Office of
Energy Projects

January 2026

TTC Connector, LLC **Docket No. CP25-525-000**

TTC Connector Project

Environmental Assessment

Washington, DC 20426

NEPA Unique ID: EAXX-019-20-000-1759314183

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:
OEP/DG2E/Gas 2
TTC Connector, LLC
TTC Connector Project
Docket No. CP25-525-000

TO THE INTERESTED PARTY:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared an environmental assessment (EA) for the TTC Connector Project, proposed by TTC Connector, LLC (TTC) in the above-referenced docket.[1] TTC requests authorization to construct, own, and operate one new compressor station and approximately 25 miles of 20-inch-diameter pipeline in Colorado and Wharton counties, Texas. The proposed facilities are designed to provide 300,000 dekatherms (Dth) a day of firm transportation service from Enbridge Inc.'s Tres Palacios Gas Storage (Tres Palacios) to interconnects with Energy Transfer Partners, LP's Trunkline Pipeline, Gulf South Pipeline Company's Coastal Bend Header Interconnect Station, and a downstream point on Tres Palacios' system.

Any person wishing to comment on the EA may do so. To ensure consideration of your comments on the proposal prior to making a decision on the project, it is important that the Commission receive your comments **on or before 5:00pm Eastern Time on February 17, 2026**. Instructions for filing comments are provided on page 3.

FERC is the lead federal agency for authorizing interstate natural gas transmission facilities under the Natural Gas Act of 1938 (NGA) and the lead federal agency for preparation of the EA. The EA assesses the potential environmental effects of the TTC Connector Project in accordance with the requirements of the National Environmental Policy Act (NEPA)[2] and the Commission's implementing regulations.[3] The principal purposes of the EA are to: identify and assess the potential effects on the natural and human environment; describe and evaluate reasonable alternatives; identify and recommend mitigation measures; and facilitate public involvement in the environmental review process. The EA concludes that approval of the proposed project would not constitute a major federal action significantly affecting the quality of the human environment.

[1] For tracking purposes under the National Environmental Policy Act, the unique identification number for documents relating to this environmental review is EAXX-019-20-000-1759314183.

[2] National Environmental Policy Act of 1969, as amended (Public Law [Pub. L.] 91-190. 42 U.S.C. 4321–4347, as amended by Pub. L. 94-52, July 3, 1975; Pub. L. 94-83, August 9, 1975; Pub. L. 97-258, §4(b), September 13, 1982; Pub. L. 118-5, June 3, 2023; Pub. L. 119-21, July 4, 2025).

[3] 18 Code of Federal Regulations (CFR) 380.

The EA addresses the potential environmental effects of the construction and operation of the following project facilities:

- 25 miles of 20-inch-diameter pipeline;
- TTC Connector Compressor Station comprised of two compressor units, each having a name-plate horsepower (hp) of 5,500 hp;
- Tres Palacios Receipt Interconnect Point (connecting to an existing flanged valve), located within TTC Connector Compressor Station;
- Tres Palacios Delivery Interconnect Station, located within the fenced limits of the TTC Connector Compressor Station;
- a mainline valve assembly, located at approximately milepost (MP) 13.1;
- Trunkline Delivery Interconnect Station, located at approximately MP 23.8; and
- Coastal Bend Header Delivery Interconnect Station, located at approximately MP 24.8.

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 the 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 the 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, excluding the last three digits (i.e. CP25-525). 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.

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. Under section 7(c) of the NGA, the Commission determines whether interstate natural gas transportation facilities are in the public convenience and necessity and, if so, grants a Certificate of Public Convenience and Necessity to construct and operate them. The Commission bases its decisions on both economic issues, including need, and environmental effects.

Your comments should focus on the EA's disclosure and discussion of potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental effects. The more specific your comments, the more useful they will be.

For your convenience, there are three methods you can use to file 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 also file your comments electronically 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." You must select the type of filing you are making. If you are filing a comment on a particular project, please select "Comment on a Filing"; or

(3) You can file a paper copy of your comments by mailing them to the Commission. Be sure to reference the project docket number (CP25-525-000) 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.

For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, contact the Office of Public Participation at (202) 502-6595 or OPP@ferc.gov. Additional information about the project is available from 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.

In addition, the Commission offers a free service called eSubscription which 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
ATWS	additional temporary workspace
BMPs	best management practices
CAA	Clean Air Act
Certificate	Certificate of Public Convenience and Necessity
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
Dth	dekatherm
EA	Environmental Assessment
ECD	Erosion and sediment control devices
EI	environmental inspector
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
GHG	greenhouse gas
GWP	global warming potential
hp	horsepower
L_{dn}	day-night sound level
L_{eq}	equivalent sound level
LNG	liquified natural gas
MP	milepost
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NPDES	National Pollutant Discharge Elimination System
NEPA	National Environmental Policy Act
NGA	Natural Gas Act
NLCD	National Land Cover Database
NOA	Notice of Application
NOS	*Notice of Scoping Requesting Comments on Environmental Issues for the Proposed TTC Connector Project*
Notice	*Notice of Schedule for the Preparation of an Environmental Assessment for the TTC Connector Project*
NO_x	nitrogen oxides
NRHP	National Register of Historic Places
OEP	Office of Energy Projects

O_3	ozone
PAR	permanent access road
PHP	Permian Highway Pipeline
Plan	FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan*
Procedures	FERC's *Wetland and Waterbody Construction and Mitigation Procedures*
Project	TTC Connector Project
ROW	right-of-way
Secretary	Secretary of the Commission
SHPO	State Historic Preservation Officer
SO_2	sulfur dioxide
SPRP	Spill Prevention Response Plan
TAR	temporary access road
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
tpy	Tons per year
TPWD	Texas Parks and Wildlife Department
TTC	TTC Connector, LLC
TWDB	Texas Water Development Board
TWS	temporary workspace
TXDOT	Texas Department of Transportation
U.S.	United States
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 Commission's environmental staff has prepared this environmental assessment (EA) to assess the potential environmental effects that could result from the construction and operation of the TTC Connector Project (Project), as proposed by TTC Connector, LLC (TTC) in Docket No. CP25-525-000. On July 21, 2025, TTC filed an application for a Certificate of Public Convenience and Necessity under Section 7(c) of the Natural Gas Act (NGA) as amended, and Part 157 of the Commission's regulations. TTC proposes to construct and operate a new compressor station and approximately 25 miles of 20-inch-diameter pipeline in Colorado and Wharton counties, Texas. The proposed Project would provide 300,000 dekatherms (Dth) per day of firm transportation service from Enbridge Inc.'s Tres Palacios Gas Storage (Tres Palacios) to interconnects with Energy Transfer Partners, LP's Trunkline Pipeline, Gulf South Pipeline Company's Coastal Bend Header Interconnect Station, and at a downstream point on Tres Palacios' system.

2. Project Purpose and Need

TTC states that the Project purpose is to enable the delivery of low nitrogen, processed natural gas from the Houston Central plant to the Freeport Liquefied Natural Gas (LNG) terminal for export and to ensure the gas is delivered at sufficient pressure to overcome higher pressure flows from adjacent infrastructure. Due to its intended function and interconnection points, TTC states that the Project must be located in reasonable proximity to the Tres Palacios, Trunkline, and Coastal Bend Header pipelines.

2.1 Scope of This Environmental Assessment

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 Project. This EA also presents our[1] conclusions and additional measures that we recommend the Commission adopt as mandatory environmental conditions of any authorization it may issue to TTC for the Project.

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 TTC and its consultants.

2.2 Public Participation and Comments

TTC filed its formal FERC application on July 21, 2025, in Docket No. CP25-525-000. On August 4, 2025, the FERC issued a Notice of Application (NOA) that described ways to

[1] "We," "us," and "our" refer to the Commission's environmental and engineering staff of the Office of Energy Projects.

become involved in the Commission's review of the Project. The comment period to respond to the NOA for CP25-525-000 closed on September 3, 2025.[2]

We received five comments on the NOA from potentially affected landowners. Commenters questioned whether the public necessity for the Project has been demonstrated. Also, commenters noted a lack of economic analysis demonstrating public benefits of the project and further questioned the validity of using eminent domain for private financial gain. The public necessity for the Project will be determined by the Commission in its order for the Project. The Commission bases its decisions on both economic issues, including need, and environmental effects. Project need and public benefits are not addressed further in this EA as these issues are not within the scope of our environmental analysis. Regarding eminent domain, if the Commission approves the Project, the NGA conveys the right of eminent domain to the Project applicant. The Commission does not grant, exercise, or oversee the exercise of eminent domain authority. The courts have exclusive authority to handle eminent domain cases; the Commission has no jurisdiction over these matters.

Commenters noted a lack of an environmental mitigation plan. Mitigation measures to reduce impacts during construction and restoration of the Project are discussed in section A.4 and throughout section B of this EA. Commenters noted that the Project would be located in rural areas and would cross agricultural lands, potentially affecting water resources and farming operations. Sections B.3 (Water Resources) and B.6 (Land Use), respectively, address these concerns. Commenters questioned whether TTC's analysis considered alternative routes or the use of existing infrastructure, rather than the Project's current design, requesting that an analysis of possible alternatives should be required before any certificate is granted. These comments are addressed in section C (Alternatives).

Commenters requested that we prepare an Environmental Impact Statement. In section D of this EA, we note that impacts from the proposed Project would result in a finding of no significant impact. Therefore, assessment of the Project in an EA is sufficient. Commenters also requested that the comment period be extended. We have reviewed all comment letters submitted prior to issuance of this EA, regardless of whether comments were received timely. All substantive environmental comments received have been addressed in this EA. Commenters also stated there was limited public outreach by TTC. The Commission requires applicants to notify affected landowners about projects that may impact their property, ensuring they have the opportunity to participate in the regulatory process. In addition, the Commission issues various notices, as described below, to facilitate public participation and is issuing this EA for public comment.

On September 10, 2025, the Commission issued in a *Notice of Scoping Period Requesting Comments on Environmental Issues for the Proposed the TTC Connector Project* (NOS) requesting comments by October 10, 2025. We received one comment in response to the NOS from the U.S. Environmental Protection Agency, Region 6 (EPA) and one comment from a potentially affected landowner (RC Hill Properties, LLC) who also filed comments in response to the NOA.

[2] All written comments are part of the FERC's public record for the Project and are available for viewing in e-library under docket number CP25-525. FERC accession no. 20250804-3038

The EPA's comments addressed water quality; dredge and fill impacts to waters of the United States; Clean Water Act (CWA) section 303(d); biological resources, habitat and wildlife; air quality; hazardous materials, hazardous waste, and solid waste; coordination with Tribal governments, and the National Historic Preservation Act (NHPA). The EPA's comments on the CWA included the suggestion that this EA address how the Project may affect ongoing restoration or protection efforts already in place from applicable total maximum daily loads of sediments. As noted in section A.6 (Permits, Approvals, and Regulatory Consultations), TTC consulted with United States Army Corps of Engineers for aspects of the Project that could affect jurisdictional waters of the United States and obtained the appropriate CWA permits that require mitigation for wetland effects from dredge and fill materials. The EPA recommended the EA address waste disposal, surface and groundwater contamination, and general conformity. These comments are addressed in section A.4.1 (Construction Methods), B.2 (Soils), and B.8 (Air Quality) of this EA. Biological resources, habitat and wildlife are addressed in section B.4 of this EA. The steps taken to consult with Tribal governments under section 106 of the NHPA are outlined in section B.5 (Cultural Resources), specifically in section B.5.3 (Tribal Outreach). The landowner (RC Hill Properties, LLC) expressed concerns regarding habitat destruction and the effects that would have on local wildlife. These comments are addressed in section B.4.3 of the EA. The landowner also expressed concerns regarding possible effects the Project would have on threatened and endangered species, and they questioned TTC's efforts to consult with the United States Fish and Wildlife Service (FWS) under the Endangered Species Act. These comments are addressed in section B.4.4 of the EA. RC Hill also suggested that TTC utilize HDD or auger drilling for pipeline construction to protect the land. These comments are addressed in section C.3.

On October 14, 2025, the Commission issued a *Notice of Schedule for the Preparation of an Environmental Assessment for the TTC Connector 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. We received no comments on the Notice.

3. Proposed Action

The TTC Connector Project would consist of the following facilities:

- 25 miles of 20-inch-diameter pipeline, of which 22.5 miles would parallel existing utility infrastructure;
- TTC Connector Compressor Station[3] comprised of two Caterpillar C3616 natural gas-fired compressor units, each having a name-plate horsepower (hp) of 5,500 hp;
- Tres Palacios Receipt Interconnect Point (includes metering and regulation) connecting to an existing flanged valve, located within TTC Connector Compressor Station;
- Tres Palacios Delivery Interconnect Station (includes metering and regulation), located within the fenced limits of the TTC Connector Compressor Station;
- one mainline valve assembly, located at approximately milepost (MP) 13.1;

[3] The TTC Compressor Station would not involve construction of building to shelter the two compressor units and instead would simply involve concrete-pad mounted installation.

- Trunkline Delivery Interconnect Station (includes metering), located at approximately MP 23.8; and
- Coastal Bend Header Delivery Interconnect Station (includes metering), located at approximately MP 24.8.

Figure 1 shows the general location of the Project facilities

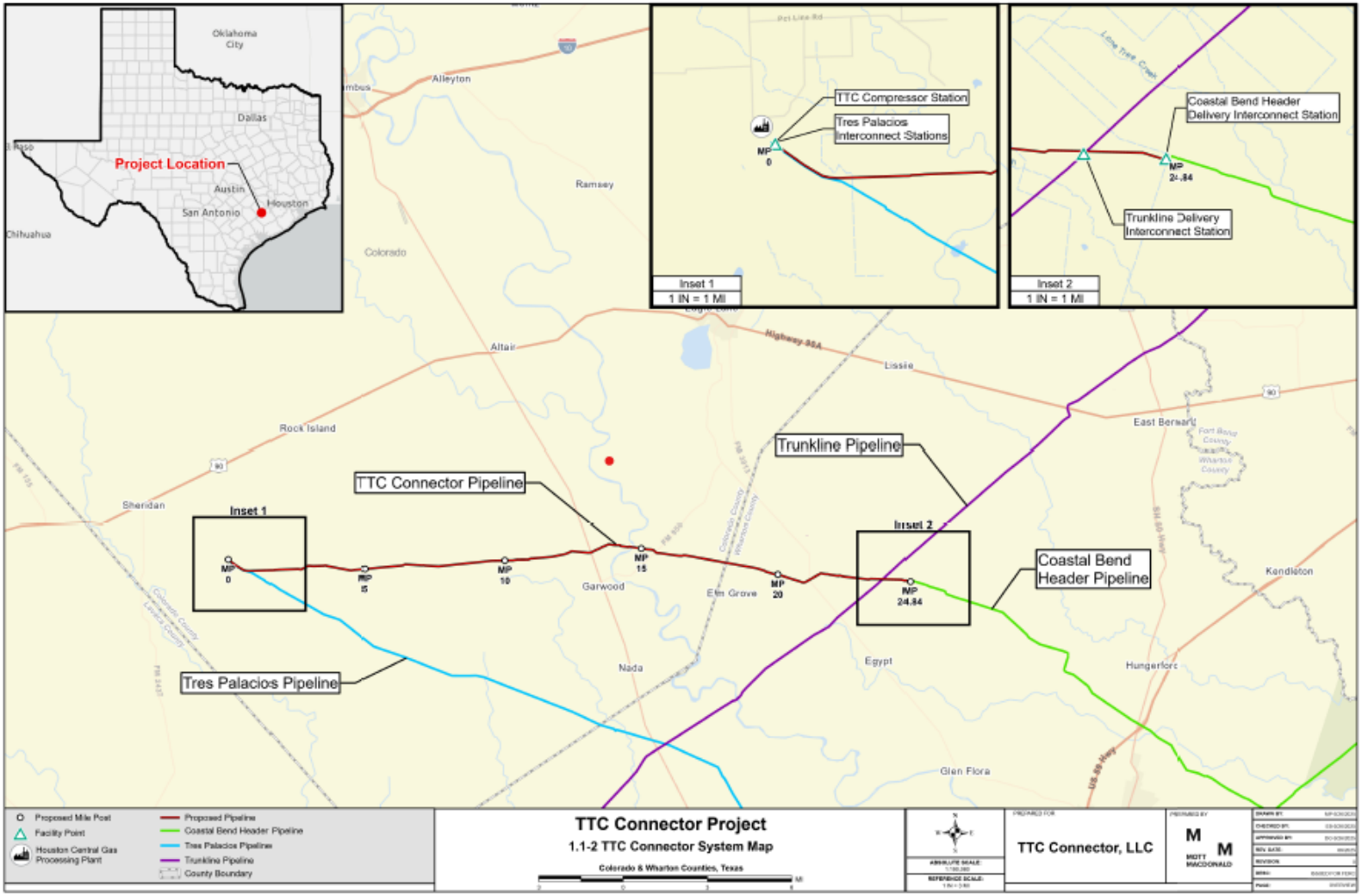

Figure 1: Project Overview Map

TTC proposes to utilize approximately 332 acres of land during construction, of which approximately 117 acres would be utilized during operation. In addition, approximately 36 acres would be affected by five permanent access roads (PAR) and six temporary access roads (TAR).

The Project would parallel Kinder Morgan Inc.'s existing Permian Highway Pipeline (PHP) for the majority of its length (about 90 percent). TTC would utilize an 80-foot-wide construction right-of-way that would include 50 feet of temporary workspace (TWS) on the working side of the right-of-way, subject to final easement negotiations with individual landowners. Following construction, TTC would maintain a 30-foot-wide permanent right-of-way for operation and maintenance of the pipeline.

TTC proposes the use of one contractor yard for construction. This contractor/pipe yard, located along Texas State Highway 71 in Colorado County, Texas, has been used for numerous pipeline projects historically and contemporarily. No permanent facilities would be constructed at this contractor yard in conjunction with the Project, nor would this yard be used for operational purposes after construction is completed.

Table 1 highlights the land use requirements for the proposed Project.

Table 1: Land Use Requirements for the TTC Connector Project (acres)

Facility	Construction	Operation
Pipeline	256.8	90
Aboveground Facilities		
TTC Compressor Station	3.82	1.82
Mainline Valve Site	0.12	0.06
Trunkline Delivery Interconnect Station	1.8	1.14
Coastal Bend Header Delivery Interconnect Station	1.01	0.81
Contractor Yard	32.12	0
Access Roads	36.06	22.48
Totals	**331.73**	**116.31**

Data Source: Adapted from TTC Connector, LLC's October 3, 2025 Supplemental filing at table 8.3. FERC accession no. 20251003-5098

3.1 Access Roads

Access to the Project area would be achieved via maintained state and county roads, existing public and private access roads, and through the use of permanent and temporary access roads. TTC would use existing TARs to transport equipment, crews, and materials to the construction right-of-way. PARs would be used to support regular and ongoing operational and maintenance activities (e.g., periodic inspections, right-of-way maintenance). Table 2 summarizes the land requirements for proposed access roads related to the Project.

Table 2. Proposed Access Roads

Facility	County	Location (milepost)	Length (miles)	Land Required for Operations (acres)	Land Required for Construction (TWS) (acres)	Total Land Required[1] (acres)
PAR-01	Colorado	0.00/offline	1.82	6.64	--	**6.64**
PAR-02	Colorado	0.00 offline	0.01	0.02	--	**0.02**
PAR-03	Colorado	13.15	0.13	0.47	--	**0.47**
PAR-04	Wharton	23.82	2.57	9.35	--	**9.35**
PAR-05	Wharton	24.84	1.66	6.0	--	**6.0**
TAR-01	Colorado	0.00/offline	2.98	--	10.82	**10.82**
TAR-02	Colorado	2.74	0.15	--	0.49	**0.49**
TAR-03	Colorado	3.69	0.06	--	0.21	**0.21**
TAR-04	Colorado	12.34	0.15	--	0.55	**0.55**
TAR-05	Wharton	19.02	0.37	--	1.35	**1.35**
TAR-06	Wharton	24.80	0.04	--	0.16	**0.16**
TOTALS			**9.94**	**22.48**	**13.58**	**36.06**

Notes: [1] Land temporarily disturbed includes aboveground facility temporary workspace and additional temporary workspace, ATWS
PAR = Permanent Access Road
TAR = Temporary Access Road
Data Source: TTC Connector, LLC July 21, 2025 Application, Resource Report 1, table 1.4. FERC accession no. 20251003-5098

4. Construction Workforce and Schedule

Construction and restoration of the Project is anticipated to take approximately 9 months. TTC proposes to commence clearing and grading in first/second quarter of 2026, with construction beginning in the second/third quarter of 2026, subject to receipt of all necessary regulatory approvals and permits. TTC anticipates placing its facilities into service in September of 2026, contingent on the Commission staff's determination that restoration is proceeding satisfactorily. Final restoration is anticipated in the third quarter of 2027. TTC anticipates the average full-time workforce for the Project would be 175 individuals, with a peak force of 250.[7] Hiring of new employees for operation of the Project facilities would be limited, as TTC has designed the Compressor Station and interconnects to be fully automated. Construction activities would generally occur during daytime hours (7am – 7pm), as TTC does not anticipate requiring nighttime construction, unless additional work time is required to complete a road or waterbody crossing. Because some road and waterbody crossings would be completed by horizontal directional drilling (HDD)[8], it is possible that a crossing would require that drilling operations that extend beyond typical daytime construction hours to increase the probability of a successful HDD crossing. If necessary, TTC has developed a Noise Mitigation Plan, as described in section 9.2.

[7] TTC Connector October 3, 2025 Environmental Information Request Response at 35; FERC accession no. 20251003-5098

[8] Horizontal Directional Drilling (HDD) is a trenchless construction method used to install underground utilities such as pipes, conduits, or cables with minimal impact on the surrounding area.

4.1 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. TTC would implement FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures).[9]

In order to minimize potential environmental effects, TTC has developed the following project-specific construction and reclamation plans,[10] which we have reviewed and find acceptable:

- Spill Prevention Response Plan (SPRP);
- HDD Contingency Plan (HDD Plan);
- HDD Noise Mitigation Plan;
- Plan for Unanticipated Contaminated Environmental Media;
- TTC Connector Project Unanticipated Discovery Plan;
- Stormwater Pollution Prevention Plan (SPRP);
- Site-specific Residential Construction Plan;
- Environmental Complaint Resolution Procedure;
- Emergency Response Plan;
- Fugitive Dust Control Plan;
- Noxious and Invasive Species Control Plan; and
- Revegetation Plan.

Constructing the pipeline would involve conventional overland construction techniques. This typically consists of a sequential process of survey staking, clearing, grading, trenching, pipe stringing and bending, welding, joint coating, padding, lowering-in, backfilling, hydrostatic testing, cleanup, and restoration. TTC would install the pipeline with a minimum of three feet of cover to the top of the pipeline, which is compliant with the USDOT Pipeline and Hazardous Materials Safety Administration minimal pipeline burial requirements. In agricultural areas, the pipeline would be buried at a minimum depth of four feet. At certain locations (e.g., road, waterbody, and other utility crossings), the pipe depth would accommodate five feet depth of cover. to maintain the integrity of the pipeline.

Following construction, TTC would restore disturbed areas to approximate preconstruction contours, and disturbed areas would be stabilized and revegetated. TTC would

[9] Copies of FERC's Plan and Procedures are available at https://www.ferc.gov/industries-data/natural-gas/environmental-overview/environmental-guidelines.

[10] Copies of TTC's Project-specific construction and reclamation plans have been filed with the Commission and can be viewed on eLibrary at http://www.ferc.gov/docs-filing/elibrary.asp under this docket. FERC accession no. 20250721-5043

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. Operational effects would occur along the permanent easement, aboveground facility permanent footprints, and permanent access roads.

The EPA recommended that the EA identify waste types, volumes, and management plans, as well as analyze the risk of transport for all debris or waste disposal generated by construction activities. TTC 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. TTC's operations and maintenance program includes corrosion control, leak inspection surveys, and regularly scheduled ground patrols of the pipeline right-of-way. Once construction and restoration is complete, TTC would remove surplus materials and equipment. All trash, litter, and debris would be collected for disposal in an approved solid waste disposal facility.

4.2 Horizontal Directional Drilling

TTC proposes to use HDDs at 3 of the 33 crossings where trenchless methods would be used to install the pipeline. The HDD method avoids effects on sensitive resources by installing the pipeline at a substantial depth beneath the resources. A small-diameter pilot bore is completed, and then subsequent swab passes enlarge the borehole until a pre-fabricated segment of pipeline is pulled back into the borehole from the exit point and welded to the pipeline at either end. Pressurized drilling mud consisting primarily of fresh water and bentonite, a non-toxic mineral, is injected into the borehole through the drilling head to stabilize the bore walls and flush cuttings out of the borehole into holding pits at the entry and exit points. The drilling mud may also include minor additives to adjust the properties of the mud to maximize its effectiveness. Prior to beginning HDD activities, TTC would submit a list of the proposed drilling mud additives to FERC for approval.

During HDD operations, the drilling mud remains inside the borehole except where it circulates out at the entry or exit point to be screened for cuttings and recirculated into the borehole. Depending on site-specific geologic conditions and drilling practices, drilling mud can extend beyond the immediate vicinity of the borehole along unknown preferential flow paths, resulting in an inadvertent return of drilling mud at the land surface. Should an inadvertent return of drilling mud occur to the land surface or to an aquatic resource, TTC would implement measures to limit effects on sensitive resources according to its HDD Plan.

Additional temporary workspace (ATWS) would be required at HDD crossings at the entry and exit points to accommodate the drilling rig, drill pipe, drilling mud systems, and other equipment. ATWS would also be needed at the HDD exit to accommodate fabricating and stringing the segment of pipeline to be pulled back and installed in the HDD borehole.

5. Environmental Compliance and Monitoring

TTC would assign an environmental inspector (EI) at each facility for the Project. TTC 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 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 Certificate and other federal and state permits or landowner requirements, and to order corrective action.

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

6. Permits, Approvals, and Regulatory Consultations

Table 3 provides a list of major federal and state environmental permits, approvals, and consultations for the Project. TTC would be responsible for obtaining all permits and approvals to construct and operate the Project, regardless of whether they appear in this table.

Table 3. TTC Anticipated Environmental Permits, Approvals, and Consultation

Agency	Permit, Approval, or Consultation	Status
FEDERAL		
Federal Energy Regulatory Commission	Certificate of Public Convenience and Necessity under 7(c) of the NGA	Pending
U.S. Army Corps of Engineers (USACE) – Galveston District	Nationwide 12 Permit under Section 404 of the Clean Water Act (CWA)	September 9, 2025
U.S. Environmental Protection Agency (EPA) (Region 6)	Water Quality Certification under Section 401 of the CWA National Pollutant Discharge Waste Elimination System (NPDES) Water Discharge Permit under Section 402 of the CWA	Water Quality Certification Issued by Railroad Commission of Texas
U.S. Fish and Wildlife Service (USFWS)—Texas Coastal Ecological Field Office	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 Fish and Wildlife Consultation under Section 2 of the Fish and Wildlife Coordination Act	September 5, 2025 Pending Pending
State of Texas		
Texas Historical Commission/SHPO	Consultation under Section 106 of the National Historical Preservation Act (NHPA)	July 9, 2025

Table 3. TTC Anticipated Environmental Permits, Approvals, and Consultation		
Agency	**Permit, Approval, or Consultation**	**Status**
Texas Parks and Wildlife Department (TPWD)	State listed rare, threatened and endangered species consultation PWD-994 Marl, Sand, Gravel, Shell, or Mudshell Permit Consultation with Kills and Spills (KAST) team: Permit to introduce fish, shellfish, or aquatic plants into public waters	Pending September 5, 2025 Pending
Texas Water Development Board Groundwater Division (TWDB)	Groundwater and drinking water resource consultation	Pending
Texas Commission on Environmental Quality (TCEQ)--Office of Water Water Supply Division, Public Drinking Water Section	Public Drinking Water Resources Consultation	Pending
Texas Commission on Environmental Quality; Office of Air	State Minor Source Permits-By-Rule applications (for interconnect stations) Oil & Gas Non-Standard Permit (for compressor station)	Pending
Railroad Commission of Texas (RRC)	CWA, Section 401, Water Quality Certification CWA Section 402, Application for a Permit to Discharge Hydrostatic Test Water	September 9, 2025 Permit required immediately prior to testing.
Texas Department of Transportation and Development	State road, highway, or interstate crossing permits	Pending
County/Local		
Colorado County; Floodplain Management	Floodplain Development Permit	Pending
Wharton County; Permits and Inspections	Floodplain Development Permit	Pending
Data Source: TTC's October 29, 2025, data response Table 2.5. FERC accession no. 20251029-5053		

7. 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. Under Section 7 of the NGA, the Commission is required to consider, as part of its decision to authorize jurisdictional facilities, all factors bearing on the public convenience and necessity.

There is one non-jurisdiction powerline associated with the Project. The Project would include the construction of a compressor station, which would be connected to an existing power line, located along the north edge of the proposed compressor station property line. This line is owned and operated by San Bernard Electric Co-Op. San Bernard Electric Co-Op would develop the extent of system modifications that would be necessary to support the additional load of the compressor station. Although the total scope is unknown, TTC's stated that it expects that all modifications would occur within the existing right-of-way. The construction of the powerline would be regulated under state and local jurisdiction. San Bernard Electric Co-Op would obtain all necessary federal and state permits prior to the construction of the powerline.

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. Construction and operation of the Project would have temporary, short-term, long-term, and permanent effects. 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 TTC'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. Geologic Resources

1.1 Geology

As discussed in section A.4.2, TTC proposed to use HDD crossing procedures. TTC has committed to complete geotechnical investigations and a feasibility assessment for each HDD bore to identify any additional risks associated with drill installation failure and define allowable drilling mud pressures based on the strength of the overlying geotechnical materials. To verify that proposed crossings are favorable for HDD installation and that any geotechnical concerns can be addressed with proper drilling techniques and equipment, **we recommend that the Commission's Order include a mandatory condition requiring that TTC not begin HDD construction activities until it files the results of the geotechnical investigations and feasibility assessments for each HDD** (see section D, recommended condition no. 13).

1.2 Mineral Resources

No active or abandoned mines or quarries are within 0.5 mile of the Project workspaces (Railroad Commission of Texas [RRC], 2025; State of Texas, 2025; U.S. Geological Survey [USGS], 2025a). Twenty-six oil or natural gas wells were identified within 0.25 mile of the Project workspaces. Of these wells, eight are permitted wells that are not yet installed and two are disposal or drain wells. Three of the remaining wells are within 150 feet of the Project workspaces (RRC, 2025). TTC would protect wells within 150 feet of proposed construction workspaces by coordinating with the well owners, and installing erosion and sediment control devices (ECD) and safety fence to protect the wellheads from equipment. Based on the limited mineral extraction sites near the Project and the well protection measures TTC would implement, we conclude that mineral resources would not be significantly affected as a result of the Project.

1.3 Geologic Hazards

Geologic hazards are natural, physical conditions that can result in damage to land and structures and injury to people. Such hazards in the Project region are typically related to flooding, ground subsidence, or earthquakes.

The Project is located 60 miles or more inland from the coast and has not been assigned a National Oceanic and Atmospheric Administration (NOAA) storm surge hazard rating (NOAA, 2025). Portions of the Project workspaces are mapped within Federal Emergency Management Agency (FEMA) Flood Zone A (100-year floodplain) (FEMA, 2025b). TTC does not propose to site aboveground facilities in Zone A floodplains. Where the pipeline would cross Zone A floodplains TTC would use construction methods in compliance with the Commission's Procedures, such as leaving a trench open for as short a period as feasible and installing ECDs and trench breakers to minimize the potential effects of flooding on the excavations. Once workspaces are restored and revegetated, there would be no significant effects on floodplain utility or from flooding on the Project facilities.

Ground subsidence can occur due to natural geologic or human processes, such as karst formation from dissolution of limestone or other soluble bedrock, withdrawal of groundwater or other fluids, and underground mine collapse. No karst terrain was identified in the Project areas (Texas Parks and Wildlife Division [TPWD], 2025). No active or abandoned underground mines were identified within 0.25 mile of the Project locations (RRC, 2025). Ground subsidence from groundwater withdrawal is well documented in the Houston, Texas, area; however, the subsidence rates decrease toward the Project area to less than 0.5 centimeter per year (Fort Bend Subsidence District, 2025). We conclude that the risk of geological hazards affecting the Project is not significant.

2. Soils

Based on the U.S. Department of Agriculture's Natural Resources Conservation Service's (USDA-NRCS) Web Soil Survey, some of the mapped soils within the Project area are described as having characteristics that limit suitability for development. These characteristics are: classification as prime farmland and farmland of statewide importance, compaction-prone soils, and soils susceptible to erosion (USDA-NRCS, 2025).

The EPA recommended that TTC prevent or minimize effects on soils from construction activities. TTC would follow measures in FERC's Plan and Procedures, such as installing and maintaining ECDs, testing for compaction and decompacting soils as necessary, and seeding within 20 days after backfilling to revegetate and protect soils from erosion. Temporarily disturbed areas would be restored to preconstruction land contours and conditions, in accordance with FERC's Plan.

About 228.1 acres of soils classified as prime farmland or farmland of statewide importance are present within the proposed right-of-way and workspaces. About 84.1 acres of these soils would be permanently affected during operations of the facilities, either for permanent pipeline right-of-way and access roads or for new aboveground facilities. The prime farmland acreage represents about 7 percent of the land that would be affected by the Project that is currently used for agriculture. TTC would restore these lands to their original contours within 20 days of the end of ground disturbance, in accordance with FERC's Plan and Procedures, and would monitor croplands until production on disturbed land is similar to adjacent, undisturbed

land. Accordingly, we conclude that the Project's effect on prime farmland soils would not be significant and effects on soils would be short-term and not significant.

The EPA recommended the EA address soil or groundwater contamination. Based on a review of publicly available databases of contaminated sites, two potential sources of soil or groundwater contamination were identified within 0.25 mile of the Project area (U.S. Environmental Protection Agency [EPA], 2024a and 2025; Texas Commission on Environmental Quality [TCEQ], 2025). TTC has developed an *Unanticipated Discovery of Contaminated Material Plan* that describes the procedures that TTC would follow in the event that unknown contaminated media is identified during construction activities. Furthermore, accidental spills of hazardous fluids such as oil, gasoline, or hydraulic fluids, could potentially affect soils. To reduce the potential for soil contamination, TTC would implement the Project *Spill Prevention and Response Procedures* (SPRP), which includes measures to avoid or minimize the potential for accidental releases and measures to clean up any releases.

Overall, we conclude that the Project would not result in significant effects on soils.

3. Water Resources

3.1 Groundwater

The Project occurs over the Gulf Coast Major Aquifer system (Texas Water Development Board [TWDB], 2016; TWDB, 2025a), which underlies the Coastal Plain Physiographic Providence extending from Texas into western Florida. The primary aquifers within the Gulf Coast Major Aquifer system are, from shallowest to deepest, the Chicot aquifer, the Evangeline aquifer, the Catahoula aquifer, and the Jasper aquifer. The water quality in the aquifers generally becomes more saline with depth (TWDB, 2016). TTC does not propose using groundwater for the Project.

There are no EPA-designated Sole Source Aquifers in the Project area (EPA, 2024b). Four private water supply wells are located within 150 feet of the Project workspaces; the nearest is 42 feet from temporary workspace near MP 17.5. TTC would coordinate with the owners of the wells near the workspaces and if a well is damaged by construction activities, TTC would provide a temporary water supply while the well is repaired or replaced if no other potable water source is readily available. There are no public or industrial water supply wells within 1 mile of the Project workspaces (TWDB, 2025b), and there are no springs or seeps within 150 ft of the Project workspaces (USGS, 2025d; Data Basin, 2025).

If trench dewatering is necessary, it would be performed in accordance with FERC's Plan and Procedures and applicable state and local permit requirements. Effluent would be discharged into well-vegetated uplands using temporary erosion controls or filtration devices.

Given TTC's proposed construction and restoration measures, including implementation of our Plan and Procedures, we conclude that effects from the Project on groundwater resources would be short term and would not be significant.

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 following HUC 12 watersheds: Upper Sandy Creek (121001020303), Upper Pinoak Creek (121001020304), Upper West Mustang Creek (121001020401), Marys Branch-Colorado River (120903020106), Town of Nada-Colorado River (120903020107), Robb Slough-Colorado River (120903020108), Clarks Branch-West Bernard Creek (120904010202), Peach Creek (120904010206), and Dry Creek-Colorado River (120903010712). The Project would cross 62 ephemeral streams, 17 intermittent waterbodies, and 8 perennial waterbodies.[11] Most waterbodies in the Project area would be crossed by a trenchless method such as a conventional bore or HDD. The rest of the waterbodies would be crossed using an open cut and two waterbodies would be permanently within the Trunkline Delivery Interconnect Station footprint.

TTC would use a dry open cut on waterbodies with water flowing at the time of construction. TTC would primarily use the dam and pump method for crossing waterbodies, and the flume method would be used for the other open cuts. TTC would use wet open-cut crossings on ephemeral waterbodies without surface flow at the time of crossing and if there is no risk to sensitive species and/or habitat.

Potential effects from waterbody crossings include increased sedimentation, turbidity, temporary loss of habitat, and erosion. Additional effects could include decreased dissolved oxygen concentrations, releases of chemical and nutrient pollutants from sediments, and introduction of chemical contaminants such as fuel and lubricants. There is also potential for an inadvertent return of drilling fluid during an HDD installation. Inadvertent returns could occur anywhere along the drill path and could result in increases in channel sedimentation and turbidity.

TTC would minimize effects to waterbodies by following the FERC's Plan and Procedures, its HDD Plan, and its SPRP. Some of these measures in these plans include installing ECDs, clearly marking buffers and waterbodies, and utilizing secondary containment around hazardous material. Following construction, if disturbance has occurred within or adjacent to a waterbody, the waterbody crossing would be restored to pre-construction contours, slope, and channel characteristics. Therefore, we conclude the Project would not significantly affect surface water resources.

TTC would obtain water from a sand pit, the Colorado River, and the lower Colorado river authority canals. TTC proposes to use 2,200,000 gallons of water for hydrostatic testing, 375,000 gallons for HDD and bores, and 720,000 gallons of dust suppression.[12] TTC stated hydrostatic test water would be discharged in a stable upland area and through an energy-dissipating device such as a splash plate. Temporary straw bales would be used to contain discharges, to dissipate energy, reduce velocities, and spread waterflow to avoid erosion and promote penetration. TTC proposes to use a discharge rate of 1,500 gallons per minute. Additionally, TTC does not plan to add any chemicals or biocides to hydrostatic test water. Since TTC would only discharge hydrostatic test water to well-vegetated upland areas, the Hydrostatic Test Discharge Permit would be obtained from the RRC, rather than Texas Commission on Environmental Quality (TCEQ). Given TTC's construction and restoration

[11] TTC's October 29, 2025, data response Table 2.5. FERC accession no. 20250721-5043
[12] TTC's October 3, 2025, Data Response at 14. FERC accession no. 20251003-5098

measures and above and TTC's adherence to the FERC Procedures, we conclude that water used during Project activities would not result in significant effects on water resources.

3.3 Wetlands

TTC conducted wetland delineations in Spring of 2025 to identify wetlands in the Project area. During these surveys TTC identified 42 palustrine emergent wetlands (PEM), one palustrine scrub/shrub wetlands (PSS), and two palustrine forested wetlands (PFO) in the Project survey area. Construction activities would temporarily affect 9.3 acres of wetlands and operation would permanently affect 5.3 acres of wetlands. The Project would permanently affect 0.6 acre of PFO wetlands and 4.7 acres of PEM wetland.[13] The Project would temporarily clear 1.1 acre of PFO wetland which would result in a long-term effect as these wetlands take longer to return to preconstruction conditions than PEM and PSS wetlands. Permanent effects on wetlands include permanent fill and structures (i.e., facilities, permanent access roads, permanent grading). The Project would not affect the PSS wetland as it is out of the workspace.

The proposed pipeline would be installed mostly via open trench construction methods, including within delineated wetlands. Typically, wetlands impacted by pipeline installation would be excavated and backfilled within 24 hours. Workspaces would be seeded and allowed to revegetate following the end of construction. TTC would implement the following measures to minimize impacts on wetlands including segregating topsoil in dry wetlands, installing filter fences across the right-of-way at the edge of wetlands, installing trench breakers on upland sides of wetland boundaries, and minimizing vegetation clearing and stump removal within wetlands. Due to these proposed mitigation measures, we conclude the Project would not significantly affect wetland resources.

4. Fisheries, Wildlife and Special Status Species

The EPA recommended that the EA address construction effects on wildlife habitat and listed endangered species and describe the mitigation that would be employed to minimize the effects. See sections 4.3 and 4.4 below.

4.1 Fisheries

Some of the waterbodies crossed by the Project are considered warmwater fisheries. Some common game and commercial fish species known to occur in waterbodies near the Project are the white crappie, black crappie, largemouth bass, flathead catfish, white bass, sunfish, blue catfish, bluegill, channel catfish, white striped bass, hybrid striped bass, and redear sunfish.

Potential effects on fisheries and aquatic resources include increases in turbidity, inadvertent spills of hazardous materials, construction lighting and shading, sedimentation from potential inadvertent return, impingement in water intake hoses, and construction and operation noise. Mobile aquatic species would likely avoid the Project area, but there could be mortality of less mobile invertebrate species from equipment or increased sedimentation.

TTC used the NOAA Essential Fish Habitat (EFH) Mapper to clarify that the Project does not overlap with any EFH habitat. TTC would adhere to the FERC Procedures and only conduct in-stream work in warmwater fisheries between June 1st and November 30th. Measures

[13] TTC's Application, Resource Report 2, Table 2.7, p. 29 FERC accession no. 20250721-5043

previously discussed for surface waters would also be protective of fisheries and aquatic resources, such as installing ECDs, clearly marking buffers and waterbodies, adhering to its HDD Plan, and utilizing secondary containment around hazardous material. Therefore, we conclude the Project would not significantly affect fishery resources.

4.2 Vegetation

During TTC's field surveys, it identified the following vegetation and habitat types: cultivated cropland, pasture/hay, woody wetlands, forests, developed land vegetation, emergent wetlands, shrub/scrub, barren land, grassland/herbaceous. Construction would temporarily affect 104.9 acres of cultivated cropland, 90.5 acres of pasture/hay, 3 acres of forest, 15.3 acres of low intensity developed vegetation, 0.3-acre shrub/scrub, and 0.1 acre of grassland/herbaceous. The Project would permanently affect 68.6 acres of cultivated cropland, 30.4 acre of pasture/hay, 0.5 acre of upland forest, 15.7 acre of acre of low intensity developed vegetation, less than 0.08 acre of barren land, and 0.07 acre of grassland.[14]

TTC Connector identified five invasive plant species during field surveys including perennial ryegrass, vaseygrass, annual bastard cabbage, Macartney rose, and chickweed. No noxious weeds, as identified by the state of Texas, were observed during field surveys.

Potential effects on the existing vegetation communities would occur from clearing, grading, and the potential spread of invasive plant species. TTC would restore and revegetate Project workspaces following construction in accordance with the FERC's Plan and Procedures. TTC would clean construction equipment prior to mobilization at the worksite and conduct restoration monitoring to prevent the spread of noxious weeds and invasive plant species. Additionally, TTC plans to consult with the USDA-NRCS to develop seed mixes for areas where the landowner has not specifically requested seed mixes. Based on our review of TTC's construction and restoration procedures, we conclude the Project would not significantly affect vegetation.

4.3 Wildlife and Migratory Birds

Wildlife

Wildlife commonly found in the Project area include wild turkey, Cooper's hawk, red tailed hawk, white tailed deer, red fox, striped skunk, eastern chipmunk, woodland vole, eastern hellbender, spotted salamander, spring peeper, and painted turtle. We received a comment regarding habitat destruction and the possible effects that the proposed Project could have on local wildlife. 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, clearing would decrease the amount of available habitat. These effects would be mostly minor and temporary as most of the disturbed habitats would be allowed to return to pre-construction conditions. The

[14] Data based on TTC's October 3, 2025, Data Response, Request no. 10. FERC accession no. 20251003-5098 and confirmed in TTC's December 5, 2025 Data Response Request no. 1. FERC accession no. 20251205-5103 . Wetland effects excluded from discussion as numbers from this section are from the updated Table 3.3 which used the US Geological Survey National Land Cover Database. Refer to section 3.3 for wetland effects as those numbers are based on delineations and are more representative of proposed effects.

aboveground facilities would permanently affect some available habitat by converting it to industrial/developed land. Mobile species would likely relocate to available adjacent habitat during abandonment activities. Additionally, to minimize effects on wildlife and migratory birds from construction lighting, TTC would use hooded and/or shielded stationary lights and light plants. Lighting would be directed onto the work site only and away from adjacent areas not in use, with safety and proper lighting of the active work areas being the primary goal. TTC would utilize gradual excavation slopes, barrier fences, and frequent inspections to minimize the potential impact to wildlife. Only a minor portion of the species population would be directly impacted from clearing and grading and there is sufficient surrounding habitat to support relocated wildlife. Therefore, we conclude the Project would not significantly affect wildlife species.

Migratory Birds

TTC used USFWS's Information for Planning and Consultation (IPaC) system to identify birds of conservation concern that could potentially occur in the Project area.[15] [16] There are 14 birds of conservation concern with potential to occur in the Project area. [17] During field surveys, TTC identified two raptor nests near the Colorado River. The first was a bald eagle nest within 500 feet of Project workspaces that contained two adult bald eagles. The second, an additional unoccupied raptor nest is located north of the Project workspace..[18] While the second nest was uninhabited it appeared to be the correct size and shape to accommodate bald eagles. TTC would cross the Colorado River using an HDD which may cause increased noise disturbances for nesting eagles. TTC stated that consultation with TPWD is ongoing regarding the bald eagle nests to determine additional survey and mitigation requirements.

The primary concern for impacts on migratory birds, including bald eagles, is mortality of eggs and/or young, as mature birds could avoid active construction. Tree 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.

TTC would avoid tree clearing from March to August, to avoid affecting migratory bird species during nesting season. If tree clearing cannot be avoided during this timeframe, TTC would conduct preconstruction nesting surveys. If TTC identifies nesting birds during preconstruction surveys, TTC would stop clearing within 100 feet of the nest and contact USFWS for further guidance. If TTC identifies any active bald eagle nests during preconstruction surveys, TTC would reach out to USFWS to determine appropriate mitigation

[15] Migratory birds are protected under the Migratory Bird Treaty Act (16 U.S.C. 703–711). The Migratory Bird Treaty Act, as amended, prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Bald and golden eagles are additionally protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d). Executive Order 13186 (66 CFR 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 USFWS.

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

[17] TTC's October 29, 2025, data response. IPaC species list page 10 – 1, accession no. 20251029-5053

[18] TTC's November 17, 2025 data response, accession no. 20251117-5200.

measures. 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 Candidate 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. TTC, acting as our nonfederal designee, used USFWS's IPaC system to identify federally listed species that could occur in the Project area. The following species were identified: the threatened Piping Plover (*Charadrius melodus)*, the threatened rufa red knot (*Calidris canutus rufa)*, the endangered whooping crane (*Grus americana)*, the endangered Houston toad (*Bufo houstonensis),* the threatened Texas fawnsfoot *(Truncilla macrodon),* the endangered Texas Pimpleback (*Cyclonaias petrina)*, the proposed for listing as endangered tricolored bat (*perimyotis* subflavus), and the proposed for listing as threatened monarch butterfly (*Danausplexippus*). Due to the lack of suitable habitat, we have concluded that the Project would have *no effect* on the Houston toad, piping plover, and the rufa red knot. The Project lacks suitable habitat for the monarch butterfly. Therefore, we conclude the Project *would not jeopardize the continued existence* of the monarch butterfly.

The whooping crane winters primarily in coastal estuarine marshes and tidal salt flats of the central Texas coast, with core use centered at and around Aransas National Wildlife Refuge. It does not nest in Texas. The Project area does not contain the typical wintering and regularly used stopover habitats involving coastal estuarine marshes and tidal flats with brackish hydrology and halophytic vegetation. However, the Project does contain areas that could be used for brief foraging locations for migrating whooping cranes. Additionally, the September 30, 2025, comment submitted by Harry Gamble stated that whooping cranes have been known to cross his property which is near or within the Project workspaces. The original consultation letter sent to UFWS stated that the Project would have *no effect* on the whooping crane. Supplementary correspondence from TTC to USFWS acknowledged potential flyover or opportunistic foraging use within the Project area, but a lack of nesting habitat.[19] We conclude that due to the potential for whooping cranes to occur and temporarily forage in the Project area, the Project *may affect, but is not likely to adversely affect* the whooping crane. USFWS concurred with this determination on January 7, 2026.[20]

The Texas fawnsfoot and the Texas Pimpleback are both Texas-endemic freshwater mussel species. There is a potential for both of these species to occur in the Colorado river. Since the Colorado River would be crossed by HDD, most of the effects to these species would be avoided. However, TTC does plan to withdraw water from the Colorado River. To prevent effects on these mussel species, TTC has provided the following mitigation measures considering each life stage:

[19] TTC December 23,2025 Supplementary Information, FERC accession nos. 20251223-5307 and 20251223-5308.
[20] TTC January 12, 2026 Supplementary Information, FERC accession no 20260112-5166

- Glochidia (larval stage): Fine-mesh screening and ≤0.5 ft/s intake velocity to prevent entrainment and shear-related mortality.
- Juveniles (recently settled): Elevated intakes and flow control to avoid substrate disturbance where juveniles reside.
- Adults (benthic): Intake designed to eliminate potential for suction, bed contact, or turbidity that could displace adult mussels.
- Habitat quality: Monitored operations and controlled discharge prevent sedimentation or flow alteration that could degrade mussel habitat.

Due to these mitigation measures, we conclude the Project *may affect, but is not likely to adversely affect* the Texas fawnsfoot and the Texas Pimpleback.

TTC's plan to withdraw water was not included in the initial consultation letter to USFWS. TTC filed supplementary consultation documentation with the USFWS on December 23, 2025, regarding the Project's proposed one-time withdrawal from the Colorado River for hydrostatic testing purposes, and proposed measures to protect aquatic species during water withdrawal.[21] USFWS concurred with our effect determinations in a letter on January 7, 2026.[22] Therefore, section 7 ESA consultation for the Project is complete.

The tricolored bat is federally proposed for listing as endangered, and it uses varying habitat that differs according to seasonal needs. During spring, summer, and fall, the non-hibernating season, habitat includes hardwood and mixed forests and woodlands, grasslands, suburban and urban areas, and old fields. Tricolored typically select open, unfragmented, forested land, mature stands, and buffer zones near perennial streams. During the winter, tricolored bats are found in caves, mines, culverts, and sometimes abandoned water wells. TTC used the USFWS IPaC system and the determination key for Northern Long-eared Bat and Tricolored Bat and received a general "may affect" determination for tricolored bat. TTC Connector stated it would consult with the USFWS to identify and implement avoidance, and minimization measures consistent with current species conservation guidance. TTC did not identify any overwintering structures during field surveys. Based on limited forest clearing, the absence of roost or hibernacula features within the survey areas, we determine the Project *would not jeopardize the continued existence of* the tricolored bat. Due to the "May affect" result from the determination key, future listing of the tricolor bat would require reinitiation of consultation with USFWS for this species.

State Listed Species

TTC consulted with TPWD on state listed species. TPWD identified the ornate box turtle and tampico pearlymussel as species of interest that could potentially occur in the Project area. TTC Connector received a spatial data file of these species of interest from the TPWD. During field surveys, TTC observed that the Project lacked the well-drained sandy soils which the ornate box turtle would use to burrow. Additionally, the TPWD maps the ornate turtle habitat approximately 4.2 miles southeast of Project workspaces. The TPWD mapped tampico pearlymussel habitat within the Colorado River approximately 1.1 miles south of the Project

[21] TTC December 23,2025 Supplementary Information, FERC Accession Nos. 20251223-5307 and 20251223-5308.
[22] TTC January 12, 2026 Supplementary Information, FERC Accession No. 20260112-5166 .

survey area. All mitigations used to avoid effects on federally listed mussels discussed above would also protect the tampico pearlymussel. Therefore, we determined the Project would not have significant effects on state species of interest.

5. Cultural Resources

In addition to accounting for effects on cultural resources under NEPA, Section 106 of the 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),[23] and to afford the Advisory Council on Historic Preservation an opportunity to comment. TTC, 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 includes the approximately 25 miles of proposed pipeline centerline within a 300-foot corridor, totaling 987 acres, 13.4 miles of associated access roads totaling approximately 85 acres, and four aboveground facility sites totaling 3.2 acres. In total, the project study area amounts to approximately 1,076 acres. Of this total, approximately 546.5 acres were previously surveyed in 2019 for the Crossover II Pipeline Project. This left approximately 529 acres to be investigated, which defines the APE for cultural resources. The indirect APE consisted of a 1-mile research buffer surrounding the APE in order to provide a broader context for the proposed Project area. The APE is sufficient to account for all potential effects to historic properties by the proposed Project.

5.2 Cultural Resources Investigations

TTC 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 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. This research identified eight previously conducted surveys located within the 1-mile research buffer, with four of these overlapping the Project area. These previous surveys documented five archaeological sites, three of which, sites 41CD166, 41CD167, and 41WH78 are located within and adjacent to the APE. Site 41CD166 consists of a portion of a historic-age raised railway with construction

[23] 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.

elements dating between the mid-twentieth century to the 1970s. Site 41CD167 consists of a light-density subsurface lithic scatter of unknown prehistoric temporal affiliation. The potential eligibility for either site to be listed on the NRHP was undetermined at the time of recording in 2019. As part of TTC's survey effort, previously identified archaeological sites 41CD166, 41CD167, and 41WH78 were revisited, and one new archaeological site, 41WH166, and one new historic-age standing resource were recorded within the project Area of Potential Effects.

Site 41CD166 consists of a portion of a historic railroad, constructed in 1898. Within the APE, this section of railbed consists of a raised track/bridge with large, wooden piers and beams protected by sheet metal. Though the site retains several wooden elements enclosed with metal sheeting, it does not retain most of the tracks and is missing most of the rail lines, including the tracks leading to the bridge itself. Due to the removal of the railroad system, the bridge does not possess sufficient integrity to be considered eligible for listing on the NRHP. Regardless, all workspaces for the proposed Project would avoid 41CD166, and no impacts to 41CD166 are anticipated.

Site 41CD167 consists of a low-density subsurface prehistoric lithic scatter. Recorded in 2019, the site's NRHP-eligibility was undetermined, pending further investigations. TTC revisited the site in 2025 and conducted additional subsurface testing, determining that the site is an ephemeral campsite with a low-density subsurface scatter of non-diagnostic lithic materials. The site has been severely impacted by numerous pipelines intersecting the location. These disturbances, combined with the low density and lack of diagnostic artifacts, suggest that the site is not eligible for listing on the NRHP. TTC would avoid the site by means of horizontal drilling, and no impacts to 41CD167 are anticipated.

Site 41WH78 was recorded in 1983 as a possible prehistoric occupation site. An abundance of lithic material, including a projectile point, as well as a clam shell and bone fragment were observed on and just below the surface. TTC relocated a portion of the site during survey for an access road, uncovering additional lithic debitage. The site was not delineated beyond the proposed road alignment but is likely to extend beyond the road across the landform outside of the APE. While the eligibility of the site remains undetermined, the portion of the site intersected by the proposed access road would be avoided by the use of matting; thus, no impacts to the site are anticipated. No further work is recommended for the site within the limits of the access road as currently planned.

Newly recorded site 41WH166 is a late nineteenth-to-mid-twentieth-century railroad grade and near-surface scatter. Within the APE, the ties, rails, and gravel bed have all been removed, but the grade itself is still visible. Based on the findings of the investigation, the site is not recommended as eligible for listing on the National Register. No further archaeological work or avoidance is recommended for the site. The Project has been realigned to the south, and the site is now outside of the Project workspace, and no impacts to the site as a result of the Project are anticipated. TTC documented a new historic age standing resource during survey, which consists of a small, one-story rectangular shaped building. A review of historic aerials and topographic maps indicates that it was built after 1956 but before 1964. Repeated alterations to the building have compromised the historic integrity of the building's design, which does not embody the distinctive characteristics of a type, period, or method of construction. Therefore, TTC recommended that the building is not eligible for inclusion on the NRHP.

On March 1, 2025, TTC submitted its results to the SHPO by letter, recommending a finding of no historic properties affected and no further archaeological study necessary within the APE. On July 9, 2025, the SHPO agreed that no historic properties are present or would be affected by implementation of the proposed Project. We agree.

5.3 Tribal Outreach

On June 12, 2025, TTC contacted the following federally recognized Tribes regarding the Project: Chitimacha Tribe of Louisiana, Chickasaw Nation of Oklahoma, Tonkawa Tribe of Indians of Oklahoma, Quapaw Tribe of Oklahoma, United Houma Nation, Tunica-Biloxi Indian Tribe, Ysleta del Sur Pueblo of Texas, Poarch Band of Creek Indians, Alabama-Quassarte Tribal Town, Cherokee Nation, Choctaw Nation of Oklahoma, Kialegee Tribal Town, Kickapoo Tribe of Oklahoma, Kiowa Indian Tribe of Oklahoma, Muscogee (Creek) Nation, Osage Nation, Seminole Nation of Oklahoma, Thlopthlocco Tribal Town United Keetoowah Band of Cherokee Indians of Oklahoma, Wichita and Affiliated Tribes Jicarilla Apache Nation, Mescalero Apache Tribe, and the Delaware Nation. On July 2, 2025 the Quapaw Tribe of Oklahoma responded to TTC's outreach, stating that the Project is located outside their tribal area of interest and they therefore declined to comment on this Project. We sent our Notices to these same Tribes.

FERC sent letters to the Alabama-Coushatta Tribe of Texas, Apache Tribe of Oklahoma, Comanche Nation, Oklahoma, Coushatta Tribe of Louisiana, Tonkawa Tribe of Louisiana, Wichita and Affiliated Tribes on October 8, 2025. To date, there have been no responses filed.

5.4 Unanticipated Discoveries Plan

TTC developed a Project-specific plan titled *TTC Connector Project Unanticipated Discovery Plan* (Unanticipated Discovery Plan), which outlines 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, Recreation, and Aesthetic Resources

The Project would affect a total of approximately 332 acres during construction, which includes approximately 117 acres of permanent effects during operation.[24] Construction of the pipeline would require a 30-foot-wide permanent easement and 50 feet of TWS on the working side of the permanent easement, totaling 80 feet of typical construction workspace required to construct the Project. ATWS would be required in some areas to allow for safe maneuvering, equipment storage and other construction activities. Land use in the vicinity of the Project generally is classified into the following categories: agricultural, forest woodland, industrial,

[24] TTC Connector, LLC's July 21, 2025 Application, Resource Report 8 at p. 7. eLibrary accession number 20250721-5043

residential, open land, and open water. Table 4 provides a summary of the land use categories and acreages affected by the Project.

Approximately 89 percent of the land that would be crossed by the Project is characterized as agricultural land (cultivated cropland or pasture/hay). Agricultural land in the Project area is used primarily for crop production, including corn, cotton, rice, hay, and sorghum.[25] Open lands include wetlands, barren lands, shrublands, and grasslands. Following completion of the construction, the area would be revegetated in accordance with the FERC's Plan and Procedures. Open land within the pipeline right-of-way would be maintained in an herbaceous state during operation.

Public roads and their respective rights-of-way are the only public lands that would be crossed by construction. No other conservation lands or public lands exist within 0.25 mile of the Project, and no recreational areas or other designated or special use areas, such as scenic areas or registered natural landmarks, were identified within the proposed Project area.[26]

During construction, TTC would implement BMPs and adhere to the FERC's Plan and Procedures to minimize effects on open water resources, agricultural, open land, and forest/woodland. To minimize effects, TTC sited the Project, where feasible, adjacent to existing pipeline and road rights-of-way. Based on the limited scope associated with this Project, as well as TTC's implementation of its various construction plans (SPRP and the FERC Plan and Procedures), and because the surrounding landscape is land within rural settings with existing natural gas infrastructure, we conclude that potential effects to land use would be minor and not significant.

6.1 Agricultural Land

About 89 percent of Project construction effects would occur in agricultural land, which in the Project area typically consists of corn, cotton, rice, hay, and sorghum. There is also pastureland within the Project area which is used primarily for hayfields and for grazing cattle.

Although effects on agricultural land use are generally temporary, typically occurring over only one growing season, several short-term effects, generally observed following restoration of affected lands, could occur as a result of the Project. These effects include unsuitable drainage and the spread or introduction of non-native plant species, as well as soils effects such as compaction, uneven grade, ponding, and mixing of soils as discussed in section B.2. Occasionally observed long-term effects on soils (changes to soil composition and chemistry) could also affect agricultural land use and crop production. TTC would implement topsoil segregation requirements for agricultural land to minimize these effects. TTC would strip and segregate topsoil from the construction workspace, and following pipeline installation, return the subsoil to excavated areas and replace the topsoil in the area from which it was stripped. Project-related activities, which could occur over several months, would temporarily preclude the use of agricultural lands. It is possible that saturated soil conditions could delay decompaction, topsoil replacement, and final grading until conditions allow for proper soil handling and restoration. During this time, affected lands would likely be encumbered,

[25] Ibid. page 17.

[26] TTC Connector, LLC's July 21, 2025 Application, Resource Report 8 at pg 20. eLibrary accession number 20250721-5043

preventing or deterring agricultural-related grading, planting, soil enhancement, harvesting, and other activities.

Most agricultural land would be restored to pre-construction conditions to the extent practicable in accordance with the FERC Plan and Procedures. Exceptions include where new permanent access roads, compressor stations, or meter stations are constructed or expanded on agricultural land; the permanent use of these facilities would result in a loss of land used for agricultural production and a conversion to developed or open land types. Cropland and pasture use would be allowed within the permanent right-of-way (ROW) in accordance with applicable easement agreements.

TTC stated it would maintain landowner access to their property and would maintain irrigation and drainage systems that cross the ROW to the extent practicable.[27] If drain tiles are present in agricultural areas, TTC would repair or negotiate with and reimburse landowners/producers of products for damages resulting from construction. Should damages occur to irrigation pumps, TTC would negotiate with and reimburse landowners/producers of products for damages resulting from construction. TTC would compensate landowners for crop losses in accordance with the terms of individual landowner agreements.[28]

An important element of right-of-way restoration in active agricultural areas is timely replanting of crops or other cover vegetation. Following construction, agricultural areas would be reseeded unless otherwise requested by a landowner.[29] Resumption of agricultural operations following Project construction and/or planting of a cover crop would aid in the restoration of soil structure and productivity that could take several years to achieve success, depending on site-specific conditions and land use practices. FERC staff would monitor restoration efforts and require corrective action where necessary to ensure compliance with the Commission's orders. Per the FERC Plan, revegetation of agricultural areas would be considered successful when crop growth and vigor, based on visual inspection, are similar to adjacent undisturbed portions of the same field. FERC also requires the size, density, and distribution of rock remaining on the construction area following restoration should be the same as adjacent areas not disturbed by construction.

Given the nature of the habitats crossed (primarily routinely disturbed, agricultural land), and TTC's construction, mitigation, and restoration plans discussed above, we conclude that the effects on agricultural land would not be significant.

[27] TTC Connector, LLC July 21, 2025 Application, Resource Report 8, section 8.3.3.1, pps. 17, 18 FERC accession no. 20250721-5043

[28] We note the Commission does not adjudicate disputes regarding compensation for damages.

[29] TTC Connector, LLC July 21, 2025 Application, Resource Report 8, section 8.3.3.1, p.18 FERC accession no. 20250721-5043

Table 4: Project Effects on Land Use Types

Facility	Agricultural Land		Forest/Wood Land		Residential Land		Open Land		Open Water		Total (acres)	
	Const.[1]	Oper.[2]	Const.[1]	Oper.[2]	Const.[1]	Oper.[2]	Const.	Oper.	Const.	Oper.	Const	Oper.[2]
Pipeline	246.46	86.63	3.03	0.52	4.74	1.76	2.6	1.02	0.07	00.07	256.8	90
Aboveground Facilities												
TTC Connector Compressor Station	1.25	0.91	0	0	2.57	0.91	0	0	0	0	3.82	1.82
Mainline Valve Site	0.01	0.04	0	0	0.02	0.02	0	0	0	0	0.12	0.06
Trunkline Delivery Interconnect Station	1.8	0.14	0	0	0	0	0	0	0	0	1.8	1.14
Coastal Bend Header Delivery Interconnect Station	0.88	0.7	0	0	0.13	0.11	0	0	0	0	1.01	0.81
Contractor Yard	28.87	0	0	0	3.24	0	0	0	0	0	32.12	0
Access Roads	15.09	9.54	0.59	0	20.31	12.94	0.07	0	0	0	36.06	22.48
Totals	**294.36**	**97.96**	**3.62**	**0.52**	**31.01**	**15.74**	**2.67**	**1.02**	**0.07**	**0.07**	**331.73**	**116.31**

Notes:

Data source: TTC Connector, LLC's Supplemental October 3, 2025 filing at Table 8.3.FERC eLibrary accession no. 20251003-5098

Const = construction effects

Oper = operations effects;

[1]Construction land use effects comprise all areas required for construction including permanent easement, permanent aboveground facility and access road footprints, TWS and ATWS. 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 land use effects comprise all areas required for operations including permanent easement, permanent aboveground facility footprints, and access road footprints.

6.2 Residential Land

No densely populated residential areas are crossed by the Project and no planned residential or commercial developments were identified within 0.5 mile of the Project area. Residential land in the Project area consists of land associated with rural single-family homes as well as recreation lands. Two residences would be located within 50 feet of the proposed Project workspaces near MP 19.9.[30] Appendix C provides a single site-specific construction plan for the two residences, which are adjacent.[31] We have reviewed the site-specific residential construction plan and find it acceptable. However, **we encourage the property owner(s) to provide us with any comments on the plan during the EA comment period**. TTC would coordinate with landowners that could be impacted by construction activities prior to any work. Prior to construction, TTC would provide letters to all landowners potentially impacted by the Project that outlines the procedures to follow if they have any environmental concerns during construction. Given TTC's proposed mitigation measures for residences near Project workspaces, we conclude that effects on residences would not be significant.

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 limited residences and the fact that the Project area is remote and rural, visual and aesthetic effects during construction are not expected.

Minor above-ground facilities would be located within the pipeline ROW, or adjacent to existing, operating natural gas aboveground facilities. Considering that the proposed Project area is rural and there are no densely populated areas within three miles of the Project, visual effects would be minimal. The above-ground facilities would not be prominent in terms of height or coloration; as a result, visual effects would be minimal.

The proposed compressor station would be located at the western end of the pipeline, in a sparsely populated rural area and situated adjacent to an operating gas plant. Agricultural and developed commercial/industrial lands surround the proposed compressor station site location. Lacking dense population and residential land uses, the operation of the proposed compressor station is not anticipated to create visual or aesthetic effects that would be noticeable from the existing facilities in the area.

Following construction, the contours and vegetation along the pipeline ROW would be restored to pre-construction conditions. The visual effect of new ROW would decrease over time as vegetation reestablishes. The only permanent visual changes associated with the Project would be pipeline markers, the permanent above-ground facilities, and the compressor station which would include in addition to the compressor units a control building and office buildig.

[30] TTC Connector, LLC's July 21, 2025 Application, Resource Report 8 at pg 20, Table 8.6. FERC eLibrary accession number 20250721-5043

[31] TTC Connector, LLC's Supplemental November 17, 2025 filing at Appendix 8-B.FERC eLibrary accession number 20250721-5043

The proposed compressor station would be located at the western terminus of the pipeline in a sparsely populated rural area situated adjacent to an operating gas plant. Agricultural and developed commercial/industrial lands surround the proposed compressor station site. Lacking dense population and residential land uses, the operation of the compressor station would not be anticipated to create significant visual or aesthetic effects that are widely visible from existing receptors in the area.

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 reservation 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.

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 Colorado and Wharton Counties in Texas.

7.1 Population, Housing, Employment, and Taxes

In 2023, the State of Texas had a population of 30,503,301 with a population density of 112 persons per square mile. Colorado County had a population of 21,117 with a population density of 21.4 persons per square mile, and Wharton County had a population of 41,739 with a population density of persons 38.3 per square mile, as reported in the 2023 Census. Population densities are low compared to the national average of 94 persons per mile given the rural nature of this part of Texas. Population growth rates from 2020 to 2024 have been 2.7 percent and 0.4 percent for Colorado and Wharton Counties, respectively.[32]

TTC estimates it would hire a construction crew averaging 175 workers, with a peak size of 250 workers,[33] for a duration of approximately nine months to construct the Project. Approximately 35 percent of the workers would be local workers (within 50 miles), leaving 65 percent as non-local. Effects to the local population would primarily result from the short-term influx of workers during construction of the Project resulting in a temporary population level increase of 0.5 percent. It is not anticipated that non-local workers would bring family members with them to the general area of the Project. Given the negligible increase in the population of the area of the Project, effects to local populations in the area of the Project are expected to be temporary and minor.

The U.S. Census Bureau reports that the housing vacancy rate in the state of Texas is 9.6 percent, and that the vacancy rates for Colorado and Wharton Counties are 24.7 percent and 12.1

[32] TTC Connector July 21, 2025 Resource Report 5 at 3; FERC accession no. 20250721-5043
[33] TTC Connector October 3, 2025 Environmental Information Request Response 22 at p.35; FERC accession no. 20251003-5098

percent, respectively. Approximately 1,371 rental housing units in Colorado and Wharton Counties are available for seasonal, recreational or occasional use by construction workers.

There are in addition approximately 29 local hotels and motels and nine local campgrounds and recreational vehicle parks available for construction worker housing in Colorado and Wharton Counties.[34] We assume that most non-local workers would reside temporarily in the Project area for the duration of construction. The influx of a construction work-force peak of 250 mostly non-local workers would cause a minor temporary increase in demand for short-term housing. Given the supply of housing currently available for workers in the area, we conclude the effect of both construction and operation on the housing market and housing availability would be negligible.

In 2023, Colorado and Wharton Counties observed an average annual unemployment rate of 2.3 percent and 4.2 percent, respectively, while Texas exhibited an unemployment rate of 3.3 percent.[35] Employed Colorado and Wharton County workers are primarily in the educational services, health care, social assistance, and retail trade industries. Colorado County workers are additionally employed in agriculture, forestry, fishing and hunting, and Wharton County workers are additionally employed in manufacturing.[36]

TTC estimates that construction workers would spend as much as 30 percent of their paychecks on goods, services, and entertainment. An estimated $74 million would be spent within Texas in construction payroll, materials and fuels that would be purchased locally and/or regionally.[37] Payroll expenditures and the resultant levies on income, retail sales and lodging would represent a substantial if only a short-term economic benefit to local businesses and governments. TTC estimates its operation of the proposed Project would contribute to local government revenues in the form of annual property taxes in the amount of $1,599,344 for Colorado County and $766,243 for Wharton County.[38] Given the temporary extent of construction and restoration of land use during Project operations, disturbance to agricultural economic and tax revenue is expected to be minimal.

7.2 Public Services and Transportation

Public facilities such as police, fire protection, medical attention, and schools are accessible to the Project's expected work force. Colorado County has three police departments, 12 fire and emergency services departments, two hospitals and 14 public schools, while Wharton County has three police departments, 15 fire and emergency services departments, one hospital and 18 public schools. The closest medical center and law enforcement facility to the Project work site is approximately 8 miles away in the town of Eagle Lake.

Given the relatively small number of workers required for the Project and the unlikelihood that they may bring their families with children to the area for the construction period, we do not anticipate an effect on local schools. The Project workforce may demand increased local public services on a temporary basis, including the need for local police to direct traffic during construction and for local emergency services to respond to emergencies associated

[34] TTC Connector July 21, 2025 Resource Report 5 at 4; FERC accession no. 20250721-5043
[35] TTC Connector July 21, 2025 Resource Report 5 at 4; FERC accession no. 20250721-5043
[36] TTC Connector July 21, 2025 Resource Report 5 at 3; FERC accession no. 20250721-5043
[37] TTC Connector October 3, 2025 Environmental Information Request Response at 36; FERC accession no. 20251003-5098
[38] TTC Connector July 21, 2025 Resource Report 5 at 8; FERC accession no. 20250721-5043

with Project construction. Fire departments may have to respond to Project-related fires or other emergencies, and medical services may be necessary for workforce personnel illnesses or injuries. Given the non-local workforce would be relatively small compared to the current populations in areas affected by the Project, we conclude effects to public services would be less than significant.

The Project work sites would be accessible using a network of interstate and U.S. highways, state highways and county routes traversing the Project area. TTC estimates that construction traffic would use a private road accessed off County Road 255 to directly access the TTC Compressor Station Site (Project's west end), which has a traffic count of 321 vehicles per day.[39] Construction traffic would access the Trunkline Interconnect Station and the Coastal Bend Header Interconnect Station at the Project's east end using TTC's proposed new permeant access roads off of Farm to Market 102, which has a traffic count of 2,763 vehicles per day.[40] TTC anticipates its workers would conduct an average of 90 daily trips per day between the Project's Staging Area 01 and pipeline right-of-way during the 6-month construction period.[41] Given the low volume of Project construction vehicle movements in this rural area, negligible effects to local traffic are anticipated.

TTC would use traffic control, detours, signage, and safety and notification procedures in order to minimize traffic effects for local road users, residents and school traffic. Planned early morning and late evening construction work start and stop times would separate construction traffic rush hours from those of local non-Project employees and school buses. TTC would maintain local access for residents as much as possible during open cuts of roadways and would keep steel crossing plates onsite available for emergency vehicle access when roadways are closed for brief periods of construction. TTC has designed sufficient additional temporary workspaces for equipment turnarounds to minimize disruption to traffic. Given these measures, the current road traffic capacities, the relatively small construction and operational workforces, we conclude effects to transportation would be temporary, minor, and not significant.

8. Air Quality

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 EPA has developed National Ambient Air Quality Standards (NAAQS) for criteria pollutants carbon monoxide, lead, oxides of nitrogen (NO_x), ozone, particulate matter less than 10 micrometers (PM_{10}), particulate matter less than 2.5 micrometers ($PM_{2.5}$), and sulfur dioxide (SO_2). Ozone is not directly emitted into the atmosphere from an emissions source; rather, ozone develops as a result of a chemical reaction between NO_x and volatile organic compounds (VOC) in the presence of sunlight. Hazardous air pollutants (HAP) are also emitted during fossil fuel combustion and are chemicals known to cause cancer and other serious health impacts. Fugitive dust would be generated during Project construction from earthmoving, wind-blown dust from stockpiles, and road dust. Most of the fugitive dust would be particulate matter in excess of 10 microns, but a portion would be PM_{10} and $PM_{2.5}$,.

[39] TTC Connector October 3, 2025 Environmental Information Request Response at 31; eLibrary accession no. 20251003-5098
[40] Texas Department of Transportation. 2024. TPP Statewide Traffic Count Map. Available at https://experience.arcgis.com/experience/6c0166bfc5144afe83926a3a529a8d03#data_s=id%3AdataSource_3-19104cf30e7-layer-10%3A102918. Accessed on October 27, 2025.
[41] TTC Connector October 3, 2025 Environmental Information Request Response at 32; eLibrary accession no. 20251003-5098

Fugitive methane emissions would occur from compressors, connectors, piping components, valves and the meter stations. The EPA 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. There are no NAAQS or established significance thresholds for GHG.

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 Colorado and Wharton counties, Texas, which are designated as in-attainment or unclassified for all pollutants. As such, the Project would not be required to perform a General Conformity Determination under the CAA.

Permitting/Regulatory Requirements

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

- New Source Review- Prevention of Significant Deterioration (PSD);
- New Source Review - Non-attainment New Source Review; and
- Tittle V Permitting – TTC Connector Compressor Station would not exceed the major source thresholds.

The provisions of the CAA that are applicable to the Project are discussed below.

New Source Performance Standards

The EPA promulgates New Source Performance Standards (NSPS) for new, modified, or reconstructed sources to control emissions to the level achievable by the best-demonstrated technology for stationary source types or categories as specified in the applicable provisions discussed below. NSPS also establishes fuel, monitoring, notification, reporting, and recordkeeping requirements. The TCEQ would determine final applicability to all NSPS in the final permit that it issues for Project facilities.

40 CFR 60 Subpart JJJJ - (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

Subpart JJJJ applies to owners and operators of stationary spark ignition internal combustion engines that commence construction after June 12, 2006 (depending on engine

power and date of manufacture), and to owners and operators of all stationary ignition internal combustion engines that are modified or reconstructed after June 12, 2006. The two new proposed compressors at the TTC Connector Compressor Station would be subject to Subpart JJJJ.

40 CFR 60 Subpart OOOOb - (Standards of Performance for Crude Oil and Natural Gas Facilities)

Subpart OOOOb would be applicable to the proposed new reciprocating compressors and piping components at the TTC Connector Compressor Station; TTC would comply with these rules and leak detection requirements, as required.

National Emission Standards for Hazardous Air Pollutants

The 1990 CAA Amendments established a list of 189 HAPs, resulting in the promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP). NESHAPs are promulgated under 40 CFR 63 to regulate and limit HAP emissions from specific source types at major or area sources of HAPs by setting emission limits, monitoring, testing, record keeping, and notification requirements.

40 CFR Part 63 Subpart ZZZZ – (NESHAP for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [RICE MACT])

Subpart ZZZZ pertains to stationary engines located at either minor or major sources of HAP emissions. Pursuant to 40 CFR 63.6590(c)(1), any new stationary RICE located at an area source must meet the requirements from the Engine NSPS (40 CFR 60, Subpart JJJJ), in order to maintain compliance with the RICE MACT. These regulations would be applicable to the new proposed compressor engines at the TTC Connect Compressor Station. As discussed, the proposed engines planned for installation would comply with Subpart JJJJ. No additional requirements from the RICE MACT apply to this unit or the remainder of the Project facilities and these units would comply with the requirements under Subpart ZZZZ.

Mandatory Greenhouse Gas Reporting Rule

The EPA'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 above this threshold and mandatory GHG reporting would be required if actual emissions exceed this threshold.

State Air Quality Regulations

In addition to the federal standards, the emission units at the TTC Connector Compressor Station would also be subject to regulations under Title 30 TAC Chapters 101 through 122.[42] The proposed TTC Connector Compressor Station would require a TCEQ Non-Rule Standard Permit for Oil and Gas Handling and Production Facilities. As a minor source of air emissions, the Tres Palacio Interconnect Station, the Trunkline Interconnect Station, and the Coastal Bend Header Interconnect Station would require Permits by Rule (PBR). The air permitting effort includes providing TCEQ with required documentation relating to source identification, air emission quantification, and applicability of appropriate state and federal regulations. State regulations applicable to the Project are listed below, with expanded details provided in the application filing.[43]

- General Rules (30 TAC Chapter 101);
- Permits by Rule (30 TAC Chapter 106);
- Control of Air Pollution from Visible Emissions and Particulate Matter (30 TAC Chapter 111);
- Control of Air Pollution from Sulfur Compounds (30 TAC Chapter 112);
- Control of Air Pollution from Toxic Materials (30 TAC Chapter 113);
- Control of Air Pollution by Permits for New Construction or Modification (30 TAC Chapter 116);
- Control of Air Pollution from Nitrogen Compounds (30 TAC Chapter 117); and
- Control of Air Pollution Episodes (30 TAC Chapter 118)

The TTC Connector Compressor Station would be a minor source of air emissions; and air emissions associated with the proposed compressor station and three interconnect stations would be required to comply with all applicable federal and state air emission standards/regulations.

8.1 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 several months of construction activities beginning in early 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.

[42] https://www.tceq.texas.gov/permitting/air/rules/state.
[43] TCC Connector July 21, 2025 application filing, resource report 9 at 12-14. FERC accession no. 20250721-5043

Emission intensity would vary depending upon the phase of construction (earth moving, building construction, electrical work, etc.). Construction emissions were estimated using the EPA's Motor Vehicle Emission Simulator model[44] and EPA AP-42 emission factors. Table 5 provides the total 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 the construction sites.

To reduce emissions, TTC would implement measures outlined in their Dust Control Plan, which we have reviewed and find acceptable.[45] These measures would be utilized as crews move along pipeline right-of-way as construction progresses and at the stationary aboveground facility construction areas throughout the duration of construction that includes, but is not limited to applying water to construction sites and access roads, covering open bodied trucks while transporting materials, reduce vehicle speed on unpaved roads, and construct and maintain construction entrances to prevent tracking mud and soil onto paved roads. To mitigate exhaust emissions during construction, TTC would construct the Project in accordance with applicable regulations and manufacturers recommendations imposed at the time of manufacture of the vehicles, utilize ultra-low sulfur diesel fuel as required under 40 CFR 80.150 and comply with EPA mobile and non-road emission regulations (40 CFR Parts 85, 86, and 89). Estimated construction emissions are presented in table 5.

Table 5. Estimated Project Construction Emissions (tons)

County	Source	NO_x	CO	SO_2	VOC		PM_{10}	$PM_{2.5}$	CO_2e	Total HAPs
Colorado County	Construction Equipment[1]	2.371	0.977	0.006	0.124		0.18	0.175	1,983.798	0.698
	On-Road Vehicle Travel[2]	0.367	3.846	0.002	0.05		0.013	0.012	470.758	0.002
Wharton County	Construction Equipment[4]	0.855	0.352	0.002	0.045		0.108	0.065	715.247	0.252
	On-Road Vehicle Travel[5]	0.143	1.295	0.001	0.02		0.005	0.005	171.791	0.001
Colorado and Wharton Counties	Fugitive Dust	--	--	--	--		91.560	9.156	--	--
TOTAL		**3.74**	**6.47**	**0.01**	**0.24**		**91.87**	**9.41**	**3,341.59**	**0.95**

[1] Emissions from construction equipment engines.
[2] Includes commuting traffic.
TTC Connector July 21, 2025 application filing, resource report 9 at 15. FERC accession no. 20250721-5043

[44] Motor Vehicle Emission Simulator: MOVES5. Office of Transportation and Air Quality. US Environmental Protection Agency. Ann Arbor, MI. November 2024.

[45] TTC Connector Dust Control Plan, appendix 9C of Resource Report 9, FERC accession no. 20250721-5043

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 a violation of any applicable ambient air quality standard, or significantly affect air quality.

8.2 Operational Emissions

Operational emissions would result from operation of the Compressor Station including two 5,500-horsepower ISO-rated Caterpillar C3616 natural gas-fired compressor units, three supporting fixed roof tanks, loading operations for the slop oil tank, fugitive emissions, pigging activities, and compressor blowdowns. Emissions from the operation of the proposed emission sources would be required to comply with applicable federal emissions regulations as indicated above. The proposed compression units at the Project compressor station would be reduced by installing compressor combustion units equipped with low NO_X combustion technology and oxidation catalysts to aid in control of CO and VOC emissions. Operational emissions are presented in table 6.

Table 6. Estimated Annual Project Operational Emissions (tpy)

							HAPs		
Emissions Source	**VOC**	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**C_6H_6**	**CH_2O**	**GHG**
Appurtenant Facility Sources									
Fugitives	1.32	--	--	--	--	--	--	--	--
Total	**1.32**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
TTC Connector Compressor Station Sources									
Waukesha 16V275GL+ESM2	6.76	14.48	42.94	1.45	1.45	0.09	0.06	0.62	15,470.66
Waukesha 16V275GL+ESM2	6.76	14.48	42.94	1.45	1.45	0.09	0.06	0.62	15,470.66
Truck Loading	0.03	--	--	--	--	--	--	--	--
200 bbl Slop Tank	0.18	--	--	--	--	--	--	--	--
500 Gal Lube Oil	<0.01	--	--	--	--	--	--	--	--
500 gal Antifreeze	<0.01	--	--	--	--	--	--	--	--
Caterpillar G3616 A4 Blowdown	0.43	--	--	--	--	--	--	--	--
Caterpillar G3616 A4 Starter	0.43	--	--	--	--	--	--	--	--
Waukesha 16V275GL+ESM2 Blowdown	0.43	--	--	--	--	--	--	--	--
Waukesha 16V275GL+ESM2 Blowdown	0.43	--	--	--	--	--	--	--	--
Pigging Blowdown	0.01	--	--	--	--	--	--	--	--
Total	**16.41**	**28.96**	**85.88**	**2.90**	**2.90**	**0.18**	**0.12**	**1.24**	**30,941.32**
Major Source Thresholds (PSD/NNSR)	*250*	*250*	*250*	*250*	*250*	*250*		*25*	*N/A*
Title V Thresholds	*100*	*100*	*100*	*100*	*100*	*100*		*25/10*[7]	*N/A*

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Air Quality Modeling

The proposed Project is not subject to PSD and is not required to conduct an air quality analysis under the PSD program as no applicable regulatory thresholds would be exceeded and no adverse effect on the NAAQS. To assess air quality effects from the Project on regional air quality, air dispersion modeling was performed for NO_2, CO, PM_{10}, $PM_{2.5}$, and SO_2 at the TTC Compressor Station using AERMOD, the most advanced sequential Gaussian plume model sanctioned by the EPA. Data presented in tables 7 and 8 was provided as part of the applicant's TCEQ permitting requirements. As discussed, the proposed TTC Connector Compressor Station would require a TCEQ Non-Rule Standard Permit for Oil and Gas Handling and Production Facilities[46] with the Interconnect Stations requiring PBRs.[47] The NRSP for the TTC Connector Compressor Station and the PBRs for the interconnect stations do not require a full air quality dispersion modeling assessment to be conducted. Air permitting requirements under these permits include providing TCEQ with documentation relating to source identification, air emission quantification, and applicability of appropriate state and federal regulations to demonstrate continuing compliance.

Table 7 SIL Modeling Results

Parameter	NO_2		CO		PM_{10}	$PM_{2.5}$		SO_2	
	1-hr	**Annual**	**1-hr**	**8-hr**	**24-hr**	**24-hr**	**Annual**	**1-hr**	**Annual**
Site-wide Ambient Impact (µg/m³)	78.96	4.33	260.05	235.02	4.62	4.62	0.46	0.53	0.03
SIL (µg/m³)	**7.5**	**1**	**2000**	**500**	**5**	**1.2**	**0.13**	**7.8**	**1.0**
Site-wide Ambient Impact less than SIL?	***No***	***No***	Yes	Yes	Yes	***No***	***No***	Yes	Yes
Largest Radius of Impact (m)	**400**	**370**	**---**	**---**	**---**	**173**	**271**	**---**	**---**

Notes: Conversion factor of 0.9 was used for estimating NO_2 impacts for both 1-hr and annual averaging times.
Secondary formation of $PM_{2.5}$ was considered to be negligible due to low annual permitted emissions of precursors (NOx and SO_2) from the facility.
Radius of impact is the maximum distance from the facility at which the impacts are equal to or exceeds the SIL.

Results show the 1-hour and annual NO_2, as well as the 24-hour and annual $PM_{2.5}$ exceeded the SIL and therefore require further analysis. All other NAAQS pollutants at all averaging times were below the respective SILs and therefore demonstrated compliance with NAAQS for these pollutants. To demonstrate compliance with the NAAQS, the site-wide values and the design background concentration are combined and the sum compared with the standard.

[46] https://www.tceq.texas.gov/permitting/air/newsourcereview/chemical/oil_and_gas_sp.html.
[47] https://www.tceq.texas.gov/permitting/air/guidance/pbr.

Table 8 – Federal NAAQS Compliance				
Parameter	**1-hr NO_2 ($\mu g/m^3$)[a]**	**Annual NO_2 ($\mu g/m^3$)[a]**	**24-hr $PM_{2.5}$ ($\mu g/m^3$)[b]**	**Annual $PM_{2.5}$ ($\mu g/m^3$)[b]**
Site-wide Impact	77.99	4.33	3.66	0.48
Background Design Value	67.68	10.94	22.70	8.00
Total Impact (Site-wide Impact + Background Design Value)	145.67	15.27	26.36	8.48
NAAQS	188	100	35.00	9.00
Is Total Impact Less Than NAAQS?	**Yes**	**Yes**	**Yes**	**Yes**
a. Site-wide Impact is based on avg. of 98th percentile of daily maximum 1-hr impacts averaging over 5 yrs of meteorological data. Background monitoring data is from Manvel Monitoring Station (Station ID: 480391004) for 2022-2024. b. Site-wide Impact is based on average of highest annual impacts over 5 years of meteorological data. 2. Background monitoring data is from College Station, Texas Monitoring Station (Station ID: 480411086) for 2022-2024.				

In addition to the federal standards, Texas also has a SO_2 net ground level concentration standard of 0.4 ppm averaged over any 30-minute period, and net ground level concentration of hydrogen sulfide to 0.08 ppm averaged over any 30-minute period and limits concentrations of sulfuric acid to 15 µg/m3 averaged over 24-hours, 50 µg/m3 over one hour and 100 µg/m3 anytime (30 TAC 112.3, 30 TAC 112.31, and 30 TAC 112.41).[48] Copies of this analysis and all state permits would be provided to FERC once submitted to TCEQ.

Given the operational emissions and that the dispersion modeling demonstrated compliance with the NAAQS, we find that emissions from operation of the Project would not result in a violation of any applicable ambient air quality standard or significantly affect air quality.

9. Noise

Construction and operation 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 (L_{eq}) and the day-night average sound level (L_{dn}). The L_{eq} is an A-weighted sound level containing the same sound energy as the instantaneous sound levels

[48] https://www.tceq.texas.gov/permitting/air/rules/state/112.

measured over a specific time period. Noise levels are perceived differently depending on length of exposure and time of day. The L_{dn} takes into account the duration and time the noise is encountered. Specifically, in the calculation of the L_{dn}, 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 L_{dn} 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 L_{dn}, for a facility to meet the 55 dBA L_{dn} 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 L_{eq} of 48.6 dBA at any Noise Sensitive Area (NSA). The 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 24-hour period and controls the environmental sound level, the L_{dn} is approximately 6.4 dB above the measured $L_{eq.}$ In general, a person's threshold for a perceivable change in loudness on the A-weighted sound level is about 3 dBA, whereas a 6 dBA change is clearly noticeable, and a 9 dBA change is perceived as either twice or half as loud. We have adopted the EPA's 55 dBA L_{dn} criterion and use it to evaluate the potential noise effects from the proposed Project at NSAs, such as residences, schools, or hospitals. There are no state or local noise ordinances that apply to the Project

9.1 Construction Noise Effects

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.

Construction would occur generally during daytime hours, which FERC considers to be between 7:00AM and 7:00PM. Construction of the aboveground facilities and pipeline would occur only during daytime hours at the respective sites through completion of those activities over a four month period. Pipeline work would be transient with crews moving along the pipeline as segments are completed. Three HDDs are proposed as part of the Project, with drilling activities occurring during daytime hours only. Two residence were identified within 50 feet from a construction workspace, with construction occurring intermittently. Based on the scope of construction activities, limited duration, and that most construction activities would be limited to daytime hours, we conclude that noise effects from construction activities would not be significant.

9.2 Operational Noise Effects

The Project's operational noise would be generated by new equipment at the TTC Connector Compressor Station and adjacent Tres Palacios Receipt Interconnect Point and Tres Palacios Delivery Interconnect Station. Noise would occur from components at the TTC Connector Compressor Station including the two reciprocating units with exhaust silencers and air inlets, gas compressor suction and discharge gas piping for the gas compressor units, two new lube oil coolers with one bay and two fans, and two new after-gas air cooled heat exchangers with cooling bays (one bay with two fans). Table 9 summarizes the estimated operational noise

effects on the nearest NSAs during operation of the Project with the nearest residence being more than 0.75-mile from the Compressor Station. There would be two types of gas blowdown events, unit blowdowns that occurs when a compressor is stopped and high-pressure gas between the suction-discharge valves and compressor is vented to the atmosphere, and emergency shutdown that will only occur at required Department of Transportation (DOT) test intervals or in an emergency situation (e.g., gas leak or fire). During the period of commissioning and testing, it is estimated that a unit blowdown could occur 2 to 4 times/day and typically only during the daytime. During normal operation of the Station, a unit blowdown event occurs infrequently (e.g., 1 to 3 times/month) for a short period (e.g. Persisting 1 to 3 minutes). The peak sound level of a unit blowdown event would be a maximum A-wt. sound level less than 78 dBA at 300-feet. As a result, the peak sound level of the unit blowdown event would be less than 41.3 dBA L_{dn} at the closest NSA, located ~1,590-ft from the unit blowdown case vent separator.

Table 7. Noise Quality Analysis for the TTC Connector Compressor Station

NSA	Distance/ Direction (ft)	Ambient dBA, L_{dn}	Station at Full Load Operation dBA, L_{dn}	Total Ambient + Station dBA, L_{dn}	Increase Above Ambient (dBA)
NSA #1	4,760	34.2	51.5	51.6	17.4
NSA #2	4,850	34.2	51.2	51.3	17.1

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Residential-grade exhaust silencers would be used on engines associated with the stationary equipment at the site. If necessary, TTC would implement mitigation measures outlined in their Noise Mitigation Plan during operation of the new compressor station.[49] While compressor station construction and operations, including gas blowdown events, are not projected to exceed 55 dBA (L_{dn}) at the nearest NSAs, TTC designed mitigation measures to implement should it become necessary to reduce noise levels beyond the projected levels. If compressor station construction or operational noise exceeds the sound criterion at an NSA, TTC would implement mitigation measures that include, but are not limited to, adding a sound wall between the compressor units and NSA requiring additional noise buffering, enclosing the compressors with a building to stifle noise.

The acoustic analysis indicates that the TTC Connector Compressor Station sound level contributions are less than an L_{dn} of 55 dBA at the closest NSA. To confirm the estimated operational noise levels, **we recommend that the Commission's Order include a mandatory condition requiring TTC to file noise surveys after placing the TTC Connector Compressor Station in service** (see section D, recommended condition no. 14).

To confirm the estimated operational noise levels at the proposed Trunkline Interconnect Station (MP 23.9) and the Coastal Bend Header Interconnect Station (MP 24.8) are at or below

[49] TTC Connector July 21, 2025 application filing, resource report 9, Noise Mitigation Plan, appendix 9-E: pps. 10-16. FERC accession no. 20250721-5043

55 dBA, L_{dn} at nearby NSAs, **we recommend that the Commission's Order include a mandatory condition requiring TTC to file noise surveys after placing the Trunkline Interconnect Station and the Coastal Bend Header Interconnect Station in service** (see section D, recommended condition no. 15).

Based on the proposed operational noise levels and our recommendations, we conclude that the noise attributable to operation of the Project would not cause a significant effect on the local noise environment.

10. 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. An unconfined mixture of methane and air is not explosive; however, it may ignite and burn if there is an ignition source. A flammable concentration within an enclosed space in the presence of an ignition source can explode. It is buoyant at atmospheric temperatures and disperses rapidly in air.

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. TTC 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, and incorporates compressor station design, including emergency shutdowns and safety equipment. 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 TTC's facilities construction and operation would represent a minimum increase in risk to the public.

11. Cumulative Effects

We evaluated the Project's potential for cumulative effects. Cumulative effects are the incremental environmental effects of a proposed action when added to other past, present, and/or reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Although the individual effect of each project may be minor, the additive or synergistic effects of multiple projects could be significant. In this analysis, we follow methodology that considers the proposed Project's potential effects to resource areas of concern where incremental contributions could be potentially significant when added to the potential effects of other actions.

To be included in the cumulative analysis for the Project, an action must first meet the following criteria:

- 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.

As described in our analysis above within section B of this EA, constructing and operating the Project would temporarily and permanently affect the environment. However, with the exceptions noted below, we concluded that most of the Project-related effects would be contained within or adjacent to the construction workspaces. For example, erosion control measures included in the FERC Plan would keep disturbed soils within the work areas and potential cumulative effects would be constrained to those locations. Resources that could be affected outside the immediate Project area and are subject to our cumulative effects review include watershed-level effects to vegetation and wildlife. However, for some resources, the contribution to regional cumulative effects is lessened by the expected recovery of ecosystem function. For example, non-forested vegetation communities and wildlife habitats would be cleared, but restoration would proceed immediately following construction.

Based on our assessment above throughout this EA, the Project would not affect cultural resources (cultural resources identified within the Project footprint would be avoided), and therefore there would be no potential to result in cumulative effects. Accordingly, we do not discuss cultural resources further.

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 10 summarizes the resource-specific geographic scoped considered in this analysis, and the justification for each. Actions outside of these boundaries were not evaluated because their potential to contribute to cumulative effects diminished with increasing distance from the proposed Project's workspace.

Table 11 provides a list of identified past and reasonably foreseeable actions (federal, non-federal, and private) in the vicinity of the Project with the potential to contribute to cumulative effects together with the proposed Project. Based on our review of the other projects in table 11, we did not identify any projects with the potential to emit operational noise. While some of the projects would have construction noise effects, none of them are expected to have persistent noise effects. Accordingly, because there are no other projects with operational noise effects, we conclude the project would not result in cumulative operational noise effects and we do not discuss it further. The reasonably foreseeable cumulative effects for each resource area are discussed in the following sections.

Table 8. Geographic Scope by Resource for Cumulative Effects		
Resource	**Geographic Scope**	**Justification**
Soils and Geology	Within the construction workspaces	Effects on soils and surficial geology would be highly localized and are not expected to extend much beyond the area of direct disturbance associated with the Project.
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 ground surface water resources, wetlands, and aquatic resources could reasonably extend throughout a HUC-12 watershed.
Fisheries, 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	Colorado and Wharton Counties	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 – Operational	Within 5-kilometer radius of the Project site	Air emissions during operation beyond a 5-kilometer radius would be de minimis.
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	0.25 mile from the pipeline or aboveground facilities / 0.5 mile from HDD	Areas in the immediate proximity of pipeline or aboveground facility construction activities would have the potential to be affected by construction-generated noise. NSAs within 0.5 mile of HDDs could be cumulatively affected if other projects had a concurrent noise effect on the NSA.
Noise - Operation	NSAs within 1 mile of compressor stations and 0.5 mile from meter stations	Noise from the Projects' permanent above-ground facilities, when combined with other noise-emitting sources could result in cumulative noise effects on NSAs.

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
Blackfin Pipeline – WhiteWater Midstream. LLC	36-inch-diameter natural gas Liquid transmission pipeline	Under development; expected operational 2026	0	Soils and Geology, Surface Water and Wetlands, Vegetation, Wildlife, Land Use and Visual, Socioeconomics, Air Quality, Noise (construction)
City of Eagle Lake 2023 Bond Street and Utility Improvements	Utility Construction	Active; Estimated end date October 2025	8.9	Surface Water and Wetlands, Vegetation, Wildlife, Socioeconomics
Texas Department of Transportation (DOT) Projects: TXDOT—SH 71 TXDOT—FM 102 TXDOT—FM 950 TXDOT—FM 1693 TXDOT—FM 2614 TXDOT—FM 961 TXDOT—UA 90 TXDOT—US 90A TXDOT—FS 102 TXDOT—FM 961 TXDOT—FM 1160 TXDOT—FM 3013	Various construction projects consisting of a bridge replacement; bridge maintenance, seal coatings; overlays; freeway operational improvements, pedestrian, sidewalks & curb ramps, and safety improvements.	Construction is underway, begins soon, or begins within 4 years	0-32	Soils and Geology, Surface Water and Wetlands, Vegetation, Wildlife, Land Use and Visual, Socioeconomics, air quality (construction), noise (construction)

Data Source: [1]TTC Connector, LLC July 21, 2025 Application, Resource Report 1, table 1.10 at page 35. eLibrary accession no. 20250721-5043

11.1 Soils and Geology

The geographic scope established for soils and geology is land overlapping the Project workspaces. The projects identified within the geographic scope that could potentially be under construction or in the early stages of restoration at the same time as the Project and would overlap the Project workspaces at various unspecified locations are the Blackfin Pipeline – WhiteWater Midstream, LLC and Texas Department of Transportation (TXDOT) projects.

The Blackfin Pipeline – WhiteWater Midstream, LLC Project would cross or abut the Project route and construction activities could occur at the same time, resulting in overlapping disturbances of soils and shallow geologic materials. However, both projects would be constructed following BMPs to minimize or mitigate effects on soils or geology, such as installing and maintaining ECDs and segregating and restoring topsoil to maintain the productivity of soils. The TXDOT projects would primarily affect soils and shallow geologic resources only along highway easements and would generally not extend beyond existing roadways and highway shoulders. The Project would cross public roads using trenchless

methods that prevent adverse effects on surficial resources and would thus avoid overlapping soil and shallow geologic materials affected by highway projects. Therefore, we conclude that the Project would not result in significant cumulative effects on soils and geologic resources.

11.2 Groundwater, Surface Water and Wetlands

The geographic scope established for groundwater, surface water and wetlands is the HUC-12 subwatersheds crossed by the Project. The projects identified within the geographic scope that could potentially be under construction or in the early stages of restoration at the same time as the Project are the Blackfin Pipeline – WhiteWater Midstream, LLC, the City of Eagle Lake 2023 Bond Street and Utility Improvements, and TXDOT projects.

The Blackfin Pipeline – WhiteWater Midstream, LLC Project would affect 9 waterbodies and 2.6 acres of wetlands.[50] Construction activities within the geographic scope that occur at the same time as the Project could result in potential effects on surface water and wetland resources, 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.

As previously mentioned, TTC would minimize effects to waterbodies and wetlands by following the FERC Plan and Procedures, its SPRP Plan, and its HDD Plan. Developers of other projects would likely follow standard erosion and sediment control practices similar to those proposed by TTC to avoid and minimize effects on wetlands and waterbodies, including impacts on water quality, in accordance with sections 401, 402, and 404 of the 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 groundwater, surface water, and wetlands.

11.3 Fisheries, Wildlife, Vegetation, and Special Status Species

The geographic scope established for fisheries, 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 or in the early stages of restoration at the same time as the Project are the Blackfin Pipeline – WhiteWater Midstream, LLC, the City of Eagle Lake 2023 Bond Street and Utility Improvements, and TXDOT projects.

Potential increases in turbidity, sedimentation, and concurrent in water work could result in cumulative effects on fisheries. TTC would adhere to timing restrictions and mitigation measures discussed in section 4.1 to minimize effects on fisheries. Other Projects would likely follow standard erosion and sediment control practices similar to those proposed by TTC to avoid and minimize effects on fishery resources. Additionally other project developers would likely consult with local, state and federal agencies as necessary to mitigate effects on fisheries.

[50] TTC's Application, resource report 1, Table 1.11, p. 38-39. FERC accession no. 20250721-5043

Due to TTC's proposed mitigation measures and the temporary nature of the Project's effects on fishery resources, we conclude the Project would not result in significant effects on fishery resources.

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.

11.4 Land Use and Visual Resources

The majority of visual effects from the proposed Project 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. 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.

11.5 Socioeconomics

The Project, combined with construction of the other nearby projects within Colorado and Wharton counties, would not be expected to cause a significant increase in local population or housing demand within these counties, given the relatively small and temporary nature of the Project's workforce. Other projects in this geographic scope would likely add some combined effect on socioeconomic resources such as police, fire, and school community services, but only temporarily during construction. The Project's Connector Pipeline and associated appurtenant facilities, the TTC Compressor Station, the Tres Palacios Receipt Interconnect Point, and the Tres Palacios and Trunkline delivery interconnect stations are widely spaced throughout Colorado and Wharton counties. Thus, cumulative traffic effects could occur from combined construction related use of public and private roads in the vicinity of the Project and the other nearby projects. The Project would, however, in combination with other nearby projects, likely have a beneficial effect on the local economy through sales and property tax generation and the consumption of goods and services of the influx of workers from each of the projects identified in the geographic scope. Given the minor and short-term nature of any construction or operations related activity, the relatively rural and sparsely populated nature of the region, and TTC's traffic control and safety measures, we do not anticipate any adverse cumulative negative effects on socioeconomics in the Project area.

11.6 Construction Air Quality

The geographic scope for construction air quality effects is a 0.25-mile radius of the Project. Construction of the Project and the actions identified in Table 11 are anticipated to involve the use of equipment that would generate emissions of pollutants from fuel combustion and generate dust from the movement of equipment and disturbance of soils. The type and quantity of equipment used would vary from site to site based on the type of project under construction which includes another pipeline project and several road improvement projects. Pipeline construction generally moves quickly and does not last long at any one location, meaning the construction emissions would be short-term, intermittent, and highly localized (essentially limited to within 0.25 mile of the activity). Some of the road improvement projects would also similarly move quickly along their linear length meaning that construction emissions and generation of dust would be present for short periods of time and dissipate quickly upon shifting of the construction workforce. Some of the other projects such as the bridge replacements would be stationary emitters of pollution and dust, and these effects, while highly localized, would only dissipate upon termination of construction. Based on our review, some minor, temporary and highly localized cumulative effects are possible, but because these would dissipate quickly, we have concluded they would not be significant.

11.7 Operational Air Quality

The Project's effects on air quality during operation are described in section B.8; TTC would be required to comply with all applicable federal air quality permitting programs. TXDOT improvement projects and the Blackfin Pipeline Projects were identified within the geographic scope as operational at the same time as the Project. These pipeline project emissions would be limited to operational fugitives and would not contribute to cumulative emissions beyond negligible releases. All Project site locations are in areas designated as in-attainment for all pollutants, with provided air dispersion modeling analyses for operation of the proposed compressor station showing the Project would not cause or contribute to an exceedance of the NAAQS. We conclude that the Project, when considered with other projects within the geographic scope, would not result in significant cumulative air quality effects during operations.

11.8 Construction Noise

Based on the geographic location, projected scope, and construction timeline for the Blackfin Pipeline and multiple TXDOT improvement projects, construction activities may occur concurrently with construction of TTC's Project. Noise effects associated with the proposed Project would be minimized by adhering to daytime hours as described in section B.9. Similarly, noise associated with the Blackfin Pipeline and TXDOT work would be mobile along the pipeline route and multiple different TXDOT site locations; they would not be stationary sites alongside the Project. Accordingly, while there is a possibility that some cumulative effects could occur if construction activities of each project occur at the same time and location, these events would be temporary and short in nature, and primarily limited to daytime hours. After construction is completed, any temporary or short-term cumulative effects would cease, and return to baseline levels. Therefore, we conclude that the Project, when considered with other

projects within the geographic scope, would not result in significant cumulative noise effects during construction.

11.9 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.[51] 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)[52] issued its *Climate Science Special Report: Fourth National Climate Assessment*, Volumes I and II.[53] 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 effects across every region of the country and the globe. Those effects extend beyond atmospheric climate change alone and include changes to water resources, agriculture, ecosystems, human health, and ocean systems.[54] According to USGCRP's 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.[55] These effects have accelerated throughout the end of the 20th and into the 21st century.[56]

GHG emissions do not result in proportional local and immediate effects; it is the combined concentration in the atmosphere that affects the global climate. These are fundamentally global effects that feed back to local and regional climate change effects. 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 will focus on the existing and potential cumulative climate change effects in the Project area. The USGCRP's

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[51] 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.

[52] The U.S. Global Change Research Program comprised representatives from 13 federal departments and agencies and issued reports every 4 years that described 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.

[53] USGCRP, Climate Science Special Report, Fourth National Climate Assessment | Volume I (Donald J. Wuebbles et al. eds) (2017), (USGCRP Report Volume I), available at https://repository.library.noaa.gov/view/noaa/19486. 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) (USGCRP Report Volume II), available at https://repository.library.noaa.gov/view/noaa/19487.

[54] IPCC Report at SPM-5 to SPM-10.

[55] USGCRP Report Volume II at 73-75.

[56] See, e.g., USGCRP Report Volume II at 99 (describing accelerating flooding rates in Atlantic and Gulf Coast cities).

Fourth Assessment Report notes that the following observations of environmental effects are attributed to climate change in the Southeast region (which includes the Project area):[57]

- 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-1960 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 effects in the Southeast with a high or very high level of confidence:[58]

- 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;
- 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 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 effects described above taken individually may be manageable for certain communities, the effects of compound events (such as simultaneous heat

[57] USGCRP Report Volume I and II.
[58] USGCRP Report Volume II.

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.[59]

The GHG emissions associated with construction and operation of the Project were identified and quantified in section B.8 of this EA. Emissions of GHG are typically expressed in terms of CO_2e.[60] Construction CO_2e emissions from the Project are estimated to be 3,341.59 tons (3,031.44 metric tons).[61] Operational CO_2e emissions are estimated to be 30,941.32 tpy (28,069.49 metric tpy).[62]

Construction and operation of the Project would increase the atmospheric concentration of GHGs in combination with past, current, and future emissions from all other sources globally and contribute incrementally to future climate change effects. To assess effects on climate change associated with the Project, Commission staff considered whether it could identify discrete physical effects 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 effects, Commission staff are unable to assess the Project's contribution to climate change through any objective analysis of physical effect 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.[63] 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 emissions on a national level, we compare the Project's GHG emissions to the total GHG emissions of the United States as a whole. At a national level, 5,489 million metric tons of CO_2e were emitted in 2022 (inclusive of CO_2e sources and sinks) (EPA, 2023). Construction emissions from the Project could potentially increase CO_2e emissions based on the national 2022 levels by 0.000055 percent; in subsequent years, Project operation could result in a potential increase in CO_2e emissions by 0.00051 percent based on the national 2022 levels.

To provide context on a state level, we compare the Project's estimated GHG emissions to the state emission inventories. The Project's construction and operational emissions would occur in Texas. At a state level, 274.1 million metric tons of CO_2 were emitted in 2023 from energy related sources.[64] Project construction could potentially increase CO_2 emissions based on

[59] USGCRP Report Volume II.

[60] 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 EPA's established method for reporting GHG emissions for air permitting requirements that allows a consistent comparison with federal regulatory requirements.

[61] TTC Connector July 21, 2025 Application Filing at 15. FERC accession no. 20250721-5043

[62] TTC Connector October 29, 2025 Supplemental Filing table 9.7. FERC accession no 20250721-5043

[63] *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.)

[64] U.S. Energy Information Administration (2024). "State carbon dioxide emissions from fossil fuels tables." https://www.eia.gov/environment/emissions/state/.

statewide 2023 levels by 0.0011 percent. In subsequent years, Project operations could potentially increase CO_2e emissions based on the state 2023 levels by 0.01 percent.

We also typically compare a project's operational emissions in the context of state GHG reduction goals.[65] At the time of this assessment, Texas did not have GHG reduction targets established.

C. ALTERNATIVES

We identified and evaluated alternatives to the facilities proposed by TTC. 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 enable the delivery of low-nitrogen, processed natural gas from the Houston Central plant to the Freeport LNG terminal for export and to ensure the gas is delivered at sufficient pressure to overcome higher pressure flows from adjacent infrastructure. Due to its intended function and interconnection points, the project must be located in reasonable proximity to the Tres Palacios, Trunkline, and Coastal Bend Header pipelines.

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 pipeline route alternatives. Our evaluation of alternatives is based on Project-specific information provided by TTC, 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, TTC 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,

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

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.

We have not identified any reasonably foreseeable negative environmental effects of not implementing the proposed action, as it is speculative to predict whether alternative projects may be proposed to meet shippers needs under a no-action alternative.

2. System Alternatives

System alternatives are alternatives to the proposed action that would make use of existing, modified, or proposed project(s) systems to meet the stated objective of the proposed Project. A viable system alternative would make it unnecessary to construct all or part of the Project, although some modifications or additions to the existing system may be required, while still meeting the project's purpose and need.

Existing TTC Connector System Alternatives

TTC does not own any other existing gas transmission systems in the area that would achieve the purpose and need of proposed Project. As such, no other "system alternative" operated by TTC would be possible.

Third-Party System Alternatives

A third-party system alternative would involve the use of pipelines not owned by TTC, that could potentially serve the stated need as the proposed Project, with less environmental impacts. According to TTC, while there are several other pipelines in the area, TTC's analysis indicated that none of these local pipeline systems are capable of delivering the volume of gas required without replacing the facilities with larger diameter pipe or looping portions of their pipeline systems with similar facilities. Additionally, Commission staff's analysis did not discover a third-party system alternatives with the capabilities to deliver the volumes of low nitrogen gas from the Houston Central Gas plant to the Coastal Bend Header to the Freeport LNG terminal or back to Tres Palacios because of the high-pressure gas delivered to Tres Palacios by Kinder Morgan Inc.'s PHP.

We ultimately dismissed third-party system alternatives because no feasible system alternatives were identified by TTC or FERC staff. Furthermore, because the Project as proposed would be co-located for nearly 90 percent of the route, the project design inherently minimizes additional environmental and landowner effects. Based on this analysis, we conclude that third-party system alternatives would not provide a significant environmental advantage, and we have not considered it further.

3. Pipeline Route Alternatives

We received comments regarding the proposed pipeline routing from various commenters. However, none of the comments identified specific alternatives or routing paths, but commenters generally sought that the Commission evaluate alternatives. RC Hill Properties, LLC filed comments noting wildlife species that live on his property and describing those species that may be threatened and endangered, generally requesting alternatives to avoid these resources, including use of HDD or boring methods.

As noted throughout this EA, 90 percent of the pipeline route would be collocated with the existing Kinder Morgan PHP pipeline corridor.[66] In most cases, co-locating a pipeline is preferred over construction on previously undeveloped land as environmental effects can be lessened by following such existing routes. In considering the commenters' request for a trenchless crossing, we note they are more complex and costly and require additional time than a trenched crossing. Therefore, staff considers the significance of the impact that would be avoided. As concluded in the sections above in this EA, the TTC Connector would not result in significant effects on any of the resources we evaluated. As such, an alternative involving previously undeveloped land was not evaluated, as it would create additional environmental impacts with no tangible benefits over paralleling the existing, previously disturbed PHP pipeline corridor. Furthermore, on balance, we did not identify potential resource impacts for which a trenchless crossing technique is warranted.

TTC Connector evaluated two minor route deviations for specific areas based on landowner engagement, engineering or construction inputs, and environmental considerations. These minor deviations are described in more detail in TTC's application, but they generally parallel and follow the proposed route for short distances often on the opposing side of the existing PHP right-of-way. Because the differences in these variations were minor, and no clear advantages were evident, we do not evaluate them further.

Construction activities proposed for the Project would be conducted in a manner that minimizes effects on the natural and human environment, while simultaneously accomplishing the purpose and need for the Project. Potential resource effects from construction activities would be temporary to short-term, and potential effects from operation and maintenance activities would be minimized through co-location with existing linear ROWs to the degree possible. After considering potential route alternatives to the proposed Project, we concluded that no pipeline route alternative would satisfy the evaluation criteria. In summary, we have determined that the proposed action, as modified by our recommended mitigation measures, is the preferred pipeline route that can meet the Project's objectives.

4. Aboveground Facility Alternatives

We received comments concerned about aboveground facility sites from RC Hill Properties, LLC. TTC proposes to site two aboveground facility sites on this landowner's property which include the Trunkline Delivery Interconnect, at about MP 23.9, and the Coastal Bend Header Delivery Interconnect at MP 24.8. The landowner provided comments concerning the sites and the effects of the facilities on wildlife and special status species. The EA discusses the effects of the project on wildlife and special status species in sections B.4.3 and B.4.4 above, which concluded that the project would not result in significant effects on these resources.

The overall siting for the Trunkline and Coastal Bend Interconnects are largely dependent on positioning of the proposed pipeline route and its intersection with both the Trunkline and Pipeline and Coastal Bend Header. Therefore, alternative sites for these interconnects are limited without relocation the pipeline routing itself. As we have described above, the siting of the pipeline route adjacent to Kinder Morgan's existing pipeline serves to reduce the environmental effects of the project as a whole, and we have not identified other superior

[66] TTC Connector July 21, 2025 Resource Report 10 at 7; FERC accession no. 20250721-5043

routing. Thus, the universe of reasonable locations for the interconnects are limited. Despite this, TTC provide alternative site configurations for the interconnects in the vicinity of the proposed sites.

The interconnects and alternative site configurations are depicted on TTC's alternative mapbooks.[67] We have reviewed the alternative site configurations and find them environmentally acceptable and conclude the alternatives offer no significant environmental advantage for the following reasons. Each of the sites is adjacent or nearly adjacent (with the greatest being approximately 1,000 feet[68] from the proposed site) and would affect the same land uses (which are agricultural or open lands). Accordingly, both the proposed sites and alternative configurations would result in the conversion of agricultural/open lands to industrial land uses. With respect to the Coastal Bend Header Interconnect, the proposed site is directly adjacent to existing gas utility infrastructure and would therefore be slightly preferable; however, the distinction is marginal in the broader landscape.

Because none of the alternative configurations outlined a clear advantage, and we did not identify any significant environmental effects with the proposed sites, we do not recommend an alternative. We conclude the proposed interconnect sites are the preferred alternative to meet the Project objectives.

5. Electric Motor-Driven Compression Alternative

We considered the use of electric motor-driven compressors at the proposed compressor station, instead of the proposed natural gas-fired reciprocating engines. The analysis was based on preliminary design assessments. The use of electric motor-driven compressor units for the compressor station would require TTC to purchase electricity from an outside supplier. TTC states that it would also require the construction of additional non-jurisdictional electric transmission infrastructure, including new electric transmission and service lines, a new dedicated substation, and new electric utility substation(s) or upgrades to existing substation(s). Due to the high energy demands of a typical electric compressor that would be required to meet the necessary hydraulic flow capacity needs for the Project, electric supply upgrades (e.g., substation and transmission line) would also be required.

Non-jurisdictional facilities, including new substations with access roads at a location along the existing electric transmission line, would need to be constructed. These non-jurisdictional facilities would increase the overall disturbance and effects for construction and operation of the compressor station. Increased overall environmental or human resources effects to waterbodies and wetlands, soils, landowners, visual resources, and land use would be anticipated.

Air emissions and noise effects of the compression units were also considered. Although electric compressors themselves do not produce air emissions, there would be emissions associated with power produced by the electric grid supplier. Regionally, the electric grid is powered by a combination of renewable and traditional sources, including wind farms, nuclear plants, natural gas plants, and coal fired plants. Although it is difficult to assess the draw of power at any one time, a significant portion of power regionally is provided by coal fired plants,

[67] TTC Connector July 21, 2025 Resource Report 10 at 45-46; FERC accession no. 20250721-5043

[68] TTC Connector July 21, 2025 Resource Report 10 at 45-46; FERC accession no. 20250721-5043

which have significantly higher air emissions than the natural gas used to power the proposed low emission gas fired compressor units. Electric compressors would be expected to have similar noise effects as gas fired units.

Overall, we did not identify a significant environmental advantage of the electric compressor alternative over the Proposed project.

6. Alternatives Conclusions

Overall, Commission staff conclude that approval of the Project would not result in significant environmental effects. We also conclude that no 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 TTC 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 Certificate of Public Convenience and Necessity the Commission may issue:

1. TTC 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. TTC must:
    a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (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**, TTC 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**, TTC 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.

TTC's exercise of eminent domain authority granted under Natural Gas Act section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. TTC's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas pipeline or facilities to accommodate future needs or to acquire a ROW for a pipeline to transport commodities other than natural gas.

5. TTC 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**, TTC shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. TTC must file revisions to the plan as schedules change. The plan shall identify:

   a. how TTC 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 TTC 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 TTC 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 TTC's organization having responsibility for compliance;
g. the procedures (including use of contract penalties) TTC would follow if noncompliance 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. TTC 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. a full-time position, separate from all other activity inspectors;
e. 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
f. responsible for maintaining status reports.

8. **Beginning with the filing of its Implementation Plan**, TTC 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 TTC'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 noncompliance;
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 TTC from other federal, state, or local permitting agencies concerning instances of non-compliance, as well as TTC's response.

9. TTC 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, TTC must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

10. TTC 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**, TTC 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 TTC 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. All conditions attached to the water quality certification issued by Railroad Commission of Texas constitute mandatory conditions of the Certificate Order. **Prior to construction,** TTC shall file, for review and written approval by the Director of OEP, or the Director's designee, any revisions to its project design necessary to comply with the water quality certification conditions**.**

13. **Prior to any HDD construction,** TTC shall file with the Secretary the results of the geotechnical investigations and feasibility assessments for each HDD bore, including:

    a. boring profiles;
    b. geological data and material properties (from geotechnical testing or other sources);
    c. any drilling fluid additives that are proposed for use in HDD activities;
    d. the likelihood of success for the bores; and
    e. for the conventional HDD bores, the potential for hydrofracture and inadvertent return using the U.S. Army Corps of Engineers' Delft method (or an equivalent method) for crossings through unconsolidated material, and/or a qualitative analysis for an inadvertent return.

14. TTC shall file a noise survey with the Secretary **no later than 60 days** after placing the TTC Connector Compressor Station in service. If a full load condition noise survey is not possible, TTC shall provide an interim survey at the maximum possible horsepower load and provide the full load survey **within 6 months.** If the noise attributable to the operation of the TTC Connector Compressor Station under interim or full horsepower load conditions exceeds an L_{dn} of 55 dBA at any nearby NSAs, TTC shall file a report on what changes are needed and install the additional noise controls to meet the level **within 1 year** of the in- service date. TTC shall confirm compliance with the above requirement

by filing a second noise survey with the Secretary **no later than 60 days after it installs the additional noise controls.**

15. TTC shall file noise surveys with the Secretary **no later than 60 days** after placing the Trunkline Interconnect Station and the Coastal Bend Header Interconnect Station into service. If a full flow rate noise survey at either station's maximum design capacity is not possible, TTC shall provide an interim survey at the maximum possible flow rate and provide the full flow rate survey **within 6 months**. If the noise attributable to the operation of either the Trunkline Interconnect Station or the Coastal Bend Header Interconnect Station exceeds an L_{dn} of 55 dBA at any nearby NSAs, TTC shall file a report on what changes are needed and shall install additional noise controls to meet the level **within 1 year** of the in-service date. TTC shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

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APPENDIX B - LIST OF REFERENCES

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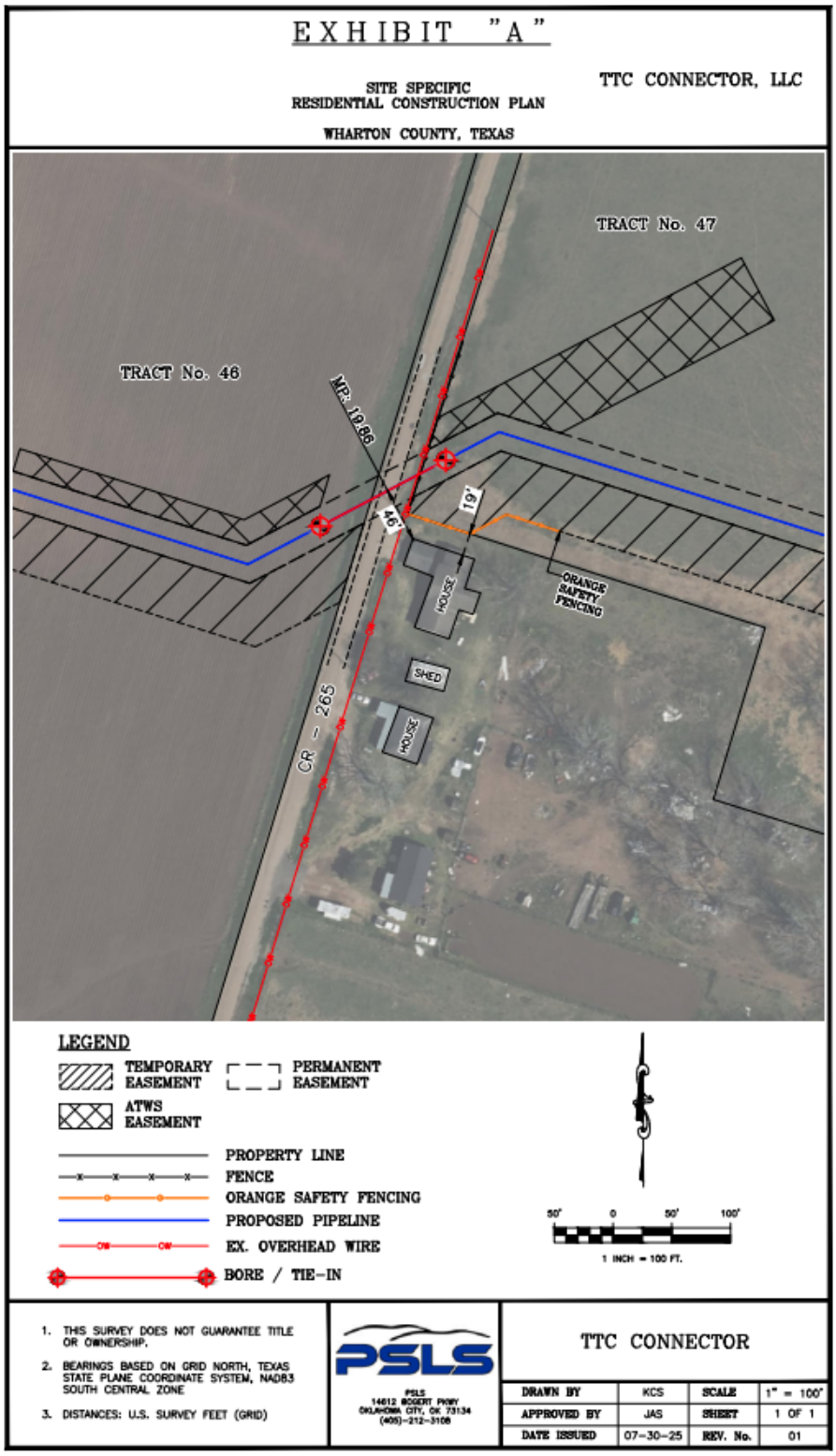
APPENDIX C – SITE SPECIFIC RESIDENTIAL CONSTRUCTION PLAN



NOTES:

1. TTC Connector, LLC (TTC Connector) has prepared this Site-Specific Residential Construction Plan to include the dimensioned site plans for each residence located within 50-ft of construction work areas; there is only a single residence within 50-ft of construction work areas. The site plan shows the location of this residence in relation to the new pipeline and construction work areas proposed for the project.

2. Existing utilities are also depicted on the site plan. Prior to construction, the state "One Call Center" will be notified to verify the location of these utilities and identify any unknown utilities which might exist within the construction right-of-way (ROW). TTC Connector will also contact individual property owner(s) to identify and locate any other utilities which might exist within the construction ROW. These utilities will be identified and marked by the respective utility companies prior to construction.

3. Any nearby structures, residential features and trees located which will not be removed during construction are noted on the site plan.

4. Although the residence that is the subject of this site plan is within 50-ft of construction workspaces, it is on an off-line tract; no mature trees, landscaping, or lawn areas will be directly impacted by construction activities.

5. TTC will notify landowner — in writing — at least two weeks prior to the start of construction. TTC Connector's land agent will then follow up with the landowner at least one week prior to the start of construction.

6. TTC Connector's land agent will discuss access to residence prior to construction and include that information in the construction line-list. The construction line-list will be included in the construction contract. Additionally, inspectors assigned to the project will ensure that the requirements in the line-list are followed.

7. To minimize impacts to the nearby residence during construction, the following construction techniques will be utilized:

    a. Boring is a trenchless means of installing the pipeline without disturbance to the ground surface between the bore entry and exit, thus preventing direct impacts to any resources located above the path of the bore. First, a vertical bore pit is excavated on one side of the feature and a receiving pit is excavated on the other. A boring machine is lowered into the entry pit and this drills a horizontal bore hole to the exit pit. After the pipe is installed, the boring machine is removed, and the bored section of pipe is tied-in to the pipeline. County Road 265 (CR-265) will be crossed using this methodology and traffic will be maintained along the road during construction.

    b. Drag Section installation would be utilized only if needed. This technique involves the installation of short sections of pipe called drag sections and allows for a reduced construction workspace. The contractor would begin the drag section installation by clearing and grading a short section of the ROW. Individual joints of pipe would then be hauled to the work area and laid out for fabrication. The contractor would then fabricate the drag section by welding together two or more pipe joints. The contractor would excavate the trench. The length of trench excavated at a given time would be limited to the minimum, necessary to install the drag section. The pipe section would then be lowered into the trench and the tie-in weld would be performed. The pipe section would be backfilled immediately following tie-in.

    c. Stove Pipe installation would be utilized only if needed. The stove pipe technique is like the drag section technique except it is limited to the installation of one joint of pipe at a time.

    d. Excavation and Backfill will be closely coordinated to limit the period in which the pipeline trench is open. Trench excavation will not be initiated until the pipeline is welded and ready to be lowered in. Backfill will be initiated immediately following installation.

8. Normal traffic flow and access to the nearby residence will be maintained during construction. CR-265 will be crossed using the boring methodology which will allow traffic to safely proceed along the road while the pipeline is installed beneath the road surface.

9. Dust abatement will be conducted as needed using water trucks and per the specifications in Resource Report 9.

10. Noise pollution will be controlled by limiting vehicle speeds and restricting work to daylight hours per the specifications in Resource Report 9.

11. Following installation, the construction work areas will be restored in accordance with applicable permit requirements and the FERC's Plan and Procedures.