Federal Energy Regulatory Commission

Office of

Energy Projects

January 2016

Comanche Trail Pipeline, LLC **Docket No. CP15-503-000**

San Elizario Crossing Project

Environmental Assessment

Washington, DC 20426

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:
OEP/DG2E/Gas 1
Comanche Trail Pipeline, LLC
San Elizario Crossing Project
Docket No. CP15-503-000

TO THE PARTY ADDRESSED:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared this Environmental Assessment (EA) of the San Elizario Crossing Project (Project) proposed by Comanche Trail Pipeline, LLC in the above-referenced docket. Comanche Trail Pipeline, LLC requests authorization to construct, operate, and maintain a new natural gas pipeline in El Paso County, Texas.

The proposed San Elizario Crossing Project would involve construction of approximately 1,800 feet of FERC-jurisdictional 42-inch-diameter pipeline, installed beneath the Rio Grande River near the City of San Isidro, State of Chihuahua. The new pipeline would transport natural gas to a new delivery interconnect with pipeline facilities owned by an affiliate of Comanche Trail at the United States - Mexico border for expanding electric generation and industrial market needs in Mexico.

The EA assesses the potential environmental effects of the construction and operation of the Project in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA). The FERC staff concludes that approval of the proposed Project, with appropriate mitigating measures, would not constitute a major federal action significantly affecting the quality of the human environment.

The FERC staff mailed copies 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; newspapers and libraries in the Project area; and parties to this proceeding.

In addition, the EA is available for public viewing on the FERC's website (www.ferc.gov) using the eLibrary link.

A limited number of copies of the EA are also available for distribution and public inspection at:

Federal Energy Regulatory Commission
Public Reference Room
888 First Street, NE, Room 2A
Washington, DC 20426
(202) 502-8371

Any person wishing to comment on the EA may do so. Your comments should focus on the potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental impacts. The more specific your comments, the more useful they will be. To ensure that your comments are properly recorded and considered prior to a Commission decision on the proposal, it is important that the FERC receives your comments in Washington, DC on or before **February 3, 2016.**

For your convenience, there are three methods you can use to submit your comments to the Commission. In all instances, please reference the project docket number (CP15-503-000) with your submission. The Commission encourages electronic filing of comments and has dedicated eFiling expert staff available to assist you at 202- 502-8258 or efiling@ferc.gov.

(1) You may file your comments electronically by using the eComment feature, which is located on the Commission's website at www.ferc.gov under the link to Documents and Filings. An eComment is an easy method for interested persons to submit text-only comments on a project;

(2) You may file your comments electronically by using the eFiling feature, which is located on the Commission's website at www.ferc.gov under the link to Documents and Filings. 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 will be asked to select the type of filing you are making. A comment on a particular project is considered a "Comment on a Filing"; or

(3) You may file a paper copy of your comments at the following address:

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

Although your comments will be considered by the Commission, simply filing comments will not serve to make the commentor a party to the proceeding. Any person seeking to become a party to the proceeding must file a motion to intervene pursuant to Rule 214 of the Commission's Rules of Practice and Procedures (Title 18 Code of Federal Regulations Part 385.214).[1] Only intervenors have the right to seek rehearing of the Commission's decision. Affected landowners and parties with environmental concerns may be granted intervenor status upon showing good cause by stating that they have a clear and direct interest in this proceeding that would not be adequately represented by any other parties. **You do not need intervenor status to have your comments considered.**

Additional information about the Project is available from the Commission's Office of External Affairs, at **1-866-208-FERC (3372)** or on the FERC website (www.ferc.gov) using the eLibrary link. Click on the eLibrary link, click on "General Search," and enter the docket number excluding the last three digits in the Docket Number field (i.e., CP15-500). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at FercOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, contact 1-202-502-8659. The eLibrary link also provides access to the texts of 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 www.ferc.gov/docs-filing/esubscription.asp.

[1] Interventions may also be filed electronically via the Internet in lieu of paper. See the previous discussion on filing comments electronically.

ENVIRONMENTAL ASSESSMENT
SAN ELIZARIO CROSSING PROJECT

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TECHNICAL ACRONYMS AND ABBREVIATIONS	
Border Patrol	U.S. Customs and Border Protection, Border Patrol Division
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
Commission	Federal Energy Regulatory Commission
dBA	decibels on the A-weighted scale
DOE	United States Department of Energy
DOT	United States Department of Transportation
EA	environmental assessment
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
HDD	horizontal directional drill
IBWC	International Water Boundary Commission
L_{dn}	day-night sound level
L_{eq}	24-hour equivalent sound level
MBTA	Migratory Bird Treaty Act
MP	milepost
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NGA	Natural Gas Act
NOI	Notice of Intent to Prepare an Environmental Assessment for the Proposed Comanche Trail Crossing Project and Request for Comments on Environmental Issues
NOx	Nitrogen Oxide
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NSA	noise-sensitive areas
OEP	Office of Energy Projects
Plan	Upland Erosion Control, Revegetation, & Maintenance Plan

TECHNICAL ACRONYMS AND ABBREVIATIONS	
$PM_{2.5}$	particle matter with an aerodynamic diameter less than or equal to 2.5 microns
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
Procedures	Wetland and Waterbody Construction and Mitigation Procedures
Project	Comanche Trail Border Crossing Project
Comanche Trail	Comanche Trail Pipeline, LLC
RRC	Railroad Commission of Texas
Secretary	Secretary of the Commission
SHPO	State Historic Preservation Office
SO_2	sulfur dioxide
SPCC Plan	Spill Prevention, Containment, and Countermeasure Plan
TCEQ	Texas Commission on Environmental Quality
TPWD	Texas Parks and Wildlife Department
USGS	U.S. Geologic Survey
VOCs	Volatile Organic Compounds

A. PROPOSED ACTION

On May 29, 2015, Comanche Trail Pipeline, LLC (Comanche Trail) filed an application in Docket No. CP15-503-000 pursuant to section 3 of the Natural Gas Act (NGA) and Part 153 of the Federal Energy Regulatory Commission's (FERC or Commission) regulations, for an order authorizing construction of new border crossing natural gas pipeline facilities, and for the issuance of a Presidential Permit for those facilities. The proposed facilities would export up to 1.1 billion cubic feet per day (Bcf/d) of natural gas at the International Boundary between the United States and Mexico. Comanche Trail proposes to construct its new international border crossing in El Paso County, Texas. The San Elizario Crossing Project (Project) would consist of the construction of approximately 1,800 feet of FERC-jurisdictional 42-inch-diameter pipeline, installed beneath the Rio Grande River near San Elizario in El Paso County Texas. The new pipeline would transport natural gas to a new delivery interconnect in the vicinity of the city of San Isidro, in the state of Chihuahua for expanding electric generation and industrial market needs in Mexico.

We[2] prepared this environmental assessment (EA) in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA); the Council on Environmental Quality's (CEQ) implementing regulations at Title 40 of the Code of Federal Regulations (CFR), Parts 1500-1508 (40 CFR 1500-1508); and the Commission's regulations at 18 CFR 380.This EA will be used by the Commission in the process of deciding whether to grant Comanche Trail's requested authorization. Our principal purposes in preparing this EA are to:

- identify and assess potential impacts on the natural and human environment that could result from implementation of the proposed action;
- identify and recommend specific mitigation measures, as necessary, to minimize environmental impacts; and
- assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects to the environment.

1.0 Purpose and Need

On May 29, 2015, Comanche Trail filed an application for Commission authorization and a Presidential Permit to site, construct, operate and maintain certain natural gas pipeline facilities for export of natural gas between the United States and Mexico. The overall purpose of this Project is to provide natural gas to fuel natural-gas electric generation plants and supply potential industrial customers in Mexico.

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

The FERC is the federal agency responsible for evaluating applications pursuant to section 3 of the Natural Gas Act (NGA) for natural gas import and export facilities, and for Presidential Permits which are necessary pursuant to Executive Order 10485 when export/import facilities are to be constructed at international borders. Under Section 3 of the NGA, the FERC considers as part of its decision to authorize natural gas facilities, all factors bearing on the public interest. Specifically, regarding whether to authorize natural gas facilities used for importation or exportation, the FERC shall authorize the proposal unless it finds that the proposed facilities will not be consistent with the public interest.

Section 3 of the NGA also requires prior approval from the Department of Energy (DOE) for the import or export of natural gas from or to a foreign country. Section 3(c) of the NGA, as amended by section 201 of the Energy Policy Act of 1992 (Public Law 102-148), requires that import and export of natural gas applications to the U.S. Department of Energy, Office of Fossil Energy (DOE/FE) from and to any nation with which the United States currently has or in the future will have a Free Trade Agreement be deemed consistent with the public interest and granted without modification or delay. On May 7, 2015 DOE/FE found that San Elizario Project Crossing meets the Section 3(c) criterion and authorized Comanche Trail to import and export natural gas from and to Mexico up to a combined total of 450billion cubic feet for a 2-year period effective beginning on June 11, 2015 extending through June 10, 2017 (DOE/FE 2015).

2.0 Public Review

On August 3, 2015, the Commission issued a *Notice Of Intent To Prepare An Environmental Assessment for the Proposed San Elizario Crossing Project and Request for Comments on Environmental Issues* (NOI). The NOI was published in the Federal Register and was mailed to interested parties including federal, state, and local officials; agency representatives; Native American Tribes, local libraries and newspapers; and property owners potentially affected by the Project activities.

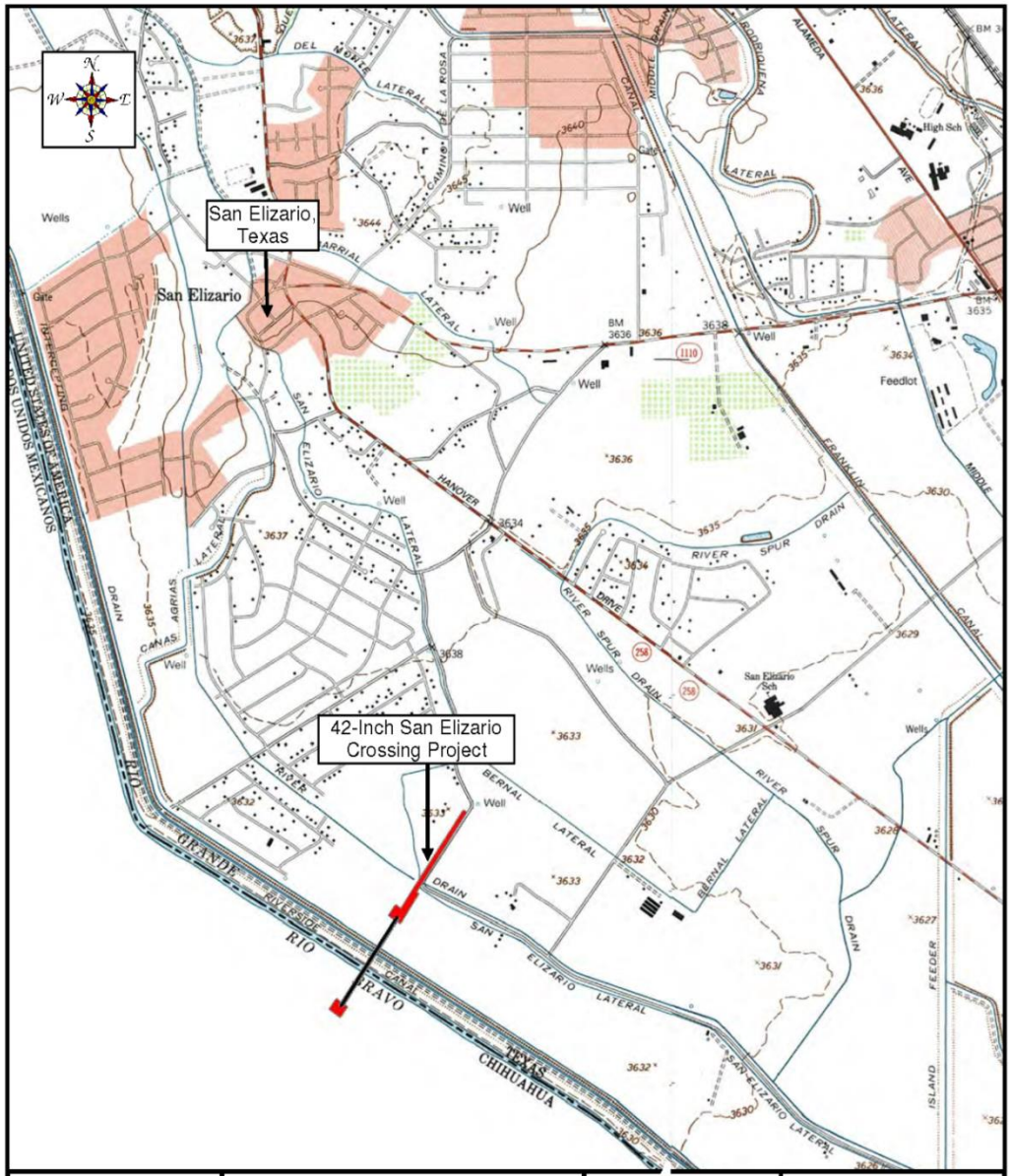
Written comments were requested from the public on specific concerns about the Project or issues that should be considered during preparation of the EA. We received over 100 comment letters on the San Elizario Crossing Project. These letters expressed concern about the regulatory framework in place to review pipeline projects and the San Elizario Crossing Project's potential impact on the environment. Local officials in the city of San Elizario and El Paso, Texas filed comments in response to the Notice of Intent siting concerns for the non-jurisdictional pipelines associated with the San Elizario Crossing Project and a proposed intrastate pipeline unrelated to the project called the Trans-Pecos Pipeline. The primary concerns were of segmentation, impact to cultural resources and the need for a NEPA analysis for impacts associated with the non-jurisdictional pipeline, described further in section 5.0. Additional comments received include safety, cultural impacts, water resources, and environmental impacts. We address all comments concerning the Project in the appropriate sections of this EA.

Executive Order 10485 requires that the FERC obtain the favorable recommendations of the Secretary of Defense and Secretary of State before issuing a Presidential Permit. On June 26, 2015, the FERC issued letters to both secretaries informing them of Comanche Trail's application, providing copies of a draft Presidential Permit, and soliciting their views. On October 7, 2015 the Secretary of State responded stating there are no objections to the issuance of the proposed Presidential Permit. A response from the Secretary of Defense is pending.

3.0 Land Requirements

Construction of the Project pipeline would affect 4.2 acres of temporary workspace in the United States for HDD construction and hydrostatic testing of the pipeline. All equipment staging, contractor parking, and materials storage would occur within the HDD workspace. Comanche Trail would use without modification or improvement an existing county maintained road. Following construction, Comanche Trail would retain a 50-foot-wide permanent right-of-way over the Project facilities, totaling 1.3 acres. Although Comanche Trail has identified areas where extra workspace and access roads would be required, additional or alternative areas could be identified in the future due to changes in site-specific construction requirements. Comanche Trail would be required to file information on each of those areas for review and approval prior to use. A general project location map is shown in figure 1.

Figure 1. General Location of Facilities



	Project Vicinity Map **Comanche Trail Pipeline, LLC** **San Elizario Crossing Project** **El Paso County, Texas** USGS Quadrangles: San Elizario & Clint, TX Scale: 1:24,000		**FIGURE: 1** **DATE**: 5/1/2015

4.0 Construction, Operation, and Maintenance Procedures

The Project would be designed, constructed, operated, and maintained in accordance with applicable requirements defined by the U.S. Department of Transportation (DOT) 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. Prior to construction, Comanche Trail would notify the one landowner regarding effects on their property, business, or operations. Comanche Trail is owned by Energy Transfer Mexicana, LLC an affiliate of Energy Transfer Partners, L.P. (Energy Transfer). Energy Transfer or an affiliate would be the operator of Comanche Trail.

Comanche Trail states that the Project would be constructed in accordance with our *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan), and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures).[3] Comanche Trail has also prepared a *Horizontal Directional Drill Inadvertent Release Control Plan* that it would use to monitor, contain, and respond if an inadvertent release were to occur. We have reviewed this plan and found it to be adequate.

The Project would have an environmental inspector (EI) who would be responsible for ensuring compliance with our Plan and Procedures, project-specific conditions contained in any FERC authorization, and other applicable environmental permits, approvals, and landowner agreements. Project personnel, including the chief inspector, EI, and construction contractor, would receive copies of construction related documents to ensure compliance with all federal, state, and local permit requirements. Construction of the Project facilities would take approximately three months to complete and Comanche Trail anticipates starting construction in the first quarter of 2016.

The HDD method would be used to construct the pipeline across the Rio Grande River. Generally, an HDD allows for trenchless construction across an area by drilling a hole below the depth of a conventional pipeline trench, and then pulling a prefabricated section of pipe through the hole. This method is used to avoid direct impacts on sensitive environmental features, such as waterbodies, or areas that otherwise present difficulties for standard pipeline construction.

[3] The FERC Plan and Procedures are a set of construction and mitigation measures that were developed in collaboration with other federal and state agencies and the natural gas pipeline industry to minimize the potential environmental impacts of the construction of pipeline projects in general. The FERC Plan can be viewed on the FERC internet website at http//www.ferc.gov/industries/gas/enviro/plan.pdf. The FERC Procedures can be viewed on the FERC internet website at http//www.ferc.gov/industries/gas/enviro/procedures.pdf.

To install the border-crossing pipelines, Comanche Trail would HDD beneath the Rio Grande from the Mexico side. The pipe would be fabricated on the U.S. side. The pipeline would then be hydrostatically tested, attached to the drill string at the exit point, and drawn back toward the drill rig at the entry location in Mexico. Upon completion of pipeline construction, Comanche Trail would again hydrostatically test the entire length of the pipeline. All disturbed workspaces would be restored per the requirements in our Plan.

5.0 Non-jurisdictional Facilities

Occasionally, projects have associated facilities that are constructed in support of the project, but do not come under the jurisdiction of the FERC. Such non-jurisdictional facilities are often constructed upstream or downstream of the jurisdictional facilities for the purpose of delivering, receiving, or using the proposed gas volumes.

The Project would interconnect with Comanche Trail's new intrastate pipeline facilities, which includes 195 miles of 42-inch-diameter pipeline, metering stations, and other auxiliary facilities from a hub in Pecos County, Texas. The intrastate facilities would be subject to the jurisdiction of the Railroad Commission of Texas (RRC) and would be non-jurisdictional to the FERC.

We have received comments in the record regarding the potential of the non-jurisdictional facilities to affect historic properties. The Comanche Trail Intrastate Project is an applicant for a USACE Nationwide Permit #12. The conditions of the permit specify that if the district engineer determines that the activity may affect any properties listed in, or eligible for listing in, the National Register of Historic Places, the activity is not authorized until the requirements of Section 106 the NHPA have been satisfied. The permit conditions also require the permittee to notify the district engineer if any previously unknown historic, cultural or archaeological remains and artifacts are discovered in the course of the activity. Therefore, effects to historic properties on the FERC non-jurisdictional facilities will be taken into account by the USACE.

Comanche Trail has conducted cultural resources surveys of 165 miles of the non-jurisdictional pipeline to date. The survey has identified 10 archaeological sites, none of which Comanche Trail recommends as significant. Comanche Trail will file a report of the assessment with the State Historic Preservation Office (SHPO) upon completion.

Comanche Trail has indicated that their planned 42-inch-diameter intrastate pipeline facilities would transport natural gas from the Waha Hub in Pecos County, Texas to the Project border facilities. The 195 mile long pipeline would interconnect to the Project border crossing pipeline. The facilities would be constructed under the jurisdiction of the RRC. Construction of the non-jurisdictional facilities would also include associated facilities, compression, and header and lateral pipelines. The facilities

would be capable of transporting approximately 1.1 billion cubic feet per day of natural gas.

A map depicting the non-jurisdictional pipeline facilities is provided on figure 2 in section B of this EA. These facilities are not part of the proposed action and not subject to the Commission's jurisdiction because they constitute construction of an intrastate pipeline subject to the jurisdiction of the RRC. However, we are providing the public and the Commission with the available information on the associated impacts in order to make a fully informed decision in the cumulative impacts analysis in section B.8.

In addition, at the crossing of the Rio Grande River, Comanche Trail plans to install a fiber optics cable to connect Energy Transfer Company's Supervisory and Control and Data Acquisition (SCADA) control system at the Waha Compressor Station to the Mexican pipeline company's control system in Mexico and allow for monitoring of pipeline system operations on the Comanche Trail pipeline and interconnecting pipeline in Mexico in real time from a control room in Mexico City. The cable would be installed in a 1,770-foot-long, 6-inch-diameter conduit installed under the Rio Grande River by HDD. The conduit HDD entry would be offset from the natural gas pipeline HDD by 15 feet and would follow a shallower profile depth of 25 feet below the river but paralleling the natural gas pipeline. Installation of the fiber-optic cable would occur during the same timeframe as the Project pipeline and would not require additional width of permanent easement of the jurisdictional pipeline or additional workspace for its installation.

The RRC Oil and Gas Division is responsible for regulating natural gas pipeline projects. According to Comanche Trail, it received an Oversight and Safety Division T-4 Permit from the RRC(Comanche Trail Pipeline) on May 12, 2015. We have determined that the non-jurisdictional Comanche Trail Pipeline is outside the scope of the proposed action for this EA. However, we include publicly available information for this project in our cumulative impacts analysis.

6.0 Permits, Approvals, and Regulatory Requirements

A number of federal, state, and local regulatory agencies have permit, approvals, or consultations that may be needed for the Project (see table 1).

Table 1. Permits and Approvals

Administrating Agency	Permit/Approval	Status
Federal		
Federal Energy Regulatory Commission	Natural Gas Act Section 3 Presidential Permit Application and 18 CFR 153	Application filed May 29, 2015, assigned Docket No. CP15-503-000. Approval Pending
U.S. Fish and Wildlife Service	Threatened and Endangered Species Act Section 7 Consultation	Consultation complete
U.S. Army Corp of Engineers	Rivers and Harbors Action Section 10 (Nationwide Permit 12)	Approval Pending.

International Boundary and Water Commission (IBWC)	License to Construct Pipeline	Approval Pending.
U.S Customs and Border Protection Border Patrol Division	Consultation to determine if proposed project would conflict with US Border Patrol operations	Ongoing coordination.
U.S.Environmental Protection Agency Region	National Pollutant Discharge Elimination System permit for hydrostatic test water discharge.	Consultation complete
State		
Texas State Historic Preservation Office	Section 106 of National Historic Preservation Act	Consultation complete.
Railroad Commission of Texas	PS-48; Notice of Construction; Hydrostatic Test Discharge Permit	PS-48 Required 30 days prior to construction. Discharge Permit requested 30 days prior to construction.
Texas Parks and Wildlife Department	Consultation regarding Marl, Sand, Gravel, Shell or Mudshell Permit.	Consultation complete

B. ENVIRONMENTAL ANALYSIS

1.0 Geology and Soils

The Project is located within the broad floodplain of the Rio Grande River. Average annual rainfall is on the order of 10 inches, and the Rio Grande River from El Paso downstream to San Elizario is a dry riverbed due to extensive irrigation and municipal withdrawals. Flash flooding is possible during a significant rainfall event over the watershed. However, the potential for scour of the pipeline is nonexistence because the pipeline would cross beneath the Rio Grande River at a depth of 52 feet beneath the river bottom.

Geology

The Project is located in the Basin and Range Physiographic Province in El Paso County, Texas along the Rio Grande River. The Project area lies within the Hueco Bolson, an extensive interior basin drained by the Rio Grande River extending from central New Mexico to the Rio Conchos Valley west of El Paso, Texas. Most of El Paso County is underlain by intermontane sediments known locally as bolson deposits.

Along the Rio Grande River, surficial sediments consist of colluvium, alluvium deposited by the flooding of the Rio Grande River, and alluvial-fan deposits. Topographically, the Project area is relatively flat, with a slight slope to the southwest and an average ground surface elevation of 3,630 feet above mean sea level. There is no identified hydrocarbon or earthen mineral resources in the Project area.

There are no known karst features in the proposed Project basin. However, the proposed Project is underlain by the Hueco Bolson aquifer, and the surficial Rio Grande Alluvial Aquifer. The Hueco Bolson is a major source of municipal supply and for

irrigation in the El Paso area. Over pumping of this aquifer in excess of naturally occurring recharge amounts within this arid environment have caused subsidence in El Paso County measured to be on the order of 0.05 feet between 1952 and 1978. The pipeline is designed, however, to withstand the levels of subsidence experienced in the area.

Paleontological resources could occur in the Project area consisting of Tertiary-age vertebrate and Cretaceous-age invertebrate fossils. Given the relatively small footprint of the Project, and the Quaternary alluvium deposits present, the Project is not expected to impact paleontological resources.

Hazards for steel pipelines used for the transmission of natural gas are limited to those that produce permanent deformation along the pipeline alignment. These hazards include seismicity or strong and prolonged ground shaking, surface fault rupture, seismically-induced soil liquefaction, slope instability and landslide susceptibility.

The United States Geologic Survey (USGS 2014) earthquake hazard program mapping shows that seismicity in terms of peak ground acceleration (PGA) within the Project area is between 3 to 5 percent gravity for the 10-percent probability of return period in 50 years. There have been five recorded earthquakes in the last 50 years within 50 miles of the Project area, the largest of these during year 2010 and registering as a magnitude 3.7. These values represent light to moderate ground shaking with little to no associated damage, and low potential for soil liquefaction to occur.

There are no recent faults which cross or that are present in the immediate vicinity of the Project. However, there are about 27 Holocene-age faults that lie within El Paso County, the nearest located about 6 miles east of the Project area. The flat terrain renders the Project area negligible for slope instability and landslides.

Given the geologic conditions at the site of the Project's crossing of the Rio Grande River, we do not anticipate that pipeline safety would be compromised due to geologic seismicity, ground rupture, soil liquefaction, subsidence or landslides.

Soils

The U.S. Department of Agriculture-National Resource Conservation Service (USDA-NRCS) on-line soil survey for El Paso County was used to define soils within the Project area. Surficial soils at the Project site consist of the Anapra Silty Clay Loam; Gila Loam; Glendale Loam; Harkey Loam; and Saneli silty clay. These soils are predominantly developed from stratified alluvial deposits, and clayey alluvium over sandy alluvium and occur along floodplains, and stream terraces. Soils in these series are considered well drained.

Comanche Trail would minimize soil impacts during construction by adhering to the construction and restoration methods required by our Plan, including: restricting

construction activities to approved work areas; installing temporary erosion controls such as silt fencing and properly maintaining these temporary controls until permanent erosion controls are installed or restoration is complete; reseeding temporary work areas; and monitoring for at least two years after construction to confirm successful restoration.

Comanche Trail would perform topsoil segregation, per our Plan requirements, and in accordance with their landowner easement agreement. Topsoil would be stockpiled separately from subsoil and replaced in the proper order during backfill and final grading. Project area soils are considered susceptible to soil rutting, depending on the degree of saturation within work areas during construction. Comanche Trail would minimize potential fugitive soil losses during construction disturbance by applying dust control measures such as watering the construction work areas and access roads, and would de-compact soils pre our Plan requirements.

Inadvertent spills or leaks of fuels, lubricants or coolant from construction equipment could impact Project soils. These are normally minor events of low frequency and small volumes. However, Comanche Trail has developed a Spill Prevention, Control, and Countermeasure (SPCC) Plan that specifies the prevention measures and cleanup procedures in the event of a spill or leak during construction activities. We have reviewed the contents of this plan and find it acceptable.

We conclude that the effects of construction and operation of the Project on soils would be minor.

2.0 Groundwater and Surface Water Resources

The proposed Project is within the Hueco Bolson alluvial aquifer, which is part of the Rio Grande Aquifer System. The Hueco Bolson aquifer is comprised of unconsolidated alluvial deposits, including the Rio Grande alluvium, or surficial aquifer with a thickness of about 200 feet overlying the Hueco Bolson aquifer. Per the findings of the geotechnical investigation conducted by Comanche Trail at the site of the proposed HDD alignment, groundwater in the surficial aquifer at the Project area occurs at a depth of about 13.5 feet below ground surface.

The Hueco Bolson aquifer is the principal aquifer for the El Paso area and Ciudad Juarez in Mexico. Nearly 90 percent of the water pumped from the Hueco Bolson, and adjacent Mesilla Bolson aquifer to the west is used for public water supply. The surficial aquifer is used primarily for supplemental irrigation when surface water flow in the Rio Grande River is not sufficient to meet agricultural water needs of the region.

Over pumping of the Hueco Bolson Aquifer in excess of naturally occurring recharge amounts within this arid environment have caused increased salinity in the aquifer, and water-level declines and minimal local land subsidence within the El Paso County area.

There are no public or private water wells within one-half mile of the Project area. There are no protected aquifers or U.S. Environmental Protection Agency (EPA) – designated sole source aquifers, or source-water protection zones in the Project area.

The Project facilities would be within the Rio Grande-Fort Quitman watershed. The HDD would cross beneath the Rio Grande River and a man-made ditch owned by the El Paso County Irrigation District No.1. There are no potable water intakes in the Rio Grande River within 3 miles downstream of the Project. The majority of surface water in the Rio Grande is diverted at a point upstream of the Project for irrigation and municipal use.

The Texas Commission on Environmental Quality (TCEQ) 2012 Texas Integrated Report of Surface Water Quality for Clean Water Act 303(d) lists this segment of the Rio Grande River from the confluence of the Rio Conchos (Mexico) in Presidio County upstream to the Riverside Dam in El Paso County (Assessment Unit No. 2307) as impaired water for bacteria, chlorides, and total dissolved solids. No discharges to this segment of the Rio Grande River are anticipated from Project construction.

Comanche Trail would implement the measures within our Plan and Procedures to minimize the potential for sediment runoff to impact adjacent surface waterbodies from construction work areas. Inadvertent releases of fuels, lubricants, or solvents from construction activities that could potentially impact adjacent surface waters and shallow groundwater resources would be addressed through implementation of Comanche Trail's SPCC Plan.

Comanche Trail's proposed HDD would be at depth of 52 feet beneath the Rio Grande River. The results of Comanche Trail's geotechnical soil boring shows subsurface material consisting of sandy clay in the upper 5 feet, underlain by poorly graded sands to a depth of 30 feet below ground surface, and sandy gravel to 40 feet below ground surface. Below 40 feet, well graded and poorly graded, medium dense gravel was encountered to a depth of 55 feet below ground surface, underlain by poorly graded sands to the bottom of the boring at 101.5 feet below ground surface. Bedrock was not encountered in the boring.

Groundwater was detected at depths of 13.5 feet below ground surface in the boring. These results indicate that the subsurface along the depth of the HDD profile above 40 feet below ground surface are amenable to the HDD method. The presence of 15 feet of medium-dense gravel between 40 and 55 feet below ground surface could present borehole stability problems during drilling, however Comanche Trail's geotechnical contractor (Hatch Mott MacDonald) states that HDD through the planned profile is technically feasible.

Comanche Trail conducted an analysis of estimated downhole drilling fluid pressures versus overburden pressure which shows that the risk of inadvertent release of drilling fluid reaching the ground and water surface is low with the exception of within 200 feet of the exit location in Mexico. Use of the HDD technique typically avoids disturbing a waterbody bed and banks and minimizes environmental impacts. However, an inadvertent release of drilling fluids from the drilled borehole through hydrofractures could reach the surface along the drill path. The release of drilling fluids could likewise occur in areas of mud pits or tanks. Drilling fluid is comprised of a mixture of water and non-toxic, naturally occurring bentonite clay, which in small quantities would not be detrimental to vegetation, fish, or wildlife. In larger quantities, the release of drilling fluids into a waterbody could affect fisheries and vegetation by causing turbidity, sedimentation, and changes to aquatic habitat.

Comanche Trail has prepared a Directional Drilling Contingency Plan to monitor and mitigate the potential effects of an inadvertent release of drilling fluids. Comanche Trail would monitor the volume of drilling fluids and the borehole pressures during drilling to determine if a substantial loss of drilling fluid circulation is occurring. An inadvertent release of drilling fluid within upland areas would be immediately contained with barriers such as hay bales, sand bags, or silt fencing, and collected. If the release is large enough to allow collection, the drilling mud would be collected and returned to the drill rig operations, or disposed of at a disposal site.

If a release were to occur within the Rio Grande River, Comanche Trail would notify the FERC, as well as the United Stated Army Corps of Engineers (USACE), the United States Fish and Wildlife Service (USFWS) and other applicable agencies to inform them of the release. In the event of a release into the Rio Grande River, varying by water levels, and flow within the river, silt fence may be used to surround and contain the release point. If water depth exceeds the ability to use silt fence, turbidity curtains may be utilized within the open water areas to contain the release and decrease turbidity levels, thus allowing the drilling mud to settle to the bottom of the waterbody. During containment procedures, Comanche Trail would minimize and limit impacts to adjacent wetland or riparian habitat areas. Once the release is contained, the drilling fluid would be pumped into trucks, and reused or disposed of at an appropriate off-site facility. However, Comanche Trail's contingency plan does not include measures that would be utilized to collect and dispose of the drilling mud release into the river. Additionally, the contingency plan does not contain the provision for notifying the International Boundary and Water Commission (IBWC) of the release. Therefore, we recommend that:

- **<u>Prior to construction</u>, Comanche Trail should file with the Secretary of the Commission (Secretary) for review and written approval by the Director of the Office of Energy Projects (OEP):**

a. a revised *Directional Drilling Contingency Plan* to provide for the measures to be implemented for collection and disposal of an inadvertent release of drilling mud into the Rio Grande River; and
b. that provides notification of the IWBC of any release of drilling mud into the river.

Comanche Trail would obtain about 200,000 gallons of water for hydrostatic testing and for drilling from a 16-inch-diameter irrigation well owned by a private landowner. This well is located at Milepost 194.3 on the intrastate pipeline alignment, approximately 2,950 foot east of the HDD entry location. Comanche Trail would ensure that water is discharged to vegetated upland areas utilizing hay bales, bag filters, and sock filters as needed to minimize erosion and sedimentation in accordance with FERC's Procedures. Comanche Trail would not be adding any chemicals to the hydrostatic test water and would test the water prior to discharge.

Field surveys conducted by Comanche Trail, the only areas that would meet wetland criteria are below the normal channel banks of the Rio Grande River, which the Project HDD would pass beneath.

Based on Comanche Trail's proposed construction methods and mitigation measures, including the measures in their SPCC Plan and their Directional Drilling Contingency Plan, and our recommendation, we conclude that impacts on groundwater (quality or quantity) and surface water resources would not be significant and would be adequately protected during construction of the Project.

3.0 Vegetation, Fisheries and Wildlife

Vegetation

The proposed Project workspaces are located entirely within previously disturbed agricultural cropland. None of the proposed workspaces contain undisturbed natural vegetation or trees. No wetlands or other sensitive plant communities exist within the proposed Project vicinity.

Construction could result in an increased potential for the introduction and establishment of invasive and noxious weeds. Comanche Trail would restore and revegetate disturbed areas in accordance with the FERC's Plan and Procedures and/or landowner requirements, and would implement control measures to reduce the spread of exotic, invasive, and noxious plant species after construction. As required by our Plan, Comanche Trail would monitor disturbed areas for at least two years following construction to determine if invasive or exotic species have become established. If

species or colonies of species were more abundant than in nearby undisturbed areas, Comanche Trail would remove invasive species.

Based on the minor footprint of the Project, a lack of vegetation resources in the Project area and Comanche Trail's post-construction monitoring for noxious weeds, we conclude that construction and operation of the Project would not significantly affect vegetation in the Project area.

Fisheries

There are no designated essential fish habitats near the Project nor are there any significant fisheries of commercial or recreational value that would be crossed or otherwise affected by the Project.

Comanche Trail would avoid fish habitat impacts by crossing the river and channel using the HDD method, which eliminates the need for in-stream construction. However, temporary habitat alteration, streambed structural changes, and substrate disturbance could also occur, from

- an inadvertent release of drilling fluids into the waterbody;
- increased sedimentation from overland flow off of construction work areas; and
- an inadvertent spill or release of fuels and/or lubricants into the waterbody.

Comanche Trail would implement the construction mitigation measures outlined in our Plan and Procedures to minimize impacts on waterbodies and fisheries. These mitigation measures include:

- reducing the size of workspaces near waterbodies where possible;
- locating extra work areas at least 50 feet from the edge of the waterbody;
- installing erosion controls to prevent run-off from entering waterbodies from construction work areas; and
- restricting refueling activities within 100 feet of the waterbody.

In addition, Comanche Trail would also implement its *Horizontal Directional Drill Inadvertent Release Control Plan* and its SPCC Plan.

Based on Comanche Trail's adherence to the construction and mitigation measures in our Plan and Procedures, and implementation of their Project-specific Plans, we conclude that impacts would not be significant.

Wildlife

The cropland described previously provides marginal habitat for commonly found wildlife. Protected species are addressed below. Wildlife observed during surveys of the project area included Brewer's blackbird (*Euphagus cyanocephalus*), mourning dove (*Zenaida macroura*), and white-winged dove (*Zenaida asiatica*).

Installing and operating the proposed pipeline would temporarily affect wildlife and wildlife habitat. Project related activities including clearing and the general use of construction equipment would result in the loss of wildlife habitat, change the characteristics of adjacent wildlife habitat, displace wildlife, alter wildlife behavior; and could increase the rates of mortality, injury and stress experienced by wildlife. However, based on the scope of the Project; amount of land affected and short duration of Project-related activities, we have determined that these effects would be minor and highly localized. Therefore, we conclude installing and operating the proposed pipeline would not significantly affect wildlife.

Threatened, Endangered, and Special Status Species

The USFWS identified six species listed under the Endangered Species Act as potentially occurring within the vicinity of the Project, but has not designated any critical habitat within El Paso County. These species include:

- least tern (*Sternula antillarum*);
- Mexican spotted owl (*Strix occidentalis lucida*);
- northern aplomado falcon (*Falco femoralis septentrioinalis*);
- southwestern willow flycatcher (*Empidonas tradillii extimus*);
- yellow-billed cuckoo (*Coccyzus americanus*); and
- Sneed's pincushion cactus (*Excobaria sneedii var sneedii*).

Habitat assessment surveys conducted on May 5, 2015, did not identify any individuals or suitable habitat for any of these species. Therefore, we have determined the Project would have *no effect* on these species from construction or operation, and our responsibility for the Endangered Species Act section 7 consultation is complete.

State-Listed Species

Because of the small Project construction footprint, as well as the previously disturbed condition of the land and lack of suitable habitat, we conclude that Project construction and operation would not adversely affect any special-status species.

Migratory Birds

Migratory birds are species that nest in the United States and Canada during the summer, and make short or long-distance migrations for the non-breeding season. Neotropical migrants migrate to and from the tropical regions of Mexico, Central and South America, and the Caribbean.

Migratory birds are protected under the Migratory Bird Treaty Act ([MBTA]-16 U.S. Code 703-711), and Bald and Golden Eagles are additionally protected under the Bald and Golden Eagle Protection Act (16 U.S. Code 668-668d). The MBTA, as amended, prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, or nests unless authorized under a U.S. Fish and Wildlife Service (USFWS) permit. Executive Order 13186 directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and avoid or minimize adverse impacts on migratory birds through enhanced collaboration with the FWS, and emphasizes species of concern, priority habitats, and key risk factors, and that particular focus should be given to population-level impacts.

On March 30, 2011, the USFWS and the Commission entered into a Memorandum of Understanding (MOU) that focuses on avoiding or minimizing adverse effects on migratory birds and strengthening migratory bird conservation through enhanced collaboration between the Commission and the USFWS by identifying areas of cooperation. This voluntary MOU does not waive legal requirements under the MBTA, the Endangered Species Act, the NGA, or any other statutes and does not authorize the take of migratory birds.

We have determined based on the characteristics and habitat requirements of the birds of conservation concern and migratory birds occurring or potentially occurring in the Project area, impacts on wildlife habitat, the amount of habitat affected and the presence of similar habitats adjacent to and in the vicinity of the Project that constructing and operating the Project would not result in population-level impacts or significant measureable negative impacts migratory birds.

4.0 Land Use

Construction of the Project would require temporary disturbance of approximately 4.2 acres classified as cultivated cropland on privately-owned property and would utilize an existing county road without modification or improvement. Following construction, Comanche Trail would restore areas disturbed by construction to pre-construction conditions, unless otherwise requested by the landowner or land managing agency. About 1.3 acre would be retained for a permanent pipeline right-of-way.

The Project would not affect nor be within 0.25 miles of any public use areas or special/sensitive land uses. Further, there are no occupied residential buildings within 50 feet of the Project. Visual impacts associated with temporary construction activities associated with the HDD would be temporary and insignificant.

5.0 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires the FERC to take into account the effects of its undertakings (including the issuance of Authorizations) on properties listed in or eligible for listing in the National Register of Historic Places (NRHP), and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking. Comanche Trail as a nonfederal party, is assisting the FERC in meeting our obligations under Section 106 by preparing the necessary information, analyses and recommendations as authorized by 36 CFR 800.2(a)(3).

Comanche Trail conducted a cultural resources survey of the proposed river crossing and additional temporary work space for the HDD. No cultural resources were identified. The Texas State Historic Preservation Officer (SHPO) requested deep testing to investigate the possibility of buried cultural deposits. Comanche Trail subsequently excavated two backhoe trenches which did not produce any archaeological material. On August 4, 2015 the SHPO recommended that no historic properties would be affected. We concur.

In an August 27, 2015 letter the National Park Service (NPS) notified the Commission that the El Camino Real del Tierra Adento National Historic Trail was located within the Project area. Comanche Trail provided the cultural resources report, the results of the deep testing and the SHPO comments on the reports to the NPS. On November 10, 2015, the NPS concurred with the SHPO's recommendation of "no historic properties affected".

On May 22, 2015 Comanche Trail wrote to the Apache Tribe of Oklahoma, the Comanche Nation of Oklahoma, the Mescalero Apache Tribe of the Mescalero Reservation, the Tonkawa Tribe of Oklahoma, the Ysleta del Sur Pueblo, the Fort Sill Apache Tribe of Oklahoma, and the White Mountain Apache Tribe to request their comments on the proposed Project. The Comanche Nation of Oklahoma responded that no properties would be affected by the proposed Project. The Ysleta del Sur Pueblo responded that they did not object to the Project but requested that they be notified in the event any artifacts or human remains were unearthed during the project. On August 3, 2015, we sent our NOI to the same tribes. We have not received any responses to our NOI to date.

Comanche Trail has prepared a plan in the event any unanticipated cultural resources or human remains are encountered during construction. We find the plan to be acceptable.

Therefore, we have determined in consultation with the Texas SHPO and Native American tribes that the Project as proposed would not affect any properties listed in, or eligible for listing in, the National Register of Historic Places.

6.0 Air Quality and Noise

Federal and state air quality standards are designed to protect human health. The Environmental Protection Agency (EPA) has developed National Ambient Air Quality Standards (NAAQS) for air contaminants designated "criteria pollutants" such as nitrogen dioxide and carbon monoxide (CO), the primary pollutants emitted by natural gas-fired compressor facilities. Other relevant criteria pollutants include ozone (O_3), sulfur dioxide (SO_2), and particulate matter (PM_{10} and $PM_{2.5}$ for size fractions less than 10 microns and less than 2.5 microns, respectively). The NAAQS were set at levels the EPA believes are necessary to protect human health and welfare.

If measured ambient air pollutant concentrations for a subject area remain below the NAAQS criteria, the area is considered to be in attainment with the NAAQS. The Project location is in the TCEQ El Paso-Juarez Air Quality Control Region in El Paso County. As of 2015, the City of El Paso is considered in moderate nonattainment status for PM_{10} and the entire county is in maintenance status for carbon monoxide. The county is considered in attainment for all other current NAAQS criteria.

Regulations

The Clean Air Act is the basic federal statute governing air pollution. However, the jurisdictional Project does not include permanent stationary air emissions sources that would be subject to permitting provisions under the Clean Air Act. Nor would the Project be subject to the Greenhouse Gas (GHG) Reporting Rule as emissions are expected to be well below the threshold of 25,000 TPY of carbon dioxide equivalents ($CO_{2\,e}$).

Conformity of General Federal Actions

A conformity analysis must be conducted by the lead federal agency if a federal action would generate emissions that would exceed the conformity applicability threshold levels of the pollutant(s) for which an air basin is in non-attainment. According to Section 176(c)(1) of the CAA (40 CFR Section 51.853), a federal agency cannot approve or support activity that does not conform to an approved State Implementation Plan. The Project location is in the TCEQ El Paso-Juarez Air Quality Control Region in El Paso County. As of 2015, the City of El Paso is considered in moderate nonattainment status for PM_{10} and the entire county is in maintenance status for carbon monoxide.

As shown in Table 2, estimated total construction emissions are below the general conformity applicability thresholds for CO and PM10 of 100 tons per year. A general conformity determination is not required and the proposed actions are deemed to be in accordance with the Texas State Implementation Plan SIP.

Emissions Impacts and Mitigation

There are no permanent stationary sources of air emissions, such as a compressor station, nor sources of periodic air emissions, such as blowdown equipment, associated with the jurisdictional Project. Air emissions would be limited to construction equipment and fugitive dust during the 40 days of anticipated construction.

Construction equipment emissions would occur as a result of combustion of gasoline and diesel fuels, most notably the operation of the HDD drilling rig and the on-site generator. Emissions are also expected from on-road vehicles making trips to the Project site and from other miscellaneous equipment operating at the site. Project emissions of criteria pollutants and GHGs from all these sources are summarized in Table 2.

Table 2. Estimated Equipment Construction Emissions (tons)

	Criteria Pollutants					
	PM10/PM 2.5	NO_X	CO	SO_2	VOCs	GHG CO_2e
Construction Equipment Emissions	0.84	4.64	3.94	0.0	0.63	296.5

Note: Note 1: Originally identified as Total Suspended Particles. Conservatively assumed that TSP=PM10=PM2.5
NO_X = nitrogen oxides

Construction equipment emissions would occur as a result of combustion of gasoline and diesel fuels, most notably the operation of the HDD drilling rig and the on-site generator. Emissions are also expected from on-road vehicles making trips to the Project site and from other miscellaneous equipment operating at the site. Fugitive dust emissions would result from traffic on unpaved roads and earth-moving activities.

The TCEQ's air quality regulations, codified in Title 30 of the Texas Administrative Code, Part 1, Chapters 1 through 351, of Rule 111.145 *Control of Air Pollution from Visible Emissions and Particulate Matter* (30 TAC 111.145), requires that construction activities that take place on more than 1 acre of land utilize listed methods of dust suppression to control visible emissions and emissions of particulate matter. We therefore anticipate that construction of the intrastate pipeline would be required to control fugitive dust in compliance with TCEQ regulations

Based on the temporary, short-term nature of construction activities and our review of construction and fugitive dust emissions, we conclude that construction of the Project would not have a significant impact on air quality.

Noise

The ambient sound level of a region is defined by the total noise generated within the specific environment, over varying land use types, and is usually comprised of natural and artificial sounds. The land use in the project area is primarily agricultural land. At any location, both the magnitude and frequency of environmental noise may vary considerably over the course of a day and throughout the week. This variation is caused in part by changing weather conditions, the effect of seasonal vegetation cover, and human activities.

Two measurements used by federal agencies to relate the time-varying quality of environmental noise to its known effects on people are the equivalent sound level (L_{eq}) and the day-night sound level (L_{dn}). The L_{eq} is an A-weighted sound level1 containing the same sound energy as instantaneous sound levels measured over a specific time period. Noise levels are perceived differently, depending on length of exposure and time of day, among other factors. The L_{dn} takes into account the duration and time the noise is encountered. Late night through 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 nighttime hours. An L_{dn} of 55 dB on the A-weighted scale (dBA) is equivalent to a continuous L_{eq} noise level of 48.6 dBA. In general, an increase of 3 dB is the threshold of noticeable difference for humans, 5 dB is clearly noticeable, and a 10-dB difference would be substantially noticeable.

The EPA has indicated that an L_{dn} of 55 dBA protects the public from indoor and outdoor activity interference. We have adopted this criterion and use it to evaluate the potential noise impact from operation of compressor facilities. We are not aware of any state or local noise regulations or ordinances applicable to the construction of the project facilities.

Impacts are determined at receptors known as noise-sensitive areas (NSAs). NSAs include residences, schools and day-care facilities, hospitals, long-term care facilities, places of worship, libraries, and parks and recreational areas (e.g., wilderness areas) valued specifically for their solitude and tranquility.

The jurisdictional Project does not include any aboveground facilities; therefore, no operational noise impacts would occur. Construction noise impacts are described further below.

Construction Noise Impacts and Mitigation

Overall noise levels in the Project area would be affected during construction of the Project facilities. While individuals in the immediate vicinity of the construction activities would experience an increase in noise, this effect would be temporary and local. The changing number and type of construction equipment present at these sites would result in varying levels of noise. The principal activity of the Project construction is the HDD under the Rio Grande, from which noise would be generated during the drilling and pullback of the pipeline. In addition, noise would be generated during construction from the use of standard heavy equipment, such as excavators, bulldozers, drill rig, and large trucks. Construction equipment would be operated on an as-needed basis during daylight hours only; therefore, nighttime noise levels would remain unaffected by most construction activities, with the possible exception of the proposed HDD itself.

The HDD would require up to 40 days of drilling. Comanche Trail states a potential for 24-hour drilling schedule in response to site-specific drilling conditions.

The nearest NSA to the HDD is located 878 feet to the north. The noise impact attributable to HDD operations at this NSA could potentially reach 56.3 dBA L_{eq}, which would be equivalent to 62.7 dBA L_{dn} during any unmitigated night-time drilling. Comanche Trail states that it intends to install a temporary 20-foot-tall noise attenuation wall on the west and northwest sides of the HDD workspace to achieve at least a 10 dBA reduction in noise. However a noise attenuation wall which reflects sound waves could increase the noise attributable to the HDD to the south and east sides of the Project. To the east of the Project area are several NSAs within a half-mile of the proposed drilling entry point.

To ensure that the nearest NSAs to the HDD site are not exposed to excessive noise during nighttime HDD operations in the event that Comanche Trail conducts 24-hour HDD activities, **we recommend that:**

- **Prior to commencing any drilling operations**, **Comanche Trail should file with the Secretary, for the review and written approval by the Director of OEP, a HDD noise analysis identifying the existing and projected noise levels at each NSA within 0.5 mile of the HDD entry site; and a HDD noise mitigation plan to reduce the projected noise level attributable to the proposed drilling operations at all NSAs with predicted L_{dn} noise levels above 55dBA. During drilling operations, Comanche Trail should implement the approved plan, monitor noise levels, and make all reasonable efforts to restrict the noise attributable to the drilling operations to no more than a day-night sound level of 55 decibels on the A-weighted scale at the NSAs**.

We conclude that construction activities associated with the project would result in short-term, temporary increases in ambient noise levels. With non-HDD-related construction limited to daytime hours, and based on the anticipated noise levels

attributable to the short-term HDD activities, the mitigation measures proposed, and our recommendation, we conclude that adjacent landowners would not be significantly affected by construction-related noise.

7.0 Reliability and Safety

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

The pipeline facilities associated with the project must be designed, constructed, operated, and maintained in accordance with the Department of Transportation (DOT) Minimum Federal Safety Standards in 49 CFR Part 192. The regulations are intended to ensure adequate protection for the public and to prevent natural gas facility accidents and failures.

The DOT 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, including compressor station design, emergency shutdowns and safety equipment (sections 192.163-192.173). 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.

Comanche Trail's construction and operation of the Project would represent a minimum increase in risk to the public and we are confident that with the options available in the detailed design of Comanche Trail's facilities, that they would be constructed and operated safely.

7.1 Border Crossing Considerations

The Project location is in the El Paso Sector of the Customs and Border Patrol (CBP) headquartered in El Paso, Texas, and the temporary work space (TWS) occurs on the U.S. side of the border control fence. Comanche Trail's representatives met with the local CBP office on June 23, 2015, and were provided a list of recommendations for safety and security during construction. Comanche Trail is committed to including CBP recommendations to all staff and contractors during construction and to using "Project

Hangtags" to be placed on vehicle rearview mirrors to assist CBP staff in identifying "Project associated vehicles."

8.0 Cumulative Impacts

In accordance with the NEPA and FERC policy, we considered the cumulative impacts of the Project and other projects in the general area. Cumulative impacts represent the incremental effects of the proposed action when added to other past, present, or reasonably foreseeable future actions, regardless of the agency or party undertaking such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. We address the direct and indirect impacts of the Project in other sections of this EA.

The purpose of the cumulative impact analysis is to identify and describe cumulative impacts that would potentially result from implementation of the Project. This cumulative impact analysis generally follows the methodology set forth in relevant guidance (CEQ, 1997). Under these guidelines, inclusion of other projects within the analysis is based on identifying commonalities of impacts from other projects with impacts that would result from the Project. The cumulative impacts analysis includes actions meeting the following three criteria:

- impact a resource potentially affected by the proposed project;
- cause this impact within all or part of the proposed project area; and
- the impact occurs or is sustained within all, or part, of the time span for the potential impact from the Project.

For the purposes of this EA, the region of influence (ROI) for cumulative impacts includes the Project's area of direct effect plus the area where impacts on a resource, such as air emissions, may extend beyond the disturbance area. Because the Project's ground disturbing activity would be relatively minor, we limited the cumulative impact region of influence to the visual range from the Project site to a maximum of a one-mile radius. For the resources affected by the Project, effects of more distant projects were not assessed because their impacts would not be additive with those of the Project. Because of its limited scope, the Project would not have a meaningful contribution to cumulative impacts at a larger geographic scale.

As previously discussed in this EA, Comanche Trail would perform activities that are not under the jurisdiction of the FERC. Because the planned non-jurisdictional intrastate facilities would be built in close proximity to the Project, there could be cumulative impacts. Therefore, we are disclosing a description of the non-jurisdictional Comanche Trail pipeline and its associated facilities, and the potential environmental effects related to construction using the best available data provided by Comanche Trail. However, with the exception of a small segment in proximity to the Project, the impacts

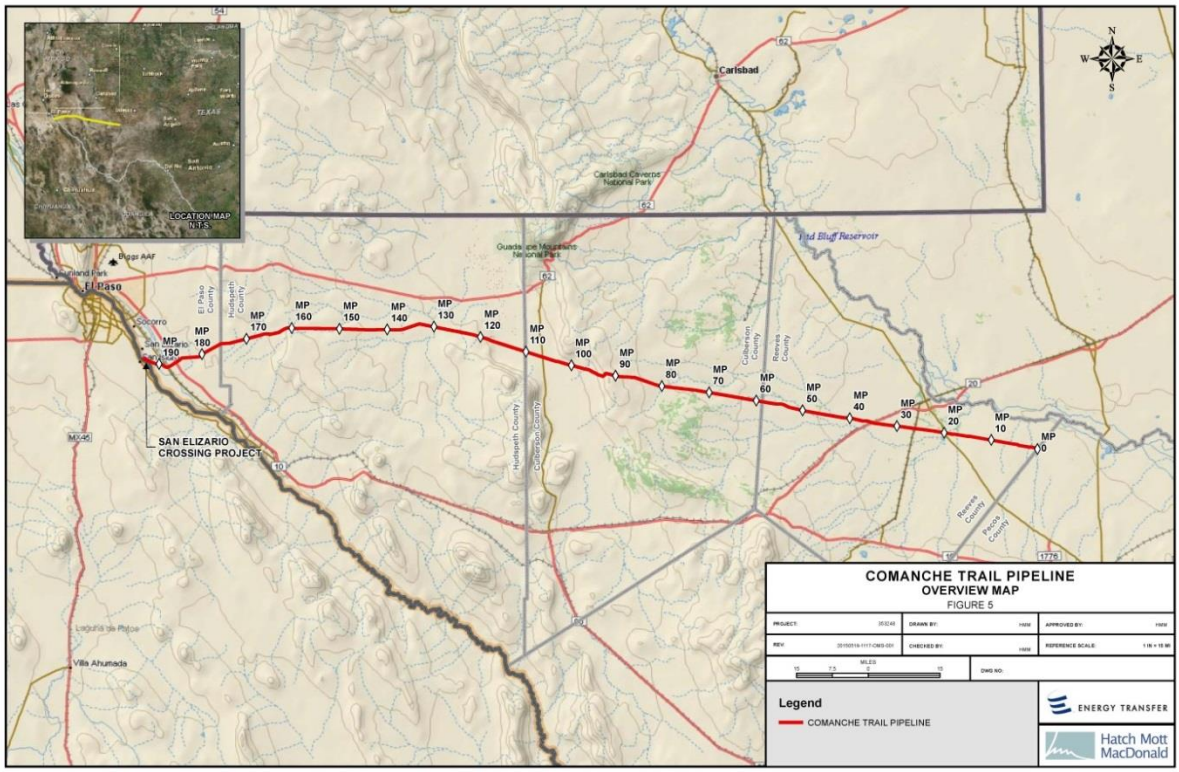
that would result from construction and operation of the Comanche Trail Pipeline would be too far removed from the San Elizario Crossing Project to be additive. That is, nearly all of the impacts for the pipeline would occur outside the potential ROI for the San Elizario Crossing Project.

We did not identify any other reasonably foreseeable development projects aside from the non-jurisdictional pipeline facilities and the Project's associated fiber optics cable in the ROI that meet the above listed criteria to warrant a cumulative impacts analysis. Therefore, the cumulative impact analysis only discusses the Project and the non-jurisdictional Comanche Trail Pipeline and the fiber optics cable.

Comanche Trail Intrastate Pipeline

Comanche Trail plans to construct a 195-mile-long 42-inch-diameter intrastate pipeline (Comanche Trail Pipeline), which would extend from the Waha Hub approximately 3 miles northwest of Coyanosa, Texas to delivery locations with local towns and utilities in south Texas, and terminate at an interconnect with the San Elizario Crossing Project. Comanche Trail provided us with a map of the proposed Comanche Trail Pipeline, which is shown in figure 2**.**

Figure 2. Comanche Trail Non-Jurisdictional Pipeline



The pipeline would include the construction of meter stations, a maximum 70,000 horsepower compressor station near the Waha Hub (Waha Compressor Station), a 1.5-mile-long header pipeline with 8 interconnects to existing intrastate and interstate pipeline systems, a 16.8-mile-long, 30-inch-diameter lateral header pipeline (Pyote Lateral), and a 10-acre custody transfer meter station at the terminus where the pipeline would connect with the border crossing facilities. The Comanche Trail Pipeline would be designed to transport 1.1 billion cubic feet of natural gas per day and is expected to initially transport solely Texas-sourced gas gathered from the Waha Hub.

The Comanche Trail would require a 50-foot-wide permanent easement and an additional 75-foot-wide temporary easement for construction activities. The pipeline would be constructed next to existing pipelines for 175.4 miles of its total length. A total of approximately 3,000 acres of land would be affected by construction of the pipeline, and about 1,180 acres would be maintained as permanent right-of-way. For the most part, land would be restored to previous conditions.

Comanche Trail would construct the pipeline via conventional and non-conventional methodologies. Survey and staking of the construction right-of-way would be followed by conventional construction activities including clearing and grading,

trenching, pipe stringing, bending and welding, lowering-in and backfilling, hydrostatic testing, commissioning, cleanup and restoration, and non-conventional construction techniques (horizontal bores and horizontal drills) of crossings of highways and canals. These activities would proceed in an assembly line fashion and construction crews would move down the construction right-of-way as work progressed. Any single point along the project would typically take 6 to 10 weeks to complete and would vary by soil conditions and construction methods. Comanche Trail plans to begin construction in April 2016 with a planned in-service date during the first quarter of 2017.

Cumulative Impacts within the ROI

The components of the Comanche Trail Pipeline project that would be within the ROI and therefore could result in additive impacts with the San Elizario Crossing Project include the 10-acre custody meter station and the part of the pipeline that would be constructed and operated within one mile of the ground disturbance associated with the San Elizario Crossing Project.

Potential Environmental Impacts

Geology and Soils

As stated before, the San Elizario Crossing Project would require minimal ground disturbance limited to a small area, and ground contours would be restored after construction. Similarly, construction of the Comanche Trail Pipeline would include localized disturbance, which would be returned to pre-construction conditions after construction. Because of the temporary and minor nature of Project activities, the cumulative effect on geological conditions and soils would be negligible.

The fiber optics cable would require no additional workspace for its installation. Because of the temporary and minor nature of these project activities, the cumulative effect on geological conditions and soils would be negligible.

Water Resources

Neither projects would directly impact surface waters as the Rio Grande River would be crossed using an HDD. Further, the projects would not likely have an impact on groundwater resources. Therefore, there would be no additive impacts on water resources. The fiber optics cable would be installed via HDD to avoid direct impacts on the Rio Grande River. Therefore, there would be no additive impacts on water resources.

Wildlife and Vegetation

As stated, the San Elizario Crossing Project would require minimal ground disturbance limited to a small area, and vegetation would be restored after construction. Wildlife could experience temporary disruptions, displacement, and loss of habitat, but would be able to return to the area following completion of activities. Activities and ground disturbance associated with the non-jurisdictional project in the ROI would also be limited in scope, vegetation would be restored when construction is complete, and wildlife would be able to return to the area. Because of the temporary and minor nature of project activities, the cumulative effect on vegetation and wildlife would not be significant.

Land Use

The San Elizario Crossing Project would temporarily affect 4.2 acres of active agricultural land, which would be restored upon completion of the Project. The non-jurisdictional Comanche Trail Pipeline facilities within the ROI would temporarily affect between about 25-35 acres of active agricultural land, and about 10 acres of land would be maintained as a permanent custody transfer meter station. The fiber optics cable would be installed within the permanent easement of the jurisdictional pipeline, and would have no added impact on land use.

Because construction activities associated with the San Elizario Crossing Project would be temporary and land use would revert to pre-construction conditions after the project is complete, the additive impacts on land use would be negligible.

Cultural Resources

Comanche Trail undertook a background review of recorded archaeological sites within 1 mile of the proposed route. The route is in the immediate vicinity of two significant previously identified archaeological sites. The proposed pipeline route avoids these sites. There are six other sites adjacent to the route but they are classified as "not significant".

Air Quality and Noise

Construction Emissions

Construction of the Comanche Trail intrastate pipeline would generate emissions of air pollutants and fugitive dust. Emissions of criteria air pollutants and GHGs are expected from the combustion of gasoline and diesel fuels in construction equipment, including pipeline lay, bores, supporting equipment, supply trucks, and vehicles used to commute to and from the work locations. All other counties (Pecos, Reeves, Culberson,

and Hudspeth) crossed by the intrastate pipeline are in an unclassified/attainment status for the NAAQS (EPA, 2015). Fugitive dust would be generated from land clearing, grading, and trench-digging for the intrastate pipeline as well as driving on unpaved roads. With the exception of GHG emissions, air quality impacts would be highly localized.

The TCEQ's air quality regulations, codified in Title 30 of the Texas Administrative Code, Part 1, Chapters 1 through 351, of Rule 111.145 *Control of Air Pollution from Visible Emissions and Particulate Matter* (30 TAC 111.145), requires that construction activities that take place on more than 1 acre of land utilize listed methods of dust suppression to control visible emissions and emissions of particulate matter. We therefore anticipate that construction of the intrastate pipeline would be required to control fugitive dust to comply with TCEQ regulations.

The impacts from construction of the portion of the intrastate pipeline within the immediate vicinity of the Project would be considered cumulative with the project during any overlap in construction schedules. The Project's fugitive dust contribution to local air quality would be minor as an HDD utilizes a wet mud slurry to drill underground which disturbs less land and produces less fugitive dust than conventional pipeline trenching methods. Considering the limited scope of the jurisdictional project, we do not anticipate significant cumulative air quality impacts to result during construction of the Project.

We anticipate that construction of both the intrastate pipeline facilities including the fiber optics cable installation would be required to control fugitive dust by TCEQ regulations.

As the jurisdictional Project would not have operational emissions, it would not contribute any impact on cumulative long-term air quality.

Noise

Construction Noise

Noise would be generated from the construction equipment which, barring unlikely nighttime construction would operate during daylight hours only. Noise impacts would also be temporary and short term, attenuating as the distance from the noise source increases.

These noise impacts from construction of the portion of the intrastate pipeline within the vicinity of the Project would be considered cumulative with the Project during any overlap in construction schedules. Construction equipment emissions and noise from the Project would be greater than construction of the proximate pipeline portion given the

need to use stationary drilling equipment for up to 30 days. While the cumulative impacts of a concurrent construction schedule would be greater, we conclude the impacts would be short-term, temporary and limited to the immediate vicinity of the Project area.

Operational Noise

Meter stations have been known to generate a high-pitched noise during operation. Comanche Trail describes plans to construct an intrastate meter station approximately 3,300 feet from the Project's HDD entry/exit point on the U.S. side.

As the jurisdictional Project would not have operational noise, we do not anticipate significant cumulative long-term noise impacts to occur.

Conclusion

The impacts of the Comanche Trail's San Elizario Crossing Project activities would be short-term and include minimal localized ground disturbance. All land disturbed would be restored to its previous condition after construction. Therefore, impacts from the border crossing activities would not contribute meaningfully to cumulative impacts in the area. Likewise, the construction of Comanche Trail Pipeline would be temporary and land disturbed would be restored to its previous condition, except for the permanent area needed to operate the custody meter station. For these reasons, we conclude that the potential additive impacts would not be significant.

Comanche Trail Pipeline Impacts Outside of the ROI

Comanche Trail filed information regarding the environmental impacts of the planned Comanche Trail Pipeline, which we present for the purposes of informing stakeholders and decision makers.

Geology and Soils

In general, the pipeline would be buried at a depth of six feet. At this depth, the impact on regional geology would be minimal. Potential geologic hazards for the Comanche Trail Pipeline include liquefaction, lateral spread movement, and seismic-induced slope instability, which can occur as the result of large earthquakes over 6.0 moment magnitude. Based on the USGS data, the maximum probability of an earthquake exceeding a moment magnitude of 6.0 within 50 years is approximately 6 percent. Comanche Trail Pipeline has conducted seismic and geological hazard risk assessments along the pipeline route and would design and construct the pipeline to incorporate these risks.

Construction activities such as clearing, grading, trenching, backfilling, and the movement of construction equipment along the right-of-way could affect soil resources. Clearing of vegetation increases the potential for soil erosion and sedimentation. Construction activities could also affect soil fertility and revegetation potential, and facilitate the dispersal and establishment of weeds. Comanche Trail would implement a Storm Water Pollution Prevention Plan (SWPPP), which includes erosion control measures during construction to minimize the potential for soil erosion and sediment transport from temporary ground disturbance.

Water Resources

Construction of the Comanche Trail Pipeline could affect water resources in several ways. Clearing and grading of stream banks, in-stream trenching, trench dewatering, backfilling, and expansion of access roads could result in increased sedimentation and erosion, modification to hydrological flow, releases of chemical and nutrient pollutant from sediments, and introduction of chemical contaminants such as fuel and lubricants.

Construction of the Comanche Trail Pipeline is not expected to have major impacts on groundwater resources. Comanche Trail would excavate a shallow trench to construct the pipeline. Thus, construction of the pipeline is not likely to impact groundwater deeper underground.

The Comanche Trail Pipeline would cross 92 streams and tributaries that are USACE jurisdictional and subject to Clean Water Act regulations. Based on desktop data and consultation with USACE, all streams crossed by the project are ephemeral. This determination would be verified through field assessments. The pipeline would be installed underneath seven irrigation canals that are not subject to regulation by USACE. Comanche Trail would use HDD methods to construct the pipeline underneath the canals. All stream work (except for irrigation canals) would fall under the jurisdiction of the USACE Nationwide Permit 12. Comanche Trail states that based on review of topographic and National Wetland Inventory maps and aerial photography, impacts on wetlands are not anticipated.

Vegetation and Wildlife

The intrastate pipeline would cross primarily desert grassland, some of which has been converted into a community dominated by bare soil and invasive woody plant species due to overgrazing by livestock, suppression of fire, and anthropogenic use of groundwater. Vegetation in the area consists of creote bush, tarbush, mariola, whitethorn acacia, honey mesquite, cacti, juniper, catclaw mimosa, sacahuiste, can cholla, adolphia, and prickly pear. The primary direct effect from pipeline construction would be the cutting, clearing, and removal of existing vegetation within the construction workspace.

The degree of impact would depend on the type and amount of vegetation affected, the rate at which the vegetation would regenerate after construction, and the frequency of vegetation maintenance conducted during operation. After construction, Comanche Trail would comply with its Post Construction Restoration Procedures, which include reseeding of the affected lands according to reseeding guidelines prepared using recommendations from the U.S. Department of Agriculture range specialists.

Potential effects on wildlife would include noise and movement associated with the construction activity and the temporary decrease in the amount of available habitat.

However, any effects from construction noise and the decrease in habitat would be temporary. During construction activities, more mobile wildlife such as mammals and birds could be displaced to other available nearby habitat. Some smaller, less mobile individuals such as reptiles and amphibians could be unintentionally killed by construction equipment. Given the limited area affected by construction along the 125-foot-wide pipeline construction right-of-way and Comanche Trail's restoration plans, Comanche Trail states that it is unlikely that there would be significant impacts on the region's wildlife.

Construction activities and vegetation removal could result in the displacement of migratory birds and their avoidance of affected lands. Displacement and avoidance could impact bird migration, nesting, foraging, and mating behaviors. Behavior changes combined with the loss and/or conversion of wildlife habitats could increase the rates of mortality, injury, and stress experienced by migratory birds. Based on the characteristics and habitat requirements of the birds of conservation concern and migratory birds occurring or potentially occurring in the Project area, impacts on wildlife habitat, the amount of wildlife habitat affected, the presence of similar habitats adjacent to and in the vicinity of the Project, constructing and operating the Project would not result in population-level impacts or significant measureable negative impacts on birds of conservation concern or migratory birds.

Comanche Trail consulted the USFWS IPAC database to evaluate the presence of threatened and endangered species near the proposed pipeline facilities. Several species of birds, crustaceans, fish, plants, and snails were listed as potentially occurring near the project area. However, based on data from the Texas Natural Heritage Database, there are no known occurrences of federally listed species on or immediately adjacent to, the proposed pipeline route. Additionally, there would be no designated critical habitat, refuges, or federal lands crossed by the pipeline.

Land Use

The land use types that would be crossed by the Comanche Trail Pipeline are mostly livestock rangeland and some active agriculture. As previously described, a total

of about 3,000 acres of land would be affected by construction, and about 1,180 acres would be maintained as permanent right-of-way. In general, lands required for construction would experience short-term, long-term, and permanent impacts based on the time it would take the land to recover to pre-construction conditions. Lands disturbed by construction would return to rangeland and active agriculture. In addition, lands required for permanent right-of-way would essentially return to pre-construction conditions.

Cultural Resources

The archaeology contractor for Comanche Trail has utilized the Texas Archaeological Archives to perform a background review of recorded archaeological sites within 1 mile of either side of all routes considered in development of the proposed route. The project route does not directly affect any known significant cultural resource sites. It is in immediate proximity, or immediately adjacent to two significant sites, but field assessments confirmed these are avoided. There are six other known sites adjacent to the route, all of which are classified as "not significant". Field assessments have documented 10 previously unrecorded sites, none of which are significant.

Air Quality and Noise

Construction of the Comanche Trail Pipeline would involve the use of heavy equipment that would generate emissions of air contaminants, fugitive dust, and noise. With the exception of GHG emissions, air impacts would be localized and confined primarily to the airshed in which they occur. All counties the project would cross through are either unclassifiable or in attainment for NAAQS. Construction of the Comanche Trail Pipeline would contribute to temporary construction noise impacts along the pipeline route. However, construction noise is generally highly localized and attenuates quickly as the distance from the noise source increases.

Operation of the Comanche Trail intrastate pipeline would generate emissions of air pollutants and noise from aboveground facilities. The principal aboveground facility, and thus source of noise and operational emissions, would be the 70,000-horsepower Waha Compressor Station in Pecos County, Texas, which is expected to serve several pipelines including the Comanche Trail intrastate pipeline. Comanche Trail states that this station will ultimately include the installation of 14 CAT 3616 KBU 5,000 horsepower dual-drive electric/natural gas-driven units . A unit driven by natural gas would generate air emissions, most notably GHGs, NO_x, and fine particulate matter. Emissions of the criteria pollutants would be regulated under the CAA and the TCEQ as the lead air permitting authority in Texas responsible for this facility. Should the units be electrically-driven, they would not generate criteria air pollutants and may not require permitting under Title V of the CAA.

On November 8, 2010, the EPA signed a rule that finalizes reporting requirements for the petroleum and natural gas industry under 40 CFR 98. Subpart W of 40 CFR 98 requires petroleum and natural gas facilities that emit 25,000 metric tons or more of carbon dioxide equivalent per year to report annual emissions of specified GHGs from various processes within a facility. Given the size of the facility and the number of individual units, this reporting requirement would most likely apply to the Waha Compressor Station. Along the intrastate pipeline, we estimated the fugitive emission of GHGs using the emission factors in 40 CFR 98, Subpart W, Table W-3, Default Total Hydrocarbon Emission Factors for Onshore Natural Gas Transmission Compression. We can expect that each meter station and mainline block valve would emit 12.3 and 27.0 tons per year of CO_{2e} respectively.

Operational noise from the Comanche Trail intrastate pipeline and associated facilities would be expected from the Waha Compressor Station and, to a lesser degree, from the meter stations along the pipeline. Comanche Trail states that the nearest noise-sensitive area to the new Waha Compressor Station is a single residence 1.08 miles northwest of the planned facility boundary. They calculated the noise impact from full-capacity operations at this receptor to be 33 dBA.

Cumulative Impacts Conclusion

In general, small scale projects, such as Comanche Trail's FERC jurisdictional border-crossing facilities and fiber optics cable with minimal impacts and of short duration, would not contribute significantly to cumulative impacts. We conclude that the potential additive impacts resulting from Comanche Trail's intrastate project within the ROI and the San Elizario would not be significant. Comanche Trail's FERC jurisdictional Project would represent a negligible contribution to the overall cumulative impacts in the Project area.

C. ALTERNATIVES

In accordance with NEPA and Commission policy, we evaluated alternatives to the Project. Our evaluation criteria included whether the alternatives would: 1) provide a significant environmental advantage over the Project; 2) meet the Project's stated objectives; and 3) be technically and economically feasible and practical.

Under the no-action alternative, Comanche Trail would not construct the Project. While this alternative would eliminate the potential impact on the environment, Comanche Trail's stated need to meet Mexico's projected energy demands and to promote Mexico's initiative to expand electric generation and industrial markets in Mexico would not be met. Other natural gas companies could construct projects in substitute for the natural gas supplies offered by Comanche Trail. Such alternative projects could require the construction of additional and/or new pipeline facilities in the same or other locations to transport the gas volumes proposed by the Project. These projects would result in their own set of specific environmental impacts that could be equal to or greater than those described for the Project.

Comanche Trail selected the siting of the proposed HDD route to traverse the shortest distance necessary across the Rio Grande River in order to transport natural gas from an interconnect with the future non-jurisdictional intrastate pipeline, owned and operated by Comanche Trail, to a non-jurisdictional pipeline interconnect in Mexico. No substantial adverse impacts were identified during scoping or in our analysis of the Project. Therefore, we did not identify any crossing location or other alternatives that could provide a significant environmental advantage over the Project as proposed, and we identified no alternatives that could satisfy all three of our evaluation criteria.

D. STAFF'S CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in this EA, the mitigation measures proposed by Comanche Trail, and the implementation of our recommendations below, we have determined that if constructed in accordance with its application and supplements, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

We recommend that the Commission Order contain a finding of no significant impact. If the Commission approves the Project, we recommend that the Commission Order contain the following conditions:

1. Comanche Trail 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. Comanche Trail 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 the Office of Energy Projects (OEP) **before using that modification**.

2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during activities associated with the construction and operation of the Project. This authority shall allow:

    a. the modification of conditions of the Order; and
    b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from Project construction and operation.

3. **Prior to any construction of facilities,** Comanche Trail shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will 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 soon as they are available, and before the start of construction,** Comanche Trail shall file with the Secretary any revised construction workspace configuration drawings at a scale not smaller than 1:6,000 with station positions for all activities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

5. Comanche Trail 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, and 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 **before construction in or near that area**.

   This requirement does not apply to extra workspace allowed by the FERC Plan and/or minor field realignments per landowner needs and requirements which 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,** Comanche Trail shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Comanche Trail must file revisions to the plan as schedules change. The plan shall identify:

   a. how Comanche Trail would implement 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 Comanche Trail 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 onsite 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 Comanche Trail would give to all personnel involved with construction activities and restoration (initial and refresher training as the Project progresses and personnel change);

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

g. the procedures (including use of contract penalties) Comanche Trail will 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 onsite personnel;
(3) the start of construction; and
(4) the start and completion of restoration.

7. Beginning with the filing of its Implementation Plan, Comanche Trail shall file updated status reports with the Secretary on a **weekly basis until all construction and restoration activities are complete.** On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

a. an update on Comanche Trail'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 noncompliance 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 corrective actions implemented in response to all instances of noncompliance, and their cost;
e. the effectiveness of all corrective actions implemented;
f. a description of any landowner/resident complaints which 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 Comanche Trail from other federal, state or local permitting agencies concerning instances of noncompliance, and Comanche Trail's response.

8. Comanche Trail shall employ at least one EI. The EI shall be:

a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
responsible for maintaining status reports.

9. **Prior to receiving written authorization from the Director of OEP to commence construction of any Project facilities**, Comanche Trail shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

10. Comanche Trail must receive written authorization from the Director of OEP **before placing the Project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of all areas affected by the Project are proceeding satisfactorily.

11. **Within 30 days of placing the authorized facilities in service**, Comanche Trail 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 will be consistent with all applicable conditions; or

b. identifying which of the conditions in the Order Comanche Trail has complied with or will 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. **Prior to construction,** Comanche Trail should file with the Secretary for review and written approval by the Director of OEP:

a. a revised *Directional Drilling Contingency Plan* to provide for the measures to be implemented for collection and disposal of an inadvertent release of drilling mud into the Rio Grande River; and
c. provides notification of the International Boundary and Water Commission (IBWC) of any release of drilling mud into the Rio Grande River.

13. **Prior to commencing any drilling operations**, Comanche Trail shall file with the Secretary, for the review and written approval by the Director of OEP, a HDD noise analysis identifying the existing and projected noise levels at each NSA within 0.5 mile of the HDD entry site; and a HDD noise mitigation plan to reduce the projected noise level attributable to the proposed drilling operations at all NSAs with predicted L_{dn} noise levels above 55dBA. During drilling operations, Comanche Trail shall implement the approved plan, monitor noise levels, and make all reasonable efforts to restrict the noise attributable to the drilling operations to no more than a day-night sound level of 55 decibels on the A-weighted scale at the NSAs.

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