



U.S. Department of the Interior
Bureau of Land Management

April 2024

**Consolidated Towers and Surveillance Equipment
Environmental Assessment**

DOI-BLM-NM-L000-2024-0017-EA



Department of Homeland Security
U.S. Customs and Border Protection
U.S. Border Patrol
Program Management Office Directorate
Consolidated Tower & Surveillance Equipment
Luna, Doña Ana, Hidalgo, Sierra Counties, New Mexico

Signature and Title of Project Lead

Signature and Title of Planning and Environmental Coordinator

**Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005
575-525-4300**

**Michelle Barnes
Border Patrol Headquarters
Program Management Office Directorate
1300 Pennsylvania Ave, NW
6.5E Mail Stop 1039
Washington, DC 20004**

TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION.....	4
1.1. Purpose and Need.....	4
1.2. Decision to be Made	5
1.3. Land Use Plan Conformance	5
1.4. Scoping and Issues.....	5
<i>1.4.1. Internal Scoping.....</i>	<i>5</i>
<i>1.4.2. Issues.....</i>	<i>6</i>
CHAPTER 2. ALTERNATIVES.....	9
2.1. Alternative A – Proposed Action	9
<i>2.1.1. Actions Common to All Proposed CTE Sites.....</i>	<i>10</i>
<i>2.1.2. Design Features</i>	<i>11</i>
2.2. Alternative B – No Action Alternative	16
2.3. Alternatives Considered but Dismissed.....	16
CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS	17
3.1. Introduction	17
3.2. Cumulative Actions.....	17
<i>3.2.1. Past and Present Actions</i>	<i>18</i>
<i>3.2.2. Reasonably Foreseeable Future Actions</i>	<i>18</i>
3.3. Issue 1: How would ground-disturbing activities from CTSE deployment (installation, operation, maintenance, and repair) activities potentially impact land use? 18	
<i>3.3.1. Affected Environment.....</i>	<i>18</i>
<i>3.3.2. Environmental Impacts</i>	<i>18</i>
3.4. Issue 2: How would ground-disturbing activities from CTSE deployment (installation, operation, maintenance, and repair) activities potentially impact vegetation resources?	19
<i>3.4.1. Affected Environment.....</i>	<i>19</i>
<i>3.4.2. Environmental Impacts</i>	<i>19</i>
3.5. Issue 3: How would ground-disturbing activities from CTSE deployment (installation, operation, maintenance, and repair) activities potentially impact wildlife habitat?	21
<i>3.5.1. Affected Environment.....</i>	<i>21</i>
<i>3.5.2. Environmental Impacts</i>	<i>21</i>
CHAPTER 4. CONSULTATION AND COORDINATION	23
4.1. Consultation and Coordination.....	23

4.1.1. <i>Consultation and Agency Coordination</i>	23
4.2. Federal and State Agency Coordination	23
4.2.1. <i>Federal Agencies</i>	23
4.2.2. <i>State Historic Preservation Office</i>	24
4.2.3. <i>Tribes and Nations</i>	24
CHAPTER 5. LIST OF PREPARERS	26
CHAPTER 6. REFERENCES	27

1 **CHAPTER 1. INTRODUCTION**

2 U.S. Customs and Border Protection (CBP) is the law enforcement component of the Department
3 of Homeland Security (DHS) responsible for securing the border and facilitating lawful
4 international trade and travel. U.S. Border Patrol (USBP) is the uniformed law enforcement
5 component within CBP responsible for securing the Nation’s borders against the illegal entry of
6 people and goods between Ports of Entry. As CBP agents often work in remote areas, providing
7 improved surveillance detection capabilities where none exist is critical to mission execution and
8 vital to agent safety.

9 The Bureau of Land Management (BLM) is an agency within the United States Department of
10 the Interior responsible for administering federal lands. The mission of the BLM is to sustain the
11 health, diversity, and productivity of public lands for the use and enjoyment of present and future
12 generations.

13 This Environmental Assessment (EA) analyzes the potential environmental consequences of
14 deploying and operating 14 Integrated Surveillance Tower (IST) - Consolidated Tower and
15 Surveillance Equipment (CTSE) at sites administered by BLM Las Cruces District Office
16 (LCDO) within the U.S. Border Patrol (USBP) El Paso Sector (EPT) Area of Responsibility
17 (AOR). The CTSEs would provide long-range, persistent surveillance, enabling USBP personnel
18 to detect, track, identify, and classify illegal entries through a series of integrated sensors and
19 tower-based surveillance equipment. The proposed CTSE Program represents a technology
20 solution for the rugged terrain within the USBP EPT AOR.

21 The Proposed Action constitutes a federal action and has the potential to affect the condition of
22 the physical, biological, and human environment of public lands administered by the BLM. As
23 such, the Proposed Action must be analyzed pursuant to the National Environmental Policy Act
24 of 1969 (NEPA). Under NEPA, federal agencies must carefully consider environmental concerns
25 in their decision-making processes and provide relevant information to the public for review and
26 comment. CBP has prepared this EA in compliance with NEPA and other relevant federal and
27 state laws and regulations. This EA contains analyses consistent with NEPA, Council on
28 Environmental Quality (CEQ) regulations, BLM policy, and DHS policy. It discloses the
29 potential effects on the human and biological environment anticipated to result from
30 implementation of the Proposed Action.

31
32 **1.1. Purpose and Need**

33 The goal of the Proposed Action for CBP is to acquire and deploy technology-based tower
34 surveillance solutions to decrease illegal cross-border activities and deter and prevent illegal
35 entries in the USBP EPT AOR.

36
37 The objective for the Proposed Action is to provide the following:

- 38
39 • Adequate surveillance coverage in the USBP EPT AOR
40 • Sustained safety of CBP/USBP agents through improved communication coverage and
41 technology
42 • Opportunity for future expansion of communication services, as necessary
43

1 The Purpose and Need for the Proposed Action is established by the BLM’s responsibility under
2 the Federal Land Policy and Management Act of 1976 (FLPMA) to respond to a right-of-way
3 (ROW) grant application for the deployment, operation, and maintenance of surveillance towers.
4 BLM’s purpose is to respond to the CBP application for legal use and access across BLM-
5 managed lands by granting a new ROW. The BLM would consider the application in accordance
6 with 43 CFR 2800 “Rights-of-Way” and under the FLPMA. The need for the BLM’s action is
7 established by the policies and mandates set forth in the White Sands and Mimbres Resource
8 Management Plans (RMPs), and the BLM’s responsibility under Title V of the FLPMA, as
9 amended (43 United States Code [USC] 1761-1771). As such, the BLM is required to respond to
10 the application for ROW submitted by CBP pursuant to 43 CFR 2804.12.

11 **1.2. Decision to be Made**

12 Consideration of the application to issue a ROW for Facilities on Federal Lands and Property
13 (SF-299) is a federal action requiring compliance with the NEPA and its implementing
14 regulations. The BLM-LCDO would decide whether to issue a new ROW for the deployment of
15 CTSEs on public land, as established by Title V of FLPMA. The decision to be made by the
16 BLM is whether to issue a ROW for all, part(s) or none of the 14 CTSEs (Proposed Action) on
17 public lands analyzed in this EA. The Authorized Office (AO) for the ROW grant is the LCDO
18 District Manager and or representative. Based on the information provided, the AO would decide
19 whether to grant CBP the desired ROW actions to construct, operate, maintain, and terminate 14
20 CTSEs on public land, and if so, under what terms, conditions, and stipulations.

21 **1.3. Land Use Plan Conformance**

22 There are 13 CTSE sites in Luna, Hidalgo and Doña Ana Counties, and this Proposed Action
23 conforms to the Mimbres Resource Management Plan (RMP) (BLM, 1993) and is consistent
24 with the following program objective: “The program is responsible for granting rights-of-ways
25 across public land,” (p. 2-9). In addition, the Proposed Action is specifically provided for in
26 decision 11 of the Mimbres RMP Record of Decision (BLM, 1993a), which states: “Issue
27 ROWs, Leases, and Permits,” (p. S-1).

28 There is one CTSE site in Sierra County, and the Proposed Action conforms to the White Sands
29 Resource Area RMP (BLM, 1986) and is consistent with the following program objective:
30 “BLM grants utility and transportation rights-of-way (ROWs) leases, and permits to individuals,
31 businesses, and governmental entities for use of the public land” (p. 11).

32 **1.4. Scoping and Issues**

33 *1.4.1. Internal Scoping*

34 The CTSE site selection process is based on initial operational requirements and assessment by
35 USBP agents at sector and station levels. Operationally preferred site locations are selected based
36 on knowledge of the terrain, environment, land ownership, and operational requirements.
37 Mapping programs, modeling, and communications analysis processes are also utilized to
38 develop a laydown that achieved both optimal surveillance and communications capabilities with
39 the minimum number of tower sites.

1 Sites are evaluated for laydown inclusion by the project team and representatives from EPT and
 2 stations. Site evaluation includes site visits. During these site visits, project team personnel,
 3 including Border Patrol Program Management Office Directorate (PMOD) and USBP, evaluated
 4 each of the locations based on accessibility, constructability, operability, and environmental
 5 considerations. Evaluation considerations included, but were not limited to, the following:

- 7 • Proximity to existing roads and the potential need for new access roads or improvements
 8 to existing roads
- 9 • Proximity to a power source
- 10 • Terrain, slope, soil type, drainage, available space
- 11 • Proximity to sensitive biological and cultural resources, Waters of the United States,
 12 floodplains, and wetlands
- 13 • Surrounding viewshed

14
 15 *1.4.2. Issues*

16 Using the scoping comments submitted and input from the Bureau of Land Management Las
 17 Cruces District Office (BLM LCDO) Interdisciplinary team, a list of issues to analyze in detail in
 18 this EA was developed in accordance with guidelines set forth in the Bureau of Land
 19 Management National Environmental Policy Handbook H-1790-1 (BLM 2008). The key issues
 20 identified internally during CBP and BLM LCDO agency scoping are summarized in Table 1-1.
 21 Impact Indicators in Table 1-1 are selected to describe the difference between the baseline
 22 condition of the affected environment and the condition of the environment after implementation
 23 of the proposed action.

24
 25 **Table 1-1. Issues Identified for Detailed Analysis in this EA.**

ISSUE #	ISSUE STATEMENT	IMPACT INDICATOR
Issue 1	How would ground-disturbing activities from CTSE deployment (installation, operation, maintenance, and repair) activities potentially impact land use?	Acres
Issue 2	How would ground-disturbing activities from CTSE deployment (installation, operation, maintenance, and repair) activities potentially impact vegetation resources?	Acres
Issue 3	How would ground-disturbing activities from CTSE deployment (installation, operation, maintenance, and repair) activities potentially impact wildlife habitat?	Acres

26
 27 The following potential issues were evaluated and are not discussed in further detail in this Draft
 28 EA for the reasons described in Table 1-2. The impacts of the Proposed Action were considered
 29 to either not be significant or to be sufficiently mitigated.

1 **Table 1-2. Resources and resource uses not significantly impacted by the proposed action.**

NON-ISSUE STATEMENT	RATIONALE
<p>How would CTSE deployment (installation, operation, maintenance, and repair) activities impact the air resource?</p>	<p>Eliminated from detailed analysis because the impact to the air resource is low and adheres to the BLM LCDO’s 2019 General Project Design Features/Guide Stipulations and Road Construction Stipulations. In addition, any impacts to air quality from vehicles, road dust, constructing and operating CTSE would be temporary and of short duration. In addition, all equipment used would be well maintained and functioning properly, which will also reduce air quality impacts.</p>
<p>How would CTSE deployment (installation, operation, maintenance, and repair) activities impact the soil resource?</p>	<p>Eliminated from detailed analysis because proposed locations would have no new ground disturbance and are stationed along existing roads, two-tracks, as well as in areas with prior vegetation clearing and ground disturbance.</p>
<p>How would construction and operation activities associated with Border Patrol CTSE impact the establishment or spread of class A, B, C, or species of concern relating to Noxious / Invasive Weeds?</p>	<p>Design features would be incorporated into the ROW grant. Specifically, CBP as the ROW holder, would be responsible for conducting a survey for and control of noxious weeds along the route to access sites, for each site to receive equipment, and where aggregate would be sourced. If during construction or use, noxious weeds are identified that were not originally encountered during the survey, the project applicant would avoid driving vehicles and equipment through or over the infested area. If avoidance measures cannot be taken within the area originally cleared, construction would cease, and the BLM LCDO AO shall be contacted.</p> <p>Any use of herbicides/pesticides would comply with the applicable Federal and State laws.</p>
<p>How would CTSE deployment (installation, operation, maintenance, and repair) potentially impact the integrity of cultural sites?</p>	<p>Section 106 consultation was completed with New Mexico SHPO on December 8, 2023. Design features would be implemented to offset any potential adverse impacts to cultural resources. This would include construction contract language that identifies a process for unanticipated archaeological sites or human burials that may be discovered during construction.</p>
<p>How would CTSE deployment (installation, operation, maintenance,</p>	<p>Project locations are on a variety of geologic units, which vary in Potential Fossil Yield Classification</p>

NON-ISSUE STATEMENT	RATIONALE
and repair), particularly grubbing and caliche pad construction impact paleontological resources?	from 1 (very low) to 4 (high) and U (unknown). Plant grubbing would have limited ground disturbance, and any needed caliche pad construction would cover the existing geology. If paleontological resources exist in the subsurface, these activities should not disturb them. Should paleontological resources be discovered during the project, the design features in this EA would protect them.
How would CTSE deployment (installation, operation, maintenance, and repair) potentially impact nesting migratory birds?	Design features would be implemented to minimize potential adverse impacts from deployment activities during the bird nesting season.
How would ground-disturbing activities from CTSE construction and operation activities impact the wildlife and special status species?	Eliminated from detailed analysis because the proposed locations would have no new ground disturbance and are stationed along existing roads, two-tracks, as well as in areas with prior vegetation clearing and ground disturbance. Biological surveys were performed in April 2023. The results of these surveys show that there are no special status species present at the proposed locations. The new ground disturbance that would occur is in habitat that is widespread and common in the area.
How would CTSE deployment (installation, operation, maintenance, and repair) impact the visual resource?	There are no sensitive receptors (e.g., residential, cultural, Class I and II).
How would CTSE deployment (installation, operation, maintenance, and repair) impact climate change?	The anticipated level of carbon dioxide equivalent is estimated to be 146 tpy. This anticipated level does not exceed the potential to emit of 75,000 tpy of greenhouse gases (GHGs) GHGs include water vapor, carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), fluorinated gases including chlorofluorocarbons (CFC) and hydrochlorofluorocarbons (HFC), and halons, as well as ground level O ₃ . (U.S. Energy Information Administration, 2022).
How would CTSE deployment (installation, operation, maintenance,	Eliminated from detail analysis because the potential impact would be low to the environmental justice communities that are present within the USBP EPT

NON-ISSUE STATEMENT	RATIONALE
and repair) activities impact environmental justice?	AOR. The impact is low due to in part the 0.229-acre CTSE footprint and of the 14 locations for the CTSEs, the closest CTSE is approximately 6 to 7 air miles from an environmental justice community. No residential areas are within or adjacent to the proposed CTSE sites.

1
2
3
4
5
6
7
8
9
10
11
12

CHAPTER 2. ALTERNATIVES

2.1. Alternative A – Proposed Action

The Proposed Action consists of the deployment (i.e., installation, operation, maintenance, and repair) of fourteen (14) Consolidated Towers and Surveillance Equipment (CTSE) in U.S. Border Patrol (USBP) El Paso Sector (EPT) - Truth or Consequences (TCN), Santa Teresa (STN), Deming (DNM), and Lordsburg (LOB) Stations’ Area of Responsibility (AOR) in New Mexico.

Table 2-1. Proposed CTSE Sites

SITE NAME	COUNTY
Radars	Luna
Vineyard	Hidalgo
Microwave Tower	Hidalgo
Old Animas	Hidalgo
Chato Road	Hidalgo
Hwy 9 MM2	Hidalgo
Monument 5	Doña Ana
Monument 7	Doña Ana
Monument 8 Alt	Doña Ana
Monument 11	Doña Ana
Monument 13	Doña Ana
Monument 15	Luna
MM411	Doña Ana
TCN Border Patrol Station	Sierra

13

1 2.1.1. Actions Common to All Proposed CTE Sites

2 2.1.1.1. *Criteria for Site Selection*

3 The proposed CTSE site selection process is based on initial operational requirements and
4 assessment by USBP agents at sector and station levels. Operationally preferred site locations are
5 selected based on knowledge of the terrain, environment, land ownership, and operational
6 requirements. Mapping programs, modeling, and communications analysis processes are also
7 utilized to develop a laydown that achieved both optimal surveillance and communications
8 capabilities with the minimum number of tower sites. Sites are evaluated for laydown inclusion
9 by the project team and representatives from EPT and stations. Site evaluation includes site
10 visits. During these site visits, project team personnel, including Border Patrol Program
11 Management Office Directorate (PMOD) and USBP, evaluated each of the locations based on
12 accessibility, constructability, operability, and environmental considerations. Evaluation
13 considerations included, but were not limited to, the following:

- 14 • Proximity to existing roads and the potential need for new access roads or improvements
15 to existing roads
- 16 • Proximity to a power source
- 17 • Terrain, slope, soil type, drainage, available space
- 18 • Proximity to sensitive biological and cultural resources, waters of the United States,
19 floodplains, and wetlands
- 20 • Surrounding viewshed

21
22 2.1.1.2. *CTSE Characteristics*

23 The CTSE consists of an up to 120-ft. relocatable trailer-based trailer system, hybrid power
24 system, sensors, and multi modal communications.

25
26 The CTSE configuration includes:

- 27 • Tower staging area not to exceed 100-ft. x 100-ft.
- 28 • Permanent site footprint not to exceed 60-ft. x 60-ft.
- 29 • Solar panels and battery power as the primary power source
- 30 • Backup propane generators with capacity less than 15-Kw on the towable trailer and a
31 backup propane tank
- 32 • Minimum 8-ft. tall non-ground penetration security fence with access gates.
- 33 • Grounding rods inserted into the soil to protect equipment from lightning strikes.
- 34 • Guy wires to stabilize the mast and are attached to the system structure and outriggers,
35 not the ground.

36
37 The security fence is a minimum of 8-ft. in height from ground level and would enclose an area
38 of 60-ft. x 60-ft. or necessary area determined by the footprint of the designated tower. The fence
39 is non- ground penetrating and is designed to be non-scalable. It can be deployed on uneven

1 ground with a slope of up to 10 degrees. The fence components are transportable on a trailer that
2 can be pulled by a ¾ ton rated pick-up truck (Appendix A).

3 4 2.1.1.3. *Site Preparation*

5 Site preparation consists of the clearance of any vegetation that is in the site footprint determined
6 by the site designed. The exact work to be done is dependent on the existing conditions at each
7 site. The pad would be constructed as necessary for the designated tower size and the approach
8 to pad surface from access road would be ensured. The site pad would be compact and level to
9 hold the relocatable tower. To achieve this caliche or gravel would be added, as needed.

10 The installation of the CTSE would comprise of the system being towed to the site via a heavy-
11 duty pickup truck. Crews would use approved roads and park in approved areas. Sites may
12 require two weeks for setup and testing. Once operational, the towers require periodic (monthly
13 or bi-monthly), and emergency maintenance as needed. Setup and maintenance would occur
14 during daylight hours. The installation team would mount the sensors on the mast, lift the mast to
15 the operating height, stabilize the tower/outriggers, connect a grounding wire, power on the
16 system, confirm connectivity, ensure the system is operationally stable, and depart the site.

17 18 2.1.2. *Design Features*

19 This chapter describes the design features that would be implemented to reduce or eliminate
20 potential adverse impacts on the human and natural environments. Many of these measures have
21 been incorporated as standard operating procedures by CBP on past projects.

22 23 Erosion

- 24 • Erosion issues shall be repaired as discovered, as directed by the Authorized Officer
25 (AO).
- 26 • No activities shall be performed during periods when the soil is too wet to adequately
27 support construction equipment. If such equipment creates ruts in excess of three inches
28 deep, the soil shall be deemed too wet to support construction equipment.
- 29 • CBP shall recontour disturbed areas, or designated sections of the authorized area by
30 grading to restore the sites to approximately the original contour of the ground, as
31 determined by the AO.
- 32 • CBP shall, as directed by the AO, rectify backfill settling in the authorized area.

33 34 Herbicides

- 35 • CBP shall be responsible for conducting a survey for and control of noxious weeds along
36 the route to access sites, for each site to receive equipment, and where aggregate would
37 be sourced. If during construction or use, noxious weeds are identified that were not
38 originally encountered during the survey, CBP and its contractors shall avoid driving
39 vehicles and equipment through or over the infested area. If avoidance measures cannot
40 be taken within the area originally cleared, construction shall cease, and the AO shall be
41 contacted.
- 42 • Any use of herbicides/pesticides shall comply with the applicable Federal and State laws.
- 43 • Herbicides/pesticides shall be used only in accordance with their registered uses and

1 within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides,
2 CBP shall obtain from the AO written approval of a plan showing the type and quantity
3 of materials to be used, pest(s) to be controlled, method of application, location of storage
4 and disposal of containers, and any other information deemed necessary by the AO.

5 Emergency use of pesticides shall be approved in writing by the AO prior to use.

- 6 • Any gravel or fill to be used shall come from weed-free sources. Gravel pits and fill
7 sources shall be inspected to identify weed-free sources.
- 8 • No soil spoil that could potentially contain noxious weed seeds shall be transported out of
9 the area where it is created unless it has been treated with a pre-emergent herbicide or
10 brought to a temperature of 180° F for a period of 30 minutes.
- 11 • If equipment is going to be moved from one location to another equipment shall be power
12 washed or high-pressure cleaned. Equipment shall not move if ground conditions are
13 muddy.
- 14 • CBP shall be responsible for weed control on disturbed areas within the limits of the site.
- 15 • CBP is responsible for consultation with the AO and/or local authorities for acceptable
16 weed control methods, which include the Environmental Protection Agency (EPA) and
17 BLM requirements and policy.

18 19 Noxious Weeds

- 20 • No soil spoil that could potentially contain noxious weed seeds shall be transported out of
21 the area where it is created unless it has been treated with a pre-emergent herbicide or
22 brought to a temperature of 180° F for a period of 30 minutes.
- 23 • If equipment is going to be moved from one location to another equipment shall be power
24 wash or high-pressure cleaned. Equipment shall not move if ground conditions are
25 muddy.
- 26 • CBP shall be responsible for weed control on disturbed areas within the limits of the site.
- 27 • CBP is responsible for consultation with the AO and/or local authorities for acceptable
28 weed control methods, which include following the EPA BLM requirements and policy.

29 30 Unanticipated Paleontological Resource Discovery

- 31 • The operator shall immediately notify the BLM AO of any paleontological resources
32 discovered. The operator shall suspend all activities in the vicinity of such discovery
33 until notified to proceed by the AO and shall protect the discovery from damage or
34 looting.
- 35 • The AO shall evaluate, or shall have evaluated, such discoveries as soon as possible,
36 but not later than 10 working days after being notified.
- 37 • Appropriate measures to mitigate adverse effects to significant paleontological
38 resources shall be determined by the AO after consulting with the operator. Within
39 10 days, the operator shall be allowed to continue construction through the site or
40 shall be given of either (1) following the AO's instructions for stabilizing the fossil
41 resource in place and avoiding further disturbance to the fossil resources, or (2)
42 following the AO's instructions for mitigating impacts to the fossil resource prior to
43 continuing construction through the project area.

44 •

1 Soils

- 2 • Clearly demarcate the perimeter of all new areas to be disturbed using flagging or
3 temporary construction fencing. Do not allow any disturbance outside that perimeter.
4 • The area of disturbance shall be minimized by limiting deliveries of materials and
5 equipment to only those amounts needed for effective project implementation.
6 • Within the designated disturbance area, grading or topsoil removal shall be limited to
7 areas where this activity is needed to provide the ground conditions necessary for
8 deployment or maintenance activities.
9 • Only the road necessary for the deployment of tower sites shall be improved, maintained,
10 or repaired.
11 • Rehabilitation shall include revegetating or the distribution of organic and geological
12 materials over the disturbed area to reduce erosion while allowing the area to naturally
13 revegetate.
14 • Vehicular traffic associated with the deployment activities and operational support
15 activities shall remain on established roads to the maximum extent practicable.
16

17 Vegetative Habitat

- 18 • Native weed free seeds or plants shall be used to revegetate temporarily disturbed areas.
19 • Materials used for on-site erosion control shall be free of non-native plant seeds and other
20 plant parts to limit potential for infestation.
21 • Identify by its source location any fill material, sandbags, hay bales, and mulch brought
22 in from outside the project site. These materials shall be free of non-native plant seeds
23 and other plant parts to limit potential for infestation.
24 • Obtain materials such as gravel, topsoil, or fill from existing developed or previously
25 used sources that are compatible with the project site and are from legally permitted sites.
26 Do not use materials from undisturbed areas adjacent to the project site.
27

28 Wildlife Resources

- 29 • Anti-perching devices shall be incorporated into the site design and installed on the
30 CTSE.
31 • Visual deterrents shall be installed on guy wires to minimize bird strikes.
32 • The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712, [1918, as amended 1936,
33 1960, 1968, 1969, 1974, 1978, 1986 and 1989]) requires that federal agencies coordinate
34 with the U.S. Fish and Wildlife (USFWS) if a construction activity would result in the
35 *take* of a migratory bird. If construction or clearing activities are scheduled during the
36 breeding season (March 15 through September 15) within potential nesting habitats,
37 surveys shall be performed to identify active nests. If construction activities result in the
38 *take* of a migratory bird, then coordination with USFWS shall be required, and applicable
39 permits would be obtained prior to construction or clearing activities. Other mitigation
40 measures that would be considered are to install visual markers on any guy wires used,
41 and to schedule all construction activities outside nesting season, negating the
42 requirement for nesting bird surveys. The proposed communications tower would also
43 comply with USFWS guidelines for reducing fatal bird strikes on communications towers
44 (Clark, 2000) to the greatest extent practicable.

- 1 • CBP shall not, for any length of time, permit any pets inside the project site or adjacent
2 native habitats. This does not pertain to law enforcement animals.
3

4 Threatened and Endangered Species

- 5 • Deployment and maintenance activities for the Proposed Action shall occur during daylight
6 hours to the greatest extent practicable
7

8 Air Quality

- 9 • All equipment and vehicles shall be kept in good operating condition to minimize exhaust
10 emissions.
11

12 Noise

- 13 • All generators shall have an attached muffler or use other noise-abatement methods in
14 accordance with industry standards.
15 • Deployment and maintenance activities shall be conducted during daylight hours to avoid
16 nighttime noise impacts.
17 • If deployment or maintenance must occur during non-daylight hours, minimize the
18 duration and frequency of these activities to the greatest extent possible.
19 • All Occupational, Safety, and Health Administration (OSHA) requirements shall be
20 followed.
21 • All motor vehicles shall be properly maintained to reduce the potential for vehicle-related
22 noise.
23

24 Cultural Resources

- 25 • If unanticipated archaeological resources or human burial remains are discovered during
26 deployment or any other project-related activities or should known archaeological
27 resources be inadvertently affected in a manner that was not anticipated, the CBP or its
28 contractor shall immediately halt all activities in the immediate area of the discovery and
29 take steps to stabilize and protect the discovered resource as directed by BLM AO until it
30 can be evaluated by a qualified archaeologist and any relevant tribes.
31

32 Hazardous Materials

- 33 • Equipment shall be refueled in designated areas, and drip pans shall be provided for each
34 piece of equipment stored on site. Any hazardous material shall be disposed of offsite per
35 EPA procedures and guidelines.
36 • Spill Prevention, Control, and Countermeasures Plan (SPCCP) shall be developed and
37 implemented and deployment and maintenance sites.
38 • Where handling of hazardous and regulated waste or materials is required, all fuels, waste
39 oils, and solvents shall be collected and stored in clearly labeled tanks or drums within a
40 secondary containment system that consists of an impervious floor and bermed sidewalls
41 capable of containing the volume of the largest container stored therein.
42 • Implement proper and routine maintenance of all vehicles and other maintenance
43 equipment such that emissions are within the design standards of all maintenance

1 equipment. The refueling of machinery shall be conducted following accepted industry
2 guidelines, and all vehicles will have drip pans during storage to contain minor spills and
3 drips.

- 4 • No refueling or storage of oils or parking of vehicles shall take place within 100-ft. of
5 drainage.
- 6 • Nonhazardous waste materials and other discarded materials, such as construction waste,
7 shall be contained until removed from the construction and maintenance sites.
- 8 • Minimize site disturbance and avoid attracting predators by promptly removing waste
9 materials, wrappers, and debris from construction site. Any waste that must remain on-
10 site more than 12-hrs shall be properly stored in closed containers until disposal. All
11 food-related trash items such as wrappers, cans, bottles, and food scraps shall be
12 disposed of in closed containers and removed daily from the project site.
- 13 • Herbicide and pesticide applications must be made under the supervision of a licensed
14 applicator. A log of the chemical used, amount used, and specific location must be
15 maintained.
- 16 • Use a ground cloth or an oversized tub for tool cleaning. Properly dispose of the wastes
17 offsite, at an approved facility, in accordance with Federal, State, local, and tribal laws and
18 regulations.
- 19 • Tools shall not be cleaned in a natural drainage or over a storm drain.

20 21 Roadways and Traffic

- 22 • Vehicles shall travel, and equipment shall be transported on established roads with proper
23 flagging and safety precautions.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44

2.2. Alternative B – No Action Alternative

Under the No Action Alternative, the proposed CTSE would not be deployed to the USBP EPT AOR. This would prevent the enhancement of the USBP ability to detect and interdict cross-border violators. Therefore, operational efficiency and effectiveness would not be improved within the area covered by the proposed towers. USBP would continue to rely solely on traditional detection methodology that includes traditional sign detection, which requires both patrolling and dragging of roads. The No Action Alternative does not meet the CBP goals and objectives for this project.

2.3. Alternatives Considered but Dismissed

CBP evaluated existing technologies, such as Autonomous Surveillance Towers (AST) and Remote Video Surveillance Systems (RVSS) towers. The AST and RVSS towers are older tower technologies. The CTSE represents a new type of equipment and procurement process using a single program of record that allows CBP to utilize mid and long-range surveillance technologies.

1 **CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL**
2 **IMPACTS**

3
4 **3.1. Introduction**
5

6 This section of the EA describes the natural and human environment that exists within the
7 project area, and the potential impacts of the Proposed Action and No Action Alternative
8 outlined in Section 2.0 of this document.
9

10 Only those parameters with the potential to be affected by the Proposed Action are described, per
11 CEQ regulation (40 CFR 1502.2 [b]). The impact analysis presented in this EA is based upon
12 existing regulatory standards, scientific and environmental knowledge, and best professional
13 opinions. Some topics are limited in scope due to the lack of direct effect from the proposed
14 project on the resource, or because that resource is not located within the project area.
15 Per 40 CFR §1508.1(g), effects are defined as changes to the human environment from the
16 Proposed Action or alternatives that are reasonably foreseeable and have a close causal
17 relationship to the Proposed Action or alternatives, including those effects that occur at the same
18 time and place as the Proposed Action or alternatives and may include effects that are later in
19 time or farther removed in distance from the Proposed Action or alternatives.
20

21 For this EA, per 40 CFR §1508.1(g) effects are not considered if they are remote in time,
22 geographically remote, or would be a result of a lengthy causal chain. They were also not
23 considered if CBP has no ability to prevent the effect or if the effect would occur regardless of
24 the Proposed Action. Also, per 40 CFR §1501.3(b)(2), CBP has considered as appropriate to the
25 Proposed Action whether effects would be short-term, long-term, beneficial, or adverse. CBP
26 also considered the effects on public health and safety and whether effects would violate federal,
27 state, tribal, or local law protecting the environment.
28

29 Impacts (consequence or effect) can be either beneficial or adverse and can be either directly
30 related to the action or indirectly caused by the action. This also includes ecological (such as the
31 effects on natural resources and on the components, structures, and function of affected
32 ecosystems), aesthetic, historic, cultural, economic (such as the effects on employment), social,
33 and health effects. Direct impacts are those effects that are caused by the action and occur at the
34 same time and place (40 CFR 1508.8[a]). Indirect impacts are those effects that are caused by the
35 action and are later in time or further removed in distance but are still reasonably foreseeable (40
36 CFR 1508.8[b]).
37

38 **3.2. Cumulative Actions**

39 This section of the EA defines cumulative impacts, identifies past, present, and reasonably
40 foreseeable projects relevant to cumulative impacts, and analyzes the potential cumulative
41 impacts associated with the implementation of the Proposed Action and other projects/programs
42 planned within BLM ROW for these proposed sites in Doña Ana, Hidalgo, Luna, and Sierra
43 Counties.
44

1 3.2.1. *Past and Present Actions*

2 Past CBP projects regulated by NEPA include the Environmental Assessment Addressing
3 Proposed Tactical Infrastructure Maintenance and Repair Along the U.S./Mexico International
4 Border in New Mexico.

6 3.2.2. *Reasonably Foreseeable Future Actions*

7 With continued funding and implementation of CBP environmental design features, including
8 use of biological monitors, wildlife water systems, and restoration activities, adverse impacts due
9 to future and ongoing projects would be avoided or minimized. Recent, ongoing, and reasonably
10 foreseeable proposed actions would result in cumulative impacts; however, the cumulative
11 impacts would not be significant. CBP is currently planning, is conducting, or has completed
12 several projects within the project area:

- 14 • Maintenance and repair of existing communication and surveillance towers
- 15 • Maintenance and repair of tactical infrastructure
- 16 • Deployment, operation, and maintenance of Autonomous Surveillance Towers

18 **3.3. Issue 1: How would ground-disturbing activities from CTSE deployment
19 (installation, operation, maintenance, and repair) activities potentially impact land
20 use?**

22 3.3.1. *Affected Environment*

23 The proposed CTSE sites are in southern New Mexico within the northern portion of the
24 Chihuahuan Desert ecoregion. The topography of the area consists of broad desert valleys,
25 bordered by terraces, mesas, and mountain ranges.

27 All the sites except the TCN Border Patrol Station are located within rangeland with grazing
28 allotments. Grazing is a main economic driver of this area with millions of public land acres used
29 for livestock grazing. The TCN Border Patrol Station site is located within a fenced area of an
30 active USBP facility. The landcover for all sites is classified as shrubland.

32 Land use impacts are measured through the total acres converted from undeveloped rangeland
33 use to law enforcement activity use for the deployment of CTSE.

35 3.3.2. *Environmental Impacts*

37 Impacts of Alternative A – Proposed Action

38 Under the Proposed Action, there are 14 CTSE sites with a 60-ft by 60-ft (0.08-acres) footprint
39 resulting in an approximate total acreage of 1.2 acres (0.08-acres x 14-sites) of undeveloped land
40 that would be permanently converted to a developed land use. In addition, a fence would be
41 constructed around the 14 CTSE sites, resulting in a temporary impact of 0.229 acres for each
42 CTSE location, and a total acreage of 3.2 acres for all 14 CTSE sites. The direct impact from this
43 land conversion would be negligible due to the small size of the total, permanent tower footprint.

1
2 For cumulative impacts, a major impact would occur if any action were inconsistent with
3 adopted land use plans or if an action would substantially alter those resources required for,
4 supporting, or benefiting the current use. The proposed CTSE sites are within undeveloped
5 rangeland located in a rural area. The Proposed Action would convert approximately 60-ft. x 60-
6 ft. of undeveloped land per site to developed use. No other CBP actions would initiate an
7 increase of development in immediate vicinity of the project area; therefore, the Proposed
8 Action, when combined with past, present, and future actions in the area, would not be expected
9 to result in a major cumulative adverse impact.

10
11 Impacts of Alternative B – No Action Alternative

12 Under the No Action alternative, site preparation and tower deployments would not occur. No
13 land would be temporarily disturbed for tower deployment and there would be no permanent
14 land use conversions due to tower deployment; therefore, land use would not be impacted.

15
16 **3.4. Issue 2: How would ground-disturbing activities from CTSE deployment**
17 **(installation, operation, maintenance, and repair) activities potentially impact**
18 **vegetation resources?**

19
20 *3.4.1. Affected Environment*

21 The project area is located within the northern portion of the Chihuahuan Desert ecoregion.
22 Typical climate includes hot summers and cool, dry winters. Annual precipitation ranges from 6
23 to 20 inches, with a large part of the rain falling in the summer during monsoon season. The
24 topography of the Chihuahuan Desert consists of broad desert valleys bordered by terraces,
25 mesas, and mountain ranges. The Chihuahuan Desert is one of the largest and most diverse
26 deserts in the world. Unique habitat types include yucca woodlands, playas, and gypsum dunes.
27 Vast desert grasslands and a wide variety of yuccas and agaves, including many endemic species,
28 are also found in the Chihuahuan Desert (NPS, 2022).

29
30 Impacts to vegetation from the Proposed Action would occur through the permanent loss of
31 vegetation within the temporary and permanent footprints due to ground disturbing activities
32 associated with site preparation. Vegetation impacts are measured through the total loss of acres
33 from site preparation activities.

34
35 *3.4.2. Environmental Impacts*

36
37 Impacts of Alternative A – Proposed Action

38 The Proposed Action Alternative would have a permanent, impact on vegetation in the project
39 area. Approximately 3.2-acres of native vegetative communities would be directly impacted
40 because of the deployment of the CTSE. More specifically, it is estimated that approximately
41 1.2-acres (38%) of the 3.2-acres of locally and regionally common vegetative habitat would be
42 permanently cleared during site preparation and would be maintained to ensure safe visibility
43 conditions for Border Patrol agents. The proposed locations of the CTSE would have no new
44 ground disturbance and would be in areas with prior vegetation clearing and ground disturbance.
45 In addition, moving equipment and materials to the sites could result in excess crushing or

1 trampling of vegetation, resulting in temporary impacts to vegetation in vicinity of the CTSE
2 footprint.

3
4 The permanent loss of the limited amount of acreage permanently impacted would not adversely
5 affect the population viability of any plant species in the region. Design features would be
6 implemented to ensure vegetation outside the project area would not be adversely impacted and
7 to ensure that the Proposed Action does not actively promote the establishment of non-native and
8 invasive species in the area (see Section 2.1.4).

9
10 By implementing design features to reduce the potential for excess trampling and invasive
11 species, the Proposed Action would result in short-term, negligible adverse impacts to vegetation
12 communities during deployment and maintenance activities. It is anticipated that vegetation
13 communities would recover in a relatively short period of time from any direct disturbance, and
14 no long-term adverse significant impacts would occur.

15
16 The Proposed Action could result in indirect and long-term beneficial impacts on vegetative
17 habitat by reducing the adverse impacts of illegal cross-border violator activities in the project
18 area. The proposed CTSE would enhance the CBP detection and threat classification capabilities
19 and increase the efficiency of operational activities within the area of tower coverage. Over time
20 the enhancement of detection capabilities and an increase in operational
21 efficiency could increase the deterrence of illegal cross-border violator activity within the area of
22 tower coverage and decrease the frequency of Border Patrol agents patrolling the area.

23
24 For cumulative impacts, a major impact on vegetation would occur if a substantial reduction in
25 ecological processes, communities, or populations would threaten the long-term viability of a
26 species or result in the substantial loss of a sensitive community that could not be offset or
27 otherwise compensated. The Chihuahuan Desert ecoregion encompasses approximately 250,000
28 square miles in North America; therefore, due to the permanent impact of only approximately 1.2
29 acres on native vegetation, in conjunction with other past, ongoing, and proposed regional
30 projects, the Proposed Action would not create a major cumulative effect on vegetative habitat in
31 the region.

32 Impacts of Alternative B – No Action Alternative

33 Under the No Action Alternative, no direct impacts on vegetative would occur. However,
34 vegetation within the vicinity of the proposed CTSE are directly and indirectly affected by illegal
35 cross-border violator pedestrian traffic and consequent law enforcement activities. These areas
36 experience damage to native vegetation because of these activities. Under the No Action
37 Alternative, USBP detection and threat classification capabilities would not be enhanced, and
38 operational efficiency would not be improved within the area of tower coverage, so illegal cross-
39 border violator activities would continue to impact vegetation in the project area.

40
41
42 Vegetative habitat would not be disturbed or removed under the No Action Alternative since the
43 proposed CTSE would not be deployed. However, long-term direct and indirect impacts on
44 vegetation communities would continue because of cross border violator activities that create

1 unauthorized roads and trails, damage vegetation and promote the dispersal and establishment of
2 nonnative invasive species.

3
4 **3.5. Issue 3: How would ground-disturbing activities from CTSE deployment**
5 **(installation, operation, maintenance, and repair) activities potentially impact**
6 **wildlife habitat?**
7

8 *3.5.1. Affected Environment*

9 The Chihuahuan Desert is home to more than 170 species of amphibians and reptiles and
10 approximately 400 bird species. Its grasslands serve as wintering grounds for a sizable
11 proportion of the North American Great Plains birds. The desert also supports a wide range of
12 mammals (more than 130 species) such as the mule deer (*Odocoileus hemionus*), pronghorn
13 (*Antilocapra americana*), jaguar (*Panthera onca*), javelina (*Tayassu tajacu*), and grey fox
14 (*Urocyon cinereoargenteus*) (NPS, 2022).

15
16 Impacts to wildlife resources would occur through the permanent loss of habitat because of
17 vegetation removal and ground disturbing activities associated with site preparation. Wildlife
18 impacts are measured through the total loss of acres of habitat because of site preparation
19 activities.

20
21 *3.5.2. Environmental Impacts*
22

23 Impacts of the Alternative A – Proposed Action

24 The permanent loss of approximately 1.2 acres would have a short-term, minor impact on
25 wildlife. Soil disturbance and operation of heavy equipment could result in the direct loss of less
26 mobile individuals such as lizards, snakes, and ground-dwelling species such as rodents and
27 rabbits. However, most wildlife would avoid direct harm by escaping to surrounding habitat. The
28 direct degradation and loss of habitat could also impact burrows and nests, as well as cover,
29 forage, and other important wildlife resources. The loss of these resources would result in the
30 displacement of individuals that would then be forced to compete with other wildlife for the
31 remaining resources. Although this competition for resources could result in a reduction of total
32 population size, such a reduction would be minimal in relation to total population size and would
33 not result in long-term effects on the sustainability of any wildlife species.

34
35 The wildlife habitat present in the project area is both locally and regionally common, and the
36 permanent loss of approximately 1.2 acres of wildlife habitat would not adversely affect the
37 population viability or fecundity of any wildlife species in the region.

38
39 A major impact on wildlife would occur if a substantial reduction in ecological processes,
40 communities, or populations would threaten the long-term viability of a species or result in the
41 substantial loss of a sensitive community that could not be offset or otherwise compensated. The
42 wildlife habitat present in the project area is both locally and regionally common. Due to the
43 permanent impact of only approximately 1.2 acres of native habitat, in conjunction with other
44 past, ongoing, and proposed regional projects, the amount of habitat potentially removed would

1 be minor on a regional scale. The Proposed Action would not create a major cumulative effect on
2 wildlife populations in the region.

3
4 Impacts of the Alternative B – No Action Alternative

5 Under the No Action alternative, site preparation and tower deployments would not occur. There
6 would be no ground disturbing activities associated with site preparation and tower deployment.
7 Therefore, there would be no impacts to wildlife from ground disturbing activities. However, off-
8 road cross border violator activity and required interdiction actions would continue to degrade
9 wildlife habitat through a loss of cover, forage, nesting, or other opportunities and potentially a
10 loss of suitable habitat over large areas.

1 **CHAPTER 4. CONSULTATION AND COORDINATION**
2

3 **4.1. Consultation and Coordination**

4 4.1.1. *Consultation and Agency Coordination*

5 Consultation and coordination with state and federal agencies and federally recognized tribes
6 began in November 2023. Coordination was conducted with the following agencies and
7 federally recognized tribes:
8

- 9 • U.S. Department of the Interior
 - 10 ○ Bureau of Land Management - Las Cruces District Office
 - 11 ○ U.S. Fish and Wildlife Service
- 12 • New Mexico Historic Preservation Division
- 13 • Fort Sill Apache Tribe
- 14 • Hopi Tribe
- 15 • Mescalero Apache Tribe
- 16 • White Mountain Apache Tribe
- 17 • Ysleta del Sur Pueblo
- 18 • Comanche Indian Tribe
- 19 • Kiowa Tribe
- 20 • Navajo Nation
- 21 • Tesuque Pueblo
- 22 • White Mountain Apache Tribe

23
24 Correspondence letters can be found in Appendix C.
25

26 **4.2. Federal and State Agency Coordination**

27 4.2.1. *Federal Agencies*

28 Tino C. Aguilera
29 Realty Specialist
30 Bureau of Land Management
31 Las Cruces District Office
32 1800 Marquess Street
33 Las Cruces, NM 88005
34 Office: (575) 525-4394
35 Email: Taguilera@blm.gov
36

37 Shawn Sartorius
38 Field Supervisor
39 United States Fish and Wildlife Service
40 New Mexico Ecological Services Field Office

1 2105 Osuna Road Ne
2 Albuquerque, NM 87113-1001
3 NMESFO@fws.gov
4

5 4.2.2. *State Historic Preservation Office*

6 Jeff Pappas, PhD
7 State Historic Preservation Officer and Director
8 New Mexico Historic Preservation Division
9 Department of Cultural Affairs
10 Bataan Memorial Building
11 407 Galisteo Street, Suite 236
12 Santa Fe, NM 87501
13

14 4.2.3. *Tribes and Nations*

15 Darren Cisco
16 Tribal Historic Preservation Officer
17 Apache Tribe of Oklahoma
18 510 E. Colorado St.
19 Anadarko, OK 73005
20

21 Martina Minthorn
22 Tribal Historic Preservation Officer
23 Comanche Nation
24 PO Box 908 Lawton, OK 73502
25

26 The Honorable Jeff Houser
27 Chairman
28 Fort Sill Apache Tribe of Oklahoma
29 Rt 2, Box 121
30 Apache, OK 73006
31

32 Stewart Koyiyumptewa
33 Tribal Historic Preservation Officer
34 The Hopi Tribe
35 Cultural Preservation Office
36 Kykotsmovi, AZ 86039
37

38 Jeffrey Blythe
39 Tribal Historic Preservation Officer
40 Jicarilla Apache Nation
41 PO Box 507
42 Dulce, NM 87528
43

1 The Honorable Lawrence SpottedBird
2 Chairman
3 Kiowa Tribe
4 Carnegie, OK 73015
5
6 Holly Houghton
7 Tribal Historic Preservation Officer
8 Mescalero Apache Tribe
9 P.O. Box 227
10 Mescalero, NM 88340
11
12 Richard Begay
13 Tribal Historic Preservation Officer/Department Manager
14 P.O. Box 4950
15 Window Rock, AZ 86515
16
17 Matt Reed
18 Tribal Historic Preservation Officer
19 Pawnee Nation of Oklahoma
20 PO Box 470
21 Pawnee, OK 75058
22
23 Dr. Henry Walt
24 Tribal Historic Preservation Officer
25 Pueblo of Isleta
26 PO Box 1270
27 Isleta, NM 87022
28
29 Lawrence Samuel
30 Tribal Historic Preservation Officer
31 Pueblo of Tesuque
32 RR 42, Box 360-T
33 Santa Fe, NM 87506
34
35 Mark Altaha
36 Tribal Historic Preservation Officer
37 White Mountain Apache Tribe
38 PO Box 1032
39 Fort Apache, AZ 85926
40
41 E. Michael Silvas
42 Governor
43 Ysleta del Sur Pueblo
44 PO Box 17579
45 El Paso, TX 79907

CHAPTER 5. LIST OF PREPARERS

Name	Agency/ Organization	Discipline/ Expertise	Experience	Role in Preparing EA
Jennifer Brown	LMI Government Consulting	Environmental Planning Specialist	5 years of environmental science and regulatory compliance	Research, environmental analysis, impact analysis, technical writing
Margaret Rockwell	LMI Government Consulting	Environmental Planning Specialist	14 years of environmental science and regulatory compliance experience	Research, environmental analysis, impact analysis, technical writing

CHAPTER 6. REFERENCES

- Bureau of Land Management (BLM) 2008. National Environmental Policy Act Handbook H-1790-1. Available at:
https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_h1790-1.pdf.
- Clark. (2000). *Service Guidance on the Siting, Construction, Operation, and Decommissioning of Communications Towers*. U.S. Fish and Wildlife Service Memorandum to Regional Directors from Director Jamie Rappaport Clark.
- NPS. (2022). Chihuahuan Desert Ecoregion. Retrieved from
<https://www.nps.gov/im/chdn/ecoregion.htm>.
- U.S. Energy Information Administration [EIA]. 2022. Energy and the environment explained. Retrieved from <https://www.eia.gov/energyexplained/energy-and-the-environment/greenhouse-gases-and-the-climate.php>.