

Final

Environmental Assessment

ADDRESSING THE
PROPOSED CONSTRUCTION, OPERATION, AND MAINTENANCE
OF A NEW U.S. BORDER PATROL
BROWN FIELD BORDER PATROL STATION IN DULZURA, SAN DIEGO COUNTY, CALIFORNIA



**Department of Homeland Security
U.S. Customs and Border Protection**

August 2019

Abbreviations and Acronyms

ACM	asbestos-containing material	dba	A-weighted decibel
ADL	aerially deposited lead	DEH	Department of Environmental Health
AOI	Area of Impact	DHS	Department of Homeland Security
AOR	Area of Responsibility	DNL	day-night average A-weighted noise level
ATV	all-terrain vehicle	DOC	Department of Conservation
BLM	Bureau of Land Management	EA	Environmental Assessment
BPS	Border Patrol Station	EIS	Environmental Impact Statement
BMP	best management practice	EISA	Energy Independence and Security Act
Cal Fire	California Department of Forestry and Fire Protection	EO	Executive Order
Cal-IPC	California Invasive Plant Council	EPACT	Energy Policy Act
Caltrans	California Department of Transportation	ESA	Environmental Site Assessment
CBP	U.S. Customs and Border Protection	FEMA	Federal Emergency Management Agency
CCR	California Code of Regulations	FHSZ	Fire Hazard Severity Zone
CDFW	California Department of Fish and Wildlife	FIRM	Flood Insurance Rate Map
CDI	construction and demolition and inert	FMMP	Farmland Mapping and Monitoring Program
CEQ	Council on Environmental Quality	FONSI	Finding of No Significant Impact
CEQA	California Environmental Quality Act	FPPA	Farmland Protection Policy Act
CFR	Code of Federal Regulations	ft ²	square foot/feet
cfs	cubic feet per second	GHG	greenhouse gas
CMP	Congestion Management Program	HCM	Highway Capacity Manual
CNDDDB	California Natural Diversity Database	I	Interstate
CO	carbon monoxide	LBP	lead-based paint
CRHR	California Register of Historical Resources	LID	low impact development
CWA	Clean Water Act	LOS	level of service
dB	decibel	MBTA	Migratory Bird Treaty Act

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mph	miles per hour	RCA	resource conservation area
MSCP	Multiple Species Conservation Program	ROI	region of influence
NAAQS	National Ambient Air Quality Standards	ROW	right-of-way
NAGPRA	Native American Graves Protection and Repatriation Act	RWQCB	Regional Water Quality Control Board
NEPA	National Environmental Policy Act	SDCFA	San Diego County Fire Authority
NHPA	National Historic Preservation Act	SDCWA	San Diego County Water Authority
NO _x	nitrogen oxides	SEL	sound exposure level
NPDES	National Pollutant Discharge Elimination System	SHPO	State Historic Preservation Officer
NRCS	Natural Resources Conservation Service	SO ₂	sulfur dioxide
NRHP	National Register of Historic Places	SPCC	Spill Prevention Control and Countermeasure
O ₃	ozone	SWPPP	Stormwater Pollution Prevention Plan
OHWM	ordinary high water mark	TCL	traditional/tribal cultural landscape
OSHA	Occupational Safety and Health Administration	TCP	traditional cultural place/property
OWTS	on-site wastewater treatment system	TCR	tribal cultural resource
PCB	polychlorinated biphenyl	tpy	tons per year
pCi/L	picocuries per liter	USACE	U.S. Army Corps of Engineers
PM ₁₀	particulate matter measured less than or equal to 10 microns in diameter	USBP	U.S. Border Patrol
PM _{2.5}	particulate matter measured less than or equal to 2.5 microns in diameter	USC	United States Code
PRC	Public Resources Code	USEPA	U.S. Environmental Protection Agency
PTSF	percent time spent following	USFWS	U.S. Fish and Wildlife Service
PWS	public water system	USGS	U.S. Geological Survey
		VOC	volatile organic compound
		WBDG	Whole Building Design Guide
		WoUS	waters of the United States

Cover Sheet

Final Environmental Assessment Addressing the Proposed Construction, Operation, and Maintenance of a New U.S. Border Patrol Brown Field Border Patrol Station in Dulzura, San Diego County, California

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

Affected Location: Dulzura, San Diego County, California.

Report Designation: Final Environmental Assessment (EA).

Abstract: The Department of Homeland Security, CBP proposes to construct, operate, and maintain a new USBP Brown Field Border Patrol Station on a 125.2-acre government-owned property in Dulzura, San Diego County, California. The Proposed Action would include construction of a main Border Patrol Station building designed to accommodate up to 400 USBP agents and support staff. Ancillary support facilities and structures would include a vehicle maintenance/all-terrain vehicle storage facility (including facility maintenance work area/shop and warehouse), outdoor tactical support areas, government and privately owned vehicle parking areas, vehicle wash rack, fuel island, canine kennel, communications tower, septic system and leach field, water supply facility, stormwater management system, helipad, roadways, emergency generators, and utilities.

This Final EA analyzes and documents potential environmental consequences associated with the Proposed Action and No Action Alternative. The analyses presented in this Final EA indicate that implementation of the Proposed Action would not result in major, adverse environmental impacts, and a Finding of No Significant Impact is appropriate.

Status updates and information requests for this EA may be obtained via the CBP EA website at <http://www.cbp.gov/about/environmental-cultural-stewardship/cbp-environmental-documents> and by emailing John.P.Petrilla@cbp.dhs.gov, respectively.

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**ENVIRONMENTAL ASSESSMENT
ADDRESSING THE PROPOSED CONSTRUCTION,
OPERATION, AND MAINTENANCE
OF A
NEW U.S. BORDER PATROL
BROWN FIELD BORDER PATROL STATION
IN DULZURA, SAN DIEGO COUNTY, CALIFORNIA**



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U.S. CUSTOMS AND BORDER PROTECTION
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AUGUST 2019

Executive Summary

Introduction

The Department of Homeland Security, U.S. Customs and Border Protection (CBP) proposes to construct, operate, and maintain a new Brown Field Border Patrol Station (BPS) for the U.S. Border Patrol (USBP) on a 125.2-acre government-owned property in Dulzura, San Diego County, California, and move all activities from the existing facility to the new facility (i.e., Proposed Action). The Dulzura property was acquired primarily because it is suitable for the proposed Brown Field BPS; however, if the property is not used for the BPS it is also considered suitable for other CBP uses (CBP 2016a). These other potential uses for the Dulzura property are not part of the Proposed Action.

The existing Brown Field BPS is in San Diego, California, within a leased, privately owned facility in an industrial park. The existing BPS is outside of the Brown Field Station Area of Responsibility (AOR) and is 12.3 miles (21 miles via roadway) southwest of the USBP Highway 94 Vehicle Checkpoint, which is staffed and supported by USBP agents from the Brown Field BPS. The Brown Field Station AOR covers approximately 200 square miles of mostly mountainous terrain in southern San Diego County, California. The USBP Highway 94 Vehicle Checkpoint is on State Route 94 (i.e., Highway 94), approximately 0.3 mile southeast of the intersection of Highway 94 and Otay Lakes Road in Jamul, California.

CBP prepared this Environmental Assessment (EA) through coordination with federal, state, and local agencies; Native American tribes; and the public to identify and assess the potential impacts associated with the construction, operation, and maintenance of the proposed Brown Field BPS. This EA was prepared to fulfill the requirements of the National Environmental Policy Act (NEPA) of 1969 and meets the requirements of the California Environmental Quality Act (CEQA).

Purpose and Need

The purpose of the Proposed Action is to replace the existing, unsuitable Brown Field BPS with a new, fully functional BPS for 400 USBP agents and support staff that would allow USBP to meet its operational requirements to increase U.S./Mexico international border security within the USBP San Diego Sector, and reduce illegal cross-border activity within the Brown Field Station AOR.

The Proposed Action is needed because the existing BPS is undersized, outside of the Brown Field Station AOR, in need of extensive repairs, and no longer meets the needs of USBP. The existing BPS is on property leased from a private owner and lacks the features and space necessary to provide an adequate work environment (e.g., sufficient infrastructure, parking, storage, and security). The proposed BPS in Dulzura, California, would accommodate the current

level of staff, vehicles, and equipment, and all reasonably foreseeable growth. The BPS would provide modern, efficient, and safe working conditions and would allow USBP agents working in the Brown Field Station AOR to execute their mission of preventing terrorists and terrorist weapons, cross-border violators, drugs, and contraband from entering the United States.

Public Involvement

CBP initiated public scoping for the Proposed Action by providing a 30-day review period from December 27, 2016, to January 30, 2017. A letter was distributed to approximately 35 potentially interested federal, state, and local agencies; Native American tribes; and other stakeholder groups or individuals. Additionally, a Notice of Completion (for scoping) was submitted to the California State Clearinghouse (SCH Number 2016124001), which notified additional state agencies who were provided the opportunity to comment. All scoping comments received were considered during preparation of the Draft EA.

CBP notified relevant federal, state, and local agencies; appropriate Native American tribes and nations; and the public of the Draft EA and requested input regarding any environmental concerns they might have. As part of the NEPA process, CBP coordinated with agencies such as the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, California Office of Historic Preservation, California Department of Forestry and Fire Protection, California Department of Transportation (Caltrans), San Diego Regional Water Quality Control Board, and other federal, state, and local agencies and with appropriate Native American tribes and nations.

A Notice of Availability for the Draft EA and draft Finding of No Significant Impact was published in the *San Diego Union Tribune* and *Alpine Sun* on October 4, 2018. The Notice of Availability publications are intended to solicit comments on the Proposed Action and involve the local community in the decision-making process. Additionally, a Notice of Completion (for Draft EA) was submitted to the California State Clearinghouse, which notified additional state agencies.

During the 30-day public review and comment period for the Draft EA, CBP considered comment submissions by email and mail from the public; federal, state, and local agencies; Native American tribes; and stakeholder organizations. Substantive comments were incorporated into the Final EA.

Description of the Proposed Action

Alternative 1: Proposed Action. The Proposed Action would include the construction, operation, and maintenance of a new Brown Field BPS on a 125.2-acre government-owned property at the intersection of Highway 94 and Campbell Ranch Road in Dulzura, San Diego County, California. The main BPS building would accommodate 400 USBP agents and support staff, as well as all reasonably foreseeable growth. The main BPS building would include offices and other administrative spaces, a detention area with capacity for 130 detainees, and a two-lane

sally port capable of holding two buses. The BPS would also include the following ancillary support facilities and structures:

- vehicle maintenance/all-terrain vehicle storage facility
- outdoor tactical support areas
- parking
- vehicle wash rack
- fuel island
- canine kennel
- septic system and leach field
- water supply facility
- stormwater management system.

Other components of the BPS would include an approximately 100-foot-tall communications tower, a helipad, two emergency generators, and a 15,000-gallon aboveground propane tank. Support infrastructure, such as fire protection and alarm systems, information technology systems, access roads, sidewalks, and curbs, also would be constructed. Appropriate site security to meet current requirements, including fencing, gates, lighting, surveillance, and access control, would be installed at the BPS.

Road improvements would be constructed based on state and local requirements. These improvements include a primary access point to the BPS from Highway 94, an acceleration lane and a deceleration lane on westbound Highway 94, a dedicated left turn lane on eastbound Highway 94 at the BPS driveway (if right-of-way width allows), and any other improvements identified by Caltrans. A majority of the work along Highway 94 would occur within the Caltrans right-of-way. The final design would be coordinated with and reviewed by Caltrans. Additionally, approximately 1,500 feet of Campbell Ranch Road within the BPS site might be hardened and improved to subgrade surface but unpaved.

The proposed BPS footprint is approximately 18.2 acres, and approximately 31.7 acres would be disturbed as a result of construction. Excess soils from grading during construction would be deposited in an approximately 2.9-acre stockpile located within the BPS footprint. Construction of the BPS would be expected to occur between 2020 and 2022. Maintenance to the BPS would be expected upon completion of construction. Maintenance activities could include routine upgrade, repair, and maintenance of the buildings, roofs, parking area, grounds, or other facilities that would not result in a change in their functional use. After completion of construction, all activities from the existing Brown Field BPS would be moved to the proposed BPS, and the existing BPS facility would be returned to the lessor.

Alternative 2: No Action Alternative. Under the No Action Alternative, USBP agents would continue to use the existing Brown Field BPS. The existing BPS is undersized for the number of

USBP agents assigned to it, in poor condition, and not able to be expanded or renovated. Additionally, the existing BPS is outside of the Brown Field Station AOR, which is inefficient and results in additional personnel and vehicle costs. Continued use of the existing BPS could adversely affect the health, safety, work efficiency, and morale of USBP agents, which could impede execution of the mission and operation of the Brown Field BPS. No BPS facilities would be constructed at the Dulzura site, and the site would remain undeveloped and unused. If CBP proposes to conduct a project at the Dulzura site in the future, separate NEPA documentation would be prepared at that time.

Summary of Environmental Impacts

Table ES-1 provides an overview of potential impacts anticipated under each alternative considered, broken down by resource area. **Section 3** of this Final EA addresses these impacts in more detail. The Proposed Action has the potential to result in adverse environmental impacts and, as such, includes best management practices (BMPs) and design concepts identified in **Section 5** of this Final EA to avoid adverse impacts to the extent practicable.

Table ES-1. Summary of Potential Environmental Impacts by Alternative

Resource Area	Alternative 1: Proposed Action	Alternative 2: No Action Alternative
Land Use	Short- and long-term, minor to moderate, adverse impacts on land use from construction and operation of the proposed BPS. Construction of the proposed BPS would result in short-term impacts on land use compatibility due to temporary construction disturbances. The Proposed Action would be consistent with land use plans and policies but would have long-term, moderate impacts on agriculture. The proposed roadway improvements would conflict with a Williamson Act contract; however, upon acquisition of the property by CBP (via purchase or easement) the contract for the portion of the property containing these public improvements would become null and void and be terminated. The Proposed Action would preclude use of most of the BPS site for agriculture but would not affect the viability of land uses, including agriculture, on adjacent properties.	No impacts
Geology and Soils	Short- and long-term, minor, adverse impacts on topography from earthmoving and grading activities during construction. Short-term, minor and long-term, negligible, adverse impacts on soils due to ground disturbance during construction and increase in impervious surfaces during operation, resulting in increased erosion and sedimentation potential. Short- and long-term, minor to moderate, adverse impacts on important farmland soils. Long-term, minor, adverse impacts from geological hazards. No impacts on regional geology.	No impacts

Resource Area	Alternative 1: Proposed Action	Alternative 2: No Action Alternative
Vegetation	Short- and long-term, negligible, adverse impacts on vegetation from temporary disturbance and permanent removal of vegetation due to construction, accidental spills, and possible increased potential for spread and establishment of invasive species. Mitigation for temporary and permanent impacts on Diegan coastal sage scrub and flat-topped buckwheat vegetation communities would be accomplished through restoration of at least 14.6 acres of disturbed native and non-native vegetation. The establishment of an Onsite Conservation Area, on which CBP would implement management, maintenance, and monitoring, would act to avoid additional impacts. BMPs would also be implemented to reduce or avoid additional impacts.	Long-term, adverse impacts on vegetation from encroachment of invasive vegetation in previously disturbed areas of the BPS site if left unused and unmaintained.
Terrestrial and Aquatic Wildlife Resources	Short- and long-term, direct and indirect, negligible, adverse impacts on terrestrial wildlife from habitat loss or degradation and potential killing/injuring of individual wildlife due to construction. Noise, fugitive dust, and increased human activity and traffic from construction, operation, and maintenance of the BPS could also result in temporary displacement of terrestrial species, prevention of migration, and increased collisions. Short-term, negligible, adverse and long-term, beneficial impacts on aquatic habitat downstream of the proposed BPS from increased and decreased sedimentation, respectively. BMPs would reduce short-term, adverse impacts.	Long-term, adverse impacts on wildlife from encroachment of invasive vegetation in previously disturbed areas of the BPS site if left unused and unmaintained, which would result in a loss of habitat and forage for wildlife.
Threatened and Endangered Species	Short- and long-term, indirect, negligible, adverse effects on Otay tarplant and San Diego thornmint and short-term, direct and/or indirect, negligible, adverse effects on the arroyo toad, California condor, southwestern willow flycatcher, least Bell's vireo, and coastal California gnatcatcher. Effects would be similar to those described for <i>Vegetation</i> and <i>Terrestrial and Aquatic Wildlife Resources</i> . Appropriate BMPs would be implemented to reduce or eliminate adverse effects. Short-term, direct and indirect, negligible, adverse effects on Quino checkerspot butterfly. The Proposed Action may affect and is likely to adversely affect Quino checkerspot butterfly; however, CBP would restore disturbed vegetation, including suitable Quino checkerspot butterfly habitat.	No impacts

Resource Area	Alternative 1: Proposed Action	Alternative 2: No Action Alternative
Hydrology and Groundwater	<p>Long-term, negligible to minor, adverse impacts on hydrology from the increase in impervious surfaces. Predevelopment hydrology would be maintained through installation of the proposed stormwater management system and use of low impact development standards. Short- and long-term, minor, adverse impacts on groundwater quality from increased runoff and sedimentation during construction and operation, and potential for accidental spills and contaminants from the proposed leach field to affect groundwater. Compliance with design measures, BMPs, and permitting requirements would be implemented to reduce or eliminate impacts. Long-term, minor to moderate, adverse impacts on groundwater supply from installation and use of one water well to provide potable water for the proposed BPS. The well would be adequate to serve the BPS and would not have major, adverse impacts on groundwater storage and well interference. The water would be disinfected and treated to remove excess fluoride and manganese.</p>	No impacts
Surface Waters and Waters of the United States	<p>Short- and long-term, direct and indirect, minor, adverse impacts on surface waters, including potential waters of the United States, during construction and operation. CBP would comply with all applicable federal, state, and local regulations and requirements for work occurring within jurisdictional features. No major, adverse impacts on water quality. BMPs, including those in the Stormwater Pollution Prevention Plan, would be implemented to reduce or eliminate impacts.</p>	No impacts
Floodplains	<p>Short- and long-term, negligible, adverse impacts on floodplains from ground disturbance during construction and increased impervious surfaces during operation resulting in potential to increase sedimentation and reduce groundwater recharge on downstream floodplains. However, the proposed BPS site has limited to no floodplain functions; therefore, no increased risk to people or structures from flooding.</p>	No impacts

Resource Area	Alternative 1: Proposed Action	Alternative 2: No Action Alternative
Air Quality	<p>Short-term, minor, adverse impacts on air quality from emission of criteria pollutants and greenhouse gases (GHGs) during construction. Criteria pollutant emissions would be below the <i>de minimis</i> threshold of each pollutant; therefore, the level of impacts would be minor and a General Conformity determination is not required. Long-term, minor, adverse and beneficial impacts on air quality from changes to annual emissions of criteria pollutants and GHGs from operations. Use of equipment, infrastructure, and vehicles would contribute to operational emissions; however, annual reductions in operational air emissions would result from greater transportation efficiency for USBP personnel. The Proposed Action would emit GHGs during construction but reduce annual emissions during operation. However, these increases and decreases of GHG emission rates would not meaningfully contribute to or lessen the potential effects of global climate change.</p>	<p>Long-term, adverse impacts on air emissions from USBP agents commuting from the existing BPS to the AOR would continue.</p>
Noise	<p>Short- and long-term, negligible to minor, adverse effects on the ambient noise environment from construction, operation, and maintenance of the proposed BPS. There are minimal noise-sensitive receptors (e.g., residences and California Department of Forestry and Fire Protection station) in the area, but they could be impacted by temporary noise during construction and temporary and intermittent noise during operation and maintenance.</p>	<p>No impacts</p>
Cultural Resources	<p>Potential for adverse effects due to ground-disturbing activities, but these activities would not cause a substantial adverse change in the significance of any known cultural resources. No known existing cemeteries or previously recorded Native American or other human remains are within or adjacent to the proposed BPS site, and no impacts are anticipated for these resources. There is potential for the inadvertent discovery of cultural resources and human remains during construction; however, with implementation of BMPs, including CBP's established standard operating procedures for inadvertent discoveries, impacts on unknown cultural resources would be avoided. No impacts on cultural resources from operation and maintenance of the proposed BPS. The State Historic Preservation Officer concurred with the finding of 'No Historic Properties Affected' for the Proposed Action.</p>	<p>No impacts</p>
Utilities and Infrastructure	<p>Short- and long-term, negligible to minor, adverse impacts on electrical supply, water supply, wastewater systems, stormwater drainage, communications, and solid waste management. No impacts on natural gas/propane supply.</p>	<p>No impacts</p>

Resource Area	Alternative 1: Proposed Action	Alternative 2: No Action Alternative
Roadways and Traffic	Short-term, minor and long-term, negligible to moderate, adverse impacts on intersection and roadway levels of service and safety with inclusion of roadway/access improvements. The Proposed Action would not conflict with applicable congestion management program for Highway 94.	Long-term, adverse impacts on roadways and traffic from continued growth and development.
Aesthetics and Visual Resources	Short-term, negligible, adverse impacts from the temporary presence of construction equipment and ground disturbance at the proposed BPS site. Long-term, negligible, adverse impacts could result from visibility of the proposed BPS from scenic corridors and resource conservation areas, particularly along Highway 94.	No impacts
Hazardous Materials and Wastes	Short-term, minor and long-term, negligible, adverse impacts from the storage and use of hazardous materials and petroleum products, and the generation of hazardous wastes during construction and operation. No impacts from special hazards (asbestos-containing material, lead-based paint, and polychlorinated biphenyls), environmental contamination, and radon.	No impacts
Socioeconomic Resources, Environmental Justice, and Protection of Children	Short-term, minor and long-term, negligible, beneficial impacts on the local economy and employment from construction expenditures and potential additional USBP personnel, respectively. No impacts on population or demographics; therefore, no impacts on housing and public services such as schools, libraries, and recreational facilities. Long-term, indirect, minor, adverse impacts on fire protection and emergency medical services. No disproportionately high and adverse human health and environmental impacts on minority and low-income populations or children.	No impacts
Human Health and Safety	Short-term, negligible, adverse impacts on contractor safety due to increased risk of accidents, but no impacts on the general public during construction. Long-term, minor, beneficial impacts on USBP personnel and public safety from improvement of law enforcement efficiency within the Brown Field Station AOR.	Long-term, minor, adverse impacts on USBP personnel and public safety from continued use of the existing BPS that is in poor condition and does not meet the needs of USBP.

Resource Area	Alternative 1: Proposed Action	Alternative 2: No Action Alternative
Sustainability and Greening	Long-term, minor, beneficial impacts through implementation of sustainable design strategies to reduce air emissions and stormwater runoff and improve efficiency. Beneficial impacts on resource demands through water and energy conservation and reduced consumption, use of renewable energy where feasible, and reduced waste generation through repurposing and recycling. Long-term, minor, adverse impacts from disturbance of green and open spaces.	Long-term, minor to moderate, adverse impacts on resource sustainability from continued operation of existing BPS, which due to its poor condition limits the capacity to expand sustainable practices.

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1. Introduction

The Department of Homeland Security (DHS), U.S. Customs and Border Protection (CBP) proposes to construct, operate, and maintain a new Brown Field Border Patrol Station (BPS) for the U.S. Border Patrol (USBP) on a 125.2-acre government-owned property in Dulzura, San Diego County, California, and move all activities from the existing facility to the new facility (i.e., Proposed Action). The Dulzura property was acquired primarily because it is suitable for the proposed Brown Field BPS; however, if the property is not used for the BPS, it is also considered suitable for other CBP uses such as an USBP horse patrol equestrian facility, new USBP Highway 94 Vehicle Checkpoint, or landing field for CBP aircraft (CBP 2016a). These other potential uses for the Dulzura property are not part of the Proposed Action. If CBP proposes to conduct one of these projects at the Dulzura site in the future, separate National Environmental Policy Act (NEPA) documentation would be prepared at that time.

This Environmental Assessment (EA) has been prepared to describe and assess the potential environmental and socioeconomic impacts of the Proposed Action. This EA complies with the NEPA of 1969, as amended (42 United States Code [USC] §§ 4321–4347); the Council on Environmental Quality’s (CEQ) *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 Code of Federal Regulations [CFR] §§ 1500–1508); and DHS Instruction Manual 023-01-001-01, Rev. 1. This EA also meets the requirements of the California Environmental Quality Act (CEQA).

This Final EA is organized into seven sections plus appendices. **Section 1** provides background information on the existing Brown Field BPS, identifies the purpose of and need for the Proposed Action, describes the area in which the Proposed Action would occur, and explains the public involvement process. **Section 2** provides a detailed description of the Proposed Action and alternatives including the No Action Alternative. **Section 3** describes existing environmental conditions in the area where the Proposed Action would occur, and identifies potential environmental impacts that could occur within each resource area. **Section 4** contains an analysis of the cumulative and other impacts that the Proposed Action may have on the environment. **Section 5** identifies potential best management practices (BMPs), design techniques, and recommendations for the proposed Brown Field BPS. **Sections 6** and **7** provide a list of references used to develop this Final EA, and a list of preparers who developed this Final EA, respectively. Finally, the appendices include other information pertinent to the development of this Final EA.

1.1 Background

The mission of CBP is to safeguard America’s borders thereby protecting the public from dangerous people and materials while enhancing the Nation’s global economic competitiveness by enabling legitimate trade and travel. In supporting CBP’s mission, USBP is charged with establishing and maintaining effective control of and securing the border of the United States. The *2012–2016 Border Patrol Strategic Plan* establishes an approach for USBP based on two

goals of which one (securing America’s borders) is relevant to the Proposed Action. The objectives of the border security goal are as follows:

- Prevent terrorists and terrorist weapons from entering the United States between the ports of entry through improved and focused intelligence-driven operations, as well as operational integration, planning, and execution with law enforcement partners.
- Manage risk through the introduction and expansion of sophisticated tactics, techniques, and procedures. These include methods of detecting illegal entries such as using “change detection” techniques, increased mobile-response capabilities, and expanded use of specially trained personnel with “force multiplying” skills and abilities.
- Disrupt and degrade Transnational Criminal Organizations by targeting enforcement efforts against the highest priority threats and expanding programs that reduce smuggling and crimes associated with smuggling.
- Expand CBP’s situational awareness at and between ports of entry and employ a comprehensive and integrated “whole of government” approach.
- Increase community engagement by participating in community programs and engaging the public to assist the USBP (CBP undated).

1.2 Project Location

The existing Brown Field BPS is located at 7560 Britannia Court, San Diego, California, within a leased, privately owned facility in an industrial park that is approximately 700 feet north of the U.S./Mexico international border (see **Figure 1-1**). The existing BPS is outside of the Brown Field Station Area of Responsibility (AOR), approximately 1.5 miles southwest of the closest portion of the AOR and 12.3 miles (21 miles via roadway) southwest of the USBP Highway 94 Vehicle Checkpoint. The USBP Highway 94 Vehicle Checkpoint is staffed and supported by USBP agents from the Brown Field BPS.

The Brown Field Station AOR covers approximately 200 square miles of mostly mountainous terrain in southern San Diego County, California, including approximately 15 miles of the U.S./Mexico international border. The AOR is bordered by Interstate (I-) 8 to the north, State Route (SR) 188 to the east, the U.S./Mexico international border to the south, and the Minnewawa Truck Trail and the central ridge of Otay Mountain to the west. The USBP Highway 94 Vehicle Checkpoint is on SR 94 (i.e., Highway 94), approximately 0.3 mile southeast of the intersection of Highway 94 and Otay Lakes Road in Jamul, California.

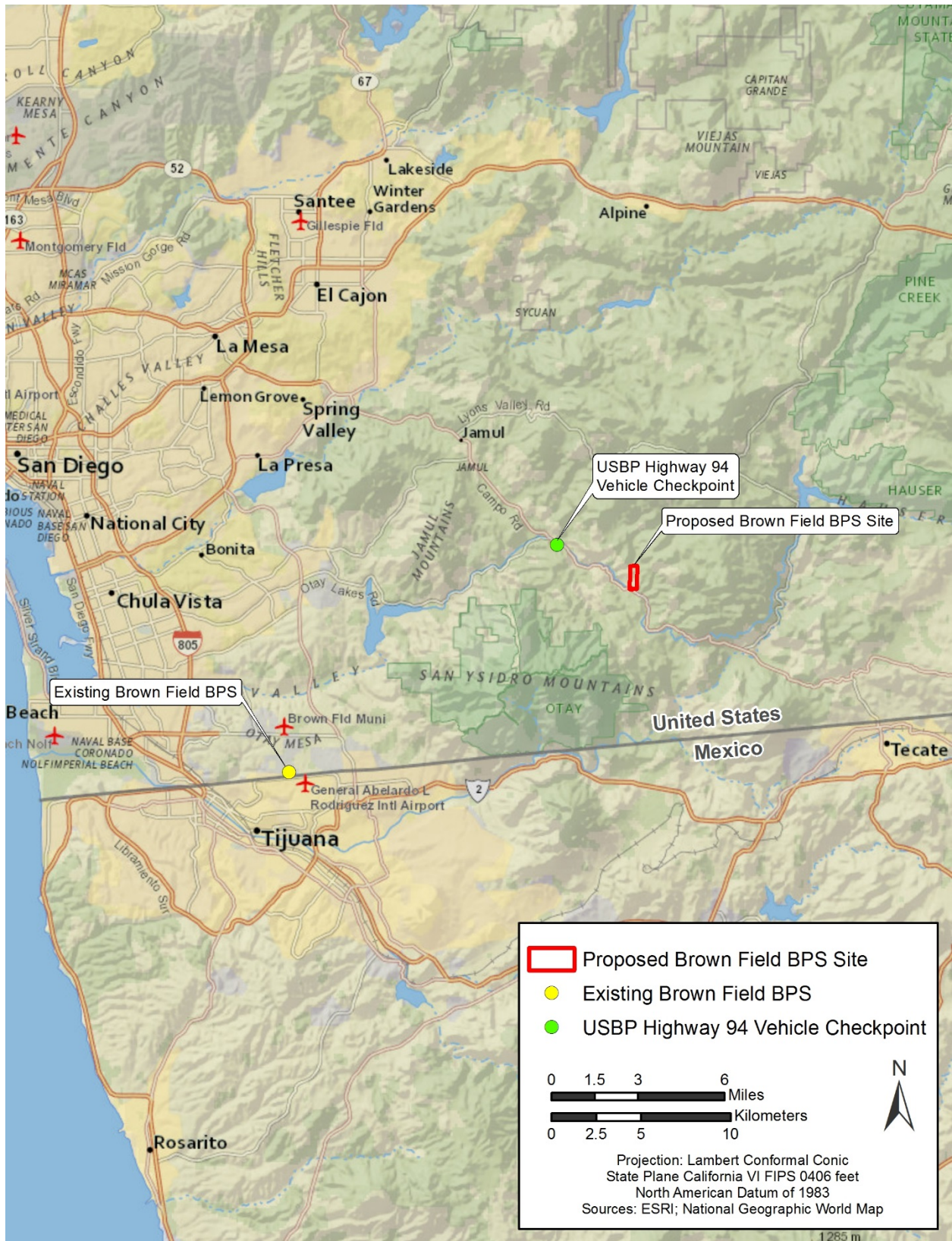


Figure 1-1. General Location Map

One site has been proposed for the new Brown Field BPS. The proposed BPS site is an approximately 125.2-acre government-owned property at the intersection of Highway 94 and Campbell Ranch Road in Dulzura, San Diego County, California, adjacent to the north of the California Department of Forestry and Fire Protection (Cal Fire) Dulzura Fire Station 30 (see **Figure 1-2**). Although not part of the government-owned property, roadway improvements and a portion of a driveway for the BPS would be within the California Department of Transportation (Caltrans) right-of-way (ROW) for Highway 94. The proposed BPS is within the Brown Field Station AOR, approximately 13.5 miles northeast of the existing BPS, 5.5 miles north of the U.S./Mexico international border, and 3 miles southeast of the USBP Highway 94 Vehicle Checkpoint. The USBP Highway 94 Vehicle Checkpoint is not part of the Proposed Action, and will remain in its current location.

1.3 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to replace the existing, unsuitable Brown Field BPS with a new, fully functional BPS for 400 USBP agents and support staff that would allow USBP to meet its operational requirements to increase U.S./Mexico international border security within the USBP San Diego Sector, and reduce illegal cross-border activity within the Brown Field Station AOR.

The Proposed Action is needed because the existing BPS is undersized, outside of the Brown Field Station AOR, in need of extensive repairs, and no longer meets the needs of USBP. The existing BPS is on property leased from a private owner and lacks the features and space necessary to provide an adequate work environment (e.g., sufficient infrastructure, parking, storage, and security). The proposed BPS in Dulzura, California, would accommodate the current level of staff, vehicles, and equipment, and all reasonably foreseeable growth. The BPS would provide modern, efficient, and safe working conditions and would allow USBP agents working in the Brown Field Station AOR to execute their mission of preventing terrorists and terrorist weapons, cross-border violators, drugs, and contraband from entering the United States.

The existing BPS was designed for 250 USBP agents, but more than 380 agents are currently working from the station. In order to accommodate the additional personnel, various BPS functions have been dispersed to separate locations, and some spaces are used for activities other than their intended purposes. Existing parking capacity is deficient to accommodate the demand, and parking lots that contain overflow will soon no longer be available. The existing BPS is unable to expand to provide adequate facilities, parking, or storage due to its location within a congested industrial park. Continuation of overcrowded conditions could negatively affect agent safety, health, work efficiency, and morale.

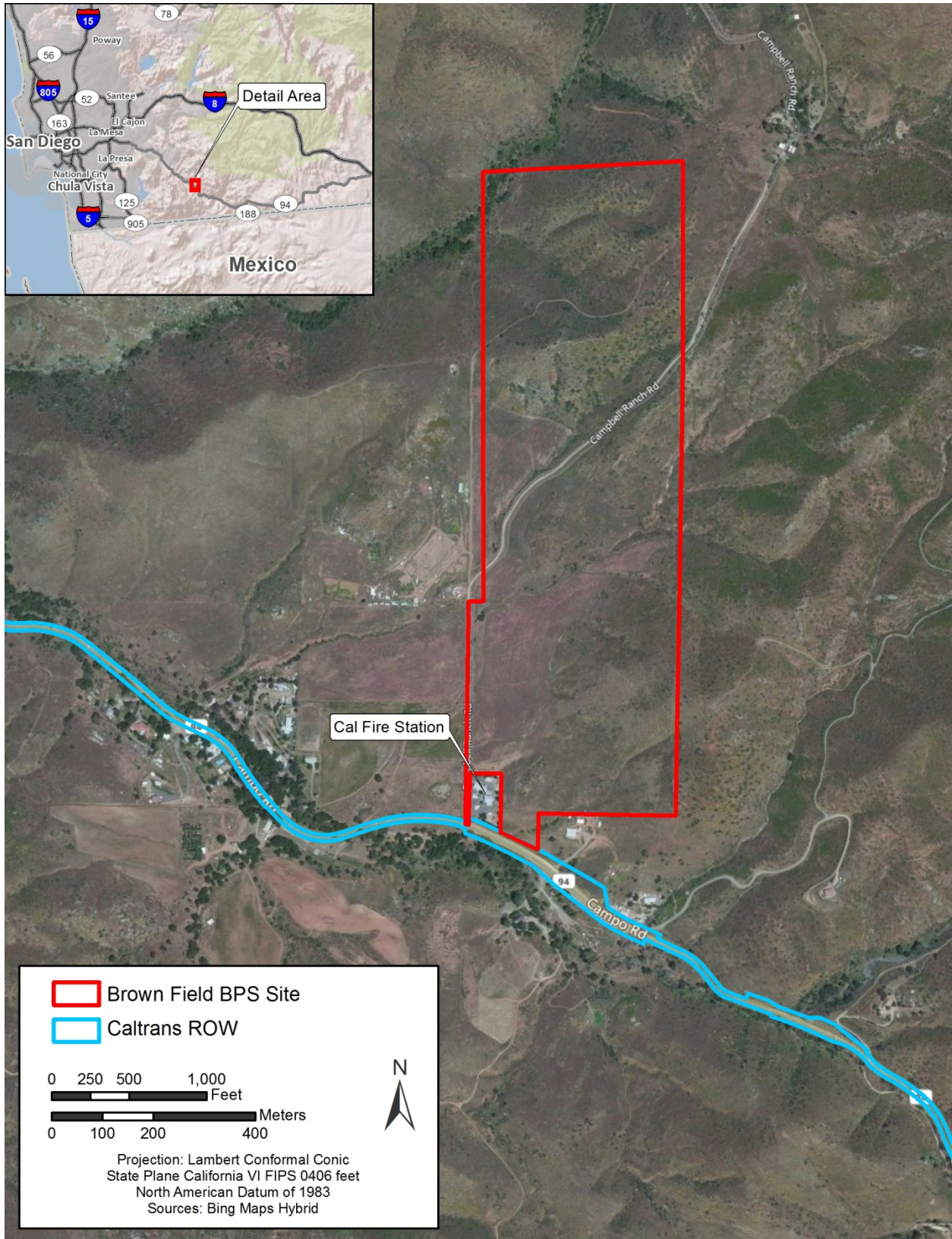


Figure 1-2. Location of the Proposed Brown Field BPS Site

As stated in **Section 1.2**, the existing BPS is located outside of the Brown Field Station AOR and at a distance of approximately 21 miles via roadway from the USBP Highway 94 Vehicle Checkpoint, which is staffed by USBP agents from the Brown Field BPS. No dedicated federal/state highway or county roadway directly connects the existing BPS to the westernmost border of the Brown Field Station AOR due to the intervening Otay Mountain range. The method of traveling to the AOR is circuitous, time consuming, costly, and inefficient. On an annual basis, USBP agents drive more than 3.7 million miles and spend more than 92,000 hours solely to commute from the existing BPS to the AOR, which results in additional personnel and vehicle costs. The proposed BPS in Dulzura, California, would improve enforcement efficiency by allowing the USBP agents' time and commuting costs to be refocused on border security activities.

The existing BPS is in poor condition and has a compromised structure. A 2014 Facility Condition Assessment estimated that deficiencies needing immediate repairs would cost approximately \$7 million, and additional future repairs would cost more than \$2.7 million. Additionally, the existing BPS does not comply with Uniform Federal Accessibility Standards, Americans with Disabilities Act regulations, or the California Seismic Code.

1.4 Public Involvement

Agency and public involvement in the NEPA process promotes open communication between the public and the government and enhances the decision-making process. All persons or organizations having a potential interest in the Proposed Action are encouraged to submit input into the decision-making process. NEPA and implementing regulations from CEQ direct agencies to make their NEPA documents available to the public during the decision-making process and prior to actions being taken. One premise of NEPA is that the quality of federal decisions will be enhanced if proponents provide information to the public and involve the public in the planning process.

Through the public involvement process, CBP notified relevant federal, state, and local agencies and the public of the Proposed Action and the availability of the Draft EA, and requested input on environmental concerns they might have regarding the Proposed Action. The public involvement process provides CBP with the opportunity to cooperate with and consider state and local views and those of the public in its decision regarding implementation of this federal proposal.

CBP coordinated with agencies such as U.S. Fish and Wildlife Service (USFWS); Bureau of Land Management (BLM); U.S. Army Corps of Engineers (USACE); Caltrans; Cal Fire; California Department of Fish and Wildlife (CDFW); the State Historic Preservation Officer (SHPO), which is a component of the California Office of Historic Preservation; San Diego Regional Water Quality Control Board (RWQCB); San Diego County Air Pollution Control District; and local agencies and with appropriate Native American tribes and nations.

A Notice of Availability for the Draft EA and draft Finding of No Significant Impact (FONSI) was published in the *San Diego Union Tribune* and *Alpine Sun* on October 4, 2018. This is done to solicit comments on the Proposed Action and alternatives and involve the local community in the decision-making process. Additionally, a Notice of Completion (for Draft EA) (SCH Number 2016124001) was submitted to the California State Clearinghouse, which notified additional state agencies. Hard copies of the Draft EA were made available at the Rancho San Diego and Potrero branches of the San Diego County Library. Throughout the NEPA process, the public can obtain information concerning the status and progress of the EA via the project website at <http://www.cbp.gov/about/environmental-cultural-stewardship/cbp-environmental-documents>. Comments received were incorporated into the Final EA. Comment letters and other agency and public involvement materials are included in **Appendix A**.

1.5 Framework for Analysis

NEPA is a federal statute requiring the identification and analysis of potential environmental impacts of proposed federal actions before those actions are taken. CEQ is responsible for the administration of NEPA. CEQ regulations mandate that all federal agencies use a systematic, interdisciplinary approach to environmental planning and the evaluation of actions that might affect the environment. This process evaluates potential environmental consequences associated with a proposed action and considers alternative courses of action. The intent of NEPA is to protect, restore, or enhance the environment through well-informed federal decisions.

The process for implementing NEPA is codified in 40 CFR §§ 1500–1508, *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*. CEQ was established under NEPA to implement and oversee federal policy in this process. CEQ regulations specify that an EA may be prepared for the following reasons:

- Briefly provide evidence and analysis for determining whether to prepare a FONSI or an Environmental Impact Statement (EIS).
- Aid in an agency’s compliance with NEPA when an EIS is unnecessary.
- Facilitate preparation of an EIS when one is necessary.

Within DHS and CBP, NEPA is implemented using DHS Instruction Manual 023-01-001-01, Rev. 1, and CBP policies and procedures.

To comply with NEPA, the planning and decision-making process for actions proposed by federal agencies involves a study of other relevant environmental statutes and regulations. However, the NEPA process does not replace procedural or substantive requirements of other environmental statutes and regulations. It addresses them collectively in the form of an EA or EIS, which enables the decision maker to have a comprehensive view of major environmental issues and requirements associated with the Proposed Action. According to CEQ regulations, the requirements of NEPA must be integrated “with other planning and environmental review

procedures required by law or by agency so that all such procedures run concurrently rather than consecutively.”

Within the framework of environmental impact analysis under NEPA, additional authorities that might be applicable include the Clean Air Act, Clean Water Act (CWA) (including a National Pollutant Discharge Elimination System [NPDES] stormwater discharge permit and Section 404 permit), Noise Control Act, Endangered Species Act, Migratory Bird Treaty Act (MBTA), National Historic Preservation Act (NHPA), Archaeological Resources Protection Act, Resource Conservation and Recovery Act, Toxic Substances Control Act, and various Executive Orders (EOs).

CEQA (California Public Resources Code Sections 21000–21177) is a statute that requires State of California and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to projects undertaken, funded, or requiring the issuance of a permit by state or local public agencies. CEQA applies to projects that have the potential to result in a physical change to the environment or that might be subject to several discretionary approvals by governmental agencies, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For this project, CEQA is applicable because CBP would be required to obtain Section 401 certification from the San Diego RWQCB for potential discharge to state or tribal waters, including wetlands, and an encroachment permit from Caltrans for actions within the Highway 94 ROW. Section 15221 of the Guidelines for Implementation of the CEQA (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000–15387), states that an EIS or EA and FONSI prepared under NEPA can be used instead of an Environmental Impact Report or Negative Declaration prepared under CEQA as long as the NEPA documentation meets CEQA requirements.

Table 1-1 lists major federal and state permits, approvals, and interagency coordination that could be required to construct, operate, and maintain the new Brown Field BPS.

Table 1-1. Key Permits and Approvals (as applicable) and Interagency Coordination

Agency	Permit/Approval/Coordination
USACE	– CWA Section 404 permit
USFWS	– Section 7 Endangered Species Act coordination/consultation – MBTA coordination
Federal Aviation Administration	– Federal Aviation Administration form 7480-1 (Notice of Landing Area Proposal)
Native American Tribes and Nations	– NHPA Section 106 consultation – Consultation regarding potential effects on cultural resources
California SHPO	– NHPA Section 106 consultation
Caltrans	– Encroachment permit (for action within Caltrans ROW)
California Water Quality Control Board, Region 9 (San Diego RWQCB)	– CWA Section 401 State Water Quality Certification – CWA NPDES permit (construction general permit) – Domestic Water Supply Permit (for applicable non-transient non-community public water system [PWS]) – Coverage (or waiver) of Waste Discharge Requirements if on-site wastewater treatment system (OWTS) has projected flow over 10,000 gallons per day
San Diego County Department of Environmental Health (DEH): Land and Water Quality Division Hazardous Materials Division	– Water well permit (for construction of water well) – Small Drinking Water System (for operation of treated non-transient, non-community water system) – OWTS permit (for septic system and leach field) – Unified Program Facility Permit (for proposed fuel system, and hazardous materials storage and disposal)
San Diego County Air Pollution Control District	– Permit to Operate (for emergency generators) – Clean Air Act permit consultation
San Diego County Board of Supervisors	– Termination of California Land Conservation Act of 1965 (Williamson Act) contract (for the portion of contracted land acquired for the proposed roadway improvements) and removal of land from Agricultural Preserve
San Diego County Department of Planning and Development Services	– Other land use/zoning, occupancy, construction permits

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2. Proposed Action and Alternatives

2.1 Introduction

This section provides detailed information on CBP's proposal to construct, operate, and maintain a new Brown Field BPS on a 125.2-acre government-owned property in Dulzura, San Diego County, California. As discussed in **Section 1.5**, the NEPA process evaluates potential environmental consequences associated with a proposed action and considers alternative courses of action. Reasonable alternatives must satisfy the purpose of and need for a proposed action, which are defined for this action in **Section 1.3**. Although the No Action Alternative would not satisfy the purpose of or need for the Proposed Action, it is included as a baseline from which to compare the impacts of action alternatives.

2.2 Screening Criteria for Alternatives

The range of reasonable alternatives considered in this EA is constrained to those that would meet the purpose of and need for the Proposed Action as described in **Section 1.3**. Such alternatives must also meet essential technical, engineering, and economic threshold requirements to ensure that each is environmentally sound and economically viable, and complies with governing standards and regulations.

CBP developed and applied selection criteria during earlier phases of planning to assist in determining suitable locations consistent with the project purpose and need described in **Section 1.3** for the construction of a new Brown Field BPS. The site-selection criteria applied are as follows:

- **Adequate Size.** The BPS should be of adequate size to provide for the initial and expected future programmed functions, to allow for expansion of parking, and to allow for necessary buffer zones for special initiatives and for future facility expansion.
- **Proper Location.** The BPS should be located and situated in such a way as to not compromise the security and safety of the station and agents. A generally accepted guideline is to locate the BPS at least 1 mile from the U.S./Mexico international border.
- **Ease of Access.** The BPS should have ease of access, which includes access to the BPS from more than one entry point for emergency egress purposes, good access for emergency response services, proximity to highways, and not being on or near heavily congested roadways or other obstructions.
- **AOR.** The BPS should be located as close as possible to the geographic center of the Brown Field Station AOR and to the area where the heaviest workload is generated.
- **Acquisition Likelihood.** The BPS should be sited on property that can be purchased in a timely and cost-effective manner.

- **Minimize Potential Negative Environmental Impacts.** The BPS should not have any obvious detrimental cultural or environmental influences.
- **Utilities.** The BPS should have access to public utilities.

Section 2.3 presents Alternative 1: Proposed Action, **Section 2.4** presents Alternative 2: No Action Alternative, and **Section 2.5** discusses alternatives considered but eliminated from further detailed analysis.

2.3 Alternative 1: Proposed Action

The Proposed Action includes the construction, operation, and maintenance of a new Brown Field BPS on a 125.2-acre government-owned property at the intersection of Highway 94 and Campbell Ranch Road in Dulzura, San Diego County, California. The main BPS building would accommodate 400 USBP agents and support staff, as well as all reasonably foreseeable growth. The main BPS building would include offices and other administrative spaces, a detention area with capacity for 130 detainees, and a two-lane sally port capable of holding two buses. A conceptual site layout of the proposed BPS is depicted in **Figure 2-1**. The BPS would also include the following ancillary support facilities and structures:

- **Vehicle Maintenance/All-Terrain Vehicle (ATV) Storage Facility.** The vehicle maintenance/ATV storage facility would include four standard-sized bays and one ATV bay. The ATV storage/parking area would accommodate 64 ATVs and four trailers with lockers and storage. The building would also include a facility maintenance work area/shop and warehouse space.
- **Outdoor Tactical Support Areas.** Two exterior tactical support areas covered with canopies, consisting of an outdoor physical training area and a weapons cleaning area, would be provided.
- **Parking.** Uncovered parking lots would be constructed for 300 privately owned vehicles, 312 government-owned vehicles, and 20 visitor spaces. Additionally, an impound lot with six standard spaces would be provided.
- **Vehicle Wash Rack.** A five-bay vehicle wash rack, including four covered bays and one uncovered bay, with sediment traps capable of handling a vehicle up to bus size would be constructed.
- **Fuel Island.** A covered fuel island consisting of three aboveground tanks, including two 12,000-gallon gasoline tanks and one 8,000-gallon diesel tank, would be constructed. Each 12,000-gallon tank would have four fuel dispensers and the 8,000-gallon tank would have two fuel dispensers.
- **Canine Kennel.** A covered four-bay kennel would be constructed to provide short-term housing for canines.

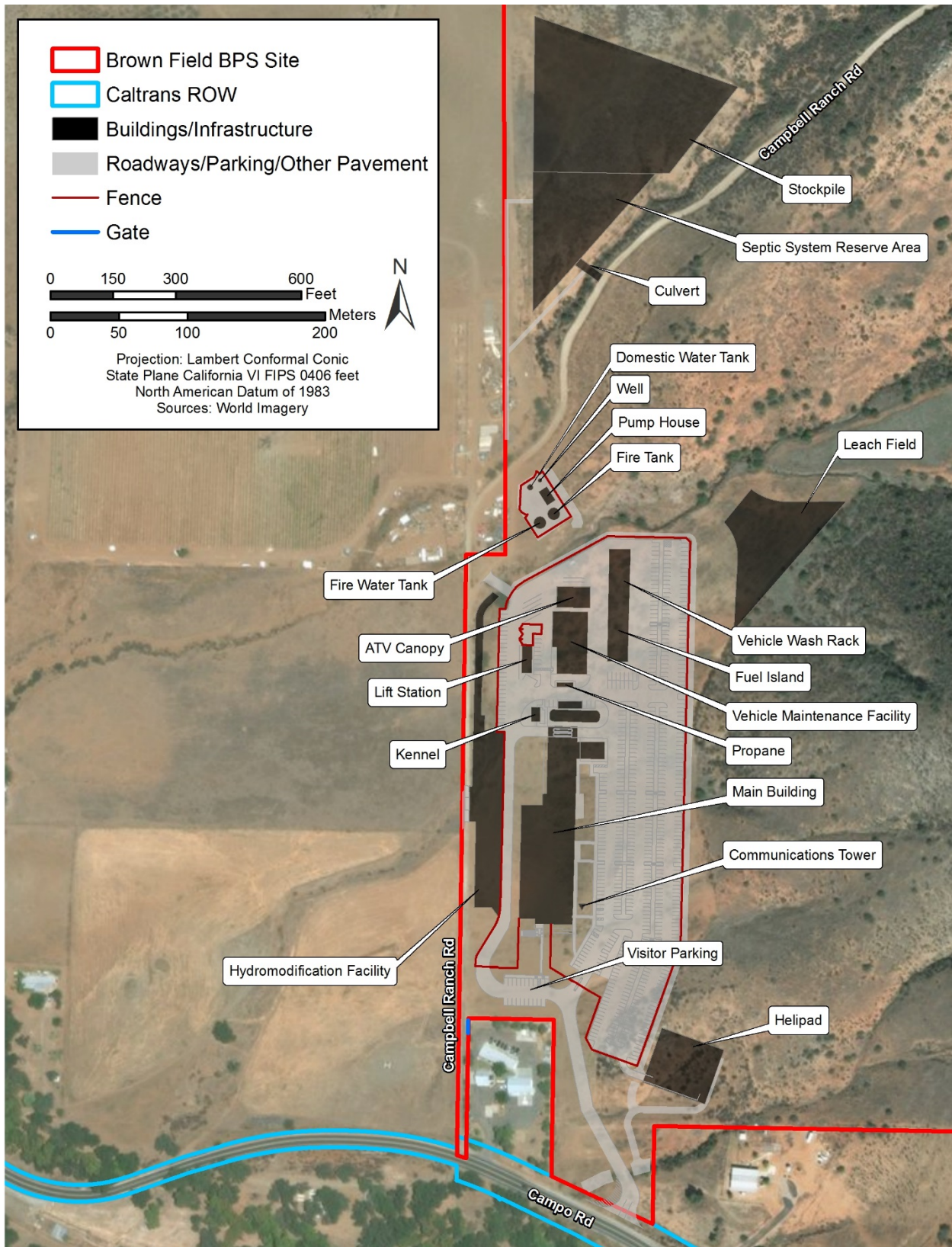


Figure 2-1. Conceptual Layout of the Proposed Brown Field BPS

- **Septic System and Leach Field.** An appropriately sized septic system and an approximately 1-acre leach field would be installed. The septic system would be sized to treat an average flow of 4,800 gallons per day with capacity to handle a peak daily flow of 6,000 gallons. An approximately 1.1-acre reserve area, which is equal to 100 percent of the leach field, has been identified within the BPS site (see **Figure 2-1**). The reserve area would not be developed, but would be an area set aside and available for replacement of the primary leach field if required.
- **Water Supply Facility.** The water supply facility would contain one water well, a pump house with potable water treatment system (sized to treat 6,000 to 12,000 gallons per day), and three water storage tanks (one 20,000-gallon tank for potable water and two 100,000-gallon tanks for fire protection water).
- **Stormwater Management System.** The stormwater management system would consist of stormwater collection and transfer infrastructure (inlets, pipes, channels, culverts) and two detention basins, including one hydromodification basin (dry detention basin). Offsite stormwater runoff would be intercepted at the BPS site boundaries, and routed through or around the site via concrete or earthen channels. Onsite stormwater from the northern portion of the BPS site and offsite stormwater from north and west of the site would be captured with inlets and conveyed through an underground pipe system to a hydromodification basin in the western portion of the BPS, which would detain the required volume of stormwater, releasing it at an allowable rate. Stormwater would be released upstream of an existing low-water crossing at Campbell Ranch Road that would be improved/hardened to a rain-weather crossing and elevated under the Proposed Action (see **Figure 2-2**). The improved low-water crossing on Campbell Ranch Road would require installation of a concrete dip crossing. Onsite stormwater from the southern portion of the BPS site and the remainder of the intercepted offsite stormwater would be concentrated into a detention facility and discharged through a flow structure in the southern portion of the BPS that flows through a proposed stormwater culvert under the primary entrance driveway that ultimately crosses under Highway 94 via a pipe and enters Dulzura Creek.

Other components of the BPS would include one communications tower measuring approximately 100 feet in height; a helicopter landing pad (helipad) with radio-controlled lighting, windsock, and space for a fuel point; two 650-kilowatt emergency generators; and one 15,000-gallon aboveground propane tank to provide heating for the main BPS building and ancillary buildings. Support infrastructure, such as fire protection and alarm systems, information technology systems, access roads, sidewalks, and curbs, would be constructed. Appropriate site security to meet current requirements, including fencing, gates, lighting, surveillance, and access control, would be installed at the BPS. Perimeter security fence would surround the BPS footprint. A sliding fence gate would be installed from Campbell Ranch Road to the northwestern portion of the Cal Fire Dulzura station to provide secondary access to the station (see **Figure 2-1**).

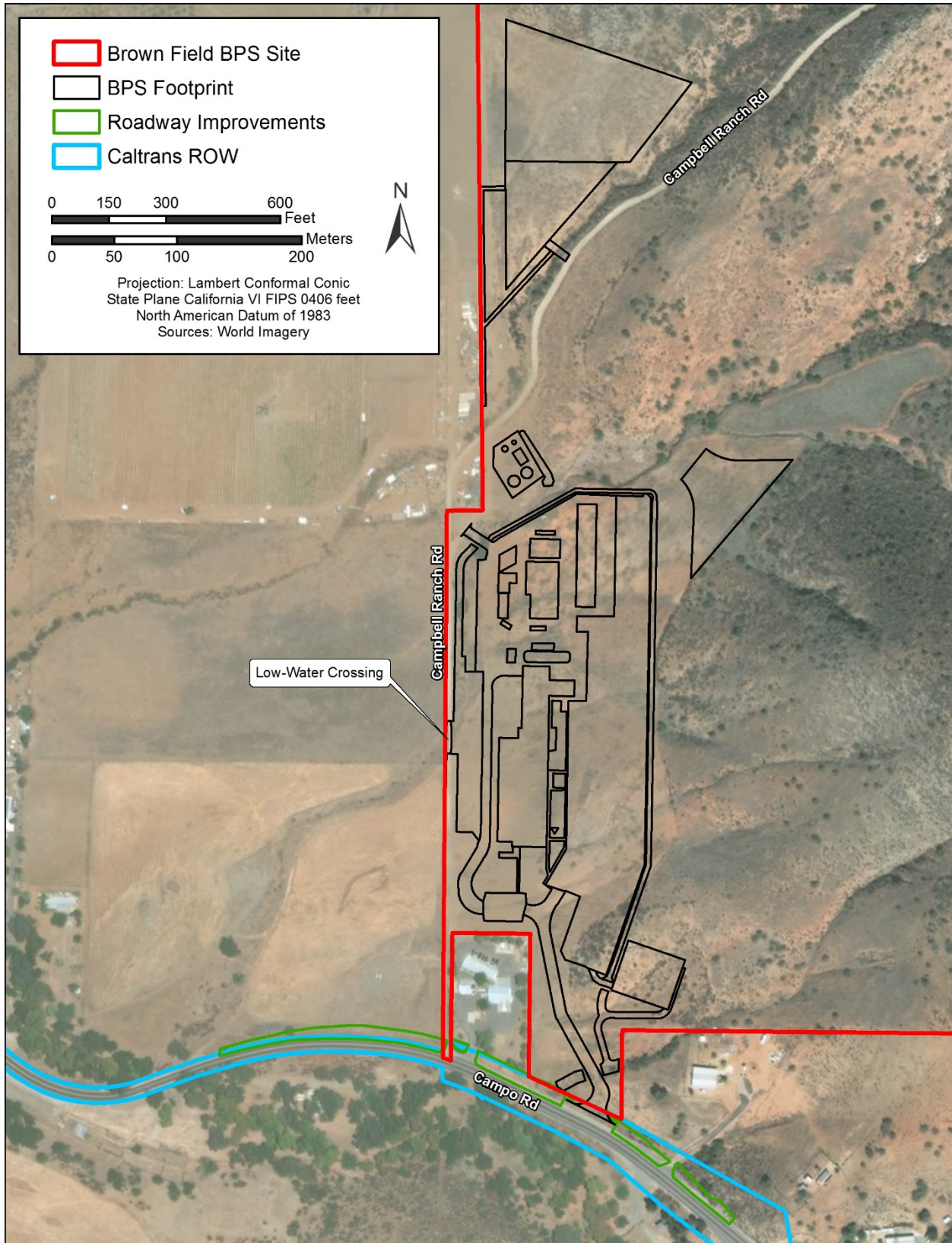


Figure 2-2. Roadway Improvements at the Proposed Brown Field BPS

Road improvements would be constructed based on state and local requirements (see **Figure 2-2**). These improvements include a primary access point to the BPS from Highway 94, an acceleration lane and a deceleration lane on westbound Highway 94, a dedicated left turn lane on eastbound Highway 94 at the BPS driveway (if ROW width allows), and any other improvements identified by Caltrans. A majority of the work along Highway 94 would occur within the Caltrans ROW. The dedicated left turn lane would also provide access to the Cal Fire Dulzura station. The final design of all roadway improvements would be coordinated with and reviewed by Caltrans. Additionally, approximately 1,500 feet of Campbell Ranch Road within the BPS site might be hardened and improved to subgrade surface but unpaved.

Excess soils from grading during construction would be deposited in a stockpile located in the BPS footprint within the BPS site (see **Figure 2-1**). This stockpile would be approximately 2.9 acres and contain up to 29,000 cubic feet of excess soils up to 7 feet high with 2:1 side slopes and 14-foot offsets. An access road over a corrugated metal pipe culvert would be installed at a drainage north of Campbell Ranch Road to provide access to the stockpile and other areas north of Campbell Ranch Road from the main BPS south of Campbell Ranch Road. The stockpile would be appropriately stabilized with temporary erosion control measures during construction, and with long-term measures according to the Stormwater Pollution Prevention Plan (SWPPP) and native plant revegetation plan during operation of the proposed BPS. A 10-foot-wide gravel access path would be constructed north of Campbell Ranch Road along the western security fence line to provide access to the fence for maintenance purposes (see **Figure 2-1**).

Upon final site design, the actual layout of the proposed BPS could be different from that shown in **Figure 2-1** and would include all facilities approved during the final design stages. The BPS footprint is approximately 18.2 acres, and approximately 31.7 acres would be disturbed as a result of construction (see **Figure 2-3**).

Construction of the BPS would be expected to occur between 2020 and 2022. Maintenance of the BPS would be expected upon completion of construction. Maintenance activities could include routine upgrade, repair, and maintenance of the buildings, roofs, parking area, grounds, or other facilities that would not result in a change in their functional use (e.g., replacing door locks or windows, painting interior or exterior walls, resurfacing a road or parking lot, grounds maintenance, or replacing essential facility components such as an air conditioning unit).

After completion of construction, all activities from the existing Brown Field BPS would be moved to the proposed BPS, and the existing BPS facility would be returned to the lessor. Excess furniture, fixtures, and equipment belonging to CBP would be reallocated or disposed of in an appropriate manner.

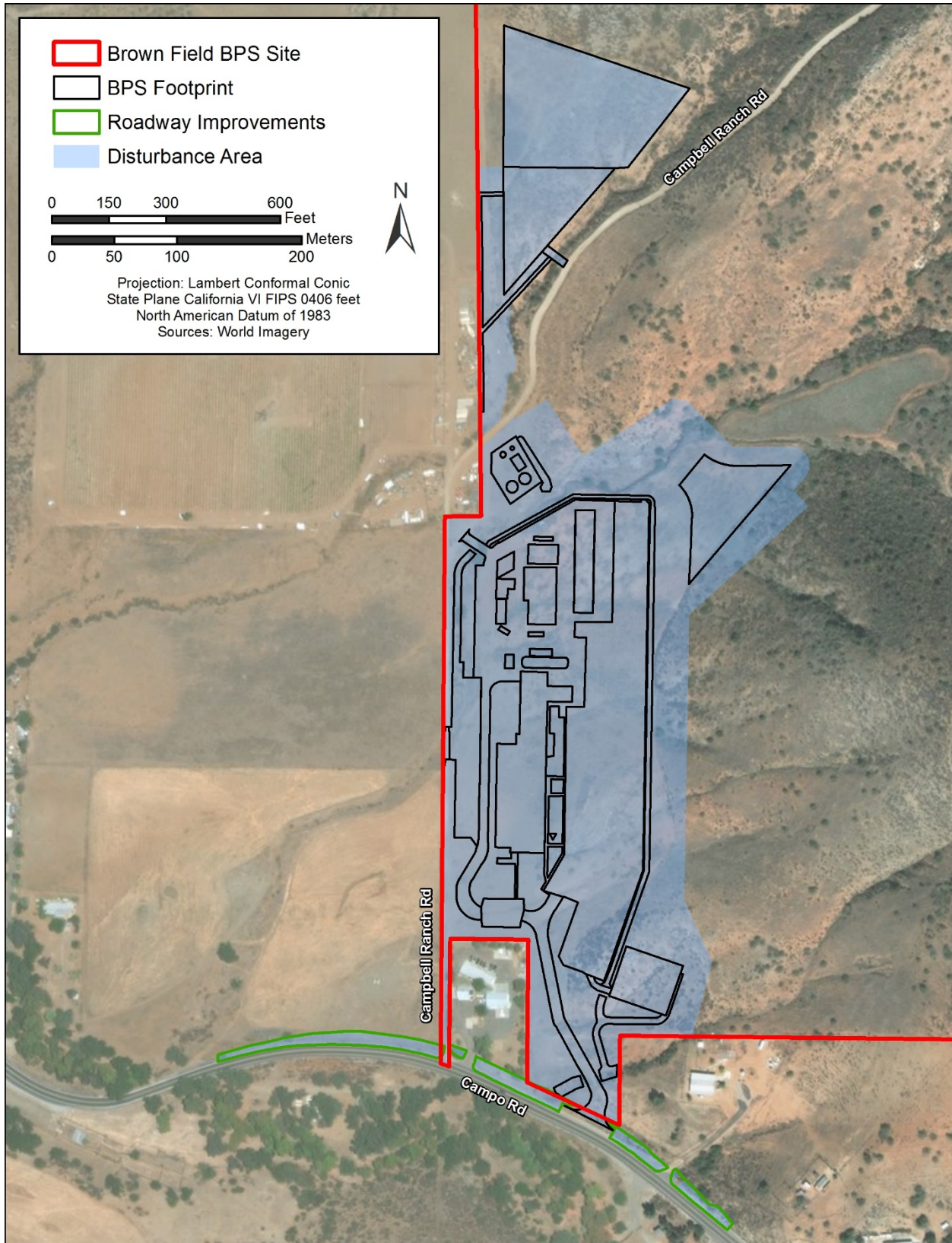


Figure 2-3. Proposed Brown Field BPS Disturbance Area

2.4 Alternative 2: No Action Alternative

Under Alternative 2: the No Action Alternative, USBP agents would continue to use the existing Brown Field BPS at 7560 Britannia Court, San Diego, California. The existing BPS is undersized for the number of USBP agents assigned to it, in poor condition, and not able to be expanded or renovated. Additionally, the existing BPS is outside of the Brown Field Station AOR, which is inefficient and results in additional personnel and vehicle costs. Continued use of the existing BPS could adversely affect the health, safety, work efficiency, and morale of USBP agents, which could impede execution of the mission and operation of the Brown Field BPS. No BPS facilities would be constructed at the Dulzura site, and the site would remain undeveloped and unused. If CBP proposes to conduct a project at the Dulzura site in the future, separate NEPA documentation would be prepared at that time.

The No Action Alternative does not satisfy CBP's purpose of and need for the Proposed Action, as identified in **Section 1.3**. However, inclusion of the No Action Alternative is prescribed by the CEQ regulations and will be carried forward for analysis in the EA. The No Action Alternative also serves as a baseline against which to evaluate the impacts of the Proposed Action.

2.5 Alternatives Considered But Eliminated From Further Detailed Analysis

CBP evaluated other possible alternatives to constructing the proposed Brown Field BPS in Dulzura, California. This section addresses options that were reviewed but not carried forward for further detailed analysis in the EA.

2.5.1 Brown Field BPS Location Alternatives

The potential alternative sites initially considered for the proposed Brown Field BPS are described below and shown in **Figure 2-4**.

Simpson Nursery. The Simpson Nursery site consists of two parcels of 21 acres and 18.7 acres to the north and south of Highway 94, respectively, in Jamul, California. The northern parcel is vacant and undeveloped consisting of dirt ground cover and trees. The southern parcel contains several buildings that were part of the former Simpson's Garden Town Nursery, which is closed. Neither parcel is currently occupied. A preliminary environmental review indicated the potential presence of wetlands and vernal pools on the site. The northern parcel is zoned C36 (General Commercial) and the southern parcel is zoned A70 (Limited Agriculture). Both zoning districts allow for law enforcement facilities, although a minor use permit would be required for the southern parcel. The General Plan designations are Rural Commercial (C-4) at the northern parcel and Semi-Rural Residential (SR-1) at the southern parcel. Both parcels are within the Jamul Rural Village boundary. The property does not have nearby access to water or sewer; therefore, the 18.7-acre parcel likely would have to be used for a leach field. The nearest residential area is approximately 500 feet away, and the Greater San Diego Academy is within 500 feet of the site.

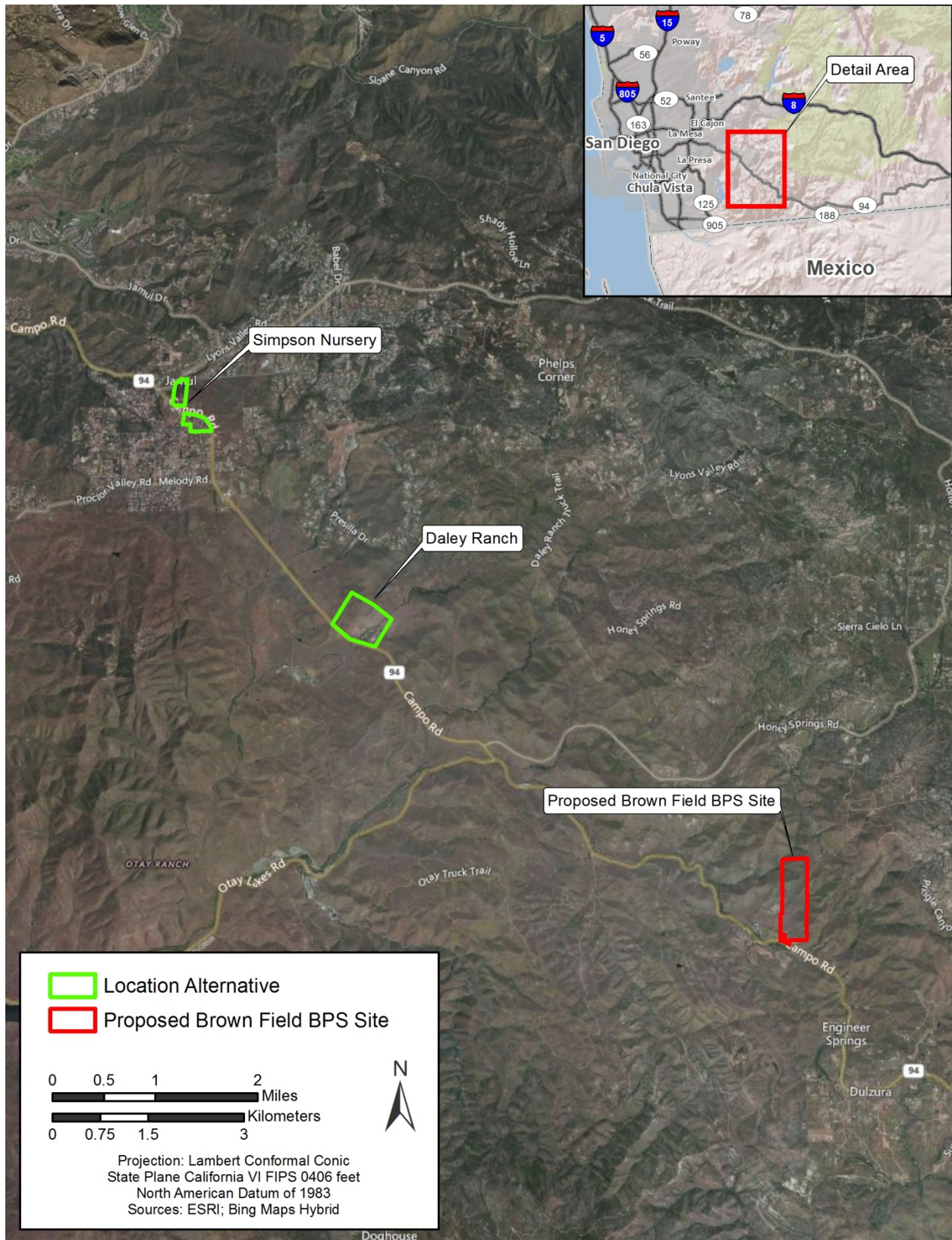


Figure 2-4. Brown Field BPS Location Alternatives

Due to the proximity of the nearby residential area and educational facility, and the noncontiguous nature of the property, this site was determined not to meet the selection criteria discussed in **Section 2.2** and is eliminated from further detailed analysis.

Daley Ranch. The Daley Ranch site is 120.8 acres and on Highway 94, approximately 3 miles south of Jamul, California. It consists of a ranch with four houses and several buildings. The ground cover is grass with scattered trees, but a preliminary environmental review indicated that the site is within designated critical habitat for the federally endangered Quino checkerspot butterfly (*Euphydryas editha quino*) and is bisected by Jamul Creek. The property is zoned A72 (General Agriculture), which allows for law enforcement facilities with a Site Plan review. The General Plan designation in the southern portion of the site is Semi-Rural Residential (SR-10), while the designation in the northern portion of the site is Open Space (Conservation). This property is surrounded to the west, north, and east by the Hollenback Canyon Wildlife Area, and the Rancho Jamul Ecological Reserve is south of Highway 94. The closest residential area is approximately 3 miles away. The site does not have onsite sewer service, but the size does allow for a leach field. The site is dependent upon groundwater and includes several wells on site.

Due to the presence of designated critical habitat for a federally endangered species within the property, this site was determined not to meet the selection criteria discussed in **Section 2.2** and is eliminated from further detailed analysis.

2.5.2 Expansion and Upgrade of Existing Brown Field BPS

Under this alternative, CBP would expand and upgrade the existing Brown Field BPS to meet its needs for staff, vehicle, and equipment space. As discussed in **Section 1.3**, the existing station has already been fully developed and cannot be expanded to provide adequate facility, parking, or storage space. The existing station operates under a lease agreement, and consequently property modifications would have to be approved by the landowner. Additionally, the existing BPS is outside of the Brown Field Station AOR. As such, this alternative was determined not to meet the selection criteria discussed in **Section 2.2** and is eliminated from further detailed analysis.

2.6 Alternatives Summary

Alternative 1: Proposed Action and Alternative 2: No Action Alternative have been carried forward for further detailed analysis in this EA. As presented in **Table 2-1**, only the Proposed Action meets the purpose and need described in **Section 1.3**.

Table 2-1. Evaluation of Alternatives Against Purpose and Need

Purpose and Need	Proposed Action (Alternative 1)	No Action Alternative (Alternative 2)
Would the alternative be appropriately sized and provide sufficient space to accommodate the current level of USBP agents and staff, vehicles, and equipment, and all reasonably foreseeable growth?	Yes	No
Would the alternative provide adequate facilities (e.g., sufficient infrastructure, parking, storage, and security) for USBP agents and support staff in the Brown Field Station AOR?	Yes	No
Would the alternative be centrally located within the Brown Field Station AOR?	Yes	No
Would the alternative provide modern, efficient, and safe working conditions?	Yes	No

2.7 Identification of the Preferred Alternative

CBP has identified its Preferred Alternative as Alternative 1: Proposed Action. Implementation of the Proposed Action would best meet CBP’s purpose and need as described in **Section 1.3**.

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3. Affected Environment and Environmental Consequences

This section provides a characterization of the affected environment and an analysis of the potential direct and indirect impacts each alternative would have on the affected environment. Each alternative was evaluated for its potential to affect physical, biological, and socioeconomic resources. Cumulative and other impacts are discussed in **Section 4**. All potentially relevant resource areas were considered in this EA.

The following discussion elaborates on the characteristics that might relate to impacts on resources:

- *Short-term or long-term.* These characteristics are determined on a case-by-case basis and do not refer to any rigid time period. In general, short-term impacts are those that would occur only with respect to a particular activity or for a finite period. Long-term impacts are those that are more likely to be persistent and chronic.
- *Direct or indirect.* A direct impact is caused by and occurs contemporaneously at or near the location of the action. An indirect impact is caused by a proposed action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action. For example, a direct impact of erosion on a stream might include sediment-laden waters near the action, whereas an indirect impact of the same erosion might lead to lack of spawning and result in lowered reproduction rates of indigenous fish downstream.
- *Negligible, minor, moderate, or major.* These relative terms are used to characterize the magnitude or intensity of an impact. Negligible impacts are generally those that might be perceptible but are at a lower level of detection. A minor impact is slight but detectable. A moderate impact is readily apparent. A major impact is one that is severely adverse or exceptionally beneficial.
- *Adverse or beneficial.* An adverse impact is one having unfavorable or undesirable outcomes on the man-made or natural environment. A beneficial impact is one having positive outcomes on the man-made or natural environment. A single act might result in adverse impacts on one environmental resource and beneficial impacts on another resource.
- *Significance.* Significant impacts are those that, in their context and due to their intensity (severity), meet the thresholds for significance set forth in CEQ regulations (40 CFR § 1508.27).
- *Context.* The context of an impact can be localized or more widespread (e.g., regional).
- *Intensity.* The intensity of an impact is determined through consideration of several factors, including whether an alternative might have an adverse impact on the unique

characteristics of an area (e.g., historical resources or ecologically critical areas), public health or safety, or endangered or threatened species or designated critical habitat. Intensity of impacts are also considered in terms of their potential for violation of federal, state, or local environmental law; their controversial nature; the degree of uncertainty or unknown impacts, or unique or unknown risks; if there are precedent-setting impacts; and their cumulative impacts (see **Section 4**).

In accordance with NEPA, CEQ regulations, and DHS Instruction Manual 023-01-001-01, Rev. 1, the following evaluation of environmental impacts focuses on those resources and conditions potentially subject to impacts.

3.1 Land Use

3.1.1 Definition of the Resource

The term “land use” refers to the relationship between people and the land, specifically, how the physical world is adapted, modified, or put to use for human purposes (ILG 2010). In many cases, land use descriptions are codified in local zoning laws. However, there is no nationally recognized convention or uniform terminology for describing land use categories.

In appropriate cases, the location and extent of a proposed action needs to be evaluated for its potential effects on a project site and adjacent land uses. The foremost factor affecting a proposed action in terms of land use is its compliance with any applicable land use or zoning regulations. Other relevant factors include matters such as existing land use at the project site, the types of land uses on adjacent properties and their proximity to a proposed action, the duration of a proposed activity, and its permanence.

3.1.2 Affected Environment

Regulatory Setting. Several state and local land use plans, policies, and regulations could be relevant to the site of the proposed Brown Field BPS. These land use plans, policies, and regulations are identified in the following paragraphs.

Farmland Protection Policy Act (FPPA). The intent of the FPPA is to minimize the extent that federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. The FPPA seeks to protect important farmland, which includes prime farmland, unique farmland, and farmland of statewide or local importance as defined by the Natural Resources Conservation Service (NRCS). Determination of whether an area is considered important farmland and potential impacts associated with a proposed action are based on preparation of the Farmland Conversion Impact Rating Form (AD-1006). See **Section 3.2** for more information on the FPPA and important farmlands.

California Land Conservation Act. The California Land Conservation Act of 1965 (California Government Code Sections 51200–51297.4), commonly known as the Williamson Act, preserves agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Act allows local governments in California to enter into contracts

with private landowners to restrict specific parcels of land to agricultural or related open space use. In return for enrollment in Williamson Act contracts, landowners receive reduced property tax assessments based on generated income as opposed to potential market value of the property. Private land within locally designated agricultural preserves is eligible for enrollment in a Williamson Act contract. The contract is on a rolling 10-year term that automatically renews on the anniversary date of the contract, unless the landowner or local government initiates the nonrenewal process, the landowner petitions for contract cancellation, or other limited contract termination scenarios (e.g., eminent domain, public acquisition) (California DOC 2017).

Although it is state policy to avoid, whenever practicable, siting of any federal, state, or local public improvements and public utility improvements, and the acquisition of land for these purposes, in agricultural preserves, there are policies for doing so. California Government Code Section 51291(b) and (c) states, when there is a need for a public agency or other eligible entity to acquire land enrolled in a Williamson Act contract, or located in an agricultural preserve, the California Department of Conservation (DOC) and the local governing body responsible for the administration of the preserve must be notified.

The Proposed Action would be on land enrolled in a Williamson Act contract. The local governing body responsible for administration of agricultural preserves in unincorporated areas of San Diego County is the San Diego County Board of Supervisors. Policy I-38 identifies the Board's policies for implementation of the Williamson Act in the county. See *San Diego County Board of Supervisors Policies* below for additional information on this policy.

San Diego County General Plan/Jamul/Dulzura Subregional Plan. The San Diego County General Plan is a framework for the future growth and development of the unincorporated areas of the county, particularly in the western communities. It is based on a set of 10 guiding principles designed to protect the county's unique and diverse natural resources and maintain the character of its rural and semi-rural communities. It reflects an environmentally sustainable approach to planning that balances the need for adequate infrastructure, housing, and economic vitality, while maintaining and preserving unique communities, agricultural areas, and open space. The General Plan provides a consistent framework for land use and development decisions consistent with an established community vision. An unincorporated community's vision, characteristics, and issues are addressed in more specific Community Plans, such as the Jamul/Dulzura Subregional Plan that is discussed below. The San Diego County General Plan identifies goals and policies relevant to land use within six elements (or chapters) including Land Use, Housing, Circulation (Mobility), Conservation and Open Space, Safety, and Noise.

San Diego County Zoning Ordinance. The San Diego County Zoning Ordinance regulates land uses within the unincorporated areas of the county by dividing the land into zones based on the present and potential uses of the land. A "zone" is the combination of Use, Animal, Development, and Special Area Regulations. The zoning for the proposed BPS site is described within *Regional Setting* and **Table 3-1**. It should be noted that the San Diego County Zoning Ordinance does not apply to federally owned public lands within the county, which are defined as parcels that are identified as federally owned public lands by the San Diego County Assessor.

Table 3-1. Proposed BPS Site Zoning

Zoning Ordinance Regulation	Regulation at Proposed BPS Site	Summary
Use Regulation	A72	– General Agriculture. Intended for crop or animal agriculture. Number of animals allowed are specified by neighborhood regulations.
Animal Regulation	O	– Various animal sales and services and animal raising uses permitted with varied restrictions and densities. Kennels are permitted. – ‘Most Restrictive’ animal enclosure setback, which includes 100 feet from street centerline, and 10 feet from interior side lot and rear lot lines.
Development Regulation ^a		
Density	-	– General Plan Land Use Designation (1 dwelling unit/40 acres)
Minimum Lot Size	40Ac/8Ac	– 40-acre and 8-acre minimum lot areas
Building Type	C	– For nonresidential uses, detached (one or more main buildings per lot) and attached (same lot or separate lots) building types are permitted.
Height	G	– Maximum height: 35 feet; maximum stories: 2 stories
Setback	C/D	– Setbacks are 60 feet (front yard), 25 feet (rear yard), and 15 feet interior setback from lot line and 35 feet exterior setback from centerline (side yard).
Special Area Regulation	-/A	– Agriculture Preserve
Enclosure Regulation	See summary	– Enclosed and open buildings/structures and other areas are permitted for Civic Use Types, and drive-in enclosures are permitted by Minor Use Permit.

Note: ^a The following development designators are not regulated for the proposed BPS site: maximum floor area ratio, floor area ratio, lot/building coverage, and usable open space.

San Diego County Board of Supervisors Policies. The following San Diego County Board of Supervisors policies could be relevant to construction and operation of facilities under the Proposed Action.

- Policy I-38, *Agricultural Preserves*: Policy I-38 sets forth policies for the implementation of the Williamson Act in the county. The policy presents criteria for the establishment, modification, and disestablishment of an Agricultural Preserve including Williamson Act contracts. The policy also includes criteria for cancellation of a Williamson Act contract.
- Policy I-78, *Small Wastewater Treatment Facilities*: Policy I-78 states that construction of small wastewater treatment facilities are subject to all appropriate plans, ordinances, statutes, and regulations including the San Diego County General Plan and associated Land Use Element, County Zoning Ordinance, CEQA and County Environmental Impact

Report Guidelines, and rules and regulations of the RWQCB and other regulatory agencies. Prior to approval of a small wastewater treatment facility, one of the following findings must be made in addition to the findings required in the Land Use Element:

(1) all projects should be within 1 mile of the urban limit line with limited exceptions; or
(2) annexation and hookup to a traditional sewer system is prohibited until the urban limit line is extended for facilities approved in the Semi-Rural or Rural Development Areas.

This policy disfavors the construction of sewage facilities that are sized larger than necessary to serve the land use pattern and density on the San Diego County General Plan land use map or that are outside the Urban Limit Line or a Village Area. The proposed BPS site is outside of the Urban Limit Line and Village boundaries.

- Policy I-133, *Support and Encouragement of Farming in San Diego County*: Policy I-133 establishes the County's support of agriculture through its intent to develop and implement programs designed to support and encourage farming in San Diego County. One such program is the Agriculture Promotion Program.

Multiple Species Conservation Program (MSCP). The MSCP is a comprehensive, habitat conservation planning program that addresses multiple species habitat needs and the preservation of native vegetation communities in San Diego County. The MSCP is a subregional plan under the Natural Communities Conservation Program that is implemented through local subarea plans, which describe specific implementing mechanisms for the MSCP.

The proposed BPS site is within the Metropolitan-Lakeside-Jamul Segment of the South County Subarea Plan. Within this segment, the take of 85 covered species and their habitats are authorized for projects (county and other public landowners, private landowners, and other land development project proponents) pending a project's fulfillment of the requirements of the Biological Mitigation Ordinance and conformance with the terms of the Subarea Plan. Specific mitigation requirements for individual projects are required to be consistent with the mitigation requirements set forth in the MSCP and the South County Subarea Plan. No preserves boundaries have been designated in the Metropolitan-Lakeside-Jamul Segment; therefore, mitigation for projects within the segment are directed to Biological Resource Core Areas as defined by the Biological Mitigation Ordinance.

Take of covered species resulting from the construction and operation of public infrastructure facilities within the Metro-Lakeside-Jamul Segment of the South County Subarea Plan is permitted within the preserve area if San Diego County makes several findings or the project is consistent with the Biological Mitigation Ordinance. However, CBP is not a signatory to the MSCP and, therefore, is not required to comply with MSCP-specific mitigation requirements and ratios. Any CBP mitigation requirements are fulfilled through Endangered Species Act Section 7 consultation with USFWS. Therefore, USBP is permitted to perform their activities within any preserve subject to applicable requirements of federal and state law with no additional permit requirements from the MSCP. Additionally, projects within Tier IV habitats, which include disturbed and agricultural lands, would not be required to mitigate for impacts to habitat pursuant

to the South County Subarea Plan (County of San Diego 1997). See **Sections 3.3.2** and **3.4.2** for more information on the MSCP.

Regional Setting. The proposed Brown Field BPS site is in an unincorporated portion of south-central San Diego County. The county covers 4,261 square miles, including 18 incorporated cities, all within the western portion of the county, and 3,570 square miles of unincorporated area. A majority of the unincorporated portions of the county are rural in character, with more than 20 scattered communities that vary in land use and density. More than 90 percent of the unincorporated land is either open space or undeveloped, which includes several large federal, state, and regional parklands (County of San Diego 2016a).

The San Diego County General Plan directs future growth of the incorporated portions of the county through the Community Development Model, which identifies Regional Categories and Land Use Designations. Regional Categories are broad development classifications that provide a framework for the location of specific Land Use Designations. Land Use Designations identify allowed uses or intensities of individual development (County of San Diego 2016a). The proposed BPS site is within the Rural Lands Regional Category, which applies to large open space and very-low-density private and publicly owned lands for agriculture, managed resource production, conservation, and recreation and thereby retain a rural character (County of San Diego 2016a, County of San Diego 2017a). The specific Land Use Designation of the proposed BPS site is Rural Lands 40 (RL-40), in which the maximum density is one (dwelling) unit per 40 gross acres (County of San Diego 2016a, County of San Diego 2017b).

The proposed BPS site is in the Jamul/Dulzura Subregion, which is a community planning area identified in the San Diego County General Plan. This Subregion consists of approximately 168 square miles of land east of the Rancho San Diego development, south of Loveland Reservoir and the Sweetwater River, and adjacent to and north of the U.S./Mexico international border. The Subregion includes several small rural or semi-rural communities, including Dulzura, and is generally rural in character primarily because it has no sewer system (County of San Diego 2016b). The Jamul/Dulzura Subregional Plan implements the broader goals and policies of the County General Plan Land Use Element through community-specific goals and policies.

San Diego County administers the General Plan primarily through its Zoning Ordinance, which regulates land uses in the unincorporated areas of the county through identification of permitted specific uses and development standards. By comparison, the General Plan identifies general land use designations. Therefore, the Zoning Ordinance (and associated zoning maps) must be consistent with the General Plan because they are the primary methods for accomplishing the Plan's objectives. Zoning at the proposed BPS site is identified in **Table 3-1**.

The proposed BPS site is within an Agricultural Preserve (Agricultural Preservation Number 31), and was formerly subject to a Williamson Act contract (Contract 73-95). However, this contract became null and void when the 125.2-acre property was purchased by the federal government. The proposed roadway improvements are outside of the BPS site partially on property under

Williamson Act Contract 73-97. Under this Williamson Act contract, the roadway improvements area is categorized as Non-Prime Agricultural Land, which is enrolled land that does not meet any of the criteria for classification as Prime Agricultural Land (California DOC 2013). Most Williamson Act Non-Prime Agricultural Land is used for grazing or non-irrigated crops; however, it may also include other open space uses compatible with agriculture and consistent with local general plans. Although primarily based on physical soil properties, the proposed BPS site and roadway improvements area are also designated as important farmland (prime farmland if irrigated and farmland of statewide importance) by NRCS. The areas are also primarily designated as farmland of local importance and grazing land by the California DOC Farmland Mapping and Monitoring Program (FMMP) (California DOC 2018). **Figure 3-1** depicts NRCS and FMMP important farmlands on the site. The definitions of Prime and Non-Prime Agricultural Land for Williamson Act lands are different from the definitions of prime farmland and non-prime farmland for NRCS and FMMP important farmlands. See **Section 3.2** for more information on NRCS and FMMP important farmland designations.

A portion of the proposed BPS site is within San Diego County Resource Conservation Area (RCA) #115: Gaskill Peak, Horse Thief-Pine Valley Creek, Lawson Peak, Barrett Lake, Mother Grundy Mountain, Deer Horn Valley. Within RCAs, County departments and other public agencies give careful consideration and special environmental analysis to all projects that they intend to carry out, propose, or approve, and shall select those conservation actions most appropriate to the project and consistent with the intent of this overlay designation (County of San Diego 2016b).

The proposed BPS site is within the Unincorporated Land in Metropolitan-Lakeside-Jamul Segment of the San Diego County (or South County) Subarea Plan of the MSCP. The proposed BPS site is not within a Biological Core Area or Biological Linkage as defined by the Biological Mitigation Ordinance. Any project approved by San Diego County within the South County MSCP boundary must be in conformance with the MSCP Plan and the South County Subarea Plan. However, CBP is not a signatory to the MSCP and USBP, other law enforcement and fire control agencies, and agencies that respond to natural disasters are permitted to perform their activities within any preserve system subject to all applicable requirements of federal and state law. The MSCP creates no additional permit requirements beyond those of existing federal and state law for the activities of these agencies (County of San Diego 1997).

The area surrounding the proposed BPS site consists mainly of private property with pasture and agricultural fields and a few scattered residences. The proposed roadway improvements are on a property to the southwest of the BPS site, which also contains an unimproved Cal Fire helipad. A portion of this property has been intermittently farmed over the years, although not typically the roadway improvements area. There are rural residential properties to the west, north, and east of the BPS site. The site is directly adjacent to the north/northwest of Cal Fire Dulzura Fire Station 30. Campbell Ranch Road connects to Highway 94 south of the site. Highway 94 is a two-lane, paved highway that runs between Jamul and Tecate, California. The Dulzura Vineyard and Winery, which is open to the public on weekends year-round, is on the southern side of Highway 94, south of the proposed BPS site.

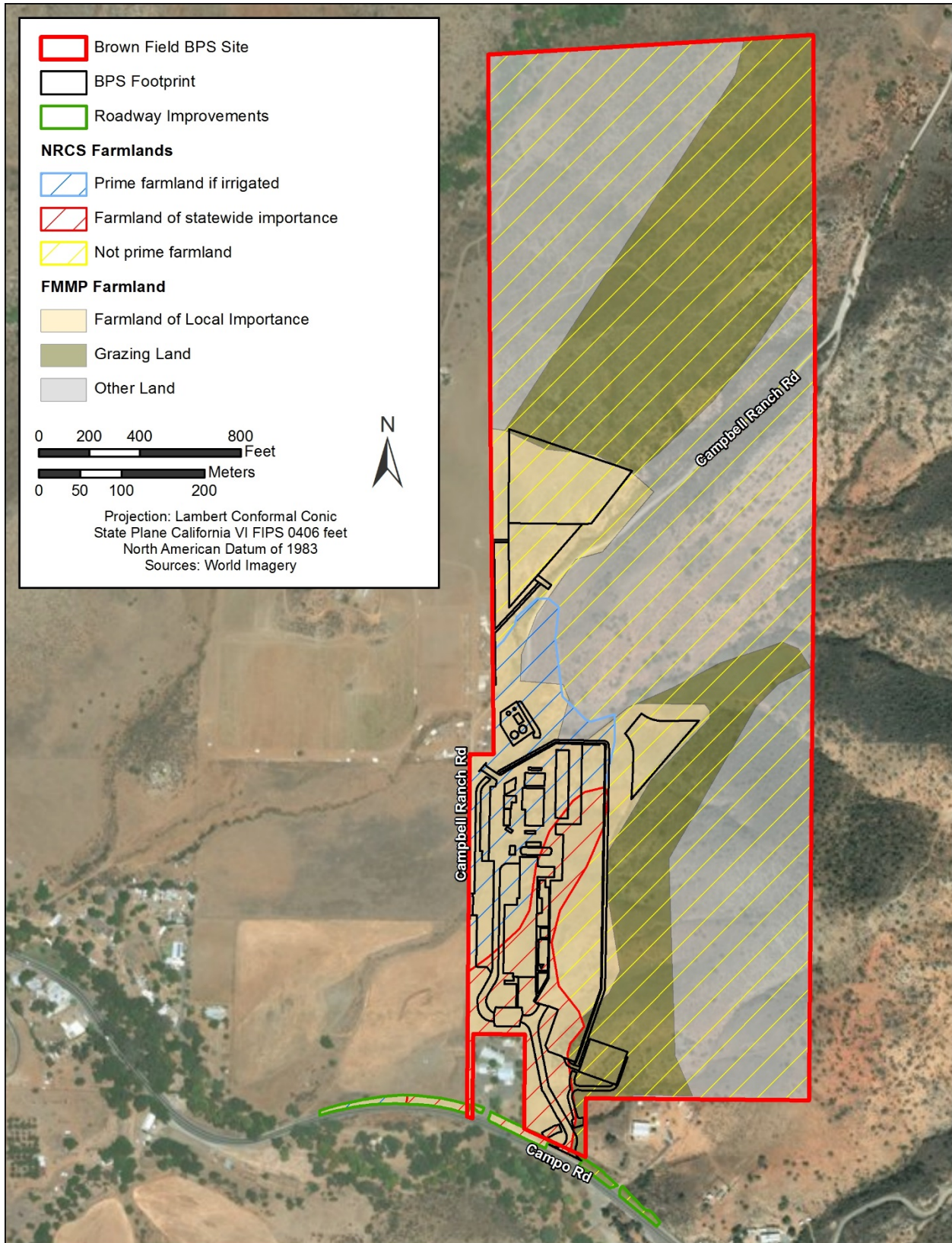


Figure 3-1. Important Farmlands on the Proposed BPS Site

The Lawrence and Barbara Daley Preserve, a 597-acre preserve that is managed by the San Diego County Department of Parks and Recreation as part of the South County MSCP preserve system, is approximately 0.25 mile west of the proposed BPS site (County of San Diego DPR 2011). The Hollenbeck Canyon Wildlife Area, which is managed for species and habitat conservation and wildlife-dependent recreation by CDFW, is approximately 0.75 mile northwest of the proposed BPS site. The Otay Mountain Wildlife Management Area and Wilderness Area, BLM-managed areas that in aggregate are approximately 38,000 acres, is at its closest approximately 0.5 mile south of Highway 94 and the proposed BPS site (CDFG 2008).

3.1.3 Environmental Consequences

Evaluation of potential land use impacts is based on the level of land use sensitivity in areas affected by a proposed action and compatibility of proposed actions with existing conditions. In general, a land use impact would be adverse if it were to meet one or more of the following requirements:

- Be inconsistent or in noncompliance with existing land use plans or policies.
- Preclude the viability of existing land use.
- Preclude continued use or occupation of an area.
- Be incompatible with adjacent land use to the extent that public health or safety is threatened.
- Conflict with planning criteria established to ensure the safety and protection of human life and property.

3.1.3.1 Proposed Action

The Proposed Action would have short- and long-term, minor to moderate, adverse impacts on land use.

Various plans applicable to the Dulzura area were reviewed to determine if there were any land use policies that would apply to the construction, maintenance, and operation of the proposed Brown Field BPS. Land use policies that could be relevant to the Proposed Action were preliminarily evaluated, and several were identified for further analysis to determine consistency (see **Table 3-2**). The Proposed Action would be consistent with the intent of these policies.

Table 3-2. Land Use Policy Consistency for the Proposed BPS

Policy	Consistency
California Land Conservation Act (Williamson Act)	Although state policy is to avoid, whenever practicable, siting of any federal, state, or local public improvements and the acquisition of land for these purposes in agricultural preserves, including land under a Williamson Act contract, there are policies for doing so. Alternative sites for the proposed BPS were considered, but are not feasible (see Section 2.5). Additionally, California Government Code Section 51293 states that some public improvements, including work on certain state highways (including Highway 94), can be sited within agricultural preserves. The Williamson Act identifies the processes for terminating a Williamson Act contract on a parcel or a portion thereof for public improvements. Upon CBP's acquisition of the roadway improvements area (via purchase or easement), Williamson Act Contract 73-97 for the portion of the adjacent property containing the public improvements would become null and void and be terminated. The 125.2-acre BPS site is not subject to the Williamson Act because the former Williamson Act contract on that property (Contract 73-95) was deemed null and void when the federal government acquired the property. Therefore, the Proposed Action would be consistent with the requirements identified in the Williamson Act.
San Diego County General Plan	
Policy LU-5.3: Rural Land Preservation. Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development under the Rural and Semi Rural Land Use Designations.	The Proposed Action would not preclude the preservation of existing open space and rural areas, including agricultural lands. The southwestern portion of the proposed BPS site was used previously for agriculture, but has not supported active agricultural operations for several years. Approximately 94 acres of the proposed BPS site would remain undisturbed and undeveloped. CBP would acquire all applicable permits for construction and operation of the proposed BPS.

Policy	Consistency
San Diego County General Plan (continued)	
<p>Policy LU-7.1: Agricultural Land Development. Protect agricultural lands with lower-density land use designations that support continued agricultural operations.</p>	<p>The Proposed Action would not preclude the continuation of existing active agricultural operations or continued use of adjacent areas for agriculture. Although, the southwestern portion of the BPS site was used previously for agriculture, it has not supported active agricultural operations for several years. The property with the proposed roadway improvements area has intermittently been farmed over the years, but not typically the actual roadway improvement area. Approximately 94 acres of the proposed BPS site would remain undisturbed and undeveloped, and approximately 49 acres of the northern portion of the site would be available for agriculture should CBP choose to lease the land for that purpose.</p>
<p>Policy LU-14.4: Sewer Facilities. Prohibit sewer facilities that would induce unplanned growth. Require sewer systems to be planned, developed, and sized to serve the land use pattern and densities depicted on the Land Use Map. Sewer systems and services shall not be extended beyond either Village boundaries or extant Urban Limit Lines, whichever is more restrictive, except:</p> <ul style="list-style-type: none"> • When necessary for public health, safety, or welfare; • When within existing sewer district boundaries; • When necessary for a conservation subdivision adjacent to existing sewer facilities; or • Where specifically allowed in the community plan. 	<p>The Proposed Action would not include sewer facilities that would induce unplanned growth. The proposed BPS site is outside of Village boundaries and the Urban Limit Line in an area designated A72 (General Agricultural) and Rural Lands (RL-40), which is reserved for very low-density rural lands. The Proposed Action would exceed the density of one unit per 40 acres identified in the General Plan (or one unit per 10 acres in the Jamul/Dulzura Subregional Plan). The Proposed Action would not extend existing sewer systems or services, but rather would install a septic system and leach field that would be designed and sized to treat wastewater only from the proposed BPS. No other uses would be permitted to utilize this septic system. Also see the consistency analysis for Board of Supervisors Policy I-78.</p>
<p>Policy COS-3.1: Wetland Protection. Require development to preserve existing natural wetland areas and associated transitional riparian and upland buffers and retain opportunities for enhancement.</p>	<p>Based on the current design, the Proposed Action would directly and indirectly affect portions of six drainages (tributaries to Dulzura Creek) for minor, adverse impacts on surface waters, including potential waters of the United States (WoUS), but would have no impact on federally protected wetlands. Although there would be direct impacts to several potentially jurisdictional features, including permanent discharge of fill to 0.057 acre of non-wetland WoUS, no net loss of aquatic function is expected with implementation of measures identified in Sections 3.7.3 and 5. CBP would comply with applicable regulations and requirements for work occurring within potential jurisdictional features.</p>

Policy	Consistency
San Diego County General Plan (continued)	
<p>Policy COS-6.2: Protection of Agricultural Operations. Protect existing agricultural operations from encroachment of incompatible land uses by doing the following:</p> <ul style="list-style-type: none"> • Limiting the ability of new development to take actions to limit existing agricultural uses by informing and educating new projects as to the potential impacts from agricultural operations. • Encouraging new or expanded agricultural land uses to provide a buffer of non-intensive agriculture or other appropriate uses (e.g., landscape screening) between intensive uses and adjacent non-agricultural land uses. • Allowing for agricultural uses in agricultural areas and designing development and lots in a manner that facilitates continued agricultural use within the development. • Requiring development to minimize potential conflicts with adjacent agricultural operations through the incorporation of adequate buffers, setbacks, and project design measures to protect surrounding agriculture. • Supporting local and State right-to-farm regulations. • Retain or facilitate large and contiguous agricultural operations by consolidation of development during the subdivision process. 	<p>The Proposed Action would not affect existing active agricultural operations. The Proposed Action would site a non-agricultural use on the BPS site, which was used previously for agricultural uses but has not supported active agricultural operations for several years. The proposed roadway improvements area would be on an adjacent property that has intermittently been farmed over the years, but not typically the actual roadway improvements area. The BPS would be adjacent to another non-agricultural use (Cal Fire station). Additionally, the Proposed Action would be compatible with adjacent agricultural operations, and not preclude their continued operation.</p>
<p>Policy COS-13.1 Restrict Light and Glare. Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.</p>	<p>The Proposed Action would include exterior lighting; however, it would be designed to minimize glare and to provide only enough illumination so that intrusion into the area can be detected and any electronic surveillance devices can operate effectively.</p>

Policy	Consistency
Jamul/Dulzura Subregional Plan	
Agriculture Policy 9: Agricultural activities are essential in maintaining the existing rural life of the community. Therefore, the community encourages all types of agricultural activities, large or small, which provide a local or regional source of food, fiber, or livestock and when water and land resources are available.	The Proposed Action would not discourage agricultural activities on adjacent land, and would be compatible with these uses. Construction and operation of the proposed BPS would not preclude the use or continued use of surrounding agricultural areas. The southwestern portion of the proposed BPS site was used previously for agricultural uses, but has not supported active agricultural operations for several years. Additionally, approximately 49 acres of the northern portion of the site could still be used for agriculture should CBP choose to lease the land for that purpose.
Agriculture Policy 12: Encourage agricultural preserves and land conservation contracts in the Jamul/Dulzura Subregion unless the land is unsuitable for any type of agricultural use.	The Proposed Action would not discourage the County's establishment of agricultural preserves or the County/landowners' entering into land conservation contracts, including Williamson Act contracts, on adjacent land. Also see the consistency analysis for California Land Conservation Act (Williamson Act).
San Diego County Board of Supervisors Policies	
Policy I-38: Agricultural Preserves	The Proposed Action would be consistent with this policy because upon CBP's acquisition of the roadway improvements area (via purchase or easement), Williamson Act Contract 73-97 would become null and void for the portion of the adjacent property containing the public improvements and the Williamson Act protections would be terminated on this land. Also see the consistency analysis for California Land Conservation Act (Williamson Act).
Policy I-78: Small Wastewater Treatment Facilities	The Proposed Action would not require hookup to a traditional sewer system, but would include an appropriately sized septic system and leach field for use by the proposed BPS only. Design and construction of the septic system and leach field would comply with all applicable statutes and regulations, and CBP would obtain necessary permits for the system. Additionally, this policy does not apply to single owner-single user on-site wastewater disposal systems. Also see the consistency analysis for General Plan Policy LU-14.4, Sewer Facilities.
Policy I-133: Support and Encouragement of Farming in San Diego County	The Proposed Action would not discourage San Diego County from developing and implementing programs designed to support and encourage farming.

The Proposed Action is inconsistent with the current land use designation of Rural Lands 40 (RL-40) as identified in the San Diego County General Plan; therefore, it is likely that a General Plan amendment to identify the proposed BPS site as federal property would be required. It

would likely be changed to No Jurisdiction Regional Category, which is applied to those areas where the County does not have land use planning jurisdiction (e.g., lands under state or federal jurisdiction and tribal reservations), and the Public Agency Lands specific Land Use Designation. The Proposed Action would then be consistent with the General Plan if the General Plan amendment were approved. The proposed BPS site is within the General Agriculture (A72) Use Regulation in the General Plan. Law enforcement services within the Civic Use Type are a permitted use within the A72 General Agricultural Use Regulations. Additionally, the proposed BPS would not be consistent with the density of the Rural Lands 40 (RL-40) designation, which is reserved for very low-density or undeveloped rural lands with large open spaces and limited development. The Proposed Action would exceed the density of one unit per 40 acres identified in the General Plan (or one unit per 10 acres in the *Jamul/Dulzura Subregional Plan*). However, as stated in the County Zoning Ordinance, federal properties are not required to comply with the ordinance, although CBP would comply with applicable building codes and other policies to the extent practicable.

Construction and operation of the Proposed Action would not preclude the viability of existing land uses on adjacent properties or other surrounding areas, or the continued use and occupation of these areas. The proposed BPS would not interfere with the continued use of adjacent properties for residential or agricultural use or the Cal Fire Dulzura Station 30. Campbell Ranch Road would continue to be accessible to property owners that require it to access their land, including providing secondary access to the Cal Fire station. Therefore, the Proposed Action, including the roadway improvements, would not preclude adjacent land from being farmed or grazed as the land would still be accessible and no equipment would be obstructed. Additionally, the Proposed Action, including use of the water well, would not affect the viability of adjacent wells on surrounding land through drawdown (CWE 2018). Therefore, operation of the water well would not preclude viability of existing land uses or the continued use of surrounding areas for agricultural, residential, or civic purposes. CBP has proposed that the BPS helipad could be jointly used by CBP and Cal Fire. The Proposed Action would not preclude continued use of the existing Cal Fire helipad, which is on an adjacent property southwest of the proposed BPS site. CBP would coordinate with adjacent property owners, including Cal Fire, to ensure that the proposed BPS would not preclude use of their land for the existing functions. See **Sections 3.2.3** and **3.6.3** for more information on impacts on geological resources and groundwater resources, respectively.

Construction of the proposed BPS would increase the presence of construction vehicles and equipment, and disturbances (e.g., noise) related to construction activities that could be observed by people immediately surrounding the site, including Cal Fire personnel at the adjacent Dulzura Station 30. These activities and associated disturbances would occur during the daytime and be temporary lasting only for the duration of construction, and would not preclude the continued use of the surrounding properties. The Proposed Action would result in short-term, minor, adverse impacts on land use compatibility due to noise resulting from construction activities. No long-term impacts on land use compatibility due to noise or lighting would be expected from

operation of the proposed BPS. Although the proposed BPS would have exterior lighting, it would include only the amount necessary for security purposes and it would be directed downward. See **Sections 3.10.3** and **3.13.3** for discussion of noise and traffic impacts, respectively, during construction and operation of the proposed BPS.

Implementation of the Proposed Action is not anticipated to encourage additional growth in the area as the proposed BPS is not a public-serving land use, nor would it add utilities services that could be used by other uses. See **Section 4.4** for more information on growth-inducing impacts.

The Proposed Action would preclude use of portions of the proposed BPS site (i.e., south of Campbell Ranch Road and the portion of the BPS north of Campbell Ranch Road) for agriculture; however, based on historical aerial photographs the site has not recently been used for agricultural production or grazing purposes. Except for the proposed sites of the stockpile, septic system reserve area, and culvert and a small area southwest of these sites, the BPS site north of Campbell Ranch Road could still be used for agriculture if CBP chooses to lease the land for that purpose. The proposed roadway improvements would not preclude the continued use of that property for agriculture. The Proposed Action would directly and indirectly convert prime farmland if irrigated and farmland of statewide importance as defined by NRCS to non-agricultural use. Additionally, according to agricultural land classifications defined by the FMMP, the proposed BPS would convert FMMP-defined important farmlands to non-agricultural use, including direct and indirect conversion of farmland of local importance. See **Section 3.2.3** for more information on impacts on important farmland soils.

As stated in **Table 3-2**, the Proposed Action would conflict with Williamson Act Contract 73-97, resulting in an adverse impact on agricultural resources. The Proposed Action would directly convert approximately 0.3 acre of Williamson Act Non-Prime Agricultural Land to non-agricultural use for public improvements (roadway improvements). The acquisition and use of this area on the adjacent property is not expected to reduce the agricultural viability of the property. Upon CBP's acquisition of the roadway improvements area (via purchase or easement), Williamson Act Contract 73-97 on this portion of the adjacent property would become null and void and the Williamson Act contract protections on this area would be terminated. Williamson Act contract protections would remain in place for the remainder of the property under Contract 73-97.

The Williamson Act contract protections would be terminated through public acquisition in which Williamson Act land is acquired by a public agency or person for a public improvement. Using this method, a public agency or person with the authority to condemn property may acquire the land by, or in lieu of eminent domain, and the Williamson Act contract will be deemed null and void. If requirements for public acquisition of Williamson Act land are met, the land may be acquired and the contract terminated. Requirements include public agency notification of DOC and San Diego County Board of Supervisors, and findings that the acquisition of the land is not based primarily on the lower cost of land due to its being in an agricultural preserve and there is no other land on which it is reasonably feasible to locate the

public improvement. If requirements are not met, the acquisition may not be valid and the contract may remain and continue to restrict use of the land (California DOC 2004). Additionally, acquisition in lieu of eminent domain must follow eminent domain law.

Because Williamson Act Contract 73-97 for the portion of the adjacent property on which the proposed roadway improvements area is sited would be deemed null and void and terminated upon acquisition by CBP, the Proposed Action would not conflict with a Williamson Act contract and impacts would be minor.

Therefore, the Proposed Action would have long-term, minor to moderate, adverse impacts on the viability of agricultural resources on the proposed BPS site because the proposed BPS would convert important farmlands to non-agricultural use, and conflict with Williamson Act Contract 73-97 until acquisition by CBP when the contract would be terminated on the portion of adjacent property containing the roadway improvements area. These impacts would be minor to moderate because the Proposed Action would not directly or indirectly convert FMMP-defined prime farmland or farmland of statewide importance to non-agricultural use or preclude the viability of adjacent agricultural land, and approximately 49 acres of the proposed BPS site would still be available for agricultural use should CBP choose to lease the land for that purpose. The Williamson Act land within the roadway improvement area is categorized as Non-Prime Agricultural Land, which does not meet the criteria for classification as Prime Agricultural Land. Upon CBP's acquisition of this land via purchase or easement for the public improvements, Williamson Act Contract 73-97 for this land would be null and void and the Proposed Action would no longer conflict with a Williamson Act contract.

The Proposed Action would not conflict with planning criteria established to ensure the safety and protection of human life and property. Because the Proposed Action would require grading of sloped areas to accommodate the BPS, CBP would ensure the design incorporates all applicable BMPs to reduce risk. The proposed BPS would comply with state and local building codes and other planning criteria and policies established to ensure safety of people and property due to geologic hazards and wildfires. Additionally, the proposed BPS site is not within 2 miles of a public or public use airport or a private airstrip, but is adjacent to the Cal Fire helipad. The proposed BPS would include an approximately 100-foot-tall communications tower. CBP would comply with all applicable federal and state regulations for design and operation of the proposed helipad; therefore, it would not conflict with planning criteria related to safety. Indirect, beneficial impacts could occur as a result of improving law enforcement efficiency within the Brown Field Station AOR.

3.1.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the proposed Dulzura site, and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. No buildings or other facilities would be constructed on the proposed Dulzura site, and it would remain undeveloped and no agriculture would occur on the site. No impacts on land use would occur as a result of the No Action Alternative.

3.2 Geology and Soils

3.2.1 Definition of the Resource

Geological resources consist of the Earth's surface and subsurface materials. Within a given physiographic province, these resources typically are described in terms of topography and 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 natural and human-made features. 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 and borings to identify subsurface composition.

Soils are the unconsolidated materials overlying bedrock or other parent material. Soils typically are described in terms of their complex type, slope, and physical characteristics. Differences among soil types in terms of their structure, elasticity, strength, shrink-swell potential, and erosion potential affect their abilities to support certain applications or uses. In appropriate cases, soil properties must be examined for their compatibility with particular construction activities or types of land use.

Important farmland is protected under the FPPA of 1981 (7 USC § 4201 et seq.). The intent of the FPPA is to minimize the extent that federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. The NRCS is responsible for overseeing compliance with the FPPA and has developed the rules and regulations for implementation of the Act (7 CFR § 658). For the purposes of the FPPA, important farmland includes prime farmland, unique farmland, and farmland of statewide or local importance. The land could be cropland, pasture, rangeland, forest, or other land, but not urban developed land or water. The FPPA defines these important farmlands as follows:

- *Prime farmland*: Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and that is also available for these uses.
- *Unique farmland*: Land other than prime farmland that is used for the production of specific high value food and fiber crops. Unique farmland is not based on national criteria.
- *Farmland of statewide or local importance*: Land that is of statewide or local importance other than prime or unique farmland that is used for the production of food feed, fiber, forage, or oilseed crops, as determined by the appropriate state or local government agencies (7 USC § 4201[c][1]).

Determination of whether an area is considered important farmland and potential impacts associated with a proposed action are based on preparation of the Farmland Conversion Impact Rating form (AD-1006) for areas where farmland soils occur and by applying criteria established

at Section 658.5 of the FPPA (7 CFR § 658). Lands that receive a combined total site assessment score of less than 160 points on the Farmland Conversion Impact Rating Form are not covered by the FPPA (7 CFR § 658.2[a]).

The California FMMP also has a classification system for important farmland categories. It uses NRCS technical soil ratings and current land use as a basis for classification. FMMP considers the following to be important farmland or 'agricultural land': prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land. Additional categories include urban and built-up land, other land, and water. Prime farmland is land that has the best combination of physical and chemical properties to sustain long-term agricultural production of crops. Farmland of statewide importance is similar to prime farmland, but with minor shortcomings (e.g., steeper slopes, inability to hold water). Prime farmland and farmland of statewide importance must have been used for irrigated agricultural during the previous 4 years. Unique farmland is land of lesser quality soils, but used for the production of the state's leading crops in the previous 4 years. Farmland of local importance is land that meets the characteristics of prime farmland or farmland of statewide importance, except it has not been irrigated. Grazing land contains vegetation that is suitable for grazing livestock (California DOC 2016a).

Geologic hazards include seismic activity such as earthquakes. Earthquake-related geologic hazards include fault rupture, landslides, rockfalls, and soil liquefaction. In California, the Alquist-Priolo Earthquake Fault Zoning Act serves to "ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep" (California DOC 2016b).

Fault rupture occurs when earthquakes result in large areas of ground displacement along a fault. The potential for landslides (i.e., movement of soil and/or rock down a slope) or rockfalls depends on an area's geologic formations; topography; ground shaking potential; and human influences such as excavation, filling, or removing of vegetative cover. Liquefaction occurs when a sudden increase in pore water pressure causes soils to lose strength and is most likely to occur in saturated, loose, and fine to medium-grained soils in areas where the groundwater table is generally 50 feet or less below the surface (County of San Diego DPLU 2011a).

3.2.2 Affected Environment

Regional Geology. The proposed Brown Field BPS site is within the Peninsular Ranges physiographic province of California. The Peninsular Ranges region consists of rolling uplands to steep mountains typically covered with granitic boulders (County of San Diego DPLU 2011a). The predominant geology consists of Mesozoic-aged plutonic igneous rocks (primarily granite) and metamorphic formations (County of San Diego DPLU 2011a, CGS 2002, CGS 2010). Quaternary-aged alluvial and alluvial fan deposits are also common (County of San Diego DPLU 2011a). Additionally, the region consists of northwest-southeast oriented fault systems branching from the San Andreas Fault, which lies approximately 75 miles from the site (CGS 2002).

The proposed BPS site is in the foothills of the Otay Mountains, and the predominant geology consists of volcanic and metamorphic rocks. Andesite and rhyolite flow rocks, greenstone, volcanic breccia, and other pyroclastic rocks are common in the area (CGS 2010).

Topography. The topography of the proposed BPS site is characteristic of rolling hills. Elevation within the BPS site boundary ranges from approximately 1,100 to 1,450 feet above mean sea level (USGS 2015), while the BPS footprint ranges from approximately 1,120 to 1,185 feet above mean sea level (Terracon 2018). Steeper slopes are present in the eastern and northern portions of the site, while the western portion is gently sloping toward the southwest (CBP 2016b). Due to the presence of steep slopes at the site and the potential for substantial geological events such as earthquakes, there is a risk of landslides. However, the site is not within a Landslide Susceptibility Area (County of San Diego OES 2017).

Soils. Ten soils are present within the proposed BPS site and roadway improvements area (see **Figure 3-2**). Within **Section 3.2**, the 125.2-acre proposed BPS site and the 0.9-acre roadway improvements area are collectively referred to as the “expanded project area” (for a total of 126.1 acres). Only six of the ten soils occur within the BPS footprint and roadway improvements area.

Fallbrook sandy loams make up approximately 22.0 percent of the expanded project area (27.7 acres). This soil type occurs in the southwestern and central portions of the expanded project area. Fallbrook sandy loam, 9 to 15 percent slopes, eroded makes up approximately 15.5 percent (19.5 acres); Fallbrook sandy loam, 5 to 9 percent slopes, eroded makes up 6.1 percent (7.8 acres); and Fallbrook sandy loam, 2 to 5 percent slopes makes up 0.3 percent (0.4 acre) of the expanded project area (NRCS 2017). These soils are moderately permeable and are typically composed of sandy loam surface layers with sandy clay loam subsoil between 27 and 60 inches deep. These soils are well drained, have a depth of more than 80 inches to the water table, and do not have a tendency to pond or flood (NRCS 2017, USDA 1973). Runoff is slow to medium and the erosion hazard is slight to moderate (USDA 1973). Fallbrook sandy loams occur within the BPS footprint and the roadway improvements area.

Ramona sandy loams make up approximately 13.8 percent (17.4 acres) of the expanded project area. These soils occur within the central and southwestern portions of the expanded project area. Ramona sandy loam, 2 to 5 percent slopes makes up approximately 7.8 percent (9.8 acres) of the expanded project area, and Ramona sandy loam, 9 to 15 percent slopes, eroded makes up 6.0 percent (7.6 acres) of the expanded project area (NRCS 2017). These soils are slowly to moderately permeable and are typically composed of sandy loam surface layers with sandy clay loam subsoil between 60 and 74 inches deep. These soils are well drained, have a depth of more than 80 inches to the water table, and do not have a tendency to pond or flood (NRCS 2017, USDA 1973). For Ramona sandy loam, 2 to 5 percent slopes runoff is slow and the erosion hazard is slight. For Ramona sandy loam, 9 to 15 percent slopes, eroded runoff is medium and the erosion hazard is moderate (USDA 1973). Ramona sandy loam, 2 to 5 percent slopes occurs within the BPS footprint and roadway improvements area, and Ramona sandy loam, 9 to 15 percent slopes, eroded occurs within the BPS footprint.

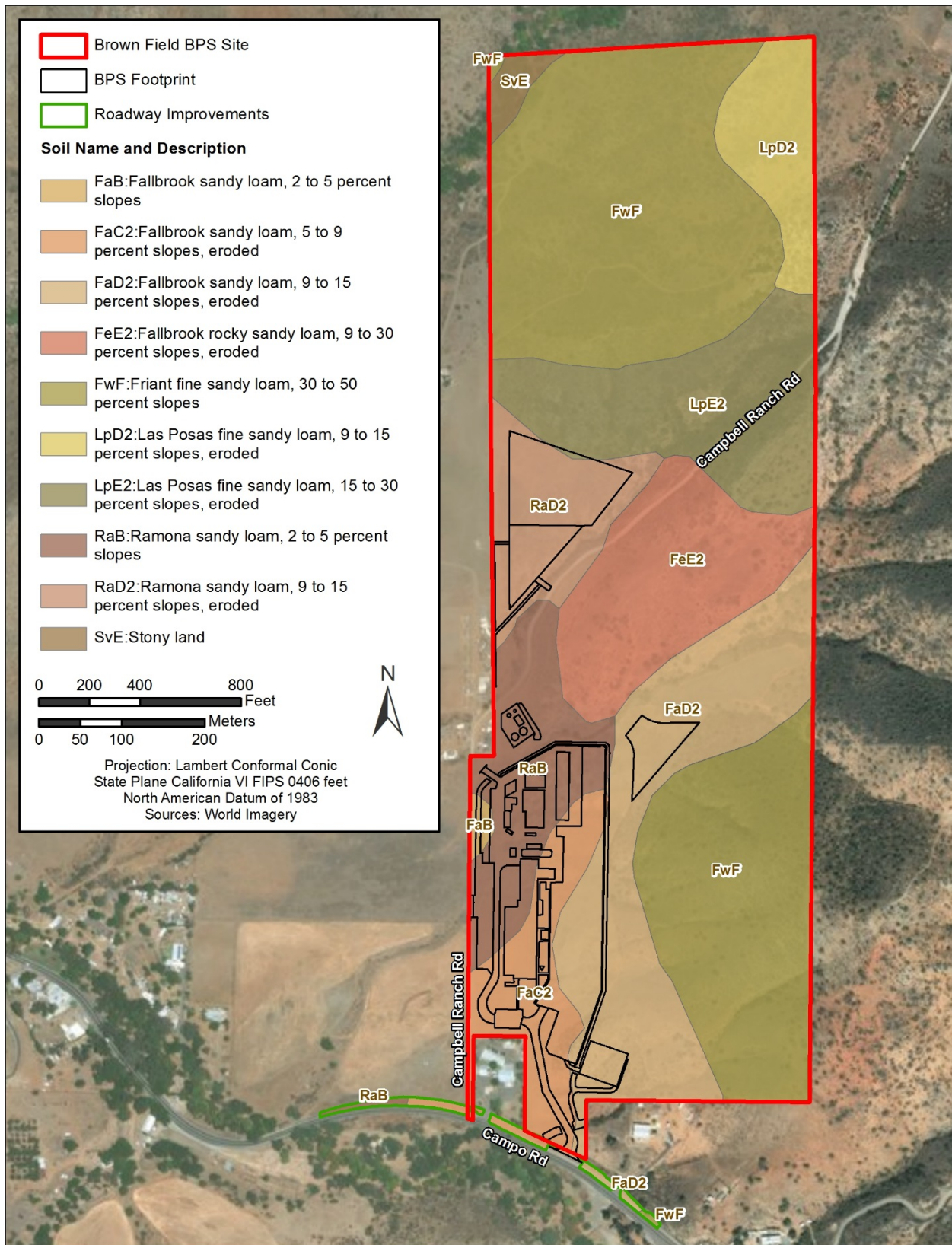


Figure 3-2. Soils on the Proposed BPS Site

Friant fine sandy loam, 30 to 50 percent slopes makes up approximately 37.1 percent (46.8 acres) of the expanded project area. This soil type occurs in the northern and southeastern portions of the expanded project area (NRCS 2017). It is moderately to rapidly permeable and is typically composed of fine sandy loam surface layers with sandy loam subsoil between 3 and 15 inches deep. It is well drained, has a depth of more than 80 inches to the water table, and does not have a tendency to pond or flood (NRCS 2017, USDA 1973). Runoff is rapid and the erosion hazard is high (USDA 1973). This soil type does not occur within the BPS footprint, but there is less than 0.1 acre in the roadway improvements area.

Fallbrook rocky sandy loam, 9 to 30 percent slopes, eroded makes up approximately 10.2 percent (12.9 acres) of the expanded project area. This soil type occurs in the central portion of the expanded project area and is similar to the Fallbrook sandy loam soils (NRCS 2017). This soil type differs from Fallbrook sandy loams because boulders and rock outcrops cover 20 to 35 percent of the surface and it is between 20 and 30 inches deep (NRCS 2017, USDA 1973). Runoff is medium to rapid, and the erosion hazard is moderate to high (USDA 1973). This soil type does not occur within the BPS footprint or the roadway improvements area.

Las Posas fine sandy loams make up approximately 16.0 percent (20.2 acres) of the expanded project area. These soils occur within the central and northeastern portions of the expanded project area. Las Posas fine sandy loam, 15 to 30 percent slopes, eroded makes up approximately 11.4 percent (14.3 acres) of the expanded project area, and Las Posas fine sandy loam, 9 to 15 percent slopes, eroded makes up approximately 4.7 percent (5.9 acres) of the area (NRCS 2017). These soils are slowly to moderately permeable and are typically composed of fine sandy loam surface layers with clay loam or clay subsoil between 26 and 40 inches deep. These soils are well drained, have a depth of more than 80 inches to the water table, and do not have a tendency to pond or flood (NRCS 2017, USDA 1973). For Las Posas fine sandy loam, 15 to 30 percent slopes, eroded runoff is medium to rapid and the erosion hazard is moderate to high. For Las Posas fine sandy loam, 9 to 15 percent slopes, eroded runoff is slow to medium and the erosion hazard is slight to moderate (USDA 1973). These soils do not occur within the roadway improvements area, but there is less than 0.1 acre of Las Posas fine sandy loam, 15 to 30 percent slopes, eroded in the BPS footprint.

Additionally, stony land makes up approximately 0.9 percent (1.1 acres) of the expanded project area and occurs in the northwestern corner of the area (NRCS 2017). This soil type consists of many stones, boulders, cobblestones, and some finer materials (USDA 1973). Stony land does not occur within the BPS footprint or the roadway improvements area.

None of the ten soils within the expanded project area is identified as a clay soil in the *County of San Diego Guidelines for Determining Significance of Geologic Hazards*, and the proposed BPS site is not in a potential expansive soil area (County of San Diego DPLU 2007a).

Soil engineering limitations were determined based on data available in the NRCS Web Soil Survey (NRCS 2017). Engineering limitations were considered for small commercial buildings

and septic tank absorption fields. A majority of the buildings and infrastructure within the BPS footprint would be constructed on Ramona sandy loam, 2 to 5 percent slopes and Fallbrook sandy loam, 5 to 9 percent slopes, eroded, which are rated as ‘somewhat limited’ for small commercial building development. This rating indicates that the soil has features that are moderately favorable for the specified use. A smaller portion of the BPS would be constructed on Fallbrook sandy loam, 9 to 15 percent slopes, eroded, which is rated as ‘very limited’ for small commercial building development due to slopes. None of these three soils are limited by shrink-swell potential. The proposed leach field would be installed in Fallbrook sandy loam, 9 to 15 percent slopes, eroded, which is rated ‘very limited’ for septic tank absorption fields due to slow water movement and to a lesser degree depth to bedrock and slope. The septic system reserve area is in Ramona sandy loam, 9 to 15 percent slopes, eroded, which is also rated ‘very limited’ for septic tank absorption fields due to slow water movement and to a lesser degree slope.

Important Farmlands. The NRCS bases important farmland soil determinations on the most recent soil survey for an area. The most recent soil survey for San Diego County was completed in 2016 (NRCS 2017). The expanded project area (i.e., proposed BPS site and roadway improvements area) contains approximately 10.2 acres of prime farmland if irrigated (8.1 percent of the expanded project area) and 7.8 acres of farmland of statewide importance (6.1 percent of the expanded project area) soil types, and both occur within the BPS footprint and roadway improvements area (NRCS 2017). Within the expanded project area, Fallbrook sandy loam, 2 to 5 percent slopes and Ramona sandy loam, 2 to 5 percent slopes are considered prime farmland if irrigated; however, these soils have not been irrigated since at least 2014 based on historical aerial photographs. The 2016 FMMP data provides additional information supporting that this land is not irrigated because it categorizes most of the BPS footprint as farmland of local importance, which is prime farmland or farmland of statewide importance except that it has not been irrigated (California DOC 2018). Fallbrook sandy loam, 5 to 9 percent slopes, eroded is considered farmland of statewide importance by NRCS. See **Figure 3-1** for NRCS important farmlands on the expanded project area.

The FMMP mapped areas of important farmland within San Diego County in 2016. The FMMP important farmland soils within the expanded project area are farmland of local importance and grazing land. The expanded project area contains approximately 29.0 acres of farmland of local importance (23.0 percent of the expanded project area), 35.7 acres of grazing land (28.3 percent of the expanded project area), and 61.5 acres of other land (48.7 percent of the expanded project area). A majority of the BPS footprint and roadway improvement area consists of farmland of local importance, while the remainder is grazing land (California DOC 2018). See **Figure 3-1** for FMMP important farmlands on the expanded project area.

Geologic Hazards. Faulting, folding, and volcanism have occurred in southern California during much of the Cenozoic Era (USACE 1994). The major fault systems close to the proposed BPS site include Rose Canyon, Elsinore, Superstition Hills, Superstition Mountain, Imperial, and San

Jacinto faults, and the closest fault line is over 15 miles from the site (USGS 2014a). The 2014 U.S. Geological Survey Seismic Hazard Map shows that the seismic hazard for the proposed BPS site ranges from 30 to 40 percent of the force of gravity. This indicates that seismic events are common in the area, and moderate damage would be expected to occur during a severe seismic event (USGS 2014b, CBP 2016b). The proposed BPS site is not within an Alquist-Priolo Earthquake Fault Zone (Terracon 2018).

Fault ruptures would not be expected to occur within the proposed BPS site because the nearest fault is over 15 miles from the site (USGS 2014a); therefore, fault ruptures are not discussed further in this EA. Liquefaction has not been known to have occurred historically in San Diego County because seismic shaking levels have not been sufficient to trigger liquefaction. Additionally, the proposed BPS site is within a low liquefaction risk zone (County of San Diego OES 2017, County of San Diego DPLU 2011a). Therefore, liquefaction is not discussed further in this EA. The proposed BPS site includes areas with steep slopes (greater than 25 percent), although it is not within a landslide susceptibility area or an area of moderate or high soil slip susceptibility (i.e., landslides) (County of San Diego OES 2017, County of San Diego DPLU 2011a).

3.2.3 Environmental Consequences

Protection of unique geological features, minimization of soil erosion, and the siting of facilities in relation to potential geologic hazards are considered when evaluating potential impacts of a proposed action on geological resources. Generally, adverse impacts can be avoided or minimized if proper techniques, erosion-control measures, and structural engineering design are incorporated into project development.

Impacts on geology and soils would be adverse if they would alter the lithology (i.e., the character of a rock formation), stratigraphy (i.e., the layering of sedimentary rocks), and geological structures that dictate groundwater systems; change the soil composition, structure, or function within the environment; or increase the risk of geological hazards.

3.2.3.1 Proposed Action

Regional Geology. No impacts on geology would be expected. Activities associated with the proposed construction, maintenance, and operation of the BPS would not alter lithology, stratigraphy, or the geological structures that control the distribution of aquifers and confining beds.

Topography. Short- and long-term, minor, adverse impacts on topography would be expected from earthmoving and grading activities during construction. Topography would be altered to provide flat surfaces for the proposed main BPS building, ancillary support facilities and structures, and access roads. Although the BPS design is not final, grading would be required in the eastern portion of the site and use of fill would be required on the western portion of the site to bring the site to planned construction grade. It is estimated that 87,215 cubic yards of soil would be cut and 72,247 cubic yards of fill would be necessary (Terracon 2018). Excess soils

from grading would be deposited in an approximately 2.9-acre stockpile that is up to 7 feet high with 2:1 side slopes located within the BPS footprint. However, impacts would be minor because the BPS would be in the southwestern portion of the site that does not contain substantially steep slopes, and natural topography would remain to the maximum extent feasible. Earthmoving and grading would not be required for proposed maintenance and operations; therefore, no impacts on topography would be expected from these activities.

Soils. Short-term, minor, adverse impacts on soils would result from temporary disturbance of ground surfaces, earthmoving activities, and grading within the proposed disturbance area during construction. These activities would excavate soils and expose rock materials, temporarily remove vegetation in some areas, and expose soils to erosion. The use of trucks and construction equipment would result in soil compaction, which could also lead to increased rates of erosion and alter soil structure. Specific construction limitations and considerations would depend on the type of construction activity and the specific subsurface composition encountered.

In general, accelerated erosion of soils would be short-term during construction activities and minimized by appropriately siting and designing facilities to take into account soil limitations, employing construction and stabilization techniques appropriate for the soil and climate, and implementing BMPs and erosion control measures. BMPs could include the installation of silt fencing and sediment traps, application of water to disturbed soil to reduce dust, and re-vegetation of disturbed areas as soon as possible following ground disturbance, as appropriate. The proposed stockpile would be appropriately stabilized with temporary erosion control measures during construction, and with long-term measures according to the SWPPP and native plant revegetation plan during operation of the proposed BPS. Impacts would be localized to the proposed disturbance area due to the implementation of these measures and BMPs. Additionally, all soils within the proposed disturbance area have a slight to moderate erosion hazard. Soil compaction would be minimized by planning construction activities and restricting construction traffic to specific areas and routes of travel (see **Section 5.2**). Therefore, short-term impacts would be minor.

Long-term, negligible, adverse impacts from the conversion and addition of up to approximately 15 acres of impervious surfaces for the Proposed Action, including the BPS and roadway improvements, would also be expected. Reduced soil infiltration and soil productivity and increased runoff from additional impervious surfaces would occur; however, permanent runoff control measures would be implemented to prevent erosion in surrounding areas. These measures would reduce potential impacts from maintenance and operations. See **Sections 3.6.3** and **3.7.3** for additional information on impacts from the proposed increase in impervious surfaces.

The soils mapped at the proposed BPS site are rated somewhat to very limited for small commercial building development and very limited for septic tank absorption fields (i.e., leach fields). A geotechnical engineering report prepared for the Proposed Action concluded the site is suitable for construction of the proposed BPS provided that recommendations identified in the report are implemented during design and construction (Terracon 2018). The proposed wastewater treatment system consists of a septic system and leach field. The final design of the

proposed BPS would consider any potential soil limitations at the site, and incorporate appropriate design measures and BMPs, including those identified by San Diego County and the State Water Resources Control Board. With implementation of appropriate design measures, including those recommended in the geotechnical engineering report, and BMPs, the proposed BPS would not result in major, adverse impacts from soil limitations.

Important Farmlands. Short- and long-term, minor to moderate, adverse impacts on important farmland soils, including soils considered prime farmland if irrigated, would be expected. Approximately 5.5 acres of NRCS prime farmland if irrigated soils (0.1 acre of Fallbrook sandy loam, 2 to 5 percent slopes and 5.4 acres of Ramona sandy loam, 2 to 5 percent slopes); and 4.9 acres of farmland of statewide importance soils (Fallbrook sandy loam, 5 to 9 percent slopes, eroded) would be directly converted to non-agricultural use because it would be within the BPS footprint and roadway improvement area. Approximately 4.7 acres of prime farmland if irrigated (0.3 acre of Fallbrook sandy loam, 2 to 5 percent slopes and 4.4 acres of Ramona sandy loam, 2 to 5 percent slopes) and 2.9 acres of farmland of statewide importance (Fallbrook sandy loam, 5 to 9 percent slopes, eroded) would be indirectly converted to non-agricultural use from being within the BPS perimeter security fence or other areas within the BPS complex (i.e., area within the proposed BPS site south of Campbell Ranch Road and a small area north of Campbell Ranch Road where vegetation would be maintained) (see **Figures 3-1** and **3-2** and **Table 3-3**). However, the Fallbrook sandy loam, 2 to 5 percent slopes and Ramona sandy loam, 2 to 5 percent slopes soils within the expanded project area are not irrigated and, therefore, are not considered prime farmland by NRCS. **Table 3-3** identifies the acreage of important farmland that would be directly and indirectly converted to non-agricultural use due to the Proposed Action within the expanded project area.

As shown in **Figure 3-1** and **Table 3-3**, approximately 17.8 acres of FMMP farmland of local importance and 1.3 acres of FMMP grazing land would be directly removed from agricultural use, and 8.9 acres of farmland of local importance and 10.9 acres of grazing land would be indirectly converted to non-agricultural use due to construction of the BPS. Approximately 2.3 acres of farmland of local importance and 23.5 acres of grazing land are north of Campbell Ranch Road and would not be within the BPS footprint or managed for vegetation and, therefore, could still be used for agriculture if CBP chooses to lease the land for that purpose. Short- and long-term impacts would be similar to those discussed for **Soils** above.

Additional long-term impacts would occur due to the removal of these soils from future agricultural use. However, because no prime farmland soils as defined by NRCS, and no prime farmland or farmland of statewide importance soils as defined by the FMMP would be impacted by the proposed BPS, the Proposed Action would not result in major, adverse impacts.

Table 3-3. Conversion of Important Farmland from the Proposed Action

Type of Farmland	Directly Converted to Non-Agricultural Use (acres) ^a	Indirectly Converted to Non- Agricultural Use (acres) ^b	Potentially Available for Agricultural Use (acres)
NRCS-Defined Farmland			
Prime Farmland if Irrigated	5.5	4.7	0
Farmland of Statewide Importance	4.9	2.9	0
FMMP-Defined Farmland			
Farmland of Local Importance	17.8	8.9	2.3
Grazing Land	1.3	10.9	23.5
Williamson Act Agricultural Land			
Non-Prime Agricultural Land	0.3	0	0

Notes:

^a Includes BPS footprint and roadway improvements area for NRCS- and FMMP-defined farmlands, and BPS footprint and roadway improvements area west of Campbell Ranch Road for Williamson Act Agricultural Lands.

^b Includes area south of Campbell Ranch Road within the proposed BPS site that would be within the BPS perimeter security fence or other areas within the BPS complex that are no longer available for potential agricultural use.

In accordance with the FPPA, a Farmland Conversion Impact Rating form (AD-1006) was completed for the Proposed Action and submitted to NRCS to determine the impacts on important farmland soils within the proposed BPS site. The total site assessment ‘score’ returned by NRCS defines if land is subject to the FPPA, and is an indicator of the potential adverse impacts on the farmland if it exceeds 160 points. The Proposed Action had a total site assessment score of 97. NRCS noted that the Proposed Action could proceed because the BPS footprint and roadway improvements area had only 19.2 acres of soils considered statewide important or local important farmland (see **Appendix A**). It is anticipated that long-term impacts would be minor because the proposed BPS site is not irrigated, not currently used for agriculture, is proximate to facilities and services that promote non-agricultural use (i.e., utility infrastructure and Cal Fire station), and conversion of the potential farmland would not affect surrounding agricultural operations or farm support services. Additionally, the proposed BPS site does not contain substantial on-farm investments (i.e., barns, irrigation, waterways, or soil conservation infrastructure). See **Section 3.1** for more information on impacts on agricultural land use.

Geologic Hazards. Long-term, minor, adverse impacts could occur due to geological hazards. The proposed facilities would meet all building requirements outlined in applicable state and local building codes to minimize potential impacts from earthquakes.

The proposed BPS site contains slopes greater than 25 percent mostly in the northern and southeastern portions of the site; however, the BPS would be in the southwestern portion of the site on flat land. Implementation of BMPs and erosion control measures discussed for **Soils** (see **Section 5.2**), as well as other appropriate preventative measures identified by federal, state, and

local agencies, would be implemented where applicable to minimize potential impacts from landslides. These preventative measures could include regular drain and culvert maintenance, drainage ditch and channel maintenance, vegetation maintenance, and implementation of roadside stabilization measures.

3.2.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the proposed Dulzura site, and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. No buildings or other facilities would be constructed on the proposed Dulzura site, and it would remain undeveloped. Geological conditions would remain as described in **Section 3.2.2**. No impacts on geological resources would be expected.

3.3 Vegetation

3.3.1 Definition of the Resource

Vegetation includes native or naturalized plants and the habitats in which they exist. This section includes a description of all plants, plant communities, and their habitats occurring within the boundaries of the proposed Brown Field BPS site and roadway improvements area. Therefore, within **Section 3.3**, “expanded project area” refers collectively to the 125.2-acre proposed BPS site and the 0.9-acre roadway improvements area (for a total of 126.1 acres). This section describes the affected environment, including native and non-native vegetation occurring within the 126.1-acre expanded project area, and the 31.7-acre proposed disturbance area and the 18.2-acre BPS footprint, which are subsets of the expanded project area. Local special status or rare vegetation species as defined by California Natural Diversity Database (CNDDDB) and the San Diego County MSCP are discussed in this section, are considered in the same general manner as the vegetation communities and other plant species discussed in this section, and are not analyzed individually by species in this EA. Federal and state threatened, endangered, and candidate plant species are discussed in **Section 3.5**.

3.3.2 Affected Environment

The expanded project area is within the Diegan Western Granitic Foothills Ecoregion. This area typically contains hills and moderately steep slopes. Climate and rainfall is less affected by the ocean than more coastal areas (USGS 2016). Vegetation communities were surveyed during biological surveys conducted in December 2015 and March 2018, and described in a biological survey report. During this effort, surveyors conducted meandering transects, each approximately 20 feet in width depending on terrain and vegetation throughout the expanded project area, and recorded vegetation, incidental wildlife observations or signs of wildlife, and potential suitable habitat for federally and state-listed species. Surveyors recorded any occurrence of special-status plants, but presence/absence surveys were not conducted. All points of interest and species locations were recorded using a Trimble sub-meter Global Positioning System.

Vegetation was classified using methods outlined by Holland (1986) and Oberbauer et al. (2008) (CBP 2018a). Holland (1986) originally used codes to identify and classify vegetation; these

were supplemented by Oberbauer et al. (2008). Holland codes are provided for each vegetation community identified in this section. All plant species observed at the expanded project area are listed in **Table 3-4**. Vegetation communities and their respective acreages within the 126.1-acre expanded project area are summarized in **Table 3-5** and shown in **Figure 3-3**.

Table 3-4. Plant Species Observed During 2015 and 2018 Biological Surveys

Common Name	Scientific Name
Diegan Coastal Sage Scrub: Coastal Form (Holland Code 32510)	
Bigelow spike-moss	<i>Selaginella bigelovii</i>
Black elderberry	<i>Sambucus nigra</i>
Blue dicks	<i>Dichelostemma capitatum</i>
Broom Baccharis	<i>Baccharis sarothroides</i>
Bush monkeyflower	<i>Mimulus aurantiacus</i>
California brickellbush	<i>Brickellia californica</i>
California buckwheat	<i>Eriogonum fasciculatum</i>
California dodder	<i>Cuscuta californica</i>
California fuchsia	<i>Epilobium canum</i>
California matchweed	<i>Gutierrezia sarothrae</i>
California plantain	<i>Plantago erecta</i>
California sagebrush	<i>Artemisia californica</i>
California scrub oak	<i>Quercus berberidifolia</i>
Canada horseweed	<i>Erigeron canadensis</i>
Chaparral yucca	<i>Hesperoyucca whipplei</i>
Cheatgrass	<i>Bromus tectorum</i>
Cloak fern	<i>Cheilanthes parryi</i>
Coast jepsonia	<i>Jepsonia parryi</i>
Coast live oak	<i>Quercus agrifolia</i>
Coastal goldenbush	<i>Isocoma menziesii</i>
Coffee fern	<i>Pellaea andromedifolia</i>
Common eucrypta	<i>Eucrypta chrysanthemifolia</i>
Coulter's matilija poppy	<i>Romneya coulteri</i>
Creek clematis	<i>Clematis ligusticifolia</i>
Deerweed	<i>Acmispon glaber</i>
Desert wishbone bush	<i>Mirabilis laevis</i>
Dodder	<i>Cuscuta californica</i>
Engelmann oak	<i>Quercus engelmannii</i>
Foxtail brome	<i>Bromus madritensis</i>
Island morning glory	<i>Calystegia macrostegia</i>
Jimsonweed	<i>Datura wrightii</i>
Ladies' tobacco	<i>Pseudognaphalium californicum</i>
Lamb's quarters	<i>Chenopodium album</i>
Laurel sumac	<i>Malosma laurina</i>

Common Name	Scientific Name
Diegan Coastal Sage Scrub: Coastal Form (Holland Code 32510) (continued)	
Lemonade berry	<i>Rhus integrifolia</i>
Mission manzanita	<i>Xylococcus bicolor</i>
Mojave yucca	<i>Yucca schidigera</i>
Poison oak	<i>Toxicodendron diversilobum</i>
Prickly sow thistle	<i>Sonchus asper</i>
Rattlesnake spurge	<i>Chamaesyce polycarpa</i>
Redberry buckthorn (spiny redberry)	<i>Rhamnus crocea</i>
San Diego bedstraw	<i>Galium nuttallii</i>
San Diego chamise	<i>Adenostoma fasciculatum</i>
San Diego sunflower	<i>Bahiopsis laciniata</i>
Short podded mustard	<i>Hirschfeldia incana</i>
Stork's bill	<i>Erodium</i> spp. (two species)
Tocalote	<i>Centaurea melitensis</i>
Torrey's hybrid oak	<i>Quercus acutidens</i>
Tumbleweed	<i>Salsola</i> sp. (one undetermined species)
Turkey mullein	<i>Croton setiger</i>
Two-color rabbit-tobacco	<i>Pseudognaphalium biolettii</i>
Vinegar weed	<i>Trichostema lanceolatum</i>
White sage	<i>Salvia apiana</i>
Wild cucumber	<i>Marah macrocarpus</i>
Willow weed	<i>Persicaria lapathifolia</i>
Yellow bush-penstemon	<i>Keckiella antirrhinoides</i>
Phacelia	<i>Phacelia</i> sp.
Fescue	<i>Vulpia</i> sp.
Southern Coast Live Oak Riparian Forest (Holland Code 61310)	
Black elderberry	<i>Sambucus nigra</i>
California buckwheat	<i>Eriogonum fasciculatum</i>
California mugwort	<i>Artemisia douglasiana</i>
California sagebrush	<i>Artemisia californica</i>
California sycamore	<i>Platanus racemosa</i>
California wood-sorrel	<i>Oxalis californica</i>
Coast live oak	<i>Quercus agrifolia</i>
Coastal goldenbush	<i>Isocoma menziesii</i>
Common celery	<i>Apium graveolens</i>
Current	<i>Ribes</i> sp.
Engelmann oak	<i>Quercus engelmannii</i>
Laurel sumac	<i>Malosma laurina</i>
Mule fat	<i>Baccharis salicifolia</i>
Narrow leaf cattail	<i>Typha angustifolia</i>

Common Name	Scientific Name
Southern Coast Live Oak Riparian Forest (Holland Code 61310) (continued)	
Poison oak	<i>Toxicodendron diversilobum</i>
Red willow	<i>Salix laevigata</i>
Short podded mustard	<i>Hirschfeldia incana</i>
Smilo grass	<i>Stipa miliacea</i>
Storks' bill	<i>Erodium</i> sp.
Tocalote	<i>Centaurea melitensis</i>
Toyon	<i>Heteromeles arbutifolia</i>
Watercress	<i>Nasturtium officinale</i>
Willow weed	<i>Persicaria lapathifolia</i>
Yerba mansa	<i>Anemopsis californica</i>

Source: CBP 2018a

Table 3-5. Vegetation Communities Occurring on the Expanded Project Area

Vegetation Community (Holland Code)	Acres	Percent of Expanded Project Area ^a
Diegan Coastal Sage Scrub: Coastal Form (32510)	94.8	75.2%
Disturbed Habitat (11300)	1.6	1.3%
Field/Pasture (18310)	28.3	22.4%
Southern Coast Live Oak Riparian Forest (61310)	1.3	1.0%
Flat-topped Buckwheat (32800)	0.1	0.1%
Total	126.1	100%

Note: ^a Includes the 125.2-acre proposed BPS site and 0.9-acre roadway improvements area.

Native Vegetation. Native vegetation accounts for approximately 96.2 acres or 76.3 percent of the expanded project area. The dominant vegetation community in this area is the coastal form of Diegan coastal sage scrub (Holland Code 32510). This vegetation community is characterized by drought-tolerant deciduous plant species that thrive in low-moisture environments. Soils are typically clay and slopes are often steep. Common species in this vegetation community that were observed during the 2015 and 2018 biological surveys include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and laurel sumac (*Malosma laurina*) (see **Table 3-4**) (CBP 2018a). North-facing slopes are generally more heavily vegetated than south-facing slopes due to limited exposure to direct sunlight and decreased desiccation of the soil. Because of the greater exposure to sunlight, south-facing slopes retain water for a shorter period of time and have decreased herbaceous understory and annual species. The San Diego sunflower (*Bahiopsis laciniata*) is generally restricted to drier, south-facing slopes (Oberbauer et al. 2008, CBP 2018a).

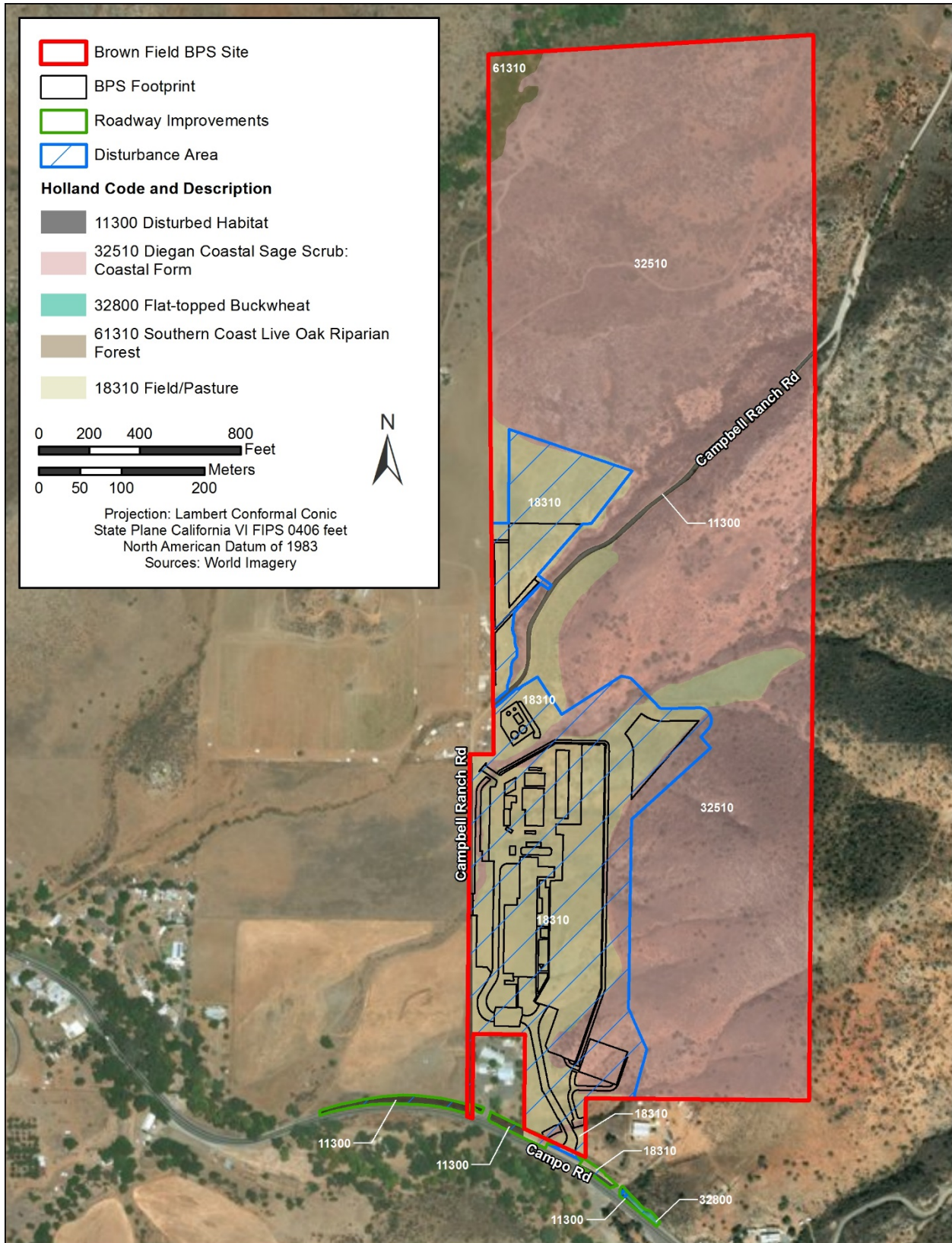


Figure 3-3. Vegetation Communities on the Expanded Project Area

The northwestern corner of the expanded project area contains approximately 1.3 acres of southern coast live oak riparian forest (Holland Code 61310) (1.0 percent of the expanded project area) (CBP 2018a). This vegetation community is characterized by a closed canopy of evergreen tree species and usually occurs in riparian areas that are marginal or not continuous.

The southern coast live oak riparian forest vegetation community is typical in drainages throughout San Diego County. Common species associated with this community that were observed during 2015 biological survey include coast live oak (*Quercus agrifolia*), California mugwort (*Artemisia douglasiana*), and poison oak (*Toxicodendron diversilobum*) (see **Table 3-4**) (Oberbauer et al. 2008, CBP 2018a). A perennial stream, which contained surface water at the time of the 2015 biological survey, is within this vegetation community on the expanded project area (CBP 2018a). The southern coast live oak riparian forest vegetation community does not occur in the proposed disturbance area.

Flat-topped buckwheat (Holland Code 32800) accounts for 0.1 acre of the expanded project area. Flat-topped buckwheat consists of a near-monoculture of buckwheat usually occurring in disturbed habitats adjacent to or integrated with Diegan coastal sage scrub.

Non-native Vegetation. Field/pasture land (Holland Code 18310) and disturbed habitat (Holland Code 11300) account for approximately 29.9 acres (23.7 percent) of the expanded project area. Flat areas of the expanded project area have historically been tilled and planted for unknown agricultural crops. During the 2015 biological survey (CBP 2018a), these areas consisted of tilled soil and little to no plant growth. Russian thistle (*Salsola* sp.) and non-native grasses were sparsely distributed throughout the tilled areas of the expanded project area.

Local Special Status Vegetation Species. The CNDDDB identified 41 local special status or rare species and two vegetation communities that could potentially occur within the U.S. Geological Survey (USGS) Dulzura quadrangle map, which contains the expanded project area. The list of these species and communities is in **Appendix B**.

MSCP. The goal of the MSCP Plan and the associated San Diego County South County Subarea Plan is to form a cooperative agreement with significant land managers or entities in San Diego County to preserve native habitat and species endemic to southern California. The MSCP Plan and South County Subarea Plan cover 85 species, 46 of which are plant species (see **Appendix B**) (City of San Diego 1998, County of San Diego 1997). CBP is not a signatory to the MSCP and, therefore, is not required to comply with MSCP-specific requirements; however, CBP fulfills mitigation and other environmental requirements through Endangered Species Act Section 7 consultation with the USFWS.

The habitat within the expanded project area is categorized as agriculture, moderate, high, and very high habitat value (City of San Diego 1998, County of San Diego 1997). CDFW determined that the Proposed Action is in an area identified as “very high” habitat value. This classification is due to one or more of the following reasons: proximity to a Biological Core Resource Area, proximity to MSCP wildlife linkages and corridors, proximity to sensitive biological receptors

such as golden eagles, or habitat quality existing on the expanded project area (CDFW 2017). The expanded project area is not within an MSCP preserve area, Biological Core Resource Area, or Habitat Linkage area, but is approximately 2.5 miles from Biological Core Resource and Habitat Linkage areas and 0.25 from an MSCP preserve area (Lawrence and Barbara Daley Preserve) (City of San Diego 1998, County of San Diego 2016a, County of San Diego DPLU 2011a). The MSCP requires that mitigation be implemented for projects that impact certain native vegetation communities. Approximately 6.7 acres of Diegan coastal sage scrub occur within the proposed disturbance area (i.e., 21.1 percent of the proposed disturbance area or 5.3 percent of the expanded project area). This vegetation community is a subset of Coastal Sage Scrub, which is considered a Tier II Level community by the MSCP. Additionally, 0.1 acre of flat-topped buckwheat, which is also considered a Tier II Level community by the MSCP, is within the roadway improvements area (County of San Diego 1997).

Surrounding Natural Areas. Natural habitats or undeveloped areas occur near the proposed BPS site. Otay Mountain Wildlife Management Area and Wilderness Area, lands managed by BLM, are immediately south of the proposed BPS site, south of Highway 94. BLM-managed lands and open spaces provide habitat for wildlife and preserve natural resources. These areas provide forage for wildlife, exhibit natural endemic vegetation, and provide visual and recreational resources to the public. Other open space conservation areas near the proposed BPS site include the Hollenbeck Canyon Wildlife Area, an area managed by CDFW approximately 0.5 mile northwest of the proposed BPS site, and the Lawrence and Barbara Daley Preserve is approximately 0.25 mile west of the proposed BPS site. The overall goals of the open space areas in San Diego County are to preserve the visual, natural, and cultural resources indicative of the county (County of San Diego 2016a).

3.3.3 Environmental Consequences

Impacts on vegetation would be considered major and adverse if a large portion of the vegetation community was affected or if the Proposed Action permanently affected the range of a species or population size of a plant community.

3.3.3.1 Proposed Action

Short- and long-term, negligible, adverse impacts on vegetation, including CNDDDB special status plant species with the potential to occur on the expanded project area, would occur as a result of the Proposed Action. Most of the proposed BPS would be constructed on the flat portions of the expanded project area. Those flat areas were previously disturbed due the conversion of native vegetation for agricultural uses. Construction would disturb 23.7 acres of previously disturbed field/pasture land (Holland Code 18310) and disturbed habitat (Holland Code 11300), 6.7 acres of Diegan coastal sage scrub, and 0.1 acre of flat-topped buckwheat (Holland Code 32800) vegetation. Within the proposed disturbance area, 6.7 acres of Diegan coastal sage scrub habitat and 0.1 acre of flat-topped buckwheat habitat would be removed by construction. BMPs implemented during construction, maintenance, and operation of the proposed BPS would likely reduce the potential for adverse impacts on vegetation. Additionally, at least 14.6 acres of disturbed native and non-native vegetation would be restored with

native vegetation, to the maximum extent practicable, based on a native plant revegetation plan, which is discussed below. Vegetation BMPs are identified in Section 5.3. Table 3-6 lists the temporary and permanent impacts on vegetation communities within the proposed disturbance area.

Table 3-6. Impacts on Vegetation Communities Associated with the Proposed Action

Disturbance	Project Area	Non-native Vegetation 18310 Field/ Pasture (acres)	Non-native Vegetation 11300 Disturbed Habitat (acres)	Native Vegetation 32510 Diegan Coastal Sage Scrub: Coastal Form (acres)	Native Vegetation 32800 Flat- topped Buckwheat (acres)	Total Acres ^a
Temporary Impacts	BPS footprint	2.84	0.00	0.19	0.00	3.03
Temporary Impacts	Site grading and other improvements	2.73	0.00	4.47	0.00	7.20
Temporary Impacts	Road improvements	0.00	0.00	0.00	0.00	0.00
	Total Temporary Impacts	5.57	0.00	4.66	0.00	10.23
Permanent Impacts	BPS footprint	13.67	0.03	1.57	0.00	15.28
Permanent Impacts	Site grading and other improvements	4.38	0.02	0.44	0.00	4.84
Permanent Impacts	Road improvements	0.12	0.64	0.03	0.08	0.88
	Total Permanent Impacts	18.17	0.70	2.05	0.08	20.99
	Grand Total	23.74	0.70	6.70	0.08	31.22

Note: ^a Total acreage does not include the improvements to Campbell Ranch Road, which would result in no net gain or loss of habitat (approximately 0.5 acre).

Construction could result in an increase in fugitive dust, which can hinder plant growth and have an overall negative impact on vegetation. A fugitive dust plan that would include dust suppressants or adhesive soil stabilizers, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means of reducing airborne dust would be implemented and would reduce or eliminate this impact. There would not be a permanent increase in levels of fugitive dust during BPS operation.

Installation and maintenance of culverts or bridges within drainage ditches, watercourses, and streambeds could impact native vegetation. While most of these areas are choked with debris from agricultural practices and dominated by non-native plants, there are likely some native plant species that also occur in these areas. These impacts would be localized and small in size, and would have an overall long-term, beneficial impact on native vegetation in drainage areas by improving water flow and reducing erosion. See **Section 3.7** for discussion of impacts on surface waters. The stockpile of excess fill would occur in a previously disturbed area populated mostly with non-native vegetation. The stockpile would be revegetated with native species and would constitute an overall increase in native vegetation. The septic system reserve area, which is primarily populated with disturbed vegetation, would not be developed under the Proposed Action.

Vegetation and vegetation communities could be adversely impacted if chemical or petroleum spills were to occur during construction or maintenance and operation of the proposed BPS. Spills could potentially leach into soils and harm vegetation outside of the previously disturbed area. BMPs identified in **Section 5.3**, including the development and implementation of a Spill Prevention Control and Countermeasure (SPCC) plan, would likely reduce or eliminate these impacts.

Recently disturbed soils, such as those at the expanded project area during and after construction, can have an increased potential for invasive species spread and establishment. The increased presence and spread of invasive species could adversely impact the native vegetation communities present adjacent to and within areas of temporary disturbance. These non-native plants, particularly grasses, could also alter fire regimes by increasing fire frequency resulting in further degradation of the native vegetation communities. Protocol for cleaning vehicles and equipment to avoid the spread of invasive species would be followed, and invasive infestations would be managed during construction activities. Prior to construction, the topsoil in areas that are to be disturbed temporarily and characterized by native vegetation communities would be stripped (6-inch surface layer) and stockpiled, so that it can be replaced on disturbed areas after construction. All fill would be certified weed-free. In addition, a fire prevention and suppression plan would be developed and implemented for all activities that require welding, or otherwise have a risk of ignition, in order to reduce impacts of fire on sensitive habitat.

Landscaping at the proposed BPS would include species appropriate for the area such as succulents and other drought tolerant species with little to no irrigation requirements. In order to reduce impacts to surrounding areas, landscaping would incorporate designs that minimize runoff or use of pesticides. Artificial topography would be designed to take advantage of natural rain runoff and surface materials (e.g., mulch) would be used to retain moisture in the soil. Any damage to landscaping caused by runoff would be repaired immediately and any dead landscaping plants would be replaced with similar species (USBP 2014).

There are no forested areas within the proposed disturbance area and, therefore, no impacts on forested areas or conversion of forested areas to non-forested areas are expected.

No direct or indirect impacts on vegetation are anticipated within nearby public lands or open spaces. Some temporary, direct and indirect, adverse impacts on natural habitats and corridor movement areas could occur during construction within drainages. The installation of bridges and erosion control infrastructure could disrupt natural vegetation within drainages; however, the overall impact would likely be beneficial in reducing erosion because stormwater on the expanded project area would be appropriately managed (see **Section 3.7**). Long-term, adverse impacts on natural habitats and vegetation within corridor movement areas could occur if there were a chemical or petroleum spill that spread outside the BPS footprint. BMPs identified in **Section 5.3** would likely reduce or eliminate these impacts.

Direct and indirect, adverse impacts on “high value” habitat as identified by the MSCP (City of San Diego 1998, County of San Diego 1997) are possible due to the Proposed Action. Approximately 6.7 acres of Diegan coastal sage scrub (coastal form) and 0.1 acre of flat-topped buckwheat would be impacted within the proposed disturbance area. This is 5.4 percent of the 126.1-acre expanded project area. These vegetation communities are considered Tier II Level communities by the MSCP (County of San Diego 1997). Potential impacts on these vegetation communities (i.e., chemical spills, culvert modification) were discussed previously. Implementation of BMPs identified in **Section 5.3** would likely reduce impacts on these vegetation communities.

Mitigation for temporary and permanent impacts on Diegan coastal sage scrub and flat-topped buckwheat in **Table 3-5** would be accomplished through restoration of at least 14.6 acres of disturbed native and non-native vegetation. Restoration activities account for mitigation to permanent impacts on Diegan coastal sage scrub and flat-topped buckwheat at a ratio of 4.7:1 and all temporary impacts on Diegan coastal sage scrub would be restored at a 1:1 ratio. Establishment of an approximately 100-acre Onsite Conservation Area, on which CBP would implement management, maintenance, and monitoring, would act to avoid additional impacts. The Onsite Conservation Area includes the areas on the BPS site not currently planned for development or restoration by CBP, or reserved for ongoing use (i.e. the proposed disturbance area, the area of restoration of field/pasture outside of the disturbance area, and Campbell Ranch Road).

Disturbed habitat and field/pasture (Holland 1986) would account for the majority (24.4 acres or 76.9 percent) of the vegetation impacts within the proposed disturbance area. These vegetation communities are considered Tier IV by the MSCP, or “lands which do not support natural vegetation and which are not regulated by this ordinance” (County of San Diego 1997). At least 14.6 acres of disturbed native and non-native vegetation would be restored with native vegetation, to the maximum extent practicable, based on a native plant revegetation plan.

CBP would offset 4.65 acres of temporary impacts and 2.05 acres of permanent impacts to Diegan coastal sage scrub by restoring and enhancing at least 14.6 acres of Diegan coastal sage scrub in areas that would be temporarily disturbed and areas of restoration within the field and pasture areas not disturbed during construction (see **Table 3-7**). **Figure 3-4** shows the restoration and landscaping treatments for different areas of the expanded project area. Areas surrounding restoration treatments that would be accessed regularly would be replanted with low density native plants that would be kept at a low height. These areas would be considered permanently impacted. Temporarily impacted areas to the north and east of the proposed BPS would be revegetated with native plants (likely Diegan coastal sage scrub) according to the revegetation plan. Fields and pastures to the north of the proposed BPS that would not be impacted by construction would be revegetated as Diegan coastal sage scrub vegetation community. Restoration would be conducted according to plans that would be approved by the USFWS. These plans would include details such as native species included in seed mixtures, topsoil treatment, a success monitoring plan, and contingency plans in case of failure. Additional information on conservation measures and other BMPs is located in **Sections 5.3** and **5.5.1**.

3.3.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the proposed Dulzura site, and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. No buildings or other facilities would be constructed on the proposed Dulzura site, and it would remain undeveloped. No impacts on Diegan coastal sage scrub vegetation or flat-topped buckwheat vegetation communities would occur at this location. There is a potential that the No Action Alternative would have a long-term, adverse impact on vegetation at the Dulzura site. If agricultural activities do not resume on the site, it is likely that invasive plant species would establish and become dominant in previously disturbed areas. An increase in non-native vegetation could encroach on areas of the site that currently have native vegetation. This encroachment could result in an altered fire regime and a loss of native habitat.

Table 3-7. Restoration Habitat within the Expanded Project Area

Disturbance	Restoration Treatment	Disturbed Non-native Vegetation 18310 Field/ Pasture (acres)	Disturbed Non-native Vegetation 11300 Disturbed Habitat (acres)	Disturbed Native Vegetation 32510 Diegan Coastal Sage Scrub: Coastal Form (acres)	Disturbed Native Vegetation 32800 Flat- topped Buckwheat (acres)	Total Acres ^a
Temporary Impact	Native Vegetation Restoration ^b	4.22	0.00	4.53	0.00	8.75
Temporary Impact	Low-density Native Vegetation ^c	1.35	0.00	0.13	0.00	1.48
	Total Temporary Impact	5.57	0.00	4.66	0.00	10.23
Restoration Area	Restoration of Field/Pasture Outside of Disturbance Area ^d	4.34	0.00	0.00	0.00	4.34
	Total Area to be Restored ^e	9.91	0.00	4.66	0.00	14.57
Permanent Impact	Impervious Surface ^f	11.55	0.70	1.39	0.08	13.71
Permanent Impact	Gravel or Boulder ^g	3.39	0.00	0.56	0.00	3.95
Permanent Impact	Low-density Native Vegetation ^h	3.23	0.00	0.10	0.00	3.33
	Total Permanent Impacts	18.17	0.70	2.05	0.08	20.99

Notes:

^a Total acreage does not include the improvements to Campbell Ranch Road, which would result in no net gain or loss of habitat.

^b Areas disturbed by the Proposed Action that would be restored with a native vegetation treatment, likely coastal sage scrub, to be defined in the vegetation restoration plan.

^c Areas disturbed by the Proposed Action that would be restored with low density plantings of native species selected to be short in height.

^d Previously disturbed areas that would not be disturbed by the Proposed Action and could potentially be restored with a native vegetation treatment, likely Diegan coastal sage scrub, to be defined in the vegetation restoration plan. This acreage is not included in the total acreage of disturbance for the project.

^e Total area to be restored includes the restored areas that would be disturbed by the Proposed Action and field/pasture outside of the Disturbance Area (i.e., those areas that were disturbed prior to the Proposed Action or the existing condition).

^f Vegetation replaced with impervious surface.

^g Vegetation replaced with a boulder or gravel landscape treatment.

^h These areas would be disturbed by the Proposed Action and would be replanted with low density plantings of native species selected to be short in height; however, because these areas would be subject to ongoing access and potential disturbance, impacts to them are considered permanent.

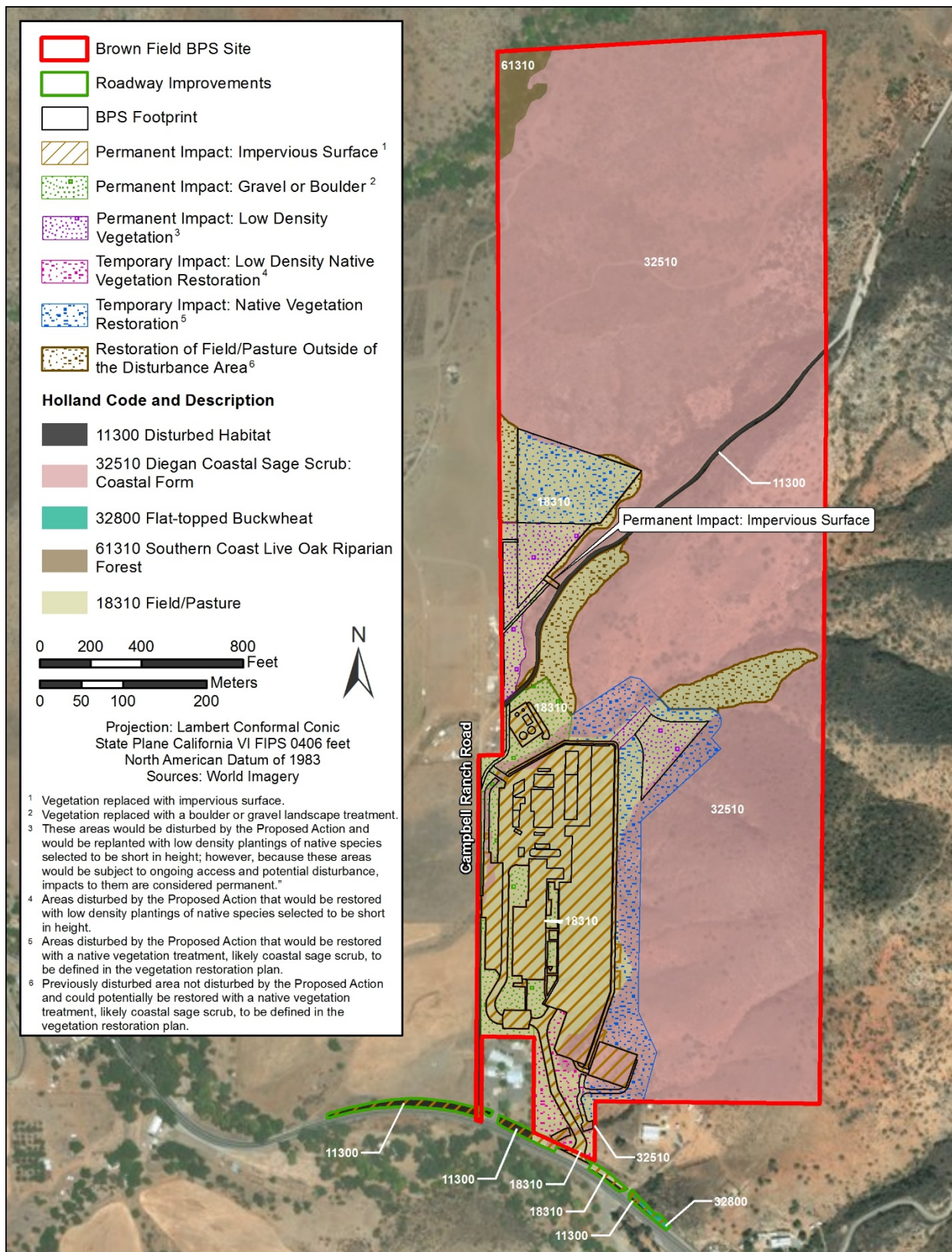


Figure 3-4. Vegetation Restoration on the Expanded Project Area

3.4 Terrestrial and Aquatic Wildlife Resources

3.4.1 Definition of the Resource

Terrestrial and aquatic wildlife resources include native or naturalized terrestrial and aquatic animals and the habitats in which they exist. This section includes a description of terrestrial and aquatic wildlife species and their habitats that are likely to be found on the proposed BPS site. Local special status or rare wildlife species as defined by CNDDDB and the MSCP, as well as bird species protected by the MBTA and Bald and Golden Eagle Protection Act, are discussed in this section. These species are considered in the same manner as the other wildlife species discussed in this section, and are not analyzed as individual species. Federally listed threatened, endangered, and candidate species and California state-listed threatened and endangered wildlife species are addressed in **Section 3.6**.

This section is supported by data gathered during biological surveys conducted in December 2015 and March 2018, and the associated biological survey report. Survey methods are described in **Section 3.3.2**. A habitat assessment was completed for the federally endangered Quino checkerspot butterfly. This habitat assessment identified areas of the BPS site and roadway improvements area that could be excluded from a protocol survey should one be necessary. The location of host plants, such as California plantain (*Plantago erecta*), were recorded when possible; however, these plants are not typically visible in winter. Additionally, the locations of plant species utilized by federally or state-listed wildlife species or candidate wildlife species were recorded. For example, spiny redberry (*Rhamnus crocea*) is utilized by the federal candidate Hermes copper butterfly (*Lycaena hermes*) as a host plant. Therefore, all locations of spiny redberry were recorded.

3.4.2 Affected Environment

Wildlife observed at the proposed BPS site during the biological surveys is representative of Diegan coastal sage scrub. Common avian and migratory bird species occurring on the site include white-crowned sparrow (*Zonotrichia leucophrys*), rock wren (*Salpinctes obsoletus*), and common raven (*Corvus corax*). Other common wildlife includes desert cottontail rabbits (*Sylvilagus audubonii*), side-blotched lizard (*Uta stansburiana*), and Behr's metalmark butterfly (*Apodemia mormo virgulti*) (CBP 2018a). A complete list of wildlife observed on the proposed BPS site is in **Table 3-8**.

Three coyote (*Canis latrans*) dens were identified in a vegetated area near the central portion of the proposed BPS site. Several woodrat (*Neotoma* sp.) middens exist near the northern portions of the site in association with rock piles or the bases of large plants where woodrats have structures to build their nests. One potential raptor nest was observed in the northwestern corner of the site in the riparian area during the 2015 biological survey. The nest was in a large sycamore tree (*Platanus racemosa*) and appeared to be inactive. This nest might have been an old raptor nest or possibly a raven nest (CBP 2018a).

Table 3-8. Wildlife Species Observed During the 2015 Biological Survey

Common Name	Scientific Name
Mammals	
Black-tailed jackrabbit	<i>Lepus californicus</i>
California ground squirrel	<i>Spermophilus beecheyi</i>
Coyote	<i>Canis latrans</i>
Desert cottontail	<i>Sylvilagus audubonii</i>
Mule deer (scat)	<i>Odocoileus hemionus</i>
Woodrat (middens)	<i>Neotoma</i> sp.
Birds	
American kestrel	<i>Falco sparverius</i>
Anna's hummingbird	<i>Calypte anna</i>
Blue-gray gnatcatcher	<i>Poliophtila caerulea</i>
Bushtit	<i>Psaltriparus minimus</i>
California quail	<i>Callipepla californica</i>
California towhee	<i>Melozone crissalis</i>
Coastal California gnatcatcher	<i>Poliophtila californica californica</i>
Common raven	<i>Corvus corax</i>
House finch	<i>Haemorhous mexicanus</i>
Northern flicker	<i>Colaptes auratus</i>
Nuttall's woodpecker	<i>Picooides nuttallii</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Rock wren	<i>Salpinctes obsoletus</i>
Spotted towhee	<i>Pipilo maculatus</i>
Turkey vulture	<i>Cathartes aura</i>
Western meadowlark	<i>Sturnella neglecta</i>
Western scrub jay	<i>Aphelocoma californica</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Wrentit	<i>Chamaea fasciata</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Reptiles	
Side-blotched lizard	<i>Uta stansburiana</i>
Insects	
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Painted lady	<i>Vanessa cardui</i>
Western pygmy-blue	<i>Brephidium exila</i>

Source: CBP 2018a

A seasonal bat roost is on a bridge southwest of the roadway improvements area, outside of all project areas. Urine staining and guano were observed during the 2015 biological survey and indicate this roost is used at least seasonally (CBP 2018a).

A riparian area crosses the extreme northwestern corner of the site (see **Figure 3-3**). Water was present at the surface during the 2015 biological survey, but no aquatic wildlife was observed. This area could host semi-aquatic species such as frogs and toads.

Natural habitats and undeveloped areas are located close to the proposed BPS site (see **Section 3.3**). Open spaces in the vicinity of the site provide movement corridors for wildlife. Wildlife often moves from one area to another during migration, in search of food or mates, and to colonize or re-colonize unused natural areas. Large tracts of land and narrow, natural passages between open natural areas are important in providing wildlife with passage between different areas of use.

Local Special Status Wildlife Species. The CNDDDB identified 27 local special status or rare wildlife species that could potentially occur within the USGS Dulzura quadrangle, which contains the proposed BPS site and roadway improvements area. The list of these species is in **Appendix B**.

MSCP. The goal of the MSCP Plan and the associated San Diego County South County Subarea Plan is to form a cooperative agreement with significant land managers or entities in San Diego County to preserve native habitat and species endemic to southern California. The MSCP Plan and South County Subarea Plan cover 85 species, 39 of which are animal species (see **Appendix B**) (City of San Diego 1998, County of San Diego 1997). See **Sections 3.1** and **3.3** for more information on the MSCP.

3.4.3 Environmental Consequences

Impacts on terrestrial and aquatic wildlife would be considered major and adverse if a large number of individuals or a large portion of suitable habitat was affected. Impacts would also be considered major and adverse if the distribution of a species or habitat was permanently affected.

3.4.3.1 Proposed Action

Short- and long-term, negligible, adverse impacts on wildlife could occur during construction, maintenance, and operation of the proposed BPS. However, the majority of the impacted habitat is marginal due to previous disturbance from agricultural practices. Although approximately 6.7 acres of native habitat within the proposed disturbance area would be impacted, this would be a negligible impact on wildlife that utilize those vegetation communities because this is a small proportion of similar native habitat at the site and surrounding areas. Additionally, at least 14.6 acres of disturbed native and non-native vegetation would be restored with native vegetation, to the maximum extent practicable, based on a native plant revegetation plan.

Noise from construction, fugitive dust, and an increase in human activity in the area could temporarily displace wildlife species. Construction activity could displace nesting birds during

the breeding season or cause nest abandonment. Chemical spills or leaks, including those of petroleum products or other hazardous materials used during construction, could kill or contaminate wildlife if leached into the soil and surface water sources. Some wildlife could be killed or injured during ground disturbing activities such as bulldozing, grubbing, and grading. Small mammals, such as woodrats, could be killed or displaced when equipment moves dirt or rocks. BMPs would be implemented to avoid take of migratory birds, bald eagles, golden eagles, or bird nests occupied with eggs or chicks (see **Sections 5.4** and **5.5.2** [Birds]).

Construction could result in an increase in fugitive dust, which can hinder plant growth and have an overall negative impact on wildlife foraging habitat. Dust suppressants or adhesive soil stabilizers, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means of reducing airborne dust would be implemented and would reduce or eliminate this impact. There would not be a permanent increase in levels of fugitive dust during operation of the BPS.

The implementation of industry standard BMPs would decrease impacts on wildlife (see BMPs identified in **Sections 5.3** and **5.4**). Pre-construction surveys for nesting birds would identify nests that could be adversely affected by construction activities and use of avoidance buffers would reduce impacts on nesting birds and facilitate compliance with the MBTA. The riparian area in the extreme northwestern corner of the BPS site is the only area where a potential raptor nest was observed during surveys in 2015. This nest appeared to be old and in disrepair; however, if raptors were to nest in the riparian area it is approximately 1,100 feet from the nearest potential construction. A pre-construction nest survey would identify any potentially active raptor nests in the vicinity and monitoring efforts would help ensure any active raptor nests were not disturbed by construction.

The majority of construction would occur within marginal quality habitat that was previously disturbed due to agriculture. Although wildlife, especially predators such as raptors, may still utilize the historically disturbed areas, the lack of food sources and vegetation would likely result in those areas being utilized much less than the surrounding areas of native vegetation and higher quality habitat and forage. Aquatic wildlife on the proposed BPS site are confined to the northwest portion of the site near the riparian area. However, no disturbance or construction would occur in this area as a result of the Proposed Action. Additionally, topography and vegetation provide a visual and auditory barrier between the proposed BPS and the riparian area.

Although no standing or moving water was present within drainage ditches and culverts within the BPS footprint during the 2015 biological survey, construction of new culverts or bridges could result in short-term, negligible, adverse impacts on aquatic wildlife downstream of the proposed BPS site due to disturbance of habitat from sedimentation of water. Installation of proposed culverts and erosion control should occur during the dry season to avoid direct impacts on aquatic species. In the long-term, after culverts and erosion control structures are in place, a beneficial impact on downstream aquatic wildlife would occur due to reduced sedimentation and turbidity of downstream water.

Maintenance and operation of the proposed BPS could have long-term, negligible, adverse impacts on terrestrial wildlife. The Proposed Action would include vegetation maintenance and the use of vehicles and equipment at the proposed BPS. Noise and increased human activity from these activities could displace wildlife from foraging within and adjacent to the BPS. External lighting could discourage use by nocturnal wildlife and displace avian species. However, downward facing floodlights would be used to help reduce this impact. Historical agricultural cultivation of the proposed BPS site has reduced the quality of the habitat on the site where the BPS facility would be constructed; therefore, maintenance and operation of the BPS would result in the disturbance of only a small proportion of high quality habitat available at the BPS site and surrounding areas.

Impacts on wildlife in the surrounding public lands or in adjacent open space areas are not anticipated. Any impacts on wildlife from the Proposed Action, such as impacts from chemical spills or lighting, would be restricted to the area immediately surrounding the BPS footprint within the proposed construction disturbance area and would not extend into offsite habitat.

Short- and long-term, negligible, direct and indirect, adverse impacts on wildlife that utilize the proposed construction disturbance area for migration or movement from one area to another are possible. The loss of habitat and the inability of wildlife to move freely between areas of habitat can reduce the value of habitat and have impacts on populations of sensitive wildlife and game species. Wildlife might avoid utilizing the area for migration or movement during construction and operation of the BPS because of noise, light, and presence of personnel on site. This could hinder migration of wildlife species or movement of species during foraging. However, the proposed BPS is in a sparsely populated region of San Diego County that contains many nearby open areas that provide alternative corridors for the movement of wildlife. The overall increase of human activity at the site is unlikely to block the movement of wildlife through the area.

Figure 1-1 shows the general vicinity of the proposed BPS and adjacent areas.

An increase in traffic in the general area of the proposed BPS, both during construction and operation, could result in an increase in animal-vehicle collisions. This could affect small and large mammals such as deer, coyote, and rabbits, as well as avian species. Although the Proposed Action would represent a new influx of personnel in the immediate vicinity of the proposed BPS site, due to both commuting and on-the-job vehicle use, it would not increase CBP personnel in southern San Diego County. The proposed BPS would merely develop a new BPS that could more appropriately accommodate the existing number of personnel already operating in southern San Diego County. Overall, the increase in traffic and associated animal-vehicle collisions is expected to be negligible. Implementation of BMPs identified in **Sections 5.3** and **5.4** would reduce adverse impacts on wildlife.

3.4.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the proposed Dulzura site, and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. No buildings or other facilities would be constructed on the proposed Dulzura site,

and it would remain undeveloped. The removal of 6.78 acres of native habitat within the proposed disturbance area would not occur. If agricultural activities do not resume, it is likely that invasive plant species would overtake the previously disturbed areas. An increase in invasive vegetation could change the natural fire regime and encroach into areas of native vegetation. This encroachment could result in a loss of native vegetation and forage for wildlife. Impacts on wildlife from construction, maintenance, or operation of the new BPS would be avoided. There would be no increase in impacts on wildlife in adjacent habitat from increased noise levels, floodlights, or vegetation control due to construction activities. With the cessation of agricultural practices on the site, there would be an overall decrease in human activity at the site. There would be no increase in impacts on nesting birds in the adjacent habitat.

3.5 Threatened and Endangered Species

3.5.1 Definition of the Resource

This section includes descriptions of federally and state listed threatened and endangered species, as defined under the federal Endangered Species Act and the California Endangered Species Act, with potential to occur on the proposed BPS site and roadway improvements area, which are collectively referred to as the “expanded project area” in **Section 3.5**. A list of potential threatened, endangered, or candidate species was compiled from USFWS and CDFW. USFWS is responsible for maintaining and tracking a list of federal threatened, endangered, and candidate species. CDFW is responsible for maintaining a similar list of species for the State of California. In terms of protection and habitat suitability, any species listed as federal or state candidate is assessed in a manner as though it has already been listed threatened or endangered.

3.5.2 Affected Environment

The USFWS Information for Planning and Consultation website was queried to determine the potential occurrence of federally listed threatened, endangered, or candidate species at the expanded project area (USFWS 2017). State listed species were obtained from the CNDDDB website, which provides information concerning state-listed threatened, endangered, and candidate species (CDFW 2015). **Table 3-9** identifies the federally and state listed threatened, endangered, and candidate species with the potential to occur on the expanded project area.

Preliminary reconnaissance-level biological surveys were conducted at the expanded project area in December 2015 and March 2018. Focused surveys for four species were conducted on an 80-acre subset of the expanded project area in 2017. The species included in the 2017 surveys were arroyo toad (*Anaxyrus californicus*), coastal California gnatcatcher (*Polioptila californica californica*), Hermes copper butterfly (*Lycaena hermes*), and Quino checkerspot butterfly (*Euphydryas editha quino*). An additional vegetation survey focused specifically on Quino checkerspot butterfly host and food plants was conducted in April 2019. Endangered Species Act Section 7 consultation with USFWS for potential effects of the Proposed Action on federally threatened and endangered species is complete. A Biological Opinion was issued by USFWS on August 2, 2019.

Table 3-9. Federally and State Listed Threatened, Endangered, and Candidate Species Known to Occur or Have the Potential to Occur in the Expanded Project Area

Common Name	Species Name	Listing Status	Likelihood of Occurrence
Plants			
Encinitas baccharis	<i>Baccharis vanessae</i>	Federally Threatened California Endangered	No suitable habitat on the expanded project area. Unlikely to occur on the expanded project area.
Engelmann oak*	<i>Quercus engelmannii</i>	CNPS Rare and Endangered	Known to occur on the expanded project area, approximately 0.5 mile north of proposed construction. Also occurs outside of the expanded project area directly adjacent to the south of the Caltrans ROW.
Mexican flannelbush	<i>Fremontodendron mexicanum</i>	Federally Endangered California Rare	Extremely localized population. No known occurrences on the expanded project area. Nearest location is approximately 3 miles from the proposed BPS site.
Otay tarplant	<i>Deinandra conjugens</i>	Federally Threatened California Endangered	May occur. No known occurrences on the expanded project area, but suitable habitat is present. Bloom season is May – June.
San Diego ambrosia	<i>Ambrosia pumila</i>	Federally Endangered	No suitable habitat and no known occurrences on the expanded project area. Unlikely to occur on the expanded project area.
San Diego thornmint	<i>Acanthomintha ilicifolia</i>	Federally Threatened California Endangered	May occur. No known occurrences on the expanded project area, but suitable habitat is present. Bloom season is April – June.
San Diego button-celery	<i>Eryngium aristulatum var. parishii</i>	Federally Endangered California Endangered	No suitable habitat and no known occurrences on the expanded project area. Unlikely to occur on the expanded project area.
Spreading navarretia	<i>Navarretia fossalis</i>	Federally Threatened	No suitable habitat and no known occurrences on the expanded project area. Unlikely to occur on the expanded project area.
Wildlife			
Arroyo toad	<i>Anaxyrus californicus</i>	Federally Endangered	No suitable breeding habitat or observations within 2017 survey area.
California condor	<i>Gymnogyps californianus</i>	Federally Endangered California Endangered	No suitable breeding habitat on the expanded project area.

Common Name	Species Name	Listing Status	Likelihood of Occurrence
Wildlife (continued)			
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	Federally Threatened	Known to occur on the expanded project area; observed during 2017 surveys. No known observations within proposed disturbance area. Nesting season February 1 – August 31.
Hermes copper butterfly	<i>Lycaena hermes</i>	Federal Candidate	No observations within 2017 survey area. Nearest known observation is 6 miles east of the proposed BPS site.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Federally Endangered California Endangered	No suitable habitat for nesting on the expanded project area. Possible visitor during migration.
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	Federally Endangered	Known to occur on the expanded project area; observed during 2017 surveys. No known observations within the proposed disturbance area, but host and food plant species known to occur within the proposed disturbance area.
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	Federally Endangered	No suitable habitat on the expanded project area. Not likely to occur.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Federally Endangered California Endangered	No suitable habitat for nesting on the expanded project area. Possible visitor during migration.

Note: *Not a federally or state listed species.

3.5.2.1 Plant Species

Encinitas Baccharis. Encinitas baccharis (*Baccharis vanessae*) is a federally listed threatened and state-listed endangered shrub. It grows in the chaparral vegetation community in southern California. The nearest known occurrence is approximately 6 miles southwest of the proposed BPS site (Calflora 2015). Encinitas baccharis was not observed during the 2015 or 2018 biological surveys (CBP 2018a). This species grows in the chaparral vegetation community, which does not occur at the expanded project area; therefore, this species is unlikely to occur on the expanded project area.

Engelmann Oak. Engelmann oak (*Quercus engelmannii*) is a species of oak tree endemic to southern California. During the 2015 biological survey, it was observed in the riparian area in the northwestern corner of the expanded project area (CBP 2018a). A large stand of Engelmann oak was also observed directly adjacent to and south of the Caltrans ROW in 2018. Although not state or federally listed, this species is listed by the California Native Plant Society as a rare and endangered species (CNPS 2015).

Mexican Flannelbush. Mexican flannelbush (*Fremontodendron mexicanum*) is a federally listed endangered and state-listed rare plant. It is a perennial tree species only known to grow in three canyons in the United States. The nearest known location for this species is approximately 3 miles southwest of the proposed BPS site in Cedar Canyon (USFWS 2009a). This plant was not observed on the expanded project area during surveys, and it is not likely to occur on the expanded project area due to the extremely limited and localized nature of distribution of known populations.

Otay Tarplant. Otay tarplant (*Deinandra conjugens*) is federally threatened and state endangered. It is an annual species in the Aster family with a yellow flower that generally grows below 1,200 feet elevation in sandy loam soils. It is found in grasslands, open coastal sage scrub, maritime succulent scrub, and along some disturbed sites and cultivated fields. Associated vegetation communities include valley grassland and coastal sage scrub with clay soils, subsoils, or lenses (isolated areas of clay soil) (Calflora 2015, USFWS 2003a). Most of the soils within the expanded project area are composed of sandy loam surface layers with sandy clay loam subsoil between 27 and 60 inches deep (see **Figure 3-2**). No Otay tarplants were observed on the expanded project area during surveys; however, this species is an annual that could have been dormant during the biological surveys. The closest confirmed occurrence of Otay tarplant is approximately 5 miles west of the proposed BPS site (CNDDDB 2018). The Diegan coastal sage scrub: coastal form vegetation community, which supports this species exists on the expanded project area; therefore, this species has the potential to occur on the expanded project area.

San Diego Ambrosia. San Diego ambrosia (*Ambrosia pumila*) is federally listed as endangered. It is a perennial herb that can be found in chaparral, valley grasslands, coastal sage scrub, and freshwater wetlands. It grows in disturbed vernal pools (Calflora 2015). No San Diego ambrosia were observed on the expanded project area during the 2015 biological survey. San Diego ambrosia grows in vernal pools and, because there are no vernal pools present, it is unlikely to occur on the expanded project area.

San Diego Thornmint. San Diego thornmint (*Acanthomintha ilicifolia*) is a federally threatened, state-endangered annual herb in the family Lamiaceae. It can be found in openings of coastal sage scrub, chaparral, and native grassland vegetation communities. It grows in patches of clay soil surrounded by non-clay soils known as “lenses” (USFWS 2009b). Most of the soils within the expanded project area are composed of sandy loam surface layers with sandy clay loam subsoil between 27 and 60 inches deep (see **Figure 3-2**).

No San Diego thornmint was observed on the expanded project area during the biological surveys; however, these surveys were conducted when this plant would likely be dormant. The closest nearby occurrence of this species is approximately 3 miles northwest of the proposed BPS site (Calflora 2015). Because there is a known occurrence of this species only 3 miles from the proposed BPS site and because it grows in the coastal sage scrub vegetation community, there is a possibility this plant could occur on the expanded project area.

Spreading Navarretia. Spreading navarretia (*Navarretia fossalis*) is a federally threatened annual herb that occurs in shadscale scrub, freshwater wetlands, and wetland-riparian vegetation communities. It grows in vernal pools (Calflora 2015). No spreading navarretia were observed on the expanded project area during the 2015 biological survey. This plant is an annual species and would not have been in a vegetative state during the survey in December 2015. However, because it grows in vernal pools and there are no vernal pools present, it is unlikely to occur on the expanded project area.

San Diego Button-Celery. San Diego button-celery (*Eryngium aristulatum* var. *parishii*) is a federally and state-listed endangered plant. The species can be either perennial or annual, and is endemic to southern California. It is generally restricted to vernal pools (Calflora 2015). No San Diego button-celery were observed on the expanded project area. Because it grows in conjunction with vernal pools and there are no vernal pools present at the expanded project area, it is unlikely to occur on the expanded project area.

3.5.2.2 Wildlife Species

Arroyo Toad. Arroyo toads (*Anaxyrus californicus*) are a small, spotted, federally endangered species of toad occurring in southern California. Arroyo toads inhabit stream banks where they burrow into the sand in order to survive dry conditions. Habitat includes small, shallow streams with sandy banks that flood periodically (USFWS 2009c). This habitat type is present on the expanded project area at the far northwestern corner.

Focused arroyo toad surveys were conducted between March 15 and July 1, 2017 (Leatherman 2017). These surveys revealed no arroyo toads within or near the 2017 survey area. Additionally, water was not present at the surface of the streambed during the protocol surveys. The lack of water during this time indicates the area would not support surface water for a sufficient amount of time to support the life cycle of the arroyo toad (Leatherman 2017).

California Condor. California condors (*Gymnogyps californianus*) are large, wide-ranging scavengers occupying several western states. They are currently federally listed as endangered. Suitable nest sites include rock cavities on steep rock faces, hollowed-out old-growth conifer trees, or cliff ledges (USFWS 2013).

No California condors were observed during the 2015 or 2018 biological surveys, and condor nesting in San Diego County is highly unlikely. In 2017, there was a wild population of 80 California condors, 6 nesting attempts, and 2 wild-fledged chicks in southern California. Additionally, six chicks were released to the wild in southern California (USFWS 2018). Although condors are not known to nest in San Diego County, they have been known to occasionally forage in the area.

Coastal California Gnatcatcher. The federally threatened coastal California gnatcatchers (*Polioptila californica californica*) are small, insectivorous birds that inhabit coastal sage scrub vegetation communities in southern California (USFWS 2010). This vegetation is known to support the federally endangered coastal California gnatcatcher and is present throughout the expanded project area. Almost all the coastal sage scrub habitat in the 2017 survey area is

suitable for coastal California gnatcatcher, although lower quality habitat occurs on south-facing slopes where vegetation is more open (Leatherman 2017).

Protocol surveys for the coastal California gnatcatcher were conducted between March 30 and June 13, 2017. Two pairs of adults were detected during the surveys. Both pairs were observed multiple times near the northern portion of the 2017 survey area in sage scrub habitat north of Campbell Ranch Road (Leatherman 2017). Additionally, juvenile coastal California gnatcatchers were observed in habitat adjacent to Campbell Ranch Road in the northern portion of the survey area. These individuals were likely offspring of the two resident pairs observed during the 2017 survey (Leatherman 2017). Locations of these observations can be seen in **Figure 3-5**.

Hermes Copper Butterfly. The Hermes copper butterfly is a federal candidate species. It is a small butterfly with copper colored wings that resides only in San Diego County and in extreme northern Mexico (Shiraiwa 2009). Spiny redberry (*Rhamnus crocea*) is a host plant for the Hermes copper butterfly. This plant occurs on the 2017 survey area site; however, it is scattered and does not occur in large abundance (Leatherman 2017).

Focused Hermes copper butterfly surveys were conducted in 2017 (Leatherman 2017). No individuals were observed during these surveys. Populations of Hermes copper butterfly have been known to occur within 10 miles of the proposed BPS site; however, many of these populations have not been observed since the mid-2000s, likely due to habitat conversion as a result of wildfires (Leatherman 2017). One population of Hermes copper butterfly was observed in 2010 approximately 6 miles east of the proposed BPS site (Leatherman 2017).

Least Bell's Vireo. The least Bell's vireo (*Vireo bellii pusillus*) is a small passerine that occupies the western portions of Mexico and southern California. The species is federally and California state-listed as endangered. They are obligate riparian dwellers that occupy dense stands of riparian woodlands.

Least Bell's vireos were not observed during the December 2015 or March 2018 biological surveys. Focused protocol surveys were not conducted because of the lack of suitable habitat within the expanded project area. Although there is a riparian area in the northwestern corner of the expanded project area, it lacks essential characteristics of the vireo's preferred habitat. Least Bell's vireos require two habitat characteristics in conjunction with one another in order to nest in an area: dense vegetation within 3 to 6 feet of the ground and a dense, multilayered canopy for foraging (USFWS 1998). Neither of these features exists in the section of riparian habitat present on the expanded project area. Therefore, this species is unlikely to nest in the riparian area on the expanded project area but could potentially use the area as a stopover during migration.

Quino Checkerspot Butterfly. Suitable Quino checkerspot butterfly habitat occurs in the Diegan coastal sage scrub at the expanded project area. Most of the proposed disturbance area is situated on previously disturbed habitat and offers poor habitat for Quino checkerspot butterfly.

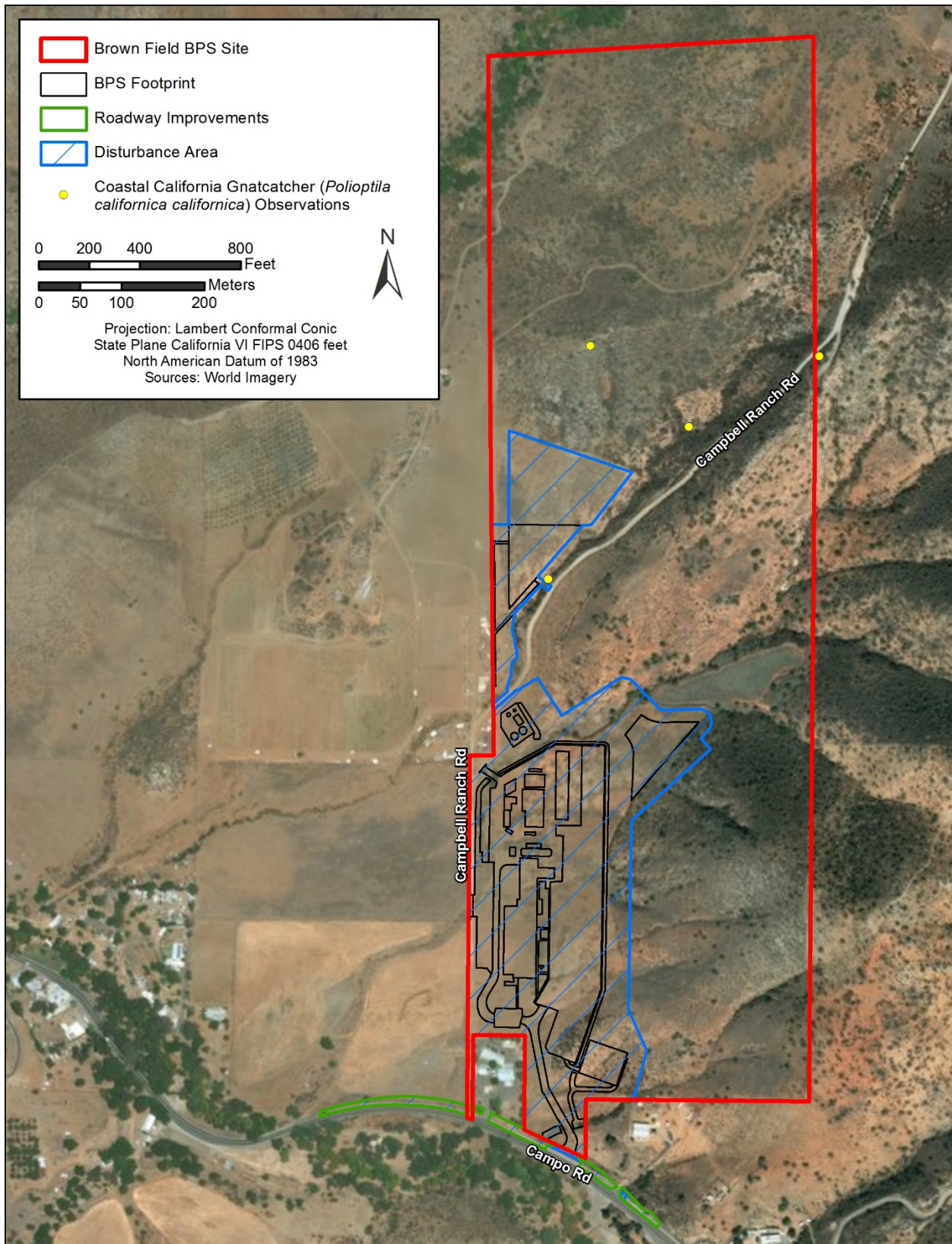


Figure 3-5. Observations of Coastal California Gnatcatcher During 2017 Protocol Surveys

The Quino checkerspot butterfly originally inhabited widespread areas of San Diego County (Shiraiwa 2009). Suitable habitat used by the federally endangered Quino checkerspot butterfly includes a variety of sage scrub and chaparral vegetation communities, meadows, oak or juniper woodlands or semi-desert scrub, depending on where in the Quino checkerspot butterfly range the butterfly occurs. An important aspect of Quino checkerspot butterfly habitat is that it must have open areas with low growing and sparse vegetation. Thick or closed stands of vegetation are not suitable (Faulkner and Klein 2008). Where this structure occurs, in combination with larval host plants such as California plantain (*Plantago erecta*) and adult nectar plants, is considered suitable Quino checkerspot butterfly habitat.

Protocol Quino checkerspot butterfly surveys were conducted on an 80-acre subset of the expanded project area in 2017. Quino checkerspot butterfly were observed during three separate survey dates (March 10, 17, and 24, 2017) (Leatherman 2017). Quino checkerspot butterfly nectar plants were observed throughout natural habitat within the 2017 survey area and in the agricultural fields in the expanded project area. Although potential nectar sources for adult Quino checkerspot butterflies were observed in these previously disturbed areas, including on the expanded project area, the majority of this habitat is not high quality and observations were concentrated on ridge tops in two different areas—one at the extreme eastern portion of the survey area and one at the extreme northern edge of the survey area (see **Figure 3-6**) (Leatherman 2017). These two populations are approximately 600 and 1,200 feet, respectively, from the proposed disturbance area. However, USFWS identifies suitable habitat within 0.6 mile (estimated movement distance) from Quino checkerspot butterfly occurrences as occupied habitat for the species in any given area (USFWS 2003b).

Figure 3-6 shows California plantain (a Quino checkerspot butterfly larval host plant) observed during the initial December 2015 biological survey and the 2017 species-specific protocol survey (Leatherman 2017, CBP 2018a). No California plantain or other larval host plants were observed within the agricultural fields or within the portion of the proposed disturbance area that was surveyed. Leatherman (2017) indicates that the plantain patches adjacent to the proposed disturbance area are low density patches, while medium and high density patches occur as close as 85 feet from the proposed disturbance area (Leatherman 2017).

A vegetation survey focused specifically on Quino checkerspot butterfly host and food plants was conducted in April 2019 (Fuller 2019). This survey revealed the existence of Quino checkerspot butterfly host and food plants within the proposed disturbance area and immediately adjacent to the eastern portion of the disturbance area. Populations of these plants had previously only been observed outside the proposed disturbance area. Although several survey events occurred throughout the project planning phases beginning in late 2015, many of these surveys were focused on other species or were conducted outside the bloom period for host and food plants. In addition, the 2018/2019 rain season was unusually wet, which may have allowed for the expansion of previously known populations of Quino checkerspot butterfly host and food plants.

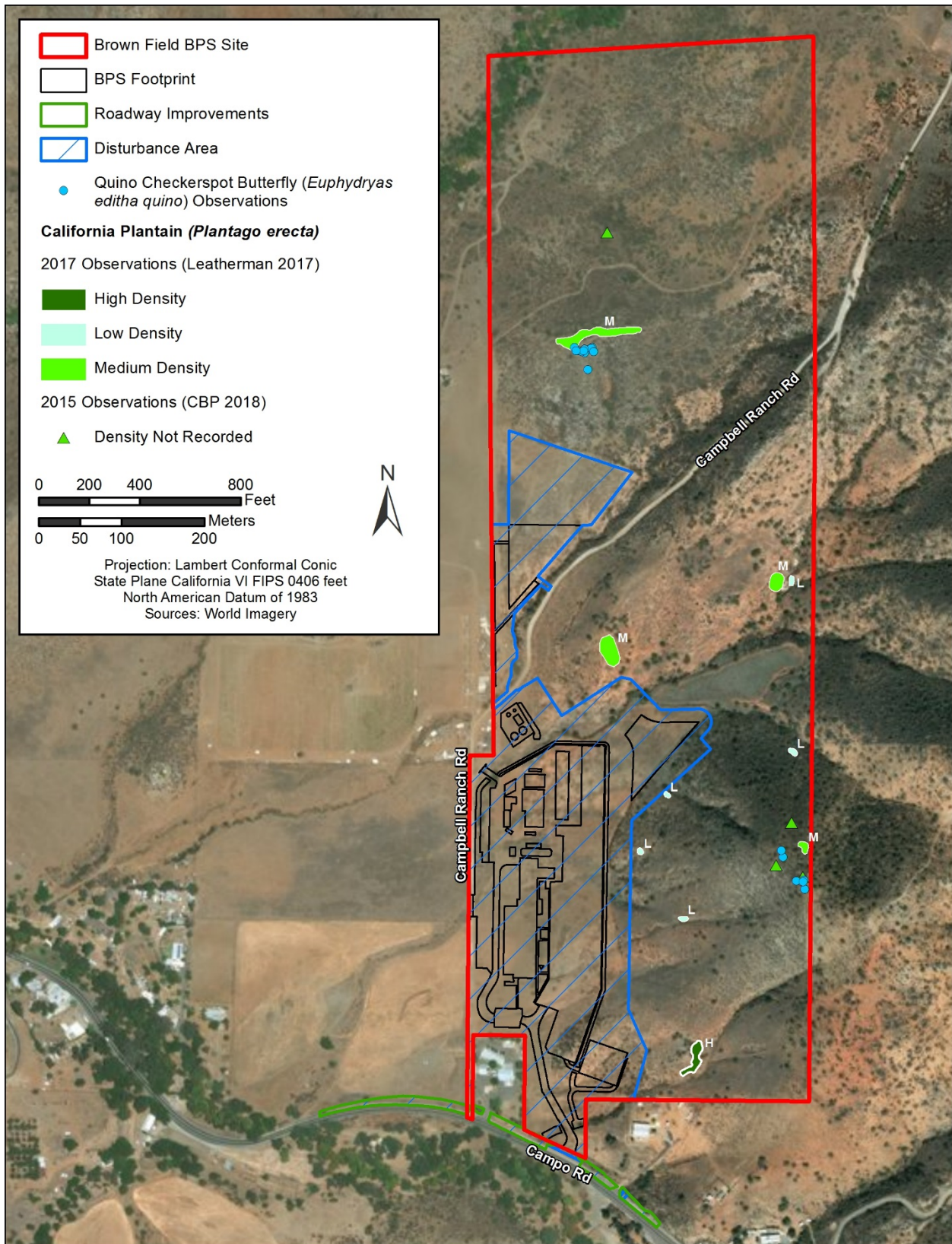


Figure 3-6. Observations of Quino Checkerspot Butterfly and California Plantain During the 2015 Biological Survey and 2017 Protocol Survey

San Diego Fairy Shrimp. San Diego fairy shrimp (*Branchinecta sandiegonensis*) is federally listed as endangered. They are a species of small, freshwater crustaceans that live in seasonal pools of water and are obligate vernal pool inhabitants. They lay eggs (cysts) that can remain dormant until the next time rainwater collects in the depressions (USFWS 2008). No such depressions or pools or evidence of such features are present at the expanded project area; therefore, this species is unlikely to occur.

Southwestern Willow Flycatcher. The southwestern willow flycatcher (*Empidonax traillii eximus*) is a federally and state-listed endangered species. The species is a riparian obligate and requires thick stands of willow trees (*Salix* sp.) or salt cedar (*Tamarix* sp.) in riparian foliage for nesting. They only nest in wide riparian areas on the order of hundreds of feet across. Nesting habitat for the southwestern willow flycatcher includes a multi-layered canopy with dense undergrowth often immediately adjacent to surface water (Sogge et al. 2010).

The riparian area on the expanded project area does not provide adequate vegetation in sufficient width or density to support nesting for the southwestern willow flycatcher. Therefore, this species is not likely to occur at the expanded project area except as a brief stopover during migration.

3.5.3 Environmental Consequences

Effects on federally or state listed threatened, endangered, or candidate species would be considered major and adverse if the Proposed Action resulted in one or more of the following consequences:

- permanent loss of occupied, critical, or other suitable habitat
- temporary loss of critical habitat that adversely affects recolonization by threatened or endangered resources
- take of a federally or state-listed threatened, endangered, or candidate species as defined under the federal and California Endangered Species Acts.

3.5.3.1 Proposed Action

Plant Species. Short- and long-term, indirect, negligible effects on Otay tarplant and San Diego thornmint would be expected as a result of the Proposed Action (as described in following paragraphs). Most of the proposed disturbance area, including the BPS footprint and roadway improvements, is situated on previously disturbed habitat. This area offers poor habitat for regeneration of native plants, unless intensely managed to exclude invasive species.

Target species were not identified during field surveys; however, focused surveys were generally not conducted during optimal bloom periods. Prior to construction, surveys would be conducted by a qualified biologist during the appropriate bloom season. If target species are documented by the qualified biologist, they would be flagged and avoided; no work, including use of herbicides, would occur within that flagged area without further consultation with USFWS. Because

implementation of the BMPs would allow CBP to avoid adverse effects, the impacts on threatened and endangered plant species would be negligible.

The implementation of the BMPs in **Sections 5.3** and **5.5.1** would result in minimal impacts on federal and state-listed threatened and endangered plant species identified in this section.

Encinitas Baccharis. Encinitas baccharis was not observed during the biological surveys. The nearest known occurrence of this species is approximately 6 miles southwest of the proposed BPS site (Calflora 2015). This species grows in the chaparral vegetation community, which does not occur at the expanded project area; therefore, this species is unlikely to occur on the expanded project area. No effects on this species are expected.

Engelmann Oak. Engelmann oaks are approximately 0.5 mile from the proposed BPS site and directly adjacent to the Caltrans ROW on the south side of Highway 94. No short- or long-term, direct or indirect, adverse effects are expected. No roadway improvements are proposed on the south side of Highway 94. Therefore, no effects on this species are expected. If work was required on the south side of Highway 94, clear delineation of the Caltrans ROW would help avoid adverse effects on Engelmann oaks.

Mexican Flannelbush. This plant was not observed during the biological surveys, and it is not likely to occur on the expanded project area due to the extremely limited and localized nature of distribution of known populations. The nearest known location for this species is approximately 3 miles southwest of the proposed BPS site in Cedar Canyon (USFWS 2009a). No short- or long-term, direct or indirect, adverse effects on this species are expected.

Otay Tarplant. Short- and long-term, negligible, indirect, adverse effects on this species could occur as a result of the Proposed Action. Approximately 6.7 acres of potentially suitable habitat occurs within the proposed disturbance area. Spilled hazardous chemicals or petroleum products could leach into soils and kill vegetation. Fugitive dust emitted during construction could hinder growth or kill individual plants. Implementation of BMPs identified in **Sections 5.3** and **5.5.1** and pre-construction surveys of habitat within and immediately surrounding the proposed disturbance area would likely reduce or eliminate potential effects from the Proposed Action. If plants are identified during pre-construction surveys, they would be flagged and avoided until USFWS is consulted; therefore, the Proposed Action is not likely to adversely affect this species.

San Diego Ambrosia. No San Diego ambrosia were observed during the biological surveys. San Diego ambrosia grows in vernal pools and, because there are no vernal pools present, it is unlikely to occur on the expanded project area. No effects are expected.

San Diego Thornmint. Short- and long-term, negligible, indirect, adverse effects on this species could occur as a result of the Proposed Action. Approximately 6.7 acres of potentially suitable habitat occurs within the proposed disturbance area. Spilled hazardous chemicals or petroleum products could leach into soils and kill vegetation. Fugitive dust emitted during construction could hinder growth or kill individual plants. Implementation of BMPs identified in **Sections 5.3**

and **5.5.1** and pre-construction surveys of habitat within and immediately surrounding the proposed disturbance area would likely reduce or eliminate potential effects from the Proposed Action. If plants are identified during pre-construction surveys, they would be flagged and avoided until USFWS is consulted; therefore, the Proposed Action is not likely to adversely affect this species.

San Diego Button-Celery. No San Diego button-celery were observed during the biological surveys. Because this species grows in conjunction with vernal pools and there are no vernal pools present at the expanded project area, it is unlikely to occur on the expanded project area. No short- or long-term, direct or indirect, adverse effects on this species are expected.

Spreading Navarretia. No spreading navarretia were observed during the biological surveys. Because it grows in vernal pools and there are no vernal pools present, it is unlikely to occur on the expanded project area. No effects on this species are expected.

Wildlife Species. Construction and operation of the proposed BPS would occur mainly on previously disturbed areas that provide marginal habitat quality for wildlife. Approximately 6.78 acres of native habitat would be removed. At least 14.6 acres of disturbed native and non-native vegetation would be restored with native vegetation, to the maximum extent practicable, based on a native plant revegetation plan. Therefore, removal of this habitat would constitute a negligible, adverse effect on threatened and endangered species known to occur on expanded project area.

Implementation of the BMPs identified in **Sections 5.3, 5.4, and 5.5** would further reduce impacts on federally and state listed threatened, endangered, and candidate wildlife species identified in this section.

Arroyo Toad. It is unlikely that the Proposed Action would affect arroyo toads. Arroyo toads were not observed during the 2017 survey. Additionally, historical occurrences of the arroyo toad in Dulzura Creek, which is 165 feet downstream from the expanded project area, are from the early 1900s and their presence has not been documented since (Leatherman 2017). Construction of culverts or bridges in drainages could be completed when the drainages are dry to eliminate any potential for indirect, adverse impacts from erosion and sedimentation on arroyo toad habitat downstream.

Direct effects on toads migrating or foraging away from more permanent water sources are unlikely. Arroyo toads are known to migrate up to 0.62 mile from their breeding area. If toads move into the area during construction or operation when streams and ditches within the proposed disturbance area contain surface water, they could be killed by moving vehicles and equipment associated with the Proposed Action. Chemical spills could also occur on site during construction or operation of the BPS and could impact populations of arroyo toad downstream of the proposed BPS site. However, implementation of industry standard BMPs and those identified in **Section 5.5**, such as spill containment and vehicle speed limits, would help to further reduce or eliminate the potential for these effects. A biological monitor would also be used to monitor

for arroyo toads during construction. Therefore, the project is not likely to adversely affect arroyo toads.

California Condor. Short-term, direct, negligible, adverse effects on this species could occur during construction of the Proposed Action. Nesting near the expanded project area has not been documented and is extremely unlikely; however, noise and activity associated with construction of the proposed BPS could potentially displace foraging condors. Due to the unlikelihood of condors nesting in the area and the uncommon observations of foraging condors in the area, the Proposed Action is not likely to adversely affect this species.

Coastal California Gnatcatcher. Short-term, direct and indirect, negligible, adverse effects on the coastal California gnatcatcher would be expected. BMPs would be implemented to avoid and minimize these direct and indirect effects to a level that is negligible.

Approximately 6.7 acres of potential coastal California gnatcatcher habitat would be removed during construction of the proposed BPS. This would constitute a negligible loss of suitable habitat in the expanded project area (7 percent) relative to the available habitat (approximately 95 acres). The nearest sighting of a coastal California gnatcatcher during the 2017 protocol survey occurred adjacent to the proposed stockpile and corrugated metal pipe culvert north of Campbell Ranch Road (see **Figure 3-5**). Installation of the culvert would result in a negligible impact (less than 0.05 acre) on previously occupied habitat. CBP would offset permanent and temporary impacts on low quality coastal California gnatcatcher habitat by restoring a greater area of higher quality gnatcatcher habitat. CBP would also control invasive species on approximately 5.5 acres of the undeveloped portion of the proposed BPS site, and conserve/manage the remaining undeveloped portion of the site.

Noise, fugitive dust, and human activity, such that could result from installation of the corrugated metal pipe culvert or accessing the stockpile north of Campbell Ranch Road, could cause coastal California gnatcatchers to avoid areas in which they might otherwise forage or nest. Any temporary “loss” (due to avoidance by gnatcatchers) of forage and nesting habitat would be reduced or eliminated by implementing BMPs such as dust control, construction boundary delineation, marking of sensitive habitat for avoidance, and reduced vehicle speed limits. Use of vehicle speed limits, fugitive dust control, and mufflers would help to reduce dust and noise impacts on this species. Additionally, a biological monitor would be used to monitor impacts on coastal California gnatcatchers.

If construction proceeds during coastal California gnatcatcher breeding season (February 15 through August 31), a permitted biologist would survey all habitat for this species within 500 feet of the work areas prior to initiating construction activities. In the event individuals are detected, the results of the survey would be submitted to USFWS for review.

If an active nest is documented, a 500-foot no-construction buffer would be established around each nest site. If construction must take place within the 500-foot buffer, a biological monitor familiar with the behavior of coastal California gnatcatchers would monitor noise at the edge of

the occupied habitat. If the biological monitor determines activities are disturbing the nesting activities, the biological monitor would contact the construction manager or site foreman to halt construction activities and would contact the project biologist who would in turn contact CBP. CBP would consult with USFWS to develop methods to reduce the noise and disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between nesting gnatcatchers and the activities, and working in other areas until the young have fledged.

Implementation of these BMPs and measures and those listed in **Section 5.5** along with clear delineation of proposed disturbance area boundaries would allow CBP to avoid impacts on individual gnatcatchers. Effects on coastal California gnatcatchers would be negligible; therefore, the Proposed Action is not likely to adversely affect this species.

Hermes Copper Butterfly. No Hermes copper butterflies were observed during focused surveys in 2017. No short- or long-term, direct or indirect, adverse effects on this species are expected.

Least Bell's Vireo. Based on the marginal nature of the riparian habitat and its inadequacy for least Bell's vireo nesting, it is unlikely that the species would occur within the expanded project area. In addition, the potential habitat is approximately 0.5 mile from proposed construction, maintenance, and operational activities and topography and vegetation create a substantial barrier between the proposed BPS and potential habitat. Because the potential for this species to occur at the expanded project area is so low it is discountable, the Proposed Action is not likely to adversely affect this species.

Quino Checkerspot Butterfly. Short-term, direct and indirect effects from construction activities on the Quino checkerspot butterfly would be expected to be negligible. Observations of Quino checkerspot butterflies during protocol surveys in 2017 indicated that populations are concentrated in two areas outside of the proposed disturbance area. While the locations of these populations can and probably will change over time, the two observed populations are currently approximately 650 feet east and 1,300 feet north from the proposed disturbance area (see **Figure 3-6**). At this distance, it is unlikely that any activity associated with the Proposed Action would affect breeding Quino checkerspot butterflies. Surveys in April 2019 revealed the presence of Quino checkerspot butterfly host and food plants within the proposed disturbance area. Therefore, it is possible that Quino checkerspot butterfly would occur within the proposed disturbance area. Although BMPs would likely minimize direct impacts to Quino checkerspot butterflies, indirect effects from the potential loss of host and food plants would occur.

The BMPs in **Sections 5.4** and **5.5.4** would be implemented to minimize these direct and indirect effects on Quino checkerspot butterfly adults, eggs, and larvae, in the unlikely event they occur within the proposed disturbance area. Effects could include injury or crushing of individuals during site preparation and by use of construction equipment and indirect effects from fugitive dust and invasive species and loss of habitat from site preparation activities.

To avoid direct effects such as injury and crushing of any life stage, a qualified biologist would be present during construction to identify areas of potential Quino checkerspot butterfly habitat (i.e., adult nectar plants and larval host plants) for avoidance, as necessary, depending on the season.

If ground clearing occurs during the active period for Quino checkerspot butterflies (February–mid-May, depending on weather), there is a potential to impact adult Quino checkerspot butterflies. If adult Quino checkerspot butterflies forage within the proposed disturbance area during construction, they could potentially be run over or hit by construction vehicles. A qualified biologist would be used to monitor for and avoid impacts on adult Quino checkerspot butterflies. If proposed activities, including vegetation clearing, construction in the proposed disturbance area, and future vegetation management/maintenance, are necessary during Quino checkerspot butterfly reproduction season (February 15 to August 31), a qualified biologist would conduct Quino checkerspot butterfly and host plant surveys in the impact area within one week prior to the work. If found, host plants would be flagged and avoided to the maximum extent practicable. If host plants cannot be avoided, the biologist would survey for adults, larvae, and eggs within the impact area and would salvage and/or relocate any adults, larvae, and host plants containing eggs and larvae to a location supporting suitable Quino checkerspot butterfly habitat that would not be impacted. CBP would notify USFWS of any relocation within 24 hours following relocation.

A qualified biologist would also be present for activities that occur between June 1 and November 1 (or when host plants are dormant to avoid adult flight season, potential egg masses, and diapause larvae) in areas of suitable Quino checkerspot butterfly habitat, to monitor for and avoid Quino checkerspot butterflies. As stated above, if larval host plants could not be avoided, they would be surveyed during the larval feeding season for larvae. If no larvae are found, construction can proceed immediately with a qualified biologist present. If larvae are found, the USFWS would be contacted.

During construction, impacts from construction such as fugitive dust and human activity could displace or kill Quino checkerspot butterflies; however, these impacts would be greatly reduced or eliminated through the implementation of industry standard BMPs such as dust control, construction boundary delineation, marking of sensitive habitat for avoidance, and reduced vehicle speed limits.

The BPS footprint would primarily be on a previously disturbed agricultural field. Approximately 6.7 acres of potential Quino checkerspot butterfly habitat located outside of the former agricultural fields would be removed during construction. This removal would constitute a negligible loss of potential habitat relative to the available habitat in the area. Although this action would remove potentially usable habitat, BMPs would be implemented to avoid host plants in the area, which likely change from year to year based on changing rainfall and other climatic conditions. CBP would offset a portion of the permanent impacts and all of the temporary impacts on potential Quino checkerspot butterfly habitat by restoring Quino

checkerspot butterfly habitat with shrubs and low-density habitat without shrubs. CBP would also control invasive species on approximately 5.5 acres of the undeveloped portion of the proposed BPS site and conserve/manage the remaining undeveloped portion of the site.

Recently disturbed soils can increase the potential for invasive species, such as Lehman's lovegrass and false-brome, to become established. These and other invasive species tend to form dense stands that outcompete larval host species and nectar-providing species resulting in degraded habitat. The Quino checkerspot butterfly occurs in open areas with low-growing and sparse vegetation that are typically formed or maintained by some form of disturbance. The majority of the vegetation-control activities would be limited to the landscaped vegetation within the proposed BPS. Outside of the proposed disturbance area, vegetation control would be limited to the minimum necessary to create defensible space for wildfires. If maintenance activities occur outside of the proposed disturbance area, the CBP protocol for cleaning vehicles and equipment to avoid the spread of invasive species would be followed.

If possible, restoration of any suitable Quino checkerspot butterfly habitat within the proposed disturbance area would be conducted in areas with appropriate topographical and biological features. The restoration effort would be based on Appendix II of the Recovery Plan for Quino checkerspot butterfly, and the plan will be submitted to USFWS prior to temporary impacts. The restoration plan would include, but is not limited to: (1) planting larval host plants; (2) planting nectar species; (3) a time line of implementation including seed casting and planting prior to the rainy season; (4) success criteria; (5) contingency measures; (6) weed control measures; (7) a monitoring program; and (8) an implementation schedule.

Although initial surveys did not reveal Quino checkerspot butterfly host or food plants within the proposed disturbance area, Quino checkerspot butterfly host and food plant-specific surveys conducted within the bloom period for those species revealed their presence within the fallow fields and within the disturbance area. While it is possible to avoid impacts on Quino checkerspot butterfly individuals with the implementation of measures and BMPs listed in **Section 5**, the avoidance of host and food plants would likely be unavoidable. In addition, the USFWS considers any area within 0.6 mile (estimated movement distance) of a known Quino checkerspot butterfly observation to be occupied habitat. Therefore, the Proposed Action may affect and is likely to adversely affect Quino checkerspot butterfly.

San Diego Fairy Shrimp. San Diego fairy shrimp are obligate vernal pool inhabitants and require rainwater that collects in depressions in order to survive (USFWS 2008). No such depressions or pools or evidence of such features are present at the expanded project area; therefore, this species is unlikely to occur at the expanded project area. No short- or long-term, direct or indirect, adverse effects on this species are expected.

Southwestern Willow Flycatcher. Based on the marginal nature of the riparian habitat and its inadequacy for southwestern willow flycatcher nesting, it is unlikely that the Proposed Action would have any short- or long-term, direct or indirect, adverse effects on this species. In

addition, the potential habitat is approximately 0.5 mile from proposed construction, maintenance, and operational activities, and topography and vegetation create a substantial barrier between the proposed BPS and potential habitat. Because the potential for this species to occur at the expanded project area is so low it is discountable, the Proposed Action is not likely to adversely affect this species.

3.5.3.2 No Action Alternative

Under the No Action Alternative, the proposed Brown Field BPS would not be constructed at the Dulzura site and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. No impacts on threatened or endangered species would be expected.

3.6 Hydrology and Groundwater

3.6.1 Definition of the Resource

Hydrology and groundwater relate to water resources that are natural and man-made sources of water that are available for use by and for the benefit of humans and the environment. Evaluation of hydrology and groundwater examines the quantity and quality of the resource and its demand for various purposes. Hydrology concerns the distribution of water-to-water resources, including surface waters and groundwater, through the processes of evapotranspiration, atmospheric transport, precipitation, surface runoff and flow, and subsurface flow. Hydrology results primarily from temperature and total precipitation that determine evapotranspiration rates, topography that determines rate and direction of surface flow, and soil and geologic properties that determine rate of subsurface flow and recharge to the groundwater reservoir.

Groundwater consists of subsurface hydrologic resources and includes underground streams and aquifers. It is an essential resource that functions to recharge surface water and is used for drinking, irrigation, and industrial processes. Groundwater features include depth from land surface, aquifer or well capacity, quality, recharge rate, and surrounding geologic formations. Groundwater quality and quantity are regulated under several different programs, including the Federal Underground Injection Control and the Federal Sole Source Aquifer regulations, both authorized under the Safe Drinking Water Act. In California, groundwater is managed by the California Department of Water Resources.

3.6.2 Affected Environment

Hydrology. The proposed BPS site is within the Diegan Western Granitic Foothills ecoregion, which is a subset of the Southern California/Northern Baja Coast ecoregion (USEPA 2013). The Diegan Western Granitic Foothills ecoregion consists of inland low hills at the intermediate elevations of central San Diego County, in the Escondido, Ramona, and Alpine areas. The area around the proposed BPS site is typical of these inland hills. The mountains and hills of the ecoregion are part of the lower Peninsular Ranges, with moderately steep to steep with narrow to rounded summits. A few narrow to broad valleys occur. The Diegan Western Granitic Foothills fall into the Mediterranean subtropical climate type, with mild year-round temperatures, cool, wet winters, and hot, dry summers (USGS 1995). While the Proposed Action area averages

between 15 to 18 inches of precipitation per year, precipitation in the ecoregion is unevenly distributed and evapotranspiration is high, making water shortages and droughts common (USGS 1995, County of San Diego DPLU 2011a). Elevation at the proposed BPS site ranges from approximately 1,100 to 1,450 feet and the site is sloped to the south and west. As a result, the site generally drains to the southwest into entrenched, low order, ephemeral drainages and swales that are tributaries of Dulzura Creek. The tributaries to Dulzura Creek and the Dulzura Creek Watershed are described in greater detail in **Section 3.7**.

Groundwater. The South Coast Hydrologic Region covers most of the southern California watersheds that drain into the Pacific Ocean, and is separated into three subregions (Los Angeles, Santa Ana, and San Diego). The proposed BPS site is within the San Diego subregion, which has 22 primary groundwater basins covering approximately 277,000 acres. Groundwater within the subregion is primarily in unconfined alluvial aquifers; however, larger basins have groundwater in multiple aquifers separated by aquitards that create confined groundwater conditions (California DWR 2003).

The proposed BPS site does not sit on any of the primary groundwater basins identified in the San Diego subregion of the South Coast Hydrologic Region, but is nearly equidistant from the Coastal Plain of San Diego (10 miles to the southwest) and the Potrero Valley (10 miles to the southeast) basins (California DWR 2003). Groundwater under the site occurs in a fractured crystalline bedrock aquifer and groundwater recharge in the area is primarily a result of percolation and precipitation (County of San Diego DPLU 2011a, SDCWA 2017). There are local impairments by nitrate, sulfate, and total dissolved solids (California DWR 2003).

There are three water wells on properties immediately adjacent to the proposed BPS site, including 300 feet northwest, 50 feet south/southwest, and 100 feet south/southeast (CWE 2018). There are no groundwater monitoring wells on or adjacent to the proposed BPS site; however, there are four active monitored wells along Honey Springs Road, approximately 2 to 3 miles north of the site. Between 1981 and 2008, groundwater levels in these wells generally ranged 3 to 67 feet below the top of the casing; however, water level in one well is highly variable, fluctuating from 3 to 179 feet from the top of the casing (County of San Diego DPLU 2011a). These water level records indicate that the fractured rock aquifer that underlies this area likely has a low storage capacity that is subject to localized rapid rises and declines in the water table based on precipitation rates. The water table declined (i.e., was deeper) during dryer years and recovered (i.e., was shallower) during above-average rainfall years (County of San Diego DPLU 2010). As a result, storage capacity on the proposed BPS site is likely low and subject to rapid declines in the water table. Because yield from groundwater wells is limited, wells in the area are generally used for low-yield domestic water supplies (SDCWA 2017). Groundwater capacity in the area shows an ability to recover from low capacity during well-above average rainfall years. Groundwater on the site is at 91 percent of maximum capacity, but would be reduced to 77 percent capacity with the full implementation of the San Diego County General Plan (County of San Diego DPLU 2011a).

Naturally occurring radionuclides are found in almost all rocks and soil throughout the world and can leach into groundwater from natural mineral deposits. Potential radionuclide problem areas have been detected in groundwater near the Jamul/Dulzura area. These problem areas have not been identified on the proposed BPS site, but large portions of San Diego County remain unmapped for the contaminant. The proposed BPS site would need to be surveyed to determine the level of radionuclides in groundwater (County of San Diego DPLU 2011a).

3.6.3 Environmental Consequences

The Proposed Action would be considered to cause a major, adverse impact on hydrology or groundwater if it were to affect water quality substantially; reduce water availability or supply to existing users substantially; threaten or damage hydrologic characteristics; or violate established federal, state, or local laws and regulations. If at any time, groundwater in storage were reduced to a level of 50 percent or less of maximum theoretical storage capacity as a result of groundwater extraction, groundwater impacts would be considered a potentially major, adverse impact (County of San Diego DPLU 2011a, County of San Diego DPLU 2007b).

3.6.3.1 Proposed Action

Hydrology. Long-term, negligible to minor, adverse impacts on hydrology would be expected from the increase in impervious surfaces of up to approximately 15 acres under the Proposed Action. Ground surface available for groundwater recharge would be reduced and impervious surfaces, such as pavement and concrete, would contribute to an increase in evaporation from precipitation or runoff. Hydrology would be altered at a local scale; however, impacts on hydrology would be negligible to minor.

The proposed stormwater management system would result in less runoff received at the receiving stream than under current conditions. The combined proposed outfall would be reduced 5.6 percent for the 10-year storm event and 14.9 percent for the 100-year storm event. Construction under the Proposed Action would be required to meet the standards identified in Section 438 of the Energy Independence and Security Act (EISA) because the footprint of disturbance would be greater than 5,000 square feet (ft²). Additionally, the low impact development (LID) standards and techniques for stormwater management would require that predevelopment hydrology is maintained to prevent any net increase in stormwater runoff. As such, the Proposed Action includes a stormwater management system with a detention system (i.e., hydromodification basin) that would be designed to store and convey the peak discharge for a 100-year design event. Runoff coming from offsite would be intercepted before it enters the proposed BPS site and routed through or around the site via channels. Runoff generated on the proposed BPS site would be captured with inlets and conveyed through an underground stormwater pipe system to a stormwater detention facility. The system would be designed to discharge stormwater via the hydromodification basin or a flow structure in the western and southern portions of the BPS site, respectively. Stormwater from the northern portion of the BPS site would be discharged through the hydromodification basin with a total storage volume of 1.6 acre-feet at the western portion of the BPS that would release at a maximum rate of 1.6 cubic

feet per second (cfs). Stormwater from the southern portion of the BPS site would be discharged through a detention facility and flow structure connected to a pipe at the southern portion of the BPS near the driveway with a total storage volume of 0.4 acre-feet. Additionally, some areas surrounding the BPS footprint that are former agricultural fields with disturbed non-native vegetation that would not be developed under the Proposed Action would be restored with native vegetation, which could contribute to reduction of runoff.

The Proposed Action is a federal project and, therefore, the site plan approval and proposed grading and drainage are not subject to review by the San Diego County Department of Public Works and the Proposed Action is not subject to the San Diego Municipal Stormwater Permit. However, CBP intends to meet or exceed local stormwater standards.

Groundwater. Short- and long-term, minor, adverse impacts on groundwater could occur due to increasing erosion and sedimentation from runoff associated with the construction, and creating new impervious surfaces that could change stormwater flow regimes into potential groundwater recharge areas. Increases in impervious surfaces would also reduce the amount of ground surface available for groundwater recharge. However, these changes would be highly localized, site-specific, and minor.

Construction of the proposed BPS facilities and operation of the vehicle wash and fuel island would require the use of potentially hazardous materials. All construction equipment would be maintained according to the manufacturer's specifications and all fuels and other potentially hazardous materials would be contained and stored appropriately. In the event of a spill, procedures outlined in CBP's spill protection plan would be followed to contain and clean up a spill quickly. BMPs outlined in the spill protection plan (i.e., SPCC Plan) would be enacted and CBP would comply with the Spill Prevention, Control, and Countermeasures Rule (40 CFR § 112) and existing groundwater protection protocols as required under the Safe Drinking Water Act.

The installation of a septic system and leach field could result in long-term, minor, adverse impacts on groundwater quality due to the potential for the discharge of contaminants into groundwater. The septic system and leach field would be designed and operated in accordance with the San Diego County *Local Agency Management Program (LAMP) for Onsite Wastewater Treatment Systems*, and the discharged effluent would comply with the *Water Quality Control Plan for the San Diego Basin* (County of San Diego DEH 2015, San Diego RWQCB 2016). Operation of the proposed septic system and leach field would comply with permitting regulations outlined by the San Diego County DEH and San Diego RWQCB such as maintaining at least a 5-foot separation between the bottom of the system and the highest anticipated groundwater level and a 50-foot separation from onsite drainages. As a result, impacts on groundwater would be minor.

Long-term, minor to moderate, adverse impacts on groundwater could occur under the Proposed Action from the installation and use of one water well and a potable water treatment system

because of the continuous requirement of potable water for 400 USBP personnel, support staff, up to 130 detainees, and fire water supply at the proposed BPS site. The system would be appropriately sized to serve only the Brown Field BPS.

CBP prepared the *Well Report for Brown Field Border Patrol Station* to evaluate the proposed well and aquifer capacity (CWE 2018). A well was drilled at the proposed BPS site in January 2018, and pumping and recovery and water quality tests were performed. The County of San Diego provides guidelines to identify and evaluate impacts on groundwater quantity and quality (County of San Diego DPLU 2007b). The following analyses address these potential impacts using data from the well report.

50-Percent Reduction of Groundwater in Storage (Water Balance Analysis). A water balance analysis was completed using 31 years of precipitation data (1987-2017), a radius of influence for the proposed well of 1,362 feet (with associated area of influence of 133.79 acres), a monthly demand of 4,290 gallons per day (approximately 4.8 acre-feet per year) for the proposed BPS for 400 agents, and other site- and project-specific information. The estimated groundwater balance from the proposed BPS within the radius of influence over the 31-year time span would yield a reduction of 45 acre-feet of groundwater over the baseline existing conditions. The total depth of the available aquifer is 768 feet; therefore, 45 feet represents a reduction of approximately 5.8 percent of the aquifer (CWE 2018). Therefore, the Proposed Action would not have major, adverse impacts on groundwater quantity related to groundwater storage.

Groundwater Overdraft. The proposed BPS site is not within a fractured rock basin that is in an overdraft condition. Therefore, the Proposed Action would not contribute to existing overdraft conditions, and would not have major, adverse impacts on groundwater related to groundwater recharge.

Well Interference. The estimated 5-year projection of drawdown indicates the total drawdown of the proposed well would be 45 feet (5.8 percent of the aquifer depth) if recharge from the proposed leach field infiltration is not included, or 9 feet (1.2 percent of the aquifer depth) if the leach field infiltration is included. San Diego County guidelines indicate that well interference in fractured rock aquifer is considered significant if it results in a decrease of 20 feet or more in the offsite wells. The 5-year projection of drawdown estimates that the drawdown at the Brown Field BPS would be 45 feet for the worst-case scenario (i.e., drought conditions and no recharge from wastewater effluent infiltration). Under these worst-case scenario conditions, the drawdown at the proposed BPS well is 5.8 percent of the aquifer depth and it was estimated that the drawdown would be less at the nearest well located approximately 500 feet southwest of this well. Therefore, it can be assumed that the adjacent well static water surface may not be decreased more than 20 feet. When considering the groundwater recharge from infiltration of the proposed BPS's wastewater treatment system effluent, the Proposed Action would have no impact on the adjacent well's static water surface (CWE 2018). The Proposed Action would not have major, adverse impacts on groundwater related to well production that would prevent adjacent wells from meeting their land use objectives.

Low Well Yield. County guidelines regarding low well yield are specific to residential uses. Yield of the proposed well and the proposed water storage infrastructure (i.e., one 20,000-gallon potable water storage tank and two 100,000-gallon firewater storage tanks) would be capable of meeting the potable water demand, including for fire suppression, of the proposed BPS. Pumping and recovery tests were conducted on the well and it was determined that the aquifer is able to sustain a flow rate of 60 gallons per minute for at least 4 hours of continuous pumping, resulting in a water surface drawdown in the well of 72 feet. At the completion of the 72-hour pump test, the water immediately rose 20 feet when the pump was shut off and an additional 30 feet within the next 5 minutes. Additional pump tests physically confirmed the well drawdown of 6 feet at a proposed pumping rate of 15 gallons per minute. This pumping rate would only occur for approximately 4 to 6 hours per day to refill the potable water storage tank. The well report concluded that the well drilled at the proposed BPS site is adequate to serve the proposed 400-agent BPS (CWE 2018). Therefore, the Proposed Action would not have major, adverse impacts on groundwater related to low well yields.

Poor Groundwater Quality. Analysis of water samples taken during the well tests at the proposed BPS site showed high levels (i.e., above primary or secondary standards [maximum contaminant levels] identified in CCR Title 22, California Regulations Related to Drinking Water) of fluoride and manganese and detectable levels of coliform bacteria. After chlorinating and flushing the well, additional water samples were taken and analysis did not detect the presence of coliform bacteria (CWE 2018). Typical treatment of well water for potable use includes disinfection, usually chlorine injection; however, the well at the proposed BPS site would require additional treatment to remove excess fluoride and manganese. Potential treatment options include reverse osmosis, activated alumina, and ion exchange. Regardless of the treatment option selected, the treatment system and potable water from the onsite well would require permitting from the CWRCB, Division of Drinking Water (CWE 2018). After treatment of the proposed well water, the Proposed Action would not have major, adverse impacts on groundwater related to water quality.

As stated in **Section 3.6.2**, potential radionuclide problem areas have been detected in groundwater near the Jamul/Dulzura area; however, no problem areas have been identified on the proposed BPS site. If a potential radionuclide problem area was identified on the BPS site, connection to a county or state-regulated PWS would be required and additional wells would be drilled and tested to monitor the status of radionuclides in groundwater. The San Diego County Groundwater Ordinance (County Code § 67.701 et seq.) requires certain projects that are within groundwater impacted basins and propose to use groundwater to comply with regulations such as completion of groundwater investigations and well tests, prior to approval.

3.6.3.2 No Action Alternative

Under the No Action Alternative, the proposed Brown Field BPS site in Dulzura would not be developed and USBP personnel would remain at the existing BPS facility in San Diego. As a

result, no impacts on hydrology and groundwater would be expected and conditions would remain as described in **Section 3.6.2**.

3.7 Surface Waters and Waters of the United States

3.7.1 Definition of the Resource

Surface water includes natural, modified, and constructed water confinement and conveyance features located above groundwater that may have a defined channel and discernable water flows. These features are generally classified as streams, springs, wetlands, natural and artificial impoundments (e.g., ponds, lakes), and constructed drainage canals and ditches.

Stormwater is an important component of surface water systems because of its potential to introduce sediments and other contaminants that could degrade lakes, rivers, and streams. Stormwater flows, which can be exacerbated by high proportions of impervious surfaces associated with buildings, roads, and parking lots, are important to the management of surface water. Man-made stormwater systems provide the benefit of reducing sediments and other contaminants that would otherwise flow directly into surface waters.

Waters of the United States (WoUS) are defined within the CWA and regulated by USACE and the U.S. Environmental Protection Agency (USEPA). WoUS has a broad meaning under the CWA and incorporates deepwater aquatic habitats and special aquatic habitats, including wetlands. USACE and USEPA assert jurisdiction over traditional navigable waters and their relatively permanent tributaries, and the wetlands that are adjacent to these waters (USEPA 2017a). The CWA (33 USC §1251 et. seq., as amended) establishes federal limits, through the NPDES, on the amounts of specific pollutants that are discharged to surface waters to restore and maintain the chemical, physical, and biological integrity of the water (USEPA 2017b).

Section 404 of the CWA authorizes USACE to issue permits for the discharge of dredged or fill materials (e.g., concrete, riprap, soil, cement block, gravel, sand) into the WoUS. In addition, Sections 101 and 404 of the CWA grant states with sufficient resources the right to assume these responsibilities, although the State of California has not been granted that authorization at this time. USACE also regulates work on structures in or affecting navigable WoUS under Section 10 of the Rivers and Harbors Act of 1899. According to USACE Regulatory Guidance Letter 07-01, USACE generally will not assert jurisdiction over the following features: swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) and ditches (including roadside ditches) excavated wholly in and draining only uplands that generally do not carry a relatively permanent flow of water (USACE 2007).

The California State Water Resources Control Board through the appropriate RWQCB regulates activities pursuant to Section 401 and Section 402 of the federal CWA (USEPA 2016) within California. The proposed Brown Field BPS site occurs within the San Diego RWQCB (Region 9). Section 401(a)(1) of the CWA specifies that certification from the applicable state is required for any applicant requesting a federal license or permit to conduct any activity including, but not

limited to, the construction or operation of facilities that may result in any discharge into navigable waters. Section 402 establishes the NPDES program, which establishes federal limits on the amounts of specific pollutants that can be discharged into WoUS. The California NPDES stormwater program requires permits for discharges of stormwater from construction, industrial, and municipal separate storm sewer systems sources. Any construction, demolition, or other activity that disturbs 1 acre or more is required to obtain coverage under an NPDES permit for their stormwater discharges.

Wetlands are also a protected resource under EO 11990, *Protection of Wetlands*, which was issued in 1977. The purpose of EO 11990 is “to avoid to the extent possible the short- and long-term, adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.”

Water quality standards are regulated by USEPA, under the Safe Drinking Water Act (42 USC §§ 201, 300 et seq.) and the CWA. Section 303(d) of the CWA requires states to identify and develop a list of impaired water bodies where technology-based and other required controls have not provided attainment of water quality standards. Section 305(b) of the CWA requires states to assess and report the quality of their water bodies.

Section 438 of the EISA (42 USC § 17094) establishes stormwater design requirements for federal construction projects that disturb a footprint greater than 5,000 ft². Under these requirements, predevelopment site hydrology must be maintained or restored to the maximum extent technically feasible with respect to temperature, rate, volume, and duration of flow. Additional guidance is provided in the USEPA *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*.

3.7.2 Affected Environment

The information discussed in this section is supported by a delineation survey that was conducted in December 2015 and March 2018 to determine the limits of potential jurisdiction regulated by (1) USACE pursuant to Section 404 of the CWA and (2) RWQCB pursuant to Section 401 of the CWA (CBP 2018b). The study area for the delineation survey included all areas with the potential to be affected by the Proposed Action (see **Figure 3-7**).

The study area is within the San Diego RWQCB’s Otay Hydrologic Unit, Dulzura Hydrologic Area, Otay Watershed (Hydrologic Unit 910.00). The Otay Watershed begins in the mountains in the southwest corner of the Cleveland National Forest. Surface waters in the study area include several unnamed ephemeral tributaries to Dulzura Creek, which ultimately drains to the Lower Otay Reservoir. The Lower Otay Reservoir is on the impaired water bodies 303(d) list for color, iron, manganese, nitrogen, ammonia (total ammonia), and high pH (USEPA 2012). Additionally, the study area supports several vegetated swales and erosional features, which do not appear to be hydrologically connected to Dulzura Creek.

Several features supporting an ordinary high water mark (OHWM) and/or other jurisdictional criteria, such as the presence of USACE three-parameter wetlands (i.e., hydrology, hydric soils, and hydrophytic vegetation), were present within the study area. Potential USACE/RWQCB jurisdictional features within the study area generally consist of narrow, incised, low-order ephemeral streams (i.e., smaller seasonal drainages or streams) that support upland perennial vegetation and have no apparent connection to groundwater or other seasonal or intermittent hydrology. A small area of USACE wetlands occurs in the northwestern corner of the study area within an intermittent drainage. Several proposed non-jurisdictional vegetated swales and a proposed non-jurisdictional erosional feature also occur within the study area (CBP 2018b). Potential jurisdictional WoUS are presented in **Figure 3-7**.

3.7.2.1 USACE/RWQCB Jurisdictional Features

Potential Jurisdictional WoUS. Several tributaries to Dulzura Creek traverse the proposed BPS site and are potential WoUS (see **Figure 3-7**). **Table 3-10** provides acreages of potential WoUS within the study area.

Table 3-10. Potential USACE/RWQCB Jurisdictional Areas within the Study Area

Potential USACE/RWQCB Jurisdictional Feature	Acres of Potential Non-Wetland WoUS	Acres of Potential Wetland WoUS	Total Acres of Potential WoUS
Tributary A	0.044	0.204	0.248
Tributary B	0.020	0.000	0.020
Tributary C	0.175	0.000	0.175
Tributary D1	0.158	0.000	0.158
Tributary D2	0.005	0.000	0.005
Tributary D3	0.007	0.000	0.007
Tributary D4	0.041	0.000	0.041
Tributary E	0.011	0.000	0.011
Tributary F	0.006	0.000	0.006
Tributary G1	0.036	0.000	0.036
Tributary G2	0.003	0.000	0.003
Tributary H	0.002	0.000	0.002
Total	0.508	0.204	0.712

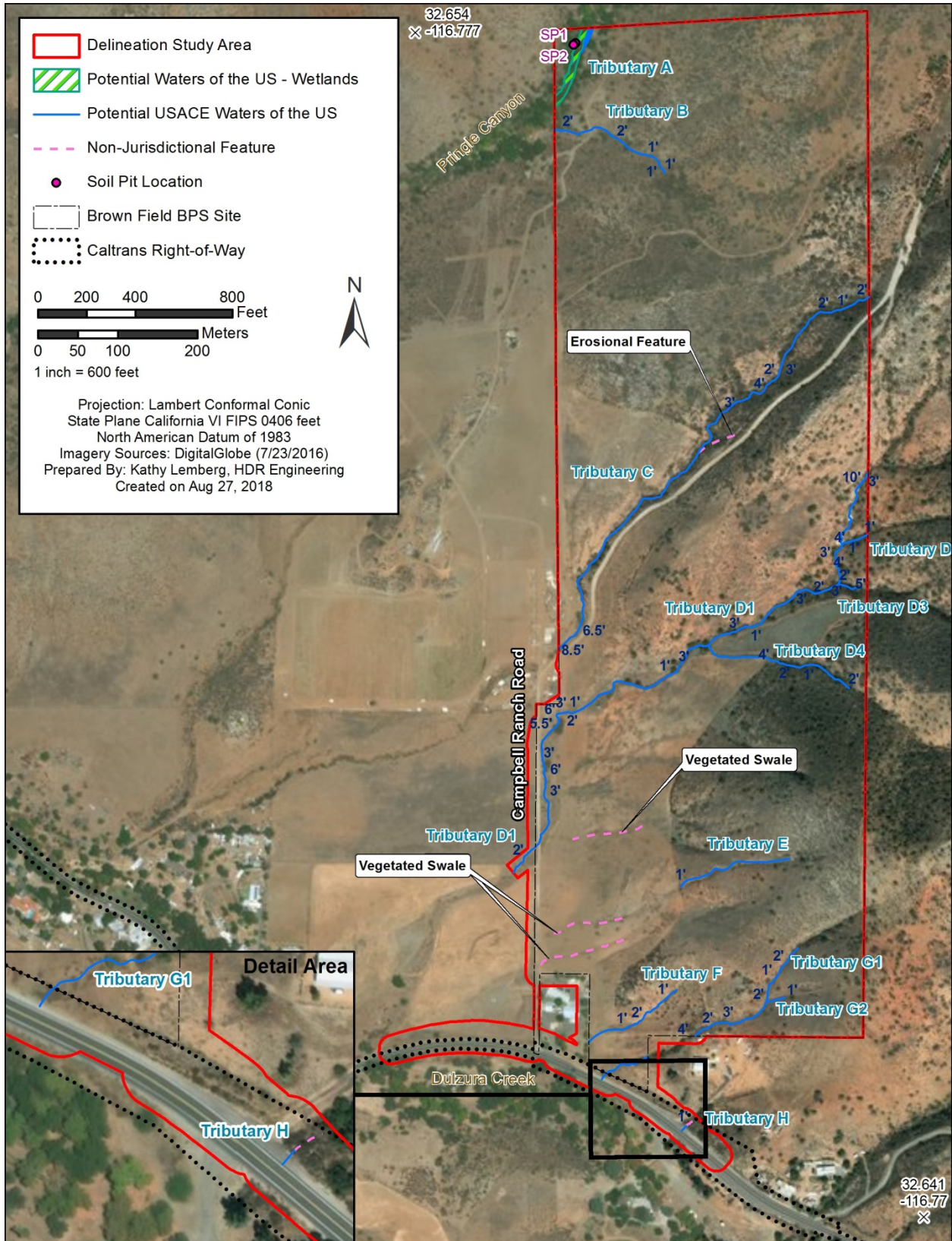


Figure 3-7. Potential Jurisdictional WoUS within the Study Area

Tributary A. Tributary A supports potential wetland and non-wetland WoUS and traverses the northwestern corner of the study area within Pringle Canyon (see **Figure 3-7**). The tributary is a shallow, intermittent stream confined between two hill slopes. Based on its intermittent flow regime, Tributary A is a relatively permanent water. The width of the active channel averages 2 to 4 feet and supports a low to medium density of hydrophytic herbaceous vegetation and mature willow and oak riparian woodland (see **Figure 3-8**). The active channel supported a soil substrate with small to medium cobble and flowing water at the time of the 2015 delineation survey. Tributary A flows south offsite for approximately 0.7 mile where it eventually outlets into Dulzura Creek.

Tributary B. Tributary B is a shallow, ephemeral, low-order drainage in the northwest corner of the study area and eventually flows into Tributary A outside of the study area (see **Figure 3-7**). Based on its ephemeral flow regime, Tributary B is a non-relatively permanent water. This potential WoUS supports a 1- to 2-foot-wide OHWM with 1-foot high gentle to moderately sloped banks and a soil substrate with medium cobble. Dense perennial sage scrub vegetation occurs along the channel banks and a moderately dense cover of annual grasses occurs within the channel bottom (see **Figure 3-8**).

Tributary C. Tributary C is a shallow, ephemeral, low-order drainage in the central portion of the study area and parallels Campbell Ranch Road (see **Figure 3-7**). Based on its ephemeral flow regime, Tributary C is a non-relatively permanent water. The potential jurisdictional WoUS originates within the study area and flows northeast to southwest where it continues offsite for approximately 0.4 mile before entering Dulzura Creek. Tributary C supports a 1- to 8-foot-wide OHWM with 1- to 3-foot vertical banks and a soil substrate with some sections scoured to bedrock. Perennial upland sage scrub vegetation occurs within and along the banks of the channel providing almost 100 percent cover of the feature for the upper half of the channel (see **Figure 3-8**). Perennial upland vegetative cover is less dense along the banks and within the streambed in the lower half of Tributary C.

Tributary D. Tributary D is an ephemeral, low-order series of drainages (referred to as Tributaries D1, D2, D3, and D4) south of Tributary C in the central and western portions of the study area (see **Figure 3-7**). The drainage consists of the main tributary (D1) that collects flows from three additional low-flow ephemeral channels (D2, D3, and D4). Based on its ephemeral flow regime, Tributary D is a non-relatively permanent water. Tributary D originates offsite east of the proposed BPS site (outside of the study area) and flows northeast to southwest where it connects with Dulzura Creek (offsite) through culverts under Highway 94. Tributaries D1 through D4 support perennial upland sage scrub vegetation and annual grasses in the channel and along the banks. Channel substrate is a mix of soil and small to medium cobble.



Tributary A



Tributary B



Tributary C



Section of Tributary D1



Section of Tributary D4

Figure 3-8. Photographs of Tributaries A, B, C, and D within the Study Area

Tributary D1 supports an average 3-foot-wide OHWM with bank height ranging from 1 to 8 feet and moderate to vertically sloped banks. Within the study area, D1 flows southwest adjacent to a historic agricultural field. This lower portion of the channel has been altered as indicated by the uniform “U” shape and width of the channel and straight gently sloping banks. This maintained

section is 100 percent vegetated by annual grasses and mustard (*Brassica* sp.) and contains a significant amount of trash (metal wire). As D1 turns to the south, it supports a varying OHWM (2 to 6 feet). Within this section, the tributary supports soil and bedrock substrate, with moderately to steeply sloped banks averaging 1 foot high. Annual and perennial upland vegetation (grasses and shrubs) occurs within the channel and along the banks. No hydrophytic vegetation was observed. Drift deposits and flow patterns on in-channel vegetation were observed. Prior to reaching Campbell Ranch Road, D1 loses an OHWM and becomes a densely vegetated grassy swale (see **Figure 3-8**).

As D1 continues southwest, it flows across Campbell Ranch Road and has created a narrow (less than 6 inches) channel in the center of the road, which is regularly graded and maintained. Downstream of Campbell Ranch Road, D1 is a grassy swale as it continues outside of the proposed BPS site onto private property (see **Figure 3-8**).

Tributary D2 supports a 1-foot-wide OHWM with 2-foot high moderately sloped banks. Tributary D3 supports an average 4-foot-wide OHWM with 4-foot high vertical banks. Tributary D4 supports a 2-foot-wide OHWM with an average 4-foot high steeply sloped bank (see **Figure 3-8**).

Tributary E. Tributary E is a low-order, shallow, ephemeral drainage in the southern portion of the study area (see **Figure 3-7**). Based on its ephemeral flow regime, Tributary E is a non-relatively permanent water. It supports a 1-foot-wide OHWM with 1-foot-high moderately sloping banks and a soil substrate. The feature is short and originates entirely within the study area. The channel and banks are vegetated by upland species but the OHWM is clearly defined by a break in bank slope. Historic agriculture and recent discing/plowing of the site has erased evidence of the lower half of this tributary if it previously existed. Based on review of historic (dating back to 1953) and recent (April 2015) aerial photographs, flow patterns through the plowed areas suggest the feature would be hydrologically connected to Tributary D during a large rain event. A defined channel was not observed on historic aerial photographs (NETROnline 2015), which is the earliest available. The tributary ends abruptly at the edge of the disced field and no OHWM or other evidence of flow was observed below it (see **Figure 3-9**).

Tributary F. Tributary F is a relatively short low-order, shallow, ephemeral drainage that originates entirely within the study area (see **Figure 3-7**). Based on its ephemeral flow regime, Tributary F is a non-relatively permanent water. The upstream portion of Tributary F supports a 1- to 2-foot-wide OHWM (indicated by a clear break in the bank slope), 1-foot high moderately sloping banks, and a soil substrate. The feature loses an OHWM as it flows southwest, briefly picking up a 1-foot-wide OHWM for a short section and terminating in a swale/sheet flow as it flows onto the adjacent Cal Fire property. Sparse to moderate upland vegetation occurs above and below the OHWM (see **Figure 3-9**).



Section of Tributary E (No OHWM)



Section of Tributary F



Section of Tributary G1



Section of Tributary H

Figure 3-9. Photographs of Tributaries E, F, G, and H within the Study Area

Tributary G. Tributary G (G1 and G2) is a shallow, low-order ephemeral drainage that occurs in the southern portion of the study area (see **Figure 3-7**). Based on its ephemeral flow regime, Tributary G is a non-relatively permanent water. Upstream, Tributary G1 supports a 2- to 4-foot-wide OHWM, 2- to 3-foot-high gentle to steeply sloping banks, and soil substrate with some small cobble and bedrock. Tributary G1 flows outside of the study area for a short section as it crosses a private property. Downstream of the private property, G1 becomes deeply entrenched and supports a 4-foot wide OHWM with steeply sloped 1-foot banks. The tributary once again flows outside of the study area and returns to the study area downstream where it becomes a swale. The tributary crosses a narrow dirt access road, where it is slowed by a man-made rock pile dam. Downstream of the dam, the channel is a swale and develops a 1-foot-wide OHWM with 1-foot-high gently sloping banks before it exits the study area through a 36-inch culvert under Highway 94. Channel substrate consists of sediment and cobble with annual grasses vegetating the channel and upland shrubs and trees along the banks (see **Figure 3-9**).

Tributary G2 supports a 1-foot-wide OHWM, 2-foot-high gently sloping banks, and a soil substrate. An OHWM is indicated by a clear break in the bank slope for both tributaries. Perennial and annual vegetation occurs above and below the OHWM.

Tributary H. Tributary H is mapped as an intermittent stream by the USFWS National Wetlands Inventory. However, based upon field observations, the feature is actually a non-relatively permanent water. The tributary is short in length, originates in the low foothills north of Highway 94, and flows southwest and under Highway 94 (through a 24-inch culvert) to Dulzura Creek (see **Figure 3-7**). This feature occurs on historic aerials as early as 1953 (NETROnline 2015) and has been subject to grading and other disturbance since then. Upstream of Highway 94, the tributary exits a private property and does not have an obvious OHWM for a short section. A defined channel starts at a headcut and supports a 1-foot OHWM with 1-foot-high vertical banks and a soil and cobble substrate until it flows under Highway 94. On the private property outside of the study area, the tributary is vegetated by elderberry (*Sambucus nigra*) and laurel sumac (*Malosma laurina*). The channelized portion of the tributary supports upland shrubs (primarily California sagebrush and California buckwheat [*Eriogonum fasciculatum*]). Downstream of Highway 94, the tributary supports a 3-foot OHWM and 1-foot high banks. The banks are densely vegetated by California buckwheat. The channel continues offsite onto private property and directly into Dulzura Creek.

Proposed Non-jurisdictional Features. A proposed non-jurisdictional erosional feature originates from Campbell Ranch Road and drains into Tributary C within the study area (see **Figure 3-7**). Because USACE generally does not assert jurisdiction over erosional features, this feature is proposed non-jurisdictional (USACE 2007). The erosional feature drains sheet flow from Campbell Ranch Road and is not part of a historic drainage.

Additionally, three vegetated swales occur in the lower elevation, historically farmed area of the study area and are not proposed WoUS (see **Figure 3-7**). The swales did not exhibit an OHWM or hydrophytic vegetation. In general, the swales were 4 to 10 feet wide based on the limits of vegetation. Observations in the field and review of historic aerial photographs indicate that these features collect flows from the adjacent hills and likely channel high flow events to Tributary D. It is possible that recent agricultural disturbance (e.g., discing) of this area erases potential OHWM indicators. However, these swales did not exhibit a defined channel upon review of historic aerial photographs dating back to 1953 (NETROnline 2015).

3.7.3 Environmental Consequences

The Proposed Action would be considered to cause a major, adverse impact on surface waters and WoUS if it were to substantially affect water quality; substantially reduce water availability or supply to existing users; threaten or damage hydrologic characteristics; cause the loss of wetlands or riparian habitat; or violate established federal, state, or local laws and regulations.

3.7.3.1 Proposed Action

Construction of the Brown Field BPS would require approximately 31.7 acres of ground disturbance and the completed Brown Field BPS would increase impervious surfaces by up to approximately 15 acres. The Proposed Action includes installation of a concrete dip crossing where Tributary D currently passes over Campbell Ranch Road, a combination of Pyramat turf reinforcement and concrete-lining within a section of Tributary D where it parallels Campbell Ranch Road, a new 36-inch reinforced concrete pipe culvert and channel hardening where Tributary G would pass beneath the main access driveway, a new corrugated metal pipe crossing over Tributary C to provide access from Campbell Ranch Road to the stockpile and septic system reserve area, and re-alignment and widening of Tributary F around the proposed helipad.

Off-site surface water runoff would be intercepted before coming onto the proposed BPS site and routed through the site via a subsurface 24-inch reinforced concrete storm drain pipeline or around the site via a combination of concrete-lined and soft-bottomed channels. Surface waters generated on-site due to the addition of impervious surfaces would be captured with inlets, conveyed through an underground stormwater pipe system to two detention basins, including one hydromodification basin. Onsite surface flows from the northern portion of the BPS site would be discharged to an offline 1.6 acre-foot extended dry detention basin and over Campbell Ranch Road at the proposed concrete dip crossing, while on-site flows from the southern portion of the BPS site would be directed to an inline 0.4 acre detention facility and discharged via a flow structure under the entrance driveway and through a pipe under Highway 94. The proposed stormwater management system would be designed to convey up to a 100-year event and maintain similar pre- and post-Proposed Action discharge rates into Tributary D at the proposed outlet downstream of Campbell Ranch Road (existing 100-year peak discharge is 197.3 cfs and proposed 100-year Peak Discharge is 181.5 cfs), and into Tributary G at the proposed outlet downstream of the driveway (existing 100-year peak discharge is 28.2 cfs and proposed 100-year peak discharge is 25.0 cfs). Additionally, some existing disturbed native and non-native vegetation surrounding the BPS footprint would be restored with native vegetation, which would further minimize potential impacts on stormwater runoff.

The Proposed Action would require CWA permits for work occurring within jurisdictional features. Additionally, because the Proposed Action would be greater than 5,000 ft², it would be required to comply with Section 438 of the EISA. LID standards and techniques for stormwater management require that the proposed BPS does not increase stormwater runoff. The Proposed Action would also be required to obtain coverage under the NPDES Construction General Permit (Order 2009-0009-DWQ as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). CBP would also be required to prepare a Notice of Intent to discharge stormwater and a SWPPP, including sediment, erosion, and pollution prevention control measures, which would be implemented during construction. Finally, although the Proposed Action is not subject to the San Diego Municipal Stormwater NPDES Permit (Order No. R9-2013-0001 as amended by Orders R9-2015-0001 and R9-2015-0100), CBP would implement permanent site design, source control, pollutant control, and hydromodification management practices in accordance with the

County of San Diego BMP Design Manual (County of San Diego 2017c, County of San Diego 2016c), as practicable, to further reduce potential impacts on surface flows.

Compliance with Section 438 of EISA and incorporation of LID techniques in the Brown Field BPS design, as well as implementation of BMPs, would minimize stormwater runoff from affecting off-site areas, including the adjacent Cal Fire station. Compliance with EISA and implementation of BMPs, as identified in **Section 5**, would also result in long-term benefits on water quality through reduced runoff and erosion.

Construction and operation of the wastewater treatment system (septic system and leach field) would not result in impacts to surface waters, including potential WoUS. The treated effluent would be discharged to the leach field via a subsurface pipe for infiltration to the lower ground by gravity flow through subsurface perforated drainpipe. Therefore, wastewater would not be sprayed on the surface and would have no impact on surface waters. See **Section 3.6.3** for more information on impacts on groundwater.

Implementation of the Proposed Action, including construction and operation, would potentially result in short- and long-term, direct and indirect, minor, adverse impacts on surface waters including potential WoUS (see **Table 3-11** and **Figures 3-10** and **3-11**). The BPS footprint and proposed construction disturbance area avoids potential WoUS to the greatest extent practicable. However, direct impacts to several potentially jurisdictional features is unavoidable, including the permanent discharge of fill to 0.057 acre of non-wetland WoUS. Although the Proposed Action would result in the permanent loss of aquatic resources, no net loss of aquatic function would result with implementation of the following: (1) preservation and long-term management of 0.595 acre of wetland (0.204 acre) and non-wetland (0.391 ac) WoUS; (2) establishment credits of no less than 0.057 acre of WoUS or equivalent aquatic function would be purchased at an approved mitigation bank or provided through an onsite mitigation plan, subject to agency approval; and (3) enhancement of approximately 0.529 acre of WoUS, including 0.204 acre of wetland. All temporary impacts would be restored to pre-project contours. CBP also would comply with all applicable requirements of Section 404/401 of the CWA, EO 11990, and EISA. Therefore, the Proposed Action would not result in major, adverse impacts on WoUS, including regulated downstream resources.

During construction there is potential for sediment and other contaminants to be introduced to surface waters and ultimately impact downstream water quality. After implementation of SWPPP BMP's, the Proposed Action would not result in major, adverse impacts to water quality during construction.

After completion of the Brown Field BPS, impervious surfaces would increase and redirected surface flows could result in long-term, adverse impacts on surface waters if these flows cause scour or introduce sediment or other contaminants not already occurring in the drainages. Although the Proposed Action is not subject to County of San Diego Department of Public Works approval, the hydromodification system is being designed to meet or exceed local

standards, which have been developed to minimize the potential for stormwater discharge to adversely affect receiving waters. Therefore, the Proposed Action would not result in major, adverse impacts on surface waters as a result of hydromodification.

Table 3-11. Impacts on WoUS/Waters of the State from the Proposed Action

Feature Name	Non-Wetland WoUS/State Temporary Discharge of Fill (acres / linear feet)	Non-Wetland WoUS/State Permanent Discharge of Fill (acres / linear feet)	Non-Wetland WoUS/State Total Impacts (acres / linear feet)
Tributary C	0.014 / 80	0.009 / 116	0.023 / 196
Tributary D1	0.044 / 875	0.037 / 487	0.081 / 1,362
Tributary D4	0.001 / 7	0 / 0	0.001 / 7
Tributary E	0.001 / 50	0 / 0	0.001 / 50
Tributary F	0 / 0	0.006 / 204	0.006 / 204
Tributary G1	0 / 0	0.005 / 227	0.005 / 227
Total (acres)	0.060 / 1,012	0.057 / 1,034	0.117 / 2,046

Herbicide use, excessive irrigation, and soil destabilization resulting from irrigation and maintenance of landscaping may adversely affect downstream water quality. CBP would minimize irrigation through the use of drought-tolerant plants and water-efficient landscaping (USBP 2014), thereby reducing or eliminating the potential for adverse impacts from irrigation and maintenance of landscaping. Chemical or petroleum spills during construction and operation of the Brown Field BPS could result in short-term, direct impacts on surface waters. Spills could potentially leach into soils and enter drainages. However, implementation of typical stormwater protection BMPs and spill prevention and management plans would likely reduce or eliminate the potential for adverse impacts on the water quality of surface waters. The Proposed Action would not result in major, adverse impacts on water quality.

3.7.3.2 No Action Alternative

Under the No Action Alternative, construction of a new Brown Field BPS would not occur at the Dulzura site and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. No buildings or other facilities would be constructed on the proposed Dulzura site, and it would remain undeveloped. Therefore, land would not be disturbed and water resources, including stormwater, would remain as described in **Section 3.7.2**. No impacts on surface waters and WoUS would occur.

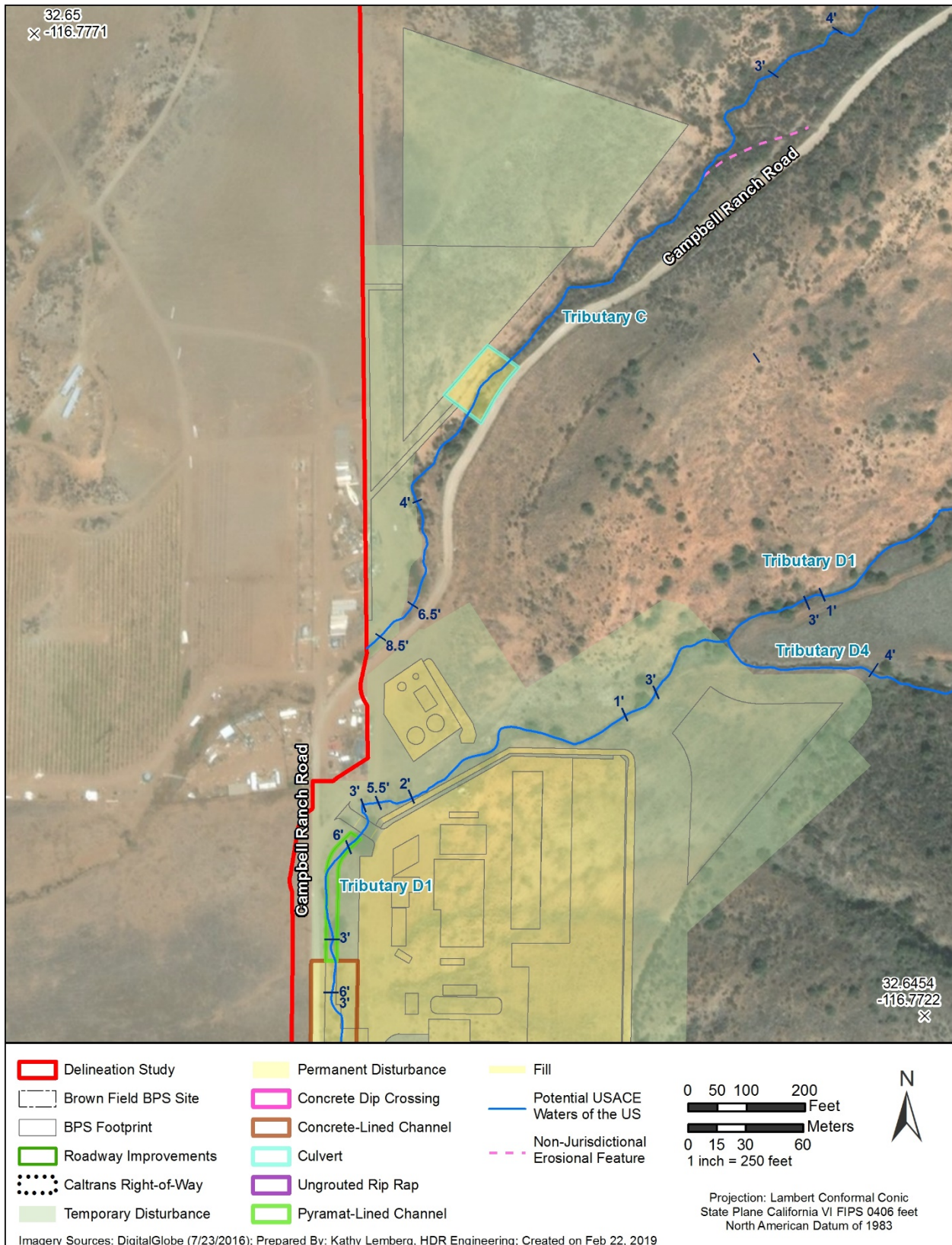


Figure 3-10. Impacts to Potential WoUS from the Proposed Action - North

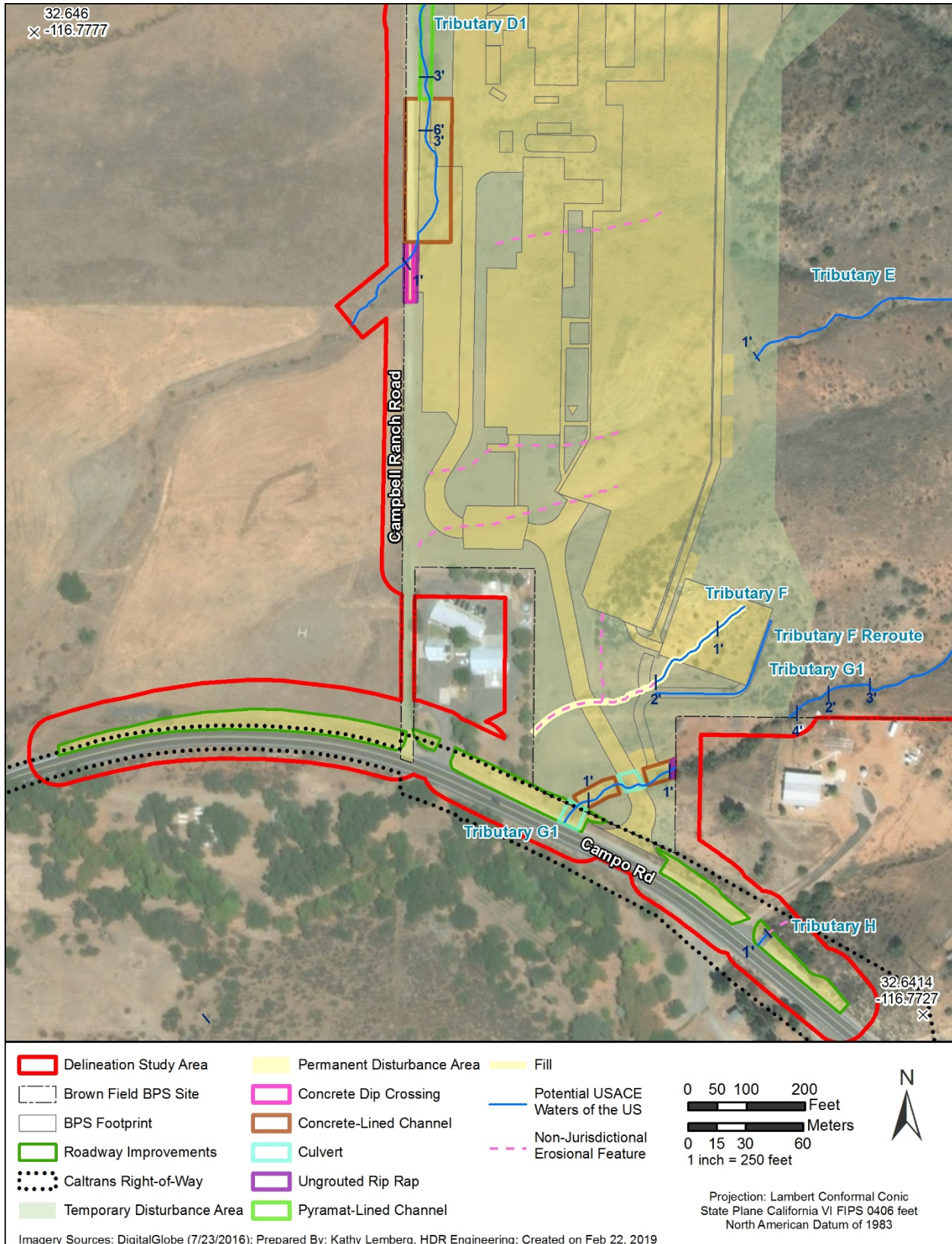


Figure 3-11. Impacts to Potential WoUS from the Proposed Action - South

3.8 Floodplains

3.8.1 Definition of the Resource

Floodplains are areas of low-level ground present along rivers, stream channels, large wetlands, or coastal waters. Floodplain ecosystem functions include natural moderation of floods, flood storage and conveyance, groundwater recharge, and nutrient cycling. Floodplains also help to maintain water quality and are often home to a diverse array of plants and animals. In their natural vegetated state, floodplains slow the rate at which the incoming overland flow reaches the main water body.

Flood potential is evaluated by the Federal Emergency Management Agency (FEMA), which defines the 100-year floodplain as the area that has a 1 percent chance of inundation by a flood event in a given year. Certain facilities, such as hospitals, schools, or storage buildings for irreplaceable records, inherently pose too great a risk to be in either the 100- or 500-year floodplain. Federal, state, and local regulations often limit floodplain development to passive uses, such as recreational and preservation activities, to reduce the risks to human health and safety.

Floodplains are protected under EO 11988, *Floodplain Management*, which requires federal agencies to determine whether a proposed action would occur within a floodplain. This determination typically involves consultation of appropriate FEMA Flood Insurance Rate Maps (FIRMs), which contain enough general information to determine the relationship of the project area to nearby floodplains. If a federal agency action encroaches within the floodplain and alters the flood hazards designated on a FIRM (e.g., changes to the floodplain boundary), an analysis reflecting any changes must be submitted to the FEMA. EO 11988 directs federal agencies to avoid floodplains unless the agency determines that there is no practicable alternative. Where the only practicable alternative is to site in a floodplain, a specific step-by-step process must be followed to comply with EO 11988 outlined in the FEMA document *Further Advice on EO 11988 Floodplain Management*.

3.8.2 Affected Environment

Based on a review of the FIRM for San Diego County, California and Incorporated Areas (map number 06073C1975G), the proposed Brown Field BPS site does not occur within a 100-year floodplain (FEMA 2012). The site is within an area mapped as Zone D, which is defined by FEMA as “areas where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted (FEMA 2011).”

The proposed BPS site primarily supports entrenched, low order, ephemeral drainages and swales. The entrenched nature of onsite drainages reduces floodplain extent because the entrenchment prevents normal flows from exiting the active channel.

3.8.3 Environmental Consequences

The Proposed Action would be considered to cause a major, adverse impact on floodplains if it were to site habitable structures within the floodplain or alter flood hazards as designated on a FIRM.

3.8.3.1 Proposed Action

The proposed Brown Field BPS site is in Zone D, which are areas where flood hazards are undetermined but possible as defined by FEMA, and is adjacent to Dulzura Creek and contains several tributaries to the creek as identified in **Section 3.7**. Onsite drainages are entrenched (incised), ephemeral, low-order features that are not typically subject to substantial flow volumes and, therefore, have limited if any floodplain functions associated with them. As discussed in **Section 3.7.3.1**, the project design includes a stormwater management system, including a hydromodification component, designed to maintain the rates and volume of stormwater flows off-site to less than existing for up to a 100-year storm event and the Proposed Action would not contribute flows to an existing storm drain system. All stormwater flows from the proposed BPS site would continue to discharge to Dulzura Creek at the same locations after implementation.

The Proposed Action does not involve the construction of residential housing and, therefore, would not place housing within a 100-year flood hazard area. Due to the Proposed Action's inland location and the lack of proximity to the ocean, a large lake or other body of water, the risk related to exposing people or structures to a tsunami or seiche is negligible. Additionally, elevations on the proposed BPS site vary less than 400 feet; therefore, the hazard of mudflows adversely affecting the proposed BPS facilities is very low.

The Proposed Action has the potential to increase sediment loads downstream and reduce groundwater recharge due to the addition of impervious surfaces. However, because the proposed BPS site is near the headwaters of the tributaries on the site (see **Section 3.7.2**), existing floodplain functions are very limited and no substantial adverse effects are anticipated. The proposed BPS site is not downstream of or adjacent to a levee or dam. Therefore, construction, operation, and maintenance of the Brown Field BPS would have no impact and would not expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

The Proposed Action would be required to comply with Section 438 of the EISA because the proposed disturbance area would be greater than 5,000 ft². The LID standards and techniques for stormwater management would require that predevelopment hydrology be maintained to prevent any net increase in stormwater runoff. These techniques and BMPs would also minimize impacts on floodplains. All applicable federal, state, and local permits would be obtained for the proposed activities.

3.8.3.2 No Action Alternative

Under the No Action Alternative, construction of a new Brown Field BPS would not occur at the Dulzura site, and CBP would continue to utilize the existing Brown Field BPS facilities in San

Diego. There would be no potential for impacts on floodplains because the Dulzura site would not be developed and existing hydrologic conditions would remain unchanged.

3.9 Air Quality

3.9.1 Definition of the Resource

Air quality is defined by the concentration of various pollutants in the atmosphere at a given location. Under the Clean Air Act, the six principal pollutants defining air quality, called “criteria pollutants,” include carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide, ozone (O₃), suspended particulate matter (measured less than or equal to 10 microns in diameter [PM₁₀] and less than or equal to 2.5 microns in diameter [PM_{2.5}]), and lead. CO, SO₂, lead, and some particulates are emitted directly into the atmosphere from emissions sources. O₃, nitrogen dioxide, and some particulates are formed through atmospheric chemical reactions that are influenced by weather, ultraviolet light, and other atmospheric processes. Volatile organic compounds (VOCs) and nitrogen oxides (NO_x) emissions are used to represent O₃ generation because they are precursors of O₃. California also includes sulfates, hydrogen sulfide, and visibility reducing particulates as principal air pollutants.

USEPA has established National Ambient Air Quality Standards (NAAQS) (40 CFR § 50) for CO, SO₂, nitrogen dioxide, O₃, PM₁₀, PM_{2.5}, and lead. California has also established its own ambient air quality standards for these pollutants, which in some cases are stricter than the NAAQS, and for sulfates, hydrogen sulfide, and visibility reducing particulates. NAAQS are classified as primary or secondary. Primary standards protect against adverse health effects; secondary standards protect against welfare effects, such as damage to farm crops and vegetation and damage to buildings. Some pollutants have short-term and long-term standards. Short-term standards are designed to protect against acute, or short-term, health effects, while long-term standards were established to protect against chronic health effects.

Areas that are and have historically been in compliance with the NAAQS or have not been evaluated for NAAQS compliance are designated as attainment areas. Areas that violate a federal air quality standard are designated as nonattainment areas. Areas that have transitioned from nonattainment to attainment are designated as maintenance areas and are required to adhere to maintenance plans to ensure continued attainment.

The USEPA General Conformity Rule applies to federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. The emissions thresholds that trigger requirements for a conformity analysis are called *de minimis* levels. *De minimis* levels (in tons per year [tpy]) vary by pollutant and also depend on the severity of the nonattainment status for the air quality management area in question.

The California Environmental Protection Agency, Air Resources Board and Air Pollution Control District of San Diego County oversee programs for permitting the construction and

operation of new or modified stationary source air emissions in San Diego County, California. Air permitting is required for many industries and facilities that emit regulated pollutants, and these requirements include, but are not limited to, Title V permitting of major sources, New Source Review, Prevention of Significant Deterioration, New Source Performance Standards for selected categories of industrial sources, and the National Emission Standards for Hazardous Air Pollutants. Permit rules and standards for emissions sources are based on the size of the emission units and type of pollutants.

Climate Change and Greenhouse Gases. Global climate change refers to long-term fluctuations in temperature, precipitation, wind, sea level, and other elements of Earth's climate system. Ways in which the Earth's climate system may be influenced by changes in the concentration of various gases in the atmosphere have been discussed worldwide. Of particular interest, greenhouse gases (GHGs) are gas emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. Scientific evidence indicates a trend of increasing global temperature over the past century because of an increase in GHG emissions from human activities. The climate change associated with this global warming is predicted to produce negative economic and social consequences across the globe (Melillo et al. 2014).

3.9.2 Affected Environment

The proposed Brown Field BPS would be sited in Dulzura, San Diego County, California, which is within the San Diego Intrastate Air Quality Control Region. San Diego County is designated by USEPA as nonattainment for 8-hour O₃ (moderate), maintenance for CO, and attainment for the remaining criteria pollutants (USEPA 2017c). The county is designated by the California Environmental Protection Agency as nonattainment for 8- and 1-hour O₃, PM₁₀, and PM_{2.5} and attainment for the remaining criteria pollutants and sulfates, hydrogen sulfide, and visibility reducing particulates (SDAPCD 2017).

There are no air emission sources currently on the proposed BPS site. Air emissions currently generated from operation of the existing BPS include those from heating the facility; vehicle operations, most notably from USBP agents commuting between the current BPS location and the AOR; routine maintenance of equipment and the BPS itself; and other lesser operational functions.

Climate Change and Greenhouse Gases. Ongoing global climate change has the potential to increase average temperatures, alter precipitation patterns, and increase the frequency and severity of droughts in southern California. As a result, the regional availability of water, agriculture patterns, wildfire potential, and health of populations could be adversely impacted from ongoing climate change (Garfin et al. 2014).

3.9.3 Environmental Consequences

Potential impacts on air quality would be considered major and adverse if the Proposed Action were to exceed the General Conformity Rule *de minimis* thresholds or Air Pollution Control

District of San Diego County screening level thresholds, as applicable. Based on compliance with the NAAQS, the General Conformity Rule is only applicable in San Diego County to emissions of O₃ and CO, and as outlined in 40 CFR § 93.153(b), the applicable *de minimis* threshold for both pollutants is 100 tpy. While the General Conformity Rule is not applicable to emissions of the other criteria pollutants, the 100 tpy *de minimis* threshold has been used as a surrogate to determine the level of impacts under NEPA. Air Pollution Control District of San Diego County does not provide quantitative screening level thresholds for construction or mobile source-related impacts. However, the district does specify threshold levels for new or modified stationary sources. If a proposed action's stationary source emissions are below these threshold levels, the proposed action's impacts on air quality are presumed to be negligible to minor. Major, adverse impacts on air quality would also occur if the Proposed Action meaningfully contributed to the potential effects of global climate change.

3.9.3.1 Proposed Action

Construction Emissions. Short-term, minor, adverse impacts on air quality would occur from the emission of criteria pollutants and GHGs during construction of the proposed BPS. Air emissions from construction would be temporary and brief in duration. Although construction would likely occur over a period of 2 years, for the purposes of this air quality analysis all construction is conservatively assumed to occur during 2019.

Criteria pollutant and GHG air emissions would be produced from the combustion of fuels in heavy equipment. Particulate matter air emissions, such as fugitive dust, would be produced from ground-disturbing activities and the combustion of fuels in heavy equipment. Fugitive dust air emissions would be greatest during the initial site grading and excavation and vary day to day depending on the work phase, level of activity, and prevailing weather conditions. The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the area of land being worked and the level of activity. Construction would incorporate BMPs and environmental control measures (e.g., wetting the ground surface) to minimize fugitive particulate matter air emissions. Additionally, work vehicles are assumed to be well maintained and use diesel particulate filters to reduce particulate matter air emissions. Construction workers commuting daily to and from the job site in their personal vehicles and heavy-duty diesel vehicles hauling construction materials to the job site would also result in criteria pollutant and GHG air emissions.

Table 3-12 summarizes all criteria pollutant and GHG air emissions resulting from the Proposed Action as well as applicable thresholds. Criteria pollutant emissions from construction would be below the *de minimis* threshold of 100 tpy of each pollutant; therefore, the level of impacts would be minor and a General Conformity determination (applicable to O₃ and CO) is not required. Air Pollution Control District of San Diego County screening level thresholds do not apply to construction emissions. Detailed emissions calculations are provided in **Appendix C**.

Table 3-12. Estimated Air Emissions from the Proposed Action

Emissions Source ^a	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO₂ (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)	GHGs (tpy)
Construction Air Emissions - 2019							
Combustion	3.877	0.941	2.779	0.010	0.172	0.172	834.525
Fugitive Dust	NA	NA	NA	NA	40.656	4.066	NA
Haul Truck On-Road	1.204	0.053	0.296	0.003	0.049	0.027	358.243
Construction Commuter	0.085	0.119	0.794	0.002	0.027	0.012	239.416
Total	5.166	1.114	3.870	0.015	40.904	4.276	1,432.184
Thresholds ^b	100	100	100	100	100	100	NA
Operational Air Emissions – 2021 and subsequent years							
Comfort Heat	0.975	0.075	0.563	0.004	0.053	0.053	937.500
Emergency Generators	16.312	1.332	3.514	1.073	1.147	1.147	606.630
USBP Commute to AOR	-0.597	-0.838	-5.576	-0.016	-0.192	-0.082	-1,681.538
Total	16.691	0.569	-1.499	1.060	1.007	1.117	-137.408
Thresholds ^{b/c}	100/40	100/13.7	100/100	100/40	100/15	100/10	NA

Key: NA = not applicable

Notes:

^a Lead, sulfates, hydrogen sulfide, and visibility reducing particulates emissions are not included as they are negligible for the types of emission sources under this Proposed Action.

^b General Conformity Rule *de minimis* thresholds or surrogate.

^c Air Pollution Control District of San Diego County screening level thresholds.

Operation and Maintenance Emissions. Long-term, minor, adverse and beneficial impacts on air quality would occur from changes to annual emissions of criteria pollutants and GHGs from operational activities. New operational air emissions would be generated annually from the use of propane-fueled heating infrastructure, operation of two emergency generators, and fuel losses from three fuel storage tanks at the proposed BPS. However, annual reductions in operational air emissions would result from greater transportation efficiency for USBP personnel. The long-term impacts from these operational activities are described in the following paragraphs.

Annual air emissions from the operation of propane-fueled comfort heating infrastructure at the proposed BPS would be similar to those produced from heating the existing BPS. These emissions would be from new stationary sources (i.e., boilers and heaters). Because the Proposed Action does not entail the demolition of the existing BPS, this air quality analysis assumes comfort heat would continue to be required at the existing BPS even after the facility is returned to the lessor. As such, a reduction or offset in heating air emissions would not occur. Estimated air emissions from the annual consumption of 150,000 gallons of propane for building heating are provided in **Table 3-12**.

The two 650-kilowatt diesel emergency generators would produce air emissions during use, which would be limited to emergency situations and equipment testing and maintenance. In accordance with USEPA guidance for calculating potential to emit for an emergency generator, this air quality analysis assumes the emergency generators would each operate 500 hours annually. Estimated air emissions from the annual operation of the emergency generators are provided in **Table 3-12**.

The three fuel storage tanks (i.e., two 12,000-gallon gasoline aboveground storage tanks and one 8,000-gallon diesel aboveground storage tank) would produce very low levels of VOC emissions from fuel losses during storage and transfer. These air emissions would be negligible in comparison to other long-term emission sources of this Proposed Action and do not warrant a quantitative estimate in this air quality analysis.

The Brown Field BPS would relocate to within the Brown Field Station AOR. USBP estimates the improved siting of the proposed BPS would result in an annual reduction of approximately 3.7 million miles driven solely from USBP agents commuting between the current BPS location and the AOR. This mileage reduction would reduce the annual air emissions that USBP personnel generate from transportation. The estimated annual reduction in air emissions from the improved siting of the proposed BPS is provided in **Table 3-12**.

No other operational activities associated with the proposed BPS would result in new impacts on air quality. Air emissions produced from the maintenance of equipment or other operational functions at the existing BPS would relocate to the proposed BPS resulting in no net change in regional air emissions and no net impacts.

As shown in **Table 3-12**, criteria pollutant emissions from all operational activities would be below the *de minimis* threshold of 100 tpy of each pollutant; therefore, the level of impacts would be minor and a General Conformity determination (applicable to O₃ and CO) is not required. Air emissions from stationary sources would not exceed the Air Pollution Control District of San Diego County screening level thresholds. Air emissions from new stationary sources would not exceed the Title V, Prevention of Significant Deterioration, and New Source Review thresholds; therefore, these permitting processes would not be applicable. However, the stationary sources might require various air permits from the Air Pollution Control District of San Diego County. Such permitting could be applicable (depending on final specifications) to the proposed heating equipment, emergency generators, and fuel storage tanks. Detailed emissions calculations are provided in **Appendix C**.

Maintenance of the proposed BPS would not result in appreciable air emissions. Such air emissions would be limited to those generated annually by landscaping and facility maintenance equipment, and impacts on air quality would be negligible given the scope of the proposed maintenance activities and similarities to those already performed at the existing BPS.

Climate Change and Greenhouse Gases. The Proposed Action would emit approximately 1,432 tons of GHGs from construction during 2020, but would reduce annual emissions of GHGs by approximately 137 tons during the operational years (i.e., 2021 and thereafter). By comparison, 1,432 and 137 tons of carbon dioxide equivalent are approximately the respective GHG footprints of 70 and 7 single-family houses with two cars per home (USEPA 2017d). As such, these increases and decreases of GHG emission rates would not meaningfully contribute or lessen the potential effects of global climate change (e.g., increases in atmospheric temperature, sea level, storm activity, accelerated coastal erosion, hydrological changes and flooding, and vegetation and wildlife changes).

As noted in **Section 3.9.2**, ongoing changes to regional climate patterns could increase average temperatures, alter precipitation patterns, and increase the frequency and severity of droughts in southern California (Garfin et al. 2014). However, even under severe drought conditions or during warmer temperatures, it is unlikely these ongoing climate change impacts would impair implementation of the Proposed Action or prevent CBP from fulfilling its mission at the proposed BPS.

3.9.3.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented and air quality conditions would remain the same as described in **Section 3.9.2**. No new air emissions would be generated, and air emissions from existing sources, such as USBP agents commuting between the current BPS location and the AOR, would continue to be produced. No new impacts on air quality would occur.

3.10 Noise

3.10.1 Definition of the Resource

Sound is a physical phenomenon consisting of vibrations that travel through a medium, such as air, and are sensed by the human ear. Noise can be defined as unwanted sound that interferes with communication, poses a threat to human health, or is irritating. Noise can be intermittent or continuous, steady or impulsive, and can involve any number of sources and frequencies. Human response to noise varies depending on the type and characteristics of the noise, distance between the noise source and the receptor, receptor sensitivity, and time of day. Noise-sensitive land uses include areas where an excessive amount of noise would interfere with normal activities. Noise is often generated by activities essential to a community's quality of life, such as construction or vehicular traffic.

Sound Metrics. Sound varies by both intensity and frequency. Sound pressure level, expressed in decibels (dB), is used to quantify sound intensity. Within the range of human hearing, a sound may vary in intensity by more than one million units. A logarithmic scale is used to compress the range of audible decibels into a more manageable form so that noise can be quantified. The A-weighted decibel (dBA) is used to characterize sound levels that can be sensed by the human ear. The threshold of audibility is generally within the range of 10 to 25 dBA for normal hearing.

The upper boundary of audibility is 135 dBA and can be painfully loud (USEPA 1981). Sounds encountered in daily life and their dBA levels are provided in **Table 3-13**.

Table 3-13. Common Sounds and Their Levels

Outdoor	Sound Level (dBA)	Indoor
Motorcycle	100	Subway train
Tractor	90	Garbage disposal
Noisy restaurant	85	Blender
Downtown (large city)	80	Vacuum cleaner
Freeway traffic	70	TV audio
Normal conversation	60	Sewing machine
Rainfall	50	Refrigerator
Quiet residential area	40	Library

Source: Harris 1998

The sound pressure level noise metric describes steady noise levels. Very few noises are constant; therefore, additional metrics have been developed to describe noise. The day-night average A-weighted noise level (DNL) averages the sum of all noise-producing events over a 24-hour period. DNL is a useful descriptor for noise because it averages ongoing yet intermittent noise and measures total sound energy over a 24-hour period with penalties applied to noise levels during nighttime hours (County of San Diego 2016a).

Regulatory Overview. The Noise Control Act of 1972 (Public Law 92-574) serves “to promote an environment for all Americans free from noise that jeopardizes their public health and welfare.” In San Diego County, residential, commercial and residential mixed-use, and agricultural land uses are compatible (acceptable) within areas with exterior DNL noise exposure levels at or below 60 dBA, at or below 65 dBA, and at or below 70 dBA, respectively (County of San Diego 2016a). The San Diego County Code of Regulatory Ordinances relating to Noise Control and Abatement (County Noise Ordinance) states that it is unlawful for residential, agricultural, or civic uses within the A72 zone (i.e., zone for the proposed BPS site) to generate noise exceeding the 1-hour average sound level limits of 50 dBA (from 7 a.m. to 10 p.m.) and 45 dBA (from 10 p.m. to 7 a.m.). The County Noise Ordinance further states that construction equipment operations must not exceed an average sound level of 75 dB over an 8-hour period, between 7 a.m. and 7 p.m., or produce an impulsive noise that exceeds a maximum sound level in surrounding occupied properties (82 dBA for residential uses and 85 dBA for agricultural and commercial uses) for more than 15 minutes within a 1-hour measurement period.

Construction Sound Levels. Noise generated by construction has the potential to quickly surpass ambient sound levels. The type and intensity of the sound is dependent upon the type of

construction activity taking place. The predicted noise levels for various construction equipment that might be used during the Proposed Action are presented in **Table 3-14**.

Table 3-14. Predicted Noise Levels for Typical Construction Equipment

Construction Equipment	Predicted Noise Level at 50 feet (dBA)	Predicted Noise Level at 500 feet (dBA)	Predicted Noise Level at 1,000 feet (dBA)	Predicted Noise Level at 2,000 feet (dBA)	Predicted Noise Level at 4,000 feet (dBA)
Clearing and Grading					
Bulldozer	80	60	54	48	42
Grader	80-93	60-73	54-67	48-61	42-55
Truck	83-94	63-74	57-68	51-62	45-56
Excavation					
Backhoe	72-93	52-73	46-67	40-61	34-55
Jackhammer	81-98	61-78	55-72	49-66	43-60
Building Construction					
Concrete mixer	74-88	54-68	48-62	42-56	36-50
Welding generator	71-82	51-62	45-56	39-50	33-44
Pile driver	91-101	71-85	65-78	59-72	53-66
Crane	75-87	55-67	49-61	43-55	37-49
Paver	86-88	66-68	60-62	54-56	48-50

Source: USEPA 1971

Note: Construction equipment equipped with noise control devices (e.g., mufflers) and use of sound barriers would result in lower noise levels than shown in this table.

3.10.2 Affected Environment

The proposed BPS site is undeveloped and in a rural area. The surrounding area contains scattered residences, agricultural structures and fields, and commercial buildings. Additionally, Cal Fire Dulzura Station 30 and Highway 94 are immediately south of the proposed BPS site. An existing Cal Fire helipad is approximately 100 feet east of the Cal Fire station, on the west side of Campbell Ranch Road. Areas south of Highway 94 are primarily agricultural or undeveloped public lands (County of San Diego 2017b), although the Dulzura Vineyard and Winery is on the southern side of Highway 94, south of the proposed BPS site. An agricultural field and associated vehicles, equipment, and fenced livestock areas are immediately west of the proposed BPS site along Campbell Ranch Road. There are a few commercial businesses along Highway 94 near the proposed BPS site, primarily a small residential and commercial area approximately 0.4 mile west.

Sensitive receptors in the vicinity include at least six residences within approximately 3,400 feet of the construction, maintenance, and operations footprint of the proposed BPS (see **Figure 2-1**)

and the Cal Fire station. One residence is approximately 3,400 feet to the northeast; four residences are approximately 160, 825, 1,800, and 2,500 feet to the east; and one residence is approximately 1,000 feet to the west. The Cal Fire station is within 50 feet of the BPS footprint.

The primary noise sources in the area are traffic on Highway 94, agricultural equipment, and intermittent Cal Fire helicopter operations. Current noise levels within the southern portion of the proposed BPS site and surrounding areas are estimated to range from 50 dBA (light auto traffic at 100 feet) to 70 dBA (maximum permitted agricultural area noise level in San Diego County) (USBR 2008, County of San Diego 2016a). Areas within 200 feet of Highway 94 could experience noise levels between approximately 65 and 70 dBA during heavy traffic (SANDAG 2015). Areas within 100 feet of operating agricultural equipment (e.g., grain dryers, tractors, combines) could also experience noise levels between approximately 65 and 70 dBA (Penn State Extension 2017, TRS Audio 2017a). Helicopter operations could intermittently produce noise levels of up to 100 dBA (at 100 feet) (IAC Acoustics 2017). Noise levels in the southern portion of the proposed BPS site and surrounding areas depend on the types of activities taking place and the number of activities occurring simultaneously.

3.10.3 Environmental Consequences

The impacts associated with noise were evaluated based on the changes to the ambient noise environment that would result from implementation of the Proposed Action. Impacts would be considered adverse if the Proposed Action were to result in the violation of applicable federal, state, or local noise regulations; or create appreciable areas of incompatible land use.

3.10.3.1 Proposed Action

Construction. Noise from construction of the proposed BPS would result in short-term, minor, adverse impacts on the ambient noise environment. Increases in noise levels would occur intermittently during construction. Noise from construction would vary depending on the type of equipment being used, the area in which the activity would occur, and the distance of the receptor from the noise source. Heavy construction equipment would be used periodically during construction; therefore, noise levels would fluctuate. Most equipment used would be expected to produce noise levels between approximately 70 and 100 dBA at a distance of 50 feet (see **Table 3-14**). Noise levels at the upper end of this range would be associated with equipment such as pile drivers and limited to intermittent spurts. Sound levels on the lower end of the range would be more constant during construction activities. These noise levels would decrease with distance from the construction area. Noise levels associated with typical construction equipment would noticeably attenuate to below 65 dBA between approximately 500 and 4,000 feet from the source, depending on the equipment used (see **Table 3-14**).

Construction activities usually require several pieces of equipment to be used simultaneously. In general, the addition of a piece of equipment with identical noise levels to another piece of equipment would add approximately 3 dB to the overall noise environment, which is barely perceptible by the human ear (TRS Audio 2017b, Caltrans undated). Cumulative noise associated with multiple pieces of construction equipment operating simultaneously would increase the

overall noise environment by a few dB over the noisiest equipment, depending on the noise levels.

In addition, noise generation due to construction would be temporary only lasting for the duration of construction activities and would be isolated to normal workdays and working hours (i.e., weekdays 7 a.m. to 7 p.m.). All applicable noise laws and guidelines would be followed to reduce effects from noise produced by construction. Although, the County Noise Ordinance does not apply to federal property, CBP would comply with the ordinance to the extent practicable. Construction workers would be required to use proper personal hearing protection to limit exposure and would use the appropriate noise attenuation equipment.

The nearest sensitive receptors (i.e., residences within approximately 3,400 feet of the footprint of the proposed BPS, and the Cal Fire station) would not be substantially impacted by temporary construction equipment noise. Construction equipment noise impacts on sensitive receptors would be minor because of the minimal cumulative contribution of the construction equipment to existing ambient noise levels from traffic, agricultural equipment, and helicopter operations; the distance of the residential receptors from the construction area; and the use of noise attenuation equipment to ensure that noise levels would not exceed an average of 75 dB over an 8-hour period. While existing noise sources produce elevated noise levels intermittently, noise during construction would be more continuous (with temporary increases in noise levels from the use of the loudest equipment) between the hours of 7 a.m. and 7 p.m.

Maintenance. Long-term, negligible, adverse impacts on the ambient noise environment would occur periodically during proposed maintenance activities. Maintenance would primarily occur within buildings and consist of minor tasks (e.g., replacing door locks or windows, painting interior or exterior walls, resurfacing a road or parking lot, grounds maintenance, or replacing essential facility components such as an air conditioning unit). Maintenance crews would be required to use proper personal hearing protection to limit exposure and would use the appropriate noise attenuation equipment when necessary. Noise from maintenance activities would not impact areas outside of the proposed BPS or sensitive receptors. Impacts could be similar to those described for construction if similar equipment were required; however, maintenance activities would be small-scale projects that would not require an extensive amount of construction equipment. These maintenance activities would be temporary and intermittent; therefore, no major, adverse impacts would be expected.

Operations. Long-term, negligible to minor, adverse impacts on the ambient noise environment would occur due to operation of the proposed BPS. Proposed BPS operations (i.e., vehicle operation, vehicle maintenance, warehouse equipment operation, training, helicopter operations, and up to four canines housed in the kennel) would result in intermittent increases in the ambient noise level. Use of the proposed helipad would be infrequent and no helicopter would be stationed at the proposed BPS, but it would be less than 200 feet from a residence and the Cal Fire station. The types of helicopters that would use the proposed helipad is unknown; however, one helicopter used by CBP's Air and Marine Operations to conduct air mobility operations

along the U.S./Mexico international border is the UH-1N “Huey” helicopter (CBP 2016c). **Table 3-15** shows the average helicopter sound exposure level (SEL) values for the UH-1N helicopter. Single sound events for aircraft noise are measured using the SEL metric, which is a measure of the total sound exposure of an event compressed into a 1-second time interval. Noise generated from a helicopter taking off and landing would only be slightly more than the noise generated from a garbage truck. These events would be infrequent.

Table 3-15. UH-1N SEL Values

Altitude (AGL)	SEL (dBA)
100	106 dBA
200	102 dBA
500	96 dBA
1,500	89 dBA

Source: USARC 2010

Note: Noise values are estimated with the receiver directly underneath the helicopter.

Key: AGL = above ground level (feet)

The intermittent increase in noise levels from BPS operations would not result in major, adverse impacts because it would be similar to the existing ambient noise levels from traffic, agricultural equipment, and Cal Fire helicopter operations. While the intermittent increase in noise levels would be similar to existing conditions, noise from the operation of the proposed BPS could create disruptions that could be observed by people immediately surrounding the proposed BPS site, including personnel at the adjacent Cal Fire station. These disruptions would be temporary and intermittent. Therefore, operational activities at the proposed BPS would have a negligible to minor impact on the ambient noise environments of the surrounding areas and sensitive receptors.

3.10.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the proposed Dulzura site, and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. Conditions at the Dulzura site would remain the same as described under **Section 3.10.2**. No impacts on the ambient noise environment would be expected.

3.11 Cultural Resources

3.11.1 Definition of the Resource

Cultural resources is a broad term encompassing all prehistoric, historic, and traditional resources regardless of significance. Under Section 106 of the NHPA, resources that are deemed significant through an assessment of relevant historic contexts and the National Register of Historic Places (NRHP) criteria set forth in 36 CFR § 60 are defined as *historic properties*. *Historic properties* are any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior.

The term includes artifacts, records, and remains related to and located within such properties (54 USC § 306108, 36 CFR § 60.4).

Cultural resources also includes *traditional cultural places or properties* (TCPs) that are traditional religious and culturally important resources to an Indian tribe or Native Hawaiian organization that meet the NRHP criteria (16 USC § 470w[5], 36 CFR § 800.16[1]). TCPs and other cultural resources can be components of *traditional or tribal cultural landscapes* (TCLs). TCLs are any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of indigenous people whose cultural practices, beliefs, or identity connects them to that place. Therefore, TCLs recognize that small cultural components, such as archaeological artifacts, may have significance to an Indian tribe or Native Hawaiian organization through a relationship with a TCP (ACHP 2016, Ball et al. 2015).

The Native American Graves Protection and Repatriation Act (NAGPRA) [Public Law 101-601; 25 USC § 3001(3)[A-D]) defines *cultural resources as cultural items* meaning human remains, associated and unassociated funerary objects, sacred objects, and objects with cultural patrimony. NAGPRA applies to items found on federal lands and agencies that obtain federal funding. It requires consultation with the appropriate Native American tribes prior to the intentional excavation, or removal after inadvertent discovery, of several cultural items, including human remains and objects of cultural patrimony (25 USC Chapter 32 § 3001).

Under the CEQA, resources deemed historically significant through an assessment based on the California Register of Historical Resources (CRHR) set forth in Public Resources Code (PRC) § 5024.1, Title 14 CCR § 4852 are defined as *historical resources*. *Historical resources* are prehistoric and historic resources listed, or determined to be eligible for listing, in the CRHR, a resource included in a local register of historical resources (CCR, Title 14(3) § 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CCR, Title 14(3) § 15064.5[a][3]). The County of San Diego's Resource Protection Ordinance defines "Significant Prehistoric or Historic Sites" as any resource formally determined eligible or listed in the NRHP by the Keeper of the National Register; one-of-a-kind, locally unique, or regionally unique cultural resources that contain a significant volume and range of data and materials; or any location of past or current sacred religious or ceremonial observances (County of San Diego 2016a).

Under CEQA, Assembly Bill 52 recognizes tribal cultural values, in addition to the scientific and archaeological values, when determining impacts and mitigation with a category of resources called *tribal cultural resources* (TCRs) (California OPR 2015); the California equivalent of TCPs. In order to qualify as a TCR, a resource must be listed, or determined eligible for listing, on the national, state, or local register of historic resources; or be a resource that a lead agency chooses to treat as a TCR based on the CRHR criteria and the cultural value of a resource to a California Native American tribe (PRC § 21074). In order to identify TCRs, lead agencies are required to consult with local Native American tribes in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement on a proposed action.

3.11.2 Affected Environment

Regional Prehistory. The earliest evidence for human occupations in southern California dates to the Terminal Pleistocene/Early Holocene period. This interval is characterized by a long period of adaptation to environmental changes brought about by the transition from the late Pleistocene to the early Holocene (12000 to 7500 BP). During the Middle Holocene Period (7500 to 5000 BP), general settlement-subsistence patterns were exemplified by a greater emphasis on seed gathering (Beedle et al. 2008). Adaptation to various ecological niches, further population growth, and an increase in sedentism typify the subsequent periods of cultural history in southern California.

During the middle to late Holocene (5000 to 1500 BP), cultural patterns remained similar; however, artifacts became more elaborate, reflecting an increase in sociopolitical complexity and efficiency in subsistence strategies (Beedle et al. 2008). A reliance on the bow and arrow for hunting along with the use of bedrock mortars and milling slicks occurred during the Late Holocene (1500 BP to Historic). Elaborate mortuary customs, the generous use of asphaltum, and the development of extensive trade networks are also characteristic of this period. The Late Horizon appears to represent increases in population size, economic and social complexity, and the appearance of social ranking (Beedle et al. 2008).

The proposed BPS site falls within the ethnographic boundaries of the Kumeyaay Band of Native Americans. Kumeyaay is a native term referring to all Yuman-speaking peoples living in the region from the San Dieguito River south to the Sierra Juarez in Baja California and roughly west of the present-day Salton Sea (Shipek 1982). The Kumeyaay can be traditionally broken down into two groups: the Ipai to the north and the Tipai to the south. Culturally, the prehistoric Native Americans living near the Proposed Action were most connected to the southern groups of Tipai living in areas now south of the U.S./Mexico international border. The natives of the Jamul Indian Village are one of the 13 recognized bands of the Kumeyaay tribe residing in southern California and are closely related to the Kumeyaay community of Juntas de Neji in northern Baja California (Wilkens 2012).

Regional History. The earliest exploration of California, by the Spanish, came in 1542 when Juan Rodriquez Cabrillo sailed into San Diego Bay (SDHC undated). Cabrillo died during this California expedition and the Spanish did not return to California until 1602, when Mexican explorer Sebastian Vizcaino was sent north to map the California coastline. Vizcaino surveyed the harbor and named the area for the Catholic saint, San Diego de Alcalá. The Mission San Diego de Alcalá was officially founded on July 16, 1769, and the first Spanish colonists arrived in San Diego on September 26, 1774 (Davis 1953, SDHC undated).

In 1821, after more than a decade of revolutionary struggle, Mexico achieved independence from Spain, and California became a distant outpost of the Mexican Republic. Under a law adopted by the Mexican Congress in 1833, the mission lands were to be secularized and subdivided into land grants, or ranchos, to be sold to prominent military personnel and politicians. In May 1846, the United States declared war on Mexico and Fort Stockton was established on Presidio Hill. The

United States won the war, and the Treaty of Guadalupe Hidalgo was signed in February 1848. The treaty set the boundary between the United States and Mexico, essentially splitting the local Native Kumeyaay groups into two countries (Davis 1953, SDHC undated).

In January 1848, just a few days before the Treaty of Guadalupe Hidalgo was signed, the discovery of gold on the American River started the “Gold Rush.” The sudden and enormous growth of California’s population brought about by the gold rush resulted in a movement for statehood resulting in the establishment of California as a state in 1850. The same year California gained statehood, the County of San Diego was established, and the City of San Diego was incorporated (Davis 1953, SDHC undated). In 1867, Alonzo Horton arrived and changed the landscape of San Diego forever. Horton acquired 960 acres of land, established New San Diego, and worked to create what would eventually become the city center of San Diego (Pourade 1964, SDHC undated, Davis 1953).

A local gold rush began in 1870 when placer gold was discovered by former slave Fred Coleman near present-day Julian. The discovery facilitated the settlement of San Diego County’s backcountry and gave rise to small towns such as Dulzura. Along with the prospects for gold, backcountry towns like Dulzura were ideal for grazing cattle or keeping bees (Schmid 1963). Long-term resident families of the Dulzura area such as the Shecklers and the Camps developed large ranches and orchards. Dulzura had another short-lived boom when gold was discovered there in 1908. However, shortly after prospectors flooded the area it was discovered that the gold samples sent in for examination were worthless. The town returned to the small backcountry hamlet it was a month earlier and would remain so for the next 100 years.

Known Cultural Resources. Ten prehistoric resources fall within the proposed BPS site, including one previously recorded resource (P-37-030018) and nine newly identified resources (P-37-036263 [HDR-1] to P-37-036271 [HDR-9]) discovered during a cultural resources survey and testing effort conducted from January to March 2016 for the Proposed Action. Additionally, one previously recorded historic resource (P-37-006981) falls within the roadway improvements area. P-37-006981 is a historic segment of SR 94/Campo Road (i.e., Highway 94). P-37-014085, which consists of historic structures within the Cal Fire station compound, falls directly adjacent to the proposed BPS site and roadway improvements area. P-37-006981 and P-37-014085 were determined to be ineligible for the NRHP during previous evaluations. No *historic properties*, *historical resources*, TCRs, TCPs, or TCLs are within the proposed BPS site. Eight prehistoric resources and two historic resources are within or near the Area of Impact (AOI), which is the 18.2-acre BPS footprint and the 0.9-acre roadway improvements area. All prehistoric cultural resources within the AOI were tested, evaluated for significance, and determined to be ineligible for listing in the NRHP. P-36-006981 was previously determined ineligible for the NRHP by consensus through the Section 106 process. Cultural resources outside of the AOI have not been tested or evaluated for significance. Resource descriptions are located in the 2016 cultural resources survey and testing report (CBP 2016d) and summarized in **Table 3-16**.

Table 3-16. Cultural Resources within the 2016 Cultural Resources Survey Area

Primary Number	Trinomial Number	Affiliation/Description	NRHP Eligibility	Comments/ Recommendations
P-37-006981	CA-SDI-006981	Historic Segment of SR 94/Campo Road	Not Eligible	No historic elements of the resource segment would be affected. Only a small portion is within the AOI.
P-37-014085	N/A	Historic structures within the Cal Fire station compound	Not Eligible	The majority of the historic structures have been destroyed. Not within the AOI; no historic elements would be affected.
P-37-030018 ^a	CA-SDI-19139	Prehistoric habitation site, high density of chipped stone flakes and tools, low density of ground stone.	Not Eligible	Only non-diagnostic flakes were recovered during testing.
P-37-030020	CA-SDI-19141	Prehistoric lithic scatter, high density of chipped stone, low density of ground stone.	Not Evaluated	Not within the AOI.
P-37-036263	CA-SDI-21984	Prehistoric lithic scatter and bedrock milling site, three bedrock features with six total mortars or slicks. Low density chipped stone artifacts.	Not Evaluated	HDR-1; Not within the AOI.
P-37-036264 ^a	CA-SDI-21985	Prehistoric lithic scatter, low density of chipped stone artifacts.	Not Eligible	HDR-2; Only one shovel test pit tested positive for a subsurface deposit.
P-37-036265 ^a	CA-SDI-21986	Prehistoric habitation site, medium density of varied chipped and ground stone artifacts.	Not Eligible	HDR-3; Only nine, non-diagnostic, flakes were recovered during testing.
P-37-036266	CA-SDI-21987	Prehistoric bedrock milling site, two bedrock features with three total milling slicks.	Not Evaluated	HDR-4; Not within the AOI.
P-37-036267 ^a	CA-SDI-21988	Prehistoric lithic scatter, low density of chipped stone artifacts.	Not Eligible	HDR-5; Only six, non-diagnostic, flakes were recovered during testing.

Primary Number	Trinomial Number	Affiliation/Description	NRHP Eligibility	Comments/ Recommendations
P-37-036268 ^a	CA-SDI-21989	Prehistoric bedrock milling site, 7 bedrock features with 11 total mortars and slicks and 1 bedrock feature with 1 possible slick.	Not Eligible	HDR-6; Only four, non-diagnostic, flakes were recovered during testing.
P-37-036269 ^a	CA-SDI-21990	Prehistoric lithic scatter and bedrock milling site, two bedrock features with two slicks. Medium-high density of chipped stone artifacts. Low density of ground stone artifacts.	Not Eligible	HDR-7; Only ten, non-diagnostic, flakes were recovered during testing.
P-37-036270 ^a	CA-SDI-21991	Prehistoric lithic scatter, medium density chipped stone artifacts.	Not Eligible	HDR-8; Only two, non-diagnostic, flakes were recovered during testing.
P-37-036271 ^a	CA-SDI-21992	Prehistoric bedrock milling feature, one basin-milling feature.	Not Eligible	HDR-9; No subsurface cultural material recovered during testing.

Note: ^a Cultural resources within or near the AOI that were tested and evaluated for significance as part of the 2016 cultural resources survey.

3.11.3 Environmental Consequences

Adverse effects on cultural resources can include physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to a resource’s significance; introducing visual or audible elements that are out of character with the property or that alter its setting; neglecting a resource to the extent that it deteriorates or is destroyed; or the sale, transfer, or lease of the property out of agency ownership (or control) without adequate legally enforceable restrictions or conditions to ensure preservation of the property’s historic significance.

The NRHP criteria (36 CFR § 60.4) were used to evaluate resources in compliance with Section 106 of the NHPA. Cultural resources must meet at least one of these criteria and possess enough substantial integrity in order to qualify as a significant resource (54 USC § 306108, 36 CFR § 60.4). All NRHP criteria were considered for the Proposed Action; however, Criteria A, B, and C were not applicable as the sites being evaluated are exclusively prehistoric in nature. Prehistoric sites are usually evaluated under Criterion D while Criteria A, B, and C apply more specifically to the Historic Period. Based on Criterion D, to be considered eligible for the NRHP, a cultural resource must have yielded, or may be likely to yield, information important in prehistory or history. Cultural resources within the AOI are unlikely to yield information

important to the past, and do not meet the criteria established to qualify as a *historical property* under Section 106.

CBP has complied with Section 106 of the NHPA by coordinating with the California SHPO and has received concurrence on the Proposed Action (see SHPO Concurrence letter in **Appendix A**). CBP has also complied with Section 106 of the NHPA and CEQA by notifying and coordinating with all local Native American tribes identified by the Native American Heritage Commission regarding the Proposed Action. No TCRs, TCPs, or TCLs have been identified in the proposed BPS site. However, the Jamul Indian Village, the Campo Band of Mission Indians, and the Viejas Band of Kumeyaay Indians have requested that qualified cultural monitors are present during construction of the Proposed Action (see **Appendix A**).

3.11.3.1 Proposed Action

Ground-disturbing activities associated with the implementation of the Proposed Action include grading, excavation, and underground trenches for the installation of new structures. These activities constitute the most relevant potential impacts on cultural resources.

Under the Proposed Action, ground-disturbing activities would not cause a substantial adverse change in the significance of any known cultural resources as defined in 16 USC § 470(w)(5) and in CCR § 15064.5(a). No known existing cemeteries or previously recorded Native American or other human remains are within or adjacent to the proposed BPS site. Although cultural resources outside of the AOI (P-37-030020, P-37-036263 [HDR-1] and P-37-036266 [HDR-4]) have not been tested or evaluated for significance, no direct or indirect impacts are anticipated for these resources because the resources would not be disturbed. P-37-006981 and P-37-014085 are ineligible for the NRHP based on a lack of historical significance or integrity and the Proposed Action would not reduce the significance or integrity of these resources any further. However, there is potential for the inadvertent discovery of cultural resources and human remains during construction. A qualified archaeologist would attend preconstruction meetings, as necessary, and monitor all ground-disturbing activities within the proposed BPS site with a Native American monitor present. With the implementation of this and other BMPs identified in **Section 5.11**, any possible potential impacts to unknown cultural resources during construction would be avoided and, therefore, would remain unaffected in accordance with Section 106 of the NHPA and CEQA. Any ground-disturbing activities associated with operation and maintenance of the proposed BPS would be performed in locations already disturbed by construction. Therefore, no impacts on cultural resources are anticipated during operation and maintenance. Procedures regarding the unanticipated discovery of cultural resources and human remains in accordance with NAGPRA and CBP policy are discussed in the 2016 cultural resources survey and testing report (CBP 2016d), and BMPs are identified in **Section 5.11**.

3.11.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the proposed Dulzura site and CBP would continue to utilize the existing Brown Field BPS facilities

in San Diego. The Dulzura site would remain vacant. Therefore, no impacts on cultural resources are anticipated to occur under the No Action Alternative.

3.12 Utilities and Infrastructure

3.12.1 Definition of the Resource

Infrastructure consists of the interrelated systems and physical structures that enable a population in a specified area to function. The infrastructure components to be discussed in this section include utilities and solid waste management. Utilities generally include electrical supply, water supply, natural gas/propane supply, sanitary sewer and wastewater, stormwater drainage, and communications systems. Solid waste management primarily relates to the availability of landfills to support a population's residential, commercial, and industrial needs.

3.12.2 Affected Environment

Electrical Supply. San Diego Gas and Electric, a division of Sempra Energy, supplies electricity to the proposed BPS area in Dulzura. Overhead electric lines run along the northern side of Highway 94 and western side of Campbell Ranch Road, adjacent to the proposed BPS site. The electric lines along Campbell Ranch Road terminate at a property adjacent to the west central portion of the proposed BPS site (CBP 2016b).

Water Supply. No potable water infrastructure is located within the proposed BPS site. There are no water pipelines adjacent to the site, although some surrounding properties have wells (CWE 2018). There are 21 permitted wells within approximately 1 mile of the proposed BPS site, although some of these wells might be decommissioned as a well permit does not necessarily mean the well is active (Kapalla 2018). The proposed BPS site is not within a water district or other district that supplies potable water, although the boundary or sphere of influence boundary of the San Diego County Water Authority (SDCWA) and one of its member water districts, Otay Water District, are within 0.5 mile (County of San Diego 2016a).

Areas east of the SDCWA boundary, including the proposed BPS site, are limited to naturally occurring surface and groundwater resources. No imported water is, or will likely become, available in the foreseeable future in these groundwater-dependent areas due to the lack of infrastructure, limited availability of water, cost of providing potable water services, and the political approval needed to extend the SDCWA boundaries. For planning purposes, San Diego County assumes that development in groundwater-dependent areas will not have access to supplemental imported water, and therefore must prove long-term groundwater adequacy independent of imported water (County of San Diego DPLU 2007b). These groundwater-dependent users are served by either onsite private wells or small water systems. Small and community water systems are regulated by the San Diego County DEH. As of 2008, there were 174 small water systems regulated by San Diego County DEH to ensure compliance with the California Safe Drinking Water Act for supplying potable water (County of San Diego DPLU 2011a). See **Section 3.6** for more information on groundwater.

Natural Gas/Propane Supply. Natural gas infrastructure is not present within or adjacent to the proposed BPS site. Various propane suppliers for residential and commercial/industrial uses are available within San Diego County.

Sanitary Sewer and Wastewater. San Diego County operates several dependent sanitation districts and wastewater facilities; however, the proposed BPS site is not within or close to a San Diego County sanitation district or other public water or sewer district (County of San Diego 2016a). Wastewater infrastructure does not exist at the site. In areas with no infrastructure, on-site subsurface sewage disposal (septic) systems are used for wastewater treatment and disposal.

Stormwater Drainage. There is no stormwater drainage system or any stormwater infrastructure on the proposed BPS site.

Communications. Communications services offered within San Diego County include digital services and cable television from Time Warner and Cox Communications, and standard landline telephone from AT&T (County of San Diego 2016a). No communications infrastructure is located within the proposed BPS site, but a communications line runs along the northern side of Highway 94.

Solid Waste Management. Solid waste management within the unincorporated areas of San Diego County is provided by a network of non-disposal (i.e., recycling centers, organics and inert processing facilities, salvage, reuse and repair facilities) and solid waste facilities and 29 franchised haulers and private residential and commercial self-haulers. Franchised haulers transport a range of materials and provide regular residential, commercial, and industrial services. The remaining solid waste is picked up by various self-haulers and contractors who directly divert materials, deliver recyclable materials to recycling facilities, and dispose of residuals in landfills or transfer stations (County of San Diego DPW 2013).

The closest waste management facility to the proposed BPS site is the Otay Landfill, which is in Chula Vista and operated by Republic Services, Inc. The Otay Landfill consists of a municipal solid waste landfill, which also composts green waste and handles some recyclable materials, and a construction and demolition and inert (CDI) debris materials recovery/processing facility to the proposed BPS site. The municipal solid waste landfill at the Otay Landfill has a maximum permitted tonnage of 6,700 tons per day of municipal solid waste and 292 tons per day of recyclables for separation and diversion. It has 21,194,008 cubic yards of remaining capacity and its estimated closure date is February 2030 (CalRecycle 2017a). The maximum permitted tonnage of the Otay CDI processing facility is 174 tons per day and 54,288 tons per year (CalRecycle 2017b). Other major commingled recyclable material recovery facilities in the region are EDCO in San Marcos and Lemon Grove, SANCO Recycling in Escondido, and Universal Refuse Removal Recycling and Transfer Station in El Cajon (County of San Diego DPW 2013).

3.12.3 Environmental Consequences

Effects on infrastructure are evaluated for their potential to disrupt or improve existing levels of service and create additional needs for energy (electric and propane), communications system, water, sanitary sewer and wastewater service, stormwater drainage, and solid waste management. For example, effects might arise from energy needs created by either direct or indirect workforce and population changes related to activities. An effect could be major and adverse if the Proposed Action resulted in any of the following:

- exceeded capacity of a utility
- a long-term interruption of the utility
- a violation of a permit condition
- a violation of an approved plan for that utility.

3.12.3.1 Proposed Action

Electrical Supply. Short-term, negligible to minor, adverse effects on electrical supply infrastructure would be expected from the construction of the proposed Brown Field BPS. Temporary, minor electrical service interruptions might be experienced during construction when electrical service is connected to the proposed BPS. The construction of the proposed facility could result in a slight, temporary increase in electrical demand because electricity might be needed to power some construction equipment.

Long-term, negligible to minor, adverse effects on electrical supply would be expected from operation of the proposed BPS. Operation of the proposed BPS would result in a slight increase in electrical demand, although much of this increase would be offset by the reduction in electrical use at the existing BPS. The use of energy-saving sustainable design features would help offset any potential increases in the electrical demand from the larger size of the proposed BPS and additional features. The overall net increase in electrical demand would not be expected to exceed electrical supply capacity. Onsite emergency generators would provide a backup power source for the proposed BPS.

Water Supply. Short- and long-term, minor, adverse effects on water supply infrastructure would be expected from construction and operation of the proposed water well and potable water treatment plant at the proposed BPS site. Non-potable water used during construction would be supplied by a well drilled on the BPS site in January 2018. Potable water required by construction workers would be supplied by the construction contractor. The annual total potable water demand for operation of the proposed BPS, including 400 agents, support staff, and up to 130 detainees, is estimated to be approximately 1.46 million gallons per year, while the average daily water demand would range from 3,585 to 7,650 gallons per day for ultimate conditions. However, the potable water treatment plant would be sized to treat an average of 6,000 gallons per day. The *Well Report for Brown Field Border Patrol Station* concluded that the drilled well is adequate to serve the proposed BPS at the proposed pumping rate of 15 gallons per minute. This pumping rate would only occur for approximately 4-6 hours per day to refill the potable

water storage tank (CWE 2018). See **Section 3.6.3** for additional information on impacts from the proposed well.

The proposed well would constitute a PWS, likely a non-transient non-community PWS (i.e., PWS that serves at least the same 25 non-residential individuals during 6 months of the year). The PWS design would be limited in capacity to what is need to support the BPS.

As discussed in **Section 3.6.3**, water quality tests showed the well water had excess fluoride and manganese. Therefore, in addition to standard water disinfection, the proposed potable water treatment plant would treat excess fluoride and manganese using one of the following potential treatment options: reverse osmosis, activated alumina, or ion exchange. Regardless of the treatment option selected, the treatment system and potable water from the onsite well would require permitting from the San Diego RWQCB, Division of Drinking Water.

Natural Gas/Propane Supply. No short- or long-term effects on natural gas or propane supply infrastructure would be expected to result from the construction and operation of the proposed BPS. Although it is possible that minimal amounts of natural gas would be used to fuel some construction equipment, it would not be directly used during operation of the proposed BPS. The 15,000-gallon aboveground propane tank would be used to provide heat and hot water for the main BPS building and support building. It is forecast that North American propane production will exceed consumer demand, including in the Pacific region (PERC 2016), and there are sufficient propane suppliers in the San Diego County region.

Sanitary Sewer and Wastewater. Short- and long-term, negligible, adverse effects would be expected from the installation and use of a septic system and a leach field at the proposed BPS site. Design and installation of the wastewater treatment system would be appropriately sized and approved for use and inspected by the San Diego County DEH. According to the *Local Agency Management Program for Onsite Waste Treatment Systems* (OWTS), the size and type of OWTS depends on soil permeability, unsaturated soil interval, peak daily flow, and net usable land area (County of San Diego DEH 2015). For commercial designs, the size of the disposal field is a combination of percolation test data and the peak daily sewage flows based on the type of usage and occupancy of the site. Septic tank sizes are also based on the peak daily sewage flow (County of San Diego DEH 2017). The wastewater collected in the system is assumed to be 80 percent of the recorded water usage (with minimum average daily usage of 2,390 gallons per day in January and maximum average daily usage of 4,760 gallons per day in November). Therefore, the proposed OWTS would be designed to treat approximately an average flow of 4,800 gallons per day with capacity to handle a peak daily flow of 6,000 gallons. The system would be limited in capacity to what is needed to support the proposed BPS.

OWTSs receiving a projected flow over 3,500 gallons per day must have a supplemental treatment system (or submit an evaluation to the San Diego County DEH that determines if the OWTS discharge would adversely affect groundwater quality) (County of San Diego DEH 2015).

Stormwater Drainage. Short-term, minor, adverse effects on stormwater drainage would be expected from construction of the proposed BPS. Ground disturbance from construction of the proposed BPS would disturb natural stormwater drainage features and temporarily increase the potential for soil erosion and sediment transport during rain events. However, CBP would obtain coverage under the NPDES Construction General Permit (Order 2009-0009-DWQ as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). Soil erosion and sediment production would be minimized by preparing and complying with a SWPPP and complying with Section 438 of the EISA of 2007, which requires that predevelopment hydrology is maintained to prevent any net increase in stormwater runoff. Construction BMPs would also be implemented to minimize ground surface disturbances and attempt to provide adequate, temporary stormwater-handling methods.

Long-term, minor, adverse effects on stormwater drainage would be expected from operation of the proposed BPS. Following construction, the facility and associated parking areas would add up to approximately 15 acres of new impervious surface, which would decrease the amount of area available for stormwater to permeate into the ground, thereby resulting in an increase in peak discharge and stormwater runoff. However, the proposed stormwater management system would include a detention system with a hydromodification basin that would be designed to convey the peak discharge for a 100-year design event. The Proposed Action and the stormwater management system would include appropriate long-term stormwater-control measures and stormwater runoff requirements and LID techniques in compliance with Section 438 of EISA to reduce, limit, and control stormwater runoff to preconstruction rates. Additionally, some existing disturbed native and non-native vegetation surrounding the BPS footprint would be restored with native vegetation. Implementation of these measures would minimize stormwater runoff from affecting off-site areas, including the adjacent Cal Fire station, and reduce the volume of runoff discharged to the receiving stream as compared to existing conditions.

Communications. Short-term, negligible to minor, adverse effects on communications infrastructure would be expected during the connection of communications infrastructure to the proposed BPS. Temporary, minor, communications service interruptions might be experienced during construction when the existing communications line on the northern side of Highway 94 is relocated outside of the roadway improvements area. Long-term, negligible to minor, adverse effects on communications systems would be expected due to the slight increase in demand for communications services and the corresponding reduction in available bandwidth. It is assumed that the CBP would design their communications system to ensure that the new tower and communications infrastructure would not interfere with adjacent communications systems at the Cal Fire station.

Solid Waste Management. Short-term, minor, adverse effects on solid waste management would be expected from construction of the proposed BPS. Construction would generate approximately 1,299,543 pounds (650 tons) of solid waste (USEPA 2009) (see **Table 3-17**). The solid waste generated would consist mainly of building materials such as concrete, metals (conduit, piping, and wiring), and lumber; and soil piles and some vegetation debris.

Table 3-17. Estimated Debris Generated from the Proposed Action

Activity	Total Square Feet	Multipliers (pounds/square feet)	Pounds	Tons
Building Construction	187,308	4.34	812,917	406.5
Pavement Construction ^a	486,626	1	486,626	243.3
		Total	1,299,543	649.8

Source: USEPA 2009

Note: ^a Includes pavements within the BPS footprint and roadway improvements area.

The San Diego County Construction and Demolition Debris Recycling Ordinance (Code of Regulatory Ordinances §§ 68.508-68.518) requires debris from construction and demolition projects of 40,000 ft² or greater in the unincorporated portion of the county to be diverted away from landfills. Therefore, the contractors would be required to recycle 90 percent of inerts (i.e., asphalt and concrete, brick/masonry/tile, dirt, mixed inerts) and 70 percent of all other materials from construction of the BPS. CBP would submit a Construction and Demolition Debris Management Plan to the county prior to building permit issuance, if applicable.

Long-term, negligible, adverse effects on solid waste management would be expected from operation of the proposed BPS. Because the proposed BPS would be larger with potential for a slight increase in personnel and features not currently found in the existing BPS, the amount of solid waste generated at the proposed facility would likely not be completely offset from the reduction in solid waste generated at the existing station. The proposed BPS would comply with California Assembly Bill 341 and the San Diego County Solid Waste Ordinance (Code of Regulatory Ordinances § 68.571), which require mandatory recycling for businesses and public entities that have trash service levels of 4 cubic yards or greater. The overall net increase in solid waste generated would not be expected to exceed the capacity of the local sanitary landfills.

3.12.3.2 No Action Alternative

Under the No Action Alternative, CBP would not construct a new BPS at the Dulzura site and the existing Brown Field BPS in San Diego would continue to operate. This would result in a continuation of the existing utilities and infrastructure conditions. Therefore, no direct or indirect effects on utilities and infrastructure would occur.

3.13 Roadways and Traffic

3.13.1 Definition of the Resource

This section documents the existing transportation systems, conditions, and travel patterns within the vicinity of the proposed Brown Field BPS (see **Figure 3-12**). Transportation systems consist of the road, pedestrian, and bicycle networks. Available capacity and performance of the transportation system indicate the conditions that commuters and other travelers encounter. The traffic network, vehicular traffic, travel patterns, circulation, and parking are described for the Study Area. This analysis evaluates traffic operations during the AM and PM peak hours, with emphasis on the level of service (LOS) of each modeled intersection and roadway segment or ability for an intersection and roadway segment to manage the flow of traffic efficiently.

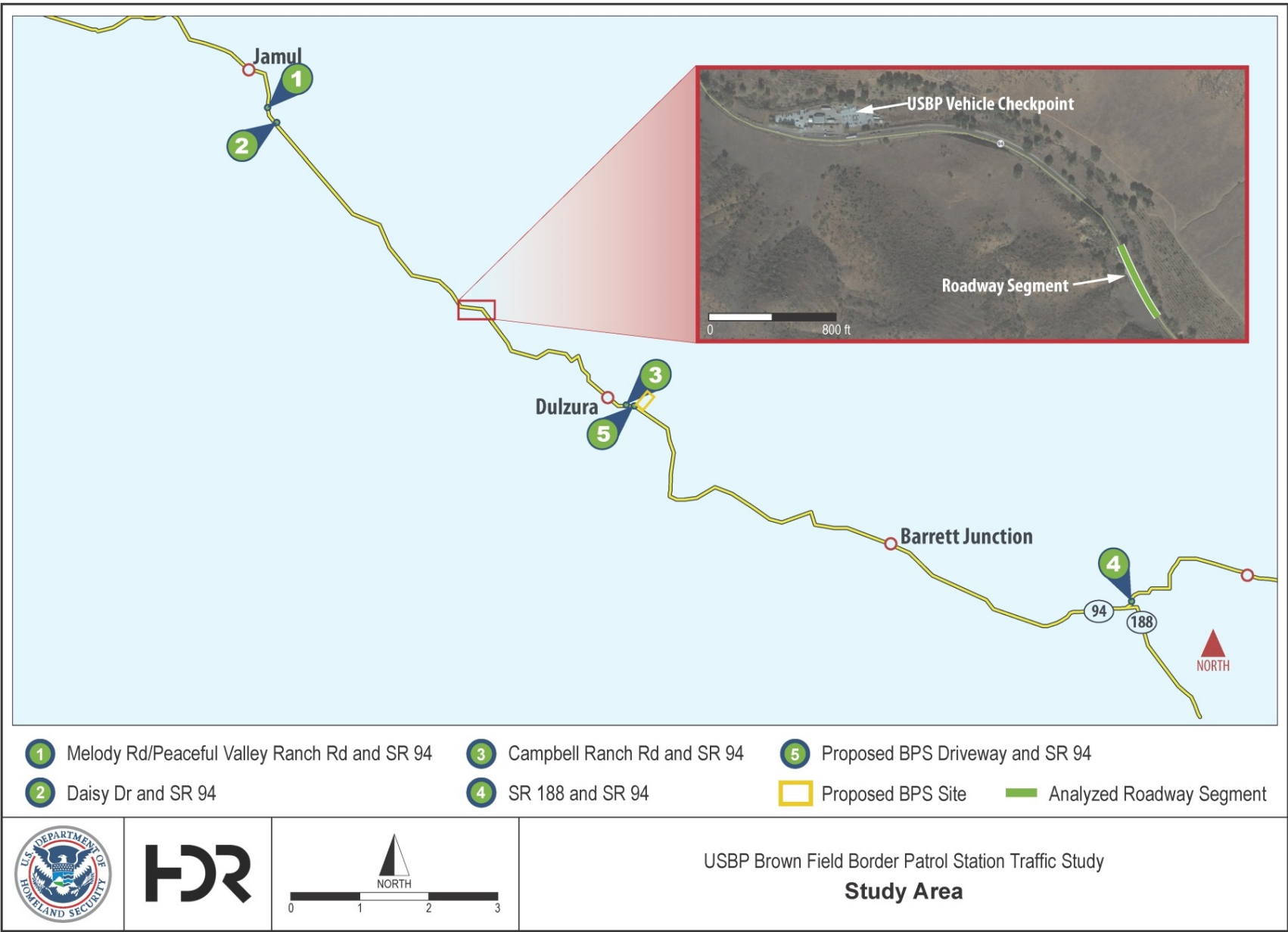


Figure 3-12. Study Area

Traffic Impact Study Methodology. A Traffic Impact Study was completed as part of this EA, and information from that study is used in the analysis in this section. The study format, methodology, and analysis is based on the *County of San Diego Report Format and Content Requirements (Transportation and Traffic)*, *County of San Diego Guidelines for Determining Significance (Transportation and Traffic)* adopted on April 24, 2011, and the Caltrans' *Guideline for the Preparation of Traffic Impact Studies* published in December of 2002 (County of San Diego DPLU 2011b, County of San Diego DPLU 2011c, Caltrans 2012).

Data Collection. Intersection turning movement counts were collected on April 4, 2017, and 24-hour directional counts were collected on May 2, 2017. These were used to develop peak hour volumes and existing conditions for key intersections and one roadway segment throughout the Study Area. Additionally, near term "2015 with Jamul Indian Village Casino Project" traffic volumes were used as existing volumes for Daisy Drive and SR 94 (i.e., Highway 94), and Melody Road and SR 94. These volumes were extracted from the Traffic Impact Study for the State Route 94 Improvement Project, dated June 2014 (Kimley-Horn and Associates 2014).

Trip Generation. The trips generated by the Proposed Action were estimated based on projected employees and delivery vehicle trips that were provided by CBP. The proposed BPS would consist of a facility with space to accommodate 400 USBP agents and support staff. Additionally, the proposed BPS would have capacity for 130 detainees. Note that the Institute of Transportation Engineers Trip Generation Manual, 9th Edition does not have a land use category specifically for the BPS facility use. Therefore, estimated trips provided by CBP were used as part of the traffic impact analysis. The total project trips generated by the project is 88 (84 inbound and 4 outbound) in the AM peak hour, 88 (4 inbound and 84 outbound) in the PM peak hour and 765 daily trips.

Vehicle Miles Traveled. The total daily project trips generated by the project is 765. Based on the California Statewide Travel Demand Model, the project trips would travel 10 miles. Therefore, the vehicle miles travelled for the proposed facility is 7,650 vehicle miles per day.

Level of Service. The criteria provided in the Highway Capacity Manual (HCM) were used to determine the LOS for the intersections and roadway segments. LOS for signalized intersections is defined in terms of delay. The LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each minor movement. At a one-way or two-way stop controlled intersection, the delay reported represents the worst movement. **Table 3-18** provides a summary of the HCM thresholds. To analyze the operations of both signalized and unsignalized intersections, Synchro 9.0 (Trafficware) was used for the analysis.

The LOS for the roadway segment was determined using percent time spent following (PTSF) and average travel speed in miles/hour (mph). The criteria for the various LOS designations for Class I two-lane highway facilities are identified in **Table 3-19**. Highway Capacity Software 2010 was used to analyze the two-way highway segment.

Table 3-18. LOS Criteria for Intersections

LOS	Control Delay (seconds/vehicle) Signalized Intersection ^a	Control Delay (seconds/vehicle) Unsignalized Intersections ^b	Description
A	≤10.0	<10.0	Operations with very low delay and most vehicles do not stop.
B	>10.0 and <20.0	>10.0 and <15.0	Operations with good progression but with some restricted movement.
C	>20.0 and <35.0	>15.0 and <25.0	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35.0 and <55.0	>25.0 and <35.0	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55.0 and <80.0	>35.0 and <50.0	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80.0	>50.0	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Sources:

^a TRB 2000 (2000 HCM, Chapter 16, Page 2, Exhibit 16-2).

^b TRB 2000 (2000 HCM, Chapter 17, Page 2, Exhibit 17-2).

Table 3-19. LOS Criteria for Urban Arterials Class I Facilities

LOS	PTSF	Average Travel Speed (mph) ^a	Description
A	<35.0	>55.0	Free-flow operations, motorists can travel at desired speed and passing demand is well below capacity.
B	>35.0 and <50.0	>50.0 and <55.0	Stable flow with speeds generally higher than 50 mph. The passing demand to maintain desired speeds becomes significant.
C	>50.0 and <65.0	>45.0 and <50.0	Stable flow at slower speeds. Individuals become noticeably affected by interactions with others and percent time spent following drastically increases.
D	>65.0 and <80.0	>40.0 and <45.0	Unstable flow, with slower speeds and long platoons. Turning vehicles and roadside distractions cause major shock waves in the traffic stream.
E	>80.0	<40.0	Operating conditions at or near capacity. Speeds are slow and passing is virtually impossible. Platooning becomes intense.
F	NA	NA	Heavily congested flow.

Source: ^a TRB 2010 (2010 HCM, Chapter 15, Page 15-7, Exhibit 15-3).

Key: PTSF = percent time spent following, NA = not applicable

3.13.2 Affected Environment

The affected environment consists of roadway networks, public transportation, airports, and non-motorized transportation networks (e.g., bicycle, pedestrian) within the Study Area.

Roadway Network. The roadway network in the Study Area is described below and depicted on **Figure 3-12**.

SR 94. SR 94 begins near downtown San Diego as an eight-lane, access-controlled freeway. As it proceeds east, it narrows to a four-lane facility, with the freeway terminating at Avocado Boulevard in La Mesa. SR 94 becomes a four-lane major roadway with signalized at-grade intersections between Avocado Boulevard and Jamacha Boulevard. In the short (approximately 0.5 mile) section between Jamacha Boulevard and Jamacha Road, SR 94 is a six-lane road. South and east of Jamacha Road, it is a four-lane facility, which then transitions to a two-lane cross section. In the vicinity of the proposed BPS site, it is a two-lane, undivided, conventional highway that is also known as Campo Road. The posted speed limit is 55 mph. The Mobility Element of the San Diego County General Plan classifies SR 94 as a prime, major road north of Melody Road and a community collector south of Melody Road (County of San Diego 2016a).

SR 188. SR 188 is a two-way undivided roadway that begins at the Tecate Port of Entry at the U.S./Mexico international border and ends at SR 94. SR 188 is classified as a major road in the County of San Diego General Plan Mobility Element (County of San Diego 2016a). The posted speed limit of SR 188 is 55 mph.

Campbell Ranch Road. This road is local (non-circulation element) undivided two-way private street. The roadway is approximately 12 feet in width and has no posted speed limit signs. Curbside parking is not permitted on Campbell Ranch Road.

Peaceful Valley Ranch Road. This road is an undivided two-way roadway. The roadway provides access from SR 94 to Cal Fire Jamul Station 36 and residences.

Melody Road. This road is a two-lane undivided roadway providing one lane of travel per direction and is classified as a light collector. Melody Road merges onto Proctor Valley Road 0.5 mile west of the Melody Road and SR 94 intersection. No bike lanes or bus stops are provided and curbside parking is prohibited. Currently, Melody Road has a roadway width of 40 feet with no shoulders provided.

Public Transportation. The San Diego Metropolitan Transit System's bus route 894 provides limited service Monday through Friday along SR 94 and SR 188.

Non-Motorized Transportation Network

Bicycle and Pedestrian Facilities. Bicycle facilities comprise paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are separate from roadways for the exclusive use of bicycles and other forms of non-motorized transportation. Bicycle lanes use striping to separate vehicles from bike travel. Bike routes are shared lanes and do not separate vehicular traffic from bicyclists.

Class III facilities include bike routes and sharrows (i.e., shared lane markings that direct bicyclists where to ride on roadways shared with motor vehicles). Currently, there is no bicycle infrastructure or pedestrian infrastructure within the Study Area (County of San Diego 2008).

Airports. The closest airport to the proposed BPS site is John Nichols Field Airport, a private airport approximately 6.8 miles to the west of the site in Chula Vista, California. There are no public airports within 15 miles of the proposed BPS site.

Traffic Impact Study. The following scenarios were analyzed in the Traffic Impact Study:

Existing Conditions (2017)

- *Existing Baseline Conditions:* Represents the traffic conditions of the existing street network with the use of traffic counts collected on April 4, 2017. The 24-hour directional counts were collected on May 2, 2017.

Opening Year Conditions (2020)

- *Opening Year Without Project Conditions:* Represents the traffic conditions of the street network assumed to be in place without the Proposed Action conditions.
- *Opening Year With Project Conditions:* Represents the traffic conditions with the addition of the Proposed Action.

Horizon Year Conditions (2040)

- *Horizon Year Without Project Conditions:* Represents the traffic conditions of the street network to be in place under Horizon Year conditions, consistent with regional plans, and is used to establish long-term, without the Proposed Action conditions for evaluating cumulative impacts and the degree to which the project would contribute to any such impacts.
- *Horizon Year With Project Conditions:* Represents the Horizon Year traffic conditions with the Proposed Action and demonstrates cumulative impacts.

Cumulative Conditions

- *Cumulative Projects:* This scenario includes a projected traffic growth based on the addition of the project and other potential projects in the Study Area. According to the San Diego County's online permit research website, since January of 2015, there are no approved and pending projects within the Study Area (County of San Diego PDS 2017).

Study Intersections and Roadway Segment. The Traffic Impact Study evaluated four intersections, the main access driveway for the proposed BPS, and a roadway segment of SR 94 east of the USBP vehicle checkpoint (see **Figure 3-12**). Additionally, under the 2020 and 2040 scenarios, it is assumed that the SR 94 Improvement Project is complete and operational (see **Table 3-20**). As shown in **Table 3-20**, potential mitigation measures include installation of a traffic signal at the intersection of SR 188 and SR 94.

Table 3-20. Traffic Impact Study Intersections - Existing and Future Traffic Control

No.	Intersection	Existing 2017 Traffic Control	2020 & 2040 Traffic Control without Mitigation	2020 & 2040 Traffic Control with Mitigation
1	SR 94 (Campo Road) & Melody Road/Peaceful Valley Ranch Road ^a	Two-Way Stop	Signalized	NA
2	SR 94 (Campo Road) & Daisy Drive ^a	Signalized	Signalized	NA
3	Campbell Ranch Road & SR 94 (Campo Road)	One-Way Stop	One-Way Stop	NA
4	SR 188 & SR 94 (Campo Road)	One-Way Stop	One-Way Stop	Signalized
5	Proposed BPS Driveway & SR 94 (Campo Road)	NA	One-Way Stop	NA

Source: Final Traffic Impact Study: SR 94 Improvement Project (Kimley-Horn and Associates 2014)

Note:

^a Intersection geometry under the 2020 and 2040 scenarios is based on the future conditions presented in the SR 94 Improvement Project; however, the final intersection geometry is yet to be determined.

Key: NA = not applicable

Existing Traffic Conditions (Existing Baseline [2017] Conditions). Based on the existing capacity analyses, it was determined that the study intersections currently operate at an acceptable LOS C or better with the exception of the intersection of SR 94 (Campo Road) and Melody Road/Peaceful Valley Ranch Road, which operates at LOS E and F during the AM and PM peak hours, respectively (see **Table 3-21**).

Table 3-21. Existing Baseline (2017) Intersection LOS

No.	Intersection	Existing Baseline (2017) AM Peak Delay (seconds)	Existing Baseline (2017) AM Peak LOS	Existing Baseline (2017) PM Peak Delay (seconds)	Existing Baseline (2017) PM Peak LOS
1	SR 94 (Campo Road) & Melody Road/Peaceful Valley Ranch Road ^a	49.1	E	213.6	F
2	SR 94 (Campo Road) & Daisy Drive ^a	11.0	B	19.9	B
3	Campbell Ranch Road & SR 94 (Campo Road) ^b	0	A	0	A
4	SR 188 & SR 94 (Campo Road) ^b	15.4	C	14.7	B
5	Proposed BPS Driveway & SR 94 (Campo Road)	This proposed intersection does not currently exist.	This proposed intersection does not currently exist.	This proposed intersection does not currently exist.	This proposed intersection does not currently exist.

Sources:

^a Traffic volumes are based on the volumes for “Near-Term 2015 Conditions with Jamul Indian Village Project” presented in the SR 94 Improvement Project (Final Traffic Impact Study: SR 94 Improvement Project [Kimley-Horn and Associates 2014]).

^b Counts Unlimited 2017

Note: **Bold** values indicate intersections operating at LOS E or F.

3.13.3 Environmental Consequences

Impacts on transportation are evaluated by how well existing roadways can accommodate changes in traffic. Adverse effects would occur if drivers experience high delays because the Proposed Action altered traffic patterns beyond existing lane capacity or resulted in the closures or detours of roadways.

3.13.3.1 Proposed Action

Construction Impacts. During construction, the Proposed Action would temporarily increase daily and peak hour traffic within the vicinity of the proposed BPS due to the hauling of material and debris, construction equipment, and construction worker commutes to and from the BPS site. Additionally, construction of the proposed roadway improvements would occur on the shoulder of westbound SR 94. No lane closures on SR 94 would be necessary during construction; however, the work area would include the entire shoulder of westbound SR 94 within the roadway improvements area. Access to the Cal Fire station driveway from SR 94 would be maintained at all times. Channelizers would mark the extent of the work area, and speeds in the construction zone would be 25 mph. Temporary traffic control signs, including signs mounted on barricades and portable changeable message signs, would notify motorists traveling on westbound and eastbound SR 94 of the upcoming construction. However, these effects would be short-term and temporary. With the implementation of a Traffic Management Plan, the effects would be minor. Therefore, the traffic impact study does not analyze construction impacts.

Operational Impacts. Intersection 1 (SR 94 and Melody Road/Peaceful Valley Ranch Road) is currently unsignalized. However, improvements would be made to this intersection as part of a series of improvements identified in the SR 94 Improvement Project. Planned improvements include, but are not limited to, signalization of the intersection and widening of the roadway (Kimley-Horn and Associates 2014). This intersection is currently operating at LOS E for the AM peak hour and LOS F for the PM peak hour (see **Table 3-21**). After improvement, the intersection LOS is forecasted to operate at LOS B during AM and PM peak hours with and without the Proposed Action under all analyzed scenarios.

Intersection 2 (SR 94 and Daisy Road) is forecasted to operate at LOS A and LOS B during AM and PM peak hours, respectively, without the Proposed Action for the Opening Year (2020) conditions. With the Proposed Action, the intersection is forecasted to operate at LOS B during the AM and PM peak hour under all scenarios analyzed for the Opening Year (2020) conditions (see **Tables 3-22** and **3-24**). For the Horizon Year (2040), the intersection is forecasted to operate at LOS B during AM and PM peak hours without the Proposed Action. With the Proposed Action, the intersection is forecasted to operate at LOS B and LOS C during the AM and PM peak hours, respectively (see **Tables 3-23** and **3-24**).

Intersection 3 (Campbell Ranch Road and SR 94), is currently operating at LOS A during AM and PM peak hours. The intersection would maintain LOS A during all scenarios analyzed (see **Tables 3-22**, **3-23**, and **3-24**).

Table 3-22. Opening Year (2020) Without Project and With Project Intersection LOS

No.	Intersection	AM Peak Without Project (Delay [sec] ^a / LOS ^b)	AM Peak With Project (Delay [sec] ^a / LOS ^b)	AM Peak Delta (Delay [sec])	PM Peak Without Project (Delay [sec] ^a / LOS ^b)	PM Peak With Project (Delay [sec] ^a / LOS ^b)	PM Peak Delta (Delay [sec])
1	SR 94 (Campo Road) & Melody Road/Peaceful Valley Ranch Road ^c	11.7 / B	10.9 / B	-0.8	14.3 / B	14.3 / B	0
2	SR 94 (Campo Road) & Daisy Drive ^c	9.9 / A	9.8 / A	-0.1	17.8 / B	17.1 / B	-0.7
3	Campbell Ranch Road & SR 94 (Campo Road)	0 / A	0 / A	0	0 / A	0 / A	0
4	SR 188 & SR 94 (Campo Road)	16.7 / C	16.9 / C	0.2	16.2 / C	16.3 / C	0.1
5	Proposed BPS Driveway & SR 94 (Campo Road)	NA / NA	16.8 / C	NA	NA / NA	10.3 / B	NA

Notes:

^a Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

^b LOS calculations are based on the methodology outlined in the 2000 HCM and performed using Synchro 9.0.

^c Geometry of Intersections 1 and 2 under the Opening Year (2020) with and without the Project scenarios are based on the future conditions presented in the SR 94 Improvement Project; however, the final geometry could be slightly different. Additionally, control type changes in future conditions under Opening Year (2020) with and without the Project scenarios (see **Table 3-20** in this Final EA).

Key: sec = seconds, NA = not applicable

Table 3-23. Horizon Year (2040) Without Project and With Project Intersection LOS

No.	Intersection	AM Peak Horizon Year (2040) Without Project (Delay [sec] ^a / LOS ^b)	AM Peak Horizon Year (2040) With Project (Delay [sec] ^a / LOS ^b)	AM Peak Delta (Delay [sec])	PM Peak Horizon Year (2040) Without Project (Delay [sec] ^a / LOS ^b)	PM Peak Horizon Year (2040) With Project (Delay [sec] ^a / LOS ^b)	PM Peak Delta (Delay [sec])
1	SR 94 (Campo Road) & Melody Road/Peaceful Valley Ranch Road ^c	14.0 / B	13.9 / B	-0.1	13.2 / B	13.4 / B	0.2
2	SR 94 (Campo Road) & Daisy Drive ^c	10.4 / B	10.7 / B	0.3	19.5 / B	19.6 / C	0.1
3	Campbell Ranch Road & SR 94 (Campo Road)	0 / A	0 / A	0	0 / A	0 / A	0
4	SR 188 & SR 94 (Campo Road)	69.2 / F*	70.8 / F*	1.6	35.6 / E*	36.3 / E*	0.7
5	Proposed BPS Driveway & SR 94 (Campo Road)	NA / NA	25.7 / D	NA	NA / NA	11.6 / B	NA

Notes:

^aDelay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

^bLOS calculations are based on the methodology outlined in the 2000 HCM and performed using Synchro 9.0.

^cGeometry of Intersections 1 and 2 under the Horizon Year (2040) with and without the Project scenarios are based on the future conditions presented in the SR 94 Improvement Project; however, the final geometry could be slightly different. Additionally, control type changes in future conditions under Horizon Year (2040) with and without the Project scenarios (see **Table 3-20** in this Final EA).

***Bold** values indicate intersections operating at LOS E or F, which could be potentially significant under CEQA (see **Section 4.3**).

Key: sec = seconds, NA = not applicable

Table 3-24. Summary of Intersection LOS

No.	Intersection	AM Peak Existing Baseline (2017) (Delay [sec] ^a / LOS ^b)	PM Peak Existing Baseline (2017) (Delay [sec] ^a / LOS ^b)	AM Peak Opening Year (2020) Without Project (Delay [sec] ^a / LOS ^b)	AM Peak Opening Year (2020) With Project (Delay [sec] ^a / LOS ^b)	PM Peak Opening Year (2020) Without Project (Delay [sec] ^a / LOS ^b)	PM Peak Opening Year (2020) With Project (Delay [sec] ^a / LOS ^b)	AM Peak Horizon Year (2040) Without Project (Delay [sec] ^a / LOS ^b)	AM Peak Horizon Year (2040) With Project (Delay [sec] ^a / LOS ^b)	PM Peak Horizon Year (2040) Without Project (Delay [sec] ^a / LOS ^b)	PM Peak Horizon Year (2040) With Project (Delay [sec] ^a / LOS ^b)
1	SR 94 & Melody Road/Peaceful Valley Ranch Road ^c	49.1 / E	213.6 / F	11.7 / B	10.9 / B	14.3 / B	14.3 / B	14.0 / B	13.9 / B	13.2 / B	13.4 / B
2	SR 94 & Daisy Road ^c	11.0 / B	19.9 / B	9.9 / A	9.8 / A	17.8 / B	17.1 / B	10.4 / B	10.7 / B	19.5 / B	19.6 / B
3	Campbell Ranch Road & SR 94	0 / A	0 / A	0 / A	0 / A	0 / A	0 / A	0 / A	0 / A	0 / A	0 / A
4	SR 188 & SR 94	15.4 / C	14.7 / B	16.7 / C	16.9 / C	16.2 / C	16.3 / C	69.2 / F*	70.8 / F*	35.6 / E*	36.3 / E*
5	Proposed BPS Driveway & SR 94	NA / NA	NA / NA	NA / NA	16.8 / C	NA / NA	10.3 / B	NA / NA	25.7 / D	NA / NA	11.6 / C

Notes:

^a Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

^b LOS calculations are based on the methodology outlined in the 2000 HCM and performed using Synchro 9.0.

^c Geometry of Intersections 1 and 2 under the Opening Year (2020) and Horizon Year (2040) with and without the Project scenarios are based on the future conditions presented in the SR 94 Improvement Project; however, the final geometry could be slightly different. Additionally, control type changes in future conditions under Opening Year (2020) and Horizon Year (2040) with and without the Project scenarios (see **Table 3-20** in this Final EA).

***Bold** values indicate intersections operating at LOS E or F, which could be potentially significant under CEQA (see **Section 4.3**).

Key: sec = seconds, NA = not applicable

Intersection 4 (SR 188 and SR 94) is forecasted to operate at LOS C under the Opening Year (2020) conditions for the without and with Proposed Action scenarios during the AM and PM peak hours (see **Tables 3-22** and **3-24**). The intersection is forecasted to operate at an unacceptable LOS E or F under the Horizon Year (2040) without and with the Proposed Action during AM and PM peak hours (see **Tables 3-23** and **3-24**). The Proposed Action would have a long-term, negligible, adverse impact on traffic and transportation at Intersection 4 (SR 188 and SR 94).

Although the impact at Intersection 4 would be minor, one potential way to reduce the cumulative traffic impact would be the installation of a traffic signal. Analysis in the Traffic Impact Study demonstrates that a traffic signal is warranted at this intersection because it satisfies the peak hour traffic signal warrants. With the installation of a traffic signal at Intersection 4 (SR 188 and SR 94), the intersection would improve to LOS A and LOS B during the Horizon Year (2040) with Project AM and PM peak hours, respectively (see **Table 3-25**). There would be no adverse effects with the implementation of the i.e., signalization.

Table 3-25. Horizon Year (2040) with Project with Signalized Peak Hour Intersection LOS

No.	Intersection	AM Peak (Delay [sec] ^a / LOS ^b)	PM Peak (Delay [sec] ^a / LOS ^b)
4	SR 188 & SR 94 (Campo Road)	7.9 / A	12.5 / B

Notes:

^a Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

^b LOS calculations are based on the methodology outlined in the 2000 HCM and performed using Synchro 9.0.

Intersection 5 (Proposed BPS Driveway and SR 94) is forecasted to operate at LOS D under the Horizon Year (2040) with the Proposed Action during the AM peak hour (see **Tables 3-23** and **3-24**). The Proposed Action could result in potential adverse effects at Intersection 5 due to safety concerns from the close proximity of the proposed BPS driveway and the existing driveway of the Cal Fire station. However, these impacts would be avoided by constructing the following roadway/access improvements at Intersection 5 that are part of the Proposed Action (as described in **Section 2.3**) per Caltrans highway design standards after consultation with Caltrans:

- Provide a deceleration right turn lane from westbound SR 94 to the proposed BPS driveway.
- Provide a dedicated left turn at eastbound SR 94 to the proposed BPS driveway if ROW width allows.
- Provide an acceleration lane from the proposed BPS driveway to westbound SR 94.

The Proposed Action would cause an increase in traffic throughout the Study Area, which is substantial in relation to the existing traffic load and capacity of the street system. Per Caltrans guidelines, it states that Caltrans endeavors to maintain a target LOS at the transition between

LOS C and LOS D for all of its facilities. When an existing State Highway facility is operating at less than the appropriate target LOS, the existing measure of effectiveness for that facility should be maintained.

The SR 94 roadway segment analyzed in the Traffic Impact Study is just east of the USBP Vehicle Checkpoint, approximately 3 miles northwest of the proposed BPS site. The roadway segment is currently operating at LOS E during AM peak hour and LOS D during the PM peak hour. The roadway segment is forecasted to maintain LOS E during the AM and PM peak hours under the Opening Year (2020) without and with Project scenarios and the Horizon Year (2040) without and with Project scenarios. Because the LOS would be the same (LOS E) with and without the Proposed Action during the AM and PM peak hours in 2020 and 2040, there would be moderate, adverse impacts (see **Table 3-26**). However, the Proposed Action would not conflict with the applicable congestion management program, established by the San Diego Association of Governments, the county congestion management agency, for designated roads or highways. San Diego Association of Governments' Congestion Management Program (CMP) designates SR 94, from Avocado Road to old Highway 80, as 'CMP Highway' because average travel speed would not decrease by more than 1 second. One potential way to reduce the cumulative traffic related impact on the SR 94 roadway segment from forecasted traffic, including the Proposed Action, would be to widen the roadway. With the implementation of roadway widening, there would be no adverse impacts. In addition, per Caltrans *Rural SR 94 Transportation Concept Summary*, dated May 2011, portions of SR 94 from Melody Road to SR 188 are potentially hazardous due to existing highway geometrics and terrain. In order to address these issues, Caltrans has developed a series of transportation improvements collectively known as the "SR 94 Improvement Project." The improvements would include realignment of deficient curves, installation of passing lanes, widening of traveled way, installation of standard 8-foot shoulders, and adding/improving turn pockets (Caltrans 2011).

Access to the Cal Fire station would not be adversely impacted by the Proposed Action. The addition of dedicated left turn lane on eastbound SR 94 would provide access to the Cal Fire driveway. The proposed deceleration and acceleration lanes would reduce impacts from additional traffic. A 10-foot shoulder would be added to the northern side of Highway 94 (i.e., westbound lane) within the roadway improvements area, providing additional safety and access features. 'No Stopping' signs would be installed near the Cal Fire station and proposed BPS to indicate stopping on the shoulders is prohibited. Additionally, a gate would be installed from Campbell Ranch Road to the northwestern corner of the Cal Fire station to allow for secondary access.

There currently is no bicycle or pedestrian infrastructure within the Study Area; therefore, there would be no adverse impacts.

The Proposed Action would not result in adverse impacts on air traffic because there are no public airports within 15 miles of the proposed BPS site.

Table 3-26. Two-Lane Highway Analysis: SR-94 East of USBP Vehicle Checkpoint

Peak Hour	Existing Baseline (2017) LOS	Existing Baseline (2017) Average Travel Speed (mph) ^a	Existing Baseline (2017) PTSF ^b	Opening Year (2020) Without Project LOS	Opening Year (2020) Without Project Average Travel Speed (mph) ^a	Opening Year (2020) Without Project PTSF ^b	Opening Year (2020) With Project LOS	Opening Year (2020) With Project Average Travel Speed (mph) ^a	Opening Year (2020) With Project PTSF ^b	Horizon Year (2040) Without Project LOS	Horizon Year (2040) Without Project Average Travel Speed (mph) ^a	Horizon Year (2040) Without Project PTSF ^b	Horizon Year (2040) With Project LOS	Horizon Year (2040) With Project Average Travel Speed (mph) ^a	Horizon Year (2040) With Project PTSF ^b
AM	E	41.6	88.1%	E	41.1	89.0%	E	40.5	86.1%	E	36.9	95.6%	E	36.3	94.2%
PM	D	42.2	80.0%	E	41.7	81.9%	E	41.1	82.7%	E	37.9	90.2%	E	37.3	89.8%

Notes:

^a Speed is calculated as the roadway segment distance divided by the travel time in mph.

^b The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced by the number of signals per mile and the intersection control delay.

Bold values indicate intersections operating at LOS E or F, which could be potentially significant under CEQA (see **Section 4.3**).

Key: PTSF = percent time spent following

BMPs and Design Improvement Measures. As stated previously, a deceleration lane, an acceleration lane, and a dedicated left turn lane at Intersection 5 (Proposed BPS Driveway and SR 94) are recommended per Caltrans highway design standards.

The proposed improvements identified in the SR 94 Improvement Project should address the existing poor traffic operations and reduced travel speed (LOS E and average travel speed of 36.3 mph as shown in **Table 3-26**) along the SR 94 roadway segment between Dulzura and SR 188. Also, the roadway/access improvements at Intersection 5 (Proposed BPS Driveway and SR 94) should be designed to accommodate the proposed future roadway section as part of the widening as identified in the Caltrans SR 94 Improvement Project.

3.13.3.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be built; therefore, there would not be adverse effects. CBP would continue occupying the existing Brown Field BPS facility in San Diego that is outside the Brown Field Station AOR, which would make it more difficult for CBP to meet its operational requirements to increase U.S./Mexico international border security within the USBP San Diego Sector and reduce illegal cross-border activity within the AOR. Therefore, the No Action Alternative would result in no short-term or long-term impacts on roadways and traffic when compared to the Proposed Action.

3.14 Aesthetics and Visual Resources

3.14.1 Definition of the Resource

Visual resources include the natural and man-made physical features that give a particular landscape its character and influence the visual appeal of an area. The features that form the overall visual impression a viewer receives include landforms, vegetation, water, color, adjacent scenery, scarcity, and man-made modifications.

An aesthetics and visual resources or viewshed impact analysis identifies and evaluates potential impacts associated with implementation of a proposed action on visible physical features on a landscape related to the pleasurable characteristics of a physical environment such as locally-designated scenic highways and RCAs. The degree of effect or impact on visual resources is quantified by proximity of a proposed action to visual resources of local importance. Distance zones are often utilized to subdivide the landscape into classes based on relative visibility from an observer position. The foreground-middleground zone includes the area visible from a travel route, use area, or other observation point to a distance of 3 to 5 miles where vegetation is only apparent in patterns or outlines. Any impacted visual resources are typically within this zone. The background zone is the visible area of a landscape that lies beyond the foreground-middleground from a distance of 3 to 5 miles to a maximum of up to 15 miles. The seldom seen zone includes portions of the landscape that are generally not visible from key observation points, or portions that are visible but more than 15 miles distance (BLM 2009a).

3.14.2 Affected Environment

The proposed BPS site is in a rural area of southwestern San Diego County within a valley in the foothills of the San Ysidro Mountains. The site ranges in elevation from approximately 1,200 to 1,450 feet above mean sea level, and the topography is characteristic of rolling hills and increases in steepness to the eastern and northern portions while the western portion is flat and gently sloping toward the southwest. The southwestern and central western portions of the site have historically been used for agricultural and consist of plowed or cleared fields. **Figures 3-13 to 3-15** provide a general overview of the proposed BPS site. The site is adjacent to the north of Highway 94 and to the east of Campbell Ranch Road, and is directly north of Cal Fire Dulzura Station 30. Surrounding land includes agricultural and grazing areas and scattered residences.

Scenic highways or corridors with local importance in the vicinity of the proposed BPS site include SR 94 (i.e., Highway 94), Lyons Valley Road, Skyline Truck Trail, Proctor Valley Road, Honey Springs Road, Otay Lakes Road, and Lawson Valley Road. RCAs with local importance in the vicinity of the proposed BPS site include RCA #68: McGinty Mountain, Sequan Creek, Japatul Road, Loveland Drainage and Reservoir; RCA #115: Gaskill Peak, Horse Thief-Pine Valley Creek, Lawson Peak, Barrett Lake, Mother Grundy Mountain, Deer Horn Valley; RCA #118: Otay Mountain and Lower Otay Lakes (County of San Diego 2016b).



Figure 3-13. Visual Conditions in the Southern Portion of the Proposed BPS Site



Figure 3-14. Visual Conditions in the Central Portion of the Proposed BPS Site



Figure 3-15. Visual Conditions in the Northern Portion of the Proposed BPS Site

3.14.3 Environmental Consequences

A proposed action is considered to have a major, adverse effect on aesthetic and visual resources if it alters or impedes a scenic vista; damages scenic resources, including trees, rock outcroppings, and historic buildings within a scenic highway; degrades the existing visual character or quality of the site and its surroundings; or creates a new source of substantial light or glare that would affect day or nighttime views.

3.14.3.1 Proposed Action

Temporary visual and aesthetic impacts during the construction phase are anticipated and would involve the presence of construction equipment and ground disturbance. Visual impairment of TCRs, TCPs, and TCLs were also considered; however, no TCRs, TCPs, or TCLs would be impacted by construction of the Proposed Action.

The viewshed analysis conducted for the Proposed Action includes a desktop study encompassing areas that can be viewed both to and from the boundaries of the proposed BPS site using the four corners of the 18.2-acre BPS footprint. The analysis is based on a view from 6 feet off the ground (i.e., the height of a person standing) and assumes a 15-foot structure height for the compound and a 100-foot height for the potential communications tower (see **Figures 3-16** and **3-17**). The BLM contrast criteria were used to assess the Proposed Action's degree of potential impact on the landscape. The BLM criteria are as follows:

- *None*: The element contrast is not visible or perceived
- *Weak*: The element contrast is visible but does not attract attention
- *Moderate*: The element contrast begins to attract attention and begins to dominate the characteristic landscape
- *Strong*: The element contrast demands attention, will not be overlooked, and is dominant in the landscape (BLM 2009b).

Four scenic corridors and three RCAs are within the foreground-midground zone (see **Table 3-27**). All other scenic corridors and RCAs identified in **Section 3.14.2** would be in the seldom seen zone, which is not visible from the proposed BPS site. Of the four scenic corridors and three RCAs within the foreground-midground zone, the Proposed Action would not be viewed from Lyons Valley Road, Otay Lakes Road, or Deer Horn Valley RCA. Therefore, these locations would not be impacted because the proposed BPS site is completely obscured by terrain and vegetation.

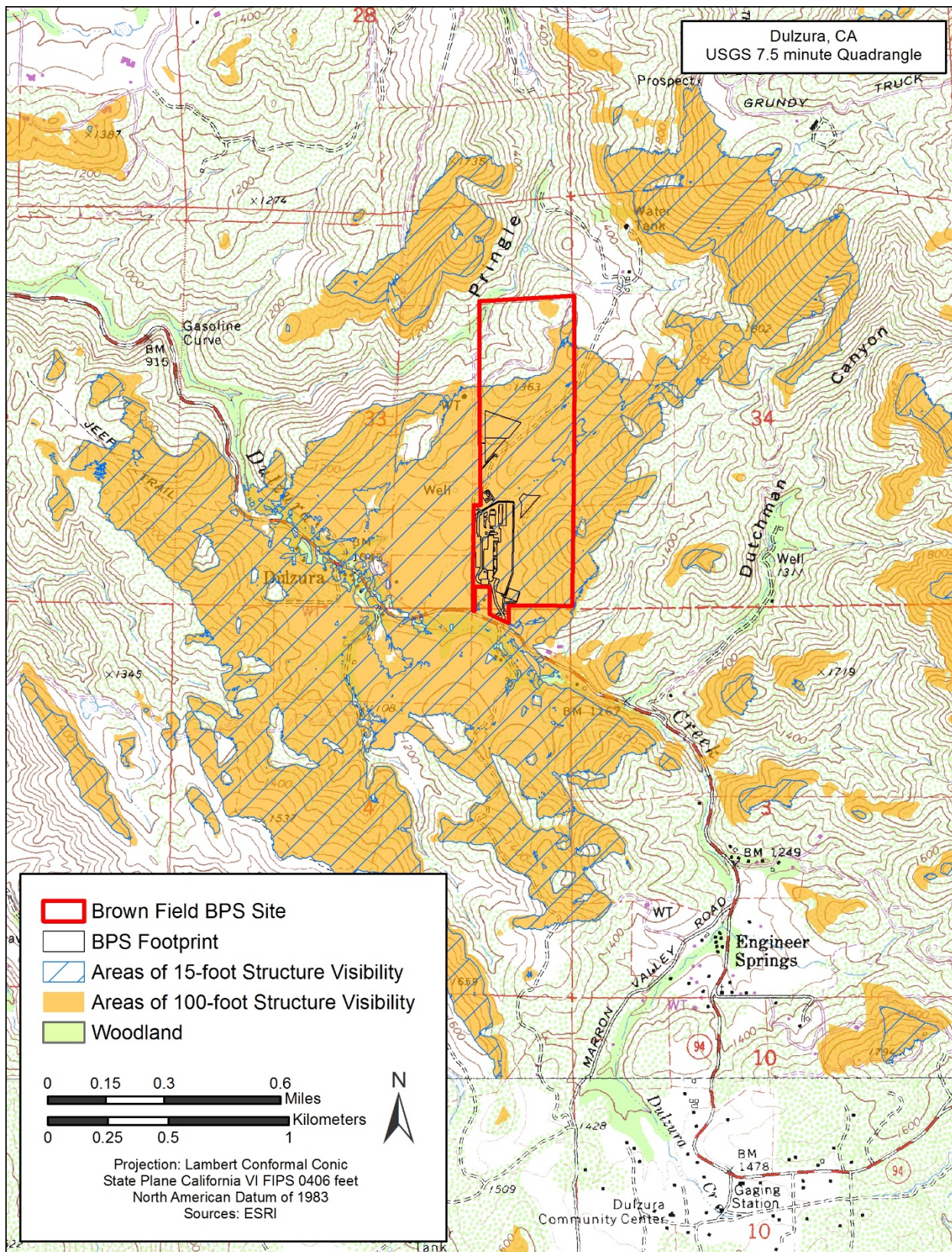


Figure 3-16. Areas of Proposed BPS Visibility to a 6-Foot Observer

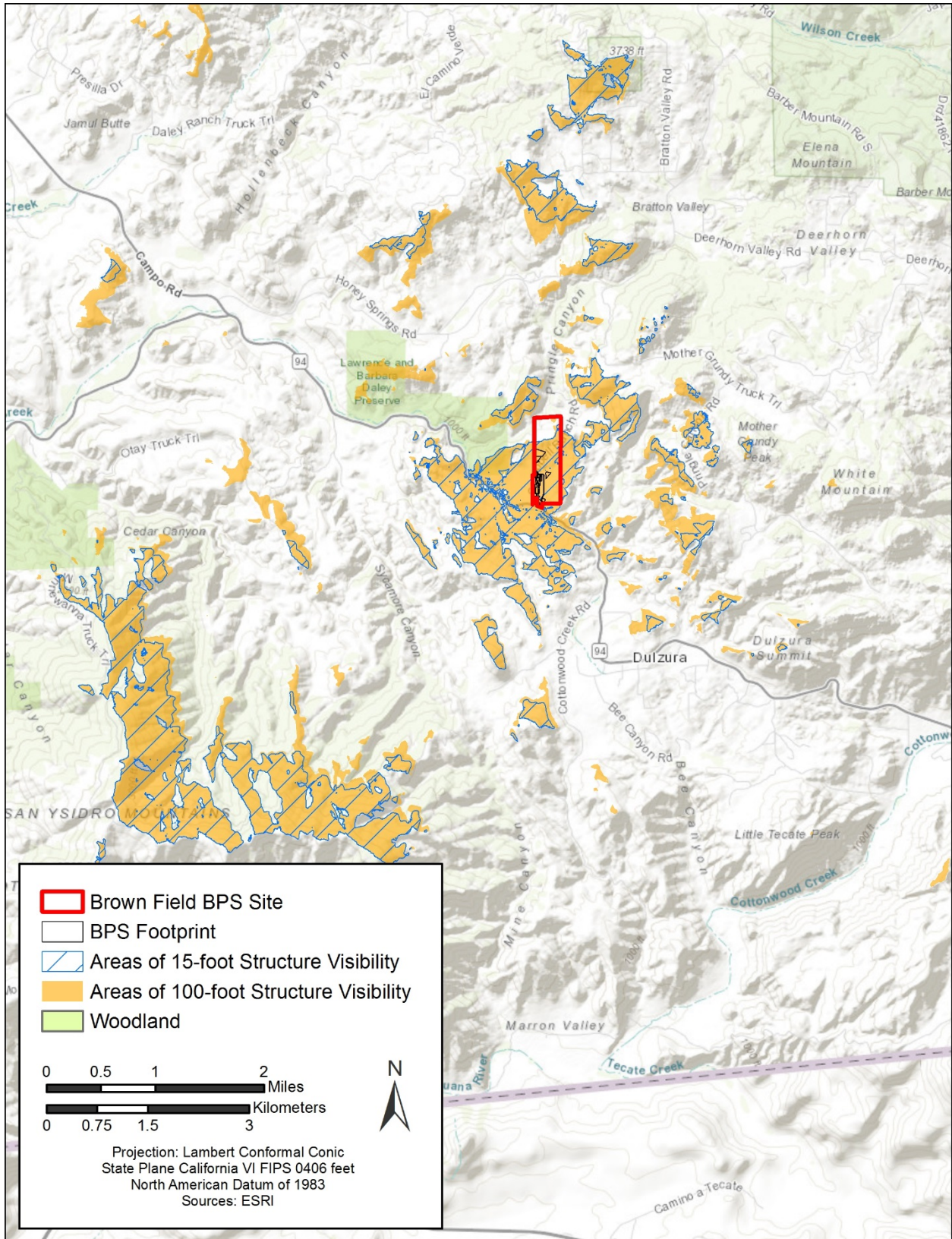


Figure 3-17. Expanded View of Areas of Proposed BPS Visibility to a 6-Foot Observer

Table 3-27. Scenic Corridors and RCAs within the Foreground-Middleground Zone

Scenic Corridor or RCA	Direction and Distance from the Proposed Action	Contrast Rating	Impact Assessment/Comments
Scenic Highway or Corridor			
State Route 94	Adjacent South	Moderate	Minor to moderate impact. The proposed BPS would only be visible on a 2,500-foot section of the corridor and the tower would be visible on a 4,500-foot section. Landscaping would reduce contrast considerably.
Lyons Valley Road	4 miles to the North	None	No impact. Terrain and vegetation completely obscure the Proposed Action.
Honey Springs Road	1.6 to 4 miles North/Northwest	Weak	Negligible to minor impact. The Proposed Action is only visible on a 1,000-foot section of the corridor.
Otay Lakes Road	3.3 miles to the West/Northwest	None	No impact. Terrain completely obscures the Proposed Action.
RCAs			
Mother Grundy Mountain	2.4 miles to the East/Northeast	Weak	Negligible to minor impact. The Proposed Action is only visible from the mountain peak.
Deer Horn Valley	3.4 miles to the Northeast	None	No impact. Terrain completely obscures the Proposed Action.
Otay Mountain	4.8 miles to the Southwest	Weak	Negligible to minor impact. The Proposed Action is visible from the entire northeastern slope; however, distance and existing vegetation reduce the contrast considerably.

The Proposed Action would be observed from small portions of Honey Springs Road, Mother Grundy Mountain, and Otay Mountain RCA. Although the Proposed Action would be visible from these scenic corridors and RCAs, distance and existing vegetation reduce the contrast to a point where the visual impact would be negligible. Visual impairment would be greatest on a 4,500-foot section of Highway 94 that abuts the proposed BPS site to the south. The proposed BPS compound and communications tower would be the dominant features along this portion of Highway 94 obscuring views to the north. However, implementation of BMPs identified in **Section 5.14** would lessen any adverse effects by reducing the contrast of the Proposed Action to a point where the visual impact would be minor to moderate.

Operation of the proposed BPS would include appropriate landscaping and exterior lighting for security purposes. The lighting would be designed to minimize glare (i.e., directed downward) while still providing sufficient illumination so that intrusion into the area can be detected and

security cameras can operate effectively. Therefore, no major, adverse impacts on aesthetics and visual resources are anticipated.

3.14.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the proposed Dulzura site, and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. The Dulzura site would remain vacant and the visual and aesthetic resources within and around the site would remain unchanged and would remain vacant. Therefore, no impacts on visual and aesthetic resources are anticipated to occur under the No Action Alternative.

3.15 Hazardous Materials and Wastes

3.15.1 Definition of the Resource

Hazardous Materials, Hazardous Wastes, and Petroleum Products. Hazardous materials are defined by 49 CFR § 171.8 as hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (49 CFR § 172.101), and materials that meet the defining criteria for hazard classes and divisions in 49 CFR § 173. Hazardous wastes are defined by the Resource Conservation and Recovery Act at 42 USC § 6903(5), as amended by the Hazardous and Solid Waste Amendments, as “a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating, reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.”

Petroleum products include crude oil or any derivative thereof, such as gasoline, diesel, or propane. They are considered hazardous materials because they present health hazards to users in the event of incidental releases or extended exposure to their vapors.

Evaluation of hazardous materials and wastes focuses on the storage, transportation, handling, and use of hazardous materials, as well as the generation, storage, transportation, handling, and disposal of hazardous wastes. In addition to being a threat to humans, the improper release or storage of hazardous materials, hazardous wastes, and petroleum products can threaten the health and well-being of wildlife species, habitats, soil systems, and water resources.

Special Hazards. Special hazards are substances that might pose a risk to human health and are addressed separately from hazardous materials and hazardous wastes. Special hazards include asbestos-containing materials (ACMs), lead-based paint (LBP), and polychlorinated biphenyls (PCBs), all of which are typically found in buildings and utilities infrastructure.

Asbestos is regulated by USEPA under the Clean Air Act; Toxic Substances Control Act; and Comprehensive Environmental Response, Compensation, and Liability Act. USEPA has

established that any material containing more than 1 percent asbestos by weight is considered an ACM. ACMs are generally found in building materials such as floor tiles, mastic, roofing materials, pipe wrap, and wall plaster. USEPA has implemented several bans on various ACMs between 1973 and 1990, so ACMs are most likely in older buildings (i.e., constructed before 1990). LBP was commonly used prior to its ban in 1978; therefore, buildings constructed prior to 1978 may contain LBP. PCBs are man-made chemicals that persist in the environment and were widely used in building materials (e.g., caulk) and electrical products prior to 1979. Structures constructed prior to 1979 potentially include PCB-containing building materials.

Environmental Contamination. Environmental contamination sites are also considered during the evaluation of hazardous materials and wastes. A site-specific Phase I Environmental Site Assessment (ESA) is an excellent method for performing a comprehensive investigation of environmental contamination threats on a specific property.

Radon. Radon is a naturally occurring odorless and colorless radioactive gas found in soils and rocks that can lead to the development of lung cancer. Radon tends to accumulate in enclosed spaces, usually those that are below ground and poorly ventilated (e.g., basements). USEPA established a guidance radon level of 4 picocuries per liter (pCi/L) in indoor air for residences, and radon levels above this amount are considered a health risk to occupants.

3.15.2 Affected Environment

Hazardous Materials, Hazardous Wastes, and Petroleum Products. CBP completed a Phase I ESA on the proposed BPS site in June 2016 to support the government's acquisition of the site. The Phase I ESA did not identify any hazardous materials, hazardous wastes, or petroleum products on the site (CBP 2016b). Hazardous materials, hazardous wastes, or petroleum products are not known to have been placed on the site since it was acquired by the government.

Special Hazards. The proposed BPS site does not contain any structures; therefore, ACMs, LBP, and PCBs in building materials do not exist on the site. The Phase I ESA of the proposed BPS site did not identify electrical transformers or other electrical infrastructure potentially containing PCBs on the site (CBP 2016b).

Environmental Contamination. The Phase I ESA of the proposed BPS site did not identify environmental contamination on the site or adjacent properties. There is no reason to suspect environmental contamination has been introduced to the site since the Phase I ESA was completed in June 2016. None of the past industries on the site (i.e., dry farmland and cattle pasture) are known to have resulted in environmental contamination (CBP 2016b).

Elevated levels of aeri ally deposited lead (ADL) are common in the soils adjacent to state highways (Caltrans 2017). Therefore, Caltrans performed an ADL survey to characterize the soil within the Highway 94 Caltrans ROW where roadway improvements and the driveway for the BPS are proposed (i.e., areas that would be disturbed by the Proposed Action). In-situ soil samples were taken at 15 locations near the edge of the Highway 94 pavement (to the north and south of the highway) within the Caltrans ROW. The samples were analyzed for total lead using

an x-ray fluorescence analyzer. The soil from all 15 sampling locations had lead readings of less than 50 milligrams per kilogram and were characterized as “clean soil” (Caltrans 2019).

Radon. USEPA rates San Diego County, California, as Radon Zone 3. Counties in Zone 3 have a predicted average indoor radon screening level less than 2 pCi/L (USEPA 2017e).

3.15.3 Environmental Consequences

Impacts on hazardous materials and wastes would be major and adverse if a proposed action would result in noncompliance with applicable federal or state regulations, or increase the amounts generated or procured beyond current management procedures, permits, and capacities. Impacts on contaminated sites would be considered major and adverse if a proposed action would disturb or create contaminated sites resulting in negative effects on human health or the environment, or if a proposed action would make it substantially more difficult or costly to remediate existing contaminated sites.

3.15.3.1 Proposed Action

Hazardous Materials, Hazardous Wastes, and Petroleum Products. Short-term, minor, adverse impacts would occur from the use of hazardous materials and petroleum products and the generation of hazardous wastes during construction of the proposed BPS. Hazardous materials that could be used include paints, welding gases, solvents, preservatives, and sealants. Additionally, hydraulic fluids and petroleum products, such as diesel and gasoline, would be used in the vehicles and equipment supporting construction. Construction would generate negligible quantities of hazardous wastes. Contractors would be responsible for the disposal of hazardous wastes in accordance with federal and state laws. All hazardous materials, petroleum products, and hazardous wastes used or generated during construction would be contained and stored appropriately (e.g., secondary containment, inspections, spill kits) in accordance applicable regulations to minimize the potential for releases. Contractors would be required to develop and implement their own SPCC Plans. All construction equipment would be maintained according to the manufacturer’s specifications and drip mats would be placed under parked equipment as needed.

Long-term, negligible, adverse impacts would occur from the use of hazardous materials and petroleum products and the generation of hazardous wastes during the operation and maintenance of the proposed BPS. Operation and maintenance activities that could use or generate hazardous materials, hazardous wastes, and petroleum products include vehicle and equipment maintenance and fueling, pesticide applications, building heating, and emergency power generation. Each of these activities could result in the accidental release of hazardous materials, hazardous wastes, or petroleum products. However, operation and maintenance activities of the proposed BPS would not appreciably change hazardous materials, hazardous wastes, and petroleum products management practices when compared to those of the existing BPS. For example, slightly larger but similar types and amounts of hazardous materials, hazardous wastes, and petroleum products would be stored, used, and generated at the proposed BPS as compared to the existing BPS. If necessary, pesticides would continue to be applied by

certified personnel in accordance with the manufacturer's recommendations. Additionally, all hazardous materials, hazardous wastes, and petroleum products would be contained and stored appropriately (e.g., secondary containment, inspections, spill kits) in accordance applicable regulations to minimize the potential for releases. Spill prevention infrastructure would guard against incidental releases during vehicle and equipment maintenance and fueling activities. CBP would develop and implement a SPCC Plan for the proposed BPS.

Propane to heat the proposed BPS would be stored in an approximately 15,000-gallon, on-site aboveground storage tank. Gasoline and diesel for USBP equipment and vehicles would be stored in two 12,000-gallon and one 8,000-gallon aboveground storage tanks, respectively, at the fuel island. These storage tanks would be inspected regularly to ensure they are operating properly and meet all applicable regulatory standards. The gasoline and diesel storage tanks would be double-walled and include leak detection infrastructure. In the event of a leak or spill, all procedures outlined in the SPCC Plan would be followed.

Special Hazards. No impacts from special hazards would occur. The proposed BPS site does not contain ACMs, LBP, or PCBs; therefore, they would not need to be removed prior to or during construction of the proposed BPS. Federal policy prohibits the use of ACMs for new construction when asbestos-free materials exist, and federal law prohibits the use of LBP and PCBs in most construction applications. Therefore, neither construction workers nor USBP agents would be exposed to these special hazards at the proposed BPS.

Environmental Contamination. The Proposed Action would not impact any existing environmental contamination sites because none occur on the proposed BPS site.

A Caltrans-prepared ADL survey within the Caltrans ROW of Highway 94 adjacent to the proposed BPS determined the soil samples from this area are "clean soil." Therefore, no impacts from soil contaminated with ADL would be expected. If any soil from this area is disposed of at a commercial landfill, it must be transported to a Class II or III landfill that is appropriately permitted to receive the soil. CBP would be responsible for identifying the landfill that would receive the soil and for costs associated with transport and disposal, including any additional sampling analysis required by the landfill.

Other potential sources of lead within the Caltrans ROW include the traffic stripes and pavement markings on Highway 94 that would be disturbed or removed during proposed activities within the roadway improvements area. If other material, soil, or groundwater that is believed to be contaminated with lead or other contaminants was unexpectedly discovered, the construction contractor would be required to immediately stop work, report the discovery to CBP, and implement appropriate safety measures. Commencement of work activities would not occur in this area until the issue was investigated and resolved.

Radon. No impacts from radon would occur. Based on the USEPA rating of Radon Zone 3 for San Diego County, it is unlikely indoor radon screening levels greater than 2 pCi/L would be identified in new construction. The proposed BPS would incorporate design features for radon

management as determined to be needed. Post-construction radon management measures would be installed in the unlikely event the proposed BPS tested at 4 pCi/L or higher.

3.15.3.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented and CBP would continue to utilize the existing Brown Field BPS facilities in San Diego. Hazardous materials and wastes conditions at the Dulzura site would remain the same as described in **Section 3.15.2**. No impacts on hazardous materials and wastes would occur.

3.16 Socioeconomic Resources, Environmental Justice, and Protection of Children

3.16.1 Definition of the Resource

Socioeconomics. Socioeconomics encompasses economies and social elements such as population levels and economic activity. Factors that describe the socioeconomic environment represent a composite of several interrelated and nonrelated attributes. There are several factors that can be used as indicators of economic conditions for a geographic area, such as demographics, median household income, unemployment rates, employment, and housing data. Data on employment identify employment by industry or trade and unemployment trends. Data on personal income in a region are used to compare the before and after effects of any jobs created or lost as a result of a proposed action. Data on industrial, commercial, and other sectors of the economy provide baseline information about the economic health of a region. Changes in demographic and economic conditions are typically accompanied by changes in other community components, such as housing availability and the provision of public services, which are also discussed in this section.

Environmental Justice and the Protection of Children. EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, requires each federal agency to identify and address whether their proposed action would result in disproportionately high and adverse environmental and health impacts on low income or minority populations. The EO was created to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no groups of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, tribal, and local programs and policies.

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, states that each Federal agency “(a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” Children might be more susceptible than adults to certain environmental effects and risks. Therefore, activities occurring near areas that could

have higher concentrations of children during any given time, such as schools and childcare facilities, might further intensify potential impacts on children.

Consideration of concerns related to environmental justice and protection of children includes the race, ethnicity, poverty status, and age of populations in the vicinity of a proposed action. Such information aids in evaluating whether a proposed action would render vulnerable any of the populations targeted for protection.

CEQ states that minority or low-income populations should be identified if the percentage of persons characterized as being a minority or low-income within the region of influence (ROI) is either greater than 50 percent or meaningfully higher than in the general population or other appropriate unit of geographic analysis (e.g., community of comparison). The community of comparison should be the smallest jurisdiction for which U.S. Census data are collected that encompasses the footprint of impacts for all resource areas. CEQ also states, “A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds” (CEQ 1997a).

3.16.2 Affected Environment

Socioeconomics. The proposed BPS site is in a sparsely populated area of unincorporated south-central San Diego County known as Dulzura. For the purpose of this analysis, the socioeconomic baseline conditions are presented for Block Group 1 in Census Tract 213.02 (the ROI), Census Tract 213.02, San Diego County, and California. **Figure 3-18** depicts the ROI and Census Tract 213.02.

Demographics. The U.S. Census Bureau estimated the population of the ROI in 2016 was 5,270 people, which represents a 207.8 percent increase since 2000. The population of Census Tract 213.02 increased 81.3 percent from 2000 to 2016, and had an estimated total population of 7,999 in 2016. The populations of the San Diego County and California increased between 2000 and 2016, but at much lower rates than the ROI and Census Tract 213.02 (U.S. Census Bureau 2000, U.S. Census Bureau 2016a). **Table 3-28** shows the total populations for 2000 and 2010 and total population estimates for 2016 based on U.S. Census data.

The ROI encompasses the East Mesa Detention Complex that houses five adult correctional or juvenile facilities. In 2010, 63.7 percent of the ROI population (2,952 people) were part of an institutionalized population, primarily consisting of people in adult correctional facilities or juvenile facilities (U.S. Census Bureau 2010). Assuming the proportion of the institutionalized population within the ROI remained the same, it is calculated that 1,913 people would be part of the non-institutionalized population and 3,357 people would be part of the institutionalized population in 2016.

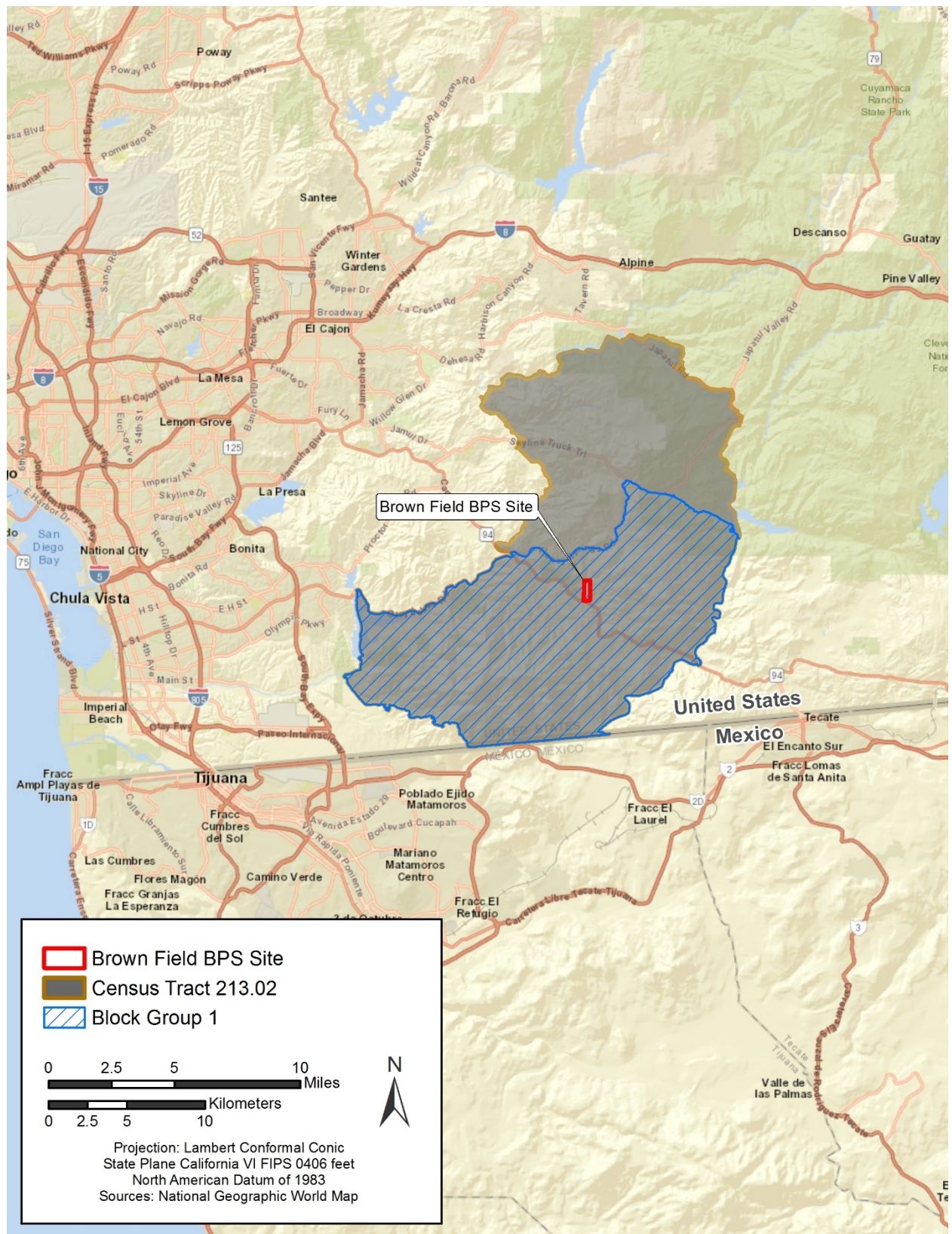


Figure 3-18. Census Tract and Block Group Encompassing the Proposed BPS Site

Table 3-28. Total Population

Geographic Area	2000	2010	2016 ^a	Percent Change (2000-2016)
California	33,871,648	37,253,956	38,654,206	14.1
San Diego County	2,813,833	3,095,313	3,253,356	15.6
Census Tract 213.02	4,412	7,361	7,999	81.3
Block Group 1, Census Tract 213.02 (ROI)	1,712 ^b	4,631	5,270	207.8

Sources: U.S. Census Bureau 2000, U.S. Census Bureau 2014, U.S. Census Bureau 2016a

Notes:

^a The 2016 total population data are estimates from the 2012-2016 American Community Survey.

^b In the 2000 Census, the equivalent block group in terms of geographic area to Block Group 1 in Census Tract 213.02 was Block Group 2 in the same census tract.

Employment and Economic Activity. In 2016, there were 614 employed people in the civilian labor force in the ROI. The industry employing the highest percentage of people in the ROI, Census Tract 213.02, San Diego County, and California was the educational services, and health care and social assistance industry. This industry employed more than 20 percent of the people in each of these areas in this industry. The manufacturing and professional, scientific, and management, and administrative and waste management services were the industries employing the second and third most people in the ROI (U.S. Census Bureau 2016b). **Table 3-29** shows the regional employment by industry in California, San Diego County, Census Tract 213.02, and the ROI.

As of April 2018, the unemployment rates (not seasonally adjusted) for California and San Diego County were 3.8 percent and 2.9 percent, respectively (BLS 2018). **Figure 3-19** displays the monthly unemployment rates for California and San Diego County from January 2008 through April 2018.

Housing. The U.S. Census Bureau estimated there were 589 housing units in the ROI in 2016, of which 109 units were vacant, representing 18.5 percent of the total housing units (U.S. Census Bureau 2016c). Of the occupied housing units in the ROI, 95.2 percent (457 units) were occupied by homeowners and 4.8 percent (23 units) were occupied by renters (U.S. Census Bureau 2016d). The percent of vacant housing units in Census Tract 213.02, San Diego County, and California were lower at 12.3 percent, 7.1 percent, and 12.2 percent, respectively (U.S. Census Bureau 2016c).

Public Services. Public services include fire protection, emergency medical services, law enforcement, schools, libraries and parks. The proposed BPS site is in a rural area and there are no police or fire stations, medical facilities, schools, community parks, or other public facilities, other than the adjacent Cal Fire Dulzura Station 30 within 2.5 miles of the proposed BPS site.

Table 3-29. Overview of Employment by Industry

Industry	Block Group 1, Census Tract 213.02 (ROI)	Census Tract 213.02	San Diego County	California
Civilian employed population 16 years old and over	614	1,807	1,495,776	17,577,142
Percent Civilian Employed Persons 16 years old and over (by industry)				
Agriculture, forestry, fishing and hunting, and mining	0	0.3	0.9	2.4
Construction	5.7	15.4	5.6	6.0
Manufacturing	15.3	10.5	9.4	9.7
Wholesale trade	1.6	0.6	2.5	3.0
Retail trade	6.2	8.1	10.9	11.0
Transportation and warehousing, and utilities	6.4	6.9	3.8	4.8
Information	3.3	1.1	2.3	2.9
Finance and insurance, and real estate and rental and leasing	7.3	4.6	6.3	6.2
Professional, scientific, and management, and administrative and waste management services	9.6	13.8	14.9	13.1
Educational services, and health care and social assistance	25.4	23.0	21.1	20.9
Arts, entertainment, and recreation, and accommodation and food services	8.3	8.9	11.7	10.3
Other services, except public administration	6.4	3.3	5.4	5.3
Public administration	4.6	3.5	5.2	4.4

Source: U.S. Census Bureau 2016b

Note: The data presented in this table are estimates from the 2012-2016 American Community Survey.

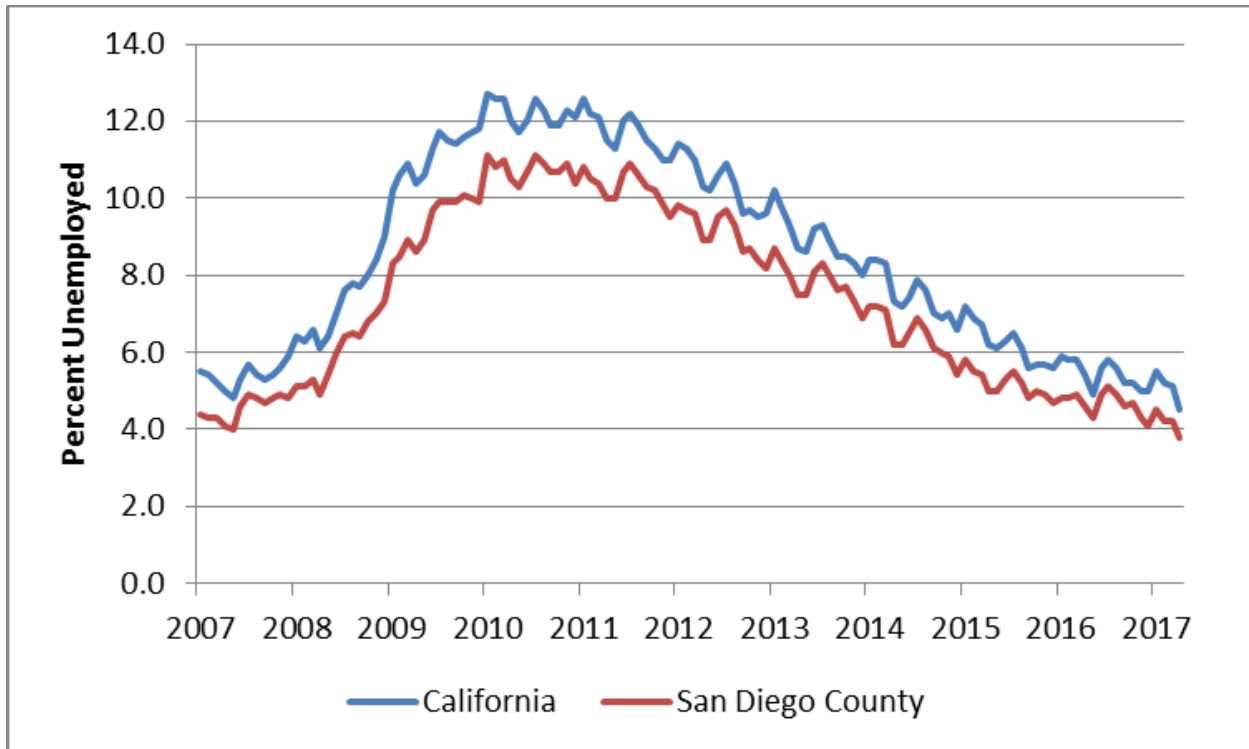


Figure 3-19. Unemployment Rates (2007-2018)

The proposed BPS site is within the Rural 94 Community Wildlife Protection Plan area. The closest fire station to the proposed BPS site is Cal Fire Dulzura Fire Station 30, which is immediately adjacent to the south of the proposed BPS site. Cal Fire Station 30 is typically staffed year-round and provides structural and wildland fire control and emergency services to the community of Dulzura and the greater surrounding area. Other nearby fire stations include Cal Fire Stations 35 (Dulzura), 36 (Jamul), and 37 (Deerhorn Valley), which are volunteer units (Station 36 also has full-time personnel) administered by San Diego County Fire Authority (SDCFA) and contracted to Cal Fire. Stations 35, 36, and 37 are approximately 2.3 miles, 7.7 miles, and 9.4 miles from the proposed BPS site, respectively. These nearby stations also provide structural and wildland fire protection and advanced life support-level emergency medical services. The proposed BPS site is within the Wildland Urban-Interface and Very High Fire Hazard Severity Zone (FHSZ) (Cal Fire 2007). Wildland Urban-Interface is an area where structures and other human development meet or intermingle with undeveloped wildland. A Fire Hazard Severity Zone is an area identified by Cal Fire to indicate the severity of fire hazard expected to prevail there based on factors such as fuel, slope, and fire weather. A Very High FHSZ is the zone with the highest fire hazard (Cal Fire 2017).

The San Diego County Sheriff’s Department is the primary law enforcement agency in San Diego County, including in the unincorporated portion of the County such as Dulzura. The Dulzura Office of the Sheriff’s Department is approximately 2.5 miles south (collocated with Cal Fire Dulzura Station 35) of the proposed BPS site. The next closest San Diego County Sheriff’s Department station is the Rancho San Diego Station, which is approximately 14 miles northwest

of the proposed Brown Field BPS site. The California Highway Patrol provides traffic law enforcement services on California public roadways, such as Highway 94. The El Cajon Office services a 3,000-square mile area along the U.S./Mexico international border, including Highway 94 in the vicinity of the proposed BPS site. The El Cajon Office is approximately 19 miles northwest of the proposed BPS site.

The proposed BPS site is within the Grossmont Union High School District and the Jamul Dulzura Union Elementary School District. The closest schools to the proposed BPS site are the Steele Canyon High School, Greater San Diego Academy (a home schooling charter school), and Oak Grove Middle School, approximately 12 miles, 9 miles, and 10 miles northwest via roadway. The closest libraries are the Potrero and Rancho San Diego branches of the San Diego County Library System, which are approximately 13 miles southeast and 14 miles northwest of the proposed BPS site. The Dulzura area is also serviced by the East County Bookmobile (mobile library).

The closest hospital to the proposed BPS site is Sharp Grossmont Hospital, approximately 20 miles northwest in La Mesa, California.

Environmental Justice and Protection of Children. Non-white residents make up approximately 30 percent of the ROI population, which is similar to that of San Diego County, but higher than the percentage of non-white residents in Census Tract 213.02 and lower than that of California. Hispanic or Latino residents made up 42.5 percent of the population of the ROI, which is a higher percentage than in Census Tract 213.02, San Diego County, and California (U.S. Census Bureau 2016e). Approximately 23 percent of the population of the ROI was below the poverty level (U.S. Census Bureau 2016f). In 2015, the federal poverty threshold for an individual was \$12,228 (U.S. Census Bureau 2016g). The per capita income in the ROI was \$15,197, which is lower than that of Census Tract 213.02, San Diego County, and California, but the ROI had a median household income of \$87,609, which is higher than that of Census Tract 213.02, San Diego County, and California (U.S. Census Bureau 2016h, U.S. Census Bureau 2016i). This is likely due to the presence of the East Mesa Detention Complex within the ROI. **Table 3-30** presents race, ethnicity, and poverty characteristics for populations in California, San Diego County, Census Tract 213.02, and the ROI.

In 2016, the minority populations exceeded 50 percent of the total populations of the ROI as well as Census Tract 213.02, San Diego County, and California. Minorities made up 66.4 percent of the ROI, which is higher than that of Census Tract 213.02 (50.4 percent), San Diego County (53.3 percent), and California (61.6 percent) (U.S. Census Bureau 2016e). The low-income population made up 23.4 percent of the total population of the ROI, which is higher than that of Census Tract 213.02 (18.1 percent), San Diego County (14.0 percent), and California (15.8 percent) (U.S. Census Bureau 2016f). Children made up 13.8 percent of the population of the ROI, which is lower than Census Tract 213.02 (18.5 percent), San Diego County (22.4 percent), and California (23.6 percent) (U.S. Census Bureau 2016j). **Table 3-31** presents characteristics of the minority, low-income, and child populations in California, San Diego County, Census Tract 213.02, and the ROI.

Table 3-30. Race, Ethnicity, and Poverty Characteristics

Demographic	Block Group 1, Census Tract 213.02 (ROI)	Census Tract 213.02	San Diego County	California
Total Population	5,270	7,999	3,253,356	38,654,206
Percent Children (Population 17 years of age and under)	13.8	18.5	22.4	23.6
Percent White	70.5	78.8	71.0	61.3
Percent Black or African American	20.3	14.2	5.0	5.9
Percent American Indian and Alaska Native	0.2	0.2	0.7	0.7
Percent Asian	1.5	1.0	11.6	13.9
Percent Native Hawaiian and Other Pacific Islander	0.9	0.6	0.5	0.4
Percent Some other race	5.3	4.2	6.4	13.3
Percent Two or more races	1.3	1.1	4.9	4.6
Percent Hispanic or Latino	42.5	37.0	33.1	38.6
Percent Individuals Below Poverty	23.4	18.1	14.0	15.8
Per Capita Income	\$15,197	\$22,422	\$32,482	\$31,458
Median Household Income	\$87,609	\$82,026	\$66,529	\$63,783

Source: U.S. Census Bureau 2016j, U.S. Census Bureau 2016e, U.S. Census Bureau 2016f, U.S. Census Bureau 2016h, U.S. Census Bureau 2016i

Note: The data presented in this table are estimates from the 2012-2016 American Community Survey.

Table 3-31. Minority, Low-Income, and Child Populations

Geographic Area	Total Population (for which Minority and Child Populations are Calculated) ^{a, b}	Percent Minority ^a	Percent Children ^b	Total Population (for which Poverty is Calculated) ^c	Percent Low- Income ^c
California	38,654,206	61.6	23.6	37,913,144	15.8
San Diego County	3,253,356	53.3	22.4	3,172,544	14.0
Census Tract 213.02	7,999	50.4	18.5	4,466	18.1
Block Group 1, Census Tract 213.02 (ROI)	5,270	66.4	13.8	1,755	23.4

Sources: ^a U.S. Census Bureau 2016e, ^b U.S. Census Bureau 2016j, ^c U.S. Census Bureau 2016jf

Note: The data presented in this table are estimates from the 2012-2016 American Community Survey.

3.16.3 Environmental Consequences

Impacts on socioeconomics, environmental justice, and protection of children were assessed to determine whether the Proposed Action and alternatives could result in any of the following major, adverse impacts:

- substantial change in the local or regional population and in housing or public services from the increased or decreased demands of the population change
- substantial change in the local or regional economy, employment, or business volume
- disproportionately high and adverse human health and environmental impacts on minority, low-income, or child populations.

3.16.3.1 Proposed Action

Socioeconomics. Construction, operation, and maintenance of the proposed Brown Field BPS would not result in major impacts on socioeconomics. The Proposed Action is not anticipated to result in short- or long-term population increases; however, presence of a new public facility designed to accommodate up to 400 USBP agents and support staff could result in long-term, minor, adverse impacts on public services (fire protection/emergency medical services). Construction of the proposed BPS would result in short-term, minor, beneficial impacts on the local economy and employment.

Demographics and Housing. The construction workforce for the proposed BPS would likely come from the existing workforce within San Diego County and adjacent counties. There is an adequate supply of workers within the construction industry in San Diego County (approximately 84,000) to meet demand for construction of the proposed BPS. Additionally, the proposed construction activities should not necessitate out-of-town workers to permanently relocate to the area. Therefore, short- and long-term population increases would not occur as a result of construction activities, and there would be no impacts on population or housing.

CBP is not expected to hire additional operational personnel as a result of the proposed BPS. There are 388 USBP agents at the existing Brown Field BPS and no additional personnel would be hired as a result of the Proposed Action. However, the proposed BPS is designed to accommodate 400 USBP agents; therefore, over time up to 12 additional USBP agents might be hired as needs within the Brown Field Station AOR arise. Relocation of existing CBP staff for operation of the proposed BPS is assumed to be negligible. In the event CBP increases the personnel at the proposed BPS, impacts would be long-term, negligible, indirect, and beneficial, as any additional personnel would increase the tax revenue of the area.

Employment and Economic Activity. Construction of the proposed BPS would result in the employment of construction workers and the purchase of construction-related materials and other goods and services (e.g., purchase of building materials), as well as secondary purchases such as retail purchases made by workers. Building materials are presumed to be sourced locally, when possible. Similarly, construction workers from San Diego County or surrounding areas would be employed, resulting in beneficial impacts on local employment. Construction expenditures for building materials, construction workers' wages and taxes, and purchases of goods and services in the area would result in short-term, minor, direct and indirect, beneficial impacts on the local economy and employment.

Maintenance and operation of the proposed BPS are expected to result in minimal purchases of maintenance supplies and secondary purchases of goods and services by USBP personnel in the local economy. In the event CBP increases personnel at the proposed BPS, there could be indirect, beneficial impacts, as any additional personnel would increase the tax revenue. The Proposed Action would result in long-term, negligible, direct and indirect, beneficial impacts on the local economy.

Public Services. No population increases would occur as a result of construction and operation of the proposed BPS. Therefore, demand on schools, libraries, and parks and recreational facilities in San Diego County would not change due to the Proposed Action, and these public services would not be affected because the existing capacity would continue to be sufficient to serve the local population. General public safety and law enforcement services at the proposed BPS would be provided primarily by USBP, as well as the San Diego County Sheriff's Department and California Highway Patrol, as applicable. The temporary presence of construction workers at the proposed BPS site during construction activities and the long-term presence of the proposed BPS would not increase demand on local law enforcement services. Additionally, the proposed BPS would provide additional law enforcement services in the area. Therefore, the Proposed Action would have no impact on schools, libraries, parks and recreational facilities, or law enforcement services.

The Proposed Action could increase the demand for fire protection/emergency medical services. The proposed BPS site is within the Wildland Urban-Interface and Very High FHSZ, and operation of the proposed BPS would require a 15,000-gallon propane tank for heating purposes, which increases the risk for fire hazards. The proposed BPS would be designed and constructed in accordance with all applicable federal, state, and local fire protection regulations and standards, including the California Fire and Building Codes as amended by San Diego County (2017 Consolidated Fire Code). For example, the proposed BPS design would include a sprinkler system, appropriate clearance and selection of landscaping around structures, water storage tank for fire suppression and protection, and fire/emergency vehicle access lanes.

If applicable, CBP would prepare a Fire Protection Plan and submit a Project Facility Availability Form to the SDCFA prior to construction. The Fire Protection Plan would assess the Proposed Action's compliance with current regulatory codes and ensure that impacts resulting from wildland fire hazards have been adequately mitigated, if necessary. Upon receipt of the Project Facility Availability Form, the SDCFA would determine whether existing fire protection services are adequate to serve the Proposed Action. Factors that would be examined include whether the Proposed Action is within SDCFA boundaries and is eligible for service, meets the travel time requirements specified under the San Diego County General Plan, is able to implement the required fuel modification zone (protective buffer surrounding a structure) around structures, and is able to provide adequate water fireflow and pressure.

A major factor used to determine adequate fire protection and emergency medical capacity is the ability to respond to fires/emergencies within an acceptable timeframe. The San Diego County

General Plan identifies fire protection services policies for the county, and requires new development to demonstrate that fire protection/emergency medical services meet minimum travel (response) time standards. The acceptable response time for the Proposed Action is 20 minutes (County of San Diego 2016a). Based on Table C.10(b) in 2017 *National Fire Protection Association 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting*, response times for Cal Fire stations 30, 35, 36, and 37 would all be under 20 minutes (0.82, 4.47, 13.82, and 16.80 minutes, respectively). The Proposed Action would not increase response times to the proposed BPS site or other locations, and response times from Cal Fire stations 30, 35, 36, and 37 to the proposed BPS site would be within the acceptable range as identified by the San Diego County General Plan. Therefore, it is anticipated the Proposed Action would not increase demand on the existing fire protection services so as to require new or expanded facilities. Long-term, indirect, minor, adverse impacts on fire protection and emergency medical services could result from the Proposed Action. See **Section 3.17** regarding impacts on health and safety from the Proposed Action.

Environmental Justice and Protection of Children. The ROI has a higher percentage of minority and low-income residents than the encompassing Census Tract 213.02 and San Diego County. However, the proposed Brown Field BPS is along a major roadway with only scattered residences in the vicinity. Increased noise and traffic during construction and operation could affect immediately surrounding populations (see **Sections 3.10** and **3.13**). During construction, these effects would be temporary, lasting for the duration of construction, and intermittent during daytime hours (7 a.m. to 5 p.m.). Increased noise during operation would be minimal, resulting from vehicle traffic, use of the outdoor training area, and infrequent use of the helipad, while increased traffic in the immediate vicinity of the proposed BPS would be intermittent, primarily associated with shift changes. These construction and operations impacts would be minimal and temporary (construction) or intermittent (operations). Therefore, while the minority and low-income populations in the ROI are higher than comparison areas, because there are few residences near the proposed BPS site and minimal impacts would occur on surrounding populations, the Proposed Action would not result in disproportionately high and adverse human health and environmental impacts on minority and low-income populations.

Activities occurring near areas that could have higher concentrations of children during any given time, such as schools and childcare facilities, might result in potential impacts on children. Children make up approximately 14 percent of the ROI; however, there are only a small number of residences near the proposed BPS site that could experience increased noise and traffic, and there are no schools, libraries, or childcare facilities near the proposed BPS. Therefore, to the extent that children reside near the proposed BPS, they could experience temporary or intermittent increased noise and traffic, but these impacts would be negligible to minor.

3.16.3.2 No Action Alternative

Under the No Action Alternative, CBP would not construct the proposed Brown Field BPS in Dulzura, and would continue to use the existing BPS. No socioeconomic impacts would occur

because there would be no direct or indirect purchase of goods and services, and no population changes that might require housing or other public services. There would be no impacts on minority, low-income, or child populations as a result of the No Action Alternative. The existing BPS is within an industrial park; therefore, there are no residences or minority, low-income, or youth populations in the vicinity of the existing BPS in San Diego.

3.17 Human Health and Safety

3.17.1 Definition of the Resource

A safe environment is one in which there is no, or an optimally reduced, potential for death, serious bodily injury or illness, or property damage. Human health and safety addresses workers' and the public's health and safety during facility construction activities and subsequent operation of the newly constructed facilities.

Construction safety is largely a matter of adherence to regulatory requirements imposed for the benefit of employees and implementation of operational practices that reduce risks of illness, injury, death, and property damage. The health and safety of onsite construction workers are safeguarded by Occupational Safety and Health Administration (OSHA) and USEPA standards, which specify the amount and type of training required for industrial workers, the use of personal protective equipment and clothing, engineering controls, and maximum exposure limits for workplace stressors.

Safety and accident hazards can often be identified and reduced or eliminated. Necessary elements for an accident-prone situation or environment include the presence of the hazard itself together with the exposed (and possibly susceptible) population. The degree of exposure depends primarily on the proximity of the hazard to the population. Activities that can be hazardous include transportation, maintenance and repair activities, and the creation of extremely noisy environments. The proper operation, maintenance, and repair of vehicles and equipment carry important safety implications. Extremely noisy environments can also mask verbal or mechanical warning signals such as sirens, bells, or horns. See **Section 3.10** for more information on noise.

3.17.2 Affected Environment

Contractor Safety. Human health and safety concerns during construction and modernizing of facilities involve exposing workers to conditions that pose a health or safety risk. Construction site safety is largely a matter of adherence to regulatory requirements. These regulatory requirements are imposed for the benefit of employees, and they implement operational practices that reduce risks of illness, injury, death, and property damage. OSHA issues standards that specify the amount and type of safety training and education required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits with respect to workplace stressors (29 CFR § 1910). CBP applies and adheres to these standards in policy and practice.

USBP Personnel Safety. USBP personnel are responsible for complying with the OSHA and DHS safety and health requirements. DHS Directive 066-01, *Safety and Health Programs*, establishes DHS's policies, responsibilities, and requirements regarding safety and health programs. The purpose of DHS safety and health programs are to prevent or minimize the loss of DHS resources and to protect employees, contractors, and the visiting public from accidental death, injury, or illness by managing risks through implementation of the tenets of operational risk management and response plans.

Public Safety. Existing conditions related to public safety in the vicinity of the proposed BPS are discussed below. See **Section 3.16** for more information on public services, including law enforcement, medical/emergency medical, and fire protection services.

The San Diego County Sheriff's Department Dulzura Office and Campo Substation provide general public safety and law enforcement services at and near the proposed BPS site. The Sheriff's Department Dulzura Office and Campo Substation are approximately 2.5 miles south and 22 miles east/southeast, respectively, of the proposed BPS site. The California Highway Patrol provides traffic law enforcement services on California public roadways such as Highway 94.

Thirty-three hospitals are located within San Diego County. The closest hospital to the proposed BPS site is Sharp Grossmont Hospital, approximately 20 miles northwest in La Mesa, California. The Sharp Grossmont Hospital is one of the largest health facilities in San Diego County with 524 licensed beds (509 maintained beds) (Sharp 2018). The hospital provides medical and surgical, emergency, critical care and rehabilitation services. Medical response teams serving the area include ambulance and emergency air transportation. The nearest ambulance service is American Medical Response in Jamul.

The proposed BPS site is within a Very High FHSZ, as identified by Cal Fire (Cal Fire 2007), and an Urban-Wildland Interface Zone. The proposed BPS site is in a fire/emergency response area that is designated as State Responsibility Area wherein state authorities (i.e., Cal Fire) are responsible for emergency response efforts during wildfires that threaten human health and property (Cal Fire 2007).

Cal Fire participates in several cooperative programs with federal, other state, and local governments and fire and emergency response agencies. The largest of these cooperative programs involves an agreement for the exchange of fire protection services with federal wildland fire agencies (e.g., U.S. Forest Service, Bureau of Land Management, National Park Service) (Cal Fire 2004). The goal is to have the closest agency respond to a wildfire, regardless of jurisdiction. Through this cooperative relationship, California is able to access federal and state resources throughout the United States to help in times of disaster and, in turn, Cal Fire provides assistance through interstate compact agreements to the federal and other state wildfire agencies throughout the nation. San Diego County (formerly through San Diego Rural Fire Protection District) also has a cooperative agreement with Cal Fire for a full range of structural

and wildland fire protection, as well as emergency medical care services (Cal Fire 2011). The nearest fire stations to the proposed BPS site are Cal Fire Dulzura Fire Station 30, located immediately adjacent to the southwest corner of the site, and Cal Fire Dulzura Station 35, located approximately 2.3 miles southeast of the site.

The County of San Diego Vector Control Program is responsible for the protection of public health through surveillance and control of mosquitoes that are vectors for human disease, including West Nile virus. There are approximately 26 species of mosquitoes that are found in San Diego County, of which at least 8 species are known to carry diseases that can be passed to humans (County of San Diego DEH 2018).

3.17.3 Environmental Consequences

Any increase in safety risks would be considered an adverse impact on health and safety. An impact would be considered major and adverse if a proposed action would do the following:

- Substantially increase risks associated with the safety of construction personnel, CBP and USBP personnel, or the local community.
- Substantially hinder the ability to respond to an emergency.
- Introduce a new health or safety risk for which CBP does not have adequate management and response plans in place.

3.17.3.1 Proposed Action

It is CBP policy to exercise environmental due diligence prior to the acquisition of a property. Information provided during due diligence provides a baseline of environmental conditions at the site and is used to identify removal or remedial actions necessary to make the real property suitable for use, establish mitigation measures, and provide for the health and safety of CBP personnel. The proposed BPS would be constructed in accordance with the *CBP's Construction of Border Patrol Facilities and Acquisition of Vehicles* (OIG-09-91), *U.S. Border Patrol Facilities Design Guide*, and *Whole Building Design Guide (WBDG) for Secure/Safe Facilities* to promote security, control, and safety (DHS 2009, USBP 2014, NIBS 2017a, NIBS 2017b). Specifically, the proposed BPS would incorporate security features (e.g., signage, monitoring and surveillance technologies) necessary to protect the occupants and assets housed at the BPS.

Additionally, because the proposed BPS is within a Very High FHSZ, the BPS would be designed and constructed in accordance with the National Fire Association Administration and the California Fire and Building Codes as amended by San Diego County. Design considerations for fire safety would ensure adequate capacity and distribution of water to accommodate hydrants and building fire suppression systems, building supplies (e.g., fire safe glass, brick or concrete, and insulation), emergency access roads, building setbacks, fire protection systems (e.g., detection and alarm systems), defensible space, and appropriate vegetation and landscaping. See **Section 3.16** for more information on fire protection services.

Contractor Safety. Short-term, negligible, adverse impacts on contractor safety would be expected during construction of the Proposed Action. Construction would pose an increased risk of construction-related accidents; however, adherence to established federal and state safety regulations would reduce this risk. Workers would be required to wear personal protective equipment such as ear protection, steel-toed boots, hard hats, gloves, and other appropriate safety products. Employer responsibilities would include assessing potential hazardous workplace conditions; monitoring employee exposure to workplace chemicals, physical, and biological agents, and ergonomic stressors; recommending and evaluating controls to ensure exposure to personnel is eliminated or adequately controlled; and ensuring a health and safety program is in place to perform occupational health physicals for those workers subject to the use of respiratory protection, or engaged in hazardous waste, or other work requiring medical monitoring. Construction areas would be fenced and appropriately marked with signs to prevent trespassing. Construction equipment and associated trucks transporting material to and from the project sites would use Highway 94. All equipment operators would be required to be fully trained and licensed for their assigned jobs. A project-specific Health and Safety Plan would be prepared to prevent or minimize health and safety risks, including exposure to metals soil and metals. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, procedures for handling excess soil, and other health and safety protocols.

USBP Personnel and Public Safety. Impacts on health and safety from the construction and operation of the proposed BPS would be long-term, minor, and beneficial. The Proposed Action would provide a new BPS facility with modern and safe working conditions to accommodate USBP staff, vehicles, and equipment at the proposed BPS. Anti-terrorism/force protection would be incorporated into the facility design. Additionally, the BPS would have more than one safe egress route for use in case of an emergency. No impacts on public health or safety would be expected during construction because the work site would be fenced and appropriate signs would be posted to further reduce safety risks to the public. Additionally, BMPs implemented during construction of the proposed BPS would reduce the creation of mosquito breeding sources that can hold standing water (see **Section 5.17**) and, therefore, help to reduce associated human exposure to mosquitos. Long-term, beneficial impacts could occur on public health and safety as a result of improving law enforcement efficiency within the Brown Field Station AOR of the U.S./Mexico international border area. As appropriate, the USBP personnel at the proposed BPS would be responsible for the safety of any individuals at the BPS.

3.17.3.2 No Action Alternative

Under the No Action Alternative, a new Brown Field BPS would not be constructed at the Dulzura site, the existing Brown Field BPS would not be relocated, and the proposed construction activities would not occur. The existing BPS facility is in poor condition, undersized, and inadequate to safely or efficiently accommodate the existing numbers of USBP agents assigned to the BPS. The existing BPS does not comply with Uniform Federal Accessibility Standards, Americans with Disabilities Act regulations, or California Seismic

Code. Additionally, the current BPS is outside of the Brown Field Station AOR in an area that is not easily accessed by vehicle and the site lacks an emergency response or egress point on its western border. Therefore, the No Action Alternative would be expected to have long-term, minor, adverse impacts on the safety of USBP personnel and the public from continued use of the existing BPS facilities that are in poor condition and do not meet the needs of USBP.

3.18 Sustainability and Greening

3.18.1 Definition of the Resource

First conceptualized through the establishment of NEPA, sustainability is defined as the means to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling social, economic, and other requirements of present and future generations of Americans (42 USC § 4321 et seq.). Adherence to this policy is guided by the CEQ's regulations for implementing NEPA (40 CFR § 1502.16[e]). Under 40 CFR § 1502, agencies are directed to consider the energy requirements and conservation potential of various alternatives and mitigation measures. For CBP, the concepts of sustainability and smart growth include the ability to adjust to changing geopolitical realities while preserving the environment and working to improve the quality of life for American residents and visitors.

3.18.2 Affected Environment

Regulations shaping federal government sustainable planning and management practices include the Energy Policy Act (EPACT) of 2005, the 2006 Memorandum of Understanding for *Federal Leadership in High Performance and Sustainable Buildings* and accompanying EPACT-compliant "Guiding Principles," the EISA of 2007, and EO 13834, *Efficient Federal Operations* (signed May 17, 2018). The EPACT focused on developing and maintaining reliable and cost-effective energy infrastructure. The 2006 Memorandum of Understanding obligated signatory agencies to design, locate, construct, and operate high-performance and sustainable buildings. The "Guiding Principles" direct the integrated design, energy performance, water conservation, indoor environmental quality, and materials of new buildings and major renovations to reduce impacts of these construction actions on the environment (White House 2006). The United States does not have a national energy code or standard; therefore, energy codes are adopted at the state and local levels of government. Given the lack of standards, energy codes can vary widely. The California Energy Commission developed its own energy codes for new construction of, and additions and alterations to, residential and nonresidential buildings called the *Building Energy Efficiency Standards* (CEC 2015). California's energy codes are updated every 3 years. The most current standard is the 2016 *Building Energy Efficiency Standards*, which was effective as of January 1, 2017.

EO 13834 directs federal agencies to manage their operations, buildings, and vehicles in a manner that increases efficiency, optimizes performance, eliminates unnecessary use of resources, and protects the environment. The EO states that each federal agency should prioritize actions that reduce waste, cut costs, enhance the resilience of federal infrastructure and

operations, and enable more effective accomplishment of its missions. In order to implement this policy, EO 13834 directs federal agencies to meet goals related to energy efficiency, renewable energy and electricity, potable and non-potable water management, performance contracting, high performance sustainable buildings, waste management, acquisition and electronics stewardship (i.e., federal procurement), and fleet management. Each federal agency should track and report its progress towards these goals.

DHS Directive 025-01, *Sustainable Practices for Environmental, Energy and Transportation Management*, establishes a policy to develop and implement sustainable practices programs to help ensure that operations and actions are carried out in an environmentally, economically, and fiscally sound manner. To achieve these goals, DHS and its subagencies develop resource efficient facilities by following the sustainability standards recommended by the National Institute of Building Sciences WBDG (NIBS 2017c). Along with the WBDG, CBP complies with the U.S. Border Patrol Baseline Design Requirements, which provides tailored sustainability standards to guide the construction of new BPSs (USBP 2014). CBP's progress toward meeting its sustainability targets for reduced GHG emissions, energy and water consumption, reduced waste generation, and efficient building performance is reported in the DHS Strategic Sustainability Performance Plan (CBP 2017).

3.18.3 Environmental Consequences

A sustainability analysis to determine potential impacts of sustainable design considers whether a proposed action would contribute to the DHS and CBP's overall sustainability goals as measured by compliance with pertinent regulations. Pursuant to NEPA, EISA, EPCRA, EO 13834, and DHS policies, impacts from energy usage and alternative energy sources are also evaluated. Adverse impacts would be considered major and adverse if implementation of the Proposed Action resulted in the substantial inability to achieve compliance with these regulations and policies.

3.18.3.1 Proposed Action

Impacts on the sustainability of resources and CBP operations from the incorporation of sustainability strategies would be long-term, minor, and beneficial because the new BPS facilities would meet mission requirements while reducing, or completely avoiding, depletion of critical resources like energy, water, and raw materials. Additionally, long-term, minor, adverse impacts would be expected from the disturbance of green and open spaces that would occur to accommodate construction and operation of the proposed BPS. Compliance with the Guiding Principles, EISA, EO 13834, State of California energy codes, and DHS's sustainability and performance policies would be met through incorporation of sustainable development strategies and technologies into the design, construction, and operation of the proposed BPS, including the following:

- Reduction or avoidance of heat island effects (i.e., heat absorption of pavements that leads to unnatural warming of the immediate environment) through preservation of green spaces, use of green roofs, light reflective or light colored materials for buildings and

pavements, or use of canopies or roofs for shade; installation of renewable energy generating systems (e.g., solar panels).

- Design to optimize building performance and efficiency while minimizing the environmental footprint. Examples of this could including selecting a building layout and orientation to encourage daylighting (i.e., use of natural sunlight through optimized window placement) and use of appropriate materials (e.g., light colored brick, concrete, pavements, paints, insulation, and venting) in the building envelope to support optimized indoor air quality, reduced energy required for heating and cooling, and building performance longevity.
- Operation in accordance with emerging federal and state energy performance standards. BPSs normally operate on a 24-hour basis; therefore, their energy usage is greater than a typical office facility. Because constant operation is required, investments in energy conservation are likely to be justified. However, CBP would install renewable energy generating systems (e.g., solar panels and passive photovoltaic hot water tanks), where feasible, to support cost-effectiveness, reduced pollutant air emissions (e.g., GHG), and help achieve compliance with DHS and other federal requirements for the use of renewable energy.
- Incorporate low-impact stormwater management through development of bioretention swales; maintenance of natural drainage divides to keep flow paths dispersed; disconnection of impervious areas such as pavement and roofs from the storm drain network, allowing runoff to be conveyed over pervious areas instead; preservation of naturally vegetated areas and soil types that slow runoff, filter out pollutants, and facilitate infiltration; runoff redirection into or across vegetated areas to help filter runoff and encourage recharge. These techniques would garner long-term benefits on water quality through reduced runoff, reduced potable water consumption, reduced erosion, and improved habitat for wildlife in vegetated areas. See **Sections 3.7** and **3.12** for additional details on impacts on stormwater management.
- Conservation of energy would be supported through procurement and use of energy-efficient technologies (e.g., Energy Star) (USEPA 2017f). Reduced potable water consumption would be achieved through use of low-flow toilets, urinals, laundering equipment, and faucets; use of water efficient landscaping and gray water or rainwater for any landscaping irrigation needs; and implementation of water-use monitoring.
- Use of locally-sourced materials (e.g., concrete, carpet, lighting, and bathroom fixtures), recycled materials (e.g., steel, ceiling panels, and glass), and sustainable wood products during construction to encourage local markets and help reduce air pollutant emissions (e.g., GHGs), fuel energy for transport of goods, and reduced demand for raw materials. The exact percentage of these materials would be determined based on the final building designs. Additionally, materials and debris resulting from proposed construction activities would be recycled or repurposed to the maximum extent practicable in

accordance with San Diego County Construction and Demolition Debris Recycling Ordinance.

- During operation of the proposed BPS, CBP would promote sustainability awareness and participation through green procurement; establishment of recycling programs for paper, cardboard, glass, plastics, and metals (at a minimum) in accordance with local recycling mandates (San Diego County Solid Waste Ordinance); and implementing energy-saving office practices, such as turning off desk lights, computers, and power strips at the end of the workday.

Table 3-32 lists sustainable design factors for building efficiency and performance, and indicates the potential benefits on environmental resources if implemented. Further, the table shows the association between each design factor and the six Guiding Principles.

3.18.3.2 No Action Alternative

Under the No Action Alternative, CBP would not construct a new Brown Field BPS at the proposed Dulzura site and would continue to utilize the existing BPS facilities in San Diego. Although CBP would continue to incorporate environmentally sustainable practices (e.g., solid waste recycling, energy and water conservation practices) into the daily operation and maintenance of the existing BPS facilities, long-term, minor to moderate, adverse impacts on resource sustainability would be expected from the existing facility's continued operation. The existing BPS is in poor condition and the existing technologies and infrastructure would limit the capacity for expanding sustainable practices and compliance with federal and state sustainability regulations.

Table 3-32. Sustainable Design Factors for Building Performance and Efficiency and Conformance to Guiding Principles

Design Factor	Sustainability Goal	Conform to Guiding Principle ^a	Resource Benefits ^b Enhanced Environment	Resource Benefits ^b Air Quality	Resource Benefits ^b Water Consumption	Resource Benefits ^b Energy Consumption	Resource Benefits ^b Stormwater Management/ Water Quality	Resource Benefits ^b Waste Management	Resource Benefits ^b Renewable Energy
Building orientation, shape, footprint, position	Optimize solar gains and support stormwater management strategies. Optimize use of space and efficiency in mission support. Reduce construction requirements through ease of connectivity relative to existing infrastructure and other facilities.	1, 2, 3, 4, 5, 6	X	X	X	X	X	X	X
Daylighting, views, and shade options, and preservation of open space	Reduce energy requirements for lighting, heating, and cooling. Reduce water requirements for cooling. Enhance natural habitat and reduce heat island effects.	1, 2, 3, 6	X	X	X	X	X		
Multi-level structures	Develop buildings and parking lots with substantially smaller site footprints, parking that requires less paved surface areas as compared with standard ground surface lots.	1, 3, 5	X	X		X	X		
Bike storage and shower facilities	Encourage bike commuting that would reduce vehicle space requirement thereby removing vehicle sources of GHG emissions.	1, 6	X	X		X			

Design Factor	Sustainability Goal	Conform to Guiding Principle ^a	Resource Benefits ^b Enhanced Environment	Resource Benefits ^b Air Quality	Resource Benefits ^b Water Consumption	Resource Benefits ^b Energy Consumption	Resource Benefits ^b Stormwater Management/ Water Quality	Resource Benefits ^b Waste Management	Resource Benefits ^b Renewable Energy
Optimized parking design strategies	Maximize space-use efficiency through right-sized parking spaces, encourage carpooling and use of energy efficient and alternative fuel vehicles, use of vegetated roofs and ‘cool’ paving material (to reduce GHG emissions and energy cooling requirements and minimize the heat island effect of paved hardscapes).	1, 4, 5, 6		X		X	X		
Rooftop design	Install green roofs and solar hot water heater panels that would lower energy demands while supporting compliance with policy requirements and agency goals for renewable energy generation.	1, 2, 5, 6	X	X		X	X		X
Potable Water Management	Reduce consumption of potable water through installation of low-flow systems (e.g., urinals, toilets, sinks), water use monitoring, use of gray water for landscaping, urinals, and toilets.	1, 3, 4	X		X		X		
Stormwater Management	Use environmental site design techniques in stormwater management that minimize the impact of development on water quality; manage rooftop rainwater through bioretention; minimize the impact of development on regional surface and groundwater quality, to recharge local aquifers and minimize erosion.	1, 3	X		X		X		

Design Factor	Sustainability Goal	Conform to Guiding Principle ^a	Resource Benefits ^b Enhanced Environment	Resource Benefits ^b Air Quality	Resource Benefits ^b Water Consumption	Resource Benefits ^b Energy Consumption	Resource Benefits ^b Stormwater Management/ Water Quality	Resource Benefits ^b Waste Management	Resource Benefits ^b Renewable Energy
Light pollution reduction	Incorporate proper orientation and intensity of indoor and outdoor lighting, incorporation of motion sensors and low-glare fixtures, and use of energy efficient lighting materials, potential for installed solar powered lighting.	1, 2, 4, 5, 6	X	X		X			X
On-site renewable energy generation	To install (as practicable): rooftop solar panels, passive solar hot water heating systems, vertical wind turbines at building corners, use of ground source loop heating and cooling systems.	1, 2, 4, 5, 6		X	X	X			X
Supply Chain	To use locally-sourced, recycled, and/or repurposed and resource-efficient materials and technologies for construction and operation to reduce requirement on long-distance transport of goods and associated burning of fuel energy sources.		X		X	X		X	

Notes:

^a Guiding Principles by number: 1 – Employ Integrated Design, 2 – Optimize Energy Performance, 3 – Protect and Conserve Water, 4 – Enhance Indoor Environmental Quality, 5 – Reduce Environmental Impact of Materials, 6 – Assess and Consider Climate Change Risks.

^b Green-filled cell with X indicates beneficial impacts on the resource indicated at the column header.

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4. Cumulative and Other Impacts

4.1 Cumulative Impacts

CEQ defines cumulative impacts as the “impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR § 1508.7). Cumulative impacts can result from individually minor but collectively significant past, present, and foreseeable future actions. Informed decision-making is served by consideration of cumulative impacts resulting from projects that are proposed, under construction, recently completed, or anticipated to be implemented in the reasonably foreseeable future.

This cumulative impacts analysis summarizes expected environmental impacts from the combined impacts of past, current, and reasonably foreseeable future projects in accordance with CEQ regulations implementing NEPA and CEQ guidance on cumulative effects (CEQ 1997b). The geographic scope of the analysis varies by resource area. For example, the geographic scope of cumulative impacts on resources such as soils and vegetation is narrow and focused on the location of the resource. The geographic scope of air quality, wildlife and sensitive species, and socioeconomics is much broader and considers more county- or region-wide activities. Projects that were considered for this analysis were identified by reviewing CBP documents; news releases and published media reports; CEQAnet database; publically available information and reports from federal, state, and local agencies. Projects that do not occur in close proximity (i.e., within several miles and generally within the Jamul-Dulzura Subregion) of the proposed BPS site would not contribute to a cumulative impact and are generally not evaluated further.

4.1.1 Past, Present, and Reasonably Foreseeable Future Actions

Past Actions. Past actions are those within the cumulative impacts analysis areas that have occurred prior to the development of this EA. The impacts of these past actions are generally described in **Section 3**.

Present and Reasonably Foreseeable Future Actions. Present actions include current or funded construction projects, CBP or other agency operations in close proximity to the proposed site, and current resource management programs and land use activities within the cumulative impacts analysis areas. Reasonably foreseeable future actions consist of activities that have been approved and can be evaluated with respect to their effects. The following activities are present or reasonably foreseeable future actions:

SR 94 Improvement Project. Caltrans is the lead agency for the SR 94 Improvement Project, which is funded by Jamul Indian Village and mitigates projected impacts on Highway 94 that are associated with the operation of the Hollywood Casino. The project consists of a series of improvement projects that include realigning and widening Highway 94 from north of Melody

Road to south of Reservation Road, and five intersection improvements at Jamacha Boulevard and Jamacha, Steele Canyon, Lyons Valley, and Maxfield roads (Caltrans 2016).

Trails Development. Several trails and pathways are proposed in the vicinity of the proposed BPS as part of the San Diego County Community Trails Master Plan. The closest include the Mother Grundy Truck Trail Pathway that is approximately 0.6 mile northeast of the site and the Marron Valley Road Pathway/Marron Valley Trail and the Honey Springs Road Pathway that are approximately 1 mile southeast and northwest, respectively, of the site (County of San Diego DPLU 2005, County of San Diego DPR 2009). A proposed staging area to be used for construction of these trails and pathways is in Hollenbeck Canyon Wildlife Area on Honey Springs Road off of Highway 94. Trails are typically away from vehicular roads and primarily used for recreation, but can also serve as an alternative mode of transportation. They are soft-surface facilities for single or multiple uses by pedestrians, equestrians, and mountain bicyclists. Pathways are non-motorized transportation facilities (e.g., riding and hiking trails) located within a parkway or road ROW. They are intended to serve both circulation and recreation purposes (County of San Diego DPR 2009). Several regional trail planning efforts are part of the Community Trails Master Plan and include some of the aforementioned trails. One such effort is the Otay Regional Trail Alignment Study, which is a planning study managed by San Diego County in conjunction with other agencies and jurisdictions including USBP, for new trails in the 72,500-acre Otay Trail Study Area, which is adjacent to the west of the proposed BPS site.

Residential and Mixed-Use Development Projects. Several ongoing and proposed residential and mixed-use development projects, ranging from development of 1 to more than 1,000 residences and mixed uses such as commercial and institutional development, were identified within the Jamul-Dulzura Subregion. However, these development projects would be at least 5 miles from the proposed BPS site and most are in or in the vicinity of Jamul, California, which is northwest of the site (County of San Diego PDS 2018a, County of San Diego PDS 2018b).

Bicycle Facilities. The *County of San Diego Bicycle Transportation Plan* proposes several Priority 1 bicycle facilities along Highway 94, including Class II and III bikeways and a Share-the-Road corridor. A Class II bikeway is proposed for a 3-mile stretch of Highway 94 from Jamacha Boulevard to Steele Canyon Road, and a Class III bikeway is proposed for a 3.25-mile stretch of Highway 94 between Steele Canyon Road and Proctor Valley Road. An approximate 43.5-mile stretch of Highway 94 from Proctor Valley Road to Old Highway 80 is proposed for designation as a Share-the-Road corridor. A Class II bikeway, also known as a bike lane, provides a striped and stenciled lane for one-way travel on a street or highway. A Class III bikeway, generally referred to as a bike route, provides for shared use with pedestrian or motor vehicle traffic and are identified only by signage (i.e., no lane markings). A Share-the-Road corridor is a corridor (i.e., public roadway) that is more suitable for 'Share-the-Road' signage rather than official designation as a bikeway facility. Priority 1 projects are the highest priority bicycle facility projects in unincorporated San Diego County. The proposed BPS site is on the segment of Highway 94 that has been proposed as a Share-the-Road corridor (County of San Diego 2008).

Colorado River Conveyance Facility. The proposed Colorado River Conveyance Facility was identified as a long-term project recommendation (i.e., considered for implementation beyond the 2025 timeframe) in the *Final 2013 Regional Water Facilities Optimization and Master Plan Update*. The proposed Colorado River Conveyance Facility would allow the SDCWA to bypass Metropolitan Water District of Southern California facilities and provide direct conveyance of other water supplies from the Colorado River to the San Vicente Reservoir. There are two preferred alternatives for Colorado River conveyance, which include the Tunnel Alignment and the Pipeline Alignment. The Pipeline Alignment, which is also known as Corridor 5C and includes Corridor 5C (Alt), follows a southerly alignment mostly along the U.S./Mexico international border and requires 81 miles of pipeline, 11 miles of tunnel, as well as a mix of open channel canals, pump stations, power generating facilities, pressure control facilities, new electrical transmission lines, and electrical substations. Portions of Corridor 5C including Corridor 5C (Alt) would be approximately 3 to 5 miles north of the proposed BPS site (SDCWA 2014).

Lucky Six Truck Trail Maintenance Repair and Brushing. This project proposes existing road surface and erosion repair, roadside brushing, and future routine maintenance of the Lucky Six Truck Trail, portions of which are within approximately 1.25 miles of the proposed BPS site. The project includes repair of roadbed erosion caused by culvert overtopping along approximately 100 feet of the existing roadbed by utilizing rocks to stabilize roadbed and repair of the road surface with decomposed granite soils generated from the existing roadbed. Additional activities include roadbed grading along the length of the truck trail to repair minor ruts and eroded water bars and removal of up to 80 percent of mature shrubs for up to a distance of 50 feet from the edge of both sides of the roadbed (approximately 36 acres) to provide safe access for fire equipment during wildland fire response (California OPR 2017a).

Emergency Pavement Repair. The project consists of completion of Emergency Director's work to repair damaged pavement (i.e., potholes) on I-8, I-805, and Highways 56 and 94 at various points within San Diego County by grinding the top 0.2 feet of the damaged surface area and repaving it (California OPR 2017b).

Expansion of Rancho Jamul Ecological Reserve. The project involves expansion of the Rancho Jamul Ecological Reserve through CDFW's accepting 3 acres from Penn National Gaming, Inc. for mitigation and acquisition of 40 acres. The 40-acre property is east of Proctor Valley Road and south of Melody Road, and the 3-acre property is near Jamul (California OPR 2017c, California OPR 2017d).

Highway 94 Pavement Overlay. The project proposes to overlay the existing pavement on Highway 94 from post mile 30.0 to 39.0, which is east of the proposed BPS site from approximately Engineer Springs to Tecate. The work includes applying slurry seal from the edge of the pavement, replenishing shoulder backing, and fog sealing existing asphalt dikes. All work would be within the Caltrans ROW. The purpose of this project is to extend service life as the pavement is cracking and deteriorating (California OPR 2018).

4.1.2 Cumulative Impacts Analysis

A cumulative impacts analysis must be conducted within the context of the resource areas. The magnitude and context of the impact on a resource area depends on whether the cumulative effects exceed the capacity of a resource to sustain itself and remain productive (CEQ 1997b). The following discusses potential cumulative impacts that could occur as a result of implementing the Proposed Action and other past, present, and reasonably foreseeable future actions. No major, adverse, cumulative impacts were identified in the cumulative impacts analysis.

Land Use. Long-term, moderate, adverse effects on undeveloped land would be expected from implementation of the Proposed Action in combination with past, present, and reasonably foreseeable future actions. Construction of the proposed BPS would alter land use and introduce new structures to undeveloped land, but would be compatible with surrounding land uses. The Proposed Action would convert agricultural land to a non-agricultural use, although it would not convert any land designated prime farmland or farmland of statewide importance by the FMMP. Past activities that have most affected land use are the development of previously undeveloped land, particularly agricultural land. If the ongoing and future residential and mixed-use development projects convert agricultural land to non-agricultural uses, the Proposed Action would contribute to these cumulative impacts.

Geology and Soils. Cumulative impacts would include impacts on topography and soils due to vegetation clearing and soil disturbance from construction activities, such as grading, contouring, trenching, and increase of impervious surfaces. Other additive effects would include conversion of important farmland soils, particularly if the residential and mixed-use development projects would be sited on these soils. Additional cumulative impacts could occur due to construction of structures within areas with geological hazards; however, it is anticipated that all structures would be designed in accordance with applicable state and local building codes to minimize potential impacts. Minor to moderate, cumulative impacts on geology and soils are expected from the additive effects of the Proposed Action in combination with past, present, and reasonably foreseeable future actions.

Vegetation. Short- and long-term, minor cumulative impacts on vegetation and habitat are expected from the additive effects of the Proposed Action in combination with past, present, and reasonably foreseeable future actions. Construction would remove vegetation, including Diegan coastal sage scrub that is a Tier II community as defined by MSCP. However, as discussed in **Section 3.3**, the vegetation at the proposed BPS site, including the Diegan coastal sage scrub, is disturbed as a result of historical agricultural operations and nearby development (Cal Fire station and Highway 94). Additionally, the Proposed Action would restore at least 14.6 acres of disturbed native and non-native vegetation and establish an Onsite Conservation Area with management, maintenance, and monitoring.

Terrestrial and Aquatic Wildlife Resources. Minor impacts on terrestrial and aquatic wildlife species are expected from the additive effects of the Proposed Action in combination with past,

present, and reasonably foreseeable future actions. Although the proposed BPS site is already highly disturbed providing marginal habitat for wildlife, cumulative impacts would mainly result from loss of habitat, habitat disturbance, and a potential reduction in habitat corridors. Similar impacts would be anticipated with the cumulative actions.

Threatened and Endangered Species. Short- or long-term, negligible effects on federally or state listed threatened, endangered, or candidate species would be expected from implementation of the Proposed Action and past, present, and reasonably foreseeable future actions. While some federal or state listed species have the potential to inhabit the proposed BPS site, the habitat onsite has been previously disturbed. Therefore, effects on federally and state listed threatened, endangered, and candidate species would be minimal, especially with implementation of the BMPs and conservation measures, and the Proposed Action is not likely to adversely affect Otay tarplant, San Diego thornmint, arroyo toad, California condor, southwestern willow flycatcher, least Bell's vireo, and coastal California gnatcatcher. The Proposed Action may affect and is likely to adversely affect Quino checkerspot butterfly; however, CBP would restore disturbed vegetation, including suitable Quino checkerspot butterfly habitat. It is not expected that long-term viability of threatened, endangered, and candidate species would be adversely impacted through cumulative actions. Therefore, negligible cumulative effects on these species are anticipated to occur.

Hydrology and Groundwater. Short-term and long-term, minor to moderate, adverse effects would be expected on hydrology and groundwater from the cumulative impacts of the Proposed Action in combination with past, present, and reasonably foreseeable future actions. Hydrology would be altered on a minor scale due to alteration of topography and increased evaporation from an increase of impervious surfaces. Increased impervious surfaces would decrease the ground surface available for groundwater recharge resulting in long-term, negligible impacts on groundwater levels. All incremental increases to impervious surfaces could cumulatively have adverse effects. Short- and long-term, negligible to minor, adverse impacts on groundwater quality could occur as a result of increased runoff and sedimentation, accidental spills during construction and operation activities, and potential discharge of contaminants to groundwater from use of a septic system. Compliance with design guidance, appropriate construction BMPs, procedures and BMPs outlined in the SPCC Plan, and permitting requirements would minimize potentially adverse effects on groundwater quality. Long-term, moderate, adverse cumulative impacts on groundwater could occur from implementation of the Proposed Action and other development actions from the installation of water wells and continuous requirements for groundwater for potable water supply.

Surface Waters and Waters of the United States. Short- and long-term, minor, adverse, cumulative effects would be expected on surface waters, including potential WoUS, due to implementation of the Proposed Action and other development actions. CWA permits would be obtained for work occurring within jurisdictional features, and projects would comply with applicable federal, state, and local requirements. Surface waters could be temporarily impacted during construction or permanently impacted during operation by increased impervious surfaces

and runoff resulting in increased erosion, sedimentation, and conveyance of non-point source pollutants in runoff. However, preparation of and compliance with a project-specific SWPPP and implementation of BMPs would minimize adverse impacts. If jurisdictional WoUS or other drainages were to occur on the sites of the cumulative development actions, potential cumulative effects would likely be minor to moderate with the implementation of proper BMPs that would be used during and after construction.

Floodplains. The proposed BPS site is within an area of undetermined flood hazards as defined by FEMA, and is adjacent to Dulzura Creek, which contains several tributaries to the creek. However, this area has limited to no floodplains functions because the onsite drainages are entrenched, ephemeral, and low-order features not typically subject to substantial flow volumes. The Proposed Action would include a stormwater management system that would be designed to maintain the rates and volume of stormwater flows off-site to less than existing for up to a 100-year storm event. Therefore, there would be long-term, minor, adverse cumulative effect on floodplains from the Proposed Action in combination with cumulative actions.

Air Quality. Short- and long-term, minor, adverse, cumulative impacts on air quality are expected from the construction, maintenance, and operation of the Proposed Action in combination with past, present, and reasonably foreseeable future actions. Construction activities would result in short-term emissions of criteria pollutants and GHGs as combustion products and evaporative emissions, and would generate particulate matter emissions as fugitive dust from ground-disturbing activities. The Proposed Action would contribute to long-term impacts from past, present, and reasonably foreseeable future actions from use of propane-fueled heating infrastructure, operation of emergency generators, and fuel losses from three storage tanks. However, annual reductions in operational air emissions would result from greater transportation efficiency for USBP personnel. Criteria pollutant emissions from construction and operations would be below *de minimis* threshold of 100 tpy of each pollutant and a General Conformity determination (applicable to O₃ and CO) is not required; therefore, the level of impacts would not be minor. Additionally, air emissions from stationary sources would also not exceed the Air Pollution Control District of San Diego County screening level thresholds. Although the Proposed Action would emit GHGs, it would not meaningfully contribute or lessen the potential effects of global climate change. When the Proposed Action is considered in combination with past, present, and reasonably foreseeable actions (particularly the development and SR 94 improvement projects), there would not be major, adverse cumulative air quality impacts.

Noise. Negligible to minor, cumulative impacts on ambient noise would be expected. The Proposed Action and cumulative actions would result in noise on the immediately surrounding project areas from construction. Most of the cumulative actions would not result in long-term noise impacts; however, the Proposed Action would generate noise during onsite maintenance and operational activities, such as vehicle operation and infrequent helicopter operations. The combined construction noise from the Proposed Action and cumulative actions potentially occurring on a simultaneous or overlapping timeframe and in the immediate area of the proposed BPS (i.e., Emergency Pavement Repair and Highway 94 Pavement Overlay) would likely result

in increased ambient noise levels in the immediate area and adverse effects on sensitive noise receptors. However, the cumulative actions would not be expected to contribute noticeably to the overall noise environment in the vicinity of the proposed BPS; therefore, major, adverse cumulative impacts would not occur.

Cultural Resources. The Proposed Action would not result in major, adverse cumulative impacts on cultural resources. The 2016 cultural resources survey and testing report discusses previously recorded and newly identified resources in the survey area, including 10 prehistoric resources (1 previously recorded and 9 newly identified) within the proposed BPS site and one previously recorded historic resource within the roadway improvements area. Eight prehistoric resources and two historic resources are within or near the AOI (i.e., BPS footprint and roadway improvements area) (CBP 2016d). All cultural resources within the AOI were tested, evaluated for significance, and determined to be ineligible for listing in the NRHP. Therefore, the proposed ground-disturbing activities would not cause a substantial adverse change in the significance of any known cultural resources. No direct or indirect impacts are anticipated for cultural resources outside of the AOI because the resources would not be disturbed. There is potential for the inadvertent discovery of cultural resources and human remains during construction; however, impacts would be avoided with implementation of BMPs. No known existing cemeteries or previously recorded Native American or other human remains are within or adjacent to the proposed BPS site. No impacts on cultural resources are anticipated during operation and maintenance of the proposed BPS. Because the Proposed Action would not have an impact on known cultural resources, it would not contribute to cumulative impacts.

Utilities and Infrastructure. Past, present, and other reasonably foreseeable future development and the accompanying population increases associated with these actions in San Diego County have and will increase demand for electrical supply, water supply, wastewater treatment, and stormwater drainage infrastructure and solid waste management. The Proposed Action would have negligible to minor impacts on utilities and infrastructure. There would be minor, cumulative effects on utilities and infrastructure from the Proposed Action in combination with cumulative actions.

Roadways and Traffic. Short-term, adverse, cumulative impacts on roadways and traffic could occur if multiple construction projects were occurring simultaneously. Implementation of a Traffic Management Plan for each project would reduce or avoid adverse effects during construction. The baseline for assessing impacts on roadways and traffic was formed using existing and projected future (consistent with regional plans) traffic conditions in **Section 3.13.2**. In 2040, with and without the Proposed Action, one intersection (SR 188 and SR 94) is forecast to operate at an unacceptable LOS E or F from surrounding growth and development, and cumulative actions. However, the Proposed Action would have a long-term, negligible, adverse impact on traffic at this intersection. Installation of a traffic signal at this intersection would reduce the cumulative traffic impact and improve the intersection to LOS A and LOS B. Under the Proposed Action, the Proposed BPS Driveway and SR 94 intersection could result in adverse impacts on traffic safety; however, inclusion of roadway/access improvements in the project

design in consultation with Caltrans would avoid these impacts. Long-term, adverse impacts on roadways and traffic (i.e., degradation of LOS values) would occur from increased vehicle traffic of the Proposed Action combined with surrounding growth and cumulative projects. The intersection LOS would be unacceptable due to other growth and cumulative projects without the Proposed Action; therefore, the Proposed Action's contribution to cumulative impacts would be negligible. Roadway improvements and traffic signalization would address the unacceptable intersection LOS at intersections, resulting in minor, adverse cumulative impacts on roadways and traffic.

Aesthetics and Visual Resources. Short- and long-term, minor, adverse impacts on aesthetics and visual resources are expected from the additive effects of the Proposed Action in combination with past, present, and reasonably foreseeable future actions. The presence of construction equipment would produce a short-term impact on visual resources. Once constructed, the proposed BPS would create a permanent structure with exterior nighttime lighting in a previously undeveloped area. Adverse cumulative effects could include temporary visual and aesthetic construction impacts and long-term facilities with the potential introduction of nighttime illumination. However, exterior lighting at the proposed BPS and possibly development from cumulative actions would be designed to minimize glare, and BMPs would be implemented to reduce the contrast of new structures in sensitive areas, thereby minimizing visual impacts. The Proposed Action would not impact TCRs, TCPs, or TCLs during construction.

Hazardous Materials and Wastes. The Proposed Action would have a short- and long-term, minor contribution to cumulative effects on hazardous materials, hazardous wastes, and petroleum products. The Proposed Action would require the storage and use of minimal amounts of hazardous materials and petroleum products, and the generation of minimal amounts of hazardous wastes during construction and operation. It is likely other cumulative actions would be similar. Additionally, the Proposed Action and other actions, including the SR 94 Improvement Project, Emergency Pavement Repair, and Highway 94 Pavement Overlay, could disturb contaminated soils or pavement markings with lead. All actions would comply with applicable regulations for minimization of the potential for releases and discovery of contamination, and prepare and implement SPCCs and other measures as necessary. Therefore, there would be short- and long-term, minor, adverse cumulative impacts on hazardous materials, hazardous wastes, and petroleum products. The Proposed Action would have no impacts on special hazards, environmental contamination, or radon; therefore, it would not contribute to cumulative impacts from these hazards.

Socioeconomics Resources, Environmental Justice, and Protection of Children. Short- and long-term, beneficial, direct and indirect, cumulative impacts on the local economy are expected from implementation of the Proposed Action in combination with past, present, and reasonably foreseeable future actions. Economic benefits would be realized by construction/work expenditures for building materials, construction workers' wages and taxes, and purchases of goods and services in the area. It is not anticipated that construction workers or CBP personnel

would be required to relocate for the Proposed Action; therefore, no cumulative impact on population growth, housing, and most public services would be expected. However, the Proposed Action could result in long-term, minor, adverse impacts on fire protection/emergency medical services, which when combined with cumulative actions, particularly the residential and mixed-use development projects, could result in adverse cumulative impacts. The Proposed Action is not expected to result in disproportionately high and adverse impacts on minority or low income populations; therefore, it would not contribute to cumulative impacts. Most cumulative actions would be in rural locations not close to areas that could have higher concentrations of children; therefore, negligible cumulative impacts on children could result.

Human Health and Safety. Short-term, adverse cumulative impacts on human health and safety would be expected as a result of construction of the Proposed Action and present and reasonably foreseeable future actions. These impacts would be minor because contractors would implement effective health and safety programs during construction of the proposed BPS and cumulative actions that would reduce or eliminate cumulative health and safety impacts on contractors, CBP personnel, and the general public. The Proposed Action would contribute a beneficial, cumulative impact on the general safety of the area by improving law enforcement efficiency within the Brown Field Station AOR.

Sustainability and Greening. Long-term, beneficial cumulative impacts would be expected as a result of incorporating sustainable design into the proposed BPS and cumulative projects. Beneficial impacts from reduced energy and water usage, reduced waste generation, increased use of recycled and repurposed materials, use of cost-effective sustainable technologies, and incorporation of sustainable design would be expected from implementation of the Proposed Action. If sustainable strategies are employed during development of cumulative projects, particularly the residential and mixed-use developments, then similar beneficial impacts would also be expected. These impacts would reflect incorporation of sustainable and low-impact design and operating strategies in compliance with California energy codes, DHS sustainability policies, the EISA, EPACK, and EO 13834.

4.2 Relationship Between the Short-Term Use of the Environment and Long-Term Productivity

Short-term uses of the biophysical components of the human environment include direct construction-related disturbances and direct impacts associated with an increase in population and activity that occurs over a period of less than 5 years. Long-term uses of the human environment include those impacts that occur over a period of more than 5 years, including permanent resource loss.

Proposed construction and disturbance activities would be confined to the southwestern portion of the proposed BPS site. The development of this land would permanently remove a portion of the natural resources, such as vegetation, wildlife habitat, and agricultural resources and important farmland soils.

4.3 CEQA Findings of Significance

This EA was prepared to comply with NEPA, but also meets the requirements of CEQA. Use of the term “significant” to describe impacts differs under these two laws. Under NEPA, an EA is prepared to determine whether an action as a whole (i.e., adverse and beneficial impacts) would have a significant impact on the environment based on context and intensity and, if no unmitigable significant impact would occur, then a FONSI is prepared. Whereas, CEQA requires a determination of each significant impact on the environment resulting from the action. Due to these differences, the determination of significant impacts under CEQA have not been specifically addressed in other sections of this EA.

Section 15382 of the CEQA Guidelines defines a significant impact on the environment as “a substantial, or potential substantial, adverse change in any of the physical conditions within the area affected by the project.” This definition underlies the analysis of environmental impacts for most of the impact issues identified in the CEQA Environmental Checklist Form (CEQA Guidelines Appendix G). Using these significance criteria, it was determined that the Proposed Action would not result in unavoidable significant impacts under CEQA with implementation of the BMPs and mitigation measures identified in **Sections 3 and 5** of this Final EA. **Table 4-1** identifies the CEQA findings of significance for each resource area identified in the CEQA Environmental Checklist Form, and the EA section in which detailed analysis for each resource area is located.

4.4 Growth-Inducing Impacts

Section 15126.2(d) of the CEQA Guidelines defines growth-inducing impacts as “the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” These projects include those that would remove obstacles to population growth (e.g., major expansion of wastewater treatment plant) and those that could encourage and facilitate other activities that could significantly affect the environment.

The Proposed Action would not result in an intensification of land use or remove any barriers to growth in the area surrounding the proposed BPS site. Implementation of the Proposed Action is not anticipated to encourage additional growth in the area because the proposed BPS is not a public-serving land use, nor would it add utilities or public services that could be utilized by other uses. The proposed BPS site and surrounding area lacks infrastructure for most utilities, except electrical supply. Additionally, the area is outside of a water district and is dependent on groundwater wells for potable water.

Additional limitations to growth in the vicinity include presence of publicly-owned land, land under Williamson Act contracts, and steep slopes. Land to the west and south of the proposed BPS site are generally conserved and protected from development as it is part of the Lawrence and Barbara Daley Preserve and Hollenbeck Canyon Wildlife Area, and BLM public lands, respectively. Land immediately to the north, east/northeast, and southwest of the site are

protected under Williamson Act contracts. Most land to the north and east of proposed BPS site contains slopes greater than 25 percent.

Table 4-1. CEQA Findings of Significance for the Proposed Action

CEQA Resource Area	EA Section	CEQA Finding of Significance
Aesthetics	3.14	The Proposed Action would have less than significant impacts on aesthetics because it would not have a substantial adverse effect on scenic vistas, would not substantially damage scenic resources, or substantially degrade the existing visual character and quality of the proposed BPS site and surroundings. Although the proposed BPS would have exterior lighting, it would include only the amount necessary for security purposes and it would be directed downward.
Agriculture and Forestry Resources	3.1, 3.2	The Proposed Action would have less than significant impacts on farmlands and lands covered by Williamson Act contracts, and no impacts on forestry resources. The Proposed Action would result in the direct conversion of 17.8 acres and indirect conversion of 8.9 acres of farmland of local importance, as defined by FMMP, to non-agricultural use. The Proposed Action would not result in the direct or indirect conversion of FMMP-defined prime farmland or farmland of statewide importance. The southwestern portion of the proposed BPS site was used previously for dryland (non-irrigated) agriculture, but has not supported active agricultural operations for several years. Approximately 49 acres of the site north of Campbell Ranch Road would remain undeveloped and available for agriculture if CBP chose to lease the land for that purpose. The Land Evaluation and Site Assessment rating for the Proposed Action is 26.5 points. Because this rating is below 39 points, the Proposed Action is not considered significant and the agricultural land on the proposed BPS site does not require further consideration. The Proposed Action would conflict with Williamson Act Contract 73-97 for the roadway improvements area until the land is acquired by CBP via purchase or easement. Upon acquisition of this land by CBP for the proposed public improvements, Contract 73-97 on the approximately 0.3 acre of covered land would be deemed null and void and terminated. The acquisition of this public improvement area on adjacent property via purchase or easement would not reduce the agricultural viability of that property because the specific roadway improvements area is not farmed and would not affect adjacent agriculture. Therefore, the removal of 0.3 acre of land from Williamson Act Contract 73-97 is not expected to result in additional farmland conversion. After termination of the Williamson Act contract on the portion of contracted land acquired for the roadway improvements, the impact would be less than significant. The proposed BPS site was formerly subject to a Williamson Act contract (Contract 73-95); however, this contract became null and void when the 125.2-acre property was purchased by the federal government. Therefore, the Proposed Action would not conflict with Williamson Act Contract 73-95. The Proposed Action would not conflict with existing zoning or cause rezoning of forestland or timberland, nor would it result in the direct or indirect loss of or conversion of forestland to non-forest use.

CEQA Resource Area	EA Section	CEQA Finding of Significance
Air Quality	3.9	<p>The Proposed Action would have less than significant impacts on air quality. The proposed Brown Field BPS would be sited in Dulzura, San Diego County, California, which is within the San Diego Intrastate Air Quality Control Region. San Diego County is designated by USEPA as nonattainment for 8-hour O₃ (moderate), maintenance for CO, and attainment for the remaining criteria pollutants (USEPA 2017c). The county is designated by the California Environmental Protection Agency as nonattainment for 8- and 1-hour O₃, PM₁₀, and PM_{2.5} and attainment for the remaining criteria pollutants and sulfates, hydrogen sulfide, and visibility reducing particulates (SDAPCD 2017). Criteria pollutant emissions would be below the <i>de minimis</i> threshold of each pollutant during construction and operation of the proposed BPS (see Table 3-12); therefore, the level of impacts would not be significant and a General Conformity determination is not required. Use of equipment, infrastructure, and vehicles would contribute to operational emissions; however, annual reductions in operational air emissions would result from greater transportation efficiency for USBP personnel resulting in long-term, beneficial impacts on air quality. The Proposed Action would not conflict with applicable air quality plans, violate air quality standards, or result in a cumulatively considerable net increase in emissions of 8- and 1-hour O₃, PM₁₀, and PM_{2.5}. The proposed BPS would be in a rural area, and would not expose sensitive receptors to substantial pollutant concentrations. Air quality regulators typically define sensitive receptors as schools, hospitals, resident care facilities, or daycare centers, or other facilities for persons with health conditions that would be adversely impacted by changes in air quality. Although use of diesel-powered equipment during construction could produce temporary odors, the Proposed Action does not include heavy industrial or agricultural uses that are typically associated with objectionable odors.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
Biological Resources	3.3, 3.4, 3.5, 3.7	<p>The Proposed Action would have less than significant impacts on biological resources. The Proposed Action would not have a substantial adverse effect on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. San Diego County ordinances do not apply to federally owned public lands within the county, and CBP is not a signatory to the MSCP and, therefore, is not required to comply with MSCP-specific mitigation requirements and ratios. Any CBP mitigation requirements are fulfilled through Endangered Species Act Section 7 consultation with USFWS. As such, mitigation for temporary and permanent impacts on Diegan coastal sage scrub and flat-topped buckwheat vegetation communities would be accomplished through restoration of at least 14.6 acres of disturbed native and non-native vegetation. The establishment of an Onsite Conservation Area, on which CBP would implement management, maintenance, and monitoring, would act to avoid additional impacts. Short- and long-term, indirect, negligible effects on Otay tarplant and San Diego thornmint and short-term, direct and/or indirect, negligible effects on arroyo toad, California condor, southwestern willow flycatcher, least Bell’s vireo, and coastal California gnatcatcher. Appropriate BMPs would be implemented to reduce or eliminate adverse effects on all species except Quino checkerspot butterfly (see Section 5). Short-term, direct and indirect, negligible, adverse effects on Quino checkerspot butterfly. The Proposed Action may affect and is likely to adversely affect Quino checkerspot butterfly; however, CBP would restore disturbed vegetation, including suitable Quino checkerspot butterfly habitat. The Proposed Action would not have a substantial adverse effect on sensitive natural communities. Habitat type, relative presence of habitat type near the proposed BPS site, its condition and size, presence or potential for sensitive species, relative connectivity with other native habitat, wildlife species, activity near the proposed BPS site, and relationship to the MSCP are discussed in Section 3.4. The Proposed Action would have no impact on federally protected wetlands. Although direct impacts to several potentially jurisdictional features is unavoidable, including the permanent discharge of fill to 0.057 acre of non-wetland WoUS, no net loss of aquatic function is expected after providing a minimum of 0.057 acre of WoUS, or equivalent aquatic function, establishment through the purchase of credit at an approved mitigation bank or on-site mitigation program subject to agency approval, onsite preservation and long-term management of WoUS, and enhancement of onsite wetland and non-wetland WoUS. Construction and operation of the proposed BPS would not interfere substantially with the movement or migratory corridors of any native resident, established, or migratory fish or wildlife species, or native wildlife nursery sites. The Proposed Action would not conflict with any local policies or ordinances protecting biological resources.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
Cultural Resources	3.11	<p>The Proposed Action would have less than significant impacts on cultural resources. Under CEQA, a proposed project is considered to have a significant effect on the environment if it can be expected to “cause a substantial adverse change in the significance of an historical resource” (PRC § 21084.1; CEQA Guidelines, CCR § 15064.5[b]). According to subdivision (h) of PRC § 21083.2, “a non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects.” These resources were recorded or updated at the time of the 2016 cultural resources survey, do not qualify as historical resources under CEQA, and are not unique archaeological resources.</p> <p>There is potential for adverse effects due to ground-disturbing activities, but these activities would not cause a substantial adverse change in the significance of any known cultural resources. There are no known existing cemeteries or previously recorded Native American or other human remains within or adjacent to the proposed BPS site, and no impacts are anticipated for these resources. There are no known unique paleontological resources or geologic features on the proposed BPS site. Resources were recorded or updated at the time of the 2016 cultural resources survey, do not qualify as <i>historical resources</i> under CEQA, and are not unique archaeological resources. There is potential for the inadvertent discovery of cultural resources and human remains during construction; however, with implementation of BMPs, impacts on unknown cultural resources would be avoided. The California SHPO concurred with the finding of ‘No Historic Properties Affected’ for the Proposed Action (see Appendix A).</p>
Geology and Soils	3.2	<p>The Proposed Action would have less than significant impacts on geology and soils. The proposed BPS site is within a seismically active region of southern California; however, it is not within an Alquist-Priolo Earthquake Fault Zone and there are no known major or active faults on or in the immediate vicinity of the site. Additionally, the site is within a low liquefaction risk zone, and it is not within a landslide susceptibility area or an area of moderate or high soil slip susceptibility (i.e., landslides). The proposed facilities would meet all building requirements outlined in applicable state and local building codes to minimize potential impacts from earthquakes. Therefore, the proposed BPS would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault, seismic ground shaking, seismic-related ground failure (e.g., liquefaction), or landslides. The Proposed Action would not result in substantial soil erosion and would implement BMPs during and after construction to reduce erosion impacts (see Section 5). A geotechnical engineering report prepared for the Proposed Action concluded the site is suitable for construction of the proposed BPS provided that recommendations identified in the report are implemented during design and construction (Terracon 2018). The proposed BPS site is not in a potential expansive soil area. The Proposed Action would have a septic system with subsurface discharge of the effluent to the proposed leach field.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
GHG Emissions	3.9	<p>The Proposed Action would have less than significant impacts on GHG emissions. The Proposed Action would emit GHGs during construction, but would reduce annual GHG emissions during operation. Use of equipment, infrastructure, and vehicles would contribute to operational emissions; however, annual reductions in operational air emissions, including GHGs, would result from greater transportation efficiency for USBP personnel. As such, the Proposed Action would result in a long-term, beneficial impact on air quality and GHGs from changes to annual emissions of GHGs from operations. However, the increases (during construction) and decreases (during operation) of GHG emission rates would not meaningfully contribute or lessen the potential effects of global climate change. The Proposed Action would not conflict with applicable plans, policies, or regulations related to reducing GHG emissions.</p>
Hazards and Hazardous Materials	3.13, 3.15, 3.17	<p>The Proposed Action would have less than significant impacts on hazards and hazardous materials. Construction and operation of the proposed BPS would require the storage and use of hazardous materials and petroleum products, and the generation of hazardous wastes. Additionally, the Proposed Action would include an approximately 15,000-gallon propane tank, two 12,000-gallon gasoline storage tanks, and one 8,000-gallon diesel storage tank. These aboveground storage tanks would be inspected regularly to ensure they are operating properly and meet all applicable regulatory standards. The gasoline and diesel storage tanks would be double-walled and include leak detection infrastructure. In the event of a leak or spill, all procedures outlined in the SPCC Plan would be followed during construction and operation. The closest school is approximately 9 miles from the proposed BPS site. The proposed BPS site was reviewed in the California Department of Toxic Substances Control EnviroStor database, and there are no listings for the site. The closest cleanup sites are inactive military evaluation sites at Otay Mountain Airport/Otay Mesa Installation approximately 5 miles to the southwest. The Proposed Action is not near a private airport, but it would include a helipad. Therefore, the Proposed Action would not result in a significant hazard to the public or environment related to hazardous materials or hazardous materials sites. This facility would be used infrequently and would comply with all federal, state, and local regulations during operation. The Proposed Action is not within an airport land use plan or within 2 miles of a public airport. The Proposed Action would not impair implementation of or physically disrupt emergency response plans. Any temporary lane closure on Highway 94 to make proposed roadway improvements would not close the roadway or result in significant access restrictions, as emergency vehicles would continue to be able to access the area and use the roadway. The proposed BPS is within a Very High FHSZ; therefore, the BPS would be designed and constructed in accordance with the National Fire Association Administration and the California Fire and Building Codes as amended by San Diego County.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
Hydrology and Water Quality	3.6, 3.7, 3.8	<p>The Proposed Action would have less than significant impacts on hydrology and water quality. The Proposed Action would not violate water quality standards or waste discharge requirements. The proposed BPS would result in up to approximately 15 acres of new impervious surfaces and potential realignment of onsite drainages. The proposed stormwater management system, which would consist of collection and transfer infrastructure and a hydromodification basin (i.e., dry detention basin), would be designed to store and convey the peak discharge for a 100-year design event. Discharge points would remain the same, but would be improved in some areas, and stormwater discharge would comply with San Diego County allowable discharge rates. Therefore, while the Proposed Action would increase impervious surfaces, it would maintain predevelopment hydrology and reduce runoff, and would not result in significant erosion or flooding issues. Construction of the Proposed Action would require an NPDES construction general permit; however, because it is a federal project, the site plan approval and proposed grading and drainage are not subject to review by the San Diego County Department of Public Works and the Proposed Action is not subject to the San Diego Municipal Stormwater Permit. However, CBP intends to meet or exceed local stormwater standards, including permanent site design, source control, pollutant control, and hydromodification management practices in accordance with the County of San Diego BMP Design Manual. The Proposed Action would require one water well. The <i>Well Report for Brown Field Border Patrol Station</i> concluded that the well would not have significant impacts on groundwater supplies/storage or interfere with groundwater recharge. Therefore, the Proposed Action would not result in a net deficit in aquifer volume or lower the aquifer volume such that the production rates of nearby existing wells would not be able to support their uses. The proposed OWTS would consist of a septic system and leach field in which wastewater would be treated prior to the effluent being discharged subsurface at the leach field. Design and operation of the proposed OWTS would comply with San Diego County DEH and San Diego RWQCB regulations; therefore, there would not be a significant impact on water quality. The proposed BPS site is not within a 100-year flood hazard area. The site is within FEMA Zone D, which are areas where there are possible but undetermined flood hazards. Onsite drainages are entrenched, ephemeral, low-order features that are not typically subject to substantial flow volumes and, therefore, have limited if any floodplain functions associated with them. The proposed BPS site is not downstream of a dam or levee and is not near areas where tsunamis or seiches could occur. Therefore, the Proposed Action would not expose people or structures to flooding.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
Land Use and Planning	3.1	<p>The Proposed Action would have less than significant impacts on land use and planning. The proposed BPS would not disrupt or physically divide an established community. The Proposed Action is consistent with the intent of the land use policies in San Diego County General Plan and other local land use policies adopted for the purposes of avoiding or mitigating effects. The San Diego County Zoning Ordinance does not apply to federal property. The proposed BPS site is within the Unincorporated Land in the Metropolitan-Lakeside-Jamul Segment of the South County Subarea Plan of the MSCP. However, CBP is not a signatory to the MSCP and, therefore, is not required to comply with MSCP-specific mitigation requirements. Any CBP mitigation requirements are fulfilled through Endangered Species Act Section 7 consultation with USFWS. USBP and other law enforcement and fire control agencies and agencies that respond to natural disasters are permitted to perform their activities within any preserve system subject to all applicable requirements of federal and state law. The MSCP creates no additional permit requirements beyond those of existing federal and state law for the activities of these agencies (County of San Diego 1997). Therefore, the Proposed Action would not conflict with the MSCP.</p>
Mineral Resources	3.2	<p>The Proposed Action would have no impacts on mineral resources. The proposed BPS site is not within a designated mineral resource zone or an area with a known mineral resource deposit. Therefore, the Proposed Action would not result in the loss of availability of a known mineral resource or locally important mineral resource recovery site.</p>
Noise	3.10	<p>The Proposed Action would have less than significant impacts on noise. Construction and operation of the proposed BPS would not expose people to excessive noise or vibrations. Although, the San Diego County Noise Ordinance does not apply to federal property, CBP would comply with the ordinance and other local standards to the extent practicable. Short-term noise would be generated during construction, and long-term, intermittent noise would be generated during BPS operation; however, the change in ambient noise levels would not be substantial. The Proposed Action is not near a private airport, but it would include a helipad. This facility would be used infrequently and the resulting noise generated by helicopter operations would be similar to those conducted at the Cal Fire helipad adjacent to the proposed BPS site. The Proposed Action is not within an airport land use plan or within 2 miles of a public airport.</p>
Population and Housing	3.16	<p>The Proposed Action would have no impact on population and housing. The Proposed Action would not result in a direct or indirect change in population that would require housing, nor would it displace existing housing or people requiring new housing.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
Public Services	3.16	<p>The Proposed Action would have less than significant impacts on fire protection and no impacts on other public services (police protection, schools, parks, and other public facilities). The Proposed Action could increase the demand for fire protection/emergency medical services. The proposed BPS site is within the Wildland Urban-Interface and Very High FHSZ, and operation of the proposed BPS would require a 15,000-gallon propane tank for heating purposes, which increases the risk for fire hazards. The proposed BPS would be designed and constructed in accordance with all applicable federal, state, and local fire protection regulations and standards. The Proposed Action would not increase response times to the proposed BPS site or other locations, and response times from Cal Fire stations 30, 35, 36, and 37 to the proposed BPS site would be within the acceptable range as identified by the San Diego County General Plan. If applicable, CBP would prepare a Fire Protection Plan and submit a Project Facility Availability Form to the SDCFA prior to construction. The Proposed Action would not result in a change in population or demographics that would require a change in schools, parks, or other public facilities.</p>
Recreation	3.1	<p>The Proposed Action would have no impacts on recreation. The proposed BPS would not increase the use of parks or recreational facilities, nor would it include or require the expansion of recreational facilities.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
Transportation/Traffic	3.13	<p>The Proposed Action would have less than significant impacts with mitigation incorporated. The Proposed Action would temporarily increase daily and peak hour traffic near the proposed BPS site during construction, and result in inadequate access from the hauling of material and debris, construction equipment, and construction worker commutes to and from the BPS site. No lane closures on SR 94 would be necessary during construction and temporary traffic control signs would notify motorists traveling on westbound and eastbound SR 94 of the construction. However, these effects would be short-term and temporary. With the implementation of a Traffic Management Plan, there would be less than significant adverse effects. During operation, the Proposed Action would have a long-term, negligible, adverse impact on traffic at Intersection 4 (SR 188 and SR 94), which would operate at LOS E or F with and without the Proposed Action. The cumulative traffic impact at this intersection could be mitigated with installation of a traffic signal. Signalization of this intersection would improve LOS to A and B during the AM and PM peak hours, respectively (see Table 3-25), and there would be no adverse effects at Intersection 4. The Proposed Action could result in potentially significant impacts/adverse effects at Intersection 5 (proposed BPS driveway and SR 94) due to safety concerns from close proximity of the proposed BPS driveway and the existing driveway of the adjacent Cal Fire station. However, these traffic impacts could be mitigated by incorporating roadway/access improvements, including a dedicated left turn lane on eastbound SR 94, 10-foot shoulders, and deceleration and acceleration lanes, per Caltrans highway design standards after consultation with Caltrans. These roadway/access improvements include addition of a deceleration right turn lane from westbound SR 94 to the proposed BPS driveway, a dedicated left turn at eastbound SR 94 to the proposed BPS driveway (if ROW width allows), and an acceleration lane from the proposed BPS driveway to westbound SR 94. The SR 94 roadway segment analyzed in the Traffic Impact Study is forecasted to maintain LOS E during the AM and PM peak hours in 2020 and 2040 (without and with Proposed Action), resulting in a long-term, adverse impact (see Table 3-26). However, the Proposed Action would not conflict with the San Diego Association of Government CMP, which designates SR 94 from Avocado Road to old Highway 80 as ‘CMP Highway’ because the average travel speed would not decrease by more than 1 second. Potential mitigation for the cumulative traffic impact would be to widen SR 94 as identified in the SR 94 Improvement Project. With the implementation of this potential mitigation, there would be no adverse impacts. The proposed improvements at Intersection 5 should be designed to accommodate the proposed future roadway section as part of the widening as identified in the Caltrans SR 94 Improvement Project. Other improvements include realignment of deficient curves, installation of passing lanes, widening of traveled way, installation of standard 8-foot shoulders, and adding/improving turn pockets. There are no public or public use airports within 15 miles of the proposed BPS site, and there is no bicycle or pedestrian infrastructure at or near the proposed BPS site. Therefore, the Proposed Action would have no impacts on air traffic and would not conflict with bicycle or pedestrian facilities. The San Diego Metropolitan Transit System’s bus route 894 provides limited service Monday through Friday along SR 94; however, the Proposed Action would not affect this service.</p>

CEQA Resource Area	EA Section	CEQA Finding of Significance
Tribal Cultural Resources	3.11	<p>The Proposed Action would have no impacts on tribal cultural resources. Eight prehistoric resources and two historic resources are within or near the AOI. All prehistoric cultural resources within the AOI were tested, evaluated for significance, and determined to be ineligible for listing in the NRHP. Resources were recorded or updated at the time of the 2016 cultural resources survey, do not qualify as <i>historical resources</i> under CEQA, and are not unique archaeological resources. CBP complied with Section 106 of the NHPA and CEQA by notifying and coordinating with all local Native American tribes identified by the Native American Heritage Commission regarding the Proposed Action. No TCRs, TCPs, or TCLs have been identified in the proposed BPS site. The Jamul Indian Village, the Campo Band of Mission Indians, and the Viejas Band of Kumeyaay Indians requested that qualified cultural monitors are present during construction of the Proposed Action. The California SHPO concurred with the finding of ‘No Historic Properties Affected’ for the Proposed Action.</p>
Utilities and Service Systems	3.6, 3.12	<p>The Proposed Action would have less than significant impacts on utilities and service systems. An OWTS (septic system with leach field) that would be appropriately sized for the proposed BPS would be installed at the proposed BPS site. It would be designed to treat wastewater in accordance with all San Diego RWQCB and San Diego County DEH requirements. Therefore, the proposed BPS would not exceed wastewater treatment requirements or require the construction of new wastewater treatment facilities that would cause significant effects. The proposed BPS would be served by one onsite water well, which has already been installed for testing purposes. The <i>Well Report for Brown Field Border Patrol Station</i> concluded that the drilled well is adequate to serve the proposed BPS and would not have significant impacts on groundwater storage or interfere with adjacent wells. Tests identified high levels of fluoride and manganese in the well water; therefore, in addition to standard disinfection, the water would be treated to remove the excess contaminants. Therefore, the Proposed Action would have sufficient water supplies to serve the BPS, and while it would require construction of a new potable water treatment facility it would not cause significant effects. The Proposed Action includes the construction of a new stormwater management system consisting of collection and transfer infrastructure (inlets, pipes, channels, culverts) and a hydromodification basin (dry detention basin). The system would not cause significant effects and would reduce the volume of runoff discharged to the receiving stream. The Proposed Action would generate solid waste during construction and operation, but most construction debris would be recycled and operational waste would be recycled to the maximum extent feasible. Remaining wastes would be disposed of at a permitted solid waste landfill. CBP would comply with all applicable federal, state, and local regulations related to solid waste.</p>

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5. Best Management Practices

The Proposed Action has the potential to result in adverse environmental impacts. However, the Proposed Action would be an environmentally acceptable action and overall would not result in major, adverse environmental impacts. If the Proposed Action were implemented, the following BMPs, measures, design techniques, and mitigation would be carried out by CBP for the proposed USBP Brown Field BPS:

5.1 Land Use

1. Notify and coordinate with all landowners with property adjacent to the proposed BPS site in advance of construction activities to discuss the construction schedule and any potential concerns.
2. Initiate and complete acquisition of land protected under Williamson Act Contract 73-97 for public improvements (i.e., roadway improvements). Upon acquisition of this land by CBP, Williamson Act Contract 73-97 and the protections on this portion of land would be null and void and terminated.

5.2 Geology and Soils

1. Implement erosion control measures, including those identified by San Diego County and the San Diego RWQCB, to prevent movement of soil and sediment and to minimize turbidity increases in water. This includes measures such as installation and maintenance of silt fencing and sediment traps.
2. Implement routine road maintenance practices to avoid making windrows with the soils once grading activities are complete and use any excess soils on site to raise and shape the road surface.
3. Apply water to disturbed soil to reduce dust and re-vegetate disturbed areas as soon as possible following ground disturbance, as appropriate.
4. Plan construction activities and restrict construction traffic to specific areas and routes of travel to minimize soil compaction.
5. Obtain materials such as gravel, topsoil, or fill from sources that are compatible with the proposed BPS site, are from legally permitted sites, and are certified weed-free. Do not use materials from undisturbed areas adjacent to the proposed BPS site.

5.3 Vegetation

1. Limit vehicle refueling and maintenance to upland areas with established spill prevention equipment in place (e.g., straw wattles, lined or paved areas, areas with no direct drains).
2. Maintain stores of chemicals and hazardous materials in proper containers and within spill retention basins large enough to capture and hold the chemicals being housed.

3. Maintain spill clean-up kits and drip pans during construction of the facility.
4. Use flagging or orange fencing to create an avoidance buffer around sensitive plant species or vegetation communities within the disturbance area.
5. Institute environmental awareness training for employees and contractors.
6. Implement a fugitive dust control plan during construction.
7. Follow the CBP protocol for cleaning vehicles and equipment to avoid the spread of invasive species.
8. Use species appropriate for Diegan Coastal Sage Scrub (Coastal Form, Holland 32510) for landscaping and revegetation, as practicable.
9. If irrigation of landscaped vegetation is necessary, restrict it to the landscaped areas and avoid native habitat.
10. Incorporate designs that minimize runoff or use of pesticides.
11. Design artificial topography in disturbance area to take advantage of natural rain runoff, and apply surface materials (e.g., mulch) to retain moisture in the soil.
12. After construction, repair damage to landscaping caused by runoff and replace any dead landscaping plants with similar species. If a particular species dies repeatedly, a more suitable species should be sought.
13. Develop and implement a fire prevention and suppression plan for all activities that require welding or otherwise have a risk of ignition (e.g., use of string trimmers, edgers or chainsaws).
14. Existing roads would be used to access the construction area and no traffic would be allowed outside of those areas.
15. All construction vehicles, equipment, and personally owned vehicles would be parked in the approved disturbance area. Access routes, parking areas, and staging areas would be designated with easily observed removable or biodegradable markers.
16. All contractors and maintenance personnel would operate within the designated and approved disturbance area.
17. CBP would offset a portion of the permanent impacts and all of the temporary impacts on potential Quino checkerspot butterfly habitat by restoring Quino checkerspot butterfly habitat with shrubs and low-density habitat without shrubs. CBP would also control invasive species on approximately 5.5 acres of the undeveloped portion of the proposed BPS site and conserve/manage the remaining undeveloped portion of the site.
18. CBP would submit preliminary working final upland habitat restoration/enhancement plans for the disturbance area and area of restoration of field/pasture outside of the disturbance area to USFWS for review and approval prior to initiating project impacts. These plans would be based on the draft and the comments provided by USFWS. The

final plans would be completed after construction with mapping of actual construction impacts. In addition to the measures proposed in the consultation, the final plans would include the following information and conditions:

- a. All final specifications and topographic-based grading, planting and irrigation plans (with 10-foot contours). All upland habitat restoration/enhancement sites would be prepared for planting by decompacting the top soil in a way that mimics natural upland habitat top soil to the maximum extent practicable while maintaining slope stability. Topsoil and plant materials salvaged from the upland habitat areas to be impacted would be transplanted to, and/or used as a seed/cutting source for, the upland habitat restoration/creation areas to the maximum extent practicable as approved by USFWS. Planting and irrigation would not be installed until USFWS has approved of upland habitat restoration/creation site grading. All planting would be installed in a way that mimics natural plant distribution, and not in rows.
- b. Planting palettes (plant species, size, and number/acre) and seed mix (plant species and pounds/acre). The upland plant palette proposed in the draft plans would include native species specifically associated with the habitat types including Quino checkerspot butterfly host and nectar species. Unless otherwise approved by USFWS, only locally native species (no cultivars) obtained from as close to the BPS site as possible would be used. The source and proof of local nativeness of all plant material and seed would be provided.
- c. Container plant survival would be 80 percent of the initial plantings at the end of 5 years. At the first and second anniversary of plant installation, all dead plants would be replaced unless their function has been replaced by natural recruitment.
- d. A final implementation schedule that indicates when all upland habitat impacts, as well as creation/restoration/enhancement grading, planting, and irrigation would begin and end. Upland habitat creation/restoration/enhancement grading, planting and irrigation would be completed during the concurrent or next planting season (i.e., late fall to early spring) after finishing grading within the creation/restoration/enhancement area. Any temporal loss of upland habitat caused by delays in creation/restoration/enhancement would be mitigated through upland habitat preservation/creation/restoration/enhancement at a 0.5:1 ratio for every 6 months of delay (i.e., 1:1 for 12 months delay, 1.5:1 for 18 months delay, etc.). In the event that CBP is wholly or partly prevented from performing obligations under the final plans (causing temporal losses due to delays) because of unforeseeable circumstances or causes beyond the reasonable control, and without the fault or negligence of CBP, CBP would be excused by such unforeseeable causes.
- e. Five years of success criteria for upland creation/restoration/enhancement areas including a total of 40-65 percent absolute cover; evidence of natural recruitment of multiple species; 0 percent coverage for California Invasive Plant Council (Cal-IPC)

- rated High or Moderate, and no more than 10 percent coverage for other exotic/weed species.
- f. A qualitative and quantitative vegetation monitoring plan with a map of proposed sampling locations. Photo points would be used for qualitative monitoring and stratified-random sampling would be used for all quantitative monitoring.
 - g. Contingency measures in the event of creation/restoration/enhancement failure.
 - h. Annual mitigation maintenance and monitoring reports would be submitted to USFWS after the maintenance and monitoring period and no later than December 1 of each year.
19. CBP would ensure that development landscaping within 300 feet of on- or off-site habitat to be avoided/preserved does not include exotic plant species that may be invasive to native habitats. Exotic plant species not to be used include any species listed on the Cal-IPC “Invasive Plant Inventory” List. This list includes such species as pepper trees, pampas grass, fountain grass, ice plant, myoporum, black locust, capeweed, tree of heaven, periwinkle, sweet alyssum, English ivy, French broom, Scotch broom, and Spanish broom. A copy of the complete list can be obtained from Cal-IPC’s web site at <http://www.cal-ipc.org>. In addition, landscaping should not use plants that require intensive irrigation, fertilizers, or pesticides adjacent to preserve areas and water runoff from landscaped areas should be directed away from the biological conservation easement area and contained and/or treated within the development footprint. CBP would submit a draft list of species to be included in the landscaping to USFWS for approval at least 15 days prior to initiating project impacts. CBP would submit to USFWS the final list of species to be included in the landscaping within 30 days of receiving approval of the draft list of species.
20. CBP would implement perpetual management, maintenance, and monitoring for the 105.8-acre Onsite Conservation Area. The Onsite Conservation Area includes the areas on the property not currently planned for development by CBP or reserved for ongoing use (i.e. the permanently impacted areas in the proposed disturbance area, leach system reserve, primary leach field and Campbell Ranch Road). CBP would submit a draft long-term management plan for the Onsite Conservation Area to USFWS for review and approval. The long-term management plan would include, but not be limited to, the following: a) the estimated cost of long-term management of the Onsite Conservation Area; b) proposed land manager’s name, qualifications, business address, and contact information; and c) method of protecting the resources in perpetuity (e.g., conservation easement), monitoring schedule, measures to prevent human and exotic species encroachment, funding mechanism, and contingency measures should problems occur.
21. CBP’s long-term management plan for the Onsite Conservation Area would specify that no easements or activities (e.g., cattle grazing, fuel modification zones, public trails, drainage facilities, walls, maintenance access roads, utility easements) that would

negatively impact the value of the Onsite Conservation Area to listed species or result in soil disturbance and/or native vegetation removal would be allowed within the Onsite Conservation Area.

22. If CBP determines that it is necessary to use the Onsite Conservation Area in a manner that is inconsistent with the long-term management plan referenced in Measures 20 and 21 above, then CBP would seek further consultation with USFWS.

5.4 Terrestrial and Aquatic Wildlife Resources

1. CBP would ensure that the following conditions are implemented during project construction:
 - a. Employees would strictly limit their activities, vehicles, equipment, and construction materials to the disturbance area.
 - b. The BPS site would be kept as clean of debris as possible. All food related trash items would be enclosed in sealed containers and regularly removed from the site.
 - c. Pets of project personnel would not be allowed on the BPS site.
 - d. Disposal or temporary placement of excess fill, brush or other debris would not be allowed in WoUS or their banks.
2. Impacts from fugitive dust would be avoided and minimized through watering and other appropriate measures.
3. Create and implement environmental awareness training for construction workers and personnel.
4. Implement a 15-mile per hour speed limit on unpaved roads to reduce vehicle-wildlife collisions.
5. Conduct construction within drainages when water is absent to avoid impacts to aquatic species downstream.
6. Use flagging or orange fencing to create an avoidance buffer around sensitive plants or wildlife habitat (such as nests or dens) in the disturbance area.
7. Construction workers and the biological monitor would inspect work areas and equipment for migratory bird nests every day. If a nest is identified, it would be destroyed before it contains eggs. If an active nest containing eggs or chicks is identified, an area of sufficient size would be flagged to create a buffer large enough to avoid direct and indirect effects; no work would occur within that flagged area without further consultation with the USFWS.
8. If project construction (other than clearing and grubbing of sensitive habitats) occurs during the avian breeding season (March 15 to September 15, or sooner if a qualified biologist demonstrates to the satisfaction of USFWS that all nesting is complete), a

qualified biologist would conduct pre-construction surveys in adjacent habitat (up to 500 feet away from the proposed disturbance area) to determine the location of any active bird nests in the area, including raptors and ground nesting birds. The survey should begin not more than three days prior to the beginning of construction activities. USFWS would be notified if any nesting birds are found. During construction, no activity would occur within 300 feet of active nesting territories (500 feet for raptors or listed species), unless measures are implemented to minimize the noise and disturbance to those adjacent birds. Exceptions to this measure includes cases where surveys confirm that adjacent habitat is not occupied or where noise studies confirm that construction noise levels are below 60 dBA hourly L_{eq} along the edge of adjacent habitat. If construction activities are not completed prior to the breeding season and noise levels exceed this threshold, noise barriers would be erected to reduce noise impacts to occupied habitat to below 60 dBA hourly L_{eq} and/or the culpable activities would be suspended.

9. For maintenance of the proposed BPS, time vegetation control outside of the breeding season or conduct nesting bird surveys prior to vegetation control or construction between February 1 (January 1 for raptors) and August 31.
10. Point floodlights used for construction and exterior lighting downward to illuminate the necessary areas and install perch deterrents on poles.
11. Implement a fugitive dust control plan during construction (e.g., wetting the ground surface, controlling vehicle access, rerouting).
12. For operations, keep all vehicular activity on existing and proposed roads.
13. CBP would ensure that development lighting adjacent to all on- or off-site habitat would be directed away from and/or shielded so as not to illuminate native habitats. CBP would submit a lighting plan to USFWS prior to initiating project impacts.

5.5 Threatened and Endangered Species

1. All access routes within the proposed Brown Field BPS site would be marked prior to construction.
2. All activities (including off-road driving and ground disturbing activities) outside of the marked access routes and areas to be disturbed would be avoided.
3. A qualified biologist would be present during construction to document the implementation of BMPs. The biologist would be present full-time for the duration of construction.
4. Clearing and grubbing in suitable habitat of threatened or endangered species would be limited to the minimum necessary to maintain drivable access roads.

5.5.1 Plants

Table 5-1 presents the suitable habitat and blooming seasons for Otay tarplant and San Diego thornmint. In addition to the BMPs and measures listed in **Section 5.3**, the following would be implemented to reduce potential impacts on listed plants.

1. A tarplant and thornmint biologist would survey the proposed disturbance area for tarplant and thornmint during the bloom season prior to project construction. The biologist must be familiar with the biology and ecology of these species. If these species are found, CBP would reinitiate consultation with USFWS.
2. For maintenance of the proposed BPS, all vegetation control activities would avoid areas of native habitat from January 1 through August 31. If vegetation control (e.g., use of herbicides or mechanical removal) in such areas, within the approved disturbance area, is unavoidable during this time, then a qualified biologist would conduct a survey. Any sensitive plant occurrences would be protected. No soil would be removed from areas of suitable threatened or endangered annual plant species habitat and disturbances would be minimized.
3. No vegetation control would occur outside of the approved disturbance area.

Table 5-1. Threatened and Endangered Plant Species That Could Occur Within the Action Area

Common Name	Suitable Habitat	Bloom Period
Otay tarplant	Below 1,200 feet in elevation in sandy loam soils; grasslands, open coastal sage scrub, maritime succulent scrub, and along some disturbed sites and cultivated fields; clay soils	May – June
San Diego thornmint	Openings of coastal sage scrub, chaparral, and native grassland; patches of clay soil surrounded by non-clay soils known as ‘lenses’	April – June

5.5.2 Wildlife

Fish: There are no federally listed fish species with the potential to occur in the proposed Brown Field BPS site.

Mammals: There are no federally listed mammal species with the potential to occur in the proposed Brown Field BPS site.

Birds: **Table 5-2** presents the suitable habitat and nesting seasons for protected bird species. In addition to the BMPs listed in **Section 5.4**, the following BMPs would be implemented to reduce potential impacts on birds.

1. A pre-construction survey of suitable habitat within the disturbance area during the proper nesting season would be conducted to avoid impacts on threatened and endangered bird species. If nests of threatened and endangered birds are documented in

the disturbance area, an area of sufficient size would be flagged to create a buffer large enough to avoid direct and indirect effects; no work would occur within that flagged area without further consultation with the USFWS.

2. Follow-up surveys for nesting threatened and endangered birds would be performed weekly during the peak of the nesting season (February–March).
3. If mechanical activities (including off-road vehicle operations) must be conducted near (within 500 feet) suitable habitat of coastal California gnatcatcher during the nesting season (see **Table 5-2**), the following avoidance measures would apply. A qualified biologist would conduct a survey for coastal California gnatcatcher and other threatened and endangered birds prior to initiating activities within threatened and endangered species habitat within the approved disturbance area. In the event that individuals are detected, the results would be submitted to USFWS for review. If coastal California gnatcatcher or any threatened or endangered bird is present, a qualified biologist would survey for nests approximately once per week within 500 feet of the disturbance area for the duration of the activity. If the biological monitor determines activities are disturbing the nesting activities, the biological monitor would contact the construction manager or site foreman to halt construction activities, and would contact the project biologist who would in turn contact CBP. CBP would consult with USFWS to develop methods to reduce the noise and disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between nesting coastal California gnatcatchers and the activities, and working in other areas until the young have fledged.
4. Vegetation clearing/grubbing of coastal sage scrub would occur between September 1 and February 14 to avoid the coastal California gnatcatcher breeding season (or sooner if surveys determine that all nesting is complete). If other construction activities (including off-road vehicle operations) must be conducted within 500 feet of coastal sage scrub between February 15 and August 31, a qualified biologist would conduct a survey for coastal California gnatcatcher. If a coastal California gnatcatcher nest is found the biological monitor would contact the construction manager or site foreman to halt construction activities within 500 feet of the nest, and CBP would consult with USFWS to develop methods to reduce the noise and disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between nesting coastal California gnatcatchers and the activities, and working in other areas until the young have fledged.
5. A monitoring biologist approved by USFWS would be onsite during: a) initial clearing and grubbing of coastal sage scrub; and b) project construction within 500 feet of coastal sage scrub to ensure compliance with applicable conservation measures for coastal California gnatcatcher and other sensitive species onsite. The biologist must be knowledgeable of all sensitive species onsite. CBP would submit the biologist's name,

address, telephone number, and work schedule on the project to USFWS at least 14 days prior to initiating project impacts. The biologist would perform the following duties:

- a. Perform a minimum of three focused surveys, on separate days, to determine the presence of coastal California gnatcatchers in the proposed disturbance area outside the gnatcatcher breeding season. Surveys would begin a maximum of seven days prior to performing vegetation clearing/grubbing and one survey would be conducted the day immediately prior to the initiation of clearing/grubbing. If any coastal California gnatcatchers are found within the proposed disturbance area, the biologist would direct construction personnel to begin vegetation clearing/grubbing in an area away from the gnatcatchers. It would be the responsibility of the biologist to ensure that coastal California gnatcatchers are not in the vegetation to be cleared/grubbed. The biologist would also record the number and location of coastal California gnatcatchers disturbed by vegetation clearing/grubbing. CBP would notify USFWS at least seven days prior to vegetation clearing/grubbing to allow USFWS to coordinate with the biologist on bird flushing activities.
- b. Perform a minimum of three focused surveys, on separate days, to determine the presence of coastal California gnatcatcher nest building activities, egg incubation activities, or brood rearing activities in or within 500 feet of the proposed disturbance area of any vegetation clearing/grubbing or project construction proposed within the coastal California gnatcatcher breeding season. The surveys would begin a maximum of seven days prior to vegetation clearing/grubbing or project construction and one survey would be conducted the day immediately prior to the initiation of work. Additional surveys would be done once a week during project construction in the breeding season. These additional surveys may be suspended as approved by USFWS. CBP would notify USFWS at least seven days prior to the initiation of surveys, and within 24 hours of locating any coastal California gnatcatchers.
- c. If a coastal California gnatcatcher nest is found in or within 500 feet of initial vegetation clearing/grubbing or project construction, the biologist would postpone work within 500 feet of the nest and contact USFWS to discuss: 1) the best approach to avoid/minimize impacts to nesting birds (e.g., sound walls); and 2) a nest monitoring program acceptable to USFWS. Subsequent to these discussions, work may be initiated subject to implementation of the agreed upon avoidance/minimization approach and nest monitoring program. Nest success or failure would be established by regular and frequent trips to the site, as determined by the biologist and through a schedule approved by USFWS. The biologist would determine whether bird activity is being disrupted. If the biologist determines that bird activity is being disrupted, CBP would stop work and coordinate with USFWS to review the avoidance/minimization approach. Coordination between CBP and USFWS to review the avoidance/minimization approach would occur within 48 hours. Upon agreement as to the necessary revisions to the avoidance/minimization

- approach, work may resume subject to the revisions and continued nest monitoring. Nest monitoring would continue until fledglings have dispersed or the nest has been determined to be a failure, as approved by USFWS.
- d. Be on site during all vegetation clearing/grubbing and project construction within 500 feet of habitat to be avoided.
 - e. Oversee installation of and inspect the fencing and erosion control measures a minimum of once per week and daily during all rain events to ensure that any breaks in the fence or erosion control measures are repaired immediately.
 - f. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.
 - g. Train all contractors and construction personnel on the biological resources associated with this project and ensure that training is implemented by construction personnel. At a minimum, training would include: 1) the purpose for resource protection; 2) a description of the sensitive species found onsite and their habitats; 3) the conservation measures that should be implemented during project construction to conserve sensitive species, including strictly limiting activities, vehicles, equipment, and construction materials to the proposed disturbance area to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the BPS site by fencing); 4) environmentally responsible construction practices as outlined in this measures; 5) the protocol to resolve conflicts that may arise at any time during the construction process; 6) the general provisions of the Endangered Species Act, the need to adhere to the provisions of the Act, the penalties associated with violating the Act.
 - h. Halt work, if necessary, and confer with USFWS to ensure the proper implementation of species and habitat protection measures. The biologist would report any violation to USFWS within 24 hours of its occurrence.
 - i. Submit weekly letter reports (including photographs of impact areas) to USFWS during vegetation clearing and/or project construction within 500 feet of avoided habitat. The weekly reports would document that authorized impacts were not exceeded, work did not occur within the 500 foot setback except as approved by USFWS and general compliance with all conditions. The reports would also outline the duration of monitoring, the location of construction activities, the type of construction which occurred, and equipment used. These reports would specify numbers, locations, and sex of sensitive species observed and remedial measures employed to avoid, minimize, and mitigate impacts to sensitive species. Raw field notes should be available upon request by USFWS.
 - j. Submit a final report to USFWS within 60 days of project completion that includes: as-built construction drawings with an overlay of habitat that was impacted and avoided, photographs of habitat areas that were to be avoided, and other relevant

- summary information documenting that authorized impacts were not exceeded and that general compliance with all conditions of this consultation was achieved.
6. If implementation, maintenance, or monitoring of a coastal sage scrub creation/restoration/enhancement area in the proposed disturbance area or area of restoration of field/pasture outside of the disturbance area is necessary between February 15 and August 31, a biologist permitted by USFWS would survey for coastal California gnatcatchers within the creation/restoration/enhancement area, access paths to it, and other areas susceptible to disturbances by site maintenance. Surveys would consist of three visits separated by two weeks starting March 1 of each maintenance/monitoring year. Work would be allowed to continue on the site during the survey period. However, if coastal California gnatcatchers are found during any of the visits, CBP would notify and coordinate with USFWS to identify measures to avoid and/or minimize effects to the gnatcatcher (e.g., nests and an appropriate buffer would be flagged by the biologist and avoided by the maintenance work).
 7. The CBP would offset permanent impacts to low quality coastal California gnatcatcher habitat by restoring a greater area of higher quality gnatcatcher habitat, and would offset temporary impacts to low quality habitat by restoring the area to higher quality gnatcatcher habitat. CBP would also control invasive species on 5.49 acres of the undeveloped portion of the proposed BPS site, and conserve/manage the remaining undeveloped portion of the site.
 8. Clearing/grubbing of scrub, as well as construction of the access driveway across the drainage north of Campbell Ranch Road, backup leach field and stockpile within 500 feet of scrub, would occur between September 1 and February 14 to avoid the coastal California gnatcatcher breeding season (or sooner if surveys determine that all nesting is complete). If these activities are necessary between February 15 and August 31, CBP would conduct coastal California gnatcatcher nest surveys as outlined in Measure 5b under **Birds** above.
 9. Measures 2, 7, and 8 under **Insects** below would also be implemented to avoid or minimize impacts to coastal California gnatcatchers.

Table 5-2. Protected Bird Species That Could Occur Within the Action Area

Common Name	Suitable Habitat	Nesting Season
California condor	Suitable nest sites include rock cavities on steep rock faces, hollowed-out old-growth conifer trees, or cliff ledges; wide-ranging scavengers (USFWS 1996).	December–April
Coastal California gnatcatcher	Coastal sage scrub in southern California	February 15–August 31
Golden eagle*	Nests are most often on rock ledges of cliffs but sometimes in large trees (e.g., oak or eucalyptus in California, white pine in eastern North America), on steep hillsides, or on the ground (NatureServe 2018).	November–April
Least Bell’s vireo	Riparian obligate dwellers in relatively dense stands of riparian woodlands; require dense vegetation within 3 to 6 feet of the ground and dense, multilayered canopy for foraging	March 15–September 15
Southwest willow flycatcher	Riparian obligate; requires thick stands of willow trees (<i>Salix</i> sp.) or salt cedar (<i>Tamarix</i> sp.) in riparian foliage for nesting; require wide riparian areas and multi-layered canopy with dense undergrowth for nesting	March 15–September 15

*Protected under the Bald and Golden Eagle Act.

5.5.3 Amphibians

Table 5-3 presents the suitable habitat and breeding period for amphibians. In addition to the BMPs and measures listed in **Sections 5.4** and **5.7**, the following would be implemented to reduce potential impacts on amphibians:

1. For maintenance of the proposed BPS, vegetation control would be avoided within 100 feet of suitable habitat for riparian species (e.g., arroyo toad [*Anaxyrus californicus*]). Any activities within areas of possible arroyo toad habitat would not take place during the breeding season (March 15–July 31). If these activities must occur during the breeding season, a qualified biologist would conduct a survey to determine if arroyo toads are present. If present, the activities would be delayed until the end of the breeding season.
2. Herbicides would not be used within 100 feet of riparian areas. This BMP would apply to maintenance and construction of the proposed Brown Field BPS.
3. Construction in drainages would be completed when the drainages are dry to eliminate any potential for indirect, adverse impacts from erosion and sedimentation on arroyo toad habitat downstream.
4. A site-specific SWPPP and a spill protection plan would be prepared, as required by regulations, for activities that could result in sedimentation.
5. CBP would survey the stockpile and leach system reserve area for arroyo toad the breeding season prior to project construction. Surveys would be conducted by a biologist with at least two years of experience with arroyo toad surveys and would be completed

during appropriate climatic conditions and during the appropriate hours (i.e., late evenings, nights, and early mornings) to maximize the likelihood of encountering arroyo toads. If climatic conditions are not appropriate for arroyo toad movement during the surveys, the arroyo toad biologist may attempt to elicit a response from the arroyo toads, during nights (i.e., at least 1 hour after sunset) with temperatures above 50 degrees Fahrenheit, by spraying the project area with water to simulate a rain event. If arroyo toads are found, CBP would reinitiate consultation with USFWS.

6. Temporary silt fencing would be installed around the perimeter of all work areas within potential arroyo toad upland habitat within the stockpile and leach system reserve area. The purpose of the fence is to exclude arroyo toads from the work sites. Such fencing would consist of woven nylon netting approximately 3 feet in height attached to wooden stakes. Prior to installing the fencing, a narrow trench approximately 1 to 2 inches in depth would be excavated and the fence buried, to prevent burrowing beneath the fence. All fencing materials (i.e., mesh, stakes, etc.) would be removed following construction. Ingress and egress of construction equipment and personnel would be kept to a minimum, but when necessary, equipment and personnel would use a single access point to the site. This access point would be as narrow as possible and would be closed off by exclusionary fencing when personnel are not on the BPS site.
7. Prior to construction activities, but after exclusionary fencing has been installed, at least two surveys for arroyo toads would be conducted within the fenced area by a USDWS-approved biologist. Surveys would be conducted during appropriate climatic conditions and during the appropriate time of day or night to maximize the likelihood of encountering arroyo toads. If climatic conditions are not appropriate for arroyo toad movement during the surveys, a qualified biologist may attempt to illicit a response from the arroyo toads, during nights (i.e., at least one hour after sunset) with temperatures above 50 degrees Fahrenheit, by spraying the project area with water to simulate a rain event. If arroyo toads are found CBP would contact USFWS for further consultation.
8. CBP would submit, in writing, the names, any permit numbers, résumés, of all biologists who might need to handle, move, or monitor arroyo toads for the proposed project. This information would be submitted to USFWS for approval at least 15 days prior to the initiation of any arroyo toad surveys. Proposed activities would not begin until an authorized biologist has been approved by USFWS.

Table 5-3. Threatened and Endangered Amphibian and Reptile Species That Could Occur Within the Action Area

Common Name	Suitable Habitat	Breeding Period
Arroyo toad	Shallow streams with sandy banks that flood periodically	March–July

5.5.4 Insects

Table 5-4 presents the suitable habitat for insects. In addition to the BMPs listed in **Sections 5.3** and **5.4**, the following BMPs and measures would be implemented to reduce potential impacts on insects:

1. CBP would offset a portion the permanent impacts to potential Quino checkerspot butterfly habitat by restoring Quino checkerspot butterfly habitat with shrubs and low-density habitat without shrubs, and would offset all temporary impacts to Quino checkerspot butterfly habitat by restoring the area with shrubs and low-density habitat without shrubs. CBP would also control invasive species on 5.49 acres of the undeveloped portion of the proposed BPS site and conserve/manage the remaining undeveloped portion of the site.
2. CBP would temporarily fence the limits of the disturbance area, including construction staging areas and access routes, to prevent additional habitat impacts and install erosion control devices to prevent the spread of silt from the construction zone into adjacent habitats to be avoided. Erosion control devices, (e.g., fiber rolls and bonded fiber matrix) would be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement. Fencing and erosion control devices would be installed in a manner that does not impact habitats to be avoided. CBP would submit to USFWS for approval, at least 14 days prior to initiating project impacts, the final plans for initial clearing/grubbing of habitat and project construction. These final plans would include photographs that show the temporary fencing and erosion control devices. If work occurs beyond the fenced limits of impact, all work would cease until the problem has been remedied to the satisfaction of USFWS. Any habitat impacts that occur beyond the approved fenced would be offset at a minimum 5:1 ratio. Temporary fencing and erosion control devices would be removed upon project completion.
3. Initial vegetation clearing/grubbing and project construction in the proposed disturbance area, and/or future vegetation management in the leach fields, would occur outside the Quino checkerspot butterfly reproduction season (February 15 to August 31). If these activities are necessary between February 15 and August 31, the CBP would conduct Quino checkerspot butterfly and host plant surveys, as outlined in Measure 4c below, in the impact area within one week prior to impacts.

The CBP would staff a Quino checkerspot butterfly biologist who would be responsible for monitoring and reporting compliance with avoidance and minimization measures for biological resources during work activities addressed in the biological opinion. The biologist would have at least 2 years of experience working with all stages of Quino checkerspot butterfly including adults, eggs, all larval instars, larval webbing, and pupae; and ability to identify Quino checkerspot butterfly larval host and nectar plants in the field. The Quino checkerspot butterfly biologist would perform the following:

- a. Be on site during all vegetation clearing/grubbing and project construction within 500 feet of habitat to be avoided.
- b. Oversee installation of and inspect the fencing and erosion control measures a minimum of once per week and daily during all rain events to ensure that any breaks in the fence or erosion control measures are repaired immediately.
- c. Conduct Quino checkerspot butterfly and host plant surveys in the impact area within one week prior to impacts. If found, host plants would be flagged and avoided to the maximum extent practicable. If host plants cannot be avoided, the Quino checkerspot butterfly biologist would survey for Quino checkerspot butterfly adults, larvae, and eggs within the impact area. The biologist would salvage and/or relocate any Quino checkerspot butterfly adults, larvae, and host plants containing eggs and larvae found in the impact area to a location supporting suitable Quino checkerspot butterfly habitat that would not be impacted. USFWS would be notified of any Quino checkerspot butterfly relocation within 24 hours following relocation.
- d. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.
- e. Train all contractors and construction personnel on the biological resources associated with this project and ensure that training is implemented by construction personnel. At a minimum, training would include: (i) the purpose for resource protection; (ii) a description of the sensitive species found on site and their habitat(s); (iii) the conservation measures that should be implemented during project construction to conserve sensitive species, including strictly limiting activities, vehicles, equipment, and construction materials to the proposed disturbance area to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the BPS site by fencing); (iv) environmentally responsible construction practices as outlined in measure 7; (v) the protocol to resolve conflicts that may arise at any time during the construction process; (vi) the general provisions of the Endangered Species Act, the need to adhere to the provisions of the Act, the penalties associated with violating the Act.
- f. Halt work, if necessary, and confer with USFWS to ensure the proper implementation of species and habitat protection measures. The biologist would report any violation to USFWS within 24 hours of its occurrence.
- g. Submit weekly email reports (including photographs of impact areas) to USFWS during vegetation clearing and/or project construction within 500 feet of avoided habitat. The weekly reports would document that authorized impacts were not exceeded, work did not occur within the 500 foot setback except as approved by USFWS and general compliance with all conditions. The reports would also outline the duration of monitoring, the location of construction activities, the type of construction which occurred, and equipment used. These reports would specify

- numbers, locations, and sex of sensitive species observed and remedial measures employed to avoid, minimize, and mitigate impacts to sensitive species. Raw field notes should be available upon request by USFWS.
- h. Submit a final report to USFWS within 60 days of project completion that includes as-built construction drawings with an overlay of habitat that was impacted and avoided, photographs of habitat areas that were to be avoided, and other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with all conditions of this consultation was achieved.
4. CBP would submit final restoration plans to USFWS for review and approval prior to initiating project impacts. These plans would be based on the *Draft Brown Field Border Patrol Station Habitat Restoration Plan San Diego California* (March 2019). In addition to the measures proposed in the draft plan, the final plans would include the following information and conditions:
- a. All final specifications and topographic-based grading, planting and irrigation plans. All habitat restoration sites would be prepared for planting by decompacting the top soil in a way that mimics natural habitat top soil to the maximum extent practicable while maintaining slope stability. Topsoil and plant materials salvaged from the habitat areas to be impacted would be transplanted to, and/or used as a seed/cutting source for, the habitat restoration areas to the maximum extent practicable as approved by USFWS. Planting and irrigation would not be installed until USFWS has approved of upland habitat restoration site grading. All planting would be installed in a way that mimics natural plant distribution, and not in rows. Planting would include pockets of coastal sage scrub surrounded by more herbaceous annuals associated with Quino checkerspot butterfly habitat.
 - b. Planting palettes (plant species, size and number/acre) and seed mix (plant species and pounds/acre). The plant palettes would include Quino checkerspot butterfly host and nectar plants and other native annuals. The plant palette for the leach fields would not include Quino checkerspot butterfly host plants. Seed would be collected from existing host and nectar plants on site by personnel familiar with Quino host and nectar plant species. Unless otherwise approved by USFWS, only locally native species (no cultivars) obtained from as close to the BPS site as possible would be used. The source and proof of local origin of all plant material and seed would be provided.
 - c. Container plant survival would be 80 percent of the initial plantings for the first 5 years. At the first and second anniversary of plant installation, all dead plants would be replaced unless their function has been replaced by natural recruitment.
 - d. A final implementation schedule that indicates when all upland habitat impacts, as well as restoration/enhancement grading, planting and irrigation would begin and end. Upland habitat restoration/enhancement grading, planting and irrigation would be

- completed during the concurrent or next planting season (i.e., late fall to early spring) after finishing grading within the restoration/enhancement area. Any temporal loss of upland habitat caused by delays in restoration/enhancement would be offset through upland habitat restoration/enhancement at a 0.5:1 ratio for every 6 months of delay (i.e., 1:1 for 12 months delay, 1.5:1 for 18 months delay, etc.). In the event that CBP is wholly or partly prevented from performing obligations under the final plans (causing temporal losses due to delays) because of unforeseeable circumstances or causes beyond their reasonable control, and without the fault or negligence of CBP, CBP would be excused by such unforeseeable causes.
- e. Restoration maintenance would be conducted outside the Quino checkerspot butterfly reproduction season (February 15 to August 31). If maintenance is needed between February 15 and August 31, a Quino checkerspot butterfly biologist would conduct host plants surveys within the maintenance area within one week prior to work. If found, host plants would be flagged and avoided.
 - f. Five years of success criteria for restoration areas including: a total of no more than 50 percent absolute cover of shrub species; evidence of natural recruitment of multiple species; 0 percent coverage for Cal-IPC List A and B species, and no more than 10 percent coverage for other exotic/weed species.
 - g. A qualitative and quantitative vegetation monitoring plan with a map of proposed sampling locations. Photo points would be used for qualitative monitoring and stratified-random sampling would be used for all quantitative.
 - h. Contingency measures in the event of restoration/enhancement failure.
 - i. Annual mitigation maintenance and monitoring reports would be submitted to USFWS after the maintenance and monitoring period and no later than December 1 of each year.
5. Herbicides would be applied to landscape and/or Quino checkerspot butterfly habitat restoration areas by certified applicators overseen by a Quino checkerspot butterfly biologist as needed using the following guidelines:
- a. A mixture of 2 percent glyphosate and 98 percent water with no surfactant would be used. Alternate herbicides or formulations may be used with USFWS approval.
 - b. A marking dye (e.g. Blazon® Blue or Tracer™) would be added to the spray solution to help ensure that the herbicide is applied only to target plants.
 - c. The herbicide solution would be sprayed through a wand that reaches down to the base of target plants where a small amount of the herbicide solution would be sprayed.
 - d. Herbicide treatments would be limited to periods of low wind to reduce spray drift (unintended dispersal of herbicide through currents of air). Herbicide would not be used if conditions become windy (maximum gusts of 7 mph).

- e. No herbicide would be applied within 10 feet of any Quino checkerspot butterfly host plant.
6. CBP would ensure that the following conditions are implemented during project construction, operation and maintenance:
 - a. Employees would strictly limit their activities, vehicles, equipment, and construction materials to the proposed disturbance area.
 - b. The BPS site would be kept as clean of debris as possible. All food related trash items would be enclosed in sealed containers and regularly removed from the site.
 - c. Pets of project personnel would not be allowed on the BPS site.
 - d. Impacts from fugitive dust during construction would be avoided and minimized through watering, limiting vehicle speeds to 15 mph, controlling vehicle access, and other appropriate measures.
 - e. Materials such as gravel, topsoil, or fill would be obtained from sources that are compatible with the BPS site; are from legally permitted sites; and are certified weed free. Materials from undisturbed areas adjacent to the BPS site would not be used.
 - f. Vehicle refueling and maintenance would be limited to upland areas with established spill prevention equipment in place (e.g., straw wattles, lined or paved areas, areas with no direct drains).
 - g. Chemicals and hazardous materials would be stored in proper containers and within spill containment.
 - h. Spill clean-up kits and drip pans would be maintained during construction of the facility and retention basins would be large enough to capture and hold the chemicals being housed.
 - i. A 15-mph speed limit on unpaved roads would be implemented to reduce vehicle-Quino checkerspot butterfly collisions.
 - j. A fire prevention and suppression plan would be developed and implemented for all activities that require welding or otherwise have a risk of ignition (e.g., use of string trimmers, edgers or chainsaws).
 - k. A SWPPP would be developed for long-term management of the stockpile.
 - l. CBP protocol for cleaning vehicles and equipment would be followed to avoid the spread of invasive species.
9. The CBP would implement long-term management, maintenance, and monitoring for the 105.8-acre Onsite Conservation Area. CBP would submit a draft long-term management plan for the Onsite Conservation Area to USFWS for review and approval prior to initiating project impacts. The long-term management plan would include, but not be limited to, the following: (a) controlling invasive species; (b) the estimated cost of long-

term management of the Onsite Conservation Area; (c) proposed land manager’s name, qualifications, business address, and contact information; (d) method of protecting the resources in perpetuity (e.g., conservation easement), monitoring schedule, measures to prevent human and invasive species encroachment, funding mechanism, and contingency measures should problems occur; and (e) specify that no easements or activities (e.g., cattle grazing, fuel modification zones, public trails, drainage facilities, walls, maintenance access roads, utility easements) that would negatively impact the value of the Onsite Conservation Area to listed species or result in soil disturbance and/or native vegetation removal would be allowed within the Onsite Conservation Area. If CBP determines that it is necessary to use the Onsite Conservation Area in a manner that is inconsistent with the long-term management plan, then CBP would reinitiate consultation with USFWS.

Table 5-4. Threatened and Endangered Insect Species That Could Occur Within the Action Area

Common Name	Suitable Habitat	Larval and Adult Activity Period
Quino checkerspot butterfly	Diegan coastal sage scrub; clay soils and steep slopes; relatively open understory and presence of host plants such as California plantain (<i>Plantago erecta</i>) and adjacent to plants used as nectar sources	November 1 through June 1

5.6 Hydrology and Groundwater

1. Implement LID standards and techniques for stormwater management to ensure that predevelopment hydrology is maintained and prevent a net increase in stormwater runoff.
2. Prepare and comply with SPCC Plan.

5.7 Surface Waters and Waters of the United States

1. Landscaping would use a no- or low-water system (drought tolerant plants) as indicated in the *Border Patrol Station Baseline Design Requirements: U.S. Border Patrol Facility Design Standard*.
2. Vehicle refueling and maintenance would be limited to upland areas with established spill prevention equipment in place (e.g., straw wattles that do not have plastic netting, lined or paved areas, areas with no direct drains).
3. Maintain chemicals and hazardous material storage in proper containers and within spill retention basins large enough to capture and hold the chemicals being housed.
4. Maintain spill clean-up kits and drip pans during construction of the facility.

5. Flag or mark potentially jurisdictional WoUS (surface waters/drainages) in the vicinity of construction.
6. Prepare SWPPP and implement applicable construction and post-construction BMPs, including sediment, erosion, pollution prevention control, and stormwater management measures, and associated plans for conformance with the NPDES Construction General Permit.
7. CBP would comply with all applicable requirements of Section 404/401 of the CWA, EO 11990, and the EISA.
8. Implement BMPs identified in the *County of San Diego Guidelines for Determining Significance for Surface Water Quality*, and the *County of San Diego BMP Design Manual*, as practicable.
9. CBP would temporarily fence (erosion and sediment control devices) the limits of the proposed disturbance area (including construction staging areas and access routes) to prevent additional habitat impacts and prevent the spread of silt from the construction zone into adjacent habitats to be avoided. Erosion and sediment control devices, including fiber rolls and bonded fiber matrix, would be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement. Fencing would be installed in a manner that does not impact habitats to be avoided. CBP would submit to USFWS for approval, at least 14 days prior to initiating project impacts, the final plans for initial clearing and grubbing of habitat and project construction. These final plans would include photographs that show the fenced limits of impact and all areas (including riparian/wetland or coastal sage scrub) to be impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact, all work would cease until the problem has been remedied to the satisfaction of USFWS. Any habitat impacts that occur beyond the approved fenced would be mitigated at a minimum 5:1 ratio. Temporary construction fencing would be removed upon project completion.
10. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities would occur outside of WoUS within the proposed disturbance area. These activities would be located in previously compacted and disturbed areas to the maximum extent practicable and in such a manner as to prevent any runoff from entering WoUS. Fueling of equipment would take place in areas greater than 100 feet from WoUS. Contractor equipment would be checked for leaks prior to operation and repaired as necessary.
11. CBP would implement the following measures: (1) preservation and long-term management of 0.595 acre of wetland (0.204 acre) and non-wetland (0.391 acre) WoUS; (2) purchase of establishment credits of no less than 0.057 acre of WoUS or equivalent aquatic function at an approved mitigation bank or provision through an onsite mitigation plan, subject to agency approval; and 3) enhancement of approximately 0.529 acre of

WoUS, including 0.204 acre of wetland. All temporary impacts would be restored to pre-project contours.

5.8 Floodplains

1. Implement LID standards to comply with Section 438 of the EISA.

5.9 Air Quality

1. Implement fugitive dust-control measures (e.g., wetting the ground surface, control of vehicle access, rerouting of vehicles).
2. Implement proper and routine maintenance of all vehicles and construction and maintenance equipment such that emissions are within the design standards of all vehicles and equipment prior to and during construction activities.

5.10 Noise

1. All OSHA requirements would be followed with respect to noise impacts. Ensure all motorized equipment possess properly working mufflers and are kept properly tuned to reduce backfires.

5.11 Cultural Resources

1. Prior to the initiation of construction or ground-disturbing activities, all personnel would receive training regarding the appropriate work practices necessary to effectively implement BMPs and comply with applicable environmental laws and regulations, including the potential for inadvertent discoveries. Training shall inform all personnel of the procedures to be followed upon the discovery or suspected discovery of archaeological materials, including human remains and their treatment.
2. A qualified archaeologist would attend preconstruction meetings, as necessary, and monitor all ground-disturbing activities within the proposed BPS site with a Native American monitor present. The role of the Native American monitor shall be to represent tribal concerns and communicate with the tribal council. The requirements for archaeological monitoring would be noted on the construction plans. The archaeologist's duties would include monitoring, evaluation of any finds, analysis of collected materials, and preparation of a monitoring results report.
3. Approved work areas would be established and construction crews would be instructed to stay within the approved work areas and avoid the disturbance of any culturally sensitive areas identified before or during construction.
4. In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist would immediately notify the

Project Manager at the time of the discovery, and the Project Manager would notify the CBP. The archaeologist, in consultation with CBP, would determine the significance of the discovered resources. No work may proceed without the written authorization of CBP. CBP would work with consulting parties to identify locations where activity may continue as well as any restrictions or special requirements that must be adhered to while the post-review discovery is addressed. For significant cultural resources, a Research Design and Data Recovery Program may be carried out. CBP's established standard operating procedures for inadvertent discoveries (*Standard Operating Procedure for Post-Review Discovery of Cultural Materials or Human Remains*) would be adhered to in all cases.

5. In the event that human remains are inadvertently discovered or there are indications that human remains may be present, such as headstones, all ground-disturbing activity would cease immediately. The archaeologist would immediately notify the Project Manager at the time of the discovery, and the Project Manager would notify the CBP. CBP would notify state police within 24 hours of the discovery and follow their directions for securing the site pending examination of a medical examiner/coroner. Law enforcement and the coroner would determine whether or not the discovery constitutes a crime scene. CBP would coordinate with the state police and the coroner regarding where construction activities can resume. No work may proceed without the written authorization of CBP. CBP would notify the Advisory Council on Historic Preservation, the appropriate SHPO or Tribal Historic Preservation Officer, any impacted Indian Tribe, and any impacted federal agency of the discovery in writing within two business days. After receipt of the medical examiner's findings, CBP shall notify all of the above agencies in writing within two business days. NAGPRA would be followed if the discovery is determined to be of Native American origin. CBP's established standard operating procedures for inadvertent discoveries would be adhered to in all cases.
6. All collected cultural materials would be cataloged and permanently curated with an appropriate institution. All artifacts would be analyzed to identify function and chronology as they relate to the history of the area. Faunal material would be identified as to species. CBP's established standard operating procedures for curation would be adhered to in all cases.
7. An archaeological monitoring results report conforming to Archaeological Resource Management Reports guidelines, describing the results analyses, and conclusions of the monitoring program would be prepared and submitted to CBP following termination of the Proposed Action. Any new cultural resources encountered would be recorded on standard Department of Parks and Recreation forms and submitted to the Southern California Information Center.

5.12 Utilities and Infrastructure

1. All utilities would be appropriately sized based on appropriate state and local guidelines to support only the occupants of the proposed BPS.
2. Stormwater infrastructure would be sized and designed to comply with federal and state regulations and guidelines, including compliance with Section 438 of the EISA to maintain predevelopment hydrology.
3. All CDI debris and solid waste would be recycled to the maximum extent feasible in accordance with state and local guidelines.

5.13 Roadways and Traffic

The following roadway/access improvements per Caltrans highway design standards are recommended to address potential safety concerns due to the close proximity of the proposed BPS driveway and Cal Fire's existing driveway:

- Provide a deceleration right turn lane from westbound SR 94 to the proposed BPS driveway.
- Provide a dedicated left turn at eastbound SR 94 to the proposed BPS driveway if ROW width allows.
- Provide an acceleration lane from the proposed BPS driveway to westbound SR 94.

Caltrans has developed a series of transportation improvements collectively known as the "SR 94 Improvement Project" to address potentially hazardous conditions on SR 94 (from Melody Road to SR 188) due to existing highway geometrics and terrain. The improvements include realignment of deficient curves, installation of passing lanes, widening of traveled way, installation of standard 8-foot shoulders, and adding/improving turn pockets (Caltrans 2011).

Roadway/access improvements at intersection 5 (Proposed BPS Driveway and SR 94) should be designed to accommodate the proposed future roadway section as part of the widening as identified in the Caltrans SR 94 Improvement Project.

5.14 Aesthetics and Visual Resources

1. Post-construction landscaping with the use of native plant species to reduce the outline and contrast of the Proposed Action. Landscaping techniques include but are not limited to shaping cuts and fills to appear as natural landforms; replacing soil, brush, rocks, etc. over disturbed earth surfaces when appropriate to allow natural regeneration rather than introducing unnatural looking vegetation types; and planting trees to detract attention from structures.
2. Camouflaging the communications equipment with a type and method that corresponds and harmonizes with the surrounding landscape.

3. The use of subdued or non-reflective paints and materials to reduce the amount of glare produced by the Proposed Action and using only the amount and type of lighting essential for security.
4. The use of an architectural style similar to existing Cal Fire station structures that does not detract from the look and feel of the area.

5.15 Hazardous Materials and Wastes

1. Contain and store appropriately (e.g., secondary containment, inspections, spill kits) all hazardous materials, petroleum products, and hazardous wastes used or generated during construction in accordance applicable regulations.
2. Contractors would develop and implement SPCC Plans for construction, and CBP would develop and implement a SPCC Plan for operation and maintenance of the proposed BPS.
3. All construction equipment would be maintained according to the manufacturer's specifications and drip mats would be placed under parked equipment as needed.
4. If necessary, pesticides would be applied by certified personnel in accordance with the manufacturer's recommendations.
5. Fuel storage tanks would be inspected regularly to ensure they are operating properly and meet all applicable regulatory standards. Gasoline and diesel storage tanks would be double-walled and include leak detection infrastructure. In the event of a leak or spill, all procedures outlined in the SPCC Plan would be followed.
6. Minimize site disturbance and avoid attracting predators by promptly removing waste materials, wrappers, and debris from the site. Any waste that must remain on site more than 12 hours should be properly stored in closed containers until disposal.
7. Any stockpiles of material containing ADL would not be placed where it could be affected by surface runoff. Stockpiles would be covered with plastic sheeting 13 mils minimum thickness or with 1 foot of nonhazardous material.

5.16 Socioeconomic Resources

1. CBP would prepare a Fire Protection Plan and submit a Project Facility Availability Form to the SDCFA if applicable.

5.17 Human Health and Safety

1. All construction would be conducted in accordance with federal, state, and local safety guidelines.
2. The construction work site would be fenced and appropriate signs would be posted to reduce safety risks to the general public.

3. During construction, the creation of mosquito breeding sources (e.g., standing water) would be minimized through implementation of erosion and sediment control measures to prevent siltation of construction stormwater controls, filling in depressions or potholes, draining or pumping standing water from depressions that cannot be filled in, inspecting stormwater controls on a regular basis to ensure no standing water has collected, covering any open containers (e.g., wheelbarrows, buckets, tarps, etc.) that can hold standing water, and removing debris from the site.
4. A project-specific Health and Safety Plan would be prepared to prevent or minimize health and safety risks. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, procedures for handling excess soil, and other health and safety protocols.

5.18 Sustainability and Greening

1. The proposed BPS design would incorporate, to the extent practicable, techniques that provide for beneficial integrated design for building performance and efficiency, energy performance and conservation, and water conservation.

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7. List of Preparers

This EA has been prepared under the direction of CBP. The individuals that assisted in resolving and providing agency guidance for this document are listed as follows:

John Petrilla (CBP)

Environmental Protection Specialist
Real Estate, Environmental, and Leasing Division
Border Patrol and Air and Marine Program Management Office
U.S. Customs and Border Protection

This EA has been prepared by HDR under the direction of CBP. The individual contractor personnel that contributed to the preparation of this document are listed as follows:

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M.S. Natural Resources
B.S. Applied Biology
Years of Experience: 40

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B.A. Anthropological Archaeology, History
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Years of Experience: 7

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M.S. Biological Anthropology
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Years of Experience: 11

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B.S. Biology and Wildlife Management

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B.A. English

Years of Experience: 10

Cheryl Myers

A.A.S. Nursing

Years of Experience: 22

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M.S. Environmental Studies

B.S. Zoology

B.S. Wildlife Science

Years of Experience: 16

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B.S. International Security Conflict
Resolution

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Years of Experience: 23

A large, white, serif capital letter 'A' is centered on a dark gray rectangular background.

Public Involvement and Agency Coordination

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Appendix A: Public Involvement and Agency Coordination

Interested Party List

FEDERAL AGENCY CONTACTS

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District, Regulatory Division
Carlsbad Field Office
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Mr. G. Mendel Stewart
Field Supervisor
U.S. Fish and Wildlife Service
Carlsbad Ecological Services Field Office
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Traffic Operations Division
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San Diego, CA 92110

Mr. Cory Binns
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California Department of Forestry and Fire
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Commissioner James Ramos
Chairperson
California Native American Heritage
Commission
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West Sacramento, CA 95691

Mr. Edmund Pert
Regional Manager
California Department of Fish & Wildlife,
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Mr. Scott Morgan
Deputy Director of Administration and State
Clearinghouse Director
Governor's Office of Planning and Research
California State Clearinghouse
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Sacramento, CA 95814

LOCAL CONTACTS

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San Diego County Air Pollution Control
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San Diego, CA 92121-1649

Mr. Mark Wardlaw
Director
San Diego County
Planning & Development Services
5510 Overland Avenue
San Diego, CA 92123

San Diego County
Land Use & Environment Group
5510 Overland Avenue
San Diego, CA 92123

The Honorable Terry Sinnott
Board of Directors, Chair
San Diego Association of Governments
401 B Street, Suite 800
San Diego, CA 92101

San Diego Gas & Electric
PO Box 129831
San Diego, CA 92112-9831

DVCA
PO Box 862
Jamul, CA 92935

TRIBAL CONTACTS

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Lakeside, CA 92040

The Honorable Robert Pinto, Sr.
Chairperson
Ewiiapaayp Tribal Office
4054 Willows Road
Alpine, CA 91901

The Honorable Gwendolyn Parada
Chairperson
La Posta Band of Mission Indians
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Boulevard, CA 91905

The Honorable Angela Elliott Santos
Chairperson
Manzanita Band of Kumeyaay Nation
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Boulevard, CA 91905

The Honorable Allen E. Lawson
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Valley Center, CA 92082

The Honorable Cody J. Martinez
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The Honorable Anthony R. Pico
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Chairperson
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Campo, CA 91906

The Honorable Raymond Hunter
Chairperson
Jamul Indian Village
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Jamul, CA 91935

The Honorable Mark Romero
Chairperson
Mesa Grande Band of Mission Indians
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Santa Ysabel, CA 92070

Ms. Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
PO Box 775
Pine Valley, CA 91962

The Honorable Rebecca Osuna
Chairwoman
Inaja Band of Mission Indians
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Escondido, CA 92025

Mr. Clint Linton
Director of Cultural Resources
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PO Box 507
Santa Ysabel, CA 92070

The Honorable Virgil Perez
Chairperson
Iipay Nation of Santa Ysabel
PO Box 130
Santa Ysabel, CA 92070

The Honorable Michael Garcia
Vice Chairperson
Ewiiapaayp Tribal Office
4054 Willows Road
Alpine, CA 91901

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Sample Interested Party Scoping Letter

1300 Pennsylvania Avenue NW
Washington, DC 20229

DEC 22 2016



**U.S. Customs and
Border Protection**

Mr. G. Mendel Stewart
Field Supervisor
U.S. Fish and Wildlife Service
Carlsbad Ecological Services Field Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

Subject: Preparation of an Environmental Assessment Addressing the Proposed Construction of the U.S. Border Patrol Brown Field Border Patrol Station in Dulzura, San Diego County, California

Dear Mr. Stewart:

U.S. Customs and Border Protection (CBP), a component within the Department of Homeland Security, proposes to construct a new U.S. Border Patrol (USBP) Brown Field Border Patrol Station (BPS) in Dulzura, San Diego County, California, and move operations from the existing USBP BPS to the new facility. The existing USBP Brown Field BPS is a leased, privately owned facility located within a congested industrial park in San Diego, California. The existing USBP BPS is undersized for the number of agents assigned to it and is in poor condition, but it cannot be expanded or renovated to provide safe and adequate facility, parking, or storage space. Additionally, the existing USBP BPS is outside of the Brown Field Station's Area of Responsibility and no longer meets the needs of USBP. An Environmental Assessment (EA) is being prepared in accordance with the National Environmental Policy Act for this project. The EA will also meet the requirements of the California Environmental Quality Act.

The Proposed Action is to construct, operate, and maintain a new USBP Brown Field BPS at an approximately 120-acre site at the intersection of State Route 94 (Highway 94) and Campbell Ranch Road in Dulzura, California (see Enclosure 1). It would include construction of a main administrative/processing building with a footprint of approximately 54,000 square feet (ft²) that would be designed to accommodate up to 400 USBP agents and support staff. Ancillary support facilities and structures would include a support building (providing vehicle maintenance, facility maintenance work area/shop, and warehouse), covered outdoor training and weapons cleaning areas, government and privately owned vehicle parking areas, fuel island, canine kennel, communications tower, septic system and leach field, helipad and associated fuel point, roadways, emergency generator, and utilities including two wells. The combined footprint of all ancillary facilities and structures would be approximately 348,000 ft², for a total footprint of approximately 402,000 ft².

Mr. G. Mendel Stewart
Page 2

After an extensive review of numerous sites, three sites were initially considered for construction of the proposed USBP Brown Field BPS, but only the Dulzura site met all of CBP's site selection criteria. Therefore, the EA will consider two alternatives in detail: the Proposed Action and the No Action Alternative. In addition to preparation of the EA, resource surveys at the Dulzura site have been or are being completed, and a traffic impact study for the Proposed Action is being prepared.

Should you have comments or information about the Proposed Action that you would like considered during preparation of the Draft EA, please send them within 30 days of receipt of this letter using one of the following methods:

- By U.S. mail: Brown Field Station EA c/o Mr. John Petrilla, Border Patrol and Air and Marine Program Management Office, 24000 Avila Road - Suite 5020, Laguna Niguel, CA 92677
- By email: John.P.Petrilla@cbp.dhs.gov

We intend to provide you with an electronic copy of the Draft EA on a CD once the document is completed. Please inform us if hard copies are needed and if someone else other than you should receive the Draft EA.

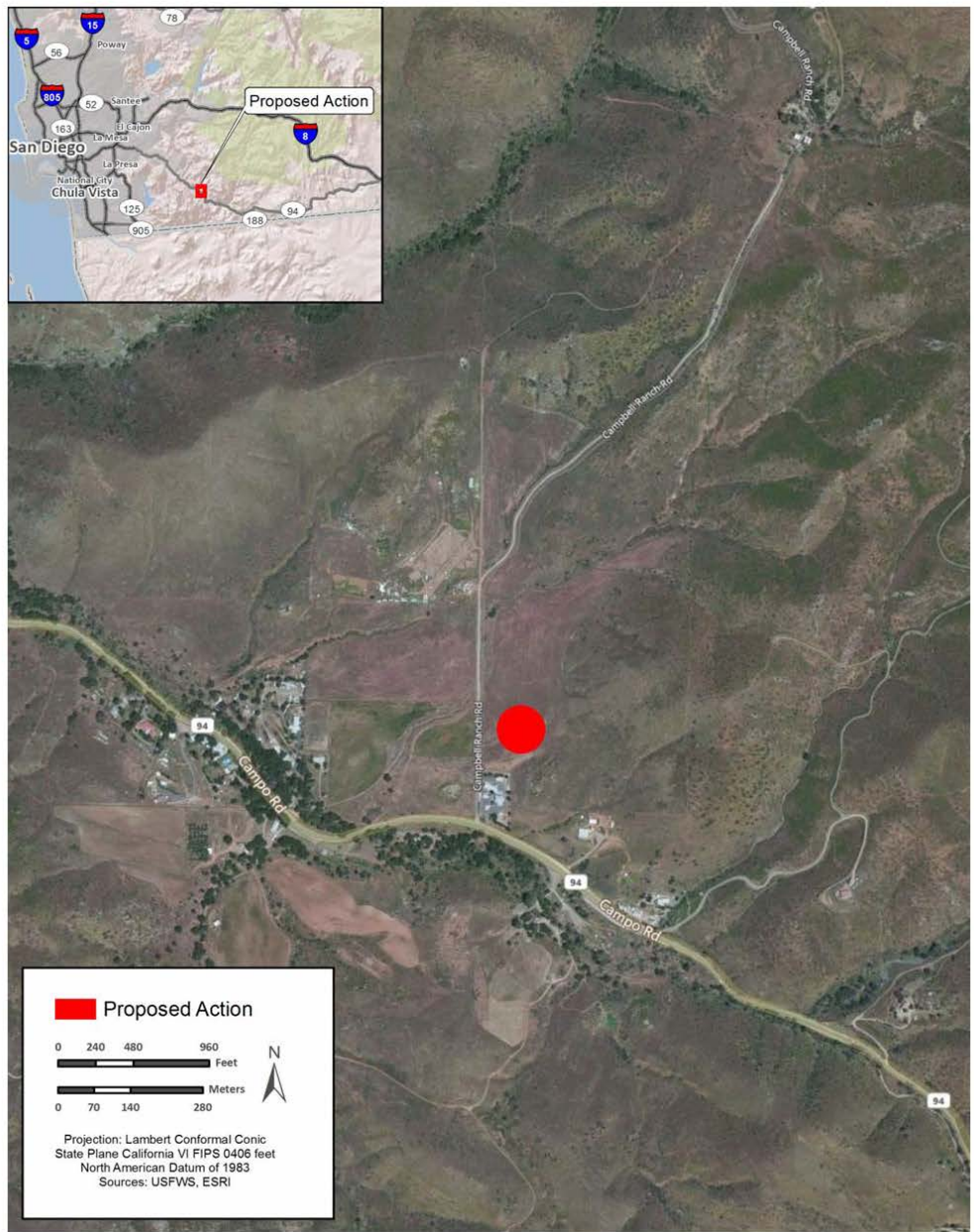
Your prompt attention to this request is greatly appreciated. If you have any questions, please contact Mr. John Petrilla by mail at Border Patrol and Air and Marine Program Management Office, 24000 Avila Road - Suite 5020, Laguna Niguel, CA 92677; or by telephone at (949) 643-6385.

Sincerely,



Paul Enriquez
Environmental Branch Chief
Real Estate, Environmental, and Leasing Division
Border Patrol and Air and Marine Program Management Office

Enclosure: Map of Proposed Action location



Sources: ESRI StreetMap USA 2007; (c) 2009 Microsoft Corporation and its data suppliers

Enclosure 1. Proposed Action Location

Comments Received During Scoping Period

U.S. Fish and Wildlife Service

From: Gower, Patrick [mailto:patrick_gower@fws.gov]
Sent: Friday, December 30, 2016 8:41 AM
To: PETRILLA, JOHN <JOHN.P.PETRILLA@cbp.dhs.gov>
Subject: Re: CBP proposed new Brown Field BPS location

John

I just got your NOI. Yes protocol surveys should be done. I didn't see a vegetation map in the bioreport; the EA should have a map that shows the vegetation, project footprint, sensitive species locations and impacts and a table with impacts per veg type and proposed mitigation.

Patrick Gower

Fish and Wildlife Biologist
Carlsbad Fish and Wildlife Office
(760) 431-9440 ext 352

California Department of Forestry and Fire Protection



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

2249 Jamacha Rd.
EL CAJON, CA 92019
(619)590-3100
Website: www.fire.ca.gov



January 13, 2017

Mr. John Petrilla
Border Patrol & Air & Marine Program Management Office
24000 Avila Road – Suite 5020
Laguna Niguel, CA 92677

RE: BROWN FIELD BORDER PATROL STATION EA - REQUEST FOR COMMENTS

Dear Mr. Petrilla,

The California Department of Forestry and Fire Protection (CALFIRE) appreciates the opportunity to comment on the Environmental Assessment (EA) for the proposed U.S. Border Patrol Brown Field Border Patrol Station (BP Station) located in Dulzura, San Diego County, California. As you are probably aware, the proposed 120-acre site for the new facility will be located directly behind (north), and adjacent to, CALFIRE's Dulzura Fire Station 30 (Station 30). Station 30 is typically staffed year-round and provides fire control and emergency services to the community of Dulzura as well as the greater surrounding area. In an effort to minimize impacts to Station 30, CALFIRE offers the following comments for your consideration.

1. The proposed BP Station site is currently in a native surface condition consisting of grass, shrubs, and exposed soil. In addition, the site also gently slopes toward the south in the direction of Station 30. To date, runoff from the area behind Station 30 has not been a problem as precipitation sufficiently absorbs into the native surface or naturally flows away from the facility. With the likelihood of asphalt, concrete, and other impermeable surfaces occupying the site directly behind Station 30, sufficient runoff collection and drainage from the proposed BP station would be necessary to mitigate potential runoff impacts to Station 30 as well as HWY 94.
2. It appears Campbell Ranch Road will likely serve as the proposed BP Station's access to HWY 94. With the significant increase in vehicular traffic on Campbell Ranch Road as a result of the new BP Station accommodating approximately 400 staff, and the road's location proximate to Station 30's driveway to access HWY 94, there is some concern regarding traffic impacts to Station 30. Although it may be premature to discuss traffic control options at this point, CALFIRE would like to ensure vehicular traffic resulting from the proposed BP Station is sufficiently managed/controlled to allow the emergency services provided by Station 30 to continue uninterrupted.
3. Station 30 is staffed by firefighters 24-hours a day throughout the year. To ensure Station 30 provides the highest quality emergency services to the public, it is necessary for on-duty staff to get sufficient rest. The BP Station, as proposed, appears to provide facilities for approximately 400 agents and support staff, an outdoor training and weapons cleaning area, canine kennels, helipad, generators, and communication tower. In addition to headlights, it is also likely that the facility and surrounding area will be illuminated at night with flood lighting or something similar. With the location of the proposed BP Station being directly adjacent to Station 30, noise and light impacts to Station 30 are highly likely and could result in the disruption of adequate rest for the on-duty staff at Station 30. CALFIRE would like to ensure noise and light impacts to Station 30 from the proposed BP Station are sufficiently addressed to allow uninterrupted rest for on-duty emergency staff.

4. The primary access point for Station 30 is the front driveway off of HWY 94. A secondary access point however, also exists at the back of the property along the northern fence line providing access to Campbell Ranch Road. CALFIRE would like to ensure the secondary access to Station 30 remains accessible and maintained.

Please consider this CALFIRE's response to the request for comments and information regarding the proposed 120-acre U.S. Border Patrol Brown Field Border Patrol Station in Dulzura. As a courtesy, CALFIRE would like to request a copy of any subsequent environmental documentation when it becomes available for public review. Again, we appreciate the request and opportunity to provide comment.

Sincerely,

Eric Just, Unit Forester
CAL FIRE, San Diego Unit
(619) 590-3103 desk
(619) 592-1224 cell
eric.just@fire.ca.gov

From: Carney, David@CALFIRE
Sent: Wednesday, January 18, 2017 11:28 AM
To: Kremensky, John@CALFIRE
Subject: Re: Boarder Patrol EIR

1. what is going to be the impact on Station 30's well and the local water table?

With over 400 employees working 7/24 and 365 days a year and landscaping the use of 2 wells at the proposed BP station will definitely have an impact on the areas water table.

2. What impact will the BP facility sewage/septic system have on the water supply and land.

Thanks,

John Kremensky
Battalion Chief
Cal Fire, San Diego
(619) 592-1451

*From: Carney, David@CALFIRE
Sent: Wednesday, January 18, 2017 11:28 AM
To: Kremensky, John@CALFIRE
Subject: Re: Boarder Patrol EIR*

- 1. With over 400 employees working 7/24 and 365 days a year and landscaping with the use of 2 wells at the proposed BP station, what is going to be the impact on Station 30's well and the local water table.*
- 2. Radio inference from USBP communication from the proposed USBP communication tower, will this effect our reception on Local?*
- 3. Impact of US customs and Border Protection helicopters impacts to Cal Fire/ SDO Aircraft operating out of the leased when used Dulzura Helibase.*

Respectfully Submitted

David Carney - Fire Captain

CAL FIRE

SAN DIEGO UNIT

**DULZURA STATION 30
OFFICE (619) 468-3391**

**CELL (619) 206-0622
FAX (619) 468-3276**

**Proudly serving the communities of Dulzura, Barrett, Jamul and Otay Lakes.
The San Diego County Fire**

California Department of Toxic Substances Control



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

January 19, 2017

Brown Field Station EA
c/o Mr. John Petrilla
Border Patrol and Air and Marine
Program Management Office
24000 Avila Road, Suite 5020
Laguna Niguel, California 92677

**NOTICE OF PREPARATION (NOP) OF AN ENVIRONMENTAL ASSESSMENT (EA)
ADDRESSING THE PROPOSED CONSTRUCTION OF THE U.S. BORDER PATROL
BROWN FIELD BORDER PATROL STATION IN DULZURA, SAN DIEGO COUNTY,
CALIFORNIA PROJECT (SCH# 2016124001)**

Dear Mr. Petrilla:

The Department of Toxic Substances Control (DTSC) has reviewed the subject NOP. The following project description is stated in the NOP: "CBP proposes to construct a new USBP Brown Field Border Patrol in Dulzura, San Diego County and move operations from the existing USBP BPS to the new facility. It would include a main administrative/processing building of approximately 54,000 square feet that would be designed to accommodate up to 400 USBP agents and support staff. Ancillary support facilities would include a support building, covered outdoor training and weapons cleaning areas, government and privately owned vehicle parking areas, Fuel Island, canine kennel, communications tower, septic system and leach field, helipad and associated fuel point, roadways, emergency generator, and utilities including two wells. All ancillary facilities would be approximately 348,000 square feet."

Based on the review of the submitted document DTSC has the following comments:

1. The EA should identify and determine whether current or historic uses at the project site may have resulted in any release of hazardous wastes/substances. A Phase I Environmental Site Assessment may be appropriate to identify any recognized environmental conditions.

Mr. John Petrilla
January 19, 2017
Page 2

2. If there are any recognized environmental conditions in the project area, proper investigation, sampling and remedial actions overseen by the appropriate regulatory agencies should be conducted prior to the new development or any construction. This information should be included in the EA.
3. If planned activities include building demolitions, lead-based paints or products, mercury, polychlorinated biphenyls (PCBs) and asbestos containing materials (ACMs) should be addressed in accordance with all applicable and relevant laws and regulations. Mitigation measures, if needed, should be included in the EA.
4. If project construction requires offsite disposal of excavated soil, then appropriate sampling is required prior to export/disposal of the excavated material. If the soil is contaminated, it should be disposed of properly in accordance with all applicable and relevant laws and regulations. In addition, if the project proposes to import soil to backfill the excavated areas, proper evaluation and/or sampling should be conducted to make sure that the imported soil is free of contamination. This information should be included in the EA.
5. If the project plans include discharging wastewater to a storm drain, you may be required to obtain an NPDES permit from the overseeing Regional Water Quality Control Board (RWQCB).
6. If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the EIR should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.

If you have any questions regarding this letter, please contact me at (714) 484-5476 or email at Johnson.Abraham@dtsc.ca.gov.

Sincerely,



Johnson P. Abraham
Project Manager
Brownfields Restoration and School Evaluation Branch
Brownfields and Environmental Restoration Program - Cypress

kl/sh/ja

cc: See next page.

Mr. John Petrilla
January 19, 2017
Page 3

cc: Governor's Office of Planning and Research (via e-mail)
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P.O. Box 3044
Sacramento, California 95812-3044
State.clearinghouse@opr.ca.gov

Mr. Guenther W. Moskat, Chief (via e-mail)
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
Guenther.Moskat@dtsc.ca.gov

Mr. Dave Kereazis (via e-mail)
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Mr. Shahir Haddad, Chief (via e-mail)
Schools Evaluation and Brownfields Cleanup
Brownfields and Environmental Restoration Program - Cypress
Shahir.Haddad@dtsc.ca.gov

CEQA# 2016124001

California Department of Transportation, District 11

DEPARTMENT OF TRANSPORTATION

DISTRICT 11
PLANNING DIVISION
4050 TAYLOR STREET, MS 240
SAN DIEGO, CA 92110
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TTY 711
www.dot.ca.gov



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January 26, 2017

11-SD-94
PM 28.7

U.S. Border Patrol Brown Field Station

Mr. John Petrilla
U.S. Customs and Border Protection
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Dear Mr. Petrilla:

The California Department of Transportation (Caltrans) appreciates the opportunity to be part of the early consultation (NEPA Scoping) process for the U.S. Border Patrol Brown Field Station project (SCH 2016124001). The proposed project is located just north of State Route 94 (SR-94) at Campbell Ranch Road (PM 28.7) in unincorporated San Diego County. Caltrans would like to make the following comments:

Please provide analysis for the use of the existing privately owned Campbell Ranch Road. Caltrans would prefer only one access to SR-94 and requests this location be thoroughly analyzed and/or additional information provided before consideration of any new access.

Caltrans will require Site Distance Analysis in order to confirm any approved access to SR-94. The following information from Caltrans' Highway Design Manual details corner sight distance requirements:

- Section 405.1 (2)(a): "General -At un-signalized intersections a substantially clear line of sight should be maintained between the driver of a vehicle, bicyclist, or pedestrian waiting at the crossroad and the driver of an approaching vehicle. Line of sight for all users should be included in right-of-way (R/W), in order to preserve sight lines."
- Section 405.1 (2)(c): "Private Road Intersections (Refer to Index 205.2) and Rural Driveways (Refer to Index 205.4)--The minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described."
- Section 405.1 (2)(a): "In determining corner sight distance, a setback distance for the vehicle waiting at the crossroad must be assumed. Setback for the driver of the vehicle on the crossroad shall be a minimum of 10 feet plus the shoulder width of the major road but not less than 15 feet. Line of sight for corner sight distance is to be determined from a 3 and 1/2-foot height at the location of the driver of the vehicle on the minor road to a 4 and 1/4-foot object height in the center of the approaching lane of the major road as illustrated in Figure 504.31."

A focused traffic impact study (TIS) on Campbell Ranch Road/SR-94 will be necessary to determine the proposed project's near-term and long-term impacts to Caltrans' facilities and to recommend appropriate mitigation measures. The TIS should include an analysis of ingress/egress volumes for peak hour and employee shift hours.

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Mr. John Pitrella
January 26, 2017
Page 2

Any work performed within Caltrans R/W will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction.

As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans' R/W, and any corresponding technical studies. Caltrans recommends that all National Environmental Policy Act (NEPA) studies include the level of analysis and specific studies needed for CEQA clearances and Caltrans permit issuance work within State R/W. Environmental documentation should include studies or letters from qualified specialists or personnel which address the potential, or lack of potential, for impacts to the following resources in Caltrans' R/W:

- Biological resources
- Archaeological and historic resources
- Visual quality
- Hazardous waste
- Water quality & stormwater
- Pre-historic resources
- Air quality
- Noise levels
- Community Impacts Assessment

Additional information regarding encroachment permits may be obtained by contacting the Caltrans Permits Office at (619) 688-6158. Early coordination with Caltrans is strongly advised for all encroachment permits.

A Traffic Control Plan or construction traffic impact study may be required by Caltrans prior to construction. The plans shall be prepared in accordance with Caltrans's *Manual of Traffic Controls for Construction and Maintenance Work Zones*. All work proposed within the Caltrans' R/W requires lane and shoulder closure charts. All roadway features (e.g., signs, pavement delineation, roadway surface, etc.) within the Caltrans' R/W must be protected, maintained in a temporary condition, and/or restored. For more information, contact the District Traffic Manager, Camille Abou-Fadel, at 619-718-7833.

Caltrans recommends continued early coordination meetings and communication in order to ensure an efficient project approval process.

If you have any questions, or require further information, please contact Damon Davis, at (619) 688-6954 or email at Damon_Davis@dot.ca.gov.

Sincerely,



JACOB ARMSTRONG, Chief
Development Review Branch

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to enhance California's economy and livability"*

California Department of Fish and Wildlife, South Coast Region



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



January 26, 2017

John Petrilla
U.S. Department of Homeland Security
Customs and Border Protection
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677
John.P.Petrilla@cbp.dhs.gov

Subject: Preparation of an Environmental Assessment for the Construction, Operation, and Maintenance of the U.S. Border Patrol Brown Field Station, San Diego County, California

Dear Mr. Petrilla:

The California Department of Fish and Wildlife (Department) has reviewed your letter dated December 22, 2016, notifying the Department of the preparation of an Environmental Assessment (EA) for the construction of a new U.S. Border Patrol (USBP) Brown Field Border Patrol Station (Proposed Project). The Department is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) The Department, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly for purposes of CEQA, the Department is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. The Department also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The Department offers the comments and recommendations below to assist the USBP in avoiding or minimizing potential impacts to biological resources.

The Proposed Project would involve the construction, operation, and maintenance of a new USBP station on an approximately 120-acre site located at the intersection of State Route 94 and Campbell Ranch Road, in the unincorporated community of Dulzura, San Diego County, California. The Proposed Project includes the construction of a 54,000 square-foot main administrative building designed to accommodate up to 400 USBP agents and support staff. Ancillary support facilities include: a vehicle maintenance facility, a maintenance work area, a warehouse, covered outdoor training and weapons cleaning areas, government and privately owned vehicle parking areas, fuel Island, canine kennel, communications tower, septic system and leach field, helipad, roadways, emergency generator, utilities, and two wells. The combined footprint of the main facility and ancillary structures would be approximately 348,000 square feet, and total approximately 402,000 square feet including the main building.

On March 17, 1998, the County of San Diego (County), U.S. Fish and Wildlife Service (Service), and the Department executed an Implementing Agreement (IA) formalizing the respective

Conserving California's Wildlife Since 1870

John Petrilla
U.S. Department of Homeland Security
January 26, 2017
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entities' commitments to the County of San Diego Multiple Species Conservation Program (MSCP). The MSCP "...describes a cooperative federal, state, and local program of conservation for a number of 'Covered Species' of plants and animals. The MSCP is a product of lengthy study and negotiation by the Parties [the County of San Diego, Service and the Department] and other interested persons and entities, and represents coordination of private development and conservation interests with federal, state and local governments" (MSCP Implementing Agreement, 1998). While USBP is not signatory to the County MSCP, we encourage the Proposed Project to conform to the MSCP and Biological Mitigation Ordinance (BMO) as a means to minimize the Proposed Project's environmental effects and provide consistency with local and regional planning policies.

While the correspondence provided to the Department did not depict the extent of the Proposed Project's footprint, Enclosure 1—Proposed Action Location, provides a general location. Based on Enclosure 1, the Department has determined the Proposed Project to be located within an area identified in Figure 4-1 of the MSCP as a "very high" habitat value (County, 1997). Accordingly, the project area is given priority for conservation purposes. The habitat values for the Proposed Project may be considered very high for a number of reasons including but not limited to: the Proposed Project's proximity to a Biological Core Resource Area; the Proposed Project's proximity to MSCP wildlife linkages and corridors; the Proposed Project's proximity to sensitive biological receptors (e.g., golden eagle); and/or the quality of the habitat and its role in fulfilling the County MSCP.

To enable Department staff to adequately review and comment on the proposed action we recommend the following information, where applicable, be included in any subsequent environmental documents.

1. The forthcoming EA and supporting documentation (biological technical report) should include site-specific surveys conducted at the appropriate times of year for optimal detection of species. Seasonal variations in use by fauna in the project area should be addressed. Recent, focused, species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable should be included in the impact analysis.
2. The EA should provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. This should include all relevant and reasonable mitigation measures that cover the range of impacts of the project, including commensurate mitigation to sensitive vegetation types, but also for impacts to narrow endemic plant species should those be identified. The County of San Diego (see Table 4-8 of the MSCP, and the BMO) has established mitigation ratios that are applied to development proposals for addressing direct impacts to the vegetation communities. The EA should discuss the Proposed Project's cumulative effects including the potential effects of past projects, the effects of other current projects, and the effects of probable future projects in comparison to the action.
3. The Proposed Project should also be analyzed relative to its effects on off-site habitats and associated wildlife. Specifically, this should include any identified nearby public lands, open space, and adjacent natural habitats. Impacts to and maintenance of wildlife corridor/movement areas, including access to undisturbed habitat in adjacent areas, are of concern to the Department. The analysis should also include a discussion of the potential for

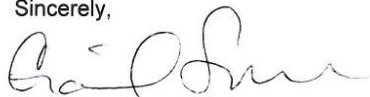
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impacts resulting from increased vehicle traffic (frequency/duration), artificial lighting, noise, and vibration, based on adopted significance thresholds.

4. The Department recommends that measures be taken to avoid project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Title 50, § 10.13, Code of Federal Regulations. Sections 3503.5 and 3513 of the California Fish and Game Code prohibit take of all raptors and other migratory nongame birds and section 3503 prohibits take of the nests and eggs of all birds. Proposed Project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from February 1 to September 1 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, we recommend surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

We appreciate the early notification of the forthcoming draft EA for the Proposed Project and the opportunity to assist the USBP in further minimizing and mitigating the proposed actions impacts to biological resources. If you have questions or comments regarding this letter, please contact Eric Weiss of the Department at (858) 467-4289.

Sincerely,



Gail K. Sevens
Environmental Program Manager
South Coast Region

cc: State Clearinghouse, Sacramento
Patrick Gower, U.S. Fish and Wildlife Service, Carlsbad

REFERENCES

County of San Diego, October 22, 1997. Multiple Species Conservation Program County of San Diego Subarea Plan.

County of San Diego. March 1997. Multiple Species Conservation Program Implementing Agreement by and between United States Fish and Wildlife Service California Department of Fish and Game, County of San Diego Subarea Plan.

County of San Diego, Planning and Development Services



County of San Diego

MARK WARDLAW
DIRECTOR

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
(858) 694-2962 • Fax (858) 694-2555
www.sdcountry.ca.gov/pds

February 2, 2017

Mr. John Petrilla
Border Patrol and Air and Marine Program Management Office
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Via email to: John.P.Petrilla@cbp.dhs.gov

**COMMENTS ON THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT
ADDRESSING THE PROPOSED CONSTRUCTION OF THE U.S. BORDER PATROL
BROWN FIELD BORDER PATROL STATION IN DULZURA**

Dear Mr. Petrilla,

The County of San Diego (County) has reviewed the U.S. Customs and Border Protection's 12/22/16 letter regarding the preparation of an Environmental Assessment (EA) addressing the proposed construction of the U.S. Border Patrol Brown Field Border Patrol Station (BPS) in Dulzura. The County offers the following comments for your consideration.

PLANNING & DEVELOPMENT SERVICES

1. Per correspondence between County staff and Mr. John Petrilla (Environmental Protection Specialist/Border Patrol and Air and Marine Program Management Office) in January 2017, it is our understanding that the proposed project site includes Assessor Parcel Number 600-160-13-01 and is owned by the Border Patrol.
2. This letter states that "An Environmental Assessment (EA) is being prepared in accordance with the National Environmental Policy Act [NEPA] for this project. The EA will also meet the requirements of the California Environmental Quality Act [CEQA]." To support the review of this project, please clarify the following:
 - a. What will be the final property ownership of the project? Will it be privately or Federally owned?

- b. Please identify if there are any anticipated permits and/or discretionary actions that require County approval; and,
 - c. Please note that any action by the County will require sufficient CEQA analysis. Please refer to the County's CEQA Guidelines of Significance. These can be accessed here: <http://www.sandiegocounty.gov/pds/procguid.html>.
3. Please ensure that your EA addresses off-site impacts as well as the Williamson Act Contract.

AGRICULTURE PROMOTION PROGRAM

1. The subject property is within Agricultural Preservation Number 31 (AP) and a Williamson Act Contract Number 73-95 (Contract), as approved by the Board of Supervisors, on May 7, 1974, in conformance with County Board Policy I-38 and the CA Land Conservation Act of 1965 (County Recorder's Office Doc. ID #488156, pp. 90-106). Additionally, the County has prepared an Agriculture Promotion Program (Program) that is planned for a Board of Supervisors decision, during the first quarter of 2017. Both the Contract and the Program, would require or encourage varied primary agricultural uses, as well as customary agricultural accessory uses, such as packing and processing of crops, barns and farm employee housing. The Program would permit accessory uses, such as growth of hops, fruits or other constituent crops consumed in the brewing and distilling process. Finally, the Program would support agritourism (e.g., agricultural product sales, agricultural tours and education opportunities, etc.)
2. The project could significantly affect surrounding existing agricultural operations and vineyards and wineries operating as part of the County Tiered Winery Ordinance. Please ensure that the EA will address the CEQA Guidelines, Appendix G, as well as the County CEQA Guidelines for Agriculture. Both the Appendix and County Guidelines requires analysis of on-site direct impacts and indirect impacts to surrounding agriculture. The County has seen interest in the establishment of vineyards and there are other existing agricultural uses in the neighborhood. Please ensure that the EA analyzes all potential impacts to: prime soils (western edge of property); direct and indirect impacts to, and any conflicts with, existing Williamson Act Contracts; and the possibility of farmland conversions to non-agricultural uses. The EA analysis should contain discussion of potential issues such as: adequacy of groundwater (planned two wells); pesticide use; noise resulting from use of the proposed helipad; and farm vehicle access to SR-94.

NOISE

1. Pursuant to Section 36.417 within the San Diego County Code of Regulatory Ordinance Relating to Noise Control and Abatement (County Noise Ordinance), any activity

preempted by State or Federal law does not apply to 36.401 et. seq. Although Federally preempted activities associated with Federal law are exempted from the County Noise Ordinance, similar operational facilities would typically be subject to the General Sound Level Limits requirements within Section 36.404 and would typically be subject to temporary construction equipment operations pursuant to 36.408, 409, and 410.

GROUNDWATER

1. The following information should be provided in the EA to ensure that groundwater resources are not significantly impacted:
 - a. A description of all onsite wells and groundwater being used; and,
 - b. Annual groundwater usage for the project site, both current and proposed.
2. There are a number of private properties adjacent and near the subject parcel that are utilizing groundwater. It is crucial that long-term groundwater supplies not be impacted for all groundwater dependent users near the subject parcel. An evaluation in an EA of all parcels should be made within a 1-mile radius of the project site boundaries to assess parcels utilizing groundwater.
3. A groundwater investigation should be included in an EA that encompasses the following:
 - a. Basin-wide Sustainable Yield: This investigation should include an evaluation of sustainable yield including an estimate of groundwater in storage. The County evaluates sustainable yield through the County Groundwater Ordinance as well as CEQA. The County Guidelines for Determining Significance – Groundwater Resources (website: <http://www.sdcountry.ca.gov/dplu/docs/GRWTR-Guidelines.pdf>) provide measurable standards for determining when an impact to groundwater resources would be considered significant pursuant to the CEQA. The guidelines were designed to provide a tiered evaluation of groundwater resources, which ultimately determine the sustainable yield for a given project.
 - b. Well Interference Analysis: In order to adequately determine if the project will substantially deplete off-site groundwater users, a groundwater assessment to evaluate impacts to nearby County groundwater users should be included. This assessment should include aquifer testing and a well interference analysis. Aquifer tests should be performed on the anticipated production wells for a minimum of 72 hours or longer depending on the magnitude of groundwater to be utilized along with how long it takes for steady state conditions of the cone of depression to be reached. A five year projection of drawdown should be performed using standard hydrologic methods (taking into account the project

demand of the project). In the County Guidelines for Determining Significance for Groundwater Resources, the County assumes the following as a significant impact regarding offsite well interference in fractured rock basins:

"As an initial screening tool, offsite well interference will be considered a significant impact if after a five year projection of drawdown, the results indicate a decrease of 20 feet or more in the offsite wells. If site-specific data indicate water bearing fractures exist which substantiate an interval of more than 400 feet between the static water level in each offsite well and the deepest major water bearing fracture in the well(s), a decrease in saturated thickness of 5% or more in the offsite wells would be considered a significant impact."

- c. Groundwater Mitigation and Monitoring Plan (GMMP): Depending on the amount of groundwater that is proposed, a GMMP should be considered to ensure impacts to off-site groundwater users remain at a level of less than significant. This would determine, based on well interference, calculations for wells to be utilized for the project. As needed, the GMMP would contain maximum pumping allowances for project wells to ensure well interference to off-site well users will be less than significant. Groundwater pumping would then be monitored at a regular interval (such as quarterly or monthly). The GMMP could also include areas where on-site production wells would be restricted to provide adequate spacing from off-site wells.

FIRE

1. The proposed project is adjacent to the existing CAL FIRE fire station in the community of Dulzura. The size and intensity of the proposed project may necessitate an augmentation of the existing staffing and/or equipment at that fire station.
2. The proposed project is within a Very High Fire Hazard Severity Zone as determined by the CAL FIRE Fire and Resource Assessment Program. We recommend that the project be designed and constructed in accordance with the California Fire and Building Codes as amended by the County of San Diego.

COUNTY LAND USE POLICIES

1. General Plan Policy LU 14.4 and Board Policy I-78 Small Wastewater Treatment Facilities disfavor the construction of sewage facilities that are sized any larger than is necessary to serve the land use pattern and density shown on the relevant General Plan Land Use Map, or that are located more than one mile outside the Urban Limit Line or the geographical boundaries of a Village Area. The proposed facility is inconsistent with the applicable County map as to density, and is proposed in an area where Board Policy I-78 would disfavor a small wastewater treatment facility. The facility should not

aggravate this incompatibility by resorting to a small wastewater treatment system that could induce and support additional growth in this rural and agricultural area. The facility should be limited to a scale that can be supported by a conventional on-site septic system and should be sized to only meet the needs of the facility.

2. The facility will also need a new water supply system, and under State law a system serving a facility of this kind would be a permitted public water system. This system, like the septic system, should be limited in capacity to what is needed to support this facility, so that the construction of this additional infrastructure will not be growth inducing.

SOUTH COUNTY MULTIPLE SPECIES CONSERVATION PLAN

1. The proposed project area is within the County's approved South County Multiple Species Conservation Plan (South County MSCP). It is anticipated that this will require concurrences from State and/or Federal wildlife agencies which should be explained in the EA.

LAND WATER QUALITY DIVISION

1. The scope of the proposed project will create a new public water system and require an onsite wastewater treatment system. For the public water system, a water supply permit will be required from the State Water Resources Control Board (SWRCB). The SWRCB Division of Drinking Water (DDW) regulates all public water systems operated by the Federal Government. Please contact the DDW for all permitting requirements and information.
2. The onsite wastewater treatment system will be regulated by the County of San Diego, Department of Environmental Health for design flows up to 10,000 gallons per day; please contact Eric Klein at 858-694-2551 or Eric.Klein@sdcounty.ca.gov for design flows up to 10,000 gallons per day. Wastewater treatment systems with design flows greater than 10,000 gallons per day are regulated by the Regional Water Quality Control Board. Please contact the Regional Water Quality Control Board for design flows greater than 10,000 gallons per day.

WATERSHED PROTECTION PROGRAM

The proposed project includes the construction of large areas of impervious surfaces that may generate potential pollutant and hydromodification impacts to adjacent private parcels and local receiving waters located in the unincorporated County. Therefore, the project may need to consider the following items:

1. San Diego Municipal Storm Water Permit Order No. R9-2013-0001, (as amended by Order Nos. R9-2015-0001 and R9-2015-0100). Although this project is not subject to the Municipal Stormwater Permit, it is recommended that the project implement permanent Site Design, Source Control, Pollutant Control, and Hydromodification Management practices in accordance with the County of San Diego Model Best Management Practice (BMP) Design Manual (http://www.sandiegocounty.gov/content/sdc/dpw/watersheds/DevelopmentandConstruction/BMP_Design_Manual.html). County staff is available as a resource to assist in project design to minimize impacts from stormwater runoff leaving the project site.
2. Construction BMPs and associated plans for conformance with the State of California's Construction General Permit.

VECTOR CONTROL PROGRAM

The County of San Diego Vector Control Program (VCP) is responsible for the protection of public health through the surveillance and control of mosquitoes that are vectors for human disease including West Nile virus (WNV). The VCP has completed their review and has the following comments regarding the proposed project.

1. The VCP requests that the EA address potential impacts from possible mosquito breeding sources created by the project and that the project be designed and constructed in a manner to minimize those impacts. Specifically, ensure that construction-related depressions created by grading activities and vehicle tires, tree pits and landscaping do not result in depressions that will hold standing water. In addition, ensure BMPs, storm water drainage systems, and ornamental water features do not create a potential mosquito breeding source. Any area that is capable of accumulating and holding at least ½ inch of water for more than 96 hours can support mosquito breeding and development. Finally, if habitat remediation is required for the project, the design should be consistent with guidelines for preventing mosquito habitat creation.
2. The VCP has the authority pursuant to state law and County Code to order the abatement of any mosquito breeding that does occur either during construction or after the project is completed that is determined to be a vector breeding public nuisance. The VCP will exert that authority as necessary to protect public health if the project is not designed and constructed to prevent such breeding.
3. For your information, the County of San Diego Guidelines for Determining Significance for Vectors can be accessed at http://www.sandiegocounty.gov/content/dam/sdc/pds/docs/vector_guidelines.pdf and the California Department of Public Health Best Management Practices for Mosquito Control in California is available at

Mr. Petrilla
February 2, 2017
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<http://www.cdph.ca.gov/HealthInfo/discond/Documents/BMPforMosquitoControl07-12.pdf>.

The County looks forward to receiving future documents and/or notices related to this project and providing additional assistance at your request. If you have any questions regarding these comments, please contact Danny Serrano, Land Use / Environmental Planner at (858) 694-3680, or via email at daniel.serrano@sdcounty.ca.gov.

Sincerely,



JOSEPH FARACE, Group Program Manager
Advance Planning Division
Planning & Development Services

Email cc:

Adam Wilson, Policy Advisor, Board of Supervisors, District 2
Vincent Kattoula, CAO Staff Officer, LUEG
James Pine, Deputy Fire Marshal, Fire Authority
Erin Jensen, Administrative Analyst, DEH
Jeff Kashak, Planner, DPW
Jim Bennett, Groundwater Geologist, PDS
Dennis Campbell, Planner, PDS
Keith Kezer, Program Coordinator, PDS
Peter Eichar, Land Use/Environmental Planning Manager, PDS

Section 106 Initial Consultation Letter to California State Historic Preservation Officer

1300 Pennsylvania Avenue NW
Washington, DC 20229



**U.S. Customs and
Border Protection**

APR 17 2017

Ms. Natalie Lincquist, SHPO
Office of Historic Preservation
California Department of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296-0001

Subject: Proposed Construction of a U.S. Border Patrol Brown Field Border Patrol Station in Dulzura, San Diego County, California.

Dear Ms. Lincquist:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and its implementing regulations 36 Code of Federal Regulations (CFR) Part 800, U.S. Customs and Border Protection (CBP) is transmitting this letter and enclosures to initiate consultation and identify historic properties for the above referenced Undertaking. CBP, a component within the Department of Homeland Security, proposes to construct a new U.S. Border Patrol (USBP) Brown Field Border Patrol Station (BPS) in Dulzura, San Diego County, California, and move operations from the existing USBP BPS to the new facility. The existing USBP BPS is undersized for the number of agents assigned to it and is in poor condition, but it cannot be expanded or renovated to provide safe and adequate facility, parking, or storage space. Additionally, the existing USBP BPS is outside of the Brown Field Station's Area of Responsibility and no longer meets the needs of USBP.

Description of Undertaking:

The Undertaking is to construct, operate, and maintain a new USBP Brown Field BPS at an approximately 120-acre site at the intersection of State Route 94 (Highway 94) and Campbell Ranch Road in Dulzura, California (see Enclosure 1). The Area of Potential Effect (APE) encompasses the entire 120-acre parcel; however, the Undertaking would only take place within the southern portion of the parcel. It would include construction of a main administrative/processing building with a footprint of approximately 54,000 square feet (ft²) that would be designed to accommodate up to 400 USBP agents and support staff. Ancillary support facilities and structures would include a support building (providing vehicle maintenance, facility maintenance work area/shop, and warehouse), covered outdoor training and weapons cleaning areas, government and privately owned vehicle parking areas, fuel island, canine kennel, communications tower, septic system and leach field, helipad and associated fuel point, roadways, emergency generator, and utilities including two wells. The combined footprint of all ancillary facilities and structures would be approximately 348,000 ft², for a total footprint of approximately 402,000 ft².

Identification of Historic Properties:

CBP has defined the Area of Potential Effect (APE) for the Undertaking as the footprint of the site for archeology for direct effects and a 1 mile radius for indirect effects. On November 5, 2015, the South Coastal Information Center (SCIC) was contacted to perform a records search within 0.5 mile of the Project APE. The records search returned with two known archaeological resources within the Project APE, and 21 other resources within 0.5 mile of the APE. On December 23, 2015, a letter was submitted to the San Diego Historical Society to request information and solicit any concerns regarding the Undertaking. On December 3, 2015, a request was submitted to the Native American Heritage Commission (NAHC) for a search of their Sacred Lands File. The results of the NAHC Sacred Land File search, received on January 13, 2016, indicated no areas of concern within the 0.5-mile radius. The response from NAHC also included a contact list of Native American individuals or organizations who may have additional information regarding sacred resources in the area. Those individuals and organizations were contacted regarding the proposed scope of the Undertaking.

Richard Tellow, the Environmental Director for the Jamul Indian Village, and Clint Linton, the Director of Cultural Resources for the Iipay Nation of Santa Ysabel, responded to the inquiries. Both contacts requested that a Native American tribe of Kumeyaay affiliation be present to monitor ground disturbing activities. All other contacts on the NAHC list either have not responded to letter, email and phone attempts to contact them, or have deferred to tribes closer to the Project area.

HDR archaeologists conducted a cultural resource survey for the Undertaking January 12 through January 15, and January 25 2016. Preliminary efforts consisted of the review of records within the Undertaking area and the generation of a map of the recorded cultural resources within and near the APE using a geographic information system (GIS). Nine new archaeological resources (HDR-1 to HDR-9) were discovered during the survey and the two prerecorded sites within the APE (P-37-030018, P-37-030020) were updated. HDR archaeologists conducted Phase II significance testing from March 10 through March 25, 2016, for sites within or near the Area of Impact (AOI). The Jamul Band of Kumeyaay Indians (Jamul Indian Village) provided Native American monitors during ground disturbance through Red Tail Monitoring & Research, Inc. The Phase II testing consisted of 298 shovel test pits (STPs) in sites HDR-2, HDR-3, HDR-5 to HDR-9, and Locus B of P-37-030018. The latter was selected for two test excavation units (TEUs) based on (1) surface artifact indications, (2) the level of perceived subsurface disturbance, and (3) data gathered from the excavation of the STPs.

Evaluation of Eligibility and Assessment of Effects:

Only non-diagnostic flakes and one piece of marine shell were identified within the STPs and TEUs. All resources within the APE were evaluated for significance and potential affect based on the criteria set forth by the National Register of Historic Places (NRHP). Sites HDR-1, HDR-4, and P-37-030020 lie outside of the APE and will not be affected by the Undertaking. Archaeological sites HDR-2, HDR-3, HDR-5, HDR-6, HDR-7, HDR-8, and P-37-030018 lie within the APE, but are unlikely to yield information important to the past, and do not meet the criteria established to qualify as a historical property under Section 106. HDR-9 lies outside but close to the APE, where it will be possible to incur indirect effects, but it also does not meet the

Ms. Natalie Lincquist

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criteria established to qualify as a historical property. Therefore, a determination of No Historic Properties Affected is appropriate for this Undertaking.

Finding of No Historic Properties Affected:

Based on the negative findings from the survey, the limited nature of the action, and because the site has been highly disturbed from previous agricultural use, CBP has determined that no historic properties will be affected by the Undertaking. CBP requests your concurrence with this determination.

In accordance with Section 106 of the National Historic Preservation Act, CBP has also notified tribal governments of its determination. The Native American Heritage Commission was also notified. The following tribal representatives were notified:

- Barona Group of Capitan Grande Band of Mission Indians, California
- Campo Band of Diegueno Mission Indians, California
- Ewiiapaayp Band of Kumeyaay Indians, California
- Iipay Nation of Santa Ysabel, California
- Inaja Band of Mission Indians, California
- Jamul Indian Village, California
- Kwaaymii Laguna Band of Mission Indians, California
- La Posta Band of Diegueno Mission Indians California
- Manzanita Band of Diegueno Mission Indians, California
- Mesa Grande Band of Diegueno Mission Indians, California
- San Pasqual Band of Diegueno Mission Indians of California
- Sycuan Band of the Kumeyaay Nation
- Viejas Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California

Enclosed is a topographic map showing the project location, a copy of a tribal consultation letter, a table listing tribal coordination, and an electronic copy of the full cultural resources investigation report on a CD. This letter serves as our project initiation and coordination in accordance with 36 CFR Part 800.3.g and we are requesting an expedited review of the following:

- 1) Review and Comment on APE
- 2) Review and Comment on Identification Efforts
- 3) SHPO Concurrence with CBP Determination of No Historic Properties Affected

Your prompt attention to this request is greatly appreciated. If CBP has not received a response from your office within 30 days of your receipt of this determination letter, CBP will consider its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted to me by mail at the following address:

Paul Enriquez
Environmental Branch Chief
Border Patrol Facilities and Tactical Infrastructure
Program Management Office
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Ms. Natalie Lincquist
Page 4

If possible, please send a scanned copy of the correspondence by email to:

John Petrilla, Environmental Protection Specialist
john.p.petrilla@cbp.dhs.gov

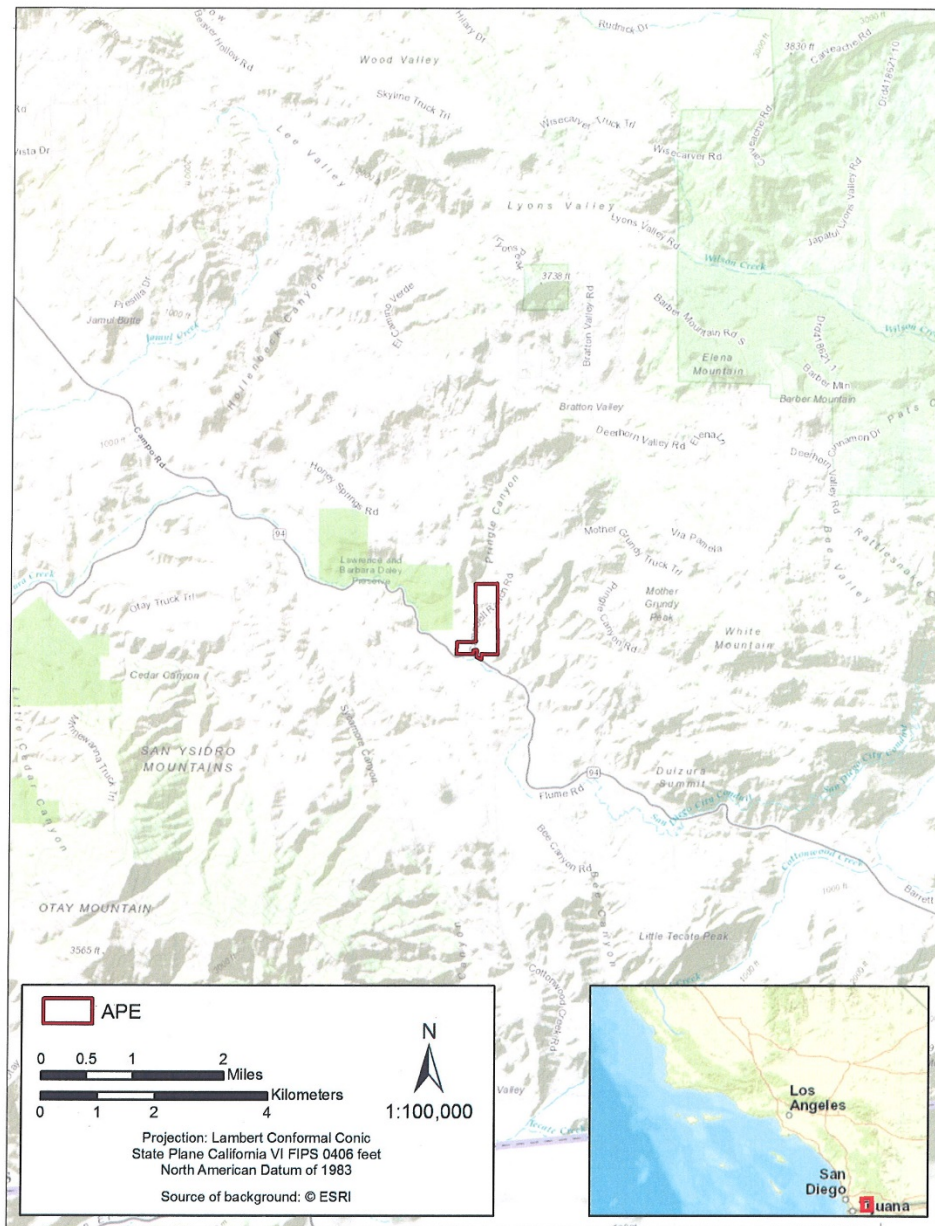
We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact John Petrilla by telephone at (949) 643-6385 or by email at john.p.petrilla@cbp.dhs.gov.

Sincerely,



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

Enclosures: Project Location Map
Copy of Typical Letter Sent to Tribes
Table Listing Coordination
Full Report (CD)



Enclosure 1. Regional Location



January 15, 2016

<Contact Address>

Re: California Border Patrol (CBP)/Cal-Fire Brown Field Project: Site 1

Dear XXX,

HDR is contacting interested parties regarding the above referenced project in the unincorporated community of Dulzura in San Diego County. The project Area of Potential Effect (APE) lies within Township 17 South, Range 2 East, Section 34 of the Dulzura USGS 7.5 minute topographic map (see figure 1). CBP is assessing potential sites for suitability as the location of a proposed new Brown Field Border Patrol Station (BPS) in San Diego County, California. Based on the results of the market survey, three initial properties were identified by Border Patrol as potential locations for a new station based on their proximity to the Highway 94 checkpoint and their central location with respect to the Brown Field station area of responsibility. One of the properties CBP is interested in further assessing is the 136-acre California Department of Forestry and Fire Protection (CAL FIRE) property (Site 1) located at the intersection of Highway 94 and Campbell Ranch Road (see map below).

A records search of the project identified two prehistoric archaeological sites (P-37-030020 & P-37-030018) documented to be within the boundaries of the project Area of Potential Effect (APE). Both of these sites are large lithic scatters with no associated milling features. Outside the APE, but within one-half mile of it, three prehistoric milling sites, three lithic scatters, four combination milling and lithic scatter sites, and two isolates consisting of a flake each, have been previously recorded. None of the resources located outside the APE will be affected by this project.

Please notify me if you have any information or concerns about tribal or cultural resources that may be within or adjacent to the project APE. I request that you respond in writing with any such concerns. I can be reached by mail or fax according to the information listed below. Additionally, I can be reached by email at margaret.diss@hdrinc.com.

Respectfully submitted,

Margaret Diss
Staff Archaeologist

hdrinc.com

8690 Balboa Avenue, Suite 200, San Diego, CA 92123
T 858.712.8400 F 858.712.8333



Figure 1. Overview of part of the APE facing west

hdrinc.com

8690 Balboa Avenue, Suite 200, San Diego, CA 92123
T 858.712.8400 F 858.712.8333



This figure has been redacted from the Environmental Assessment because it includes information that is confidential under California Government Code 6254.10 and the National Historic Preservation Act, Section 304, and other applicable federal, state, and local laws and regulations prohibiting public and unauthorized disclosure of records related to cultural resources.

Figure 2. Record Search Results

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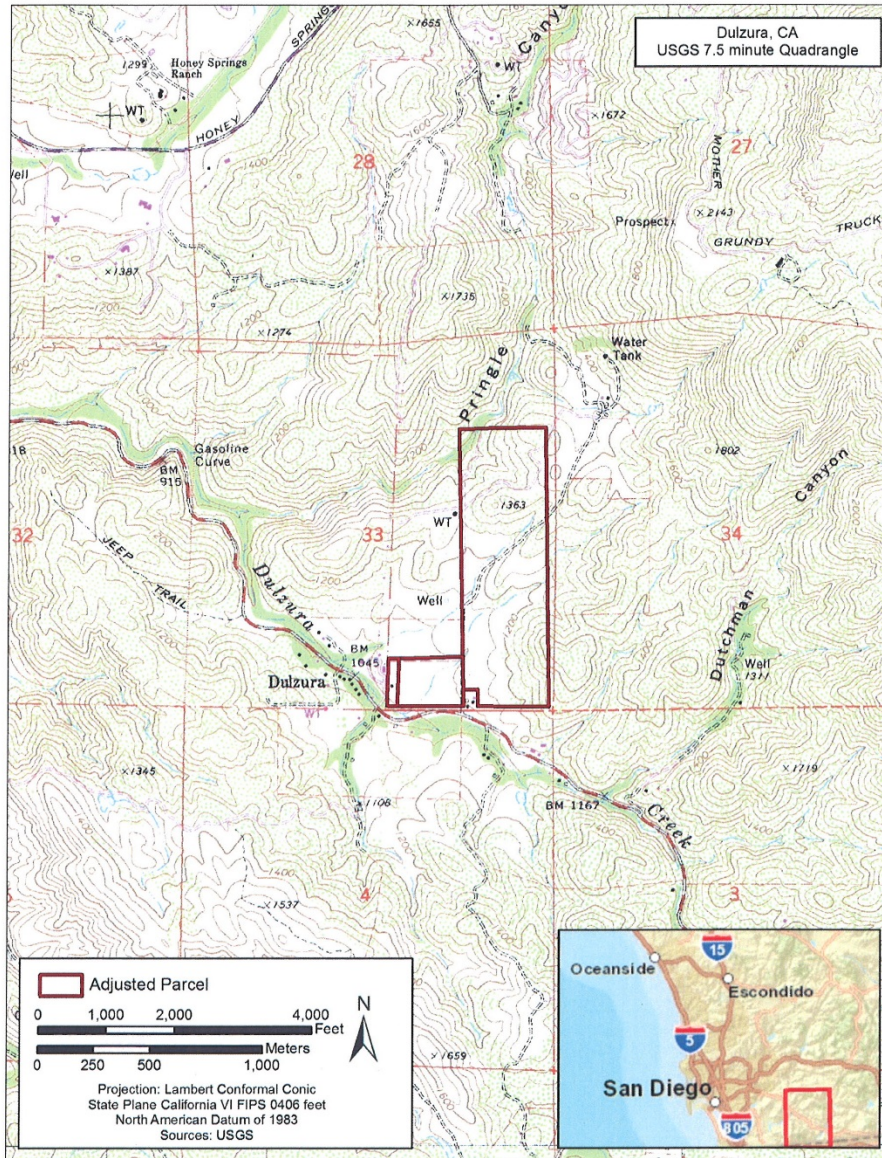


Figure 3. Project APE

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CalFire Property Brown Field CBP Station - Native American Correspondence

Tribal Affiliation	Individual Contacted	Method of Contact	Date of Contact	Response Received
California Native American Heritage Commission	Rob Wood 1550 Harbor Blvd, Suite 100, West Sacramento, CA 95691	Email: nahc@nahc.ca.gov	12/3/2015	Yes (1/13/2016): No known sacred sites within the project area. Recommends contacting local tribal entities.
Diegueno	Barona Group of the Capitan Grande Clifford La Chappa, Chairperson 1095 Barona Rd. Lakeside, CA 92040	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-3-16	Left a message with the secretary. She says that if we do not hear back from anyone in the office, then the Band has no comments.
Diegueno/Kumeyaay	EWiiaapaayp Tribal Office Robert Pinto Sr., Chairperson 4054 Willows Rd. Alpine, CA 91901	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-3-16	Spoke with the Vice Chairman (see below), who says that the project is not within tribal use area or on the reservation, so they have no comment.
Diegueno/Kumeyaay	EWiiaapaayp Tribal Office Michael Garcia, Vice Chairperson 4054 Willows Road, Alpine, CA 91901	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-3-16	Mr. Garcia says that the project is not within tribal use area or on the reservation, so they have no comment.
Diegueno/Kumeyaay	La Posta Band of Mission Indians Gwendolyn Parada, Chairperson 8 Crestwood Road Boulevard, CA 91905	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-3-16	Left voicemail.

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Tribal Affiliation	Individual Contacted	Method of Contact	Date of Contact	Response Received
Diegueno/Kumeyaay	Manzanita Band of Kumeyaay Nation Angela Elliott Santos, Chairperson P.O. Box 1302 Boulevard, CA 91905	<ul style="list-style-type: none"> • USPS Letter • Phone • Email 	1-15-16 2-3-16 2-17-16 2-3-16	No response to letter. No Voicemail option. Sent Email.
Diegueno	San Pasqual Band of Mission Indians Allen E. Lawson, Chairperson P.O. Box 365 Valley Center, CA 92082	<ul style="list-style-type: none"> • USPS Letter • Phone • Email 	1-15-16 2-3-16 2-3-16	Spoke with Doris C, who requested that I re-send the letter via email.
Diegueno/Kumeyaay	Sycuan Band of the Kumeyaay Nation Cody J. Martinez, Chairperson 1 Kwaaypaay Court, El Cajon, CA 92019	<ul style="list-style-type: none"> • USPS Letter • Phone • Email 	1-15-16 2-3-16 2-3-16	Spoke with Lisa Haws, Cultural Resource Manager. Re-sent the letter via email.
Diegueno/Kumeyaay	Viejas Band of Kumeyaay Indians Anthony R. Pico, Chairperson P.O. Box 908 Alpine, CA 91903	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-3-16	Left message with Julie Hagen, Environmental Coordinator (PS, Robert Welch is the new Chairperson).
Diegueno/Kumeyaay	Campo Band of Mission Indians Ralph Goff, Chairperson	<ul style="list-style-type: none"> • USPS Letter • Phone • Email 	1-15-16 2-3-16 2-3-16	Tried to leave message at provided phone number, but no one answers phone and the message directory does not include Mr. Goff.

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Tribal Affiliation	Individual Contacted	Method of Contact	Date of Contact	Response Received
	36190 Church Road., Suite 1, Campo, CA 91906			Email sent with letter attached.
Diegueno/Kumeyaay	Jamul Indian Village Raymond Hunter, Chairperson, P.O. Box 612, Jamul, CA 91935	<ul style="list-style-type: none"> • USPS Letter • Phone • Phone • Email 	1-15-16 2-3-16 2-17-16 2-17-16	Spoke with Environmental Director Richard Tellow, who recommended monitoring. The Jamul Indian Village is the closest band to the project APE. Mr. Tellow recommends having a meeting on the property and/or a phone call to specify the details of the project and see what is out there. He recommends moving artifacts to an appropriate area close by or giving important artifacts to the tribe rather than curation. A map and description of the sites within the APE was sent to him via email.
Diegueno	Mesa Grande Band of Mission Indians Mark Romero, Chairperson PO Box 270, Santa Ysabel, CA 92070	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-3-16	Left Voicemail.
Diegueno- Kwaaymli Kumeyaay	Kwaaymii Laguna band of Mission Indians Carmen Lucas P.O. Box 775, Pine Valley, CA 91962	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-2-15	Left Voicemail.
Diegueno	Inaja Band of Mission Indians Rebecca	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-2-15	Phone Rang...no voicemail and no email.

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Tribal Affiliation	Individual Contacted	Method of Contact	Date of Contact	Response Received
	Osuna, Chairman 2005 S. Escondido Blvd, Escondido, CA 92025			
Diegueno/Kumeyaay	lipay Nation of Santa Ysabel, Clint Linton, Director of Cultural Resources, P.O. Box 507, Santa Ysabel, CA 92070	<ul style="list-style-type: none"> • USPS Letter • Phone • Email 	1-15-16 2-2-15 2-17-16	Received email on 2-19-16. Mr. Linton recommends Native American monitoring by a Kumeyaay Band member.
Diegueno/Kumeyaay	lipay Nation of Santa Ysabel Virgil Perez, Chairperson PO Box 130 Santa Ysabel, CA 92070	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-2-15	Left Voicemail
Diegueno/Kumeyaay	Ewiiaapaayp Tribal Office Michael Garcia, Vice Chairperson 4054 Willows Road, Alpine, CA 91901	<ul style="list-style-type: none"> • USPS Letter • Phone 	1-15-16 2-2-15	Mr. Garcia says that the project is not within tribal use area or on the reservation, so they have no comment.

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Example Section 106 Consultation Letter to Native American Tribes

1300 Pennsylvania Avenue NW
Washington, DC 20229



**U.S. Customs and
Border Protection**

APR 17 2017

Clint Linton
Director of Cultural Resources
Iipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, CA 92070

Subject: Proposed Construction of a U.S. Border Patrol Brown Field Border Patrol Station in Dulzura, San Diego County, California.

Dear Director of Cultural Resources Linton:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and its implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, U.S. Customs and Border Protection (CBP) is transmitting this letter to respectfully invite your Tribe to consult on this Undertaking, if you so choose, and to review CBP's assessment of effects. CBP, a component within the Department of Homeland Security, proposes to construct a new U.S. Border Patrol (USBP) Brown Field Border Patrol Station (BPS) in Dulzura, San Diego County, California, and move operations from the existing USBP BPS to the new facility. The existing USBP BPS is undersized for the number of agents assigned to it and is in poor condition, but it cannot be expanded or renovated to provide safe and adequate facility, parking, or storage space. Additionally, the existing USBP BPS is outside of the Brown Field Station's Area of Responsibility and no longer meets the needs of USBP.

Description of Undertaking:

The Undertaking is to construct, operate, and maintain a new USBP Brown Field BPS at an approximately 120-acre site at the intersection of State Route 94 (Highway 94) and Campbell Ranch Road in Dulzura, California (see Enclosure 1). The Area of Potential Effect (APE) encompasses the entire 120-acre parcel; however, the Undertaking would only take place within the southern portion of the parcel. It would include construction of a main administrative/processing building with a footprint of approximately 54,000 square feet (ft²) that would be designed to accommodate up to 400 USBP agents and support staff. Ancillary support facilities and structures would include a support building (providing vehicle maintenance, facility maintenance work area/shop, and warehouse), covered outdoor training and weapons cleaning areas, government and privately owned vehicle parking areas, fuel island, canine kennel, communications tower, septic system and leach field, helipad and associated fuel point, roadways, emergency generator, and utilities including two wells. The combined footprint of all ancillary facilities and structures would be approximately 348,000 ft², for a total footprint of approximately 402,000 ft².

Identification of Historic Properties:

CBP has defined the Area of Potential Effect (APE) for the Undertaking as the footprint of the site for archeology for direct effects and a 1 mile radius for indirect effects.

On November 5, 2015, the South Coastal Information Center (SCIC) was contacted to perform a records search within 0.5 mile of the Project APE. The records search returned with two known archaeological resources within the Project APE, and 21 other resources within 0.5 mile of the APE. On December 23, 2015, a letter was submitted to the San Diego Historical Society to request information and solicit any concerns regarding the Undertaking. On December 3, 2015, a request was submitted to the Native American Heritage Commission (NAHC) for a search of their Sacred Lands File. The results of the NAHC Sacred Land File search, received on January 13, 2016, indicated no areas of concern within the 0.5-mile radius. The response from NAHC also included a contact list of Native American individuals or organizations who may have additional information regarding sacred resources in the area. Those individuals and organizations were contacted regarding the proposed scope of the Undertaking.

Richard Tellow, the Environmental Director for the Jamul Indian Village, and Clint Linton, the Director of Cultural Resources for the Iipay Nation of Santa Ysabel, responded to the inquiries. Both contacts requested that a Native American tribe of Kumeyaay affiliation be present to monitor ground disturbing activities. All other contacts on the NAHC list either have not responded to letter, email and phone attempts to contact them, or have deferred to tribes closer to the Project area.

HDR archaeologists conducted a cultural resource survey for the Undertaking January 12 through January 15, and January 25 2016. Preliminary efforts consisted of the review of records within the Undertaking area and the generation of a map of the recorded cultural resources within and near the APE using a geographic information system (GIS). Nine new archaeological resources (HDR-1 to HDR-9) were discovered during the survey and the two prerecorded sites within the APE (P-37-030018, P-37-030020) were updated. HDR archaeologists conducted Phase II significance testing from March 10 through March 25, 2016, for sites within or near the Area of Impact (AOI). The Jamul Band of Kumeyaay Indians (Jamul Indian Village) provided Native American monitors during ground disturbance through Red Tail Monitoring & Research, Inc. The Phase II testing consisted of 298 shovel test pits (STPs) in sites HDR-2, HDR-3, HDR-5 to HDR-9, and Locus B of P-37-030018. The latter was selected for two test excavation units (TEUs) based on (1) surface artifact indications, (2) the level of perceived subsurface disturbance, and (3) data gathered from the excavation of the STPs.

Evaluation of Eligibility and Assessment of Effects:

Only non-diagnostic flakes and one piece of marine shell were identified within the STPs and TEUs. All resources within the APE were evaluated for significance and potential affect based on the criteria set forth by the National Register of Historic Places (NRHP). Sites HDR-1, HDR-4, and P-37-030020 lie outside of the APE and will not be affected by the Undertaking. Archaeological sites HDR-2, HDR-3, HDR-5, HDR-6, HDR-7, HDR-8, and P-37-030018 lie within the APE, but are unlikely to yield information important to the past, and do not meet the

Clint Linton
Page 3

criteria established to qualify as a historical property under Section 106. HDR-9 lies outside but close to the APE, where it will be possible to incur indirect effects, but it also does not meet the criteria established to qualify as a historical property. Therefore, a determination of No Historic Properties Affected is appropriate for this Undertaking.

Finding of No Historic Properties Affected:

Based on the negative findings from the survey, the limited nature of the action, and because the site has been highly disturbed from previous agricultural use, CBP has determined that no historic properties will be affected by the Undertaking. CBP requests your concurrence with this determination.

In accordance Section 106 of the National Historic Preservation Act, CBP has also notified the State Historic Preservation Officer and the Native American Heritage Commission of its determination. The following tribal representatives, including yours, were notified:

- Barona Group of Capitan Grande Band of Mission Indians, California
- Campo Band of Diegueno Mission Indians, California
- Ewiiapaayp Band of Kumeyaay Indians, California
- Iipay Nation of Santa Ysabel, California
- Inaja Band of Mission Indians, California
- Jamul Indian Village, California
- Kwaaymii Laguna Band of Mission Indians, California
- La Posta Band of Diegueno Mission Indians California
- Manzanita Band of Diegueno Mission Indians, California
- Mesa Grande Band of Diegueno Mission Indians, California
- San Pasqual Band of Diegueno Mission Indians of California
- Sycuan Band of the Kumeyaay Nation
- Viejas Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California

Your prompt attention to the request is greatly appreciated. CBP requests a response from your office within 30 days of your receipt of this determination letter. Written correspondence may be submitted to me by mail at the following address:

Paul Enriquez
Environmental Branch Chief
Border Patrol Facilities and Tactical Infrastructure
Program Management Office
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

If possible, please send a scanned copy of the correspondence by email to:

John Petrilla, Environmental Protection Specialist
john.p.petrilla@cbp.dhs.gov

Clint Linton
Page 4

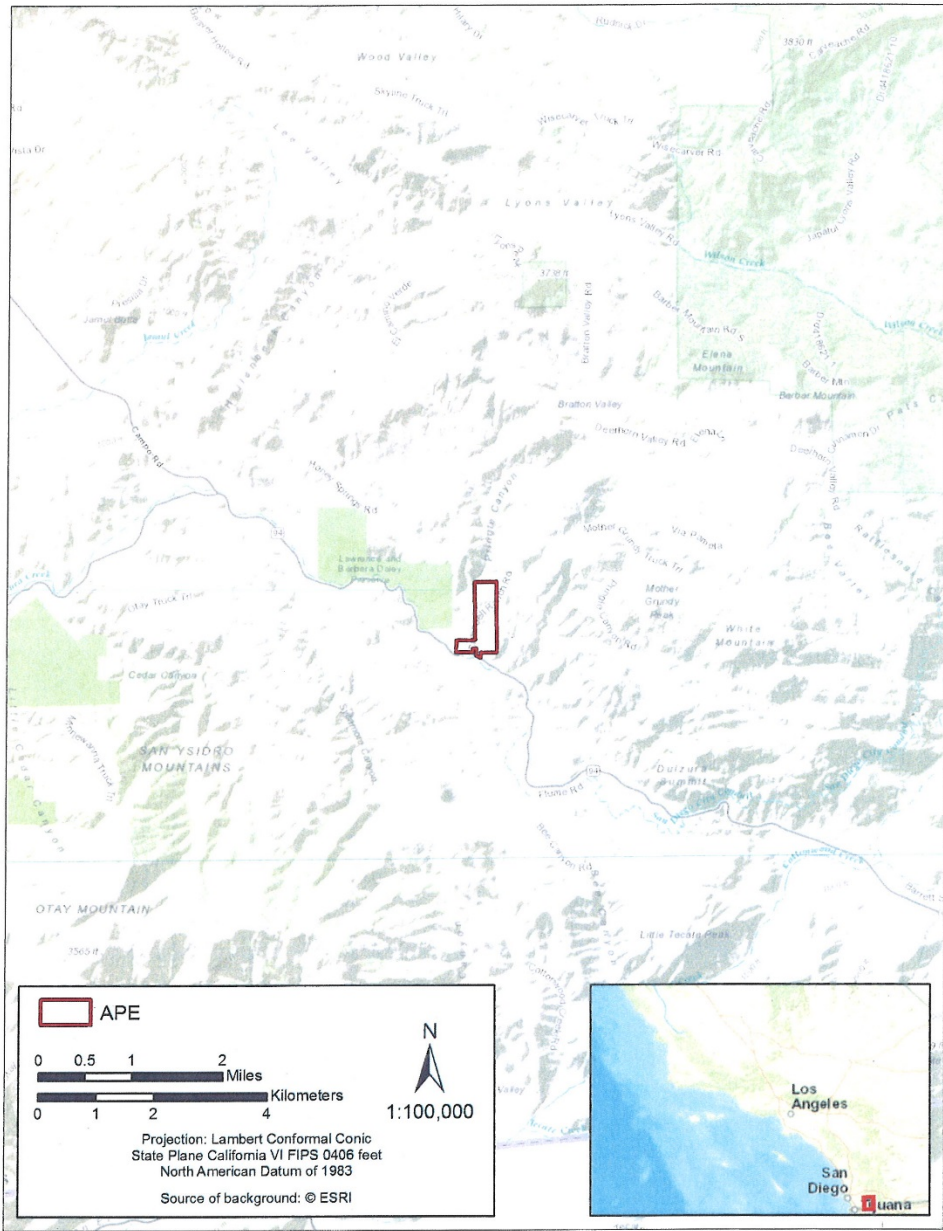
We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact John Petrilla by telephone at (949) 643-6385 or by email at john.p.petrilla@cbp.dhs.gov.

Sincerely,

A handwritten signature in black ink that reads "Paul Enriquez". The signature is written in a cursive, flowing style.

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

Enclosures: Project Location and APE Map



Enclosure 1. Regional Location

Letter from California State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



May 17, 2017

Reply In Reference To: CBP_2017_0505_001

Paul Enriquez, Environmental Branch Chief
Border Patrol Facilities and Tactical Infrastructure
Program Management Office
U. S Customs and Border Protection
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677-3401

RE: Proposed Construction of U. S. Border Patrol Brown Field Border Patrol Station in Dulzura, San Diego County, California (your letter of APR 17, 2017)

Dear Mr. Enriquez:

The U. S. Customs and Border Protection (CBP) is initiating consultation with the Office of Historic Preservation (OHP) on the above-cited undertaking, in accordance with Section 106 of the *National Historic Preservation Act*, as amended. CBP proposes to construct the new Brown Field Border Patrol Station (BPS) on a 120-acre parcel in Dulzura (San Diego County).

The BPS will consist of an administrative and processing building with a footprint of approximately 54,000 square feet (ft²) and other ancillary facilities and structures with a footprint of approximately 348,000 ft², for a total footprint of approximately 402,000 ft² (approximately 9.25 acres). CBP has identified the area of potential effect (APE) as the 120 acres parcel and the area of impact (AOI) as the 9.25 acres area. Access to the AOI will be via SR-94 and Campbell Ranch Road. All of the ground disturbing activities associated with the proposed undertaking will occur within the AOI.

As documentation for your finding of effect, you provided a cultural resources survey report prepared by Margaret Diss, Michael Connolly, and Wayne Glenny (HDR, Inc.) and dated September 2016. A records review was conducted at the South Coastal Information Center, San Diego State University on November 5, 2015. That review identified 2 cultural resources as being located within the AOI and 21 other cultural resources as being located within 0.5 miles of the APE. Pedestrian surveys of AOI identified five new cultural resources within the AOI and subsequent field-testing of the seven cultural resources (located within the AOI) were conducted by HDR personnel. The field-testing was monitored by three Native American Monitors provided by Red Tail Monitoring & Research, Inc.

Native American consultation included contacting the Native American Heritage Commission, who identified 15 tribal governments or groups that should be contacted in regards to the proposed undertaking. Request for comment letters were sent to those Native American contacts on January 16, 2016. The following two responses were received in response to those letters:

- Richard Tellow, Environmental Director, Jamul Indian Village (Diegueno/Kumeyaay) recommended that Native American monitors be present during ground disturbing activities; and

Mr. Paul Enriquez
May 17, 2017
Page 2 of 2

CBP_2017_0505_001

- Clint Linton, Director of Cultural Resources, Lipay Nation of Santa Ysabel (Diegueno/Kumeyaay) recommended that Native American monitors be present during ground disturbing activities.

CBP has determined that the following seven cultural resources are not eligible for listing on the National Register of Historic Places (NRHP):

1. HDR-2 – lithic scatter;
2. HDR-3 – habitation site;
3. HDR-5 – lithic scatter;
4. HDR-6 – bedrock milling site;
5. HDR-7 – lithic scatter and bedrock milling site;
6. HDR-8 – lithic scatter; and
7. P-37-030018 – habitation site.

The report prepared by HDR was very detailed and provided adequate documentation to support the determination of non-eligibility for these seven cultural resources.

Based on the records reviews, the pedestrian surveys, and the tribal consultation, CBP has determined that a finding of No Historic Properties Affected is appropriate for the proposed undertaking. The Board has requested OHP to review and comment on their identification of the APE, their determination of eligibility, and their finding of No Properties Affected for the proposed undertaking.

After reviewing the information submitted with your letter, OHP offers the following comments:

- I have no objections to your identification and delineation of the APE, pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d);
- I concur that the seven cultural resources identified above are not eligible for listing on the NRHP, and
- I do not object to your finding of No Historic Properties Affected for the proposed undertaking, as described above.

Be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have additional future responsibilities for this undertaking under 36 CFR Part 800. Should you encounter cultural artifacts during ground disturbing activities, please halt all work until a qualified archaeologist can be consulted on the nature and significance of such artifacts.

If you have any questions or concerns, please contact Ed Carroll at (916) 445-700627 or via e-mail at Ed.Carroll@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

Letter from Viejas Band of Kumeyaay Indians



PQ Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
Fax: 6194455337
viejas.com

April 27, 2017

Mr. Paul Enriquez
Environmental Branch Chief
US Border Patrol
1300 Pennsylvania Avenue NW
Washington, DC 20229

RE: Brown Field Border Patrol Station

Dear Mr. Enriquez,

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site is has cultural significance or ties to Viejas.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

Please call Ernest Pingleton for scheduling at 619-659-2314 or email epingleton@Viejas-nsn.gov. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ray Teran", is written over a horizontal line.

Ray Teran, Resource Management
VIEJAS BAND OF KUMEYAAY INDIANS

Letter from Campo Band of Mission Indians



Campo Band of Mission Indians

Chairman Ralph Goff
Vice-Chairman Harry P. Cuero Jr.
Secretary Kerm Shipp
Treasurer Marcus Cuero
Committee Brian Connolly Sr.
Committee Steven M. Cuero
Committee Benjamin Dyche

May 5, 2017

Paul Enriquez

Environmental Branch Chief

Border Patrol Facilities and Tactical Infrastructure

Program Management Office

24000 Avila Road, Suite 5020

Laguna Niguel, CA 92677

Dear Mr. Enriquez

Subject: Proposed Construction of a US Border Patrol Brown Field Border Patrol Station in Dulzura

After review of Proposed Construction of a US Border Patrol Brown Field Border Patrol Station in Dulzura project, Campo Band of Mission Indians concludes that there is no significant impact on cultural resources from initial surveys, also that cultural resources sometime are discovered underground once earth is moved during construction. Campo Band of Mission Indians request that the project have qualified cultural monitors from a reputable company monitor the project. If there is a discovery of cultural resources as a result of the proposed project Campo Band of Mission Indian requests to be notified of the discovery and possible mitigation.

Sincerely,

Ralph Goff

Chairman

Campo Band of Mission Indians

Example Draft EA Transmittal Letter

1300 Pennsylvania Avenue NW
Washington, DC 20229



**U.S. Customs and
Border Protection**

Mr. G. Mendel Stewart
Field Supervisor
U.S. Fish and Wildlife Service
Carlsbad Ecological Services Field Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

OCT 01 2018

Subject: Notice of Availability for the Draft Environmental Assessment Addressing the Proposed Construction, Operation, and Maintenance of a New U.S. Border Patrol Brown Field Border Patrol Station in Dulzura, San Diego County, California

Dear Mr. Stewart:

U.S. Customs and Border Protection (CBP), a component within the Department of Homeland Security (DHS), proposes to construct a new Brown Field Border Patrol Station (BPS) for the U.S. Border Patrol in Dulzura, San Diego County, California, and move all activities from the existing facility to the new facility. Pursuant to the National Environmental Policy Act (NEPA) of 1969, 42 United States Code § 4321 et seq., CBP has prepared a Draft Environmental Assessment (EA) to identify and assess the potential impacts of construction, operation, and maintenance of a new Brown Field BPS on a 125.2-acre government-owned property at the intersection of Highway 94 and Campbell Ranch Road. The EA complies with NEPA, the Council on Environmental Quality regulations in 40 Code of Federal Regulations §§ 1500–1508, and DHS Instruction Manual 023-01-001-01, Rev. 1.

The Proposed Action would include construction of a main BPS building designed to accommodate up to 400 U.S. Border Patrol agents and support staff. Ancillary support facilities and structures would include a vehicle maintenance/all-terrain vehicle storage facility (including facility maintenance work area/shop and warehouse), outdoor tactical support areas, government and privately owned vehicle parking areas, vehicle wash rack, fuel island, canine kennel, communications tower, septic system and leach field, water supply facility, stormwater management system, helipad, roadways, emergency generators, and utilities.

CBP invites public participation in the NEPA process through its solicitation of comments on the enclosed Draft EA and its associated Draft Finding of No Significant Impact (FONSI). In order to be considered for inclusion in the Final EA, comments on the Draft EA and Draft FONSI must be received by **November 5, 2018**. Please provide comments using only one of the following methods:

- by email: commentsenv@cbp.dhs.gov
- by U.S. mail: Brown Field Station EA, c/o Mr. John Petrilla, Border Patrol and Air and Marine Program Management Office, 24000 Avila Road, Suite 5020, Laguna Niguel, CA 92677.

Mr. G. Mendel Stewart
Page 2

When submitting comments, please include your name and address, and identify your comments as for the Brown Field Station EA. Addresses will be compiled to develop a mailing list for those requesting information on the Final EA. Your comments, your name, and affiliation (if any) will be made available to the public.

The Draft EA and Draft FONSI are also available at <http://www.cbp.gov/about/environmental-cultural-stewardship/cbp-environmental-documents>. Hard copies of the Draft EA and Draft FONSI can also be reviewed at the Rancho San Diego Branch Library, 11555 Via Rancho San Diego, El Cajon, CA 92019 and the Potrero Branch Library, 24883 Potrero Valley Road, Potrero, CA 91963.

If you have any technical questions, please contact Mr. John Petrilla by telephone at 949-643-6385 or by email to John.P.Petrilla@cbp.dhs.gov.

Sincerely,



Joseph Zidron
(A) Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine Program Management Office
U.S. Customs and Border Protection

Enclosure: Draft EA and Draft FONSI

Comments Received During the Draft EA Comment Period

California Department of Forestry and Fire Protection



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

2249 Jamacha Rd.
EL CAJON, CA 92019
(619)590-3100
Website: www.fire.ca.gov



October 31, 2018

Mr. John Petrilla
Border Patrol & Air & Marine Program Management Office
24000 Avila Road – Suite 5020
Laguna Niguel, CA 92677

RE: Notice of Availability for the Draft Environmental Assessment Addressing the Proposed Construction, Operation, and Maintenance of a New U.S. Border Patrol Brown Field Border Patrol Station in Dulzura, San Diego County, California

Dear Mr. Petrilla,

The California Department of Forestry and Fire Protection (CALFIRE) appreciates the opportunity to comment on the Environmental Assessment (EA) for the proposed U.S. Border Patrol Brown Field Border Patrol Station (BP Station) located in Dulzura, San Diego County, California. The proposed 120-acre site for the new facility will be located directly behind (north), and adjacent to, CALFIRE's Dulzura Fire Station 30 (Station 30). Station 30 is staffed year-round and provides fire control and emergency services to the community of Dulzura as well as the greater surrounding area. In an effort to minimize impacts to Station 30, CALFIRE offers the following comments for your consideration.

1. The proposed BP Station site is currently in a native surface condition consisting of grass, shrubs, and exposed soil. In addition, the site also gently slopes toward the south in the direction of Station 30. To date, runoff from the area behind Station 30 has not been a problem as precipitation sufficiently absorbs into the native surface or naturally flows away from the facility. With the likelihood of asphalt, concrete, and other impermeable surfaces occupying the site directly behind Station 30, sufficient runoff collection and drainage from the proposed CBP station would be necessary to mitigate potential runoff and flooding impacts to Station 30.
2. With the significant increase in vehicular traffic as a result of the new BP Station accommodating approximately 400 staff, and the road's location proximate to Station 30's driveway to access HWY 94, there is some concern regarding traffic impacts to Station 30. CALFIRE would like to ensure vehicular traffic resulting from the proposed BP Station is sufficiently mitigated to allow the emergency services provided by Station 30 to continue uninterrupted.
3. The CEQA Finding of Significance (pg. 4-17) related to Noise states helicopter operations would be similar to those conducted by CALFIRE based on the CALFIRE helipad nearby. It should be noted that the CALFIRE helispot is utilized, on average, less than five times a year and often much less. The helispot is not under the control of CALFIRE and is only used informally during an emergency as conditions warrant. CALFIRE Aircraft Operations are managed out of Gilesie Helitack Base in El Cajon and the Ramona Air Attack Base in Ramona. Noise generated from CBP helicopter operations behind the Dulzura Station will likely be significantly more frequent both in duration and intensity.

Station 30 is staffed by firefighters 24-hours a day throughout the year. To ensure Station 30 provides the highest quality emergency services to the public, it is necessary for on-duty staff to get sufficient rest. The BP Station, as proposed, appears to provide facilities for approximately 400

agents and support staff, canine kennels, helipad, generators, and generators. In addition to headlights, it is also likely that the facility and surrounding area will be illuminated at night with flood lighting or something similar.

With the location of the proposed BP Station being directly adjacent to Station 30, noise and light impacts to Station 30 are likely and could result in the disruption of adequate rest for the on-duty staff at Station 30. CALFIRE would like to ensure noise and light impacts to Station 30 from the proposed BP Station are sufficiently mitigated to allow uninterrupted rest for on-duty emergency staff.

4. The primary access point for Station 30 is the front driveway off of HWY 94. A secondary access point however, also exists at the back of the property along the northern fence line providing access to Campbell Ranch Road. CALFIRE would like to ensure secondary access to Station 30 remains accessible and maintained.

Please consider this CALFIRE's response to the request for comments and information regarding the proposed 120-acre U.S. Border Patrol Brown Field Border Patrol Station in Dulzura. As a courtesy, CALFIRE would like to request a copy of any subsequent environmental documentation when it becomes available for public review. Again, we appreciate the request and opportunity to provide comment.

Sincerely,



Eric Just, Unit Forester
CAL FIRE, San Diego Unit
(619) 590-3103 desk
(619) 592-1224 cell
eric.just@fire.ca.gov

California Department of Transportation, District 11

DEPARTMENT OF TRANSPORTATION

DISTRICT 11
4050 TAYLOR STREET, MS-240
SAN DIEGO, CA 92110
PHONE (619) 688-6960
FAX (619) 688-4299
TTY 711
www.dot.ca.gov



*Making Conservation
a California Way of Life.*

November 5, 2018

11-SD-94

PM 28.7

U.S. Border Patrol Brown Field Station
Draft Environmental Assessment

Mr. John Petrilla
U.S. Customs and Border Protection
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Dear Mr. Petrilla:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the Draft Environmental Assessment (EA) for the new U.S. Border Patrol Brown Field Station project in Dulzura. The proposed project is located just north of State Route 94 (SR-94) at Campbell Ranch Road (PM 28.7) in unincorporated San Diego County. Caltrans would like to make the following comments:

Caltrans is in the process of reviewing an Access Analysis Study. Caltrans will need to approve any new access proposed on the state highway.

Caltrans is in the process of reviewing design plans for access improvements on the state highway. Caltrans will need to approve all design geometrics on the state highway.

Please provide Hydrological Studies for Caltrans review.

In order to evaluate environmental clearances for work within the state Right-of-Way (R/W), the location of access and design footprint of work within state R/W must be determined. Any work performed within Caltrans R/W will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction.

As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans' R/W, and any corresponding technical studies. Caltrans recommends that all National Environmental Policy Act (NEPA) studies include the level of analysis and specific studies needed for CEQA clearances and Caltrans permit issuance work within State R/W. Environmental documentation should include studies or letters from qualified specialists or personnel which address the potential, or lack of potential, for impacts to the following resources in Caltrans' R/W:

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

- Noise
- Air Quality
- Hazardous Materials
- Community Impacts
- Visual/Aesthetic Impacts (including any removal of vegetation or trees)
- Biological Resources
- Cultural Resources
- Water Quality
- Agricultural/Farmland Impacts
- Traffic/Circulation

Community Impacts:

Community impacts that may affect Caltrans' facilities include temporary impacts to traffic flow during construction. Because the area has limited access, all efforts should be made to minimize lane closures. Public Outreach needs to be done to inform the motoring public of any potential traffic delays.

Hazardous Waste:

Aerially deposited lead (ADL) - Elevated levels of aerially deposited lead (ADL) are common in the soil adjacent to state highways. The Environmental Assessment states that "Excess soils from grading during construction would be deposited in an approximately 2.9-acre stockpile located within the BPS footprint." The document does not discuss how soil generated from roadway improvements in the state right-of-way will be addressed. As stated in Section 407 Aerially Deposited Lead Management Guidance for Encroachment Permit Projects of Caltrans Encroachment Permit Manual, "...ADL management has to be addressed when proposed work in state highway right-of-way includes soil disturbance...".

Permittee will be required to perform sampling and analysis of the soils for lead and other contaminants of concern that will be excavated within state right-of-way. For this activity, permittee will be required to submit an initial Encroachment Permit (EP) application for sampling. A Sampling and Analysis Plan (SAP), and a Health and Safety Plan (HaSP) must be submitted along with the application for review. HaSP must be prepared, signed, and sealed by a Certified Industrial Hygienist (CIH). The final soil assessment report including chain of custody, laboratory data, and statistical analysis must be submitted to Caltrans for review. Upon the permit review, additional environmental documents may be required.

The Permittee can then submit the permit application for full project review and approval. Package must include a Lead Compliance Plan (LCP) and a soil management plan, if applicable, as recommended by the Caltrans. The package must be sent for review and approval.

Thermoplastic, traffic stripe, and pavement marking - It is anticipated that traffic stripes and/or pavement markings will be removed when constructing roadway improvements on SR-94.

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to enhance California's economy and livability"*

Mr. John Petrilla
November 5, 2018
Page 3

Traffic stripes and pavement markings contain non-hazardous and/or hazardous levels of lead. A lead compliance plan will be required.

NPDES/Stormwater:

For Alternative 2, it stated that “No impacts” will occur. Therefore, no stormwater issues need to be addressed.

For Alternative 1, “No major, adverse impacts on water quality. BMPs, including those in the Stormwater Pollution Prevention Plan, would be implemented to reduce or eliminate impacts.” All Stormwater related issues should be addressed in SWPPP. Without full design plans for the roadway and culvert work involved within Caltrans Right-of-Way, Caltrans reserves the right to reassess our review/ comments after receiving a completed encroachment permit application for BPS project.

Caltrans received a preliminary Traffic Control Plan (TCP) for review. Caltrans will provide any necessary follow-up comments, and will formally review and approve the TCP as part of Caltrans Encroachment Permit.

Additional information regarding encroachment permits may be obtained by contacting the Caltrans Permits Office at (619) 688-6158. Early coordination with Caltrans is strongly advised for all encroachment permits.

Caltrans recommends continued coordination meetings and communication in order to ensure an efficient project approval process.

If you have any questions, please contact Mark McCumsey at (619) 688-6802 or by email at mark.mccumsey@dot.ca.gov

Sincerely,



JACOB M. ARMSTRONG, Chief
Development Review Branch

*“Provide a safe, sustainable, integrated and efficient transportation system
to enhance California’s economy and livability”*

State of California Governor's Office of Planning and Research, State Clearinghouse



EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH



KEN ALEX
DIRECTOR

November 6, 2018

John Petrilla
U.S. Customs and Border Protection
24000 Avila Rd, Suite 5020
Laguna Niguel, CA 92677

Subject: U.S. Border Patrol Brown Field Border Patrol Station
SCH#: 2016124001

Dear John Petrilla:

The State Clearinghouse submitted the above named Environmental Assessment to selected state agencies for review. The review period closed on November 5, 2018, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
1-916-322-2318 FAX 1-916-558-3184 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

SCH# 2016124001
Project Title U.S. Border Patrol Brown Field Border Patrol Station
Lead Agency U.S. Customs and Border Protection

Type EA Environmental Assessment

Description Note: Review Per Lead

The Department of Homeland Security, U.S. Customs and Border Protection proposes to construct, operate, and maintain a new U.S. Border Patrol (USBP) Brown Field Border Patrol Station on a 125.2-acre government-owned property in Dulzura, San Diego County, CA. The proposed action would include construction of a main Border Patrol Station building designed to accommodate up to 400 USBP agents and support staff. Ancillary support facilities and structures would include a vehicle maintenance/all-terrain vehicle storage facility (including facility maintenance work area/shop and warehouse), outdoor tactical support areas, government and privately owned vehicle parking areas, vehicle wash rack, fuel island, canine kennel, communications tower, septic system and leach field, water supply utilities. Additionally, 0.9 acre of roadway improvements and 0.2 acre of drainage hardening would be constructed on land outside of the government-owned property.

Lead Agency Contact

Name John Petrilla
Agency U.S. Customs and Border Protection
Phone 949-643-6385 **Fax**
email
Address 24000 Avila Rd, Suite 5020
City Laguna Niguel **State** CA **Zip** 92677

Project Location

County San Diego
City
Region
Lat / Long 32° 38' 39" N / 116° 46' 29" W
Cross Streets Hwy 94 and Campbell Ranch Rd
Parcel No. 600-160-13-01
Township 17S **Range** 2E **Section** 33 **Base**

Proximity to:

Highways 94
Airports
Railways
Waterways Dulzura Crk, unnamed intermittent and ephemeral streams
Schools
Land Use Vacant/general ag/rural lands

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Schools/Universities; Septic System; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Cal Fire; Department of Conservation; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 11; Office of Emergency Services, California; Air Resources Board; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Board, Region 9; Department of Toxic Substances Control; Native American Heritage Commission

Note: Blanks in data fields result from insufficient information provided by lead agency

**Document Details Report
State Clearinghouse Data Base**

Date Received 10/03/2018 *Start of Review* 10/03/2018 *End of Review* 11/05/2018

Note: Blanks in data fields result from insufficient information provided by lead agency.

County of San Diego, Planning and Development Services



County of San Diego

MARK WARDLAW
DIRECTOR

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
(858) 694-2962 • Fax (858) 694-2555
www.sdcounty.ca.gov/pds

KATHLEEN A. FLANNERY
ASSISTANT DIRECTOR

November 16, 2018

John Petrilla
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine Program Management Office
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Via e-mail to: John.P.Petrilla@cbp.dhs.gov

REQUEST FOR COMMENTS ON THE U.S. CUSTOMS AND BORDER PROTECTION'S NOTICE OF AVAILABILITY FOR THE DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED BROWN FIELD BORDER PATROL STATION IN DULZURA

Mr. Petrilla,

The County of San Diego (County) reviewed the U.S. Customs and Border Protection's (CBP) Notice of Availability for the Draft Environmental Assessment (EA) For Brown Field Border Patrol Station in Dulzura (Project), dated October 15, 2018.

The County appreciates the opportunity to review the project and offers the following comments for your consideration. Please note that none of these comments should be construed as County support for this Project.

MULTIPLE SPECIES CONSERVATION PLAN

The County would like to submit the following biological comments on the Draft EA, Sections 3.3 through 3.5 and Sections 5.3 through 5.5.

1. **Formation of the MSCP:** The proposed site is within the South County Multiple Species Conservation Program (MSCP) within unincorporated lands in the Metro-Lakeside-Jamul segment. The County implements the MSCP through the South County Subarea Plan and its associated Implementing Agreement. These documents establish the conditions under which the County receives from the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) long-term Take Authorizations for certain Covered Species incidental to land development and other lawful land uses.

The successful implementation of the MSCP and its associated South County Subarea Plan requires that the County establish the South County Preserve in accordance with the Biological Mitigation Ordinance (BMO). A critical component through which the County meets its obligations to the USFWS and CDFW of forming the Preserve is through the preservation of sensitive habitat occurring in step (i.e. in direct

association) with development activities. Depending on the impacted land and mitigation site, the BMO requires that Tier II habitats are mitigated at a 1:1 to 2:1 mitigation-to-impact ratio and Tier III habitats are mitigated at a 0.5:1 to 1.5:1 mitigation-to-impact ratio. Within MSCP, the habitat mitigation provided would need to be provided at the same tier level of the impacted habitat or above.

- a. The Environmental Assessment (EA) indicates that the project site contains Diegan coastal sage scrub, southern coast live oak riparian forest, non-native grassland, flat-topped buckwheat, field/pasture, and disturbed habitat. The proposed project would impact a total of 30.8 acres of the 125.2-acre government-owned property, including 6.7 acres of Diegan coastal sage scrub (Tier II), 0.1 acres of flat topped buckwheat (Tier II), and 0.2 acres of non-native grassland (Tier III), 22.7 acres of field/pasture, and 1.1 acres of disturbed habitat.
 - b. The Proposed Project does not appear to provide habitat preservation for impacts to sensitive habitats, including 6.7 acres of Diegan coastal sage scrub (Tier II), 0.1 acres of flat-topped buckwheat (Tier II), and 0.2 acres of non-native grassland (Tier III). Please clarify how the proposed project is mitigating project impacts to 30.8 acres, including 7.0 acres of sensitive vegetation communities, consistent with the MSCP and the County's BMO, thereby meeting CEQA requirements to implement feasible mitigation measures.
2. Impact Area: The County would consider the entire 125.2-acre parcel impacted unless the non-impacted lands are protected under a biological open space easement (or similar preservation mechanism). A clear delineation shown on all maps and plans of non-impacted lands that are "not a part" of the proposed project may be considered acceptable on a project-by-project basis.
 3. Significance Determination and Mitigation: Sections 3.3.3.1 and 3.4.3.1 indicate that the project would have "negligible" adverse impacts on vegetation, including CNDDDB special status plant species. This conclusion has not been substantiated based on proposed impacts to 6.7 acres of Diegan coastal sage scrub, 0.1 acres of flat-topped buckwheat, 0.2 acres of non-native grassland, potential raptor foraging habitat, and identification of sensitive species. Per the County's BMO and the County's Guidelines for Determining Significance, the County's California Environmental Quality Act (CEQA) implementing document, these impacts would be considered significant and require appropriate mitigation.
 4. Application of BMPs: Sections 3.3.3.1 and 3.4.3.1 indicate that "BMPs implemented during construction, maintenance, and operation of the proposed BPS *would likely reduce* [emphasis added] the potential for adverse impacts on vegetation." The County of San Diego supports the implementation of BMPs; however please clearly demonstrate how the proposed BMPs will reduce impacts to less than significant in conformance with CEQA and the BMO.
 5. Proposed Habitat Restoration: Sections 3.3.3.1 and 3.4.3.1 further indicate that "*up to* [emphasis added] 17 acres of disturbed native and non-native habitat would be restored with native vegetation, *to the maximum extent practicable* [emphasis added]..." The County of San Diego supports restoration of native habitat; however please clearly demonstrate how the proposed restoration of native habitat will reduce impacts to less than significant in conformance with CEQA and the BMO.
 6. Protections for Restored Lands: There is a temporal loss associated with habitat restoration activities. Additionally, restoration without land protection does not guarantee the long-term preservation of the habitat. As such, the County would require mitigation for impacts to vegetation communities through a biological open space easement or similar preservation mechanism, instead of or in addition to restoration in order to ensure the perpetual preservation and stewardship of habitat lands. Where appropriate, implementation of a Resource Management Plan or equivalent for the perpetual monitoring and management of the easement, sensitive species, and other biological resources should also be

- provided. Please clarify how the proposed project is consistent with the MSCP, the County's BMO, and therefore CEQA.
7. Habitat Classifications: Please provide additional information about the on-site characteristics of the areas identified as field/pasture and disturbed vegetation and how these vegetation communities are differentiated from non-native grasslands as defined in the Draft Vegetation Communities of San Diego County (Oberbauer 2008).
 8. Non-native Grassland: Per the County's BMO, non-native grassland is a sensitive habitat type, categorized as Tier III, due to the sensitive plant and animal species that such habitat supports. As such, impacts to this habitat would require appropriate mitigation.
 9. Sensitive Species Surveys: According to the EA, federally and State listed threatened, endangered, and candidate species known to occur on-site include coastal California gnatcatcher, and Quino checkerspot butterfly. Federally and State listed threatened, endangered, and candidate species that have a potential to occur in the expanded project area includes Mexican flannelbush, Otay tarplant, San Diego thornmint, Hermes copper butterfly, least Bell's vireo, and southwestern willow flycatcher. Engelmann oak, a County sensitive species, has also been identified on the site.
 - a. Please verify that comprehensive habitat assessment and/or surveys were conducted to evaluate the potential for County-listed species to occur as identified in the County's Guidelines for Determining Significance, the County's implementing document for CEQA.
 - b. Please provide additional information about the duration/extent, methods, and existing conditions of surveys completed and make the results of these surveys available for public review.
 10. Sensitive Species Impacts and Mitigation: Please demonstrate how the project provides adequate mitigation for impacts to all sensitive wildlife and plant species known to occur on the project site or that have a high potential to occur, including County-listed species. Staff suggests that in accordance with the BMO, species-specific mitigation should be provided for potentially significant impacts to Federal, State, and County-listed species. In addition to preconstruction surveys outlined in the EA, appropriate mitigation might include preservation of species-specific suitable habitat, restoration/enhancement plans, and/or long-term management and monitoring plans, in order to demonstrate a less than significance determination. Habitat-based mitigation may be adequate for certain species considered to be less sensitive (e.g. species identified only on the County List D Plant Species list in the County's Guidelines for Determining Significance).
 11. Wildlife Movement, Raptor Foraging, and Nursery Sites: Please clarify whether the proposed project site provides biological function and value for wildlife movement, raptor foraging, and/or nursery sites. If the site functions in any of these capacities, please identify the project's potential impacts to these biological functions and values and how these functions and values will be mitigated to less than significant.
 12. Conformance with CEQA: In order to comply with the California Environmental Quality Act (CEQA) as suggested in Section 4.3 of the EA, the project would be required to comply with the MSCP and the County's MSCP Subarea Plan and BMO, which are the County's CEQA implementation documents within the South County MSCP Subarea as well as the County's Guidelines for Determining Significance. Please demonstrate how the project is in conformance with these documents, and therefore CEQA.
 13. The Implementing Agreement for the MSCP states that "To the maximum extent appropriate, in any consultation under Section 7 of the ESA (16 U.S.C. § 1536) involving the County and/or an existing or prospective Third Party Beneficiary with regard to Covered Species Subject to Incidental Take, the USFWS shall ensure that the biological opinion issued in connection with the proposed project which is

the subject of the consultation is consistent with the biological opinion issued in connection with the MSCP and Subarea Plan, provided that the proposed project is consistent with the MSCP and Subarea Plan. Any biological measures included under the terms and conditions of the Section 7 biological opinion shall, to the maximum extent appropriate, be consistent with the mitigation required by the County for the particular project or activity under the MSCP and Subarea Plan as implemented by this Agreement."

FIRE

1. The proposed project is adjacent to the existing CAL FIRE station in the community of Dulzura. The size and intensity of the proposed project may necessitate an augmentation of the existing staffing and/or equipment at that fire station.

GROUNDWATER

1. Based on the proposed water demand and proximity to nearby wells, the County recommends development of a Groundwater Monitoring & Mitigation Plan (GMMP) to ensure adequate water for offsite groundwater users. The GMMP should include requirements for water level monitoring for at least the first five years of operation.

PARKS & RECREATION

1. County Department of Parks and Recreation (DPR) owns the Lawrence and Barbara Daley Preserve (located approximately .25 miles west of the subject project parcel), which is a 597 acre biological and cultural preserve with sensitive resources. The Dulzura Creek runs from the subject project area to the preserve. DPR requests all project related impacts to the creek be minimized and divulged to DPR's land manager in order to adequately prepare for impacts to resources on the preserve. This includes (but are not limited to) impacts associated with preserve encroachment, lighting and noise.
 - a. Additionally, DPR notes that the vehicle wash rack, leach field, and septic system reserve area are proposed to be located directly adjacent to a tributary that runs into Dulzura Creek. Proper BMP's and long term stormwater practices should be employed as part of this project.
2. County DPR appreciates the inclusion of Trails Development as part of the cumulative analysis. On page 4-2, in the Trails Development section, please revise the following:
 - a. The first citation should read County of San Diego (DPLU) 2005 and County of San Diego (DPR) 2009. The second citation should read County of San Diego (DPR) 2009. This should also be corrected in the EA's References.
 - b. A proposed staging area for these trails and pathways is located in Hollenbeck Canyon Wildlife Area on Honey Springs Road off Highway 94.

LAND & WATER QUALITY

1. The scope of the proposed project will create a new public water system that will be regulated by the State Water Resources Control Board, Division of Drinking Water. Ensure the new public water system maintains source capacity pursuant to Section 64554 of Title 22 of the California Code of Regulations. Contact the State Water Resources Control Board – Division of Drinking Water at (619) 525-4159, for a Water Supply Permit Amendment package, water quality testing requirements and specific conditions as stated in the California Code of Regulations, Waterworks Standards, before using this constructed source as a public water supply.

2. The Cal Fire Access Driveway is proposed over the existing leach field serving the Station. The existing leach lines and reserve area must be protected from vehicular traffic and free from surface pavement.
3. The EA states that the project will generate an average daily wastewater flow of 4,800 gallons per day, and will have a peak daily capacity of 6,000 gallons per day, which will be discharged to a septic system with an approximately 1-acre leach field. Since the projected flow is less than 10,000 gallons per day, the septic system will be regulated by the Department of Environmental Health (DEH) Land & Water Quality Division. Per the Local Agency Management Program for Onsite Wastewater Treatment Systems (OWTS) in the County, a projected flow over 3,500 gallons per day must either utilize a supplemental treatment system certified by NSF International or a third party tester as capable of achieving 50 percent total nitrogen reduction when comparing the 30-day average influent to the 30-day average effluent; or submit an evaluation to the County DEH completed by a qualified professional that determines whether or not the discharge from the OWTS will adversely affect groundwater quality. DEH review requires submission of a septic layout, including percolation testing and an engineered design with flow calculations, with appropriate fees.
4. The EA states that the project includes a Canine Kennel. If the kennel facility includes a wastewater collection system that is proposed to discharge to an onsite wastewater treatment system, then the design must include the method of achieving adequate treatment of animal waste and hair.
5. The EA states that the project includes a Vehicle Maintenance Facility and Vehicle Wash Rack. Wastewater collection systems associated with these facilities are prohibited from discharging to an onsite wastewater treatment system and must be approved through the San Diego Regional Water Quality Control Board.
6. Please contact Craig Caes at 858-694-2551 or Craig.Caes@sdcounty.ca.gov for DEH OWTS permitting requirements.

FOOD & HOUSING DIVISION

1. The EA includes information regarding a 130 detainee detention facility. Please consult with DEH- Food and Housing Division to ensure the required plan check and operational permits, for the detention facility and food facility to feed detainees, are obtained.

HAZARDOUS MATERIALS

1. Thank you for the opportunity to comment on the referenced project. The County's Hazardous Materials Division (HMD) is responsible for the protection of public health and the environment by ensuring hazardous materials, hazardous waste, medical waste and underground storage tanks are properly managed. The HMD has completed their review and has the following comments regarding the proposed project.
2. The facility described in the Proposed Action include vehicle maintenance work area/shop and warehouse as well as a vehicle wash rack, fuel island, and emergency generators. Please be advised, all of these types of facilities are known to commonly store 55 gallons or more of hazardous materials (e.g. diesel, gasoline, propane, lubricating oils, used oil, etc.). As such, the building owner or manager will be required to submit a Hazardous Materials Questionnaire to the HMD and complete a HMD Hazardous Materials Plan Check review prior to issuance of a certificate of occupancy by the Building Department. For your reference, guidance and information regarding the plan check requirement can be reviewed at: https://www.sandiegocounty.gov/content/sdc/deh/hazmat/hazmat/hmd_plan_check.html.

3. Please be advised, any proposed activities involving hazardous materials or generating hazardous waste will require the operator(s) to apply for a Unified Program Facility Permit through the California Environmental Reporting System (CERS) and comply with local and state laws and regulations.
4. Any facility storing 1,320 gallons of petroleum in aboveground tanks, containers, and equipment 55-gallons or greater is subject to the California Aboveground Petroleum Storage Act (APSA). Owners and/or operators of such facilities will be required to prepare and implement a Spill Prevention control and Countermeasure plan as referenced in your EA. Large Tank Facilities, with a storage capacity of more than 10,000 gallons of oil must use a Professional Engineer to certify the SPCC Plan. Additional information about APSA is available at:
https://www.sandiegocounty.gov/content/sdc/deh/hazmat/hmd_apsa.html
5. Any and all construction-related hazardous materials generated and stored onsite must be properly labeled and handled in manner to prevent release to the environment. In addition, the applicant and/or contractor(s) must ensure any hazardous wastes generated onsite during construction is properly labeled and disposed by registered hazardous waste hauler.
6. Please note, the HMD has the authority pursuant to state law and County Code to regulate facilities that handle or store hazardous materials and/or generate hazardous/medical wastes. The HMD will apply that authority as necessary to protect public health and the environment. Additional information can be found on our website at: <https://www.sandiegocounty.gov/content/sdc/deh/hazmat.html>.
7. The HMD appreciates the opportunity to participate in the environmental review process for this project. If you have any questions regarding these comments, please contact me at 858-505-6779 or by e-mail at" <https://www.sandiegocounty.gov/content/sdc/deh/hazmat.html>.

VECTOR CONTROL PROGRAM

1. The County's Vector Control Program (VCP) is responsible for the protection of public health through the surveillance and control of mosquitoes that are vectors for human disease including West Nile virus (WNV).
2. The VCP respectfully requests that the Draft Environmental Assessment address potential impacts from possible mosquito breeding sources created by the project and that the project be designed and constructed in a manner to minimize those impacts. Specifically, ensure construction-related depressions created by grading activities, vehicle tires, and excavation do not result in depressions that will hold standing water. In addition, ensure drains, BMPs, detention ponds, and other structures do not create a potential mosquito breeding source. Any area that is capable of accumulating and holding at least ½ inch of water for more than 96 hours can support mosquito breeding and development. Finally, if habitat remediation is required for the project, the design should be consistent with guidelines for preventing mosquito habitat creation.
3. Please note, the VCP has the authority pursuant to state law and County Code to order the abatement of any mosquito breeding that does occur either during construction or after the project is completed that is determined to be a vector breeding public nuisance. The VCP will exert that authority as necessary to protect public health if the project is not designed and constructed to prevent such breeding.
4. For your information, the County's Guidelines for Determining Significance for Vectors can be accessed at: http://www.sandiegocounty.gov/content/dam/sdc/pds/docs/vector_guidelines.pdf and the California Department of Public Health Best Management Practices for Mosquito Control in California is available at:
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/MosquitoesandMosquitoBorneDiseases.aspx#>

Mr. Petrilla
November 16, 2018
Page 7

5. The VCP appreciates the opportunity to participate in the environmental review process for this project. If you have any questions regarding these comments, please contact Daniel Valdez at 858-688-3722 or by e-mail at Daniel.Valdez@sdcounty.ca.gov.

The County appreciates the opportunity to comment on this Project. We look forward to receiving future documents related to this Project and providing additional assistance, at your request. If you have any questions regarding these comments, please contact Timothy Vertino, Land Use / Environmental Planner, at (858) 495-5468, or via e-mail at timothy.vertino@sdcounty.ca.gov.

Sincerely,



Eric Lardy, AICP
Chief (Acting), Advance Planning Division
Planning & Development Services

Enclosure: Attachment A – 2017 COSD Comment Letter

E-mail cc: Adam Wilson, Policy Advisor, Board of Supervisors, District 2
Mel Millstein, Group Program Manager, LUEG
Peter Eichar, Planning Manager, PDS
Kimberly Smith, Land Use/Environmental Planner, PDS
James Pine, Deputy Fire Marshall, County Fire Authority
Jim Bennett, Groundwater Geologist, PDS
Leanne Crow, Hydrogeologist, PDS
Emmet Aquino, Project Manager, DPR
Mary Bennett, Administrative Analyst, DEH

U.S. Department of Agriculture, Natural Resources Conservation Service



United States Department of Agriculture

October 31, 2018

Leigh Hagan
Project Manager, HDR
3025 Chemical Rd. Suite 110
Plymouth Meeting, PA 19462

RE: Brown Field Border Patrol Station Project

Greetings,

In this letter, I am enclosing a soils map and soils resource information to support the farmland determination completed in this office for the project referenced above. According to the enclosed soils report, soils are considered prime farmland, only if irrigated and drained. Of the total 126.3 acres, only 19.2 are considered statewide important or local important farmland. Therefore, the project may proceed as planned.

These soils require good grading and compaction before any construction project begins. In addition, you may consult with other state or federal agencies to make sure no endangered species or cultural resources are affected. These soils are not considered hydric soils neither located in a wetland area due to the absence of water or hydrophytic vegetation. If you have any questions in regards to this letter, please respond to this email.

Warm regards,

Raul S. Alvarado
Raul S. Alvarado
District Conservationist

Attachments

USDA Natural Resources Conservation Service
900 Canterbury Pl. Suite 320 Escondido, CA 92025
Voice: (760) 745-2061 Fax: (844) 206-6968
An Equal Opportunity Provider and Employer

U.S. Department of Agriculture					
FARMLAND CONVERSION IMPACT RATING					
PART I (To be completed by Federal Agency)			Date Of Land Evaluation Request 09/19/2018		
Name of Project U.S. Border Patrol Brown Field Border Patrol Station		Federal Agency Involved U.S. Customs and Border Protection			
Proposed Land Use Border Patrol Station		County and State San Diego County, California			
PART II (To be completed by NRCS)			Date Request Received By NRCS 9/24/2018		Person Completing Form: Raul Alvarado
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>			YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated 62,213
					Average Farm Size 102
Major Crop(s) Avocados, Citrus, Grapes		Farmable Land In Govt. Jurisdiction Acres: 3.8 % 102,502		Amount of Farmland As Defined in FPPA Acres: 7.7 % 207,352	
Name of Land Evaluation System Used CA Revised Storie Index		Name of State or Local Site Assessment System LESA System		Date Land Evaluation Returned by NRCS 10/31/2018	
PART III (To be completed by Federal Agency)			Alternative Site Rating		
			Site A	Site B	Site C
A. Total Acres To Be Converted Directly			19.2		
B. Total Acres To Be Converted Indirectly			59.6		
C. Total Acres In Site			126.3		
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland			0		
B. Total Acres Statewide Important or Local Important Farmland			19.2		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted			0		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value			0		
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)			65		
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>			Maximum Points	Site A	Site B
1. Area In Non-urban Use			(15)	15	
2. Perimeter In Non-urban Use			(10)	10	
3. Percent Of Site Being Farmed			(20)	2	
4. Protection Provided By State and Local Government			(20)	20	
5. Distance From Urban Built-up Area			(15)	15	
6. Distance To Urban Support Services			(15)	10	
7. Size Of Present Farm Unit Compared To Average			(10)	10	
8. Creation Of Non-farmable Farmland			(10)	10	
9. Availability Of Farm Support Services			(5)	5	
10. On-Farm Investments			(20)	0	
11. Effects Of Conversion On Farm Support Services			(10)	0	
12. Compatibility With Existing Agricultural Use			(10)	0	
TOTAL SITE ASSESSMENT POINTS			160	97	0
				0	0
				0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)			100	65	0
Total Site Assessment (From Part VI above or local site assessment)			160	97	0
TOTAL POINTS (Total of above 2 lines)			260	162	0
Site Selected: Site A			Date Of Selection April 7, 2016		Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Reason For Selection: <small>The Department of Homeland Security, U.S. Customs and Border Protection (CBP) propose to construct, operate, and maintain a new U.S. Border Patrol (USBP) Brown Field Border Patrol Station (BPS) on a 125.2-acre government-owned property in Dulzura, San Diego County, California. The Proposed Action would include construction of a main BPS building designed to accommodate up to 400 USBP agents and support staff, as well as all reasonably foreseeable growth. The main BPS building would include offices and other administrative spaces, a detention area with capacity for 130 detainees, and a two-lane salty port. Ancillary support facilities would include a vehicle maintenance/all-terrain vehicle storage facility, covered outdoor training and weapons cleaning areas, government and privately owned vehicle parking areas, vehicle wash rack, fuel island, canine kennel, communications tower, septic system and leach field, water supply facility with one well, stormwater management system, helipad, roadways, emergency generators, and utilities.</small>					
Name of Federal agency representative completing this form: John Petrilla					Date: 09/19/2018
(See Instructions on reverse side)					

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndjSAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

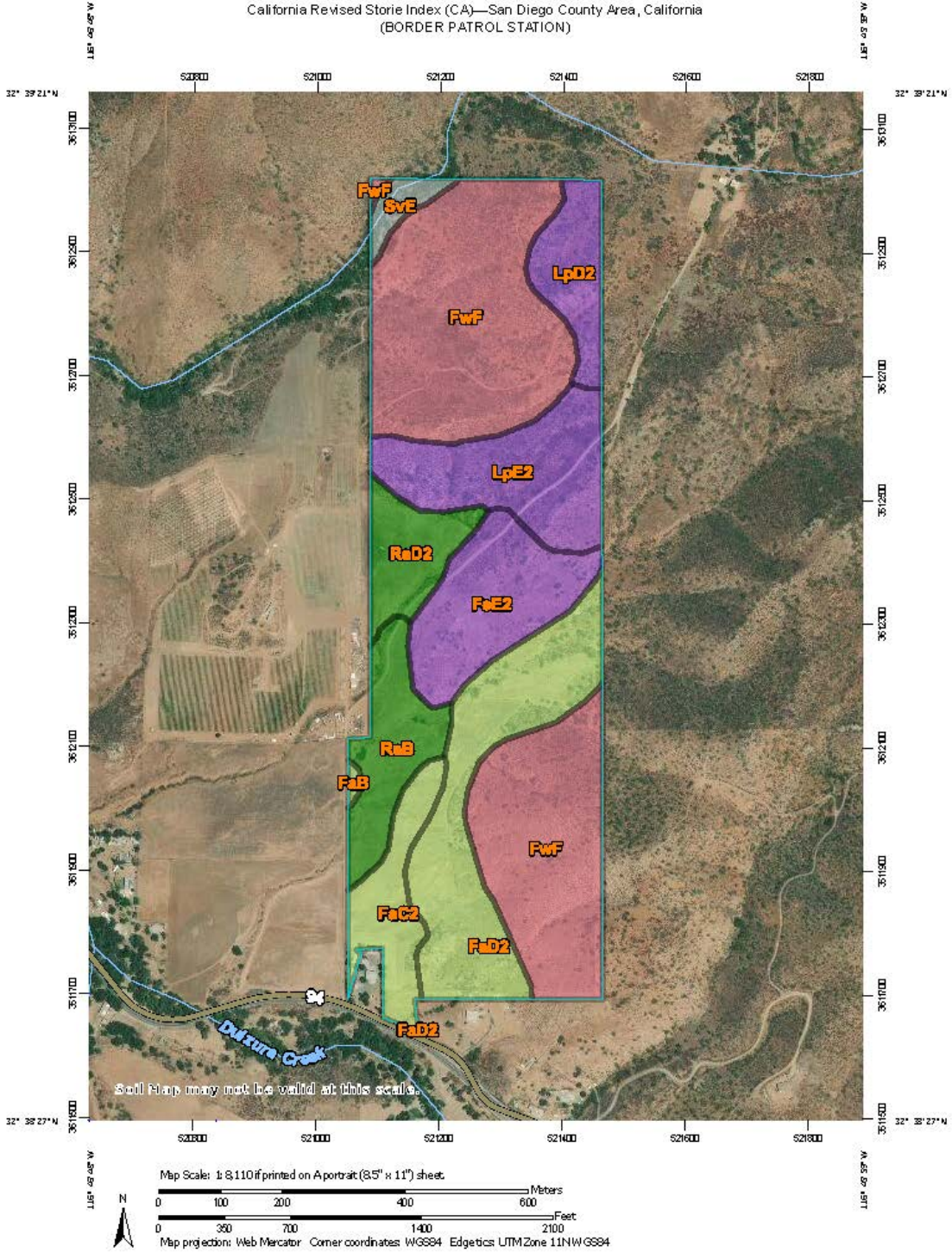
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

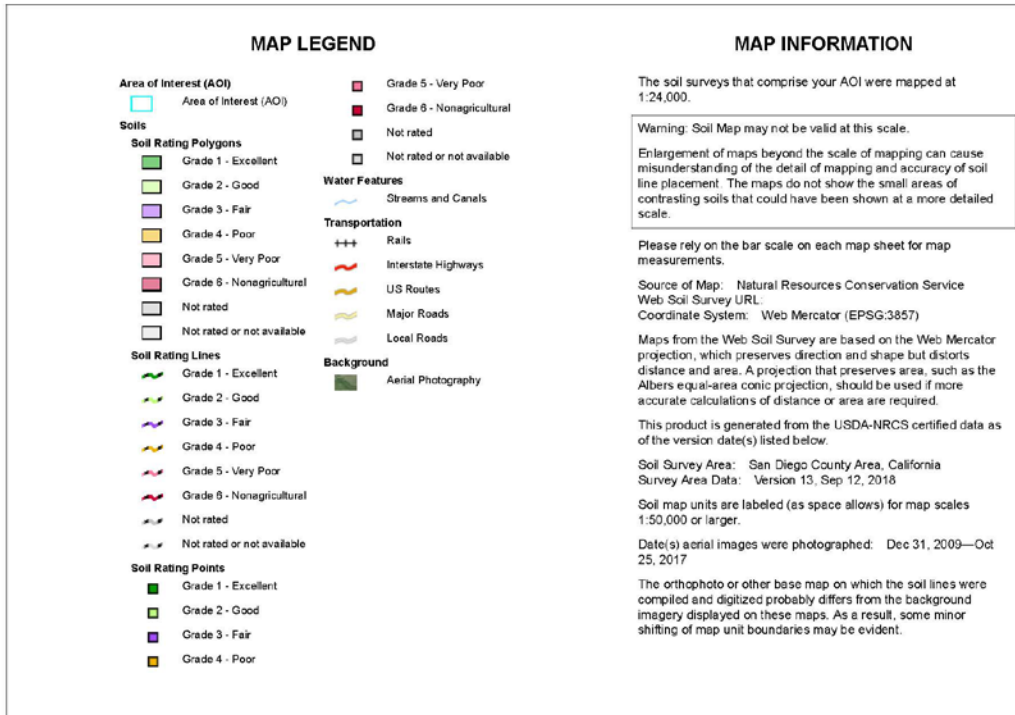
$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

California Revised Soil Index (CA)—San Diego County Area, California
(BORDER PATROL STATION)





California Revised Storie Index (CA)

Map unit symbol	Map unit name	Rating	Component name (percent)	Acres in AOI	Percent of AOI
FaB	Fallbrook sandy loam, 2 to 5 percent slopes	Grade 2 - Good	Fallbrook (85%)	0.3	0.2%
FaC2	Fallbrook sandy loam, 5 to 9 percent slopes, eroded	Grade 2 - Good	Fallbrook (85%)	7.6	5.9%
FaD2	Fallbrook sandy loam, 9 to 15 percent slopes, eroded	Grade 2 - Good	Fallbrook (85%)	20.1	15.7%
FeE2	Fallbrook rocky sandy loam, 9 to 30 percent slopes, eroded	Grade 3 - Fair	Fallbrook (70%)	12.9	10.1%
FwF	Friant fine sandy loam, 30 to 50 percent slopes	Grade 5 - Very Poor	Friant (85%)	49.1	38.4%
LpD2	Las Posas fine sandy loam, 9 to 15 percent slopes, eroded	Grade 3 - Fair	Las Posas (85%)	6.5	5.1%
LpE2	Las Posas fine sandy loam, 15 to 30 percent slopes, eroded	Grade 3 - Fair	Las Posas (85%)	14.2	11.1%
RaB	Ramona sandy loam, 2 to 5 percent slopes	Grade 1 - Excellent	Ramona (85%)	8.8	6.9%
RaD2	Ramona sandy loam, 9 to 15 percent slopes, eroded	Grade 1 - Excellent	Ramona (85%)	6.4	5.0%
SvE	Stony land	Not Applicable for Storie Index	Stony land (100%)	1.9	1.5%
Totals for Area of Interest				127.8	100.0%

Description

The Revised Storie Index is a rating system based on soil properties that govern the potential for soil map unit components to be used for irrigated agriculture in California.

The Revised Storie Index assesses the productivity of a soil from the following four characteristics:

- Factor A: degree of soil profile development
- Factor B: texture of the surface layer
- Factor C: steepness of slope
- Factor X: drainage class, landform, erosion class, flooding and ponding frequency and duration, soil pH, soluble salt content as measured by electrical conductivity, and sodium adsorption ratio

Revised Storie Index numerical ratings have been combined into six classes as follows:

- Grade 1: Excellent (81 to 100)
- Grade 2: Good (61 to 80)
- Grade 3: Fair (41 to 60)
- Grade 4: Poor (21 to 40)
- Grade 5: Very poor (11 to 20)
- Grade 6: Nonagricultural (10 or less)

The components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as the one shown for the map unit. The percent composition of each component in a particular map unit is given to help the user better understand the extent to which the rating applies to the map unit.

Other components with different ratings may occur in each map unit. The ratings for all components, regardless the aggregated rating of the map unit, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

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B

CNDDDB Listed Species and MSCP Covered Species

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Appendix B: CNDDDB Listed Species and MSCP Covered Species

Table B-1. Species Listed by the California Natural Diversity Database

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
<i>Acanthomintha ilicifolia</i>	San Diego thorn-mint	Dicots	T	E	S1	1B.1	SB_RSABG	Chaparral, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland	Chaparral, coastal scrub, valley and foothill grassland, vernal pools.	Endemic to active vertisol clay soils of mesas & valleys. Usually on clay lenses within grassland or chaparral communities. 25-945 m.	Potential
<i>Agelaius tricolor</i>	tricolored blackbird	Birds	None	CE	S1S2	None	BLM_S, CDFW_SSC, IUCN_EN, NABCI_RWL, USFWS_BCC	Freshwater marsh, Marsh & swamp, Swamp, Wetland	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Potential
<i>Ambrosia monogyra</i>	singlewhorl burrobrush	Dicots	None	None	S2	2B.2	None	Chaparral, Sonoran desert scrub	Chaparral, Sonoran desert scrub.	Sandy soils. 5-475 m.	No
<i>Antrozous pallidus</i>	pallid bat	Mammals	None	None	S3	None	BLM_S, CDFW_SSC, IUCN_LC, USFS_S, WBWG_H	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Potential
<i>Arctostaphylos otayensis</i>	Otay manzanita	Dicots	None	None	S1	1B.2	BLM_S	Chaparral, Cismontane woodland	Chaparral, cismontane woodland.	Metavolcanic soils with other chaparral associates. 120-1,525 m.	No
<i>Artemisia palmeri</i>	San Diego sagewort	Dicots	None	None	S3?	4.2	None	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland	Coastal scrub, chaparral, riparian forest, riparian woodland, riparian scrub.	In drainages and riparian areas in sandy soil within chaparral and other habitats. 15-915 m.	Potential
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	Birds	None	None	S3	None	CDFW_WL, USFWS_BCC	Chaparral, Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories approximately 50 yards apart.	Potential
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	Reptiles	None	None	S2S3		CDFW_WL, IUCN_LC, USFS_S	Chaparral, Cismontane woodland, Coastal scrub	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	Potential
<i>Astragalus oocarpus</i>	San Diego milk-vetch	Dicots	None	None	S2?	1B.2	BLM_S, USFS_S	Chaparral, Cismontane woodland	Chaparral, cismontane woodland.	Openings in chaparral or on gravelly flats and slopes in thin oak woodland. 120-1,795 m.	No
<i>Atriplex pacifica</i>	south coast saltscale	Dicots	None	None	S2	1B.2	None	Alkali playa, Coastal bluff scrub, Coastal dunes, Coastal scrub	Coastal scrub, coastal bluff scrub, playas, coastal dunes.	Alkali soils. 1-400 m.	Potential

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
<i>Bloomeria clevelandii</i>	San Diego goldenstar	Monocots	None	None	S2	1B.1	BLM_S	Chaparral, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland	Chaparral, coastal scrub, valley and foothill grassland, vernal pools.	Mesa grasslands, scrub edges; clay soils. Often on mounds between vernal pools in fine, sandy loam. 60-465 m.	Potential
<i>Bombus crotchii</i>	Crotch bumble bee	Insects	None	None	S1S2	None	None		Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Potential
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	Monocots	None	None	S2	1B.1	BLM_S, USFS_S	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Meadow & seep, Ultramafic, Valley & foothill grassland, Vernal pool, Wetland	Vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows and seeps.	Mesic, clay habitats; usually in vernal pools and small drainages. 30-1,615 m.	Potential
<i>Buteo swainsoni</i>	Swainson's hawk	Birds	None	T	S3	None	BLM_S, IUCN_LC, USFWS_BCC	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	No
<i>California macrophylla</i>	round-leaved filaree	Dicots	None	None	S3?	1B.2	BLM_S, SB_RSABG, SB_SBBG	Cismontane woodland, Valley & foothill grassland	Cismontane woodland, valley and foothill grassland.	Clay soils. 15-1,200 m.	No
<i>Callophrys thornei</i>	Thorne's hairstreak	Insects	None	None	S1	None	BLM_S		Associated with the endemic tecate cypress (<i>Cupressus forbesii</i>).	Only known from vicinity of Otay Mountain.	Potential
<i>Calochortus dunnii</i>	Dunn's mariposa-lily	Monocots	None	R	S2S3	1B.2	BLM_S, SB_RSABG, USFS_S	Chaparral, Closed-cone coniferous forest, Ultramafic, Valley & foothill grassland	Closed-cone coniferous forest, chaparral, valley and foothill grassland.	On gabbro or metavolcanic soils; also known from sandstone; often associated with chaparral. 255-1,615 m.	No
<i>Carex obispoensis</i>	San Luis Obispo sedge	Monocots	None	None	S3?	1B.2	BLM_S, SB_SBBG, USFS_S	Chaparral, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland	Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland.	Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m.	Potential
<i>Ceanothus cyaneus</i>	Lakeside ceanothus	Dicots	None	None	S2	1B.2	BLM_S, SB_RSABG, USFS_S	Chaparral, Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral.	200-1040 m.	No
<i>Ceanothus otayensis</i>	Otay Mountain ceanothus	Dicots	None	None	S1	1B.2	BLM_S	Chaparral, Ultramafic	Chaparral.	Metavolcanic or gabbroic soils. 75-1,160 m.	No
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	Mammals	None	None	S3	None	CDFW_SSC	Chaparral, Coastal scrub, Valley & foothill grassland	Variety of habitats including coastal scrub, chaparral & grassland in San Diego County.	Attracted to grass-chaparral edges.	Potential
<i>Clarkia delicata</i>	delicate clarkia	Dicots	None	None	S3	1B.2	BLM_S	Chaparral, Cismontane woodland, Ultramafic	Cismontane woodland, chaparral.	Often on gabbro soils. 50-1,360 m.	No

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
<i>Clinopodium chandleri</i>	San Miguel savory	Dicots	None	None	S2	1B.2	BLM_S, USFS_S	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Ultramafic, Valley & foothill grassland	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland.	Rocky, gabbroic or metavolcanic substrate. 120-1,075 m.	Potential
<i>Coluber fuliginosus</i>	Baja California coachwhip	Reptiles	None	None	S1S2	None	CDFW_SSC		In California restricted to southern San Diego County, where it is known from grassland and coastal sage scrub.	Open areas in grassland and coastal sage scrub.	Potential
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	Dicots	None	None	S2	1B.2	BLM_S, SB_RSABG	Chaparral, Cismontane woodland	Chaparral, cismontane woodland.	Often in mixed chaparral in California, sometimes post-burn. 30-945 m.	No
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Mammals	None	None	S2	None	BLM_S, CDFW_SSC, IUCN_LC, USFS_S, WBWG_H	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Potential
<i>Crotalus ruber</i>	red-diamond rattlesnake	Reptiles	None	None	S3	None	CDFW_SSC, USFS_S	Chaparral, Mojavean desert scrub, Sonoran desert scrub	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No
<i>Cylindropuntia californica</i> var. <i>californica</i>	snake cholla	Dicots	None	None	S1	1B.1	None	Chaparral, Coastal scrub	Chaparral, coastal scrub.	15-290 m.	Potential
<i>Deinandra conjugens</i>	Otay tarplant	Dicots	T	E	S1	1B.1	SB_RSABG	Coastal scrub, Valley & foothill grassland	Coastal scrub, valley and foothill grassland.	Coastal plains, mesas, and river bottoms; often in open, disturbed areas; clay soils. 60-275 m.	Potential
<i>Deinandra floribunda</i>	Tecate tarplant	Dicots	None	None	S2?	1B.2	BLM_S, SB_USDA, USFS_S	Chaparral, Coastal scrub	Chaparral, coastal scrub.	Often in little drainages or disturbed areas. 300-1,325 m.	Potential
<i>Dudleya variegata</i>	variegated dudleya	Dicots	None	None	S2	1B.2	BLM_S	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland	Chaparral, coastal scrub, cismontane woodland, valley and foothill grassland.	In rocky or clay soils; sometimes associated with vernal pool margins. 3-550 m.	Potential

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
<i>Emys marmorata</i>	western pond turtle	Reptiles	None	None	S3	None	BLM_S, CDFW_SSC, IUCN_VU, USFS_S	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometer from water for egg-laying.	No
<i>Ericameria palmeri</i> var. <i>palmeri</i>	Palmer's goldenbush	Dicots	None	None	S2	1B.1	BLM_S	Chaparral, Coastal scrub	Coastal scrub, chaparral.	On granitic soils, on steep hillsides. Mesic sites. 5-625 m.	Potential
<i>Eumops perotis californicus</i>	western mastiff bat	Mammals	None	None	S3S4	None	BLM_S, CDFW_SSC, WBWG_H	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Potential
<i>Euphydryas editha quino</i>	quino checkerspot butterfly	Insects	E	None	S1S2	None	XERCES_CI	Chaparral, Coastal scrub	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside and San Diego counties.	Hills and mesas near the coast. Need high densities of food plants <i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Orthocarpus purpureus</i> .	Potential
<i>Ferocactus viridescens</i>	San Diego barrel cactus	Dicots	None	None	S2S3	2B.1	SB_RSABG	Chaparral, Coastal scrub, Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Often on exposed, level or south-sloping areas; often in coastal scrub near crest of slopes. 3-490 m.	Potential
<i>Fraxinus parryi</i>	chaparral ash	Dicots	None	None	S1	2B.2	None	Chaparral	Chaparral.	Open mixed chaparral and in the chaparral-sage scrub interface in California. 213-620 m.	No
<i>Fremontodendron mexicanum</i>	Mexican flannelbush	Dicots	E	R	S1	1B.1	SB_RSABG	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Ultramafic	Closed-cone coniferous forest, chaparral, cismontane woodland.	Usually scattered along the borders of creeks or in dry canyons; found on gabbro, serpentine, or metavolcanics. 300-490 m.	No
<i>Hesperocyparis forbesii</i>	Tecate cypress	Gymnosperms	None	None	S2	1B.1	BLM_S, SB_RSABG, SB_USDA, USFS_S	Chaparral, Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral.	Primarily on north-facing slopes; groves often associated with chaparral. On clay or gabbro. 60-1,645 m.	No
<i>Horkelia truncata</i>	Ramona horkelia	Dicots	None	None	S3	1B.3	SB_RSABG, USFS_S	Chaparral, Cismontane woodland, Ultramafic	Chaparral, cismontane woodland.	Habitats in California include: mixed chaparral, vernal streams, and disturbed areas near roads. Clay soil; at least sometimes on gabbro. 400-1,300 m.	No
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	Dicots	None	None	S2	1B.2	None	Chaparral, Coastal scrub	Coastal scrub, chaparral.	Sandy soils; often in disturbed sites. 1-915 m.	Potential

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
<i>Iva hayesiana</i>	San Diego marsh-elder	Dicots	None	None	S2	2B.2	SB_RSABG	Alkali playa, Marsh & swamp, Wetland	Marshes and swamps, playas.	Riverwashes. 1-430 m.	Potential
<i>Lasiurus blossevillii</i>	western red bat	Mammals	None	None	S3	None	CDFW_SSC, IUCN_LC, WBWG_H	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests.	Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Potential
<i>Lasiurus cinereus</i>	hoary bat	Mammals	None	None	S4	None	IUCN_LC, WBWG_M	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	No
<i>Lepechinia ganderi</i>	Gander's pitcher sage	Dicots	None	None	S3	1B.3	BLM_S, SB_RSABG	Chaparral, Closed-cone coniferous forest, Coastal scrub, Ultramafic, Valley & foothill grassland	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland.	Usually found in chaparral or coastal scrub; sometimes in tecate cypress woodland. Gabbro or metavolcanic substrate. 305-1,005 m.	Potential
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	Dicots	None	None	S3	4.3	None	Chaparral, Coastal scrub	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1,435 m.	Potential
<i>Lycaena hermes</i>	Hermes copper butterfly	Insects	C	None	S1	None	IUCN_VU, USFS_S	Chaparral, Coastal scrub	Found in southern mixed chaparral and coastal sage scrub at western edge of Laguna Mountains.	Host plant is <i>Rhamnus crocea</i> . Although <i>R. crocea</i> is widespread throughout the coast range, <i>Lycaena hermes</i> is not.	Potential
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	felt-leaved monardella	Dicots	None	None	S3	1B.2	BLM_S, USFS_S	Chaparral, Cismontane woodland	Chaparral, cismontane woodland.	Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil. 300-1,575 m.	No
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	Dicots	None	None	S2	3.1	None	Valley & foothill grassland, Vernal pool, Wetland	Vernal pools, valley and foothill grassland. This subspecies has taxonomic problems; distinguishing between this and <i>M. sessilis</i> is difficult. Hybrid?	Alkaline soils. 20-640 m.	Potential
<i>Myotis ciliolabrum</i>	western small-footed myotis	Mammals	None	None	S3	None	BLM_S, IUCN_LC, WBWG_M		Wide range of habitats mostly arid wooded & brushy uplands near water. Seeks cover in caves, buildings, mines, and crevices.	Prefers open stands in forests and woodlands. Requires drinking water. Feeds on a wide variety of small flying insects.	Potential
<i>Myotis evotis</i>	long-eared myotis	Mammals	None	None	S3	None	BLM_S, IUCN_LC, WBWG_M		Found in all brush, woodland and forest habitats from sea level to approximately 9,000 feet. Prefers coniferous woodlands and forests.	Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Potential

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
<i>Myotis yumanensis</i>	Yuma myotis	Mammals	None	None	S4	None	BLM_S, IUCN_LC, WBWG_LM	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Potential
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	Mammals	None	None	S3S4	None	CDFW_SSC	Coastal scrub	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Potential
<i>Nolina interrata</i>	Dehesa nolina	Monocots	None	E	S2	1B.1	BLM_S, SB_RSABG	Chaparral, Ultramafic	Chaparral.	Typically on rocky hillsides or ravines on ultramafic soils (gabbro, serpentine, or metavolcanic). 255-735 m.	No
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	Mammals	None	None	S3	None	CDFW_SSC, IUCN_L, WBWG_M	Joshua tree woodland, Pinon & juniper woodlands, Riparian scrub, Sonoran desert scrub	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	No
<i>Packera ganderi</i>	Gander's ragwort	Dicots	None	R	S2	1B.2	BLM_S, USFS_S	Chaparral, Ultramafic	Chaparral.	Recently burned sites and gabbro outcrops. 485-1,070 m.	No
<i>Phrynosoma blainvillii</i>	coast horned lizard	Reptiles	None	None	S3S4	None	BLM_S, CDFW_SSC, IUCN_LC	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Potential
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	Birds	T	None	S2	None	CDFW_SSC, NABCI_YWL	Coastal bluff scrub, Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Potential
<i>Quercus cedrosensis</i>	Cedros Island oak	Dicots	None	None	S1	2B.2	None	Chaparral, Closed-cone coniferous forest, Coastal scrub	Closed-cone coniferous forest, chaparral, coastal scrub.	130-975 m.	Potential
<i>Quercus dumosa</i>	Nuttall's scrub oak	Dicots	None	None	S3	1B.1	USFS_S	Chaparral, Closed-cone coniferous forest, Coastal scrub	Closed-cone coniferous forest, chaparral, coastal scrub.	Generally on sandy soils near the coast; sometimes on clay loam. 15-640 m.	Potential
<i>Ribes canthariforme</i>	Moreno currant	Dicots	None	None	S2	1B.3	BLM_S, USFS_S	Chaparral, Riparian scrub	Chaparral, riparian scrub.	Among boulders in oak-manzanita thickets; shaded or partially shaded sites. 30-1430 m.	No
<i>Salvia munzii</i>	Munz's sage	Dicots	None	None	S2	2B.2	SB_RSABG	Chaparral, Coastal scrub	Coastal scrub, chaparral.	Rolling hills and slopes, in rocky soil. 35-575 m.	Potential
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None	S4	None	None	Riparian forest			No

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
Southern Interior Cypress Forest	Southern Interior Cypress Forest	Forest	None	None	S2.1	None	None	Closed-cone coniferous forest			No
<i>Spea hammondi</i>	western spadefoot	Amphibians	None	None	S3	None	BLM_S, CDFW_SSC, IUCN_NT	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	Potential
<i>Stemodia durantifolia</i>	purple stemodia	Dicots	None	None	S2	2B.1	None	Sonoran desert scrub	Sonoran desert scrub.	Sandy soils; mesic sites. 35-385 m.	No
<i>Streptanthus bernardinus</i>	Laguna Mountains jewelflower	Dicots	None	None	S3S4	4.3	SB_RSABG	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest	Chaparral, lower montane coniferous forest.	Clay or decomposed granite soils; sometimes in disturbed areas such as streamsides or roadcuts. 1,440-2,500 m.	No
<i>Taxidea taxus</i>	American badger	Mammals	None	None	S3	None	CDFW_SSC, IUCN_LC	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Potential
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	Dicots	None	None	S2	1B.2	BLM_S, SB_RSABG, USFS_S	Chaparral, Coastal scrub, Ultramafic	Chaparral, coastal scrub.	Stony, decomposed gabbro soil. 135-705 m.	Potential

Scientific Name	Common Name	Taxonomic Group	Federal Status ^a	California Status ^a	State Rank ^b	Rare Plant Rank ^c	Other Status ^d	Habitats	General Habitat	Micro Habitat	Habitat On-site
<i>Vireo bellii pusillus</i>	least Bell's vireo	Birds	E	E	S2	None	IUCN_NT, NABCI_YWL	Riparian forest, Riparian scrub, Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Potential

Source: CDFW 2015 (Metadata at: https://map.dfg.ca.gov/rarefind/view/RF_FieldDescriptions.htm)

Notes:

a. Federal and State Listing Status

T = Threatened
E = Endangered
C = Candidate
CE = Candidate Endangered
R = Rare

b. State Rank is a reflection of the condition and imperilment of an element throughout its range within the state.

S1 = Critically Imperiled — Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2 = Imperiled — Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state.

S2.1 = Reflects an older rank, which needs to be updated. The decimal represents a “threat” rank; .1 indicates very threatened status.

S3 = Vulnerable — Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 = Apparently Secure — Uncommon but not rare; some cause for long-term concern due to declines or other factors.

? = Qualifier: Inexact or Uncertain — A question mark represents a rank qualifier, denoting an inexact or uncertain numeric rank.

c. The California Rare Plant Rank is a ranking system originally developed by the California Native Plant Society to better define and categorize rarity in California's flora.

1B.1 = Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California

1B.2 = Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California

1B.3 = Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California

2B.1 = Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California

2B.2 = Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

3.1 = Plants about which we need more information; seriously threatened in California

4.2 = Plants of limited distribution; fairly threatened in California

4.3 = Plants of limited distribution; not very threatened in California

d. Other Status is additional status listings for species.

BLM_S = Bureau of Land Management; Sensitive

CDFW_SSC = California Department of Fish and Wildlife; Species of Special Concern

CDFW_WL = California Department of Fish and Wildlife; Watch List

IUCN_EN = International Union for the Conservation of Nature; Endangered

IUCN_NT = International Union for the Conservation of Nature; Near Threatened

IUCN_LC = International Union for the Conservation of Nature; Least Concern

IUCN_VU = International Union for the Conservation of Nature; Vulnerable

NABCI_RWL = North American Bird Conservation Initiative; Red Watch List

NABCI_YWL = North American Bird Conservation Initiative; Yellow Watch List

SB_RSABG = Seeded bank; Rancho Santa Ana Botanic Garden

SB_SBBG = Seeded bank; Santa Barbara Botanic Garden

SB_USDA = Seeded bank; U.S. Department of Agriculture

USFWS_BCC = U.S. Fish and Wildlife Service; Birds of Conservation Concern

USFS_S = U.S. Forest Service; Sensitive

WBWG_H = Western Bat Working Group; High Priority

WBWG_LM = Western Bat Working Group; Low-Medium Priority

WBWG_M = Western Bat Working Group; Medium Priority

XERCES_CI = Xerces Society; Critically Imperiled

Key: m = meters

Table B-2. San Diego Multiple Species Conservation Program Covered Species List

Common Name	Scientific Name
PLANTS	
San Diego thornmint	<i>Acanthomintha ilicifolia</i>
Coastal agave	<i>Agave shawii</i>
San Diego ambrosia	<i>Ambrosia pumila</i>
Aphanisma	<i>Aphanisma blitoides</i>
Del Mar manzanita	<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>
Otay manzanita	<i>Arctostaphylos otayensis</i>
Coastal Dunes Milkvetch	<i>Astragalus tener</i> var. <i>titi</i>
Encinitas Baccharis	<i>Baccharis vanessae</i>
Nevin's barberry	<i>Berberis nevinii</i>
San Diego goldenstar	<i>Bloomeria clevelandii</i> (<i>Muilla clevelandii</i>)
Thread-leaf brodiaea	<i>Brodiaea filifolia</i>
Orcutt's brodiaea	<i>Brodiaea orcuttii</i>
Fire redgrass	<i>Calamagrostis koelerioides</i> (<i>C. densa</i>)
Dunn's mariposa lily	<i>Calochortus dunnii</i>
California mustard	<i>Caulanthus heterophylles</i> var. <i>heterophyllus</i> * formerly <i>C. stenocarpus</i> (Slender-pod jewelflower)
Lakeside-lilac	<i>Ceanothus cyaneus</i>
Wart-stem-lilac	<i>Ceanothus verrucosus</i>
Salt marsh bird's beak	<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>
Orcutt's bird's beak	<i>Cordylanthus orcuttianus</i>
Del Mar Mesa sandaster	<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>
Tecate cypress	<i>Cupressus forbesii</i>
Snake cholla	<i>Cylindropuntia californica</i> var. <i>californica</i> (<i>Opuntia parryi</i> var. <i>serpentina</i>)
Otay tarplant	<i>Deinandra conjugens</i> (<i>Hemizonia conjugens</i>)
Short-leaf dudleya	<i>Dudleya blochmaniae</i> ssp. <i>brevifolia</i>
Variegated dudleya	<i>Dudleya variegata</i>
Sticky dudleya	<i>Dudleya viscida</i>
Palmer's goldenbush	<i>Ericameria palmeri</i> var. <i>palmeri</i>
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>
Coast wallflower	<i>Erysimum ammophilum</i>
Coast barrel cactus	<i>Ferocactus viridescens</i> var. <i>viridescens</i>
Heart-leaf pitcher sage	<i>Lepechinia cardiophylla</i>
Gander's pitcher sage	<i>Lepechinia ganderi</i>
Prostrate/Nuttall's lotus	<i>Lotus nuttallianus</i>

Common Name	Scientific Name
PLANTS (continued)	
Felt-leaf monardella	<i>Monardella hypoleuca</i> spp. <i>lanata</i>
Willow monardella	<i>Monardella viminea</i> (<i>M. linoidea</i> ssp. <i>viminea</i>)
Spreading navarretia	<i>Navarretia fossalis</i>
Dehesa beargrass	<i>Nolina interrata</i>
California Orcutt grass	<i>Orcuttia californica</i>
Gander's butterweed	<i>Packera ganderi</i> (<i>Senecio ganderi</i>)
Torrey pine	<i>Pinus torreyana</i> ssp. <i>torreyana</i>
San Diego mesa mint	<i>Pogogyne abramsii</i>
Otay mesa mint	<i>Pogogyne nudiuscula</i>
Small-leaved rose	<i>Rosa minutifolia</i>
San Miguel savory	<i>Satureja chandleri</i>
Purple nightshade	<i>Solanum xanti</i> * formerly Narrow-leaved nightshade (<i>S. tenuilobatum</i>)
Parry's tetracoccus	<i>Tetracoccus dioicus</i>
MAMMALS	
Mountain lion	<i>Felis concolor</i>
Southern mule deer	<i>Odocoileus hemionus</i>
American badger	<i>Taxidea taxus</i>
INVERTEBRATES	
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>
Thorne's hairstreak butterfly	<i>Callophrys thornei</i> (<i>Mitoura thornei</i>)
Wandering skipper	<i>Panoquina errans</i>
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>
AMPHIBIANS & REPTILES	
Arroyo toad	<i>Bufo californicus</i>
Southwestern pond turtle	<i>Clemmys marmorata pallida</i>
Orange-throated whiptail	<i>Cnemidophorus hyperythrus</i>
Coast horned lizard	<i>Phrynosoma coronatum</i>
California red-legged frog	<i>Rana aurora draytoni</i>
BIRDS	
Cooper's hawk	<i>Accipiter cooperii</i>
Tricolored blackbird	<i>Agelaius tricolor</i>
Rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>
Golden eagle	<i>Aquila chrysaetos canadensis</i>
Burrowing owl	<i>Athene cunicularia hypugaea</i>

Common Name	Scientific Name
BIRDS (continued)	
Canada goose	<i>Branta canadensis</i>
Ferruginous hawk	<i>Buteo regalis</i>
Swainson's hawk	<i>Buteo swainsoni</i>
San Diego Cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>
Snowy plover	<i>Charadrius alexandrinus nivosus</i>
Mountain plover	<i>Charadrius montanus</i>
Northern harrier	<i>Circus cyaneus hudsonius</i>
Reddish egret	<i>Egretta rufescens</i>
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>
Peregrine falcon	<i>Falco peregrinus anatum</i>
Bald eagle	<i>Haliaeetus leucocephalus</i>
Long-billed curlew	<i>Numenius americanus</i>
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>
Large-billed savannah sparrow	<i>Passerculus sandwichensis rostratus</i>
California brown pelican	<i>Pelecanus occidentalis californicus</i>
White-faced ibis	<i>Plegadis chihi</i>
California gnatcatcher	<i>Polioptila californica californica</i>
Light-footed clapper rail	<i>Rallus longirostris levipes</i>
Western bluebird	<i>Sialia mexicana</i>
California least tern	<i>Sterna antillarum browni</i>
Elegant tern	<i>Sterna elegans</i>
Least Bell's vireo	<i>Vireo bellii pusillus</i>

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Air Quality Calculations

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Appendix C: Air Quality Calculations

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Summary

	NO _x (tpy)	VOC (tpy)	CO (tpy)	SO ₂ (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)	CO ₂ e (tpy)
Construction Year (2019)							
Combustion	3.877	0.941	2.779	0.010	0.172	0.172	834.525
Fugitive Dust	NA	NA	NA	NA	40.656	4.066	NA
Haul Truck On-Road	1.204	0.053	0.296	0.003	0.049	0.027	358.243
Construction Commuter	0.085	0.119	0.794	0.002	0.027	0.012	239.416
Total	5.166	1.114	3.870	0.015	40.904	4.276	1,432.184
Operational Years (2020 and subsequent)							
Emergency Generator	16.312	1.332	3.514	1.073	1.147	1.147	606.630
Building Heating Emissions	0.975	0.075	0.563	0.004	0.053	0.053	937.500
AOR Commuter Emissions	-0.597	-0.838	-5.576	-0.016	-0.192	-0.082	-1,681.538
Total	16.691	0.569	-1.499	1.060	1.007	1.117	-137.408

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Project Combustion

Combustion Emissions of VOC, NO_x, SO₂, CO, PM_{2.5}, PM₁₀, and CO₂e due to Construction and Demolition

Construction and Demolition Activities	Area Disturbed		
Construct BPS Building	187,308	ft ²	
Construct Roadways/Parking/Other Pavements at BPS	434,293	ft ²	
New Paving for Roadway Improvements	38,768	ft ²	
Improvements to Campbell Ranch Road	25,700	ft ²	
Create Permanent Spoils Stockpile	124,654	ft ²	
Minor Grading for Septic System Leach Field	48,000	ft ²	
Other Disturbance Area	482,924	ft ²	
Total Building Construction Area:	187,308	ft ²	
	4.300	acres	
Total Building Demolition Area:	0	ft ²	
	0.000	acres	
Total Pavement Demolition Area:	64,469	ft ²	
	1.480	acres	
New Roadway and/or Pavement Construction Area	498,762	ft ²	
	11.450	acres	
Total Disturbed Area:	1,341,648	ft ²	
	30.800	acres	
Construction Duration:	12	months	
Annual Construction Activity:	264	days	Assumes 22 days per month.

All construction and demolition conservatively assumed to occur in one year, 2019.

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Project Combustion

Emissions Factors Used for Construction Equipment

All emission factors are from the *Air Emissions Guide for Air Force Transitory Sources*, July 2016, Table 4-5. Page 57. These are valid for Calendar Year 2019.

Assumptions regarding the type and number of equipment are from Guide to Air Quality Assessment, SMAQMD, 2004 Table 3-1 unless otherwise noted.

Equipment	No. Req ^d . ^a per 10 acres	NO _x (lb/hr)	VOC (lb/hr)	CO (lb/hr)	SO _x (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	CO _{2e} (lb/hr)
Grading								
Bulldozer	1	1.695	0.223	0.839	0.002	0.068	0.068	239.588
Motor Grader	1	0.649	0.098	0.579	0.001	0.032	0.032	132.965
Water Truck	1	0.935	0.152	0.557	0.003	0.032	0.032	260.430
Total per 10 acres of activity per 8-hour day	3	26.232	3.784	15.800	0.048	1.056	1.056	5,063.864
Paving								
Paver	1	0.583	0.105	0.497	0.001	0.039	0.039	78.171
Roller	1	0.413	0.063	0.386	0.001	0.026	0.026	67.185
Truck	2	0.935	0.152	0.557	0.003	0.032	0.032	260.430
Total per 10 acres of activity per 8-hour day	4	22.928	3.776	15.976	0.064	1.032	1.032	5,329.728
Demolition								
Loader	1	0.527	0.080	0.444	0.001	0.027	0.027	108.792
Haul Truck	1	0.935	0.152	0.557	0.003	0.032	0.032	260.430
Total per 10 acres of activity per 8-hour day	2	11.696	1.856	8.008	0.032	0.472	0.472	2,953.776
Building Construction								
Stationary								
Generator Set	1	0.348	0.043	0.276	0.001	0.017	0.017	61.090
Industrial Saw	1	0.367	0.054	0.381	0.001	0.023	0.023	58.585
Welder	1	0.183	0.034	0.184	0.000	0.012	0.012	25.680
Mobile (non-road)								
Truck	1	0.935	0.152	0.557	0.003	0.032	0.032	260.430
Forklift	1	0.192	0.034	0.217	0.001	0.009	0.009	54.474
Crane	1	0.724	0.095	0.398	0.001	0.029	0.029	128.844
Total per 10 acres of activity per 8-hour day	6	21.992	3.296	16.104	0.056	0.976	0.976	4,712.824
Architectural Coatings								
Air Compressor	1	0.358	0.053	0.310	0.001	0.021	0.021	63.726
Total per 10 acres of activity per 8-hour day	1	2.864	0.424	2.480	0.008	0.168	0.168	509.808

a) The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity, (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.

b) Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Project Combustion

Project Specific Emission Factor Summary

Source	Equipment Multiplier*	Project-Specific Emission Factors (lb/day) NO _x	Project-Specific Emission Factors (lb/day) VOC	Project-Specific Emission Factors (lb/day) CO	Project-Specific Emission Factors (lb/day) SO ₂	Project-Specific Emission Factors (lb/day) PM ₁₀	Project-Specific Emission Factors (lb/day) PM _{2.5}	Project-Specific Emission Factors (lb/day) CO ₂
Grading Equipment	4	104.928	15.136	63.200	0.192	4.224	4.224	20,255.456
Paving Equipment	2	45.856	7.552	31.952	0.128	2.064	2.064	10,659.456
Demolition Equipment	1	11.696	1.856	8.008	0.032	0.472	0.472	2,953.776
Building Construction	1	21.992	3.296	16.104	0.056	0.976	0.976	4,712.824
Air Compressor for Architectural Coating	1	2.864	0.424	2.480	0.008	0.168	0.168	509.808
Architectural Coating**			35.272					

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project.

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days	
Grading:	1,341,648	30.800	6	(from "Grading" worksheet)
Paving:	498,762	11.450	28	
Demolition:	0	0.000	0	
Building Construction:	187,308	4.300	264	
Architectural Coating	187,308	4.300	20	per SMAQMD "Air Quality of Thresholds of Significance", 1994)

Total Project Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	629.568	90.816	379.200	1.152	25.344	25.344	121,532.736
Paving	1,261.040	207.680	878.680	3.520	56.760	56.760	293,135.040
Demolition	-	-	-	-	-	-	-
Building Construction	5,805.888	870.144	4,251.456	14.784	257.664	257.664	1,244,185.536
Architectural Coatings	57.280	713.929	49.600	0.160	3.360	3.360	10,196.160
Total Emissions (lbs):	7,753.776	1,882.569	5,558.936	19.616	343.128	343.128	1,669,049.472

Results: Total Project Annual Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Total Project Emissions (lbs)	7,753.776	1,882.569	5,558.936	19.616	343.128	343.128	1,669,049.472
Total Project Emissions (tons)	3.877	0.941	2.779	0.010	0.172	0.172	834.525

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Project Fugitive

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
Demolition Activities	0.00042	lb PM ₁₀ /cubic foot	AFCEC 2016
Grading, Excavating and Trenching.	0.220	ton PM ₁₀ /acre-month	AFCEC 2016
PM_{2.5} Emissions			
PM _{2.5} Multiplier	0.100	(10% of PM ₁₀ emissions assumed to be PM _{2.5})	USEPA 2006
Control Efficiency for Grading, Excavating and Trenching Emissions	0.500	(assume 50% control efficiency for PM ₁₀ and PM _{2.5} emissions)	USEPA 2006
<i>Demolition (0.00042 lb PM₁₀/cubic foot)</i>			
Area of Buildings	0	square feet	
Average Height of Buildings	15	feet	
<i>Grading, Excavating and Trenching (0.22 ton PM₁₀/acre-month)</i>			
Duration of Project	12	months	
Area	30.800	acres	

Project Emissions (tons/year)

	PM₁₀	PM_{2.5}	Source
Demolition	0.000	0.000	
Grading, Excavating and Trenching	40.656	4.066	
Total	40.656	4.066	
Demolition Emission Factor*	0.00042	lb PM₁₀/cubic foot	AFCEC 2016
Grading, Excavating and Trenching Emission Factor**	0.220	ton PM₁₀/acre-month	AFCEC 2016
PM_{2.5} Multiplier***	0.100		
Control Efficiency for PM₁₀ and PM_{2.5}****	0.50		

Notes:

*This emission factor is from AFCEC 2016, Section 4.3.1.1 and Equation 4-3.

** This emission factor is from AFCEC 2016, Section 4.3.1.2 and Equation 4-4.

*** PM_{2.5} emissions are estimated by applying a particle size multiplier of 0.10 to PM₁₀ emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (USEPA 2006).

**** The USEPA National Emission Inventory documentation recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas (USEPA 2006). Wetting controls will be applied during project construction.

References:

U.S. Environmental Protection Agency (USEPA). 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

Air Force Civil Engineering Center (AFCEC). 2016. *Air Emissions Guide for Air Force Transitory Sources*, July 2016. Pages 42 and 43.

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Haul Truck On-Road

Haul Truck Emissions

Emissions from hauling excavation material, demolition materials, and construction supplies are estimated in this spreadsheet.

Emission Estimation Method:

Air Force Civil Engineering Center (AFCEC). 2016. *Air Emissions Guide for Air Force Mobile Sources. Methods for Estimating Emissions of Air Pollutants For Mobile Sources at U.S. Air Force Installations.* July 2016.

Assumptions:

Haul trucks carry 10 cubic yards of material per trip.

The average distance from the project site to the materials source is 15 miles; therefore, a haul truck will travel 30 miles round trip.

Estimated number of trips required by haul trucks = total amount of material/10 cubic yards per truck

Assumes soil would not need to be hauled to or from the site.

Truck Loads	Assumptions
Amount of Building Materials = 62,436 cubic yards	Assumes 9 cubic feet of building material are needed per square foot of building space
Amount of Paving Material = 20,860 cubic yards	Assumes 1 cubic foot of pavement is needed per square foot of pavement construction. Additionally, 1 cubic foot of pavement debris is generated per square foot of pavement demolition.
Amount of Building Debris = 0 cubic yards	Assumes 4 cubic feet of demolition debris is generated per square foot of building space
Number of trucks required = 8,330 heavy duty diesel haul truck trips	
Miles per trip = 30 miles	

Heavy Duty Diesel Vehicle (HDDV) Average Emission Factors (grams/mile)

NO_x	VOC	CO	SO₂	PM₁₀	PM_{2.5}	CO₂e
4.370	0.193	1.076	0.012	0.178	0.097	1300.569

Notes:

Construction assumed to occur in Calendar Year 2019.

Emission factors for all pollutants are from AFCEC 2016, Table 5-39, EMFAC County-Specific On-Road Vehicle Emissions Factors - 2019 for HDDV in San Diego County 2019. Page 323.

ROG used in place of VOC

HDDV Haul Truck Emissions

	NO_x	VOC	CO	SO₂	PM₁₀	PM_{2.5}	CO₂e
lbs	2407.442	106.324	592.771	6.611	98.061	53.438	716,486.215
tons	1.204	0.053	0.296	0.003	0.049	0.027	358.243

Example Calculation: NO_x emissions (lbs) = miles per trip * number of trips * NO_x emission factor (g/mile) * lb/453.6 g

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Construction Commuter Emissions

Construction Commuter Emissions

Emissions from construction workers commuting to the job site are estimated in this spreadsheet.

Assumptions:

The average round-trip commute for a construction worker = 50 miles

Number of construction days = 264 days

Number of construction workers (daily) = 40 people

Light-Duty Trucks (Gasoline Powered) Emission Factors for Year 2019 (grams/mile)

NO_x	VOC	CO	SO₂	PM₁₀	PM_{2.5}	CO_{2e}
0.146	0.205	1.364	0.004	0.047	0.020	411.361

Source: Air Force Civil Engineering Center (AFCEC). 2016. *Air Emissions Guide for Air Force Mobile Sources. Methods for Estimating Emissions of Air Pollutants For Mobile Sources at U.S. Air Force Installations*. July 2016. Table 5-39 EMFAC County-Specific On-Road Vehicle Emissions Factors - 2019 for LDGT in San Diego County, 2019. Page 323.

Construction Commuter Emissions

	NO_x	VOC	CO	SO₂	PM₁₀	PM_{2.5}	CO_{2e}
lbs	169.947	238.624	1,587.725	4.656	54.709	23.280	478,832.910
tons	0.085	0.119	0.794	0.002	0.027	0.012	239.416

Example Calculation: NO_x emissions (lbs) = miles/day * NO_x emission factor (grams/mile) * number of construction days * number of workers ÷ 453.56 grams/lb

ROG used in place of VOC

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Emergency Generator Emissions

Calculates Air Emissions from Emergency Generators

Assumptions:

Number of Generators: 2

Generator Power Rating: 650 kilowatts

Generator Fuel: Diesel

Generator Kilowatts	Conversion from kW to Btu/hr	Engine Btu/hr (Assume 30% efficiency converting mechanical to electrical power)	Engine MMBtu/hr
650	3414.4	7,397,923	7.40

Diesel Industrial Engine Emission Factors from AP-42, Section 3.3	NOx lb/MMBtu	CO lb/MMBtu	TOC lb/MMBtu	PM₁₀ lb/MMBtu	SO₂ lb/MMBtu	CO₂ lb/MMBtu
Emission Factor	4.41	0.95	0.36	0.31	0.29	164

Source: USEPA 1996. AP-42. Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines. Table 3.3-1. Page 3.3-6.

Assume max. 500 hrs/yr	NOx (lbs/yr)	CO (lbs/yr)	TOC (lbs/yr)	PM₁₀ (lbs/yr)	SO₂ (lbs/yr)	CO₂ (lbs/yr)
Emissions (lbs/yr)	32,624.84	7,028.03	2,663.25	2,293.36	2,145.40	1,213,259.34

Assume max. 500 hrs/yr	NOx (tons/yr)	CO (tons/yr)	TOC (tons/yr)	PM₁₀ (tons/yr)	SO₂ (tons/yr)	CO₂ (tons/yr)
Emissions (tons/yr)	16.312	3.514	1.332	1.147	1.073	606.630

Total Organic Compounds (TOCs) have been used in place of VOCs for this analysis

500 hour/year was used as a conservative assumption for generator use. It is equivalent to the USEPA guidance for calculating potential to emit for emergency generators.

PM₁₀ used in place of PM_{2.5} for lack of PM_{2.5} emission factors.

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

Heat Emissions

Calculates Air Emissions from the Operation of Propane-Fired Commercial Boilers to Heat the Proposed BPS:

150,000 gallons of propane required annually

Pollutant	Emission Factor	Units	Potential Annual Emissions (lb/yr)	Conversion Factor to Tons	Potential Annual Emissions (tons/yr)
SO2	0.054	lb/10 ³ gallon	8.10	0.0005	0.004
PM	0.7	lb/10 ³ gallon	105.00	0.0005	0.053
NOx	13	lb/10 ³ gallon	1,950.00	0.0005	0.975
CO	7.5	lb/10 ³ gallon	1,125.00	0.0005	0.563
CO2	12,500	lb/10 ³ gallon	1,875,000.00	0.0005	937.500
VOC	1	lb/10 ³ gallon	150.00	0.0005	0.075

Source: USEPA 1998. AP-42. *Emission Factors for LPG Combustion*. Table 1.5-1. Pages 1.5-3.

Assumptions:

Total PM used to represent PM10 and PM2.5.

TOC used in place of VOC

Propane Emission Factor for Commercial Boilers used.

Sulfur content of LPG is 0.54 grains per 100 ft of exhaust vapor.

Estimated Air Emissions for the Proposed USBP Brown Field BPS in Dulzura, San Diego County, California

AOR Commuter Emissions

Emissions from USBP agents commuting to the AOR are estimated in this spreadsheet.

Assumptions:

Annual reduction in number of miles driven solely for commuting purposes from the current station location to the AOR: (3,708,400)

Source: U.S. Customs and Border Protection (CBP). 2016. *Facilities Project Requirements Document for FC SDC BRF Build 400 Agent BPS*. Last updated 25 March 2016.

Light-Duty Trucks (Gasoline Powered) Emission Factors for Year 2019 (grams/mile)

NO_x	VOC	CO	SO₂	PM₁₀	PM_{2.5}	CO_{2e}
0.146	0.205	1.364	0.004	0.047	0.020	411.361

Source: Air Force Civil Engineering Center (AFCEC). 2016. *Air Emissions Guide for Air Force Mobile Sources. Methods for Estimating Emissions of Air Pollutants For Mobile Sources at U.S. Air Force Installations*. July 2016. Table 5-39 EMFAC County-Specific On-Road Vehicle Emissions Factors - 2019 for LDGT in San Diego County, 2019. Page 323.

AOR Commuter Emissions

	NO_x	VOC	CO	SO₂	PM₁₀	PM_{2.5}	CO_{2e}
lbs	-1,193.621	-1,675.974	-11,151.362	-32.702	-384.248	-163.510	-3,363,075.689
tons	-0.597	-0.838	-5.576	-0.016	-0.192	-0.082	-1,681.538

ROG used in place of VOC