder Morgan Louisiana Pipeline LLC, Texas Header Project[2]	Planned natural gas transmission line	Under development	Collocated	Water, Vegetation, Wildlife, Socioeconomics, Geology, Soils, Land Use
Golden[3] Triangle Storage, LLC Spindletop Expansion Project	Natural gas storage facility expansion	Under development	~20 miles northwest of Golden Pass LNG Terminal	Water, Vegetation, Wildlife, Socioeconomics,
Port Arthur LNG Liquefaction and Expansion Project	Phase I and Phase II of the Port Arthur Liquefaction Project	Ongoing construction	~2 miles northwest of Golden Pass LNG Terminal	Water, Vegetation, Wildlife, Socioeconomics,

Data Source: [1]Golden Pass LNG August 1, 2025 Application Amendment, Resource Report 1, table 1.10 at page 32, eLibrary accession no. 20250801-5212.
[2]Informational Postings :: Kinder Morgan Louisiana Pipeline LLC.
[3] Golden Triangle Storage, LLC March 31, 2025 Application, eLibrary accession no. 20250331-5388

10.1 Geology and Soils

The Project's effects on geology and soils would be highly localized and limited primarily to the workspaces during the period of active construction; cumulative effects on geology and soils would only occur if other geographically overlapping or abutting projects were constructed at the same time and place as the Project and the exposure of soils to erosion and sedimentation occurs. Of the projects identified in table 8, four were determined to be within the geographic and temporal scope for geology and soil resources: the Golden Pass LNG Terminal; the Trident Intrastate Pipeline; the Delivery Station; and the Header Project. The temporary workspaces for these projects could overlap with this Project, resulting in minor, short-term

impacts on soils. However, these FERC-jurisdictional projects would implement mitigation measures from the FERC Plan and effects on soils and geologic resources would last only until restoration and/or revegetation. Based on this information, we conclude that cumulative effects on geology and soils would not be significant.

10.2 Groundwater

The Project would contribute negligibly to cumulative effects on groundwater resources as no withdrawal of groundwater is proposed except as necessary for dewatering excavations for foundations and header piping. Of the projects identified in table 8, all nine were determined to be within the geographic and temporal scope (the same HUC-12 sub-watersheds) for groundwater resources. We concluded in Section B that effects from Project on groundwater resources would be short term, lasting only until any dewatering were completed and disturbed areas were restored, would not extend far from the areas of ground disturbance, and would not be significant. Based on the scope and overlapping footprint of impacts for the Project and other projects in the geographic scope relative to the size of the affected HUC-12 sub-watersheds, resulting effects are anticipated to be minor and highly localized and would not result in significant cumulative effects on groundwater resources.

10.3 Surface Water

The geographic scope established for surface water and wetlands is the HUC-12 subwatersheds crossed by the Project. Of the projects identified in table 8, all nine were determined to be within the geographic and temporal scope (the same HUC-12 sub-watersheds) for surface water resources.

Construction activities within the geographic scope for surface water and wetland resources could result in effects including increases in turbidity and sedimentation, depletion of dissolved oxygen levels, and decreased water quality during and immediately following their construction. Primary effects on these resources would result from alteration of vegetation within or adjacent to these resources during clearing, excavation, rutting, compaction, and mixing of topsoil and subsoil. Additionally, inadvertent spills could affect water quality. These effects would be the greatest during and immediately following concurrent construction of the proposed Project and other projects within the HUC-12 subwatershed.

The Kinder Morgan Trident Intrastate Pipeline Project is projected to affect 109.9 acres of wetlands, the Kinder Morgan LP Delivery Station would affect 2.1 acres of wetlands, the Golden Pass NGPL Spur/Sabine Spur Project would affect 8.9 acres of wetlands, the Cheniere Midstream Services, LLC Project would affect 44.4 acres of wetlands, Cheniere Energy Inc. Sabine Crossing would affect 23.5 acres, and the Golden Triangle Storage, Spindletop Expansion Project would affect 2.6 acres.[16] The Golden Pass LNG Terminal previously affected 387.7 acres of wetlands to develop the site; however, no additional wetland effects are anticipated from ongoing construction activities at the Golden Pass LNG Terminal.[17] The Port Arthur LNG Project permanently affected 724 acres of wetlands during site development; however, no additional wetland impacts are anticipated for continued construction of Phase I and the Phase II

[16] Golden Pass LNG's August 1, 2025 Supplemental filing Accession number 20250801-5214

[17] July 29, 2016, Final Environmental Impact Statement for Golden Pass LNG Export Project. Accession Number: 20160729-4002.

Expansion.[18] These Projects have either already consulted or would be required to consult with United States Army Corps of Engineers for any aspects that affect jurisdictional waters of the United States to obtain the appropriate Clean Water Act permits that require mitigation for wetland impacts and as applicable, compensatory mitigation for wetland loss.

The Project and other FERC regulated projects would follow the FERC Plan and Procedures, while the other projects would be regulated by other applicable federal and state regulations and adhere to any pertinent best management practices or mitigation measures. As previously mentioned, Golden Pass LNG would minimize effects to waterbodies and wetlands by following the FERC Plan and Procedures and its SPCC Plan. Developers of other projects would likely follow standard erosion and sediment control practices similar to those proposed by Golden Pass LNG to avoid and minimize effects on wetlands and waterbodies, including effects on water quality, in accordance with sections 401 and 404 of the Clean Water Act (CWA), and may implement procedures to prevent spills of hazardous materials from reaching surface water and wetland resources in accordance with the CWA. Therefore, we conclude that the Project would not result in significant cumulative effects on surface water resources.

10.4 Wildlife, Vegetation, and Special Status Species

The geographic scope established for wildlife, vegetation, and threatened and endangered species is the HUC-12 subwatersheds crossed by the Project. The projects identified within the geographic scope that could potentially be under construction at the same time as the Project are the are the Golden Pass LNG Terminal, the Port Arthur LNG Terminal, the Kinder Morgan Trident Intrastate Pipeline Project, the Kinder Morgan LP Delivery Station, Kinder Morgan Louisiana Pipeline LLC Texas Header Project, Cheniere Midstream Services, LLC natural gas pipeline, the Golden Triangle Storage, Spindletop Expansion Project, and the Cheniere Energy Inc. Sabine Crossing natural gas transmission line.

The ESA prohibits the take of any threatened and endangered species except under federal permit of take statement. Any other federal development projects in the cumulative effects area would be required to comply with Section 7 of the ESA to ensure construction and operation of the facilities would not jeopardize the continued existence of federally listed species. Non-federal projects would also adhere to Section 10 of the ESA. As discussed in Section B.4.4, the Project would either have no effect or would not adversely affect federally listed species. Therefore, the Project would not result in significant cumulative effects on federally listed species.

Given the minor, temporary effects on vegetation and wildlife from the Project, and the abundant available habitat within the geographic area surrounding the Project, we conclude that the Project would not result in significant cumulative effects on vegetation or wildlife.

10.5 Socioeconomics

The Golden Pass LNG Terminal, Port Arthur LNG Terminal, Kinder Morgan Trident Intrastate Pipeline Project, Kinder Mogan LP Delivery Station Project, Golden Pass NGPL

[18] April 28, 2003 Supplemental Environmental Assessment for Port Arhtur LNG Expansion Project, Accession Number: 20230428-3014.

Spur/Sabine Spur Project, Cheniere Midstream Services, LLC pipeline, Cheniere Energy, Inc. Sabine Crossing Project, the Golden Triangle Storage Spindletop Expansion Project, and the Kinder Morgan Louisiana Pipeline LLC, Texas Header Project are within the geographic scope of the Project. In addition, we acknowledge that throughout Jefferson County there are multiple oil and gas well construction activities, various TXDOT roadway projects, and residential development projects that may be under construction concurrently with the proposed Project.[19] Construction of the Project is anticipated to begin in June 2026 and last approximately 15 months. If the projects identified in table 8 overlap during construction and nonlocal workers are hired for the projects, there could be a temporary cumulative effect to housing, public services, and traffic. However, there may be a temporary beneficial effect to employment for Jefferson County, TX.

Given the size of the population within Jefferson County (about 251,496 people), the operational cumulative effects would be minor for housing. The Project, in combination with other projects in the area, would increase the burden on health care, local police, and fire services and traffic; however, given the minor scope of the proposed Project, we expect the incremental effects would be negligible. There would be a net, although minor, beneficial cumulative effect to employment during operation of these projects. Therefore, we conclude that cumulative effects of the proposed Projects on socioeconomics, when added to the identified past, present, and reasonably foreseeable future projects, would be temporary and not be significant.

10.6 Land Use and Visual Resources

The nine projects listed in table 8 are within the geographic and temporal scope for land use and visual resources as the Project. As noted in table 8, the Golden Pass NGPL Spur/Sabine Spur was completed in 2024 and Open Land impacts have reverted to original land use type and function. Although construction activities within the Golden Pass LNG and Port Arthur LNG Terminals are ongoing, active work is primarily contained within the site. Final restoration of the Projects would follow FERC's Plan and Procedures for restoring the workspaces following construction, and the size of new, permanent aboveground facilities would be relatively small and low profile in rural settings.

The Kinder Morgan Delivery Station project may be visible from areas where the Project would have visual effects. The majority of visual effects would last about 15 months during active construction activities for the lateral pipeline, or lasting the duration of the nearby projects where permanent aboveground facilities would be constructed. The Project would be constructed and operated in a remote, rural area where visual effects would affect a limited number of users and would not be significant. Cumulative effects on land use, recreation, and visual resources would not be significant.

The Project would be entirely co-located with existing utility corridors, at or near areas classified as Industrial land use which would reduce visual cumulative effects. The Project facilities would fit in with the existing landscape character of the area. We do not anticipate the Project would result in significant visual or land use cumulative impacts.

[19] Golden Pass LNG August 1, 2025 Application Amendment, Table 1.9. Accession number: 20250801-5212.

10.7 Air Quality and Noise

The ongoing construction at the Golden Pass LNG Terminal, the Trident Intrastate Pipeline, and the Kinder Morgan Delivery Station were identified within the geographic scope for cumulative construction air and noise effects when considered in tandem with the Project. Construction equipment and vehicles would emit air pollutants in the immediate vicinity of the Project, with soil excavation and other construction activities resulting in short-term fugitive dust and tailpipe emissions. The Project and projects identified in table 8 would be required to comply with all applicable federal air quality permitting programs and Golden Pass LNG proposes mitigation measures for both fugitive emissions and exhaust emissions from construction equipment. There is a potential for construction emission overlap, however these would be small, very limited construction projects. Construction emissions from any potential concurrent construction of the Project and the projects identified in table 8 would be highly localized, temporary, and intermittent. Therefore, we conclude that cumulative construction air quality effects would not be significant. Operation of the Project would be limited to de minimus releases from the new facility components. Based on the limited scope of operational emissions, we conclude that cumulative operational effects in the surrounding area would not be significant.

Construction of the Project, if concurrent with the Projects identified above could result in cumulative construction noise in the Project area. As construction is slated to occur during daytime hours and the scope of facilities is limited, we expect effects would be localized and temporary. We conclude that cumulative noise effects in the surrounding area would not be significant.

10.8 Climate Change

Climate change is the variation in the Earth's climate (including temperature, precipitation, humidity, wind, and other meteorological variables) over time. Climate change is driven by accumulation of GHG in the atmosphere due to the increased consumption of fossil fuels (e.g., coal, petroleum, and natural gas) since the early beginnings of the industrial age and accelerating in the mid- to late-20th century.[20] The GHGs produced by fossil-fuel combustion are CO_2, methane, and N_2O.

In 2017 and 2018, the U.S. Global Change Research Program (USGCRP)[21] issued its *Climate Science Special Report: Fourth National Climate Assessment*, Volumes I and II.[22] This report and the report by the Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis*, states that climate change has resulted in a wide range of impacts across every region of the country and the globe. Those impacts extend beyond atmospheric

[20] Intergovernmental Panel on Climate Change, United Nations, *Summary for Policymakers* of Climate Change 2021: The Physical Science Basis. (Valerie Masson-Delmotte et al., eds.) (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (IPCC Report) at SPM 5. Other forces contribute to climate change, such as agriculture, forest clearing, and other anthropogenically driven sources.

[21] The U.S. Global Change Research Program is the leading U.S. scientific body on climate change. It comprises representatives from 13 federal departments and agencies and issues reports every 4 years that describe the state of the science relating to climate change and the effects of climate change on different regions of the United States and on various societal and environmental sectors, such as water resources, agriculture, energy use, and human health.

[22] U.S. Global Change Research Program, Climate Science Special Report, Fourth National Climate Assessment | Volume I (Donald J. Wuebbles et al. eds) (2017), https://science2017.globalchange.gov/downloads/CSSR2017_FullReport.pdf (USGCRP Report Volume I); U.S. Global Change Research Program, Fourth National Climate Assessment, Volume II Impacts, Risks, And Adaptation In The United States (David Reidmiller et al. eds.) (2018), https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf (USGCRP Report Volume II).

climate change alone and include changes to water resources, agriculture, ecosystems, human health, and ocean systems.[23] According to the Fourth Assessment Report, the United States and the world are warming; global sea level is rising and oceans are acidifying; and certain weather events are becoming more frequent and more severe.[24] These impacts have accelerated throughout the end of the 20th and into the 21st century.[25]

GHG emissions do not result in proportional local and immediate impacts; it is the combined concentration in the atmosphere that affects the global climate. These are fundamentally global impacts that feed back to local and regional climate change impacts. Thus, the geographic scope for cumulative analysis of GHG emissions is global rather than local or regional. For example, a project 1 mile away emitting 1 ton of GHG would contribute to climate change in a similar manner as a project 2,000 miles distant also emitting 1 ton of GHG.

Climate change is a global phenomenon; however, for this analysis, we would focus on the existing and potential climate change impacts in the general Project area. The USGCRP's Fourth Assessment Report notes the following observations of environmental impacts attributed to climate change in the Southeast region of the United States:[26]

- the near decade of 2010 through 2017 has been warmer than any previous decade since 1920 for average daily maximum and average daily minimum temperature;
- since 1960, there have been lower numbers of days above 95°F compared to the pre-
- 60 period but during the 2010's the number of nights above 75°F has been nearly double the average over 1901 – 1960. The length of the freeze free season was 1.5 weeks longer on average in the 2010s compared to any other historical period on record;
- the number of days with 3 or more inches of rain has been historically high over the past 25 years. The 1990s, 2000s, and 2010s rank first, third, and second, respectively in the number of these events;
- summers have been either increasingly dry or extremely wet, depending on location;
- due to a combination of sea level rise and soil subsidence, approximately 2,006 square miles of land have been lost in Louisiana between 1932 and 2016, or about 23 square miles per year; and
- in south Louisiana, relative sea level is rising at a rate of 1 to 3 feet per 100 years.

The USGCRP's Fourth Assessment Report notes the following projections of climate change impacts in the Southeast region with a high or very high level of confidence. [27]

- climate models project nighttime temperatures above 75°F and daytime maximum temperatures above 95°F become the summer norm. Nights above 80°F and days above 100°F, which are now relatively rare, would become common;

[23] IPCC Report at SPM-5 to SPM-10.
[24] USGCRP Report Volume II at 73-75.
[25] See, e.g., USGCRP Report Volume II at 99 (describing accelerating flooding rates in Atlantic and Gulf Coast cities).
[26] USGCRP Report Volume I and II.

[27] USGCRP Report Volume II.

- lowland coastal areas are expected to receive less rainfall on average, but experience more frequent intense rainfall events followed by longer drought periods;
- coastal areas along the Gulf of Mexico are flat; therefore, expected sea level rises may cause inundation in certain low-lying areas;
- drought and sea level rise will create stressful conditions for coastal trees that are not adapted to higher salinity levels;
- other coastal species may also be stressed by sea level rise and warmer temperatures, prompting migration out of the area; and
- tropical storms and hurricanes may become more intense.

It should be noted that while the impacts described above taken individually may be manageable for certain communities, the impacts of compound events (such as simultaneous heat and drought, wildfires associated with hot and dry conditions, or flooding associated with high precipitation on top of saturated soils) can be greater than the sum of the parts.[28]

The GHG emissions associated with the Project were identified and quantified in section B.8 of this EA. Emissions of GHG are typically expressed in terms of CO_2e.[29] Construction CO_2e emissions from the Project are estimated to be 215.93 tons (195.89 metric tons). Operational CO_2e emissions from the Project are limited to fugitives and blowdown releases, estimated to be 771.05 tpy (699.49 metric tpy). Regarding potential downstream emissions, we note the purpose of the Project is to provide supply diversity to the terminal and enable Golden Pass LNG to continue to receive feed gas in the event of an operational disruption. Natural gas transported by the Project facilities would be liquefied and exported as LNG overseas. The courts have explained that because the authority to authorize LNG exports rests with the Department of Energy, NEPA does not require the Commission to consider the downstream GHG emissions that may be indirect effects of the export itself when determining whether the related facility satisfies section 3 of the NGA.[30] Therefore, we do not address downstream GHG emissions in this EA.

Construction and operation of Project facilities would increase the atmospheric concentration of GHG in combination with past, current, and future emissions from all other sources globally, and would contribute incrementally to future climate change impacts. To assess impacts on climate change associated with the Project, Commission staff considered whether it could identify discrete physical impacts resulting from the Project's GHG emissions or compare the Project's GHG emissions to established targets designed to combat climate change.

To date, Commission staff have not identified a methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs. Without the ability to determine discrete resource impacts, Commission staff are unable to assess the Project's contribution to climate change through any objective

[28] USGCRP Report Volume II.

[29] GHG gases are converted to CO2e by means of the GWP; the measure of a particular GHG's ability to absorb solar radiation; and its residence time within the atmosphere, consistent with the USEPA's established method for reporting GHG emissions for air permitting requirements that allows a consistent comparison with federal regulatory requirements.

[30] *See Freeport*, 827 F.3d at 46-47; *Ctr. for Biological Diversity* v. FERC, 67 F.4th 1176, 1185 (D.C. Cir. 2023); *see also Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017) (*Sabal Trail*) (discussing *Freeport*).

analysis of physical impact attributable to the Project. Additionally, Commission staff have not been able to find an established threshold for determining the Project's significance when compared to established GHG reduction targets at the state or federal level. Ultimately, this EA is not characterizing the Project's GHG emissions as significant or insignificant.[31] However, as we have done in prior NEPA analyses, we disclose the Project's GHG emissions in comparison to national and state GHG emission inventories.

In order to provide context of the Project GHG emissions on a national level, we compare the Project GHG emissions to the total current GHG emissions inventory for the United States as a whole. At a national level, 5,489.0 million metric tons of CO_2e were emitted in 2022 (inclusive of CO_2e sources and sinks).[32] Construction emissions from the Project could potentially increase CO_2e emissions based on the national 2022 levels by 0.000004 percent. Operational fugitive emissions from the Project could potentially increase CO_2e emissions based on the national 2022 levels by 0.00001 percent.

To provide context on a state level, we compare the Project's estimated GHG emissions to the state emission inventories. The Project's construction emissions would occur in Texas. At a state level, 669.9 million metric tons of CO_2 were emitted in 2023 from energy related sources.[33] Project construction could potentially increase CO_2 emissions based on statewide 2023 levels by 0.00003 percent. Operational fugitive emissions from the Project could potentially increase CO_2e emissions based on the statewide 2023 levels by 0.0001 percent.

We also typically compare a project's operational emissions in the context of state GHG reduction goals.[34] At the time of this assessment, the state of Texas did not have GHG reduction targets established.

[31] *See e.g.*, *Driftwood Pipeline LLC*, 183 FERC ¶ 61,049, at P 63 (2023) ("…there currently are no accepted tools or methods for the Commission to use to determine significance, therefore the Commission is not herein characterizing these emissions as significant or insignificant.").

[32] USEPA (2024) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022. U.S. Environmental Protection Agency, USEPA 430-R-24-004. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissionsandsinks-1990-2022 .

[33] U.S. Energy Information Administration (2025). "State carbon dioxide emissions from fossil fuels tables." https://www.eia.gov/environment/emissions/state/

[34] We reviewed the U.S. State Greenhouse Emission Targets site for individual state requirements at: https://www.c2es.org/document/greenhouse-gas-emissions-targets/.

C. ALTERNATIVES

In accordance with NEPA and Commission policy, we identified and evaluated alternatives to the facilities proposed by Golden Pass LNG. Alternatives were evaluated using a specific set of criteria. The evaluation criteria applied to each alternative include a determination whether the alternative:

- meets the objectives of the proposed Project;
- has technical and economic feasibility and practicality; and
- offers a significant environmental advantage over the proposed Project.

The alternatives were reviewed against the evaluation criteria in the sequence presented above. The first consideration for including an alternative in our analysis is whether or not it could satisfy the stated purpose of the Project. A preferable alternative must meet the stated purpose of the Project, which is to provide supply diversity to the terminal and enable Golden Pass LNG to continue to receive feed gas in the event of an operational disruption on or upstream of its primary supply pipeline, Golden Pass Pipeline. The proposed pipeline is located entirely within the Golden Pass LNG property and would have a capacity of 2.6 MDth/d and 18 MTPA.

It is important to recognize that not all conceivable alternatives can meet the Project's purpose, and an alternative that does not meet the Project's purpose cannot be considered a viable alternative. We considered the no-action alternative, system alternatives, and project siting alternatives. Our evaluation of alternatives is based on Project-specific information provided by Golden Pass LNG, publicly available information, our consultations with federal and state resource and permitting agencies, our expertise and experience regarding the siting, construction, and operation of natural gas projects and such projects' potential environmental effects, and the specific environmental effects associated with the Project, as described in section B of this EA.

1. No-Action Alternative

NEPA requires the Commission to consider and evaluate the No-Action Alternative. In instances involving federal decisions on proposals for projects, the no-action would mean the proposed activity would not take place and the resulting environmental effects from taking the no-action would be compared with the effects of authorizing the proposed activity.

Under the No-Action Alternative, Golden Pass LNG would not construct any component of the Project and, consequently, would be unable to meet the stated purpose and need. We have prepared this EA to inform the Commission and stakeholders about the expected effects that would occur if the Project facilities are constructed and operated. Based on our analysis in section B of this EA, we do not recommend the No-Action Alternative; however, the Commission will determine if the Project is inconsistent with the public interest and could choose the No-Action Alternative.

2. Alternative Locations

In the consideration of alternatives for the Supply Lateral Project, our review found that based on the limited environmental impact associated with this Project, we did not identify any unresolved resource conflicts that would present a need to examine site or system alternatives further. Additionally, no comments were received regarding resources that would be affected by

the Project that would drive further evaluation of siting alternatives. Because the effects associated with the Project would be minor and not significant, and the facilities would be located within Golden Pass LNG's property boundary, we did not evaluate additional alternatives.

3. Alternatives Conclusions

Overall, Commission staff conclude that approval of the Project would not result in significant environmental effects. We also conclude that no system or other alternative would provide a significant environmental advantage over the Project as proposed. Therefore, we conclude that the proposed Project, with our recommended mitigation measures, is the preferred alternative to meet the Project objectives.

D. STAFF'S CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations presented in this EA are those of the Commission's environmental staff. Based on the analysis in this EA, we have determined that if Golden Pass LNG constructs and operates the proposed facilities in accordance with its application and supplements, approval of the Project would not constitute a major federal action significantly affecting the quality of the human environment. We also conclude that the proposed Project, with our recommended mitigation measures, is the preferred alternative to meet the project objectives. If the Commission authorizes the Project, we recommend that the following measures be included as environmental conditions to any Authorization the Commission may issue:

1. Golden Pass LNG shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA, unless modified by the Order. Golden Pass LNG must:
    a. request any modification to these procedures, measures, or conditions in a filing with the Secretary;
    b. justify each modification relative to site-specific conditions;
    c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
    d. receive approval in writing from the Director of OEP, or the Director's designee, **before using that modification**.

2. The Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the Project. This authority shall allow:
    a. the modification of conditions of the Order;
    b. stop-work authority; and
    c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order, as well as the avoidance or mitigation of unforeseen adverse environmental effects resulting from Project construction and operation.

3. **Prior to any construction**, Golden Pass LNG shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, EIs, and contractor personnel would be informed of the EI's authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Golden Pass LNG shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the

Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

5. Golden Pass LNG shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP, or the Director's designee, **before construction in or near that area**.

   This requirement does not apply to extra workspace allowed by the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

   Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

   a. implementation of cultural resources mitigation measures;

   b. implementation of endangered, threatened, or special concern species mitigation measures;

   c. recommendations by state regulatory authorities; and

   d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

6. **Within 60 days of the acceptance of the authorization and before construction begins**, Golden Pass LNG shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. Golden Pass LNG must file revisions to the plan as schedules change. The plan shall identify:

   a. how Golden Pass LNG would implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;

   b. how Golden Pass LNG would incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to on-site construction and inspection personnel;

   c. the number of EIs assigned, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;

d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;

e. the location and dates of the environmental compliance training and instructions Golden Pass LNG would give to all personnel involved with construction and restoration (initial and refresher training would be provided as the Project progresses and personnel change).

f. the company personnel (if known) and specific portion of Golden Pass LNG's organization having responsibility for compliance;

g. the procedures (including use of contract penalties) Golden Pass LNG would follow if non-compliance occurs; and

h. for each discrete facility, a Gantt or PERT chart (or similar Project scheduling diagram) and dates for:

(1) the completion of all required surveys and reports;

(2) the environmental compliance training of on-site personnel;

(3) the start of construction; and

(4) the start and completion of restoration.

7. Golden Pass LNG shall employ at least one EI for the project. The EI(s) shall be:

a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;

b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;

c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;

d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and

e. responsible for maintaining status reports.

8. Beginning with the filing of its Implementation Plan, Golden Pass LNG shall file updated status reports with the Secretary on a **biweekly** basis until all construction and restoration activities are complete. Upon request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

a. an update on Golden Pass LNG's efforts to obtain the necessary federal authorizations;

b. the construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;

c. a listing of all problems encountered and each instance of non-compliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);

d. a description of the corrective actions implemented in response to all instances of non-compliance;

e. the effectiveness of all corrective actions implemented;

f. a description of any landowner/resident complaints that may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and

g. copies of any correspondence received by Golden Pass LNG from other federal, state, or local permitting agencies concerning instances of non-compliance, as well as Golden Pass LNG' response.

9. Golden Pass LNG must receive written authorization from the Director of OEP, or the Director's designee, **before commencing construction of any Project facilities.** To obtain such authorization, Golden Pass LNG must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

10. Golden Pass LNG must receive written authorization from the Director of OEP, or the Director's designee, **before placing the Project into service**. Such authorization would only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily.

11. **Within 30 days of placing the authorized facilities in service**, Golden Pass LNG shall file an affirmative statement with the Secretary, certified by a senior company official:

a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities would be consistent with all applicable conditions; or

b. identifying which of the conditions in the Order Golden Pass LNG has complied with or would comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

12. Golden Pass LNG shall **not begin** construction activities **until:**

a. FERC staff receives comments from the USFWS regarding the proposed action;

b. FERC staff completes ESA consultation with the USFWS; and

c. Golden Pass LNG has received written notification from the Director of OEP, or the Director's designee, that construction or use of mitigation may begin.

13. **Within 5 days of receipt of a water quality certification issued by Railroad Commission of Texas,** Golden Pass LNG shall file the complete certification, including all conditions. All conditions attached to the water quality certification constitute mandatory conditions of the Authorization Order. **Prior to construction**, Golden Pass LNG shall file, for review and written approval of the Director of OEP, or the Director's designee, any revisions to its project design necessary to comply with the water quality certification conditions.

APPENDIX A - LIST OF PREPARERS

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APPENDIX B - LIST OF REFERENCES

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