ENVIRONMENTAL STEWARDSHIP PLAN FOR REPLACEMENT, OPERATION, AND MAINTENANCE OF TACTICAL INFRASTRUCTURE

U.S. Border Patrol
El Paso Sector
Santa Teresa Station
New Mexico

DEPARTMENT OF HOMELAND SECURITY
U.S. CUSTOMS AND BORDER PROTECTION
U.S. BORDER PATROL EL PASO SECTOR

Prepared by
Northland Research Inc. and LMI
March 2018

COVER SHEET

Environmental Stewardship Plan for Replacement, Operation, and Maintenance of Tactical Infrastructure, U.S. Border Patrol El Paso Sector, Santa Teresa Station, New Mexico

Responsible Agencies: Department of Homeland Security (DHS), U.S. Customs and Border Protection (CBP), U.S. Border Patrol (USBP).

Coordinating Agencies: Bureau of Land Management (BLM), Las Cruces Field Office; U.S. Army Corps of Engineers (USACE)-Albuquerque District; U.S. Fish and Wildlife Service. (USFWS); and the U.S. Section, International Boundary and Water Commission (USIBWC).

Affected Location: U.S.–Mexico international border, west of the Santa Teresa Port of Entry (POE), in and around Doña Ana County, New Mexico.

Project Description: The project consists of constructing, operating, and maintaining tactical infrastructure (TI) to include 20 miles of P-3 pedestrian fencing along the U.S.–Mexico international border within the USBP El Paso Sector, Santa Teresa Station Area of Responsibility (AOR). The pedestrian fence and patrol road will be built entirely within the 60-foot–wide Roosevelt Reservation, which was established for law enforcement purposes. In addition to the planned TI, six staging areas totaling approximately 24.6 acres outside the Roosevelt Reservation will be utilized to facilitate operation of equipment, staging of materials, and construction, and three existing access roads totaling approximately 6.5 miles will be used to access the project corridor.

Report Designation: Environmental Stewardship Plan (ESP).

Abstract: CBP plans to remove 20 miles of existing vehicle fence, then construct, operate, and maintain 20 miles of TI and upgrade 20 miles of patrol roads along the U.S.–Mexico international border in the USBP El Paso Sector, Santa Teresa Station, New Mexico AOR. Table CS-1 shows the individual project-related area and the associated TI, access roads, and staging areas within each segment of the project.

Table CS-1. Access Roads and Staging Areas Planned in the Project Corridor

Project Components	Length (Miles)	Area (Acres)
Pedestrian fence and upgraded construction/patrol road	20	145.5
Access roads	6.5	15.8
Staging areas	N/A	24.6

Construction of the TI will begin in spring of 2018 and is anticipated to take 9 months. The existing vehicle fencing consists of post and rail, Normandy-style, and bollard fencing and will be removed. The replacement pedestrian fence will consist of new-type P-3 bollard wall, ranging in height from 18 feet (typical) to approximately 21 feet or taller, made of hollow steel wall members filled with concrete up to 10 feet above grade, designed to withstand vehicle impact and resist cutting with hand tools or torches. Continuous openings in the wall, such as space between adjacent pickets and plates, will be no more than 4 inches, except at drainage crossings where spacing will be no more than 5 inches. The wall will be designed to deter under-digging below the finished grade. Border lights and detection cameras mounted on 40–60-foot poles will be installed within the enforcement zone, in addition to the installation of a fiber optic cable along the border for communications use. Access roads and construction roads paralleling the new pedestrian wall will be at least 28 feet wide.

This document analyzes the resources in the project area and examines the potential for environmental impact.

EXECUTIVE SUMMARY

Introduction

In Section 102(b) of the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA), Congress mandated that the Department of Homeland Security (DHS) install fencing, barriers, roads, lighting, cameras, and sensors on the southwestern border.

The Secretary of DHS, pursuant to her authority under Section 102(c) of IIRIRA, issued a Waiver in January 2018 covering the TI described in this Environmental Stewardship Plan (ESP).

Although the Secretary's waiver means that U.S. Customs and Border Protection (CBP) no longer has legal obligation under the laws included in the waiver, the Secretary committed DHS to responsible environmental stewardship of our valuable natural and cultural resources. CBP strongly supports this objective and remains committed to being a good steward of the environment. CBP will continue collaboration with local government, state, and Federal land managers and members of the interested public to identify environmentally sensitive resources and develop appropriate best management practices (BMPs) to avoid or minimize adverse effects resulting from the installation of TI.

CBP has prepared this ESP to analyze the potential environmental effects associated with construction of TI in the U.S. Border Patrol's Santa Teresa Station area of operation, El Paso Sector. The ESP details the BMPs associated with the TI that CBP will implement during and after construction.

Goals and Objectives of the Project

This project aims to increase border security within the El Paso Sector with the ultimate objective of achieving effective control of our Nation's borders. Upon completion of the TI, CBP will be responsible for repair and maintenance of the fence and construction and access roads. Such activities include replacement or repair of fence segments that are vandalized, removal of debris that becomes entrapped along the fence or within drainage structures, and grading of the road surface. These activities will occur on an as-needed basis; routine road maintenance is expected to occur at least annually. Areas outside the Roosevelt Reservation will be used to facilitate operation of equipment, staging of materials, and construction access to the project corridor. A concrete batch plant will be required and be located close to the project but offsite. The total area of the six staging areas is approximately 24.6 acres. Vegetation will be cleared, and grading may occur where needed in the staging areas. Upon completion of construction activities, the temporary staging areas will be rehabilitated.

Summary of Environmental Impacts, Mitigations, and Best Management Practices

Table ES-1 lists potential environmental impacts by resource area. Chapters 3 and 5 of this ESP address these impacts in more detail. CBP followed specially developed design criteria to reduce adverse environmental impacts and will implement BMPs and mitigation measures to further reduce or offset adverse environmental impacts. These BMPs and mitigation measures are addressed in Chapter 4. Design criteria to reduce adverse environmental impacts include consulting with Federal and state agencies and other stakeholders and developing appropriate BMPs to protect natural and cultural resources. Potential effects—including physical disturbance and construction of solid barriers on wetlands, riparian areas, streambeds, and floodplains—will be avoided or mitigated as appropriate. BMPs will include implementation of a Stormwater Pollution Prevention Plan (SWPPP); Spill Prevention, Control, and Countermeasure (SPCC) Plan; Dust Control Plan; Fire Prevention and Suppression Plan; and Unanticipated Discovery Plan to protect natural and cultural resources.

Table ES-1. Summary of Potential Environmental Impacts

Resource Area	Potential Effects of the Project	Best Management Practices
Air Quality	Minor and temporary impact on air quality will occur during construction; air emissions will remain below *de minimis* levels.	Dust Control Plan; Fire Prevention and Suppression Plan; maintain equipment according to specifications.
Land Use	There are no land use effects within the 60-foot Roosevelt Reservation because TI implementation there is consistent with the intention of the reservation. Beneficial effects, such as reduced habitat degradation north of the border, are expected.	No mitigation necessary.
Soils	No effects within the Roosevelt Reservation or existing access roads. Temporary, minor effects on soils from a loss of biological production in the staging areas are expected as a result of construction.	Dust Control Plan; Erosion and Sediment Control Plan; rehabilitation of staging areas.
Water Use, Water Quality, Hydrology, and Groundwater	Temporary water usage will create a negligible to minor impact on the availability of water in the region. Grading and contouring could result in short-term minor adverse effects to hydrology.	SPCC plan.

Table ES-1. Summary of Potential Environmental Impacts

Resource Area	Potential Effects of the Project	Best Management Practices
Surface Waters and Waters of the United States	No surface waters exist within the area of the project. Direct effects could occur to approximately eight dry washes totaling 0.32 acres that may be considered as jurisdictional Waters of the United States. Surface runoff potential will result in short-term minor adverse effects on these dry washes.	SWPPP; construction of low-water crossings and other drainage structures will ensure continued surface flows.
Vegetation	Temporary loss of 24.6 acres of vegetation communities in the staging areas, due to construction of TI, but will be rehabilitated upon completion of the construction activities. The previous construction of access roads and TI within the Roosevelt Reservation resulted in the permanent loss of 160.8 acres.	Fire Suppression and Prevention Plan
Wildlife and Aquatic Resources	Negligible impact on wildlife expected. Some permanent loss of habitat. Potential loss of small mammals and reptiles during construction. There are no permanent aquatic resources in the project corridor.	No mitigation necessary.
Threatened and Endangered Species	No adverse effects on federally listed or New Mexico special status species are expected.	Educational awareness plans will be conducted.
Cultural Resources	No listed National Register of Historic Places or eligible sites exist within the footprint of disturbance.	Avoidance flagging will be utilized; educational awareness plans will be conducted.

Table of Contents

Figures

Tables

1 INTRODUCTION

1.1 Background

The Department of Homeland Security (DHS), U.S. Customs and Border Protection (CBP) proposes to install and operate approximately 20 miles of tactical infrastructure (TI) along the U.S.–Mexico international border in Doña Ana County, New Mexico (see Figure 1-1). All construction of the TI will occur within the boundaries of the Roosevelt Reservation, a 60-foot stretch of federally owned land on the U.S. side of the U.S.–Mexico border established by President Theodore Roosevelt in 1907 as a border enforcement zone. The construction of the TI will include the removal and replacement of 20 miles of existing TI, all of which occurs in the U.S. Border Patrol (USBP), El Paso Sector. The new TI includes pedestrian fencing, access and patrol roads, and low-water crossings. Border lights and detection cameras mounted on 40-foot poles will be installed within the enforcement zone. Areas outside the Roosevelt Reservation will house construction equipment and stage materials and be used for construction access to the project area.

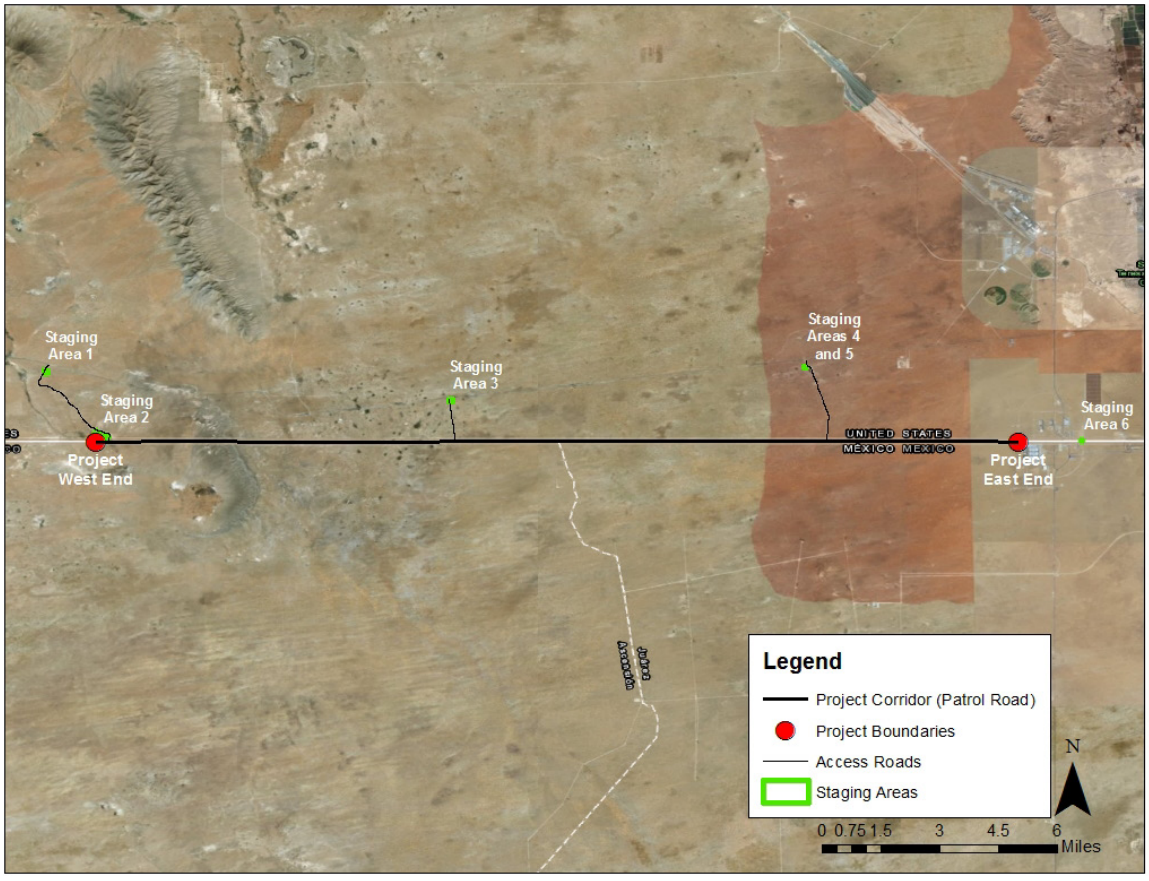


Figure 1-1. Project Area

Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) grants authority to the Secretary of Homeland Security (the Secretary) to waive legal

requirements that may impede the construction of TI. A waiver was executed in April 2008 for the construction and operation of 48 miles of TI in the same location where this project occurs; it was determined an area of high illegal entry into the United States.[1] Similarly, on January 22, 2018, the Secretary waived environmental laws and regulations to expedite the construction of 20 miles of TI in Doña Ana County, New Mexico, as described above (see Appendix A).[2] Although the waiver removes the obligation for CBP to follow environmental laws and regulations, the Secretary and CBP remain committed to practicing responsible environmental stewardship.

As such, CBP has prepared this Environmental Stewardship Plan (ESP), which addresses the removal of vehicle barriers; the installation, operation, and maintenance of a primary pedestrian fence and patrol road; the improvement of roads for better construction, maintenance, and patrol access and use; and the development of temporary staging areas. The ESP also identifies best management practices (BMPs) to be implemented during and after construction to avoid or minimize adverse effects.

This ESP analyzes and evaluates effects to natural and cultural resources in the project area to help CBP protect critical resources during construction and operation of the TI. Each affected resource area is identified and evaluated in separate sections to clearly define and highlight critical resources and lay out measures to minimize effects to the greatest extent possible.

In December 2008, CBP released the Environmental Stewardship Plan for Construction, Operation, and Maintenance of Tactical Infrastructure, Segments JV-1 through JV-3 (hereinafter referred to as the 2008 ESP).[3] The 2008 ESP addresses natural and cultural resources in the project area and evaluates direct, indirect, and cumulative effects of the project.

In 2015, CBP and the Office of Border Patrol released the Environmental Assessment (EA) for Repair and Maintenance of Tactical Infrastructure, Office of Border Patrol, El Paso Sector, New Mexico Stations. This EA and accompanying Finding of No Significant Impact are hereinafter referred to as the 2015 EA.[4] The 2015 EA discussed the potential effects of the repair, operation, and maintenance of various existing and proposed TI throughout the El Paso Sector, New Mexico Stations' area of operation.

1.2 General Goals and Objectives

The goal of the project is to provide the necessary tools to USBP agents to effectively secure 20 miles of the U.S.–Mexico border just west of El Paso, Texas. Illegal entry typically occurs in remote areas along the border and in areas within easy access to major U.S. transportation routes. CBP has determined the project area to be an area of high illegal entry into the United States. The removal of vehicle fencing and replacement with pedestrian fencing will assist USBP agents in reducing illegal cross-border violations by improving enforcement efficiency while providing a safer work environmental for agents.

[1] CBP 2008
[2] F.R. Vol. 83, No. 14
[3] CBP 2008
[4] CBP 2015

USBP has nine administrative sectors along the U.S.–Mexico border. Each sector is responsible for implementing an optimal combination of personnel, technology, and infrastructure appropriate for its operational requirements. The El Paso Sector is responsible for Luna, Hidalgo, and Doña Ana counties, New Mexico, and El Paso and Hudspeth counties, Texas. The area affected by the project includes the southernmost portion of Doña Ana County.

Upon completion of the project, CBP will be responsible for repair and maintenance of the pedestrian fence and access and patrol roads. Maintenance activities will occur on an as-needed basis and include removal of debris and vegetation, repair of fencing, and grading of the road surfaces.

1.3 Organization of this Environmental Stewardship Plan

This ESP is organized into six chapters and appendices. Chapter 1 introduces the project, including USBP background, project goals, and objectives. Chapter 2 offers a general description of the project. Chapter 3 provides the environmental baseline and evaluation, describing the resources present and evaluating the direct, indirect, and cumulative effects of the project for each category of resources. Categories include air quality, land use, aesthetics, soils, water use and quality, biological resources, cultural resources, socioeconomic resources, hazardous materials and waste, utilities and infrastructure, and noise. Chapter 4 addresses the specially developed design criteria and BMPs that CBP will follow to reduce adverse environmental effects and the mitigation measures that will be implemented to further reduce or offset adverse environmental effects to the extent possible. Related projects and potential effects are covered in Chapter 5. Chapter 6 includes references and abbreviations, respectively. Appendices contain supplemental data, coordination, responses to comments and other supporting information.

1.4 Public Outreach and Agency Coordination

CBP conducted environmental and cultural resource surveys and prepared a biological resource management plan to avoid or minimize potential adverse environmental effects. CBP also prepared a jurisdictional determination study for Waters of the United States (WoUS) of the project. CBP coordinated with the following agencies:

- **U.S. Army Corps of Engineers (USACE), Albuquerque District**
- **U.S. Fish and Wildlife Service (USFWS)**
- **U.S. Department of the Interior Bureau of Land Management (BLM)**
- **New Mexico Department of Fish and Game**
- **New Mexico State Historic Preservation Office**

In addition, CBP posted a project description and this ESP to CBP's website https://www.cbp.gov/about/environmental-cultural-stewardship/current-ongoing-projects.

All correspondence sent and received during the development of this ESP are provided in Appendix B. All substantive comments from other Federal, Tribal, state, and local agencies are included in Table B-1 and will be incorporated as applicable in to the Final ESP analysis of environmental impacts.

1.5 Summary of Best Management Practices and Mitigation Measures

It is CBP's policy to reduce effects to air quality, wildlife, landscapes, and other natural and cultural resources through the sequence of avoidance, minimization, mitigation, and finally, compensation. Mitigation efforts vary by project and setting and may include activities such as implementation of appropriate BMPs and restoration of habitat. CBP coordinates its environmental design measures with the appropriate federal and state resource agencies. Both general and species-specific BMPs have been developed during the preparation of this ESP.

This section describes those measures that may reduce or eliminate potential adverse effects on the human and natural environment. Many of these measures have been incorporated by CBP as standard operating procedures on past projects. Below is a summary of BMPs for each resource category that might be affected. The mitigation measures will be coordinated with the appropriate agencies and land managers or administrators. Table 1-1 provides an overview of BMPs and mitigation measures by specific resource areas.

Table 1-1. Specific Resource Area BMPs and Mitigation

Resource Area	Best Management Practices and Mitigation Measures
Air Quality	• Dust Control Plan and associated BMPs • Fire Prevention and Suppression Plan and associated BMPs • Maintain equipment and vehicles according to specifications
Noise	• Adherence with Occupational Safety and Health Administration requirements • Proper design and maintenance of equipment and vehicles • Seasonal activity restrictions
Land Use	• Notification • Site access maintenance
Geology and Soils	• Stormwater Pollution Prevention Plan • Dust Control Plan and associated BMPs • Erosion control measures • Drainage improvements and revegetation
Water Use and Quality	• Spill Prevention, Control, and Countermeasure (SPCC) Plan and associated BMPs • Stormwater Pollution Prevention Plan and associated BMPs • Proper storage and use of fuels and hazardous materials
Biological resources	• Fire Prevention and Suppression Plan and associated BMPs • Biological resource training plans • General and species-specific BMPs
Cultural Resources	• Avoidance, testing, and data recovery • Cultural resource training plans • Consultation with state and tribal representatives
Socioeconomic Resources and Safety	• Fire Prevention and Suppression Plan and associated BMPs • SPCC Plan and associated BMPs
Utilities and Infrastructure	• Marking and avoidance • Repair or replacement
Hazardous Materials and Waste	• SPCC Plan and associated BMPs • Proper storage and use of hazardous materials • Proper management and disposal of solid and hazardous waste • Vehicle maintenance

2 GENERAL PROJECT DESCRIPTION

CBP plans to remove existing vehicle barriers and install and operate approximately 20 miles of TI, consisting of primary pedestrian fence and access and patrol roads located along the U.S.–Mexico border in Doña Ana County, New Mexico, El Paso Sector. The footprint of the fencing and construction road will be contained within the 60-foot–wide Roosevelt Reservation, which was set aside in 1907 by President Roosevelt as a border enforcement zone. Removal and replacement of existing fencing on the Roosevelt Reservation will assist USBP agents in reducing illegal cross-border violations and provide a safer work environment for agents. Replacement will start west of the Santa Teresa Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The fence alignment will typically be placed within the existing corridor, with patrol and access roads running parallel and adjacent to the fence. This configuration will allow the infrastructure to be placed in an existing right of way as described by the boundaries of the Roosevelt Reservation. Access roads will permit approach to the fence from Doña Ana County Route 9 and to staging areas to facilitate construction requirements. Three existing access roads totaling approximately 6.5 miles and six existing staging areas totaling approximately 24.6 acres may be required. A concrete batch plant will be located offsite. The construction corridor will be 60 feet wide, all of which has been disturbed by the installation of the existing vehicle barrier and roads.

Construction of the TI will begin in spring of 2018 and is anticipated to take nine months to complete. All but two of the staging areas and all access roads were used in 2008 when the vehicle fencing was constructed under a DHS secretarial waiver. Following completion of the 2008 ESP,[5] an Environmental Stewardship Summary Report was completed in 2012 detailing the environmental issues and final footprint of the bollard wall construction.[6] This project consists of four components: (1) development of temporary construction staging areas (2) removal of vehicle barriers; (3) improvement of existing roads for better construction, maintenance, repair, and patrol access and use; and, (4) installation, operation, repair, and maintenance of a primary pedestrian fence and patrol road;

2.1 Removal of Existing Vehicle Barriers

Existing fencing consists of post and rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The post and rail design consists of a steel pipe (approximately 6–8 inches in diameter) placed into the ground at 4–6 feet, filled with concrete with welded steel along the tops of the support pipes in a horizontal manner. The vertical support pipes are positioned at 4–5-foot centers. The Normandy-style vehicle fence is typically constructed of welded metal similar to railroad rail that is placed on the ground and welded together. A typical section of Normandy-style vehicle fence is 10–12 feet long and stands 4–6 feet high. Existing bollard vehicle fence consists of 4-inch diameter steel bollards sunk vertically, with a continuous reinforced concrete foundation at a depth of 6 inches and a width of 1 foot 8 inches. This fencing was typically outfitted with pipe,

[5] CBP 2008
[6] CBP 2012

tubing, or similar material to prevent livestock from crossing but allow most wildlife to easily pass through.

Prior to installation of new fencing, existing post and rail and bollard-style fencing, concrete foundations, and other fence components will be demolished and removed. Existing Normandy-style fence also will be removed and hauled offsite.

2.2 Installation of New Fencing

Vegetation will be removed within the project area prior to construction. The corridor is previously disturbed and sparsely vegetated. Foundations for new fencing will be cast on compacted native soils. Where native soils do not meet compaction standards, soils will be over-excavated, backfilled, and compacted. The project site will be graded to eliminate surface irregularities and match the approximate elevation of the access road.

The replacement fence will consist of New Type P-3 bollard wall ranging in height from 18 feet (typical) to approximately 21 feet or taller (see Figures 2-1 and 2-2).[7] The fence will consist of hollow steel wall members filled with concrete up to 10 feet above grade, designed to withstand vehicle impact and resist cutting with hand tools and torches. Continuous openings in the wall, such as space between adjacent pickets and plates, will be no more than 4 inches, except at drainage crossings where spacing will be no more than 5 inches. The wall will deter under-digging below the finished grade.

Border lights and detection cameras will be installed within the enforcement zone to illuminate the Roosevelt Reservation (60 feet north of the U.S.–Mexico border). The lights and cameras will be installed on 40–60-foot poles, spaced approximately 180 feet apart along the 20-mile bollard wall. The lights will be LED and have automatic sensors to turn on at sunset and off at sunrise throughout the year. Lamp backshields will minimize light pollution. The existing electricity grid will power the lights.

A fiber optic cable for communications will be installed along the border. Directional drilling will allow installation under the existing road and fencing. A new junction box will be installed on an existing building structure at the eastern terminus of the project near the Santa Teresa Port of Entry, with the communication line routed under the building.

2.3 Improvements to Roads

All equipment and materials (e.g., steel bollards, pickets, and prefabricated fence and wall panels) will be transported to the site by using heavy diesel trucks such as tractor trailers and dump trucks via the designated construction access roads. All egress or ingress to the project site will be from existing roads. Three existing access roads totaling approximately 6.5 miles will be required for construction (see Figure 2-3).[8] These roads are typically greater than 20 feet wide. Although existing access roads will be used, vegetation removal and disturbance may be required. As part of the construction process, caliche or other aggregate will be added to the surface of the road to

[7] DHS 2017
[8] DHS 2017

repair erosion and damage from maintenance activities. All-weather patrol roads constructed on the north side of the primary pedestrian fence will overlay the existing roads for the vehicular barriers; construction will be primarily by grading and contouring with heavy diesel earthmoving equipment. The patrol roads will be surfaced with caliche or similar local material, and if necessary, transported to the project site via heavy diesel equipment. Several areas will require installation of drainage structures to maintain the integrity of the road surface and proper surface water flow during storm events. In areas where drainage structures are built, adjacent concrete maintenance roads will be installed to facilitate the construction, repair and maintenance and clean out of the culverts.

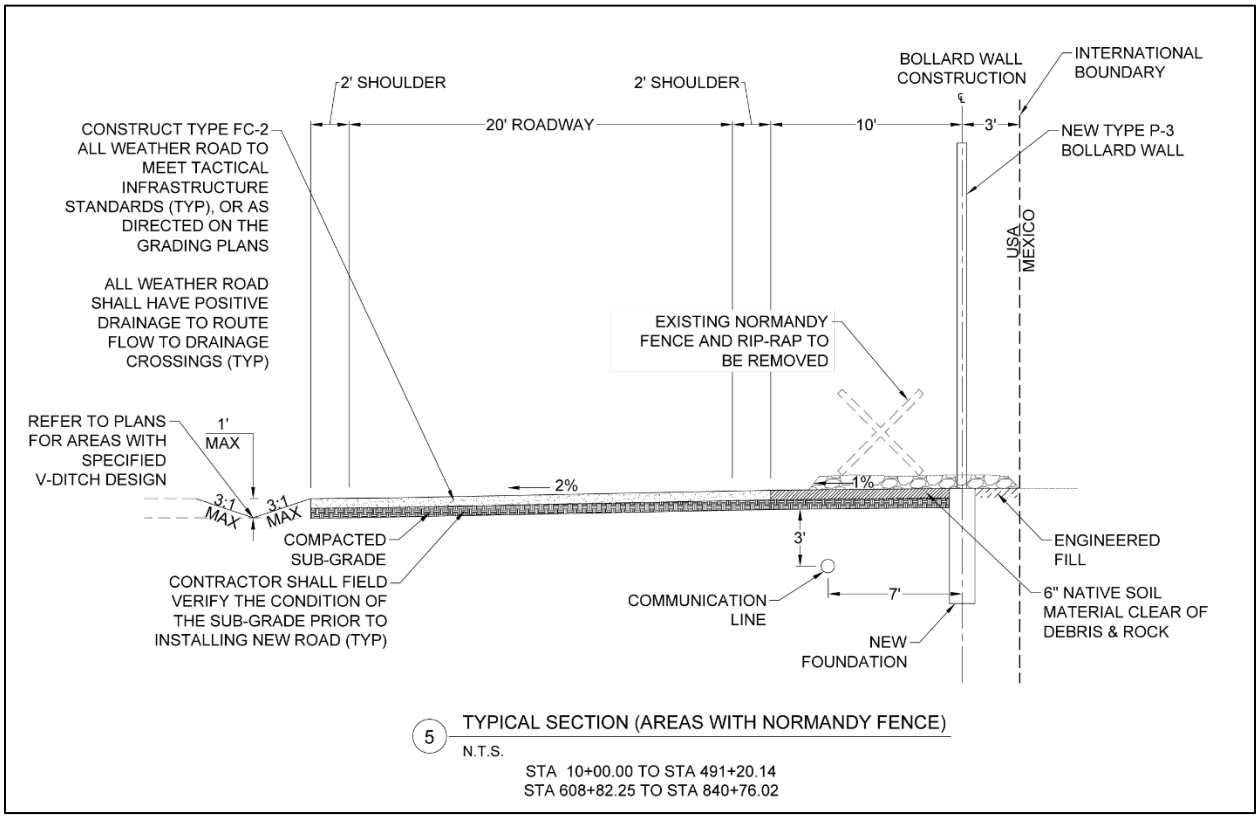


Figure 2-1. Typical Section of Bollard-Style Fencing

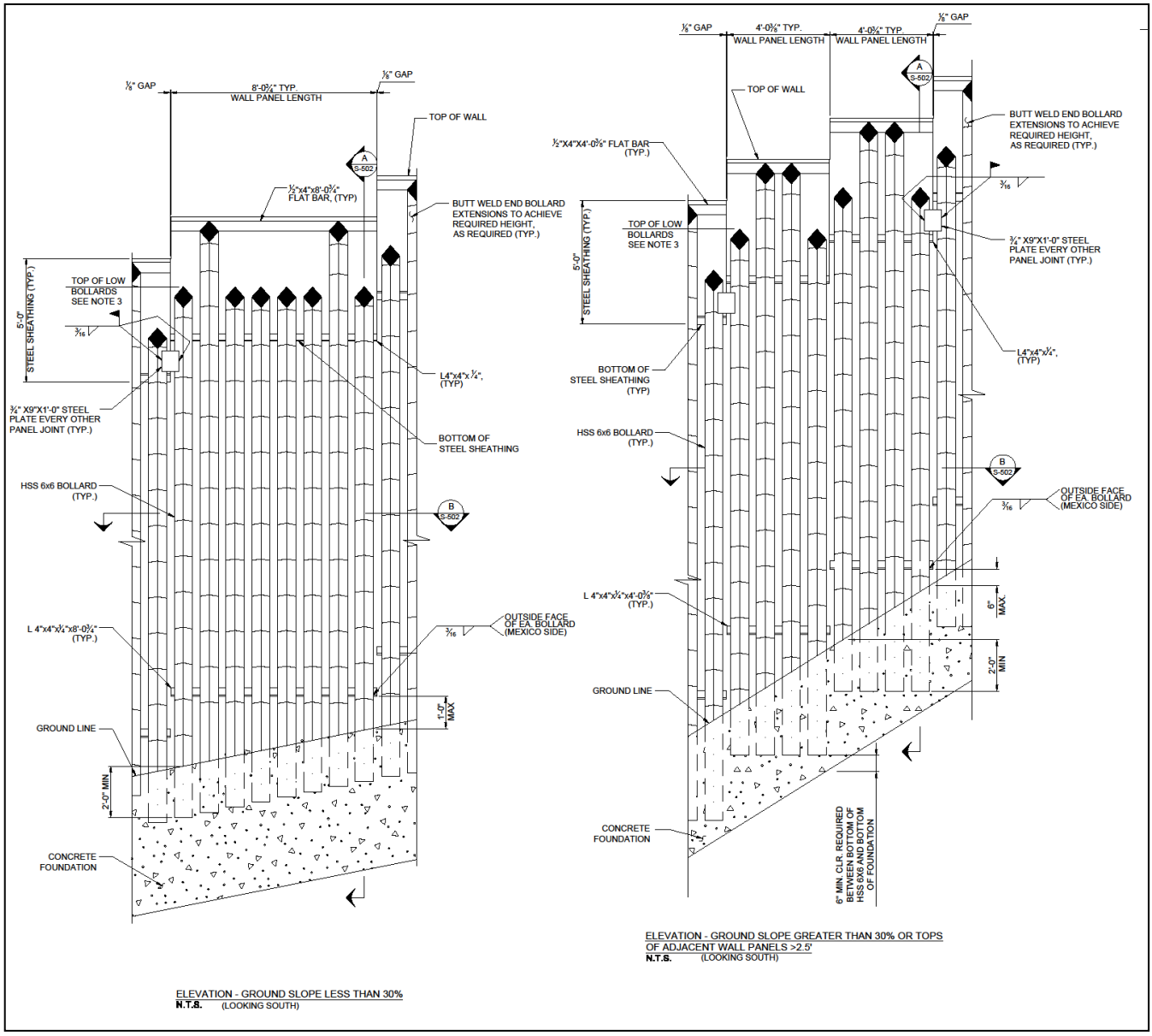


Figure 2-2. Fence Wall Panel Diagram

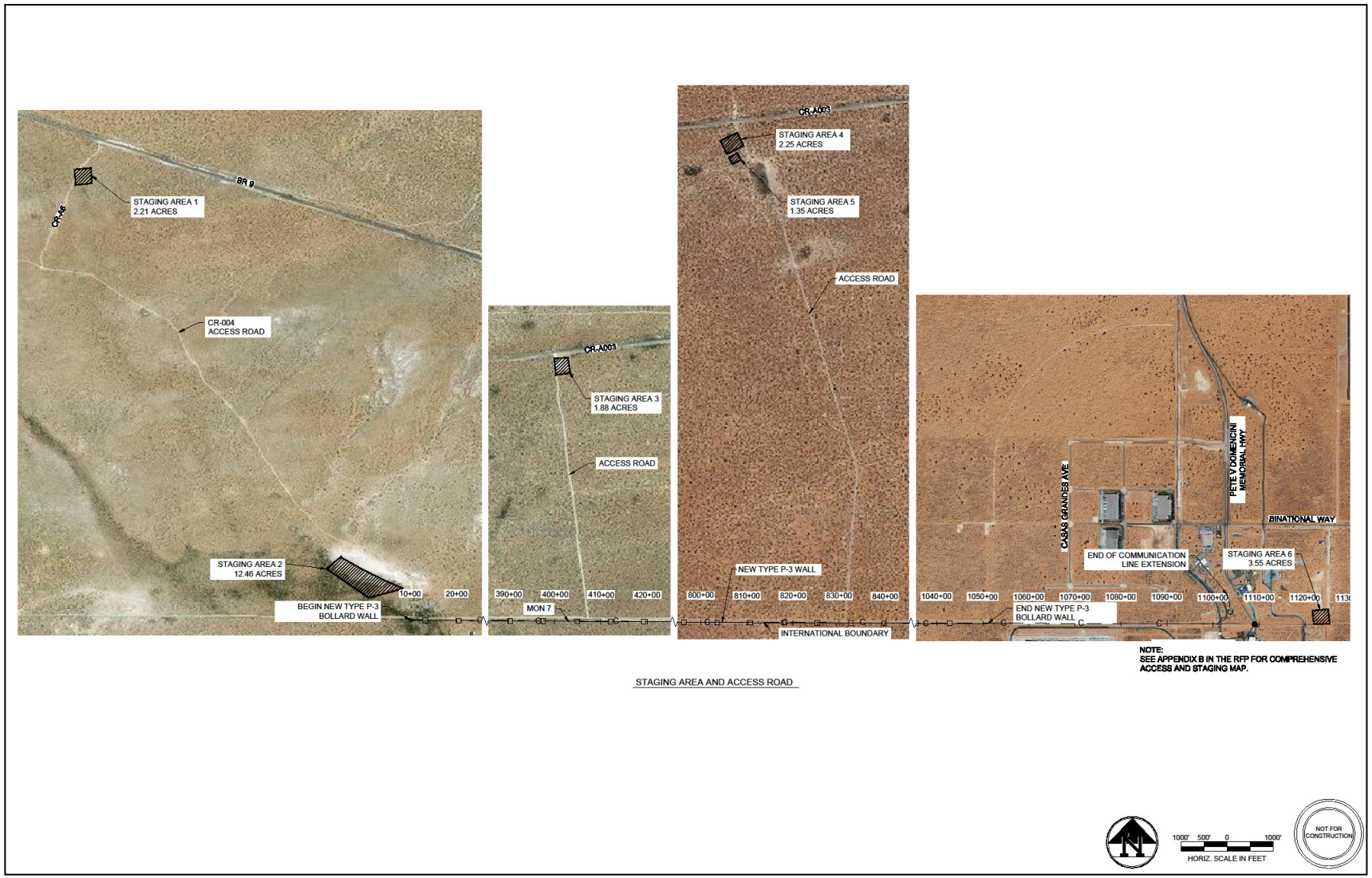


Figure 2-3. Project Access Roads and Staging Areas

Articulated concrete mat low-water crossings will be constructed at 23 low-water crossings (see Figure 2-4) of maintenance and patrol roads (washes 2S, 3N, 4N, 5N, 9N, 11S, 12N, 14S, 16S, 17S, 19S, 20S, 21N, 22N, 23S, 25S, 26S, 27S, 28S, 29S, 30S, 31S, and 32S). Designs of low-water crossings will vary, incorporating bollard drainage gates, grouted rip rap, headwalls, wingwalls, guardrails, and drainage culverts as appropriate. Adequate drainage will be maintained during construction. Concrete maintenance road segments or aprons will be installed adjacent to all drainage culverts. Upon completion of the construction activities, the pre-existing construction roads will continue to be used for patrolling and access to the fence and its maintenance.

2.4 Development of Temporary Construction Staging Areas

To facilitate the storage and staging of equipment and materials, as well as construction access to the project corridor, six existing staging areas totaling approximately 24.6 acres are required. Staging areas were planned for disturbed areas to the maximum extent practicable; vegetated areas will also be used. Where necessary, these staging areas will be cleared of vegetation and graded. The contractor may utilize a previously disturbed area located on private property adjacent to the project area as a staging and fabrication area. The contractor may utilize a previously disturbed area located on private property adjacent to the project area as a staging and fabrication area and a concrete batch plant will be located offsite. Upon completion, the temporary staging areas will be rehabilitated.

Prior to undertaking the project, the construction contractor will prepare a stormwater pollution prevention plan (SWPPP) to reduce pollutants in stormwater discharges from the project area. Best management practices (BMPs) described in the SWPPP will be implemented.

Excavated onsite soils meeting the requirements for engineered fill may be reused. All other excavated material will be removed from the project permanent easements and staging areas and disposed of offsite. All waste materials generated by demolition and site preparation will be collected and transported off the site for disposal.

Early phases of construction will be accomplished using heavier diesel earthmoving equipment. If required, pile driving will occur during daytime. Later phases of construction projects involve tasks such as welding, cutting, and applying surface coatings. Noise will not affect the entire corridor at one time but will move along the corridor with construction. Typical construction noise levels will decrease as the distance increases from the source; noise levels are expected to be less than ambient at 1 mile from the project area.

2.5 Operations and Maintenance

This project will not cause significant change in USBP operations. Although activities such as patrols and apprehensions will move from existing patrol roads to the improved patrol roads along the north side of the primary pedestrian fence, no significant change in the number of patrols is expected. USBP operations routinely adapt to evolving operational requirements and will continue to do so. USBP will retain its flexibility to use the most effective methods to provide a law enforcement resolution to illegal cross-border activity.

This maintenance will include removal of debris and vegetation and repair of the fencing and walls, when necessary, in addition to other activities. The fences will be made from non-reflective steel that requires no paint. Fence maintenance will also include removing accumulated debris after a rain event to avoid flooding. Soil and sand that builds up against the fence and brush will also be removed. Vegetation will be maintained under a fence maintenance contract; this could include mowing, removal of small trees, and the application of herbicides within the 60-foot project corridor on the north side of the fence. During routine patrols, sector personnel will observe the condition of the fence, and repairs will be made as appropriate.

The footprint of the fencing and construction road will be contained entirely within the 60-foot–wide Roosevelt Reservation. Materials and equipment will be stored onsite within the six designated staging areas. BMPs and mitigation measures will reduce or eliminate potential adverse effects on the human and natural environment (see Section 4). The project will be constructed by private contractors. Construction is planned to begin in spring of 2018 and will last approximately nine months.

3 ENVIRONMENTAL BASELINE AND EVALUATION

3.1 Introduction

CBP has compiled extensive information about the environmental resources that could be affected by the construction, operation, and maintenance of TI along the U.S.–Mexico border. CBP used this information to establish the baseline against which it evaluated the effects of the construction, repair, maintenance, and operation of the pedestrian fence and supporting infrastructure.

Some resources within the project's region of influence are not addressed in this ESP because they are not relevant to the analyses. Resources that are not addressed, and the reasons for eliminating them, are as follows:

- **Communications.** The project will not affect communications systems because there are none in the project corridor.
- **Climate.** The project will not affect nor be affected by the climate.
- **Wild and Scenic Rivers**: The project will not affect any designated Wild and Scenic Rivers because no rivers designated as such are located within or near the project corridor.
- **Transportation.** The project corridor is located in a remote region of New Mexico; no activities will take place on public roadways other than routine transport of goods and personnel on an intermittent basis during construction activities. Therefore, effects on roadways and traffic will not be discussed further.
- **Prime Farmlands.** No impact will occur on soils protected by the Farmland Protection Policy Act as none are located within the project corridor.
- **Human Health and Safety.** The Occupational Safety and Health Administration and U.S. Environmental Protection Agency (EPA) issue standards that specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits with respect to workplace stressors. Contractors will be required to establish and maintain safety programs at the construction site, consistent with these standards. All vehicle traffic will be on public and private roads with very little traffic and in an area of New Mexico with extremely low population density. Therefore, the project will not expose members of the general public to increased safety risks.
- **Environmental Justice and Protection of Children.** The project corridor is located in a remote region of New Mexico. No residences or businesses are located near or within the project corridor. No children will be affected as a result of the project.

For those resources that will be impacted, Table 3-1 shows the TI project areas, associated access roads and staging areas, and land area impacted (acres) within each segment of the project.

Table 3-1. Project Footprint and Actions

Project area	Acreage	Proposed action	Current condition	Status
TI	145.5	Installation of pedestrian fence, patrol roads, and communications equipment	Completely disturbed	Permanent
Access roads	15.8	Minor road repairs such as grading	Completely disturbed	Permanent
Staging areas	24.6	Vegetation removal, grading, and installation of temporary fencing	Partially disturbed	Temporary

[a] 24.6 temporary, 160.8 permanent, and 185.4 total acres.

Key: TI=tactical infrastructure

Throughout Chapter 3 of this ESP, permanent effects are associated with improvements to construction and access roads and pedestrian fence, while temporary effects relate to the use of staging areas. These temporarily impacted areas will be rehabilitated upon completion of the construction activities. The three access roads are generally 20 feet wide. Widening is not anticipated; therefore, a 20-foot width defines the area of effect. The project allows for use of the entire 60-foot–wide Roosevelt Reservation. Thus, effects related to the construction road and pedestrian fence are based on a 60-foot–wide footprint.

3.2 Air Quality

3.2.1 Definition of the Resource

EPA defines ambient air quality as "that portion of the atmosphere, external to buildings, to which the general public has access."[9] The air quality in a given region or area is measured by the concentration of criteria pollutants in the atmosphere. It is a result not only of the types and quantities of atmospheric pollutants and pollutant sources in an area, but also surface topography, the size of the topographic "air basin," and the prevailing meteorological conditions. In accordance with Federal CAA requirements, air quality regulations in the United States are based on concerns that high concentrations of air pollutants can harm human health, especially for children, the elderly, and people with compromised health conditions; as well as adversely affect public welfare by damage to crops, vegetation, buildings, and other property.

Under the CAA, EPA developed numerical concentration-based standards, or National Ambient Air Quality Standards (NAAQS), for pollutants that have been determined to affect human health and the environment. The NAAQS represent the maximum allowable concentrations for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (including particulate matter equal to or less than 10 microns in diameter [PM10] and particulate matter equal to or less than 2.5 microns in diameter [PM2.5]), and lead (Pb).[10] The CAA also gives states authority to establish air quality rules and regulations.

EPA classifies the air quality in an air quality control region (AQCR), or in subareas of an AQCR, according to whether the concentrations of criteria pollutants in ambient air exceed the NAAQS. Areas within each AQCR are therefore designated as "attainment," "nonattainment,"

[9] 40 CFR § 50.1
[10] 40 CFR Part 50

"maintenance," or "unclassified" for each of the six criteria pollutants. Attainment means that the air quality within an AQCR is better than the NAAQS; nonattainment indicates that criteria pollutant levels exceed NAAQS; maintenance indicates that an area was previously designated nonattainment but is now attainment; and an unclassified air quality designation by EPA means that there is not enough information to appropriately classify an AQCR, so the area is considered attainment. In accordance with the CAA, each state must develop a State Implementation Plan (SIP), a compilation of regulations, strategies, schedules, and enforcement actions designed to move the state into compliance with all NAAQS.

The General Conformity Rule applies only to significant Federal actions in nonattainment or maintenance areas. This rule requires that any Federal action meet the requirements of a SIP or Federal Implementation Plan. Specifically, CAA conformity is ensured when a Federal action does not cause a new violation of the NAAQS; contribute to an increase in the frequency or severity of violations of NAAQS; or delay the timely attainment of any NAAQS, interim progress milestones, or other milestones toward achieving compliance with the NAAQS.

3.2.2 Environmental Setting

Information on air quality within the project corridor was described in the CBP 2008 ESP[11] and 2015 EA[12] and is incorporated herein by reference. Doña Ana County borders El Paso, Texas, and Ciudad Juarez, Mexico, and is located in the Paso del Norte air shed, which includes El Paso County, Texas, and Ciudad Juarez, Mexico. This region has historically had air quality problems, including particulate matter and ozone pollution. Doña Ana County is in the El Paso-Las Cruces-Alamogordo Interstate Air Quality Control Region 153. The total area of this region, which is composed of Doña Ana, Otero, Sierra, and Lincoln counties, is 18,335 square miles.[13]

Anthony, New Mexico, which lies on the border of Texas and New Mexico, is designated as a nonattainment area for PM10,[14] which was designated as moderate nonattainment for PM10 by EPA in 1991. In 1995, EPA declared a 42 square mile–region in the southeast corner of Doña Ana County on the border of Texas and Mexico as a marginal nonattainment area for the 1-hour ozone standard. The nonattainment area included the City of Sunland Park, Santa Teresa, and La Union, New Mexico. The 1-hour ozone standard was revoked by EPA in 2004 with the adoption of the new 8-hour ozone standard. Due to the revocation of the 1-hour ozone standard, Sunland Park was re-designated to maintenance for the new 8-hour ozone standard. In March 2008, the Government lowered the NAAQS for ozone from 0.08 to 0.075 parts per million (ppm). Due to the lowering of this standard, Governor Richardson recommended that Sunland Park, New Mexico (including the communities of Santa Teresa and La Union) be designated as nonattainment of the new 8-hour ozone standard. However, EPA has never acted on that recommendation due to its reconsideration of the 0.075 ppm standard. No areas of Doña Ana County are nonattainment for ozone.[15]

[11] CBP 2008
[12] CBP 2015a
[13] NMED 2018a
[14] EPA, 2018a
[15] NMED 2018b

The project area does not fall within any designated nonattainment areas. A limited portion of the project area does fall within a designated maintenance area for ozone. The Sunland Park, NM 1–hour ozone maintenance area is bounded by the New Mexico-Texas State line on the east, the New Mexico- Mexico international line on the south, the Range 3E-Range 2E line on the west, and the N3200 latitude line on the north.[16] With the exception of Staging Area 6, which is located east of Pete V. Domenichi International Blvd., the entirety of the project area is located west of the Range 3E-Range 2E line and is therefore not located in the maintenance area.

3.2.3 Effects of the Project

Although the Secretary's waiver means that CBP no longer has legal obligations under the CAA for the TI segments addressed in this ESP, the Secretary committed DHS to responsible environmental stewardship of our valuable natural and cultural resources. CBP supports this objective and has applied the appropriate standards and guidelines associated with the CAA as the basis for evaluating potential environmental effects and appropriate mitigations.

Effects on air quality in NAAQS "nonattainment" areas are considered significant if the net changes in project-related pollutant emissions result in any of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Increase the frequency or severity of a violation of any ambient air quality standard
- Delay the attainment of any standard or other milestone contained in the SIP or permit limitations.

The Federal *de minimis* threshold emissions rates were established by EPA in the General Conformity Rule to focus analysis requirements on those Federal actions with the potential to substantially affect air quality. The thresholds are identified in Table 3-2. With respect to the General Conformity Rule, effects on air quality would be considered significant if the proposed Federal action would result in an increase of a nonattainment or maintenance area's emissions inventory above the *de minimis* threshold levels established in 40 CFR 93.153(b) for individual nonattainment pollutants or for pollutants for which the area has been re-designated as a maintenance area. Only the emissions originating within the boundaries of the nonattainment or maintenance area where the action is taking place need to be analyzed under the general conformity requirements.[17]

Certain Federal actions are exempt under 40 CFR 93.153(c) from a general conformity determination. In addition to the *de minimis* emissions thresholds, Federal prevention of significant deterioration regulations define air pollutant emissions to be significant if the source is within 10 kilometers of any Class I area, and stationary source emissions would cause an increase in the concentration of any regulated pollutant in the Class I area of 1 microgram per cubic meter or more (40 CFR 52.21[b][23][iii]).

[16] USEPA 1979.
[17] USEPA 2006.

Table 3-2. De Minimis Thresholds

Pollutant	Tons/year
Ozone (NO_X), SO_2 or NO_2:	100
Ozone (VOC's) - Maintenance areas outside an ozone transport region	100
Carbon monoxide	100
PM-10	100
$PM_{2.5}$ (direct emissions, SO_2, NO_X, VOC, and Ammonia)	100
Sulfur dioxide	100
Pb	25

Source: 40 CFR 93.153(b)(2)

A minimal increase in local air pollution will be expected from bollard wall and road construction. Temporary increases in air pollution will result from emissions from vehicles of construction workers commuting to the project site and the use of vehicles, construction equipment, and generators at the site. Fugitive dust emissions would be greatest during initial site preparation activities and vary from day to day, depending on the type and level of activity and prevailing weather conditions. The quantity of uncontrolled fugitive dust emissions from activities is proportional to the area of land being worked and the level of activity. Effects from combustible air emissions from USBP traffic are expected to be the same before and after the construction activities.

The amount of concrete required for construction and the distance from existing fabrication facilities will require the temporary location of a concrete batch plant. This plant will be erected at an offsite location that is close by. It will not be located within the Sunland Park designated maintenance area. Fugitive dust emissions from the plant will be minimized using appropriate manufacturing controls.

Because of the limited extent of construction activities being undertaken in the Sunland Park designated maintenance area (i.e. transfers of equipment and materials into and out of the previously developed Staging Area 6), emissions within the maintenance zone are expected to be temporary and minor and well within the *de minimis* levels identified in Table 3-2. Due to the short duration of the project, any effects on ambient air quality during construction activities are expected to be short term and can be reduced through the use of standard dust control techniques. Measures will include the preparation and implementation of a Dust Control Plan that outlines dust suppression methods to minimize airborne particulate matter created during construction activities. Standard construction best management practices, such as routine watering of the construction site and access roads, will be used to control fugitive dust during the construction phases. Proper and routine maintenance of all vehicles and construction equipment will ensure that emissions are within the equipment's design standards. Air emissions from the project will be temporary and result in negligible effects on air quality in the region.

If a 24-hour work schedule is needed, then the portable lights will operate throughout the night; however, this will be temporary, and as construction activities are completed within a particular area the lights will be relocated to a new area. Furthermore, a 24-hour schedule will only occur due to unforeseen circumstances or if federally mandated schedules dictate it to be necessary. Regardless, the effects from the operation of the light generators will be temporary; thus, they will have a negligible effect on air quality in the region.

Table 3-3. Air Quality Effects Determination

Resource	Long-Term Effects	Temporary Effects
Air quality	Minor effect	Temporary minor adverse effects

3.3 Land Use

3.3.1 Definition of the Resource

Land use refers to real property classifications that indicate the type of human activity occurring in an area or the natural conditions that are present. Land use descriptions are typically codified in local zoning laws, yet there is no nationally recognized convention or terminology for describing land use categories. Land use planning ensures orderly growth and compatibility among adjacent land use parcels.

3.3.2 Environmental Setting

The footprint of the fencing and construction road would occur within the 60-foot–wide Roosevelt Reservation with the exception of three existing access roads, three existing staging areas, and three new staging areas that total approximately 6.5 miles of access roads and 24.6 acres of staging areas. In 1907, President Roosevelt created the Roosevelt Reservation as an easement to protect against the smuggling of goods between the United States and Mexico. The Roosevelt Reservation is owned by the Government.

3.3.3 Effects of the Project

Removal of the existing fence and installation of new fencing would not affect land use zoning, and the land within the Roosevelt Reservation would remain a Federal law enforcement zone. In addition, construction of the fence would occur in an area that already contains fencing; no long-term change to land use would be expected. Other areas surrounding the project corridor are open, undeveloped, and expected to remain undeveloped.

Four of the six staging areas were used and evaluated in the 2008 ESP[18] and 2012 Environmental Stewardship Summary Report.[19] The land use in staging areas, which are located outside of the Roosevelt Reservation, would temporarily change from open and undeveloped to disturbed open space; this would affect grazing opportunities. Open space is common within this area, and the project will not pose a major long-term change to the land use, grazing, or recreational opportunities regionally. The staging areas, which are needed to store materials and equipment, will temporarily affect land use on 24.6 acres. These areas will be rehabilitated upon completion of construction activities and the current land use restored. Therefore, effects associated with the staging areas are considered temporary and minimal.

[18] CBP 2008
[19] CBP 2012

Continued operation, repair and maintenance will not cause a significant change in USBP operations. No additional effects to the land use designations would be expected.

The temporary change of land use categories (from open/undeveloped to disturbed open space) of construction staging areas will cause short-term minor effects on land use. No permanent changes in land use will occur as a part of the project; no long-term effects are expected.

Table 3-4. Determination of Effect for Land Use

Resource	Long-Term Effects	Temporary Effects
Land use	No effect	Temporary minor effects

3.4 Geology and Soils

3.4.1 Definition of the Resource

Geology is the study of the Earth's composition and provides information on the structure and configuration of surface and subsurface features. Such information derives from field analysis based on observations of the surface instrumental explorations and borings to identify subsurface composition. Geological resources consist of the Earth's surface and subsurface materials. Within a given physiographic province, these resources are typically described in terms of topography, physiography, geology, soils, and, where applicable, geologic hazards and paleontology.

Topography and physiography pertain to the general shape and arrangement of a land surface, including its height and the position of its features. Topographic features can be important determiners of successful construction as well as used to predict potential for effects from given activities. For example, "steep slopes" is a topographic term; disturbing steep slopes by removing vegetation can result in erosion and sedimentation.

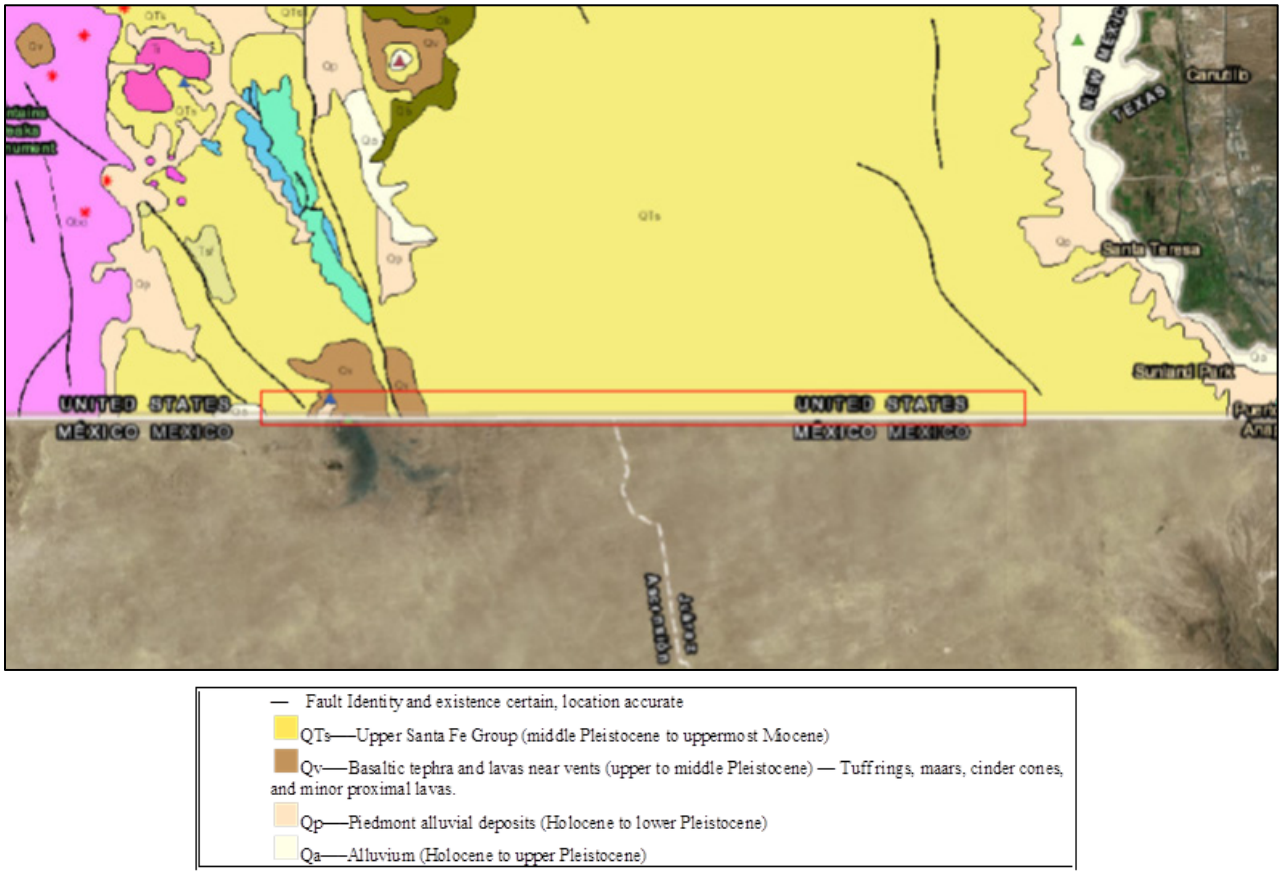
Soils are the unconsolidated materials overlying bedrock or other parent material. Soil types are determined from their parent materials (the geological features and types of rock that, when broken down, are the mineral portion of soils) and various factors that influence pedogenesis, the formation of soils from parent materials. The amount of moisture, freeze thaw patterns, erosion potential, and the like combine to influence the formation of the soils. Animals such as beavers that make impoundments or cattle that graze the plant materials and disturb the soils, or human activities such as plowing, grading, and other excavation can influence the formation of soils and change their nature over time. Soils are typically described in terms of their complex type, slope, and physical characteristics. Differences among soil types regarding their structure, elasticity, strength, shrink-swell potential, and erosion potential affect their abilities to support certain applications and uses. Soils are described in soil surveys given their texture, color, and depth of differing layers and then named. The U.S. Department of Agriculture (USDA) performs soil mapping as part of its mission; soil maps exist for every county in the United States. When considered together, geology, topography, physiography, and soils critically influence water resources, habitat, wildlife success, and many more resources.

3.4.2 Affected Environment

3.4.2.1 Geology

The project is located on the La Mesa surface of the Mesilla Basin, a flat depositional area deposited approximately 700,000 years ago within the Rio Grande Rift.[20] Geologically, the project area (shown in red in Figure 3-1) is predominantly located in the Upper Santa Fe Group. It is composed of sand dunes that are sand and gravel of Quaternary alluvium from the middle Pleistocene to the uppermost Miocene.[21] In the far western edge of the project area is a hilly area known to be a volcanic feature composed of Basaltic tephra and lavas near vents (dating to the upper to middle Pleistocene). The project crosses this volcanic field, known as the Potrillo volcanic field, and forms an alluvial collection zone in the drainage known as the Potrillo Maar. Tuff rings, maars, cinder cones, and minor proximal lavas can be found in this geological feature. Two alluvial areas are present near this structure where recent sedimentary deposits are trapped by the steeper surrounding lava areas and topography.

There are known fault lines in the area, as depicted by black lines in Figure 3-1.



— Fault Identity and existence certain, location accurate

QTs—Upper Santa Fe Group (middle Pleistocene to uppermost Miocene)

Qv—Basaltic tephra and lavas near vents (upper to middle Pleistocene) — Tuff rings, maars, cinder cones, and minor proximal lavas.

Qp—Piedmont alluvial deposits (Holocene to lower Pleistocene)

Qa—Alluvium (Holocene to upper Pleistocene)

Figure 3-1. Geological Features

[20] Mack, et al. 2006
[21] NMBGMR Interactive Mapping Tool 2018

3.4.2.2 Soils

The soil survey data for this project area were reported using the USDA Web Soil Survey tool.[22] General soil associations within the project corridor consist of soils discussed in the 2008 ESP[23] and 2015 EA[24] and are incorporated herein by reference. The study corridor has five general soil associations: the Pajarito-Pintura (Pb)complex, Simona-Harrisburg association(SH), Tencee-Upton association, Wink-Harrisburg (WH) association, and—by far the most prevalent soil type, comprising 66.8 percent of the project area—Wink-Pintura (Wp) complex.[25] These soils have developed in a combination of topographic situations: floodplains, basin floors, fans, terraces, valleys, mesas, ridges, and mountains. The soils are gravelly sandy loam with high runoff potential.

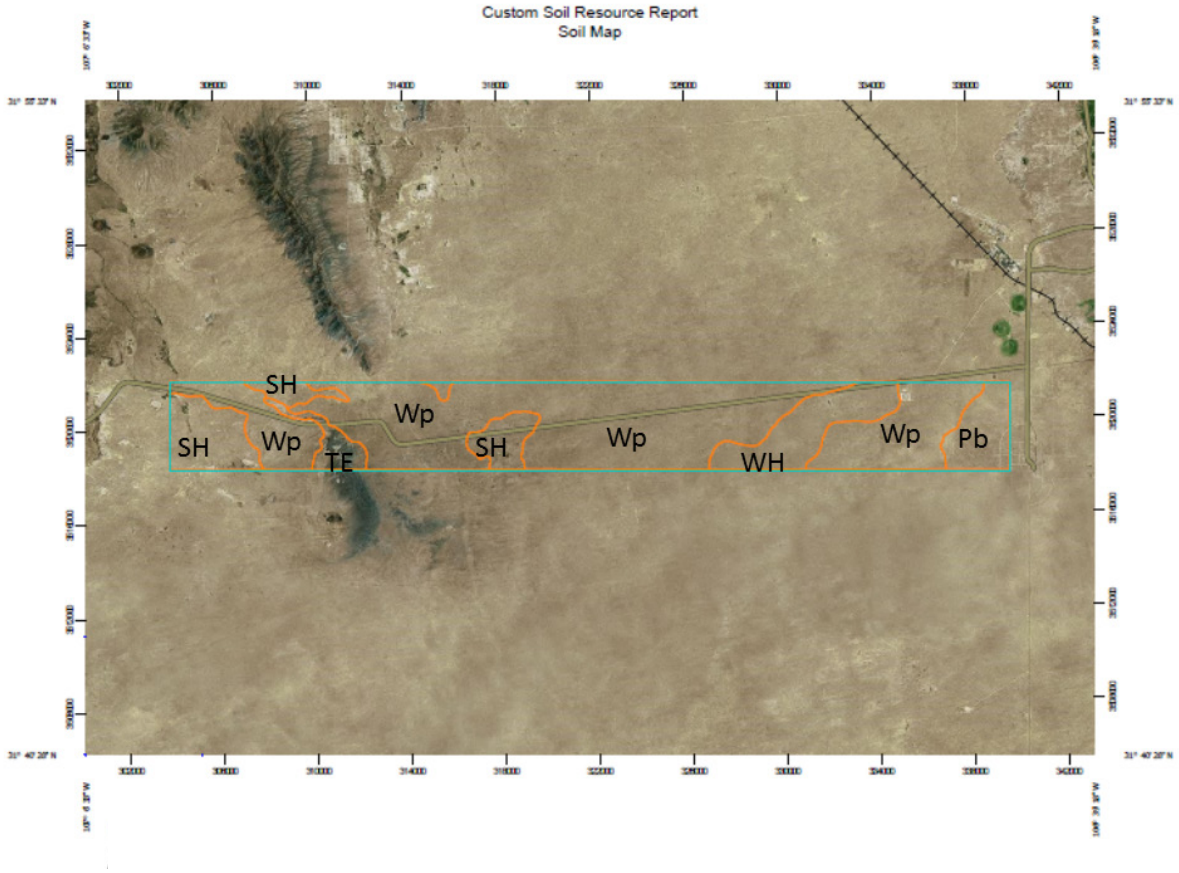


Figure 3-2. Soil Survey for the Project Area

[22] USDA 2018
[23] CBP 2008
[24] CBP 2015a
[25] USDA 2018

3.4.3 Environmental Consequences

The project will result in minor, localized effects on surficial geological features. Topography will be slightly altered within the project footprint. However, physiography of the project region will not be affected.

The project—including the direct project area, staging areas, and access roads—will have a direct, permanent impact on approximately 160.8 acres and temporary effects on 24.6 acres of predominantly Pintura-Wink soils. These soils are common locally and regionally and have received previous disturbance from the existing border and access roads; negligible effects are expected.

Table 3-5. Geological and Soil Resources Effect Determination

Resource	Long-Term Effects	Temporary Effects
Geological	Minor adverse	Minor adverse
Soil	Minor adverse	Minor adverse

3.5 Water Use and Quality

3.5.1 Definition of the Resource

Water is perhaps the most valuable resource in this desert region. Water as a resource exists as groundwater and in limited amounts as surface water. Most human activities in New Mexico depend on the extraction of groundwater due to the limited surface water resources available. To discuss the potential effects of this project on water resources, it is necessary to consider water use and water quality. Water use patterns in a desert region are tied to the supply of water. Changes in usage can drastically affect the total supply of water available for continued human activities as well as habitat. Water quality likewise affects the amount of water available for a given use, because the quality of water drives its availability for given uses.

The water in this region exists as groundwater or surface water. These two water sources are interconnected and dependent on drainage features and hydrology. Drainage features and hydrology recharge the aquifer, which provides water for extraction from wells and can flow into surface water in gaining streams and rivers. Evaluation of hydrology requires a study of the occurrence, distribution, and movement of water and its relationship with the environment. Many factors affect the hydrology of a region, including natural precipitation, evaporation rates, and outside influences such as groundwater withdrawals. Groundwater is a subsurface hydrologic resource that can recharge, or be recharged by, surface water. It is used for drinking, irrigation, and industrial processes. Groundwater can be described in terms of its depth from the surface, aquifer or well capacity, water quality, recharge rate, and surrounding geologic formations.

3.5.2 Affected Environment

The project area is located in the Chihuahuan Desert Ecoregion.[26] This ecoregion differs from other hot deserts, such as the Sonoran, because it is located at higher elevations and has summer dominated rainfall as opposed to a biannual precipitation regime. The annual precipitation can exceed 8 inches.[27] Some areas of the Chihuahua are the hottest and most arid regions in the state, with low available moisture and high evapotranspiration rates, while at higher elevations there is somewhat greater annual precipitation.

3.5.2.1 Groundwater

The aquifers in the area of the project are part of the Rio Grande aquifer system and a piedmont aquifer called the Mesilla Bolson on the U.S. side and Conejos Medanos on the Mexican side.[28] The international agreement that governs Rio Grande surface water doesn't apply to the water of this binational aquifer,[29] although approximately 78 percent of the population of New Mexico relies on groundwater for drinking water.[30]

This system consists of a network of hydraulically interconnected aquifers in basin-fill deposits located along the Rio Grande Valley and nearby valleys.[31] The aquifers of the Rio Grande valley are capable of high yields and represent a precious resource for New Mexico. Recharge primarily originates from rainfall and snowmelt in the mountainous areas around the basins, percolating downward through streambeds and porous rock formations. Precipitation that falls in the valleys is generally lost to evaporation and more important to transpiration by desert-adapted plant species. Little water percolates to a depth sufficient to recharge the aquifers in the area near this project. Shallow soil horizons plugged with carbonate inhibit deep movement of soil moisture, thereby retaining the limited amounts of water for plant use.[32] and preventing downward percolation into the thick interzone of unsaturated basin fill. Groundwater discharges from the system include evapotranspiration, withdrawal from wells and drains, discharge to stream, and underflow, although pumping wells are the primary means of discharge. Water quality is typically considered good, but high conductivity (minerals, total dissolved solids, and salinity) can be characteristic. The primary groundwater quality issue in the Lower Rio Grande Basin is increased salinity, which reduces potable water supplies, deteriorates soil quality, and leads to smaller crop yields.[33]

A single drinking water well was identified near but more than half a mile north of the project area in the business park at the far eastern terminus (see Figure 3-3). No other types of wells (abandoned extraction or injection) were identified by the New Mexico OpenEnviroMap.[34]

[26] Griffith et al. 2006
[27] Davey et al. 2007
[28] Hawley & Lozinzky 1992.
[29] Villagran 2017
[30] NMED 2018c
[31] King et al. 1971
[32] Ibid.
[33] NMED 2010
[34] NMED 2018c

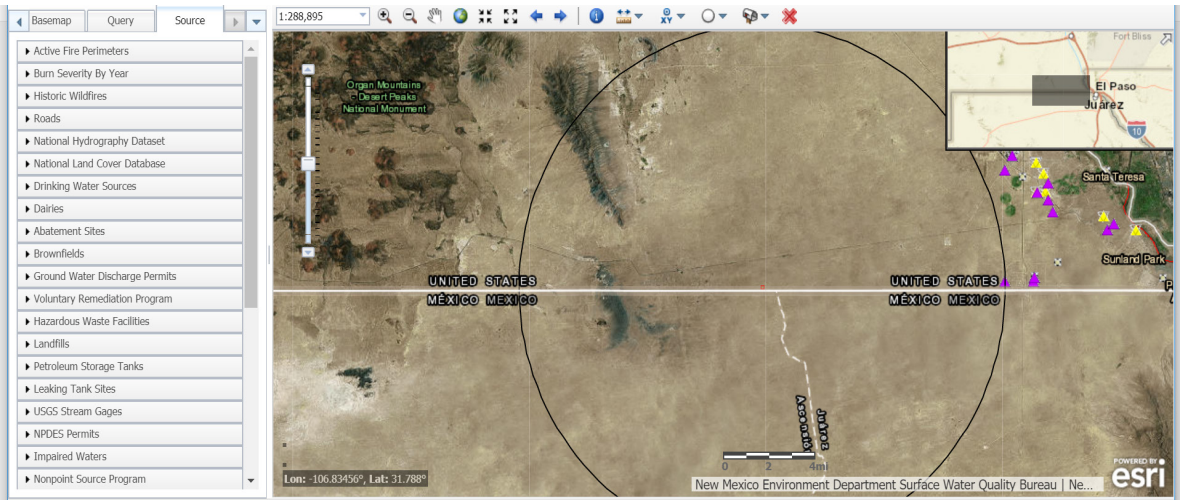


Figure 3-3. Well Heads near the Project Area

3.5.2.2 Waters of the United States (WoUS)

The region's surface waters and WoUS were discussed in detail in the 2008 ESP[35] and 2015 EA[36] and are incorporated herein by reference. Biological surveys conducted in the 2008 ESP within the western portion of the project corridor identified 19 drainages bisecting the project corridor that merited further characterization to determine whether they should be defined as WoUS under Section 404 of the Clean Water Act. Recent LMI biological surveys and a Natural Channel Design, Inc., WoUS survey in the western portion of the project corridor identified many drainages bisecting the project corridor that could be defined as WoUS under Section 404.[37] The WoUS definition in effect is the definition promulgated in a 1987 U.S. Army Corps of Engineers (USACE) manual,[38] implemented consistent with subsequent Supreme Court decisions and guidance documents. The 2015 revised regulatory WoUS definition has been stayed by the U.S. Court of Appeals for the Sixth Circuit. Due to this court stay in implementation, the U.S. Environmental Protection Agency (EPA) and USACE resumed nationwide use of the agencies' prior regulations defining WoUS.[39] On February 28, 2017, the president issued an executive order directing EPA and the Department of the Army to review and rescind or revise the 2015 rule.

The November 2017 Natural Channel Design, Inc., survey identified 28 low-water crossings or other washes and included 20 sites identified on the construction drawings as scheduled for improvement. Any channel or low-lying areas identified in the construction drawings as areas needing a low-water crossing or culvert were labeled "washes," in part due to their nature and in part owing to the current confusion in the regulatory identification of WoUS. However, the majority are depressional areas that accumulate water on the roadbed and do not appear to have

[35] CBP 2008
[36] CBP 2015a
[37] LMI 2018; Natural Channel Design, Inc. 2017
[38] Environmental Laboratory 1987.
[39] EPA 2018b. Current Implementation of Waters of the United States. https://www.epa.gov/cwa-404/definition-waters-united-states-under-clean-water-act. Accessed January 10, 2018.

directional flow or an associated channel. Two low-water crossings were checked for wetland plants and threatened species, and no hydrophytes were found growing in those areas (Table 3-6).

Table 3-6. Low-Water Crossing Plant Species

Common Name	Scientific Name
Creosote bush	*Larrea tridentata*
Rabbit brush	*Ericameria nauseosa*
Chino grama	*Bouteloua ramosa*
Honey mesquite	*Prosopis glandulosa* var. Korr
Desert holy	*Acourtia nana* (A. Gray) Reveal and R.M. King

The ground within the action area has been heavily affected by road construction, vehicle travel, and surface maintenance (Figure 3-4). In many areas, the ordinary high water mark was only observable immediately upstream and downstream from recent disturbance. None of the drainages that flow through the project area connect to a traditional navigable water (TNW). All washes identified on the construction drawings that require a low-water crossing or culvert are isolated waters that do not flow out of the immediate area and do not have a significant nexus to any TNW. However, the Natural Channel Design, Inc., surveyors identified eight washes that originate in the United States or Mexico and cross the international border (Table 3-7); these could be classified as interstate waters and deemed jurisdictional.[40]

[40] Natural Channel Design, Inc. 2017

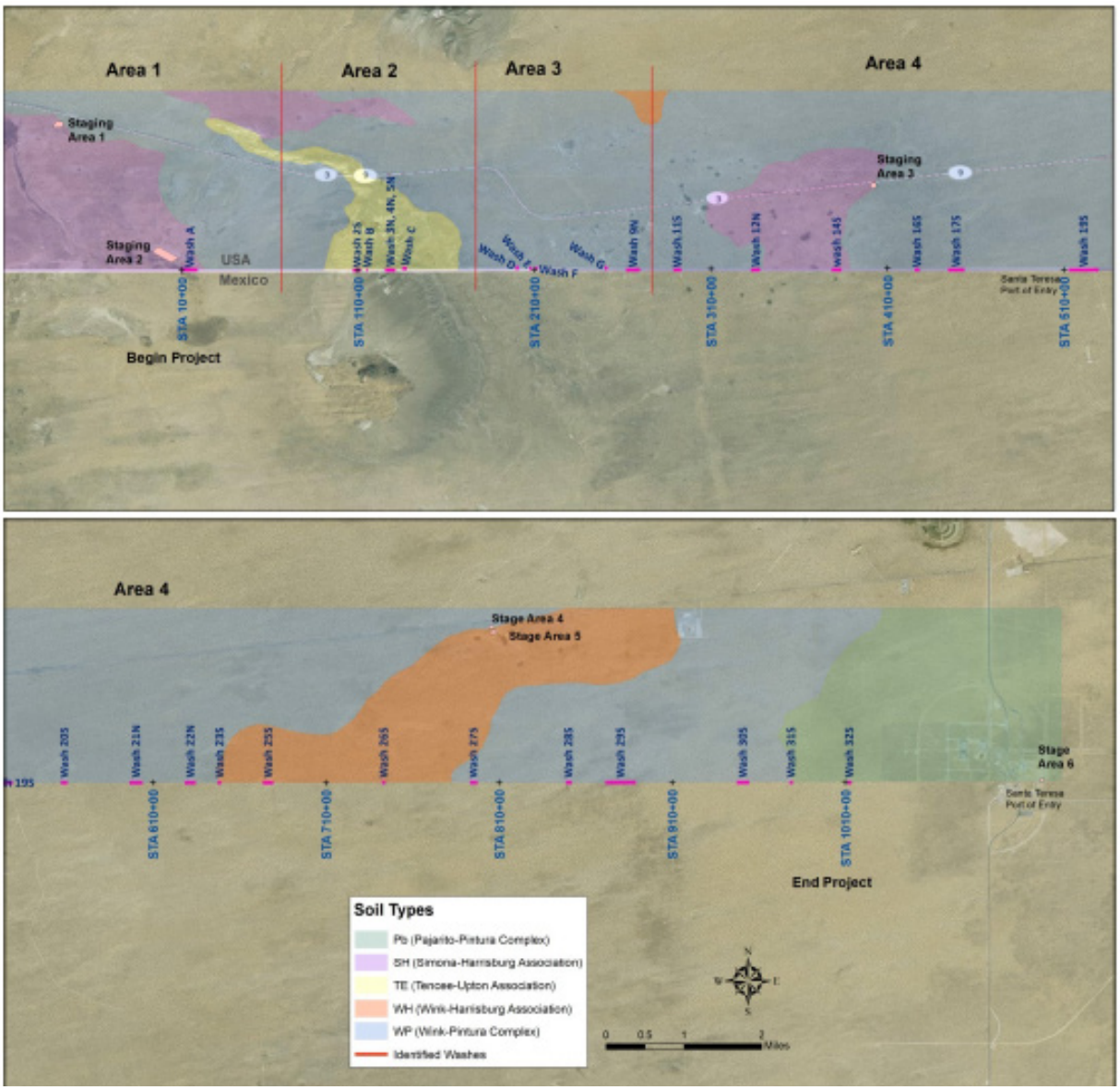


Figure 3-4. Overview of the Project Area Showing the Washes

Table 3-7. Eight Washes Crossing the International Border

Site No.	Latitude (dd)	Longitude (dd)	HUC 12	Jurisdictional Area in Project (ac)	Stream Length in Project Area (ft)	Average Width (ft)
1	31.783796	-107.001944	130302021701	0.104	60	75
2	31.783805	-107.000932	130302021701	0.052	60	35
3	31.783824	-106.999657	130302021701	0.032	69	21
4	31.783797	-106.995231	130302021701	0.005	60	3
5	31.783780	-106.994589	130302021701	0.013	60	9.5
6	31.783839	-106.969905	130302021701	0.030	60	20
7	31.783795	-106.968841	130302021701	0.061	230	15
8	31.783810	-106.951418	130302021701	0.022	80	10

These interstate waters were delineated for preliminary jurisdictional areas because of their potential jurisdictional importance, not because of possible habitat importance. They total 0.32 acre in the project area. The 1987 USACE manual relies heavily on the presence of hydrology,[41] which is evident, and the presence of hydric soils and hydrophytic plants, which are not present. Due to the climate of the project area, these surface drainage channels are dry much of the year and considered ephemeral.

No wetlands or existing TNW are in the area slated for construction, staging areas, or access roads.

3.5.3 Direct and Indirect Effects of the Project

3.5.3.1 Water Use

The project could have a temporary minor, adverse effect on water use and availability during the construction phase due to water being a required element for concrete fabrication and for dust suppression. There will be no long-term effects on water use.

3.5.3.2 Water Quality

Spills during construction, drips from equipment, and other fugitive emissions could have a temporary minor, adverse effect on surface water quality or ground water quality during construction. However, CBP has determined the project will have no effect given the project's distance from any WoUS or well heads, and the area's soil imperviousness to deep recharge from sheet flow. There will be no long-term effects on water quality.

3.5.3.3 Water Resources

There is no surface water, TNW, or wetland within or near the project area. Eight washes are ephemeral in nature, not connected to any TNW, and only considered for regulatory inclusion because they cross the international border. There will be no short-term or long-term effects of the project on any water resources.

Table 3-8. Aquatic Resources Effects Determinations

Resource	Long-Term Effects	Temporary Effects
Water use	No effect	Minor adverse effect
Water quality	No effect	No effect
Ground water	No effect	No effect
Wetlands	No effect	No effect
Surface waters	No effect	No effect

[41] Environmental Laboratory 1987

3.6 Biological Resources

3.6.1 Definition of the Resource

The biological resources that were evaluated include vegetation, aquatic and terrestrial wildlife, migratory bird species covered by the Migratory Bird Treaty Act (MBTA), special status species (including Federal endangered, threatened, candidate, and State of New Mexico protected species) and critical habitat. Together, these resources form the ecological character of a given site. While the previously discussed resources such as geology, soils, and water have a large influence on which biological resources can be present, it is the vegetation that helps decide which animal species can be present and how many individuals can be supported. These factors constitute habitat. Critical habitat is described by USFWS as necessary to support the special needs of protected species.

3.6.1.1 Vegetation

Vegetation resources include all plants that are found within the region of analysis. Vegetation analysis and descriptions were conducted using Bailey's multi-tiered classification of ecoregions contained in the U.S. Forest Service's *Descriptions of the Ecoregions of the United States*.[42] In addition, the U.S. Geological Survey's Gap Analysis Program Level 3 data and associated NatureServe descriptions of the ecological systems were used to describe the vegetation in the region of analysis.[43] Site visits and surveys were made and discussed in the 2008 ESP[44] and the 2015 EA[45] and are incorporated by reference, as well as for this project in December 2017.[46]

An ecoregion contains geographically distinct environmental communities and conditions based on several tiers of classification. These include domains, divisions, and provinces. Domains are the largest geographic level of ecoregional classification and are generally defined by climate. Domains are split into divisions, which are defined according to climate and vegetation. Divisions are subsequently split into provinces that are typically defined by their major plant formations. Because ecoregions are defined by their shared biotic and abiotic characteristics, they represent practical units on which to base conservation planning.

3.6.1.2 Wildlife

No WoUS, surface waters, TNW, or wetlands are known to exist in the area of this project, and the analyses will not cover aquatic wildlife. Terrestrial wildlife resources include native and naturalized terrestrial animals and the habitats in which they exist. Species addressed in this section include those not listed as threatened or endangered by the Government.

[42] USFS 1995
[43] USGS 2018
[44] CBP 2008
[45] CBP 2015a
[46] LMI 2018

3.6.1.3 Migratory Bird Treaty Species

International treaty protects many birds that migrate through nations. In the United States these birds are protected by the MBTA. Birds listed as MBTA species are protected from "take," which means *"to pursue, hunt, shoot, wound, kill, trap, capture, or collect" or to attempt any of these acts."*[47]

3.6.1.4 Threatened and Endangered Species

Under the Endangered Species Act (ESA), an endangered species is defined as any species in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species likely to become an endangered species in the foreseeable future. Although the Secretary's waiver means that CBP no longer has legal obligations under the ESA, the Secretary committed DHS to responsible environmental stewardship of our valuable natural resources. CBP supports this objective and has applied the appropriate standards and guidelines associated with the ESA as the basis for evaluating potential environmental effects and appropriate mitigations.

Species listed as threatened or endangered under the ESA (i.e., federally listed species) that have the potential to be affected by implementation of the Proposed Action or No Action Alternative are discussed in this section. NatureServe elemental occurrence data were used to determine the presence of species within the region of analysis. An elemental occurrence is defined by NatureServe as an area of land or water where a species or natural community is or was present and has conservation value.[48] These occurrence data require that a species is in appropriate habitat, at the appropriate time of the year, and is naturally occurring.[49] This section presents those federally listed species that are known to occur or have the potential to occur within the region of analysis.

3.6.2 Environmental Setting

3.6.2.1 Vegetation Resources

New Mexico contains eight ecoregions with characteristic environmental resources, such as geology, climate, soils, and hydrology. The project corridor is located in the Chihuahuan Desert ecoregion, which is part of the Chihuahuan Basins and Playas ecoregion.[50] The Chihuahuan Desert is distinguished from other hot deserts in the Southwest by its higher elevation and summer dominant rainfall.[51] Much of the Chihuahuan Desert Ecoregion used to be covered by healthy semi-desert grasslands, but heavy livestock grazing coupled with frequent droughts during the twentieth century transformed thousands of the acres to desert shrubland, a process that continues.[52] Unique in its diversity of yucca (*Yucca* spp.) and agave (*Agave* spp.) species, the

[47] MBTA 1918
[48] NatureServe 2013
[49] NatureServe 2013
[50] Griffith et al. 2006
[51] Sleeter et al. 2012
[52] Hoyt 2002

Chihuahuan Desert replaces the large cacti, creosote bush (*Larrea tridentata*), and bursage (*Asteraceae* spp.) communities of the Sonoran Desert to the west with large yuccas amid a sea of sparse grass and shrubs.[53] Livestock grazing and range-management programs since the 1870s have led to soil erosion, plant catchments, and destruction of plants most palatable to livestock. Prescribed fires and wild fires have helped the spread of non-native plants and a steady increase in the density of woody plants.

The entire project area was surveyed for plant associations in December 2017. The survey revealed several discrete plant communities along the project corridor and the staging areas. In general, field surveys found less than 30 percent cover by plant species on all sites surveyed, the remaining area being bare soil. In the western part of the project area, the dominant species were creosote bush (*Larrea tridentata*), four-wing saltbush (*Atriplex canescens*), ocotillo (*Fouquieria splendens*), rabbit brush (*Ericameria nauseosa*), and honey mesquite (*Prosopis glandulosa* var. Korr). In the higher rock outcropping, the dominant species were ocotillo (*Fouquieria splendens*), fluff grass (*Dasyochloa pulchella*), and creosote bush (*Larrea tridentata*). The central part of the project area was found to be dominated by soaptree yucca (*Yucca elata*), honey mesquite (*Prosopis glandulosa* var. Korr), burrograss (*Scleropogon brevifolius*), and chino grama (*Bouteloua ramosa*). In the easternmost part of the project area, the dominant species consisted of soaptree yucca (*Yucca elata*) and spike dropseed (*Sporobolus contractus*).

The vegetation along the access roads was less thoroughly categorized in as much as the roads are already constructed and off-road activities will not be part of this project. However, the three existing access roads had several of the same species as listed above, with the addition of curly dock (*Rumex crispus)*, Arkansas lazydaisy (*Aphanostephus skirrhobasis*), Mexican tea (*Ephedra trifurca* Torr.), and desert holly (*Acourtia nana* [A. Gray]).

As stated in Chapter 2, the project will use three existing staging areas (2, 3, and 6) and clear three new staging areas (1, 4, and 5) for use during the construction period. Surveys were performed throughout the three new staging areas to collect data on the type and abundance of vegetation present in each. The plant community classification system employed is a general classification method incorporating a visual survey of all plants present in the study area. Staging area 1 is dominated by rabbit brush (*Ericameria tridentata*), threadleaf ragwort (*Senecio longiloba*), chino grama (*Bouteloua ramosa*), and burrograss (*Scleropogon brevifolius*). Staging areas 4 and 5 are dominated by creosote bush (*Larrea tridentata*), four-wing saltbush (*Atriplex canescens*), Arkansas lazydaisy (*Aphanostephus skirrhobasis*), and honey mesquite (*Prosopis glandulosa* var. Korr). Staging areas 2, 3, and 6 have been cleared and are highly disturbed; since their last use, some vegetation has re-grown and will need to be removed.

3.6.2.2 Wildlife

Wildlife resources potentially found within the project corridor were discussed in the 2004 EA, 2006 Programmatic Environmental Assessment (PEA), and 2008 ESP; incorporated information from these sources is referenced herein. Mammals typically associated with the Chihuahuan Desert scrub plant community range from large hoofed mammals to small ground-dwelling animals.

[53] Sleeter et al. 2012

Evidence of several mammal species was observed during recent surveys conducted by LMI to include the following: scat from black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), numerous bird species (see next paragraph), several unoccupied woodrat (*Neotoma* sp.) middens, badger (*Taxidea taxus*) burrows, kangaroo rat (*Dipodemys* sp.) burrows, and coyote (*Canis latrans*) and white-tailed deer (*Odocoileus virginianus*) tracks. In addition, many common species of amphibians and reptiles associated with western arid regions can be found in southern Doña Ana County. During the survey, numerous tailed reptile tracks were also observed.

Fourteen species of birds were identified during biological surveys, including the mourning dove (*Zenaida maroura*), red-tailed hawk (*Buteo jamaicensis*), loggerhead shrike (*Lanius ludoviscianus*), black-tailed gnatcatcher (*Polioptila melanura*), Gambles Quail (*Callipepla gambelii*), crow (*Corvus corax*), black phoebe (*Sayornis nigricans*), ladder-backed woodpecker (*Dryobates scalaris*), ferruginous hawk (*Buteo regalis*), greater roadrunner (*Geococcyx californianus*), and ash-throated flycatcher (*Myiarchus cinerascens*). Bobwhite quail (*Colinus virginianus*) were observed by call. A large abandoned nest was observed on a windmill adjacent to staging area 2. It is likely that this is a Common black hawk (*Buteogallus anthracinus*) nest, as a pair of Common black hawks was observed in a newly constructed nest on a windmill less than 2 miles west of the end of this project area.

3.6.2.3 Special Status Species

3.1.1.1.1 Federally Listed Species

Federally protected species and designated critical habitat were discussed in the 2004 EA,[54] 2006 PEA,[55] 2008 ESP,[56] and, 2015 EA,[57] and those discussions are incorporated herein by reference. USFWS lists six federally endangered or threatened species within Doña Ana County.[58] Table 3-9 lists these species and describes their potential to occur within the project corridor. No critical habitat for any of the federally listed threatened or endangered species has been identified within the project corridor.

[54] CBP 2004
[55] CBP 2006
[56] CBP 2008
[57] CBP 2015a
[58] USFWS 2017a and USFWS 2018

Table 3-9. Federally Threatened or Endangered Species in Doña Ana County

Common and scientific name	Federal status	Potential to occur within project area	Known element occurrence?
		Birds	
Least tern (interior population) *Sterna antillarum*	Endangered	No—no suitable habitat occurs within or near the project corridor	No element occurrences demonstrated in New Mexico
Northern aplomado falcon* *Falco femoralis septentrionalis*	Endangered	Yes—potential tree and scrub habitat exist within the project corridor. an experimental population listed under section 10(j) of the ESA.	Element occurrences in Doña Ana County
Southwestern willow flycatcher *Empidonax traillii extimus*	Endangered	No—no suitable habitat occurs within or near the project corridor	Element occurrences in Doña Ana County
Yellow-billed cuckoo *Coccyzus americanus*	Threatened	No—no suitable habitat occurs within or near the project corridor	Element occurrences in Doña Ana County
		Mammals	
Mexican wolf* *Canis lupus baileyi*	Endangered	Yes—suitable habitat occurs within or near the project corridor. an experimental population listed under section 10(j) of the ESA.	Element occurrences in Doña Ana County
		Flowering Plants	
Sneed pincushion cactus *Coryphantha sneedii* var. *sneedii*	Endangered	No—no suitable habitat occurs within or near the project corridor	Element occurrences in Doña Ana County

Sources: USFWS 2017a, NatureServe Explorer 2016, USFWS 2017b
* The northern aplomado falcon and Mexican wolf in New Mexico are experimental populations listed under section 10(j) of the ESA.

Of the six federally listed threatened or endangered species in Doña Ana County, the least tern is the only species not known to occur in New Mexico. During the 2017 biological survey, no federally protected species were observed within the project corridor. However, suitable foraging and nesting habitat for the northern aplomado falcon was identified.

In 2006, USFWS announced a final rule to reintroduce the northern aplomado falcon in historical habitats in southern New Mexico and Arizona.[59] Under this ruling, the northern aplomado falcon is classified as a nonessential experimental population. This designation requires Federal land managers to incorporate the following actions in a release under 10(j) of 70 FR 6819, 6828: (1) a geographic area is designated where all falcons within the area would be considered "experimental"; (2) Federal agencies would treat the release of birds as "proposed threatened" versus "endangered" (this requires the Federal agency to conference instead of consult, as required by Section 7 of the ESA); and (3) Federal agencies would conference with USFWS if the actions may adversely affect the aplomado falcon, but no authorization for incidental take would be required as with consultation.

[59] Federal Register Volume 71, No. 143

In 1998, USFWS designated a Mexican Wolf nonessential experimental population under ESA section 10(j), which was revised in 2015 (80 FR 2512). The Mexican Wolf Experimental Population Area (MWEPA) in New Mexico is the entire area south of Interstate 40 (in Albuquerque) to the southern border with Mexico and to the eastern and western state boundaries. The project corridor is within the MWEPA, however the current occupied range does not extend into the project corridor. Mexican wolves within the MWEPA boundaries are considered part of the nonessential experimental population and those outside of the MWEPA boundary are considered endangered. There are no known Mexican wolves outside of the MWEPA. In January 2017, there were sightings of Mexican wolves near Santa Teresa, New Mexico (USFWS 2017b).

3.6.2.3.1 State-Listed Species

The potential for New Mexico state-protected species to occur within the project corridor was discussed in the 2004 EA[60] and 2006 PEA;[61] those discussions are incorporated herein by reference. In summary, a total of 22 New Mexico threatened and endangered species are considered to inhabit Doña Ana County.[62] A total of six species, other than those on the Federal list, have the potential to occur within the project corridor.[63] Table 3-10 lists those species potentially occurring in the project corridor.

During the 2017 biological survey, a large, abandoned nest was observed on a windmill in construction staging area 2 located at the western end of the project corridor. A pair of Common black hawks were observed in a newly constructed nest on a windmill less than 2 miles west of this construction staging area; it is likely that the abandoned nest belonged to Common black hawks (*Buteogallus anthracinus*) as well.

Table 3-10. State-Listed Species with Potential to Occur in the Project Corridor

Common and scientific name	New Mexico status	Potential to occur within project area
Birds		
Common black hawk Buteogallus anthracinus	Threatened	Yes—potential tree and scrub habitat exist within the project corridor
Bunting varied species Passerina versicolor dickeyae	Threatened	Yes—potential tree and scrub habitat exist within the project corridor
Common ground dove Columbina passerina	Endangered	Yes—potential tree and scrub habitat exist within the project corridor
Costa's hummingbird Calypte costae	Threatened	Yes—potential tree and scrub habitat exist within the project corridor
Baird's sparrow Ammodramus bairdii	Threatened	Yes—potential tree and scrub habitat exist within the project corridor
Reptiles		
Reticulated Gila monster *Heloderma suspectum*	Endangered	No—no suitable habitat occurs within or near the project corridor

Sources: NMDGF 2016, NMDGF undated.

[60] CBP 2004
[61] CBP 2006
[62] NMDGF undated
[63] NMDGF 2016, NatureServe Explorer 2016.

3.6.3 Effects of the Project

3.6.3.1 Vegetation Resources

The total project footprint is 145.5 acres of Chihuahuan Desert scrub vegetation, but since the construction of the bollard wall exists within the Roosevelt Reservation, there will be minimal effects to vegetation. The addition of lighting structures along the border may affect plant growth in the localized area along the U.S.–Mexico border. Construction of the three new staging areas will require plant removal, and some plant removal is expected within the three existing staging areas, as they have become overgrown since last used. However, the Chihuahuan Desert scrub plant community is both locally and regionally common, so the loss of vegetation within the project area will not adversely impact the plant population; therefore, the impact of the bollard wall' lighting, and staging area components is expected to be negligible. As the three access roads already exist and no off-road activities are expected, no impact to vegetation is expected as a result of this project component.

The project may have indirect effects to vegetation. The disturbance and removal of vegetation within the project area could create suitable conditions for the establishment of non-native species. In addition, fugitive dust from construction activities will affect photosynthesis and respiration of plants near the project corridor. The magnitude of these effects depend upon the type and number of construction equipment used, the time of day during which construction occurs, climatic factors, wetting procedures used by CBP, and the health and density of nearby vegetation. To ensure that the project does not promote the establishment of nonnative species and to minimize the negative effects resulting from construction dust, CBP will implement several best management practices (BMPs) during construction and operation of the project. The BMPs will help minimize the spread of propagules, re-establish native vegetation, control existing populations, and minimize dust production. These BMPs are described in Chapter 4 of this ESP.

Border lights will be installed on the tactical infrastructure (TI) within the enforcement zone and automatically operate between sunset and sunrise hours and could have a permanent minor effect on plant growth. Artificial lighting interrupts the cycle of natural light on which plants depend for photosynthesis. If the artificial lighting is bright enough, it could induce a physiological response in plants, altering their phenology, growth, and resource allocation. While there is little research on the effects of artificial lighting on wild vegetation, it can be expected that vegetation in the project area will experience minor negligible effects.[64] CBP will implement BMPs to limit the amount of unnecessary artificial light exposure to nearby vegetation.

Negligible to minor, direct adverse effects on vegetation, such as crushing, might occur when vehicles and equipment are required to access, park at, or maneuver around areas for construction, repair and maintenance activities. All activities are expected to occur within or adjacent to existing TI footprints, and as such, these effects would be negligible.

[64] Bennie et al. 2016

Table 3-11. Vegetation Effects Determination

Resource	Long-Term Effects	Temporary Effects
Vegetation	Minor adverse	Minor adverse

3.6.3.2 Wildlife

No significant effects to wildlife will occur as a result of this project, as the project occurs near and within previously disturbed areas (i.e., existing border fence, Santa Teresa Port of Entry [POE], patrol road, access roads). Further, all wildlife habitat is locally and regionally abundant. The project will not affect any fish or other aquatic species, because the construction activities will not take place in naturally flowing or standing water. BMPs will be implemented for construction activities in and near low-water crossings, as stated in Section 4.4, to minimize potential effects from erosion or sedimentation.

No impact is expected for mobile animals (e.g., birds), which are able to escape to areas of similar habitat outside the project area. Direct minor adverse effects on slow or sedentary mammals, reptiles, and amphibians may occur due to their inability to relocate outside the project area. As a result, direct minor adverse effects on wildlife species in the vicinity of the project corridor are expected. Although some animals may be lost, this project will not result in any substantial reduction of the breeding opportunities for birds and other animals on a regional scale due to the suitable, similar habitat adjacent to the project corridor.

Increased noise during construction activities could have short-term effects on certain wildlife species (e.g., white-tailed deer, mule deer, red-tailed hawk, and desert cottontail) (see Section 3.6.2.2; CBP 2008). Animal response to increased noise can include physiological responses (e.g., increased heart rate, change in hormone balance, increased stress) and behavioral responses, such as body shifting or leaving the area altogether.[65] The degree of the response depends on the length of exposure to noise, temperament, age, sex, or prior experience to noise. Panic and escape behavior, when an animal leaves the area, results from more significant disturbances.[66] As most wildlife species are active during nighttime, early morning, or dusk, construction activities will take place during daytime hours to the maximum extent practicable. Therefore, short-term effects of noise on wildlife species are expected to be minimal to moderate.

The installation of permanent lights on the TI could potentially affect wildlife. Some species of bats may benefit from the lights, as they can take advantage of the concentration of insects around the white lights.[67] Birds, mammals, and other species of bats may experience adverse effects. Birds often migrate at night, and lighting along the bollard wall may cause an increase in mortality of birds as they strike the TI.[68] The majority of mammals in this region are nocturnal, hunting and

[65] Fletcher 1990
[66] Busnel and Fletcher 1978
[67] BCT 2014
[68] Pollard 2009

feeding at night or in low daylight hours to avoid predators. Artificial lighting in these areas is likely to disrupt their behavior patterns, and their foraging areas could be lost or minimized.[69]

The TI lights will operate every night between sunset and sunrise once installed; therefore, effects on wildlife are expected to be permanent but minor. To minimize negative effects to wildlife, the lights will be outfitted with backlighting shields and will be pointed downward to minimize light pollution. The amount of lights installed will only be sufficient to provide increased border security; no excessive or unnecessary lights will be installed. The lights will be installed on top of 40–60-foot poles, which will minimize the size of light spills and allow for greater distance between light fixtures (approximately 180 feet).

The existing electricity grid will power the lights and no generator will be required. Therefore, no change in noise level is expected as a result of the light installation.

Table 3-12. Wildlife Resources Effects Determination

Resource	Long-Term Effects	Temporary Effects
Wildlife	Minor adverse	Minor adverse

3.6.3.3 Special Status Species

No federally protected species were observed within the project corridor during the 2017 biological survey, although suitable foraging and nesting habitat for the northern aplomado falcon exists. Effects on potential habitat of the falcon will occur as a result of the project (i.e., removal of the existing fence, installation of new fencing, and clearing of construction staging areas); however, this habitat is regionally and locally common. In addition, the proposed staging areas will result in a loss of 24.6 acres of habitat, although not all of this area is considered suitable habitat for the northern aplomado falcon; this loss is considered minor and temporary. No designated critical habitat exists within the project corridor; no impact on critical habitat is expected.

Additionally, the project corridor is within the nonessential experimental population area for the Mexican wolf. Habitat for the Mexican wolf will be impacted by the project, however it is very unlikely that construction or demolition activities would directly impact a Mexican wolf since it is a mobile species and would leave an area if noise disturbances were present. No critical habitat has been designated for the Mexican wolf, therefore no effects are expected.

As shown in Table 3-13, state-listed species could be affected. Individuals could be harmed or lost during the removal of the existing fence, installation of new fencing, and clearing of construction staging areas; the likelihood of the loss of any individuals are minimal because the five species with the potential to occur are birds and are highly mobile. The greatest effects on state-listed species would result from the removal of habitat during the clearing of construction staging areas (24.6 acres) and access roads (15.8 acres). However, an abundance of similar habitat exists locally and regionally and the temporary removal of 24.6 acres is considered minimal. Disturbance already

[69] BCT 2014

occurs in the project corridor (along the patrol road) and is in proximity to development at the Santa Teresa POE. Therefore, any potential effects on individuals or habitat as a result of this proposed action is expected to be minor. As discussed in Section 1.5 of this ESP, construction BMPs will be implemented to further reduce any effects.

The temporary disturbance from construction activities could cause short-term minor effects on the northern aplomado falcon and state-listed species, if present. The removal of habitat in construction staging areas would result in minor effects on federally and state-listed species, until the habitat is reestablished. No long-term effects are expected on federally or state-listed species as a result of the project.

Table 3-13. Special Status Species Effects Determinations

Resource	Long-Term Effects	Temporary Effects
Least tern (interior population) *Sterna antillarum*	No effect	No effect
Northern aplomado falcon* *Falco femoralis septentrionalis*	No effect	Temporary minor adverse effect
Southwestern willow flycatcher *Empidonax traillii extimus*	No effect	No effect
Yellow-billed cuckoo *Coccyzus americanus*	No effect	No effect
Sneed pincushion cactus *Coryphantha sneedii var. sneedii*	No effect	No effect
Critical habitat	No effect	No effect
Common black hawk *Buteogallus anthracinus*	No effect	Temporary minor adverse effect
Bunting varied species *Passerina versicolor dickeyae*	No effect	No effect
Common ground dove *Columbina passerina*	No effect	No effect
Costa's hummingbird *Calypte costae*	No effect	No effect
Baird's sparrow *Ammodramus bairdii*	No effect	No effect
Reticulated Gila monster *Heloderma suspectum*	No effect	No effect

3.8 Cultural Resources

3.8.1 Definition of the Resource

"Cultural resources" is an umbrella term for many heritage-related resources defined in several Federal laws and executive orders, including the National Historic Preservation Act (NHPA), the Archeological and Historic Preservation Act, the American Indian Religious Freedom Act, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act (NAGPRA). The NHPA focuses on cultural resources such as prehistoric and

historic sites, buildings and structures, districts, and other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Such resources might provide insight into the cultural practices of previous civilizations or retain cultural and religious significance to modern groups. Resources judged important under criteria established in the NHPA are considered eligible for listing in the National Register of Historic Places (NRHP). These resources are termed "historic properties" and protected under the NHPA.

NAGPRA requires consultation with culturally affiliated Native American tribes for the disposition of Native American human remains, burial goods, and cultural items recovered from federally owned or managed lands. Typically, cultural resources are subdivided into archaeological sites (prehistoric or historic sites containing physical evidence of human activity but no standing structures); architectural sites (buildings or other structures or groups of structures, or designed landscapes that are of historic or aesthetic significance); and sites of traditional, religious, or cultural significance to Native American tribes.

Archaeological resources comprise areas where human activity has measurably altered the earth or deposits of physical remains are found (i.e., artifacts). Architectural resources include standing buildings, bridges, dams, and other structures of historic or aesthetic significance. Generally, architectural resources must be more than 50 years old to warrant consideration for the NRHP. More recent structures, such as Cold War–era resources, might warrant protection if they are of exceptional importance or have the potential to gain significance.

Resources of traditional, religious, or cultural significance to Native American tribes can include archaeological resources, sacred sites, structures, neighborhoods, prominent topographic features, habitats, plants, animals, and minerals that Native Americans consider essential for the preservation of their traditional culture.

3.8.2 Environmental Setting

3.8.2.1 Location

The project area is located in the southwestern portion of the Mesilla Bolson (basin). It is in the eastern part of the Basin and Range physiographic province and includes some of the western portion of the Rio Grande Rift.[70] The Mesilla Bolson covers the area roughly between Las Cruces on the northwest and El Paso on the southeast and the Organ-Franklin-Juarez Mountain chain on the east and the East Potrillo Mountains on the west.[71]

The region has been heavily affected by historical grazing,[72] with former grasslands replaced by the current landscape replete with coppice dunes. These are stable mounds formed around plants. Mesquite, in particular, is a common anchor plant for the coppice dunes.

[70] Baldridge and Olsen 1989
[71] Hawley et al. 2001
[72] Rango et al. 2000

3.8.2.2 Cultural History Overview

The culture history of south-central New Mexico and the Trans-Pecos includes four major subdivisions, the Paleoindian Period (ca. 9,000–6,000 BCE), the Archaic Period (ca. 6,000 BCE to CE 200), the Formative Period (CE 200–1450), and the Protohistoric and Historic periods (CE 1450 to present). These periods have been defined by archaeologists given changes in cultural adaptations to environmental conditions, technological changes, and subsistence strategies. Note that disagreement exists over specific dates, but consensus exists for the general trends.

3.8.2.3 Project Area

The project area includes roughly 295.8 acres west of El Paso, Texas, in southern Doña Ana County, New Mexico, along the U.S.–Mexico border. The project area comprises a segment of the Roosevelt Reservation (the 60-foot–wide corridor on the north side of the border between the Santa Teresa POE on the east and CRA-6 on the west), three access roads between State Road 9 and the border, and six staging areas adjacent to the access roads. Land ownership includes the Roosevelt Reservation, which is on lands administered by CBP, lands administered by the Bureau of Land Management, and private land.

3.8.3 Effects of the Project

3.8.3.1 Survey Results

CBP completed a full-coverage survey of the three access roads, six staging areas, and portion of fiber optic line to the north of the Roosevelt Reservation. Three newly discovered sites were recorded during the project (Table 3-14). All three sites are historical trash dumps that date roughly from the 1920s to 1930s. None of the sites are considered significant and are not recommended as eligible for the NRHP. No additional investigation of the sites is recommended.

Table 3-14. Newly Discovered Sites in the Project Area

Site	Type and Age	UTM Location (Zone 13)	Elevation (m)	NRHP Eligibility Recommendation	Management Recommendation
LA189577	Trash dump ca. 1930s	305422 E 3520519 N	1,252	Not eligible	No additional investigation
LA189578	Trash dump ca. 1930s	306269 E 3519711 N	1,243	Not eligible	No additional Investigation
LA189579	Trash scatter ca. 1920s-1930s	306630 E 3519268 N	1,239	Not eligible	No additional investigation

CBP revisited 27 previously recorded sites during fieldwork.[73] These sites are located along the U.S.–Mexico border and adjacent to two of the access roads. Twenty-two of these sites include

[73] These sites, locations, and other pertinent information are listed in the Northland Research Inc. Cultural Resources Survey, which is considered confidential under Department of the Interior guidance concerning antiquities. Northland Research Inc. 2018.

portions of, or are adjacent to, the Roosevelt Reservation. Note that nearly all of the Roosevelt Reservation has been disturbed by relatively recent improvements to the border fence and road. An archaeological survey, as well as archaeological test investigations of selected sites, was conducted prior to those improvements.[74] During the surveying for the current project, no artifacts or features were found within the Roosevelt Reservation at any of the 22 previously recorded sites in the current Area of Potential Effect (APE).[75]

Previous investigations have recommended that six of the sites along the Roosevelt Reservation should not be considered NRHP eligible; CBP recommends no further action at these sites. Two sites have been determined NRHP eligible (LA86788 and LA133193). Another 14 sites have not been evaluated or are considered unknown NRHP eligibility. CBP recommends that all 16 of the eligible and indeterminate sites should be avoided during construction. The proposed undertaking will not involve any effects outside the 60-foot–wide Roosevelt Reservation. Avoidance is recommended, but given the proposed scope of work and previous disturbance to the Roosevelt Reservation, no additional investigation of these sites is recommended.

Two previously recorded sites—LA86774 and LA86780—are plotted near the proposed fiber optic line and are located in the Santa Teresa POE. These are the Mockingbird and Santa Teresa sites, respectively. Data recovery was conducted at the sites in the 1990s. Portions of the sites have since been destroyed by the upgrade of the port of entry.[76] No further action is recommended for these two sites.

Two previously recorded sites—LA 159821 and LA85922—were revisited in or near staging area 2 on the West Access Road. When they were observed by CBP, these sites were in essentially the same condition as recorded. Neither site is recommended eligible for the NRHP.[77] CBP concurs with this recommendation.

The last previously recorded site—LA15920—is located near the southern end of the east access road. The site has been the subject of data recovery.[78] It is considered eligible for the NRHP under Criterion D. CBP did not observe artifacts or evidence of features at LA15920. Given the data recovery effort and the possibility of shifting sand in the dunes, this is not unexpected. Avoidance of the site is recommended. As long as vehicle traffic is confined to the existing road, there should be no additional impact to the site related to the proposed undertaking.

Following the cultural resources BMPs listed in Chapter 4 of this document will ensure that there are no short-term effects during construction or any long-term effects.

Table 3-15. Cultural Resources Effects Determination

Resource	Long-Term Effects	Temporary Effects
Cultural resources	No effect	No effect

[74] Northland Research Inc. 2018.
[75] Ibid
[76] Moore 1996
[77] Kurota and Turnbow 2009
[78] Ibid

3.9 Socioeconomics

3.9.1 Definition of the Resource

Socioeconomic factors describe attributes and resources of the population, particularly the size and economic activity of a population. In this section, data and analysis is provided for the project's region of influence (ROI), the geographical area in which a majority of the socioeconomic effects are expected to occur. For the purposes of this ESP, the ROI is defined to include Doña Ana County, New Mexico.

3.9.2 Environmental Setting

According to the U.S. Census, the 2010 population of Doña Ana County was 209,235, with a projected 2016 population of 214,207.[79] This represents a higher population growth rate from 2010 to 2016 than the state of New Mexico in that same time period—2.4 percent and 1.1 percent, respectively.[80] Further, the New Mexico Economic Development Department (NMEDD) projects the 2025 population of Doña Ana County to increase to 258,887, a 21 percent increase from the 2016 population.[81]

The largest percentages of people employed by industry in New Mexico are the healthcare and social assistance and retail trade industries.[82] The smallest industry by population of those employed in New Mexico is the utilities industry. The healthcare and social assistance and educational services industries employ the largest population of citizens in Doña Ana County, with mining employing the smallest population.[83]

The U.S. Census reports that in 2015, employer establishments in Doña Ana County totaled 3,570. The unemployment rate of Doña Ana County in 2013 was 7.5 percent,[84] which was above the state (6.9 percent) and national (7.4 percent) averages.[85] Doña Ana's 2016 per capita personal income (PCPI), the average income earned per person in a given area, was $32,852. This is well below the 2016 national and state PCPI averages, which were $49,246 and $38,474, respectively.[86]

3.9.3 Effects of the Project

It not anticipated that the project will have adverse effects on the local or regional socioeconomic factors. No change in population, personal income, or employment status is expected. As the project is located on disturbed land at the site of an existing border fence, there will be no impact to residences, businesses, or other private property. There may be temporary beneficial effects to the local economy due to the additional employment for project construction and additional income and sales tax from the purchase of goods and materials. These temporary effects are expected to

[79] USCB 2017a
[80] USCB 2017b
[81] NMEDD 2012
[82] NMEDD 2016
[83] NMEDD 2012
[84] Ibid.
[85] BLS 2013a and 2013b
[86] BEA 2016

last during the 9-month construction phase. No long-term beneficial effects to socioeconomic factors are anticipated.

Table 3-16. Socioeconomic Resources Effects Determination

Resource	Long-Term Effects	Temporary Effects
Socioeconomics	None	Minor beneficial

3.10 Hazardous Materials and Waste

3.10.1 Definition of the Resource

Although the Secretary's waiver means that CBP no longer has legal obligations under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Secretary committed DHS to responsible environmental stewardship of our valuable natural and cultural resources. CBP supports this objective and has applied the appropriate standards and guidelines associated with CERCLA as the basis for evaluating potential environmental effects and appropriate mitigations.

Hazardous materials, substances, wastes; and toxic substances include elements, compounds, mixtures, solutions, and substances that, when released into the environment or are otherwise improperly managed, could present substantial danger to the public health or welfare, or the environment. Evaluation of hazardous materials and wastes includes above-ground storage tanks (ASTs); underground storage tanks (USTs);, and the storage, transport, handling, and use of pesticides, fuels, solvents, oils, and lubricants. In addition to being a threat to humans, the improper release of hazardous materials and wastes can threaten the health and well-being of wildlife, plants, soil resources, and water quality. The extent of contamination would vary based on the type of soil, topography, and water resources in an area.

The American Society of Testing and Materials (ASTM) defines a recognized environmental condition as the likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.[87]

3.10.2 Environmental Setting

The U.S. Environmental Protection Agency (EPA) maintains a list of hazardous waste sites, particularly waste storage and treatment facilities or former industrial manufacturing sites in the EPA databases Environmental and Compliance History Online and Envirofacts Data Warehouse. These databases were reviewed to determine the locations of hazardous waste sites within or near

[87] ASTM 2013

the project corridor. No hazardous waste sites are located near or within the project corridor.[88] In addition, there are no known USTs or ASTs within the project corridor.

During biological surveys performed by LMI in December 2017 and described more fully in the 2018 Biological Resource Plan,[89] no visual evidence of hazardous materials or recognized environmental conditions were observed or are expected to occur within the project corridor.

3.10.3 Effects of the Project

No temporary or permanent effects on the public, wildlife, or other natural resources will be expected from the storage, transport, handling, and use of hazardous materials and substances during the activities associated with the removal of the fence and installation of new fencing. Construction, maintenance and repair operations of the fence will be completed in accordance with the project's Spill Prevention, Control, and Countermeasure (SPCC) Plan pertaining to the storage, transport, handling, and use of hazardous materials and substances. Petroleum, oil, and lubricants (POL) will be stored properly and within designated containers, which will include primary and secondary containment measures. Cleanup materials (e.g., oil mops), in accordance with the project's SPCC Plan, will be maintained at the site to allow for immediate response in case an accidental spill occurs. Drip pans will be provided for the power generators and other stationary equipment to capture any POL accidentally spilled during construction, repair or maintenance activities or from leaking equipment.

Sanitary facilities will be provided during construction activities, and waste products will be collected and disposed of by licensed contractors. No gray water will be discharged to the ground. Disposal contractors will use established roads to transport equipment and supplies; all waste will be disposed of in accordance with laws, regulations, and the contractor's permits. All unregulated solid waste will be handled in the proper manner, and necessary permits will be obtained by a licensed contractor. No hazards to the public, wildlife, or other natural resources are expected through the handling, transport, or disposal of unregulated solid waste.

Hazardous materials and substances will be handled in accordance with the project's SPCC Plan and Federal laws and regulations. No long- or short-term effects are expected from construction activities.

Table 3-17. Hazardous Materials Determination of Effects

Resource	Long-Term Effects	Temporary Effects
HAZMAT	No effect	No effect

[88] EPA 2017a and 2017b
[89] LMI 2018

3.11 Noise

3.11.1 Definition of the Resource

Sound is defined as an auditory effect produced by a given source, for example the sound of wind rustling tree branches. Noise in the auditory sense is sound with the same physical aspects but a different value judgement. Noise is considered a disturbance while sound is defined as an auditory effect. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Noise can be intermittent or continuous, steady or impulsive, and can involve any number of sources and frequencies. In fact, noise is not always strictly detected as audible by humans, as is the case with complaints about low-frequency sounds from wind turbine blades. Therefore, noise can be readily identifiable or nondescript. Human and wildlife response to increased sound levels varies according to the type, characteristics of the sound source, distance between source and receptor, receptor sensitivity, and time of day. How an organism responds to the sound source will determine whether the sound is judged as pleasing or as annoying noise or if it disturbs a normal behavior. Affected receptors are specific (e.g., wildlife, schools, churches, or hospitals) or broad (e.g., nature preserves or designated districts) areas in which occasional or persistent sensitivity to noise above ambient levels exists.[90]

3.1.1.2 Noise Metrics and Regulations.

Although human response to noise varies, measurements can be calculated with instruments that record instantaneous sound levels in decibels. A-weighted decibel (dBA) characterizes sound levels that can be sensed by the human ear. "A-weighted" denotes the adjustment of the frequency range to what the average human ear can sense when experiencing an audible event. The threshold of audibility is generally within the range of 10 to 25 dBA for normal hearing. The threshold of pain occurs at the upper boundary of audibility, which is normally in the region of 135 dBA.[91] Table 3-18 compares common sounds and shows how they rank in terms of effects on hearing. As shown, a whisper is usually 30 dBA and considered to be very quiet, while an air conditioning unit 20 feet away is considered an intrusive noise at 60 dBA, while the sound of a refrigerator at 55 dBA is considered at the level of ambient sound levels. Noise levels can become annoying at 80 dBA and very annoying at 90 dBA. To the human ear, each 10 dBA increase seems twice as loud.[92]

[90] EPA 1981a
[91] Ibid
[92] EPA 1981b

Table 3-18. Sound Levels and Human Response

Noise Level (dBA)[93]	Common Sounds	Effect
10	Just audible	Negligible
30	Soft whisper (15 feet)	Very quiet
50	Light auto traffic (100 feet)	Quiet
60	Air conditioning unit (20 feet)	Intrusive
70	Noisy restaurant or freeway traffic	Telephone use difficult
80	Alarm clock (2 feet)	Annoying
90	Heavy truck (50 feet) or city traffic	Very annoying; hearing damage (8 hours)
100	Garbage truck	Very annoying
110	Pile drivers	Strained vocal effort
120	Jet takeoff (200 feet) or auto horn (3 feet)	Maximum vocal effort
140	Carrier deck jet operation	Painfully loud

Under the Noise Control Act of 1972, the Occupational Safety and Health Administration (OSHA) established workplace standards for noise. The minimum requirement states that constant noise exposure must not exceed 90 dBA over an 8-hour period.[94] The highest allowable sound level to which workers can be constantly exposed is 115 dBA; exposure to this level must not exceed 15 minutes within an 8-hour period[95]. The standards limit instantaneous exposure, such as impact noise, to 140 dBA.[96] If noise levels exceed these standards, employers are required to provide hearing protection equipment that reduce sound levels to acceptable limits.

Construction Sound Levels. Construction, maintenance, or repair activities can cause an increase in sound that is well above the ambient level. A variety of sounds are emitted from loaders, trucks, saws, and other work equipment. Table 3-19 lists noise levels associated with common types of equipment.[97]

Table 3-19. Predicted Noise Levels for Construction, Maintenance and Repair Equipment

Equipment[98]	Predicted Noise Level at 50 feet (dBA)
Bulldozer	80
Grader 8	0–93
Truck	83–94
Roller	73–75
Backhoe	72–93
Jackhammer	81–98
Concrete mixer	74–88
Welding generator	71–82
Paver	86–88

[93] EPA 1981b
[94] OSHA 2018.
[95] Ibid
[96] Ibid
[97] EPA 1971
[98] Ibid

3.11.2 Affected Environment

The land within the region of analysis is characterized by desert landscapes. Property uses along the U.S.–Mexico border in the project area include public lands and ranch land. A business park lies at the extreme eastern terminus of the project, but the closest buildings are several hundred yards from the project area. The proposed project area is largely rural and undeveloped areas. Prominent sources of noise in these areas are most likely from vehicle traffic. The closest populations on the U.S. side of the border is the City of Sunland Park, which is more than 8.5 miles from the eastern end of the project area. No residences are located along the entire project area between County Route 9 and the project.

In addition to vehicle noise, natural sources of noise occur within the region of analysis. In New Mexico, natural noises include sounds generated by high winds, weather conditions such as thunder and rain, and water flows. Wildlife such as avian species, mammals, and insects are a source of natural noise within the region of analysis. The areas south of the project area in Mexico are likewise rural and undeveloped areas and ranchland. Prominent sources of noise in these areas are most likely from vehicle traffic. The closest populations in Mexico are more than 10 miles from the project area in Puerto Anapra.

3.11.3 Environmental Consequences

Noise impact analyses typically evaluate potential changes to the existing noise environment that would result from implementation of a proposed action. Potential changes in the acoustical environment can be beneficial (i.e., if they reduce the number of sensitive receptors exposed to unacceptable noise levels or reduce the ambient sound level), negligible (i.e., if the total number of sensitive receptors exposed to unacceptable noise levels is essentially unchanged), or adverse (i.e., if they result in increased sound exposure to unacceptable noise levels or ultimately increase the ambient sound level). Projected noise effects were evaluated qualitatively for the project.

Removal and construction of TI would occur sporadically along the U.S.–Mexico border. Long-term, periodic, negligible to minor, adverse effects on the ambient noise environment would occur. The noise levels and effects would vary depending on the location, type, and quantity of demolition or construction being performed and the distance from the source of the noise to sensitive populations or wildlife receptors. Construction activities usually involve the use of more than one piece of equipment simultaneously (e.g., paver and haul truck, welder and crane). To predict how construction, maintenance, and repair activities affect populations, noise from probable activities was estimated. The cumulative noise from a paver and haul truck was estimated to determine the total impact of noise from construction activities at a given distance. As stated in Section 3.11.2, the nearest populations vary depending on location; the majority of area considered in this ESP is sparsely populated or uninhabited. Examples of expected cumulative demolition or construction noise during daytime hours at specified distances are shown in Table 3-20. These sound levels were predicted at 50, 300, 500, 1,000, and 3,000 feet from the source of the noise.

Table 3-20. Predicted Noise Levels from Construction, Maintenance and Repair Activities

Distance from Noise Source	Predicted Noise Level
50 feet	92 dBA
300 feet	76 dBA
500 feet	72 dBA
1,000 feet	66 dBA
3,000 feet	56 dBA

The noise from equipment used for demolition and construction activities would be localized, short term, and intermittent during machinery operations. The proposed activities would be expected to result in noise levels comparable to those indicated in Table 3-20. Noise levels of up to 92 dBA would occur in the areas where construction, maintenance and repair activities were occurring for the duration of those activities during normal working hours (i.e., approximately 7:00 a.m. to 5:00 p.m., depending on local ordinances).

3.12 Utilities and Infrastructure

3.12.1 Definition of the Resource

This section focuses on utilities and infrastructure within the vicinity of the project area, including public utilities, solid waste management, and transportation systems. Public utilities include natural gas, electric, water, and wastewater infrastructure. Solid waste management involves the generation, collection, and disposal of non-hazardous solid waste, including construction and demolition debris. The transportation resource is defined as the system of roadways and highways that could reasonably be affected by the project.

3.12.2 Environmental Setting

Electric service is provided to the site by El Paso Electric from the eastern terminus of the project near the Santa Teresa Port of Entry. Solid waste facilities in Doña Ana County are operated by the South Central Solid Waste Authority.

The footprint of the fencing and construction road will be contained entirely within the 60-foot–wide Roosevelt Reservation. Staging areas and access roads are located outside of the reservation. Access roads will permit approach to the fence from State Road 9 (NM 9) and to staging areas to facilitate construction requirements. NM 9 is a 109.154-mile (175.666 km) long paved two-lane state road spanning Hidalgo, Grant, and Luna counties from NM 80 to Doña Ana County Road (CR) A003 at the Doña Ana County line. NM 9 officially ends at the Doña Ana County line, but the road continues as CR A003 to the Pete Domenici Highway (NM 136) just west of El Paso CR A003 and CR A08, which intersect with NM 9 at various points, are unpaved and surfaced with dirt or caliche.

3.12.3 Effects of Project

This project addresses the removal of vehicle barriers; the installation, operation, and maintenance of a primary pedestrian fence and patrol road; the improvement of roads for better construction, maintenance, and patrol access and use; and the development of temporary staging areas. Due to

the remote location of the region of analysis, effects on public utilities and infrastructure during construction or operation of the TI would not be expected. Before beginning construction, contractors will locate and mark the locations of utilities in the field. All overhead and underground public or private utility lines (e.g., gas, electric, water, sewer, communication) or customer service lines will be identified and protected during excavation, clearing and grading, and other construction activities. As necessary, contractors will work with El Paso Electric and other utilities to coordinate activities and minimize effects on these systems to the maximum extent practical. Temporary interruptions in utility service could be experienced in the event that it would be necessary to move infrastructure.

Border lights and detection cameras will be installed within the enforcement zone to illuminate the Roosevelt Reservation (60 feet north of the U.S.–Mexico border). The lights and cameras will be installed on 40–60-foot poles, spaced approximately 180 feet apart along the 20-mile bollard wall'. The lights will be LED and have automatic sensors to turn on at sunset and off at sunrise throughout the year. Although there will be a net increase in energy demand and consumption because no lighting currently exists, the use of sensors and LED lamps will be more energy efficient that other lamp types and will minimize the impact on the existing electricity grid that will power the lights. The installation of lighting will improve the safety and effectiveness of U.S. Border Patrol (USBP) operations.

Short-term minor effects on solid waste management are expected. Solid waste generated from the construction activities consists of building materials such as concrete and metals (existing fencing and foundation materials). The contractor will recycle construction materials to the greatest extent practical. Non-recyclable construction debris will be taken to an appropriate landfill. Other solid waste will be collected in containers and removed regularly from the site and disposed in approved landfills. All excavated material will be removed from the site unless approved for use as backfill.

Effects to roadways and the use of such infrastructure for USBP operations, including existing access roads, patrol roads, maintenance roads, will generally be localized to areas under construction and will be temporary and minimal. The construction will require delivery of materials to, and removal of debris from, the project area. Construction traffic will compose a small percentage of the total existing traffic, and many of the vehicles will be driven to and kept onsite for the duration of construction activities, resulting in relatively few additional trips. Heavy vehicles are frequently driven on local transportation systems. The vehicles necessary for construction are not expected to have an impact on local transportation systems. No road or lane closures are anticipated. The contractor will be responsible for maintaining adequate drainage and controlling potential effects from erosion and sedimentation through implementation of appropriate measures. The contractor will provide safe access to and from all driveways and streets, paved or unpaved, at all times during construction. Unobstructed access through the construction areas for USBP will always be provided. Any and all damage to existing roads, concrete lined ditches, fence, utilities, and all other existing structures will be replaced or repaired to original condition or better.

Table 3-21. Utilities and Infrastructure Effects Determination

Resource	Long-Term Effects	Temporary Effects
Utilities and Infrastructure	Minor effects	Minor effects

4 BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES

It is CBP's policy to reduce effects to air quality, wildlife, landscapes, and other natural and cultural resources through the sequence of avoidance, minimization, mitigation, and compensation. Mitigation efforts vary by project and setting and may include activities such as implementation of appropriate best management practices (BMPs) and restoration of habitat. CBP coordinates its environmental design measures with the appropriate Federal and state resource agencies. General and species-specific BMPs have been developed during the preparation of this ESP.

This section describes those measures that may be implemented to reduce or eliminate potential adverse effects on the human and natural environment. Many of these measures have been incorporated by CBP as standard operating procedures on past projects. Below is a summary of BMPs for each resource category that might be affected. The mitigation measures will be coordinated with the appropriate agencies and land managers or administrators. Table 4-1 provides an overview of BMPs and mitigation measures by resource area.

Table 4-1. Specific Resource Area BMPs and Mitigation *Resource Area*

Resource Area	Best Management Practices and Mitigation Measures
Air Quality	• Dust Control Plan and associated BMPs • Fire Prevention and Suppression Plan and associated BMPs • Maintain equipment and vehicles according to specifications
Noise	• Adherence with OSHA requirements • Proper design and maintenance of equipment and vehicles • Seasonal activity restrictions
Land Use	• Notification • Site access maintenance
Geology and Soils	• SWPPP • Dust Control Plan and associated BMPs • Erosion control measures • Drainage improvements and revegetation
Water Use and Quality	• SPCC Plan and associated BMPs • SWPPP and associated BMPs • Proper storage and use of fuels and hazardous materials
Biological Resources	• Fire Prevention and Suppression Plan and associated BMPs • Biological resource training plans • General and species specific BMPs
Cultural Resources	• Avoidance, testing, and data recovery • Cultural resource training plans • Consultation with state and tribal representatives
Socioeconomic Resources and Safety	• Fire Prevention and Suppression Plan and associated BMPs • SPCC Plan and associated BMPs

Table 4-1. Specific Resource Area BMPs and Mitigation *Resource Area*

Resource Area	Best Management Practices and Mitigation Measures
Utilities and Infrastructure	• Marking and avoidance • Repair or replacement
Hazardous Materials and Waste	• SPCC Plan and associated BMPs • Proper storage and use of hazardous materials • Proper management and disposal of solid and hazardous waste • Vehicle maintenance

4.1 General Construction Activities

BMPs will be implemented as standard operating procedures during construction activities. As part of the project, the following plans will be prepared and implemented consistent with Federal, state, and local requirements and standard industry practices:

- Dust Control Plan
- Fire Prevention and Suppression Plan
- Spill Prevention, Control, and Countermeasures (SPCC) Plan
- Stormwater Pollution Prevention Plan (SWPPP)

Each of these plans identifies BMPs that will be implemented to avoid or minimize effects to specific resource areas. In addition to preparing and implementing plans directing specific construction design measures and practices, all construction practices will be limited to approved areas. The contractor will demark the perimeter of all areas to be disturbed during construction activities by using flagging or temporary construction fence and will not allow disturbance outside that perimeter. Access to the project will be limited to designated travel corridors along roads and limited to authorized personnel. No off-road vehicular travel outside those areas is permitted. All parking will be in designated disturbed areas. All contractors and other personnel will operate within the designated and approved construction corridor, conducting only the activities authorized for a given area such as construction roads, staging areas, or active project zones.

Once activities in any given construction segment of the project corridor are completed, appropriate active measures will be implemented to rehabilitate the construction zone, access roads, and staging areas. CBP will coordinate with land managers to determine the most suitable and cost-effective measures for successful rehabilitation. Access roads and staging areas will be returned to equal or better conditions upon completion.

4.2 Air Quality

Mitigation measures will be incorporated to ensure that PM-10 emission levels remain minimal. Measures will include the preparation and implementation of a Dust Control Plan that outlines dust suppression methods to minimize airborne particulate matter created during construction activities. Standard construction BMPs, such as routine watering of the construction site and access roads, will be used to control fugitive dust during the construction phases of the project. In addition, all

construction equipment and vehicles will need to be kept in good operating condition to minimize exhaust emissions.

4.3 Noise

OSHA requirements to minimize construction noise effects will be followed. All motorized equipment will possess working mufflers and be kept properly tuned to reduce engine noise and backfires. All motorized generators will be in baffle boxes (a sound-resistant box placed over or around a generator), have an attached muffler, or use other noise-abatement methods in accordance with industry standards. For activities involving heavy equipment, seasonal restrictions might be required to avoid effects on threatened or endangered species in areas where these species or their potential habitat occur. See species-specific BMPs.

4.4 Land Use

CBP will notify all land managers at least 5 days in advance of scheduled construction activities on their lands. The project site shall be secured at all times during construction. At the completion of each work day, the contractor shall have a permanent wall or temporary fence erected to effectively close off all gaps in the fence until work resumes the following day. The contractor shall provide safe access to and from all driveways and streets, paved and unpaved, at all times during construction. Unobstructed access through the construction for USBP will always be allowed. Egress/ingress and haul routes may be used by more than one contractor. Contractors will establish a road maintenance schedule to keep roads drivable.

4.5 Geology and Soils

A SWPPP will be prepared prior to construction activities. Proper site-specific BMPs will be implemented as described in the SWPPP to reduce erosion and the impact of non-point source pollution during construction activities, giving special consideration to areas with highly erodible soils. BMPs include such things as buffers around washes to reduce the risk of siltation, installation of waterbars to slow the flow of water downhill, and placement of culverts, low-water crossings, or bridges where washes need to be traversed. These BMPs will greatly reduce the amount of soil lost to runoff during heavy rain events and ensure the integrity of the construction site. Soil erosion BMPs can also beneficially affect air quality by reducing the amount of fugitive dust.

Areas with highly erodible soils will be given special consideration to ensure incorporation of various and effective compaction techniques, aggregate materials, wetting compounds, and rehabilitation to reduce potential soil erosion. Erosion control measures such as waterbars, gabions, straw bales, and revegetation will be implemented during and after construction activities. Silt fencing and floating silt curtains will be installed and maintained to prevent movement of soil and sediment and to minimize turbidity increases in water. Routine road maintenance practices will be implemented to avoid making wind rows with the soil once grading activities are complete and use any excess soil onsite to raise and shape the road surface. Soil-binding agents will be applied only to areas that lack vegetation and only during the late summer and early fall months to avoid effects on federally listed species. Soil-binding agents will not be applied in or near (within 100 feet of) surface waters (e.g., wetlands, perennial streams, intermittent streams, washes). Materials

such as gravel, topsoil, and fill will be obtained from developed or previously used sources that are compatible with the project area and from legally permitted sites. Materials from undisturbed areas adjacent to the project area will not be used. All excavated materials will be stored and disposed of in approved areas.

Drainage improvements and revegetation efforts will be implemented to ensure long-term recovery of the area and to prevent significant soil erosion problems. For successful rehabilitation, all or some of the following measures may be conducted on the part of CBP:

- Site preparation through ripping and disking to loosen compacted soils
- Hydromulch with native grasses and forbs to control soil erosion and ensure adequate revegetation
- Planting of native shrubs as needed
- Temporary irrigation (i.e., truck watering) for seedlings
- Periodic monitoring to determine whether additional actions are necessary to successfully rehabilitate disturbed areas.

4.6 Water Use and Quality

Although the Secretary's waiver eliminates CBP's legal obligations under the Clean Water Act (CWA), for the TI segments addressed in this ESP, the Secretary committed DHS to responsible environmental stewardship of our valuable natural and cultural resources. CBP supports this objective and has applied the appropriate standards and guidelines associated with the CWA as the basis for evaluating potential environmental effects and appropriate mitigations.

All engineering designs and subsequent hydrology reports will be provided to the U.S. Section of the International Boundary and Water Commission prior to the start of construction activities for recommendation of measures to avoid an increase, concentration, or relocation of overland surface flows into the United States or Mexico. CBP will routinely check and maintain drainage structures, including low-water crossings, and bollard wall installed within drainages. Such activities may include removal of debris that would impede proper conveyance, repair and maintenance of erosional features, installation of energy dissipation measures, and revegetation of temporarily disturbed areas. Work within drainages will be limited to dry periods to reduce downstream water quality effects, to the extent practicable

To minimize potential effects from hazardous and regulated materials, all fuels, waste oils, and solvents will be collected and stored in tanks or drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein. The refueling of machinery will be completed by following accepted industry guidelines, and all vehicles will have drip pans during storage to contain minor spills and drips. Although a major spill is unlikely to occur, any spill of 5 gallons or more will be contained immediately within an earthen dike, and an absorbent (e.g., granular, pillow, sock) will be applied to contain the spill. An SPCC Plan will be in place prior to the start of construction, and all personnel will be briefed on the implementation and responsibilities of this plan.

The contractor will avoid contaminating natural aquatic and wetland systems with runoff by limiting all equipment maintenance, staging, laydown, and dispensing hazardous liquids (e.g., fuel and oil) to designated upland areas. Runoff will be prevented from entering drainages or storm drains by placing fabric filters, sand bag enclosures, or other capture devices around the work area. The capture device will be emptied or cleaned out at the end of each day, with any waste properly disposed. Contamination of ground and surface waters will be avoided by storing concrete wash water, with any water that has been contaminated (e.g., with construction materials, oils, equipment residue) in closed containers onsite until removed for disposal. In upland areas, storage tanks must be on-ground containers. Water tankers that convey untreated surface water will not discard unused water where it has the potential to enter aquatic or wetland habitat.

4.7 Biological Resources

All of the pertinent training plans for biological resources for the fence sections where construction activities will commence will be collected. Prior to arrival on the worksite, all onsite personnel will be made aware of these species and familiar with the proper BMPs to implement in case they encounter these species. Construction activities will be performed only in areas that have been surveyed for biological resources.

If herbicides or pesticides are used, applications will be made under the supervision of a licensed applicator. A log of the event including the date, time, chemical and amount used, and specific location will be maintained. The contractor will follow guidance from the U.S. Environmental Protection Agency on applications in or near riparian areas.

A fire prevention and suppression plan will be developed and implemented for all construction activities that require welding or otherwise have a risk of starting a wildfire.

4.7.1 Vegetation

Clearing and grubbing of vegetation will be performed consistent with the design specifications, avoiding the removal of mature trees providing shade or bank stabilization within the riparian area of any waterways. The removal of trees and brush in habitats of federally listed species will be limited to the smallest amount needed to meet the objectives of the project. If vegetation must be removed, natural regeneration of native plants will be promoted by cutting vegetation with hand tools, mowing, trimming, or using other removal methods that allow root systems to remain intact.

Only targeted vegetation will be removed. Other vegetation will be flagged and protected as appropriate during construction. Training to identify non-native invasive plants will be provided for CBP personnel or contractors as necessary. If mechanical methods are used to remove invasive plants, the entire plant will be removed and placed in a disposal area. If herbicides are used, the plants will be left in place. All chemical applications on federally managed land will be coordinated with the Federal land manager.

If construction activities will occur in an area that poses an unacceptable risk of transmitting non-native invasive plant species, equipment will be cleaned using a high-pressure water system prior to entering the project corridor to minimize the spread and establishment of invasive species.

Construction vehicles and equipment should be sprayed with a 10 percent bleach solution before entering each flowing water or stream crossing or separate areas of standing water.

Soil disturbances in temporary impact areas will be rehabilitated. Rehabilitation includes revegetation and the distribution of organic and geological materials over the disturbed area to reduce erosion while allowing the area to naturally revegetate. Rehabilitation methods will be outlined in a rehabilitation plan. At a minimum, the rehabilitation plan will include the plant species to be used, a planting schedule, measures to control non-native species, specific success criteria, and the party responsible for maintaining and meeting the success criteria. Seeds or plants native to Doña Ana County will be used to the extent practicable. Fill material, sandbags, hay bales, and mulch brought in from outside the project area will be sterile or free of weeds.

Disturbed and restored areas will be monitored as appropriate to document conditions such as erosion and the spread of non-native invasive plant species.

4.7.2 Wildlife

To prevent entrapment of wildlife species, excavated, steep-walled holes or trenches must be either completely covered by plywood or metal caps at the close of each work day or provided with one or more escape ramps (at no greater than 1,000-foot intervals and sloped less than 45 degrees) constructed of earth fill or wooden planks. Each morning before the start of construction activities and before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. Any animals discovered will be allowed to escape voluntarily (by escape ramps or temporary structures), without harassment, before construction activities resume; or they will be removed from the trench or hole by a qualified person and allowed to escape unimpeded.

If hollow posts or bollards are used, they will be filled with a reinforcing material such as concrete to prevent wildlife from entrapment. Temporary covers will be deployed to open posts or bollards from the time they arrive on the site and are unloaded, until they are filled with reinforcing material and finally capped.

Temporary light poles and other pole-like structures used for construction activities will have anti-perch devices to discourage roosting by birds.

During construction, animal collisions will be minimized by not exceeding construction speed limits of 35 miles per hour (mph) on major unpaved roads (i.e., graded with ditches on both sides) and 25 mph on all other unpaved roads. During periods of decreased visibility (e.g., night, poor weather, around curves), speeds of 25 mph will not be exceeded.

Pets owned or under the care of the contractor or sector personnel are not allowed inside the project boundaries, adjacent native habitats, or other associated work areas (except animals under service to USBP, such as canine or horse patrols).

Border lights installed on 40–60-foot poles will use LED lamps and be equipped with backshields to minimize light pollution.

4.7.3 Threatened and Endangered Species and Other Protected Species

4.7.3.1 General BMPs

The contractor will coordinate with the contracting officer's representative or CBP environmental subject matter expert to determine which threatened and endangered species could occur in the vicinity of the project. In areas where there are no threatened, endangered, or other species concerns, the personnel performing the construction activity are responsible for monitoring the implementation of BMPs to avoid effects on the environment. To protect individuals of listed species within the project area, work will be suspended in the immediate vicinity of the individual until it moves out of harm's way on its own or a qualified specialist (individuals or agency personnel with a permit to handle the species) is enlisted to relocate the animal to a nearby safe location in accordance with accepted species-handling protocol.

Surface water from aquatic or marsh habitat will not be used for construction purposes if that site supports aquatic federally listed species or if it contains non-native invasive species or disease vectors and there is an opportunity to contaminate a federally listed species habitat through use of water at the project site. Surface water from untreated sources, including water used for irrigation purposes, will not be used for construction projects located within 1 mile of aquatic habitat for federally listed aquatic species. Groundwater or surface water from a treated municipal source will be used when close to such habitats.

Before moving vehicles and equipment at the beginning of each workday and after vehicles have sat idle for more than 15 minutes, visible space underneath all vehicles and heavy equipment will be checked for listed species and other wildlife.

4.7.4 Migratory Birds

To the extent practicable, mechanical and chemical vegetation control, drainage improvements, and other construction activities will be timed to avoid the migration, breeding, and nesting timeframe of migratory birds (February 1 through September 1). Herbicide retreatments could occur throughout the year. When such activities must be implemented during February 1 through September 1, a survey for nesting migratory birds will be conducted immediately prior to the start of activities. If an active nest is found, a buffer zone will be established around the nest, and no activities will occur within that zone until nestlings have fledged and abandoned the nest.

If construction is scheduled during the migratory bird nesting season, steps will be taken to prevent migratory birds from establishing nests in the potential impact area. These steps could include covering equipment and structures and use of various excluders (e.g., noise). Birds can be harassed to prevent them from nesting on the site. A nest can be removed until eggs have been laid

4.7.5 Species-Specific BMPs

4.7.5.1 Southwestern Willow Flycatcher (Empidonax traillii extimus)

Vegetation control in suitable habitat of threatened or endangered bird species will be limited to the minimum necessary. This limited vegetation control will be conducted outside of the nesting

season. This restriction does not apply to areas where protocol surveys have been conducted, and it has been determined that the area is not occupied and does not contain PCE.

For all other activities within suitable habitat of a threatened or endangered bird species during the nesting season, the following avoidance measures apply. A qualified biologist will survey for threatened and endangered birds prior to initiating construction activities. If a threatened or endangered bird is present, a qualified biologist will survey for nests approximately once per week within 500 feet of the project area for the duration of the activity. If an active nest is found, no maintenance will be conducted within 300 feet of the nest until the young have fledged.

4.7.5.2 Northern Aplomado Falcon (Falco femoralis septentrionalis)

No construction activities will be conducted within 2 miles of active nests of northern aplomado falcons.

Because Northern Aplomado falcons use nests constructed by other birds, mainly corvids such as ravens, large nests constructed of sticks will be removed from towers and other infrastructure located within potential habitat for this species only when it is essential to do so to maintain the functionality of the infrastructure. Similarly, removal of agave with such nests will be avoided unless essential to maintaining drivable access roads and to maintain the functionality of other TI.

Construction should occur during daylight hours to avoid noise and lighting issues. If construction work must continue at night, all lights should be shielded to direct light only onto the worksite, the minimum wattage needed should be used, and the number of lights should be minimized.

Noise levels for day or night construction maintenance and repair should be minimized. All generators should have an attached muffler or other noise-abatement equipment in accordance with industry standards.

4.7.5.3 Least Tern, Interior Population (Sterna antillarum)

No construction, maintenance and repair activities will be conducted within areas classified as protected activity centers of interior least tern during the nesting season (April 1–August 31). CBP will coordinate with USFWS to update known locations.

For all activities within suitable habitat of a threatened or endangered bird species during the nesting season, the following avoidance measures apply. A qualified biologist will survey for threatened and endangered birds prior to initiating construction activities. If a threatened or endangered bird is present, a qualified biologist will survey for nests approximately once per week within 500 feet of the project area for the duration of the activity. If an active nest is found, no construction, maintenance will be conducted within 300 feet of the nest until the young have fledged.

4.7.5.4 Yellow-Billed Cuckoo (Coccyzus americanus)

No construction, maintenance and repair activities will be conducted within areas classified as protected activity centers of yellow-billed cuckoo during the nesting season (March 1–August 31). CBP will coordinate with USFWS to update known locations.

For all activities within suitable habitat of a threatened or endangered bird species during the nesting season, the following avoidance measures apply. A qualified biologist will survey for threatened and endangered birds prior to initiating construction activities. If a threatened or endangered bird is present, a qualified biologist will survey for nests approximately once per week within 500 feet of the project area for the duration of the activity. If an active nest is found, no construction, maintenance or repairs will be conducted within 300 feet of the nest until the young have fledged.

4.7.5.5 Sneed's Pincushion Cactus (Coryphantha sneedii var. sneedii)

Disturbance to Sneed's pincushion cactus populations and occupied habitat, including land clearing, introduction and spread of invasive plants, herbivory, trampling, and exposure to toxic substances, should be avoided. Surveys should be conducted on all intact Sneed's pincushion cactus habitat and potential habitat in the impact corridor. Sneed's pincushion cactus habitat is limestone outcropping, which is not known to be located in the project corridor, staging areas, or access roads. In cases when project activities cannot completely avoid Sneed's pincushion cactus populations and occupied habitat, the effects to the populations and habitat should be minimized as much as possible. Minimization may be accomplished by, but is not limited to, the following methods:

- Prevent or control non-native grasses and other invasive plants from colonizing sites following disturbance
- Minimize permanent effects to individual populations and habitat
- Reduce the duration of effects to populations and habitat
- When necessary to temporarily remove vegetation, cut plants above ground level rather than clearing with bulldozers, root plows, or other implements that cut into the soil.

4.8 Cultural Resources

Prior to arrival on the worksite, all onsite personnel will be made aware of these resources and be familiar with the proper BMPs to implement in case they are encountered on the worksite. During construction, orange fabric barrier fencing (or similar material) will be positioned on the edges of established roads to prevent vehicle traffic from affecting undisturbed cultural sites. Prior to arrival on the worksite, the contractor will ensure that key personnel are aware of the cultural resources potentially occurring in the project area and understand the proper BMPs to implement should cultural resources be encountered in the project area. If previously unidentified cultural resources are encountered during the fence replacement project, the contractor should stop all ground-disturbing activities in the vicinity of the discovery until officials from CBP and/or the Bureau of Land Management are notified and the nature and significance of the find can be evaluated. If human remains are encountered during construction activity, construction should stop and appropriate notifications be made as per the Native American Graves Protection and Repatriation Act.

4.9 Socioeconomic Resources and Safety

No BMPs have been identified for socioeconomic resources. The Fire Prevention and Suppression Plan and SPCC Plan will list BMPs that address safety.

4.10 Utilities and Infrastructure

Before beginning construction, contractors will locate and mark the locations of utilities in the field. All overhead and underground public and private utility lines (e.g., gas, electric, water, sewer, communication) and customer service lines will be identified and protected during excavation, clearing and grading, and other construction activities. Contractors will work with El Paso Electric and other utilities to coordinate activities. The use of LED lighting will be more energy efficient than other lamp types and will minimize demand on the electricity grid that will power the lights.

Effects to roads and the use of such infrastructure for USBP operations—including existing access roads, patrol roads, and maintenance roads—will generally be localized to areas under construction and will be temporary and minimal. The contractor will be responsible for maintaining adequate drainage and controlling potential effects from erosion and sedimentation through implementation of appropriate measures. Any and all damage to existing roads, concrete-lined ditches, fence, utilities, and other existing structures will be replaced or repaired to original condition or better.

4.11 Hazardous Materials and Waste

When hazardous and regulated materials are handled, workers will collect and store all fuels, waste oils, and solvents in clearly labeled closed tanks and drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein.

Contractors will use a ground cloth or an oversized tub for paint mixing and tool cleaning and properly dispose of the wastes. Spray-painting operations will be enclosed with tarps or other means to minimize wind drift and contain overspray. Paintbrushes and tools covered with water-based paints will be cleaned in sinks plumbed to a sanitary sewer or in portable containers that can be dumped into sanitary sewer drains. Brushes and tools covered with non-water–based paints, finishes, thinners, solvents, or other materials must be cleaned over a tub or container and the cleaning wastes disposed of or recycled at an approved facility. Tools will not be cleaned in a natural drainage or over a storm drain.

All vehicles and other equipment will be maintained to prevent leakage of fluids. Any leaked fluids will be collected and disposed of properly.

Solid waste receptacles will be maintained at staging areas and other locations. All food-related trash such as wrappers, cans, bottles, and scraps will be disposed of in closed containers. Non-hazardous solid waste (trash and waste construction materials) will be collected and deposited in onsite receptacles. Waste materials and other discarded materials contained in these receptacles will be removed from the site as quickly as possible. Solid waste will be collected and disposed of properly.

5 RELATED PROJECTS AND POTENTIAL EFFECTS

This section of the ESP addresses potential effects of the project when considering the project's effects as a cumulative action with other actions that have occurred or are planned to occur in the region. Cumulative effects can result from individually minor but collectively significant actions over time. The cumulative impact analysis includes actions by Federal, non-federal, and private entities within Doña Ana County, New Mexico.

CBP's use of BMPs and environmental conservation measures prevent or minimize effects to environmental and human health. However, recent, ongoing, and foreseeable actions would result in cumulative effects. General descriptions of these projects are discussed in the following paragraphs.

5.1 Past, Present, And Reasonably Foreseeable Actions

Past actions have shaped the surrounding environment; thus, effects of those past actions are included in the affected environment described in Chapter 3. Present actions include ad hoc maintenance and repair of existing TI, the construction of new TI as addressed in this ESP, current or funded construction projects by other agencies, and land use activities within the project area. Future actions include construction, maintenance and repair of future or current TI or approved construction of additional TI.

5.2 Cumulative TI along the U.S.–Mexico Border

There are 85 miles of primary pedestrian and vehicle fence and 75 miles of road in New Mexico, the majority of which occur within the Roosevelt Reservation.[99] Hidalgo County, New Mexico, contains 22.3 miles of vehicle fence and 19.9 miles of vehicle road; 40 miles of vehicle fence and 8 miles of road occur west of the Santa Teresa Port of Entry (POE) in Luna and Doña Ana counties, (20 miles of which are covered in this ESP); and 6 miles of pedestrian fence, 16.5 miles of vehicle fence, and 46 miles of road occur along the southern boundary of Luna County.

Texas has a total of 57 miles of primary pedestrian fence. The city of El Paso hosts 9.6 miles of pedestrian fence and El Paso County has just under 42 miles of pedestrian fence, with 25.4 miles of that fence having permanent lighting.

5.3 Present Actions

Ongoing actions considered in the cumulative effects analysis include reconstruction and rehabilitation of the Pete V Domenici International Highway. The New Mexico Department of Transportation (NMDOT) began reconstruction of NM 136 in October 2017; the construction is expected to take over a year to complete.[100] NM 136 runs north-south and leads directly to the Santa Teresa POE (about 1 mile from the east boundary of the project area).

[99] CBP 2015a
[100] Las Cruces Sun 2017

5.4 Reasonably Foreseeable Future Actions

Reasonably foreseeable future actions consist of activities that have been approved and can be evaluated with respect to their effects.

Table 5-1 lists recently completed or reasonably foreseeable CBP projects within the region surrounding the Santa Teresa Station area of operation. CBP may also be required to implement other activities and operations not planned. These actions could be in response to national disasters or security events or to changes in the current mode of operations.

Table 5-1. Recently Completed or Reasonably Foreseeable CBP Projects within Santa Teresa Station's Area of Responsibility

Project	Approximate Distance from Project Corridor (miles)	Approximate Acres Permanently Affected
Anapra Fence Replacement and Road Renovations, Doña Ana County, New Mexico[a]	5	4
Tactical Infrastructure Maintenance and Repair along the U.S.–Mexico International Border, New Mexico[b]	0	4
	Total	8 acres

[a] CBP (2015b). Final Environmental Assessment for Anapra Fence Replacement and Associated Road Renovations Sunland Park, New Mexico.
[b] CBP (2015a). Final Environmental Assessment Addressing Proposed Tactical Infrastructure Maintenance and Repair along the U.S.–Mexico International Border in New Mexico.

Plans by other agencies may also affect the project area's human and natural environment, including road improvements by NMDOT or Doña Ana County. These projects would likely occur along existing roadways and within previously disturbed sites. The magnitude of the effects of these projects depends on the length and width of the road and the conditions within the project area. A list of reasonably foreseeable NMDOT projects within the region surrounding the project area of impact is presented in Table 5-2.

Table 5-2. Reasonably Foreseeable Other Agency Actions within or near the Project Area

Project	Approximate Distance from Project Corridor (miles)	Approximate Acres Permanently Affected
I-10 Bridge and Roadway Rehabilitation in Luna County, New Mexico	75	19
Valley Drive Project, Las Cruces, New Mexico	55	75
US 70 N. Main, Solano 3 Crosses and Spitz Intersection Project	65	1
NM 498 Racetrack Drive	35	5
	Total	100 acres

Source: NMDOT Road Construction Projects, District 1, http://dot.state.nm.us/content/nmdot/en/ProjectsD1.html#CN-ER14103, accessed January 19, 2018.

Other Federal entities may have current or planned projects that could affect the project area. CBP and USBP maintain close coordination with these agencies to ensure no conflict exists between projects, policies, or management plans. Typically, CBP coordinates with outside agencies prior to beginning a project. According to the Bureau of Land Management (BLM), no projects are scheduled near the project area.[101]

A summary of the anticipated cumulative effects of the project (i.e., construction of 20 miles of bollard wall, access roads, and staging areas in Doña Ana County) in conjunction with other area projects are presented in the following sections. Discussions are presented for each of the resources described previously.

5.5 Air Quality

A minor increase in local air pollution will be expected from bollard wall and road construction. Temporary increases in air pollution will result from emissions from vehicles of construction workers commuting to the various project sites and the use of vehicles, construction equipment, and generators at those sites. Fugitive dust emissions would be greatest during initial site preparation activities and vary from day to day, depending on the type and level of activity and prevailing weather conditions. Due to the short duration of the project, any impacts on ambient air quality from dust emissions during construction are expected to be short term and can be reduced through the use of standard dust control techniques. If a 24-hour work schedule is needed, then the portable lights will operate throughout the night; however, this will be temporary, and as construction activities are completed within a particular area the lights will be relocated to a new area. Given the remote project location compared with the other projects that are reasonably foreseeable, there is little potential for temporary cumulative effects to air quality.

Permanent border lights installed along the border will have a minor effect on air quality because of indirect emissions from the regional power provider, El Paso Electric. Energy consumption and associated emissions will be minimized through the use of energy efficiency measures such as sensors and LED lamps. There is potential for minor long-term cumulative air quality effects associated with emissions from El Paso Electric, should any other projects result in increased emissions associated with electrical production.

Table 5-3. Air Quality Cumulative Effects

Resource	Long-Term Cumulative Effects	Temporary Cumulative Effects
Air Quality	Minor adverse effect	Negligible temporary effect

5.6 Land Use

The project is not expected to have long-term effects on land use and therefore no long-term, cumulative effects are expected as a result of the cumulative projects. Temporary effects from the change of land use categories (from open or undeveloped to disturbed open space) of construction

[101] BLM 2018a and 2018b

staging areas will cause short-term minor effects on land use, although it is unlikely to cause additional cumulative effects as a result of the cumulative projects.

Table 5-4. Land Use Cumulative Effects

Resource	Long-Term Cumulative Effects	Short-Term Cumulative Effects
Land use	No effect	Minor effect

5.7 Soils

The project is expected to have no effect on soils and would have little potential for cumulative effects. Geological resources could be affected. The requirement for rock, stone, and aggregate to armor roads, low-water crossings, and other potential erosion stabilization aspects of the project could provide a minor effect on the supply of these building materials. When combined with the potential for other, much larger projects to affect the supply of these building materials, there is only a chance of a minor temporary effect.

Table 5-5. Soils and Geology Cumulative Effects

Resource	Long-Term Cumulative Effects	Short-Term Cumulative Effects
Soils	No effect	No effect
Geology	No effect	Minor effect

5.8 Water Use and Quality

The project is expected to have minor effects on water use and no effect on water quality, although it has potential for minor cumulative effects on water use and water quality. The requirement for water for concrete fabrication and dust suppression to help armor roads, low-water crossings, and other potential erosion stabilization aspects of the project could provide a minor temporary effect on the supply of water during the construction phase of this project, especially in conjunction with other, much larger road construction projects. When combined with the potential for these larger projects to affect the supply of these building materials, there is only a chance of a minor temporary effect on water use.

Given the fact that the project site is not adjacent to any Waters of the United States (WoUS), there is no effect from the project. The other road projects that are reasonably foreseeable have crossings of the WoUS and drainage features that will allow road contaminants to be carried to WoUS. These projects could have a long-term minor impact on water quality. However, given the distance from this project and the project's lack of a nexus with surface water, long-term cumulative effects on water quality are unlikely.

Table 5-6. Water Use and Water Quality Cumulative Effects

Resource	Long-Term Cumulative Effects	Short-Term Cumulative Effects
Water use	No effect	Minor adverse effect
Water quality	Minor adverse effect	No effect

5.9 Biological Resources

The project itself is expected to have either no effect or minor short-term effects during the construction phase for all of the listed biological resources. When taken in the context of all the projects listed in Table 5-1 and Table 5-2, the footprint of temporary and permanent disturbance is so small in relation to the resources and habitat available for Migratory Bird Treaty Act species, Endangered Species Act species, New Mexico protected species, and wildlife in general that no effect is expected. A minor adverse impact could be that the number of road projects and increase in the crossing width of some of these roads taken as a whole could limit migratory patterns for some wildlife and cause potential wildlife and vehicle interactions (e.g., bird strikes, deer strikes). These strikes should represent a very small proportion of impact for the populations of these animals. A possibly serious exception could be vehicle interactions or animal avoidance behaviors for an experimental population of the Mexican wolf.

Table 5-7. Biological Resources Cumulative Effects

Resource	Long-Term Cumulative Effects	Short-Term Cumulative Effects
Vegetation	No effect	Minor adverse effect
Wildlife	Minor adverse effect	No effect
Migratory birds	No effect	No effect
Least tern interior population	No effect	No effect
Southwestern willow flycatcher	No effect	No effect
Aplomado falcon	No effect	No effect
Yellow-billed cuckoo	No effect	No effect
Common black hawk	No effect	No effect
Sneed's pincushion cactus	No effect	No effect
Mexican wolf	Minor adverse impact on migration	No effect

5.10 Cultural Resources

The project itself is not expected to have long- or short-term effects given the known location of cultural resources in comparison to the planned activities. When taken in conjunction with the other aforementioned projects, there should be no cumulative effects to cultural resources.

Table 5-8. Cultural Resources Cumulative Effects Determination

Resource	Long-Term Effects	Short-Term Effects
Cultural resources	No effect	No effect

5.11 Socioeconomics

The project would provide only minor, short-term, beneficial effects during the 9-month construction phase and would have little potential for cumulative effects on socioeconomic resources. The planned and proposed activities in or near the project area will not provide permanent employment opportunities and thus will not result in a permanent in-migration of people. Construction, maintenance, and repair activities of TI, including the project and other activities identified in Table 5-1 and Table 5-2, would result in long-term, beneficial cumulative effects by allowing USBP agents to patrol border areas effectively. This would be considered cumulatively beneficial for the safety of all residents, including children, in the southern border area. Further, the projects will lower the cost associated with illegal activity as a result of USBP's increased deterrence and apprehension abilities.

Table 5-9. Socioeconomics Cumulative Effects

Resource	Long-Term Effects	Short-Term Effects
Economic	Potential minor beneficial economic effects	Potential minor beneficial economic effects
Safety	Potential minor beneficial economic effects	Potential minor beneficial economic effects
Children	Potential minor beneficial economic effects	Potential minor beneficial economic effects

5.12 Hazardous Materials

No temporary or permanent effects on the public, wildlife, or other natural resources are expected from the storage, transport, handling, and use of hazardous materials and substances during the activities associated with the project or cumulative projects. All activities associated with the project and other cumulative projects will be completed in accordance with the project's SPCC Plan and Federal laws and regulations pertaining to the storage, transport, handling, and use of hazardous materials and substances.

Table 5-10. Hazardous Materials Cumulative Effects

Resource	Long-Term Cumulative Effects	Short-Term Cumulative Effects
Hazardous materials	No effect	No effect

5.13 Utilities And Infrastructure

Given the remote project location compared with the other projects that are reasonably foreseeable, there is little potential for temporary cumulative effects to utilities and infrastructure. There is potential for minor long-term cumulative effects associated with the increased energy required for the ongoing operation of pole-mounted LED lighting that will be installed as part of this project, should any other projects also increase the demand for electric power.

Table 5-11. Utilities and Infrastructure Cumulative Effects

Resource	Long-Term Cumulative Effects	Temporary Cumulative Effects
Utilities and infrastructure	Minor adverse effect	No effect

5.14 Noise

Given the rapid attenuation of noise levels at the project site and its remote location compared with the other projects that are reasonably foreseeable, there is no potential for long-term or temporary cumulative effects to ambient noise levels.

Table 5-12. Noise Cumulative Effects

Resource	Long-Term Cumulative Effects	Temporary Cumulative Effects
Noise	No effect	No effect

6 REFERENCES

40 CFR Part 50, National Primary and Secondary Ambient Air Quality Standards. Available online at https://www.ecfr.gov/cgi-bin/text-idx?SID=7e54995dbe9e1338e81b88a90fc25b4b&mc=true&node=pt40.2.50&rgn=div5.

40 CFR § 50.1, Definitions. Available online at https://www.ecfr.gov/cgi-bin/text-idx?SID=070ff405b07c1ae4ca81c32ed1aadf2b &mc=true&node=se40.2.50_11&rgn=div8.

American Society of Testing and Materials (ASTM). 2013. ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. ASTM International, West Conshohocken, PA. Available at www.astm.org.

Bailey, R. G. 1988. Ecogeographic Analysis: A Guide to the Ecological Division of Land for Resource Management. (Misc. Publ. 1465.) Washington, DC: USDA Forest Service. 18 p. Available at https://www.researchgate.net/publication/280165481_Ecogeographic_analysis_A_guide_to_the_ecological_division_of_land_for_resource_management.

Baldrige, W. Scott, and Kenneth H. Olsen. 1989. The Rio Grande Rift. American Scientist 77:240–247.

Bat Conservation Trust (BCT). 2014. Artificial Lighting and Wildlife. Interim Guidance: Recommendations to Help Minimize the Impact of Artificial Lighting. June 2014.

Bennie, J., Davies, T.W., Cruse, D. & Gaston, K.J. 2016. Ecological Effects of Artificial Light at Night on Wild Plants. Journal of Ecology. 104(3): 611–620. DOI:10.1111/1365-2745.12551.

Bureau of Economic Analysis (BEA). 2016. Local Area Personal Income: 2016. Available online at https://www.bea.gov/newsreleases/regional/lapi/2017/pdf/lapi1117.pdf. Last accessed 08 January 2018.

Bureau of Labor Statistics (BLS). 2013a. Local Area Unemployment Statistics. Available online at https://data.bls.gov/timeseries/LASST350000000000003?amp%253bdata_tool=XGtable &output_view=data&include_graphs=true. Last accessed 08 January 2018.

Bureau of Labor Statistics (BLS). 2013b. Labor Force Statistics from the Current Population Survey. Available online at https://data.bls.gov/timeseries/LNS14000000. Last accessed 08 January 2018.

Bureau of Land Management (BLM). 2018a. ePlanning Project Search. Available online at https://eplanning.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do. Last accessed 29 January 2018.

Bureau of Land Management (BLM). 2018b. New Mexico Planning and NEPA. Plans and NEPA Documents in Development and Plans in Effect. Available online at https://www.blm.gov/programs/planning-and-nepa/plans-in-development/new-mexico. Last accessed 29 January 2018.

Busnel, R. G., and J. Fletcher. 1978. Effect of Noise on Wildlife. New York: Academic Press.

Davey, C.A., K.T. Redmond and D.B. Simeral. 2007. Weather and Climate Inventory. National Park Service Chihuahuan Desert Network. Natural Resource Technical Report NPS/CHDN/NRTR—2007/034.

Department of Homeland Security (DHS). 2017. Santa Teresa, Fence Replacement Project, Santa Teresa, New Mexico, 30% Concept Design. Customs and Border Protection, Office of Border Patrol, El Paso Sector. 194 pp.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1. U.S. Army Corps of Engineers (USACE) Waterways Experiment Station. January 1987.

Federal Register, Vol. 83, No. 14, Monday, January 22, 2018, Notices.

Fletcher, J.L. 1990. Review of Noise and Terrestrial Species: 1983-1988. pp. 181-188 in: B. Berglund and T. Lindvall, eds. Noise as a Public Health Problem Vol. 5: New Advances in Noise Research Part II. Swedish Council for Building Research, Stockholm.

Griffith, G.E., Omernik, J.M., McGraw, M.M., Jacobi, G.Z., Canavan, C.M., Schrader, T.S., Mercer, D., Hill, R., and Moran, B.C. 2006. Ecoregions of New Mexico (color posterwith map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,400,000).

Hawley, J.W. and R.P. Lozinzky. 1992. Hydrogeologic Framework of the Mesilla Basin in New Mexico and Western Texas. New Mexico Bureau of Mines and Mineral Resources. Open-File Report 323. 95 pp.

Hawley et al. 2001. The Mesilla Basin Aquifer System of New Mexico, West Texas, and Chihuahua—An Overview of Its Hydrogeologic Framework and Related Aspects of Groundwater Flow and Chemistry. Chapter 7 in: Aquifers of West Texas, Texas Water Development Board Report 356.

Hoyt, Cathryn A. 2002. The Chihuahuan Desert: Diversity at Risk. Endangered Species Bulletin March/June 2002, XXVII No. 2. 16 pp. March 2002.

King, W.E., J.W. Hawley, A.M. Taylor, R.P. Wilson. 1971. Geology and Ground-Water Resources of Central and Western Doña Ana County, New Mexico. Hydrologic Report #1. State Bureau of Mines and Mineral Resources. 64 Pgs.

Kurota, Alexander, and Christopher A. Turnbow. 2009. The Border Fence Project: Excavations at LA85760 and LA159820 for JV 1-3, Santa Teresa Station, Doña Ana County, New Mexico. University of New Mexico Office of Contract Archaeology, Albuquerque.

Las Cruces Sun. 2017. Extensive Roadwork Under Way on Pete V. Domenici Hwy. 16 October 2017. Available online at http://www.lcsun-news.com/story/news/local/2017/10/16/extensive-roadwork-under-way-pete-v-domenici-hwy/768526001/.

LMI. 2018. Biological Resource Plan.

Mack, G.H., et al. 2006. Pliocene and Quaternary history of the Rio Grande, the Axial River of the Southern Rio Grande Rift, New Mexico, USA. Earth-Science Reviews. 79 (2006) 141-162.

MBTA 1918. Migratory Bird Treaty Act. 16 U.S.C. §§ 703–712

Moore, James L. 1996. Archaeological Investigations in the Southern Mesilla Bolson: Data Recovery at the Santa Teresa Port-of-Entry Facility. Office of Archaeological Studies Museum of New Mexico, Office of Cultural Affairs, Santa Fe.

Natural Channel Design, Inc. 2017. Santa Teresa Fence Replacement Waters of the U.S. Preliminary Jurisdictional Determination. December 2017.

NatureServe. 2013. NatureServe Vista Decision-Support Software for Land Use and Conservation Planning User's Manual. 22 October 2013. Available online at http://www.natureserve.org/sites/default/files/vista_usermanual_102213_whole.pdf. Last accessed 06 February 2018.

NatureServe Explorer. 2016. Available online at http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&l. Last updated: November 2016. Last accessed 12 January 2018.

New Mexico Bureau of Geology and Mineral Resources (NMBGMR). 2018. Interactive Mapping Tool (A research and service division of NM Tech). Available online at https://geoinfo.nmt.edu/maps/. Last accessed 03 February 2018.

New Mexico Department of Game and Fish (NMDGF), Wildlife Management and Fisheries Management Divisions. 2016. Threatened and Endangered Species of New Mexico, 2016 Biennial Review. October 5, 2016.

New Mexico Department of Game and Fish (NMDGF). Undated. Biota Information System of New Mexico. Available online at http://www.bison-m.org/reports.aspx?rtype=9. Last accessed 19 January 2018.

New Mexico Department of Transportation (NMDOT). 2017. NMDOT Road Construction Projects, District 1. Available online at http://dot.state.nm.us/content/nmdot/en/ProjectsD1.html#CN-ER14103. Last accessed 19 January 2018.

New Mexico Economic Development Department (NMEDD). 2012. Doña Ana County Profile. Available online at https://gonm.biz/uploads/documents/DonaAnaCountyProfile.pdf. Last accessed 30 January 2018.

New Mexico Economic Development Department (NMEDD). 2016. New Mexico Industry and Occupational Employment Projects. December 2016. Available online at https://gonm.biz/site-selection/workforce-profile/. Last accessed 30 January 2018.

New Mexico Environment Department (NMED). 2010. Water Resources & Management. Available online at https://www.env.nm.gov/water/. Last Accessed 04 February 2018.

New Mexico Environment Department (NEMD). 2018a. Air Quality Bureau, New Mexico Air Quality Control Regions. Available online at https://www.env.nm.gov/aqb/modeling/aqcr_map.html. Last accessed 02 February 2018.

New Mexico Environment Department (NMED). 2018b. Air Quality Bureau, Doña Ana County, New Mexico. Available online at https://www.env.nm.gov/air-quality/dona-ana-2/. Last accessed 02 February 2018.

New Mexico Environment Department (NMED). 2018c. OpenEnviroMap. Available online at https://gis.web.env.nm.gov/oem/?map=swpa. Last accessed 04 February 2018.

Northland Research, Inc. 2018. A Cultural Resources Survey For The Proposed Replacement Of Approximately 20 Miles Of Border Fence And Associated Access Roads And Staging Areas Located West Of The Santa Teresa Port Of Entry, Doña Ana County, New Mexico.

Occupational Safety and Health Administration (OSHA). 2018. Occupational Noise Exposure. Standard 1910.95. Available online at https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9735&p_text_version=FALSE#1910.95%28b%29%282%29. Last accessed 07 February 2018.

Pollard, Alexandara. 2009. Visual Constraints upon Avian Behaviour. PhD Thesis, Cardiff University. September 2009.

Rango, A., M. Chopping, J. Ritchie, K. Havstad, W. Kustas, and T. Schmugge. 2000. Morphological Characteristics of Shrub Coppice Dunes in Desert Grasslands of Southern New Mexico Derived from Scanning LIDAR. *Remote Sensing of Environment* 74:.26–44.

Sleeter, Benjamin & Soulard, Christopher & Wilson, Tamara & Sorenson, Daniel. 2012. Chapter 1: Land-cover trends in the Western United States – 1973 to 2000. Status and Trends of Land Change in the Western United States—1973 to 2000. Edited by Benjamin M. Sleeter, Tamara S. Wilson, and William Acevedo U.S. Geological Survey Professional Paper 1794–A, 2012.

U.S. Census Bureau (USCB). 2017a. QuickFacts: Doña Ana County, New Mexico. Available online at https://www.census.gov/quickfacts/fact/table/US/PST045217. Last accessed 08 January 2018.

U.S. Census Bureau (USCB). 2017b. QuickFacts: New Mexico. Available online at https://www.census.gov/quickfacts/fact/table/US/PST045217. Last accessed 30 January 2018.

U.S. Customs and Border Protection (CBP). 2004. Final Environmental Assessment for Proposed Vehicle Barriers near Santa Teresa Doña Ana County, New Mexico. April 2004.

U.S. Customs and Border Protection (CBP). 2006. Programmatic Environmental Assessment for Proposed Tactical Infrastructure, Office of Border Patrol, El Paso Sectors, New Mexico Stations. July 2006.

U.S. Customs and Border Protection (CBP). 2008. Environmental Stewardship Plan for Construction, Operation, and Maintenance of Tactical Infrastructure, Segments JV-1 through JV-3, U.S. Border Patrol El Paso Sector, Santa Teresa Station, New Mexico. December 2008.

U.S. Customs and Border Protection (CBP). 2009. Best Management Practices (BMPs) for U.S. Customs and Border Protection Drainage Improvement Project – Sector Environmental General BMPs. November 2009.

U.S. Customs and Border Protection (CBP). 2012. Environmental Stewardship Summary Report for the Construction, Operation, and Maintenance of Tactical Infrastructure Pedestrian Fence Segments K-2 through K-5 U.S. Border Patrol El Paso Sector, TX. July 2012.

U.S. Customs and Border Protection (CBP). 2015a. Final Environmental Assessment Addressing Proposed Tactical Infrastructure Maintenance and Repair Along the U.S./Mexico International Border in New Mexico. July 2015.

U.S. Customs and Border Protection (CBP). 2015b. Final Environmental Assessment for Anapra Fence Replacement and Associated Road Renovations Sunland Park, New Mexico. August 2015.

U.S. Department of Agriculture (USDA). 2018. Custom Soil Resource Report for Doña Ana County Area, New Mexico Project Area including access roads and staging areas Doña Ana, NM. Available online at https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Last accessed 03 February 2018.

U.S. Environmental Protection Agency (EPA). 1971. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances. 31 December 1971. Available online at https://nepis.epa.gov/Exe/ZyPDF.cgi/9101NN3I.PDF?Dockey=9101NN3I.PDF. Last accessed 07 February 2018.

U.S. Environmental Protection Agency (EPA). 1979. Designated Area Partial County Descriptions – NAAQS Revoked. Available online at https://www3.epa.gov/airquality/greenbook/obp.html#Ozone_1-hr.1990.Sunland_Park. Last accessed 09 February 2018.

U.S. Environmental Protection Agency (EPA). 1981a. Noise Effects Handbook. A Desk Reference to Health and Welfare Effects of Noise. Office of Noise Abatement and Control. October 1979, Revised July 1981. Available online at http://nonoise.org/epa/Roll7/roll7doc27.pdf. Last accessed 07 February 2018.

U.S. Environmental Protection Agency (EPA). 1981b. Noise and its Measurement. January 1981. Available online at http://nonoise.org/epa/Roll19/roll19doc49.pdf. Last accessed 02 February 2018.

U.S. Environmental Protection Agency (EPA). 2006. Revision to General Conformity Applicability Questions and Answers. Available online at https://www.epa.gov/sites/production/files/2016-03/documents/rev_to_gc_app_qandas.pdf. June 2006.

U.S. Environmental Protection Agency (EPA). 2017a. USEPA Enforcement and Compliance History Online (ECHO). Last updated December 26, 2017. Available online at https://echo.epa.gov/facilities/facility-search/results.

U.S. Environmental Protection Agency (EPA). 2017b. USEPA Envirofacts. Last updated October 18, 2017. Available online at https://oaspub.epa.gov/enviro/envirofacts.quickstart?pSearch=Map%20Recentered&minx=106.805308&miny=31.762860&maxx=106.440012&maxy=31.894124&ve=11,31.828492,106.622660.

U.S. Environmental Protection Agency (EPA). 2018a. New Mexico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Data is current as of January 31, 2018. Available online at https://www3.epa.gov/airquality/greenbook/anayo_nm.html. Last accessed 02 February 2018.

U.S. Environmental Protection Agency (EPA). 2018b. Current Implementation of Waters of the United States. Available online at https://www.epa.gov/cwa-404/definition-waters-united-states-under-clean-water-act.

U.S. Forest Service (USFS). 1995. Description of the Ecoregions of the United States. Compiled by Robert G. Bailey. Available online at https://www.fs.fed.us/land/ecosysmgmt/.

U.S. Forest Service (USFS). 2018. 321 Chihuahuan Desert Province. Available online at https://www.fs.fed.us/land/ecosysmgmt/colorimagemap/images/321.html. Last accessed 05 February 2018.

U.S. Fish and Wildlife Service (USFWS). 2017a. Information for Planning and Consultation (IPaC). Available online at https://ecos.fws.gov/ipac/. Last accessed 29 December 2017.

U.S. Fish and Wildlife Service (USFWS). 2017b. Biological Report for the Mexican wolf (*Canis lupus baileyi*). USFWS Southwest Region (Region 2), Albuquerque, New Mexico. November 2017.

U.S. Fish and Wildlife Service (USFWS). 2018. https://fws.maps.arcgis.com/apps/webappviewer/index.html?id=e87092240501466abd4606dcdb50ce98

U.S. Geological Survey (USGS). 2018. U.S. Geological Survey Gap Analysis Program (GAP) Land Cover Data v2.2. Available online at https://www.arcgis.com/home/webmap/viewer.html?url=https%3A%2F%2Fgis1.usgs.gov%2Farcgis%2Frest%2Fservices%2Fgap%2FGAP_Land_Cover_Ecological_Systems_Landuse%2FMapServer&source=sd. Last accessed 09 February 2018.

Villagran, Lauren. 2017. Two Nations, One Aquifer: Border Wall Can't Keep Groundwater from Draining Away. *Albuquerque Journal*. Available online at https://www.abqjournal.com/1023295/no-accord-over-aquifer-shared-by-nm-and-mexico.html.

Wikipedia 2018. New Mexico State Road 9. Available online at https://en.wikipedia.org/wiki/New_Mexico_State_Road_9. Last accessed 07 February 2018.

7 Appendices

Appendix A: Secretarial Waiver. 2018. F.R. Vol. 83, No. 14

Appendix B: Agency Coordination

Appendix C: Air Pollution Calculations

Appendix D: Acronyms

APPENDIX A: SECRETARIAL WAIVER

3012 **Federal Register** / Vol. 83, No. 14 / Monday, January 22, 2018 / Notices

FOR FURTHER INFORMATION CONTACT: Mr. Anthony Smith, Office of Information Management, telephone 202–475–3532, or fax 202–372–8405, for questions on these documents.

SUPPLEMENTARY INFORMATION:

Public Participation and Request for Comments

This Notice relies on the authority of the Paperwork Reduction Act of 1995; 44 U.S.C. Chapter 35, as amended. An ICR is an application to OIRA seeking the approval, extension, or renewal of a Coast Guard collection of information (Collection). The ICR contains information describing the Collection's purpose, the Collection's likely burden on the affected public, an explanation of the necessity of the Collection, and other important information describing the Collection. There is one ICR for each Collection.

The Coast Guard invites comments on whether this ICR should be granted based on the Collection being necessary for the proper performance of Departmental functions. In particular, the Coast Guard would appreciate comments addressing: (1) The practical utility of the Collection; (2) the accuracy of the estimated burden of the Collection; (3) ways to enhance the quality, utility, and clarity of information subject to the Collection; and (4) ways to minimize the burden of the Collection on respondents, including the use of automated collection techniques or other forms of information technology. These comments will help OIRA determine whether to approve the ICR referred to in this Notice.

We encourage you to respond to this request by submitting comments and related materials. Comments to Coast Guard or OIRA must contain the OMB Control Number of the ICR. They must also contain the docket number of this request, [USCG–2017–0950], and must be received by February 21, 2018.

Submitting Comments

We encourage you to submit comments through the Federal eRulemaking Portal at *http://www.regulations.gov*. If your material cannot be submitted using *http://www.regulations.gov,* contact the person in the **FOR FURTHER INFORMATION CONTACT** section of this document for alternate instructions. Documents mentioned in this notice, and all public comments, are in our online docket at *http://www.regulations.gov* and can be viewed by following that website's instructions. Additionally, if you go to the online docket and sign up for email alerts, you will be notified when comments are posted.

We accept anonymous comments. All comments received will be posted without change to *http://www.regulations.gov* and will include any personal information you have provided. For more about privacy and the docket, you may review a Privacy Act notice regarding the Federal Docket Management System in the March 24, 2005, issue of the **Federal Register** (70 FR 15086).

OIRA posts its decisions on ICRs online at *http://www.reginfo.gov/public/do/PRAMain* after the comment period for each ICR. An OMB Notice of Action on each ICR will become available via a hyperlink in the OMB Control Number: 1625–0024.

Previous Request for Comments

This request provides a 30-day comment period required by OIRA. The Coast Guard published the 60-day notice (82 FR 49038, October 23, 2017) required by 44 U.S.C. 3506(c)(2). That Notice elicited no comments. Accordingly, no changes have been made to the Collection.

Information Collection Request

Title: Safety Approval of Cargo Containers.

Omb Control Number: 1625–0024.

Summary: This information collection is associated with requirements for owners and manufacturers of cargo containers to submit information and keep records associated with the approval and inspection of those containers. This information is required to ensure compliance with the International Convention for Safe Containers (CSC), 29 U.S.T. 3707; T.I.A.S. 9037.

Need: This collection of information addresses the reporting and recordkeeping requirements for containers in 49 CFR parts 450 through 453. These rules are necessary since the U.S. is signatory to the CSC. The CSC requires all containers to be safety approved prior to being used in trade. These rules prescribe only the minimum requirements of the CSC.

Forms: None.

Respondents: Owners and manufacturers of containers, and organizations that the Coast Guard delegates to act as an approval authority.

Frequency: On occasion.

Hour Burden Estimate: The estimated burden has increased from 98,452 hours to 117,271 hours a year due to an increase in the estimated number of responses.

Authority: The Paperwork Reduction Act of 1995; 44 U.S.C. chapter 35, as amended.

Dated: January 11, 2018.

James D. Roppel,

U.S. Coast Guard, Acting Chief, Office of Information Management.

[FR Doc. 2018–00954 Filed 1–19–18; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Office of the Secretary

Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, as Amended

AGENCY: Office of the Secretary, Department of Homeland Security.

ACTION: Notice of determination.

SUMMARY: The Secretary of Homeland Security has determined, pursuant to law, that it is necessary to waive certain laws, regulations and other legal requirements in order to ensure the expeditious construction of barriers and roads in the vicinity of the international land border of the United States near the Santa Teresa Land Port of Entry in the state of New Mexico.

DATES: This determination takes effect on January 22, 2018.

SUPPLEMENTARY INFORMATION: The principal mission requirements of the Department of Homeland Security (''DHS'') include border security and the detection and prevention of illegal entry into the United States. Border security is critical to the nation's national security. Recognizing the critical importance of border security, Congress has ordered DHS to achieve and maintain operational control of the international land border. Secure Fence Act of 2006, Public Law 109–367, 2, 120 Stat. 2638 (Oct. 26, 2006) (8 U.S.C. 1701 note). Congress defined ''operational control'' as the prevention of all unlawful entries into the United States, including entries by terrorists, other unlawful aliens, instruments of terrorism, narcotics, and other contraband. *Id.* Consistent with that mandate from Congress, the President's Executive Order on Border Security and Immigration Enforcement Improvements directed executive departments and agencies to deploy all lawful means to secure the southern border. Executive Order 13767, § 1. To achieve this end, the President directed, among other things, that I take immediate steps to prevent all unlawful entries into the United States, to include the immediate construction of physical infrastructure

to prevent illegal entry. Executive Order 13767, § 4(a).

Congress has provided the Secretary of Homeland Security with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (''IIRIRA''). Public Law 104–208, Div. C, 110 Stat. 3009–546, 3009–554 (Sept. 30, 1996) (8 U.S.C 1103 note), as amended by the REAL ID Act of 2005, Public Law 109–13, Div. B, 119 Stat. 231, 302, 306 (May 11, 2005) (8 U.S.C. 1103 note), as amended by the Secure Fence Act of 2006, Public Law 109–367, 3, 120 Stat. 2638 (Oct. 26, 2006) (8 U.S.C. 1103 note), as amended by the Department of Homeland Security Appropriations Act, 2008, Public Law 110–161, Div. E, Title V, § 564, 121 Stat. 2090 (Dec. 26, 2007). In section 102(a) of IIRIRA, Congress provided that the Secretary of Homeland Security shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of high illegal entry into the United States. In section 102(b) of IIRIRA, Congress has called for the installation of additional fencing, barriers, roads, lighting, cameras, and sensors on the southwest border. Finally, in section 102(c) of IIRIRA, Congress granted to the Secretary of Homeland Security the authority to waive all legal requirements that I, in my sole discretion, determine necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

Determination and Waiver

Section 1

The United States Border Patrol's El Paso Sector is an area of high illegal entry. For example, in fiscal year 2016, the United States Border Patrol (''Border Patrol'') apprehended over 25,000 illegal aliens and seized approximately 67,000 pounds of marijuana and approximately 157 pounds of cocaine. Since the creation of DHS, and through the construction of border infrastructure and other operational improvements, the Border Patrol has been able to make significant gains in border security within the El Paso Sector; however, more work needs to be done. In fact, in recent years, the El Paso Sector has seen an increase in apprehensions. The El Paso Sector therefore remains an area of high illegal entry for which there is an immediate need to construct border barriers and roads.

To begin to meet the need for enhanced border infrastructure in the El Paso Sector, DHS will take immediate action to replace existing vehicle barrier with bollard wall. Vehicle barrier replacement in the El Paso Sector is among DHS's highest priority border security requirements. The vehicle barrier replacement will take place along an approximately twenty mile segment of the border that starts at the Santa Teresa Land Port of Entry and extends westward. This approximately twenty mile segment of the border is referred to herein as the ''project area'' and is more specifically described in Section 2 below.

Although the existing vehicle barrier has aided border enforcement within the project area, Border Patrol must have a more effective means of deterring and preventing illegal crossings. The area within Mexico that is situated across the border from the project area has a population of almost two million people, including the city of Ciudad Juarez. The close proximity of this heavily populated area and its urban infrastructure creates opportunities for illegal entrants to gain quick and immediate access to the border. On the United States side of the border, the eastern portion of the project area includes developed areas where illegal aliens can quickly blend into the population and have ready access to roads, highways, and other infrastructure. The western portion of the project area is made up of desert areas where there is little to no natural terrain that deters illegal crossings and illegal aliens can quickly access state highways as a means of travel into the interior of the United States. Replacing the existing vehicle barrier with bollard wall within the project area will improve Border Patrol's operational efficiency and, in turn, further deter and prevent illegal crossings.

Section 2

I determine that the following area in the vicinity of the United States border, located in the State of New Mexico within the United States Border Patrol's El Paso Sector is an area of high illegal entry (the ''project area''): Starting at the Santa Teresa Land Port of Entry and extending west to Border Monument 10.

There is presently a need to construct physical barriers and roads in the vicinity of the border of the United States to deter illegal crossings in the project area. In order to ensure the expeditious construction of the barriers and roads in the project area, I have determined that it is necessary that I exercise the authority that is vested in me by section 102(c) of the IIRIRA as amended.

Accordingly, pursuant to section 102(c) of IIRIRA, I hereby waive in their entirety, with respect to the construction of roads and physical barriers (including, but not limited to, accessing the project area, creating and using staging areas, the conduct of earthwork, excavation, fill, and site preparation, and installation and upkeep of physical barriers, roads, supporting elements, drainage, erosion controls, and safety features) in the project area, the following statutes, including all federal, state, or other laws, regulations and legal requirements of, deriving from, or related to the subject of, the following statutes, as amended: The National Environmental Policy Act (Pub. L. 91–190, 83 Stat. 852 (Jan. 1, 1970) (42 U.S.C. 4321 *et seq.*)), the Endangered Species Act (Pub. L. 93–205, 87 Stat. 884 (Dec. 28, 1973) (16 U.S.C. 1531 *et seq.*)), the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act (33 U.S.C. 1251 *et seq.*)), the National Historic Preservation Act (Pub. L. 89–665, 80 Stat. 915 (Oct. 15, 1966), as amended, repealed, or replaced by Pub. L. 113–287 (Dec. 19, 2014) (formerly codified at 16 U.S.C. 470 *et seq.*, now codified at 54 U.S.C. 100101 note and 54 U.S.C. 300101 *et seq.*)), the Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), the Migratory Bird Conservation Act (16 U.S.C. 715 *et seq.*), the Clean Air Act (42 U.S.C. 7401 *et seq.*), the Archeological Resources Protection Act (Pub. L. 96–95 (16 U.S.C. 470aa *et seq.*)), the Paleontological Resources Preservation Act (16 U.S.C. 470aaa *et seq.*), the Federal Cave Resources Protection Act of 1988 (16 U.S.C. 4301 *et seq.*), the Safe Drinking Water Act (42 U.S.C. 300f *et seq.*), the Noise Control Act (42 U.S.C. 4901 *et seq.*), the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*), the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 *et seq.*), the Archaeological and Historic Preservation Act (Pub. L. 86–523, as amended, repealed, or replaced by Pub. L. 113–287 (Dec. 19, 2014) (formerly codified at 16 U.S.C. 469 *et seq.*, now codified at 54 U.S.C. 312502 *et seq.*)), the Antiquities Act (formerly codified at 16 U.S.C. 431 *et seq.*, now codified 54 U.S.C. 320301 *et seq.*), the Historic Sites, Buildings, and Antiquities Act (formerly codified at 16 U.S.C. 461 *et seq.*, now codified at 54 U.S.C. 3201–320303 & 320101–320106), the Farmland Protection Policy Act (7 U.S.C. 4201 *et seq.*), the Federal Land

Policy and Management Act (Pub. L. 94–579 (43 U.S.C. 1701 *et seq.*)), National Fish and Wildlife Act of 1956 (Pub. L. 84–1024 (16 U.S.C. 742a, *et seq.*)), the Fish and Wildlife Coordination Act (Pub. L. 73–121 (16 U.S.C. 661 *et seq.*)), the Administrative Procedure Act (5 U.S.C. 551 *et seq.*), the Eagle Protection Act (16 U.S.C. 668 *et seq.*), the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 *et seq.*), and the American Indian Religious Freedom Act (42 U.S.C. 1996).

This waiver does not repeal the previous waiver published in the **Federal Register** on April 8, 2008 (73 FR 19078). I reserve the authority to make further waivers from time to time as I may determine to be necessary under section 102 of the IIRIRA, as amended.

Dated: January 10, 2018.

Kirstjen M. Nielsen,

Secretary of Homeland Security.

[FR Doc. 2018–00996 Filed 1–19–18; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF HOMELAND SECURITY

U.S. Citizenship and Immigration Services

[CIS No. 2616–18; DHS Docket No. USCIS–2008–0034]

RIN 1615–ZB71

Termination of the Designation of El Salvador for Temporary Protected Status

Correction

In notice document 2018–00885, appearing on pages 2654 through 2660 in the issue of Thursday, January 18, 2018, make the following correction:

On page 2655, in the first column, in the **SUPPLEMENTARY INFORMATION** section, twenty-one lines from the bottom, ''January 19, 2018'' should read ''January 18, 2018''.

[FR Doc. C1–2018–00885 Filed 1–19–18; 8:45 am]

BILLING CODE 1301–00–D

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R1–ES–2017–N139; FXES11130100000C4–178–FF01E00000]

Endangered and Threatened Wildlife and Plants; Initiation of 5-Year Status Reviews for 18 Species in Hawaii, Oregon, Washington, Idaho, and Canada

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of initiation of reviews; request for information.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are initiating 5-year status reviews for 18 species in Hawaii, Oregon, Washington, Idaho, and Canada under the Endangered Species Act of 1973, as amended (Act). A 5-year status review is based on the best scientific and commercial data available at the time of the review; therefore, we are requesting submission of any new information on these species that has become available since the last review.

DATES: To ensure consideration in our reviews, we are requesting submission of new information no later than March 23, 2018. However, we will continue to accept new information about any listed species at any time.

ADDRESSES: Submit information on any of the 12 species in Hawaii (see table under What Species Are Under Review?) via U.S. mail to: Field Supervisor, Attention: 5-Year Review, U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, 300 Ala Moana Blvd., Room 3–122, Honolulu, HI 96850, or by email to *pifwo_admin@fws.gov.*

For the Columbia Basin pygmy rabbit, *Castilleja levisecta, Hackelia venusta,* and *Sidalcea oregana* var. *calva,* submit information via U.S. mail to: Field Supervisor, Attention: 5-Year Review, U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 510 Desmond Dr. SE, Suite 102, Lacey, WA 98503, or by email to *WFWO_LR@fws.gov.*

For the Snake River physa snail, submit information via U.S. mail to: Field Supervisor; Attention: 5-Year Review; U.S. Fish and Wildlife Service; Idaho Fish and Wildlife Office; 1387 S. Vinnell Way, Suite 368, Boise, ID 83709, or by email to *greg_burak@fws.gov.*

For the white sturgeon, submit information via U.S. mail to: Field Supervisor; Attention: 5-Year Review, U.S. Fish and Wildlife Service, Northern Idaho Field Office, 11103 East Montgomery Dr., Spokane, WA 99206, or by email to *jason_flory@fws.gov.*

FOR FURTHER INFORMATION CONTACT: Gregory Koob, U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office (see **ADDRESSES**), 808–792–9400 (for species in Hawaii); Tom McDowell, U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 360–753–9440 (for Columbia Basin pygmy rabbit, *Castilleja levisecta, Hackelia venusta,* and *Sidalcea oregana* var. *calva*); or Tracy Melbihess, U.S. Fish and Wildlife Service, Idaho Fish and Wildlife Office, 208–378–5287 (for white sturgeon and Snake River physa snail). Individuals who are hearing impaired or speech impaired may call the Federal Relay Service at 800–877–8339 for TTY assistance.

SUPPLEMENTARY INFORMATION:

Why do we conduct 5-year reviews?

Under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.;* Act), we maintain lists of endangered and threatened wildlife and plant speciess (referred to as the List) in the Code of Federal Regulations (CFR) at 50 CFR 17.11 (for wildlife) and 17.12 (for plants). Section 4(c)(2) of the Act requires us to review each listed species' status at least once every 5 years. For additional information about 5-year reviews, go to *http://www.fws.gov/endangered/what-we-do/recovery-overview.html,* scroll down to ''Learn more about 5-Year Reviews,'' and click on the ''5-Year Reviews'' link.

What information do we consider in our review?

A 5-year review considers all new information available at the time of the review. In conducting these reviews, we consider the best scientific and commercial data that have become available since the listing determination or most recent status review, such as:

(A) Species biology, including but not limited to population trends, distribution, abundance, demographics, and genetics;

(B) Habitat conditions, including but not limited to amount, distribution, and suitability;

(C) Conservation measures that have been implemented that benefit the species;

(D) Threat status and trends in relation to the five listing factors (as defined in section 4(a)(1) of the Act); and

(E) Other new information, data, or corrections, including but not limited to taxonomic or nomenclatural changes, identification of erroneous information contained in the List, and improved analytical methods.

Any new information will be considered during the 5-year review and

APPENDIX B: AGENCY COORDINATION

This appendix provides information on all the activities in the various agency coordination efforts related to the replacement of 20 miles of vehicle fence with a primary border wall in Santa Teresa, New Mexico.

CBP notified relevant Federal, Tribal, state, and local agencies about the project and asked for input on potential environmental concerns each party may have regarding the project. To avoid or minimize adverse environmental effects, CBP also conducted environmental and cultural resource surveys, prepared a biological resource management plan, and prepared a jurisdictional determination study for Waters of the United States of the project. CBP coordinated with the U.S. Army Corps of Engineers (USACE), Albuquerque District; U.S. Fish and Wildlife Service (USFWS); New Mexico Department of Fish and Game; and the New Mexico State Historic Preservation Office.

Coordination Letters

During the preparation of the ESP, CBP emailed correspondence letters to potentially interested agency points of contact to inform them of the status of the ongoing environmental analysis and to request their input. This coordination included both seeking input during the development of the ESP and notifying parties of the availability of the completed ESP on CBP's website. CBP received written correspondence with feedback as a result of this coordination. Agency stakeholder comments were considered and incorporated into the ESP, as applicable (see Table G-1).

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Jeff Pappas, Ph.D.
State Historic Preservation Officer
New Mexico Historic Preservation Division
Bataan Memorial Building
407 Galisteo Street, Suite 236
Santa Fe, NM 87501

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Dr. Pappas

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of

Dr. Pappas
Page 2

high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Cultural Resources Survey Report, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to cultural resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Daniel Malanchuk
Chief, Regulatory Branch
United States Army Corps of Engineers
Albuquerque District
4101 Jefferson Palza NE
Albuquerque, NM 87109

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Mr. Malanchuk:

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of

Mr. Malanchuk
Page 2

illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Waters of the U.S. Survey Report, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to water resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Matthew Wunder
Chief, Conservation Service Divisions
New Mexico Department of Game and Fish
1 Wildlife Way
Santa Fe, NM 85704

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Mr. Wunder

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of

Mr. Wunder
Page 2

high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Biological Resources Plan, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to biological resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
William Childress
Bureau of Land Management
Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Mr. Childress

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of

Mr. Childress
Page 2

high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Cultural Resources Survey Report, Biological Resources Plan, and Waters of the U.S. Survey, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from state and local agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to environmental resources from the implementation of the Project. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Wally Murphy
Field Supervisor
New Mexico Ecological Services Field Office
2105 Osuna Road NE
Albuquerque, NM 87113

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Mr. Murphy:

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of

Mr. Murphy
Page 2

high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Biological Resources Plan, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to biological resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Carlos Hisa
Governor
Ysleta del Sur Pueblo
P.O. Box 17579
El Paso, TX 79907

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Governor Hisa:

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of

Governor Hisa
Page 2

high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Cultural Resources Survey Report, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to cultural resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Jeff Haozous
Chairman
Fort Sill Apache Tribe of Oklahoma
Rt. 2, Box 121
Apache, OK 73006

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Chairman Haozous:

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to

install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Cultural Resources Survey Report, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to cultural resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Donnie Cabaniss Jr.
Chairman
Apache Tribe of Oklahoma
P.O. Box 1330
Anadarko, OK 73005

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Chairman Cabaniss Jr

The Department of Homeland Security (DHS) and Customs and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

Chairman Cabaniss Jr
Page 2

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Cultural Resources Survey Report, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to cultural resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

February 14, 2018
Dr. Jeffrey Blythe
Tribal Historic Preservation Officer
Jicarilla Apache Nation
P.O. Box 1367
Dulce, NM 87528

Subject: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa, Doña Ana County, New Mexico

Dear Dr. Blythe

The Department of Homeland Security (DHS), Customs, and Border Protection (CBP) plan to remove approximately twenty miles of existing vehicle barrier and replace it with primary border wall in Santa Teresa, Doña Ana County, New Mexico (Project). The area in which the replacement project will take place (the Project Area), which is described in more detail below, is situated within the United States Border Patrol (USBP) El Paso Sector (EPT). The current fencing consists of post-and-rail, Normandy-style, and bollard fencing designed to prevent illegal vehicle traffic. The vehicle barriers will be replaced with a new bollard wall, which will range in height from 18 feet to approximately 30 feet. The project consists of four components: (1) development of temporary construction staging areas; (2) removal of existing vehicle barriers; (3) improvement of roads for better construction, maintenance, and patrol access and use; (4) installation, operation, and maintenance of a primary pedestrian wall and patrol road. The new bollard wall and improved patrol road are critical to prevent illegal entries into the United States and to achieve operational control of the U.S.-Mexico international border.

Replacement will start west of the Santa Teresa Land Port of Entry at (31.78385, -106.69818) and proceed west for 20 miles to (31.78376, -107.0377). The footprint of the wall and construction road will be contained entirely within the 60-foot-wide Roosevelt Reservation, set aside in 1907 as a border enforcement zone. Removal and replacement of the fencing will help USBP agents reduce illegal cross-border violations (CBVs) and give them a safer work environment.

The principal mission requirements of DHS include border security and the detection and prevention of illegal entry into the United States. Congress has provided the Secretary of Homeland Security (the Secretary) with a number of authorities necessary to carry out DHS's border security mission. One of these authorities is found at section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA). In section 102(a) of IIRIRA, Congress provided that the Secretary shall take such actions as may be necessary to install additional physical barriers and roads (including the removal of obstacles to detection of illegal entrants) in the vicinity of the United States border to deter illegal crossings in areas of

Dr. Blythe
Page 2

high illegal entry into the United States. In section 102(c) of IIRIRA, Congress granted to the Secretary the authority to waive all legal requirements that the Secretary determines necessary to ensure the expeditious construction of barriers and roads authorized by section 102 of IIRIRA.

In January of 2018, the Secretary issued a waiver covering the Project. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that were included in the waiver, DHS and CBP, as was the case with past projects covered by a waiver, are committed to responsible environmental stewardship of our valuable natural and cultural resources. In order to uphold this commitment to responsible environmental stewardship, CBP has completed environmental resource surveys and prepared associated survey reports, including the enclosed Cultural Resources Survey Report, for the Project. CBP will also prepare an evaluation of potential environmental impacts associated with the Project.

CBP is gathering data and input from State agencies, Federal agencies, and Native American Tribes that may be affected by or otherwise have an interest in the Project. CBP respectfully requests your input regarding the likely or anticipated effects to cultural resources from the implementation of the Project and recommended conservation or mitigation measures. Please send any comments and supporting information regarding the Project to commentsenv@cbp.dhs.gov before March 20, 2018 and include "Santa Teresa Border Wall Replacement" in the title of your email. Should you have any questions, please contact Mr. Joseph Zidron at (949) 643-6392 or by email at joseph.zidron@dhs.gov.

Sincerely,

Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs and Border Protection

Enclosure

Agency Responses

CBP received two responses from their request to agency stakeholders. The New Mexico Department of Game and Fish responded via consultation letter and the USFWS responded via email.

18 March 2018

Mr. Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine
Program Management Office
U.S. Customs Border Protection
1300 Pennsylvania Avenue NW
Washington, D.C. 20229

Re: Replacement of Existing Vehicle Barriers with Primary Border Wall in Santa Teresa; NMDGF No. 18333

Dear Mr. Enriquez:

The New Mexico Department of Game and Fish (Department) has reviewed the Biological Resources Plan for Construction, Operation, and Maintenance of Tactical Infrastructure, El Paso Sector, Santa Teresa Station, New Mexico (Plan). The Department of Homeland Security and Customs and Border Protection plans to remove approximately 20 miles of existing vehicle barrier, and replace it with primary border wall.

The Plan analyzes potential effects of vehicle barrier removal and primary wall construction on federally listed species. The Department concurs with the findings of the Plan that removal and construction is unlikely to adversely affect any listed (Threatened or Endangered) species.

The Plan does not provide specific information on construction activities and timing, but we assume that extensive trenching will be necessary during primary wall construction.

Open trenches can unintentionally trap small mammals, amphibians and reptiles, and can cause injury to large mammals (Romano et al. 2014; Enge et al. 1996; Anderson et al. 1952; Painter et al. unpublished data). In 2001, a trench of approximately 3 miles long, 10 inches wide and 6 feet deep in Bernalillo County, New Mexico, was documented to have trapped 298 individual reptiles and amphibians. Two species of toads, 5 species of lizards, and 9 species of snakes were removed from the trench, including 105 glossy snakes (*Arizona elegans*), 41 plains black-headed snakes (*Tantilla nigriceps*), and 68 massasauga rattlesnakes (*Sistrurus catenatus*). Since no escape ramps were constructed for the trench, and no biological monitor was employed to search for and remove trapped animals, these animals would surely have died had they not been removed by Department biologists and cooperators. The long-term effects of these kinds of events on wildlife are unknown, but they are likely to have adverse effects on local populations of some species.

A number of reptile, amphibian and small mammal species occur in the undeveloped habitats of the project area. The Biota Information System of New Mexico (BISON-M) (http://www.bison-m.org/) identifies 87 reptile, amphibian and small mammal species potentially at risk of mortality from trenching operations. Of these, fourteen are state or federally listed reptile and amphibian species (includes one subspecies), and an additional nine reptile and amphibian species (includes one subspecies) are New Mexico Species of Greatest Conservation Need (New Mexico Department of Game and Fish 2016). Periods of highest activity for many of these species include summer months, nighttime, and in wet weather.

Appendix 5 (p. A-5) of the Plan states "A government-provided environmental monitor will be consulted during critical times (e.g., breeding seasons) to monitor construction operations to ensure adherence with the BMPs and provide advice to the construction contractor as needed". To minimize unnecessary mortality of wildlife from trenching activities for primary wall construction, the Department requests that a qualified biological monitor be employed on site to remove wildlife trapped in open trenches, whenever any construction activities involve leaving trenches open overnight or for extended periods during the day. Removed wildlife should be relocated outside of the disturbance zone of construction activities.

Additional effective mitigation strategies to minimize wildlife mortality include implementing concurrent trenching and backfilling, and keeping trenching and back-filling crews as close together as possible to minimize the amount of open trench at any given time. Trenches should not be left open overnight. Where trenches cannot be back-filled immediately, escape ramps should be constructed at least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping to the surface (see photo below). The escape ramp slope should be less than 45 degrees (1:1). Alternatively, wildlife can be protected from trench entrapment by constructing silt fence tied to t-posts surrounding the open trench. Silt fence should be buried at the base to preclude animals from moving below the fence. Any trenches that have been left open overnight should be inspected and animals removed prior to backfilling. It is important to note that if there are any objects, such as pipes, forms, or tools, in the trench, small animals will hide under them making it considerably more difficult to find and remove trapped wildlife.

With implementation of these recommendations, the Department does not anticipate significant adverse effects to wildlife from implementation of this project.

We appreciate the opportunity to comment on this project, and respectfully request a response to indicate if our recommendations will be implemented, or if alternative mitigation strategies will be employed and if so, which strategies. Should you have any questions regarding our comments, please contact Mark Watson, Terrestrial Habitat Specialist, at (505) 476-8115 or mark.watson@state.nm.us .

Sincerely,

Matt Wunder, Ph.D.
Chief, Ecological and Environmental Planning Division

CC: USFWS NMES Field Office
Daniel Lusk (Southwest Regional Habitat Biologist, NMDGF)
Leland Pierce (Herpetologist, NMDGF)
Jim Stuart (Mammologist, NMDGF)

Literature Cited

Anderson, P.K., E. Liner, and R. Etheridge. 1952. Notes on amphibian and reptile populations in a Louisiana pineland area. Ecology 33:274-278.

Enge, K.M., D.T. Cobb, G. Sprandel, and D. Francis. 1996. Wildlife captures in a pipeline trench in Gadsden County, Florida. Florida Scientist 59:1, Winter 1996. Florida Academy of Sciences.

New Mexico Department of Game and Fish. 2016. State Wildlife Action Plan for New Mexico. New Mexico Department of Game and Fish, Santa Fe, New Mexico, USA.

Romano, A.J , D.J. Leavitt, C.M. Schalk, D.E. Dittmer, and L.A. Fitzgerald. 2014. Vertebrate by-catch of pipeline trenches in the Mescalero-Monahans Shinnery Sands of southeastern New Mexico. Prairie Naturalist 46:95-96.

Open trench Bernalillo County, NM, 2001

Bull snake removed from open trench

Escape ramps allow trapped wildlife to escape

From: ENRIQUEZ, PAUL
To: ZIDRON, JOSEPH
Subject: FW: El Paso Wall
Date: Monday, February 5, 2018 6:42:05 PM

FYI

From: Barrett, Sherry [mailto:sherry_barrett@fws.gov]
Sent: Monday, February 5, 2018 3:28 PM
To: ENRIQUEZ, PAUL <paul.enriquez@cbp.dhs.gov>
Cc: Millsap, Susan <susan_millsap@fws.gov>; SHAW, CHRISTOPHER D (OCC) <CHRISTOPHER.D.SHAW@CBP.DHS.GOV>; Range, Brent <brent_range@ios.doi.gov>; George Dennis <george_dennis@fws.gov>; Maggie Dwire <maggie_dwire@fws.gov>; John Oakleaf <john_oakleaf@fws.gov>; Mary Pruitt <mary_pruitt@fws.gov>
Subject: Re: El Paso Wall

Thank you Paul - the area in the southeastern portion of New Mexico is in Zone 3, as defined in the Revision to the Regulations for the Nonessential Experimental Population of the Mexican wolf (2015 10j Rule), which is an area of less suitable Mexican wolf habitat where Mexican wolves will be more actively managed under the authorities of the rule to reduce conflict with the potentially affected public. See page 2519 of the 10j Rule here: https://www.fws.gov/southwest/es/mexicanwolf/pdf/Mx_wolf_10j_final_rule_to_OFR.pdf

Here is the link to our website with the current occupied range https://fws.maps.arcgis.com/apps/webappviewer/index.html?id=e87092240501466abd4606dcdb50ce98

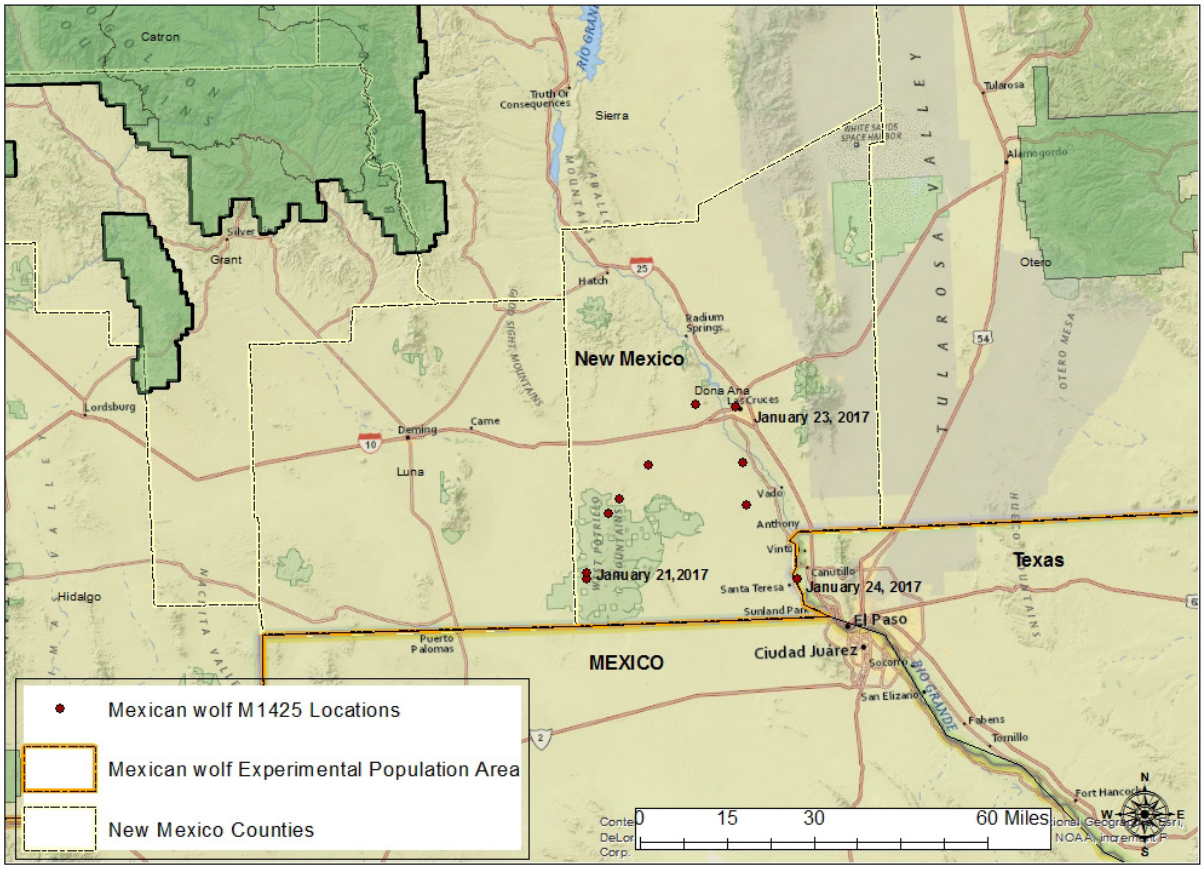
On Wed, Jan 31, 2018 at 11:31 AM, ENRIQUEZ, PAUL <paul.enriquez@cbp.dhs.gov> wrote:

> Hi Sherry – A map of the project area is attached. For reference, the Santa Teresa land port of entry is on the right side (east side) of the map and the project extends 20 miles to the west of the port of entry. The yellow areas of land on the map are BLM managed lands. Any data or information you have for species is greatly appreciated.
>
> Thank you.
>
> **From:** Barrett, Sherry [mailto:sherry_barrett@fws.gov]
> **Sent:** Wednesday, January 31, 2018 10:03 AM
> **To:** ENRIQUEZ, PAUL <paul.enriquez@cbp.dhs.gov>
> **Cc:** Millsap, Susan <susan_millsap@fws.gov>; SHAW, CHRISTOPHER D (OCC) <CHRISTOPHER.D.SHAW@CBP.DHS.GOV>; Range, Brent <brent_range@ios.doi.gov>; amy_lueders@fws.gov; Tade, Justin <justin.tade@sol.doi.gov>; George Dennis <george_dennis@fws.gov>; Maggie Dwire <maggie_dwire@fws.gov>; John Oakleaf <john_oakleaf@fws.gov>
> **Subject:** Re: El Paso Wall
>
> Hi all: please send me a map of the area where the wall would be constructed, as we have had wolves cross the border between the U.S. and Mexico. The area along the border in both Arizona and New Mexico is within the Mexican Wolf Experimental Population Area, pursuant to section 10j of the ESA, so section 7 consultation is not required.
>
> Thank you

From: Barrett, Sherry [mailto:sherry_barrett@fws.gov]
Sent: Monday, February 5, 2018 3:36 PM
To: Millsap, Susan <susan_millsap@fws.gov>; SHAW, CHRISTOPHER D (OCC) <CHRISTOPHER.D.SHAW@CBP.DHS.GOV>; Range, Brent <brent_range@ios.doi.gov>; George Dennis <george_dennis@fws.gov>; Maggie Dwire <maggie_dwire@fws.gov>; John Oakleaf <john_oakleaf@fws.gov>; Mary Pruitt <mary_pruitt@fws.gov>; Seth Willey <seth_willey@fws.gov>; ENRIQUEZ, PAUL <paul.enriquez@cbp.dhs.gov>
Subject: Fwd: El Paso Wall

Paul: In addition to the other email I just sent, attached to this email is a map of the locations of a wolf that crossed the border from Mexico into the U.S. and then went back in 2017. This was in the area of the proposed wall.

Mexican wolf M1425 GPS Collar locations in U.S. January 21,2017 through January 24, 2017



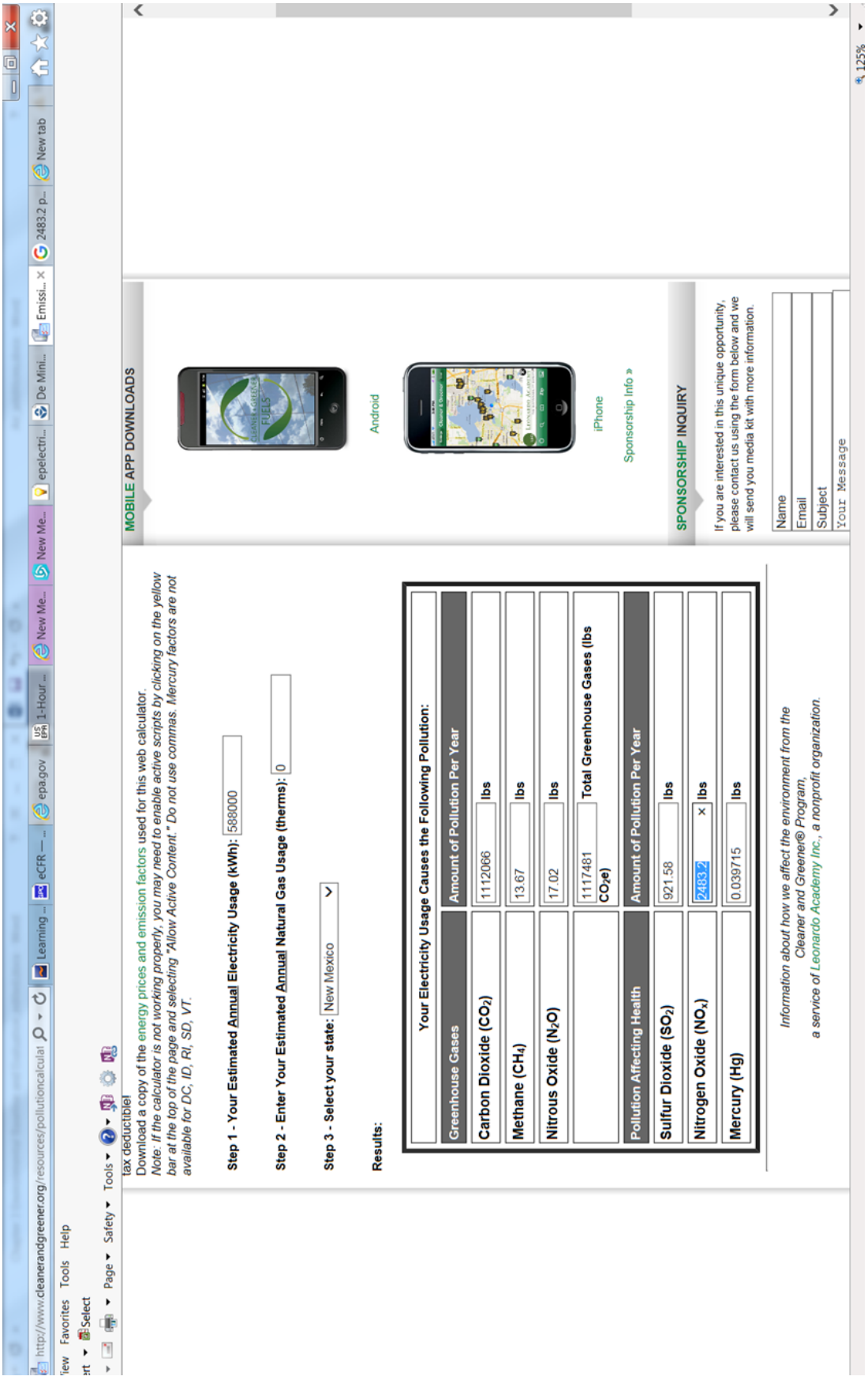
Project Comments

Table B-1 documents the comments received as part of the agency coordination efforts.

Table B-1: Agency Coordination Comments

Comment Number	Solicitation Type	Agency	Comment	Response
1	Letter dated 03/18/2018	New Mexico Dept. of Fish and Game	Open trenches can unintentionally trap small mammals, amphibians, and reptiles, and can cause injury to large mammals. CBP should implement our suggested BMPs to avoid significant adverse effects to wildlife from implementation of this project.	BMPs adopted by CBP specifically address animal entrapment and call for all trenches to be covered each night; to include ramps at least every 1000 feet; and require morning inspections to ensure no animals are trapped in active trenches.
2	Emails dated 01/31/2018 – 02/05/2018	USFWS	A member of an experimental population of Mexican Wolf is known to be present in Dona Ana County not far from the project site.	The Mexican Wolf is a member of an experimental population of reintroduced wolves and under the provisions of the ESA section 10(j) are to be treated as threatened rather than endangered. In addition this wolf has not been present within the project corridor or near the proposed staging areas or access roads.

APPENDIX C: AIR POLLUTION CALCULATIONS


http://www.cleanerandgreener.org/resources/pollutioncalculat
Favorites Tools Help
Page Safety Tools
tax deductible!
Download a copy of the energy prices and emission factors used for this web calculator.
Note. If the calculator is not working properly, you may need to enable active scripts by clicking on the yellow bar at the top of the page and selecting "Allow Active Content." Do not use commas. Mercury factors are not available for DC, ID, RI, SD, VT.
Step 1 - Your Estimated Annual Electricity Usage (kWh): 588000
Step 2 - Enter Your Estimated Annual Natural Gas Usage (therms): 0
Step 3 - Select your state: New Mexico
Results:
Your Electricity Usage Causes the Following Pollution:
Greenhouse Gases
Amount of Pollution Per Year
Carbon Dioxide (CO2) 1112066 lbs
Methane (CH4) 13.67 lbs
Nitrous Oxide (N2O) 17.02 lbs
1117481 Total Greenhouse Gases (lbs CO2e)
Pollution Affecting Health
Amount of Pollution Per Year
Sulfur Dioxide (SO2) 921.58 lbs
Nitrogen Oxide (NOx) 2483.2 lbs
Mercury (Hg) 0.039715 lbs
Information about how we affect the environment from the Cleaner and Greener® Program, a service of Leonardo Academy Inc., a nonprofit organization.
MOBILE APP DOWNLOADS
Android
iPhone
Sponsorship Info »
SPONSORSHIP INQUIRY
If you are interested in this unique opportunity, please contact us using the form below and we will send you media kit with more information.
Name
Email
Subject
Your Message
125%

APPENDIX D: ACRONYMS

2008 ESP	Environmental Stewardship Plan for Construction, Operation, and Maintenance of Tactical Infrastructure, Segments JV-1 through JV-3
2015 EA	Environmental Assessment for Repair and Maintenance of Tactical Infrastructure, Office of Border Patrol, El Paso Sector, New Mexico Stations and accompanying Finding of No Significant Impact
AOR	Area of Responsibility
AST	above-ground storage tank
ASTM	American Society of Testing and Materials
AQCR	air quality control region
BCT	Bat Conservation Trust
BEA	Bureau of Economic Analysis
BMP	best management practice
BLM	Bureau of Land Management
BLS	U.S. Bureau of Labor Statistics
CAA	Clean Air Act
CBP	U.S. Customs and Border Protection
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	U.S. Code of Federal Regulations
CM&R	Construction Mitigation and Restoration
CO	carbon monoxide
CWA	Clean Water Act
dBA	decibel—A-weighted scale
DHS	Department of Homeland Security
EA	Environmental Assessment
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESP	Environmental Stewardship Plan
FR	Federal Register
IIRIRA	Illegal Immigration Reform and Immigrant Responsibility Act
LED	light-emitting diode
MBTA	Migratory Bird Treaty Act
mph	miles per hour
NAAQS	National Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMBGMR	New Mexico Bureau of Geology and Mineral Resources
NMDGF	New Mexico Department of Game and Fish
NMED	New Mexico Environment Department
NMEDD	New Mexico Economic Development Department
NMDOT	New Mexico Department of Transportation

NO_2	nitrogen dioxide
NRHP	National Register of Historic Places
O_3	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PCE	primary constituent element
PCPI	per capita personal income
PEA	Programmatic Environmental Assessment
PM2.5	Particulate < 2.5 micrometers
PM10	Particulate < 10 micrometers
POE	Port of Entry
POL	petroleum, oil, and lubricants
ppm	parts per million
ROI	region of influence
Secretary	Secretary of Homeland Security
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
TI	tactical infrastructure
TNW	traditional navigable water
tpy	tons per year
USACE	U.S. Army Corps of Engineers
USBP	U.S. Border Patrol
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USIBWC	U.S. Section, International Boundary Water Commission
UST	underground storage tank
UTM	Universal Transverse Mercator
WoUS	Waters of the United States