Final
Environmental Assessment

Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California

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ABBREVIATIONS AND ACRONYMS

ACEC	Areas of Critical Environmental Concern
APE	Area of Potential Effect
BLM	Bureau of Land Management
BMP	Best Management Practices
CBP	United States Customs and Border Protection
CDCA	California Desert Conservation Area Plan
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFWO	Carlsbad Fish and Wildlife Office
CMA	Conservation and Management Action
CWA	Clean Water Act
DHS	Department of Homeland Security
DRECP	Desert Renewable Energy Conservation Plan
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Study
ENV SME	Environmental Subject Matter Experts
ESA	Environmentally Sensitive Area
ESDC RMP	Eastern San Diego County Resource Management Plan
FLPMA	Federal Land Policy and Management Act
FONSI	Finding of No Significant Impact
FTHL	flat-tailed horned lizard
GPL	General Public Land
LUP	Land Use Plan
LUPA	Land Use Plan Amendment
MBTA	Migratory Bird Treaty Act
mph	miles per hour
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
NHPA	National Historic Preservation Act
PFYC	Potential Fossil Yield Classification
Proposed Action	Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands
RMS	Rangewide Management Strategy
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Officer
SWPPP	storm water pollution prevention plan
U.S.	United States
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USBP	United States Border Patrol
USFWS	United States Fish and Wildlife Service
WEAP	Worker Environmental Awareness Program

1.0 INTRODUCTION

The United States (U.S.) Customs and Border Protection (CBP), under the Department of Homeland Security (DHS), and the Bureau of Land Management (BLM), an agency of the Department of the Interior, have prepared this Final Environmental Assessment (EA) for the proposed Maintenance and Repair of Patrol and Access Roads on BLM Lands in California (Proposed Action) (Appendix A, Figure 1). The BLM and CBP are joint lead agencies, with CBP requesting right-of-way (ROW) authorization for maintenance and repair activities and the BLM providing the ROW grant upon review and approval.

Under the Proposed Action, CBP would conduct maintenance and repair activities of approximately 33.7 miles of existing roads on BLM-administered public lands (under BLM right-of-way permits) near the U.S./Mexico international border in California within three U.S. Border Patrol (USBP) sectors: San Diego, El Centro, and Yuma (Project Area). The USBP San Diego and El Centro sectors are entirely within California, and a portion of the Yuma sector is within California. Road maintenance and repair on BLM-administered public lands would be done to facilitate USBP patrol interdiction and emergency response along the border to deter and prevent illegal cross-border activity.

CBP is responsible for maintenance and repair of access roads to support USBP border security requirements. USBP operations on these roads would remain unchanged and are not analyzed as part of this EA.

This EA is divided into seven sections plus appendices. **Section 1.0** provides background information on CBP and USBP missions, identifies the purpose of and need for the Proposed Action, describes the framework for analysis, and explains the public involvement process. **Section 2.0** provides a detailed description of the Project Area and the Proposed Action and alternatives considered, including the No Action Alternative. **Section 3.0** describes existing environmental conditions in the areas where the Proposed Action would occur and identifies potential environmental impacts that could occur within each resource area under the alternatives evaluated in detail, including potential cumulative impacts and other impacts that might result from implementation of the Proposed Action, combined with foreseeable future actions. **Section 4.0** a summary of consultation and coordination with tribes, individuals, organizations, or agencies, **Section 5.0** provides the list of preparers, **Section 6.0** provides the Best Management Practices, and **Section 7.0** provides the references for the EA.

1.1 U.S. BORDER PATROL AND BLM BACKGROUNDS

In 1924, Congress created the USBP to serve as the law enforcement entity of the Immigration and Naturalization Service. On November 25, 2002, Congress transferred all Immigration and Naturalization Service responsibilities to the newly created DHS with the passage of the Homeland Security Act of 2002 (Public Law 107-296). Since the terrorist attacks of September 11, 2001, the focus of the USBP has changed to detection, apprehension, and/or deterrence of terrorists and terrorist weapons. The USBP law enforcement organization and responsibilities were transferred to the CBP component of DHS on March 1, 2003. Although the USBP has changed dramatically since its inception, its overall mission remains unchanged: to detect and

prevent the illegal entry of aliens into the U.S. Together with other law enforcement officers, the USBP helps maintain borders that work, facilitating the flow of legal immigration and goods while preventing the illegal trafficking of people and contraband. The priority mission of the USBP is preventing terrorists and terrorist weapons, including weapons of mass destruction, from entering the U.S. 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. The USBP is specifically responsible for patrolling the 6,000 miles of Mexican and Canadian international land borders and 2,000 miles of coastal waters surrounding the Florida Peninsula and the island of Puerto Rico. Agents work around the clock on assignments, in all types of terrain and weather conditions. Agents also work in many isolated communities throughout the U.S.

The BLM, created in 1946, is an agency within the U.S. Department of the Interior responsible for the administration of public lands. The BLM has oversight over 247.3 million acres of lands. The agency is also responsible for the management of the federal government's nearly 700 million acres of subsurface mineral estate located beneath Federal, state and private lands.

The mission of the BLM is to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. This means supporting an all-of-the-above approach through environmentally responsible development; promoting conservation through shared stewardship; managing our borders effectively; promoting jobs on working landscapes; and serving the American family–which includes being good neighbors and recognizing traditional uses of public lands (i.e., hunting, fishing, and other recreational opportunities).

1.2 PURPOSE AND NEED

The Applicant's purpose of the Proposed Action is for CBP is to maintain ground access routes for rapid response to detected threats in areas patrolled by the USBP San Diego, El Centro, and Yuma Sectors. For CBP to maintain effective control of the border and enhance the safety of USBP agents, it must have safe and reliable access within the Project Area.

The Applicant's need for the Proposed Action is for CBP is to enhance USBP's ability to respond to detected changing threats safely, efficiently, and effectively, in order to secure the U.S./Mexico international border in California.

In accordance with the BLM's multiple use mandate, the BLM's purpose and need for the Proposed Action is to respond to a Federal Land Policy and Management Act (FLPMA) ROW application (assigned serial number CACA-54895) submitted by CBP to maintain and repair roads across BLM-administered public lands in compliance with FLPMA, BLM ROW regulations (43 Code of Federal Regulations [CFR] §2800), and other applicable Federal laws and policies.

1.3 DECISIONS TO BE MADE

The BLM and CBP are joint lead agencies for the development of the EA and decision making regarding the alternatives analyzed. CBP would make the decision whether to execute the maintenance and repair of segments of road in southern California administered by the BLM, as

described in the Proposed Action. The BLM would decide whether to grant, grant with conditions, or deny a ROW authorizing the use, maintenance, and repair, as described in the Proposed Action.

1.4 FRAMEWORK FOR ANALYSIS

This EA includes an analysis of direct, indirect, and cumulative impacts that would result from implementing the Proposed Action or any reasonable alternatives carried forward for consideration. The potentially affected biological and human environment would include resources in and adjacent to the roads proposed for maintenance and repair within the San Diego, El Centro, and Yuma USBP sectors in California. Based on previous evaluations of similar road maintenance and repair activities, the expectation is that the potential effects would be limited to the proposed Action roadways and immediately adjacent resources.

Recent changes to the Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA; 40 CFR §§ 1500–1508) became effective on September 14, 2020 (85 Federal Register 43304-76 [July 16, 2020]). As stated in 40 CFR § 1506.13, the new regulatory changes apply to any NEPA process begun after September 14, 2020. This EA substantively commenced prior to that date, as shown by the scoping letters sent to stakeholders on October 30, 2019. Therefore, this EA conforms to the CEQ NEPA implementing regulations that were in place prior to September 14, 2020.

1.5 PUBLIC INVOLVEMENT

CBP and the BLM are committed to communicating with the public to help ensure that potentially affected communities and other interested parties understand the Proposed Action and are given opportunities to participate in decisions that may affect them. CBP and the BLM invite public participation in the NEPA process. Consideration of the views and information of all interested persons promote open communication and enable better decision making. CBP and the BLM urge all agencies, organizations, Indian nations, and members of the public having a potential interest in the Proposed Action to participate in the decision-making process.

DHS Instructional Manual 023-01-001-01, Revision 01, and BLM NEPA Handbook (BLM H-1790-1) provide guidance on public participation opportunities with respect to this EA and decision making on the Proposed Action. CBP and the BLM conduct public involvement consistent with their respective guidance and procedures.

1.5.1 Scoping

CBP and the BLM initiated scoping for the Proposed Action by distributing a scoping letter with a brief description of the Proposed Action to approximately 31 potentially interested Federal, state, and local agencies and Native American Tribes (Appendix B) and provided a 30-day review and comment period from October 30, 2019 to November 29, 2019. Scoping comments were received from the California Department of Fish and Wildlife, U.S. Forest Service, and Viejas Band of Kumeyaay Indians. All scoping comments received were considered during preparation of the Draft EA (see Appendix B for scoping comment letters).

1.5.2 Public Review of Draft EA

A Draft EA and Draft Finding of No Significant Impact (FONSI) were available for public review for 30 days, from November 19, 2021, to December 20, 2021. The Notice of Availability was published in the *San Diego Union-Tribune* and the *Imperial Valley Press* on November 19, 2021. Copies were available by request and curbside pickup at the El Centro Public Library, 1140 North Imperial Avenue, El Centro, CA 92243 (760-337-4565) and at the San Diego Central Library, 330 Park Boulevard, San Diego, CA 92101 (619-236-5800). A copy of the Notice of Availability text is included in this Final EA (Appendix C). The EA, Draft and Final CBP FONSI, and Draft and Final BLM FONSI are available electronically at: https://www.cbp.gov/about/environmental-management-sustainability/documents/docs-review.

The Draft and Final EA, Draft and Final BLM FONSI, and Decision Record are also available electronically on the BLM E-Planning website for NEPA document DOI-BLM-CA-D070-2022-0002-EA at: https://eplanning.blm.gov/eplanning-ui/project/2016309/510.

CBP and the BLM determined that there would be no significant impacts from the Proposed Action and have incorporated comments received on the Draft EA and Draft FONSI into the Final EA and Final FONSI, as appropriate. CBP and the BLM prepared a synopsis of the public comments received and responses to substantive comments (Appendix D). The BLM developed a Decision Record that provides the rationale for and record of the BLM decision to approve the Proposed Action, including any mitigation measures. The BLM Decision Record has been included with this Final EA and FONSI, available on the BLM E-Planning website for NEPA document DOI-BLM-CA-D070-2022-0002-EA at: https://eplanning.blm.gov/eplanning-ui/project/2016309/510. I Decision Record has been signed by the BLM in favor of authorizing the Proposed Action and the BLM will prepare and issue a ROW grant to CBP. Once the ROW grant is executed by both parties and CBP receives a notice to proceed from the BLM, CBP can proceed with the Proposed Action.

2.0 PROPOSED ACTION AND ALTERNATIVES

This section describes the Proposed Action and the No Action Alternative, and Alternatives Considered but Eliminated from Further Consideration. The NEPA process evaluates potential environmental consequences associated with the Proposed Action and considers alternative courses of action. Reasonable alternatives must satisfy the purpose of and need for a Proposed Action, as defined in Section 1.2. CEQ regulations specify the inclusion of a No Action Alternative against which potential impacts can be compared.

2.1 PROJECT SETTING AND BACKGROUND

The Project Area is located near the U.S./Mexico international border in California within three USBP sectors: San Diego, El Centro, and Yuma. The USBP San Diego and El Centro sectors are entirely within California, and a portion of the Yuma sector is within California. The Project Area is located on BLM-administered public lands and consists of the existing road segments presented in Table 2.1 below, and shown in Appendix A, Figures 2a–2e.

2.2 ALTERNATIVE 1: NO ACTION ALTERNATIVE

CEQ regulations for implementing NEPA require that an agency "include the alternative of no action" as one of the alternatives it considers in an EA. Under the No Action Alternative, CBP would not maintain or repair several miles of roads on BLM lands within San Diego and Imperial counties. The No Action Alternative serves as a baseline against which the impacts of the Proposed Action and any alternatives are compared.

Under the No Action Alternative, the roads would remain in poor condition and in need of maintenance and repair and would continue to deteriorate with continued USBP use and weather-related impacts. The lack of maintenance and repair of roads would result in diminished response time to detected threats as well as unsafe and unreliable routes by which USBP can access strategically valuable areas. The No Action Alternative would result in diminished USBP ability to detect threats safely, efficiently, and effectively to secure the U.S./Mexico international border. The No Action Alternative does not meet the Purpose and Need of the Proposed Action or minimum CBP mission needs.

2.3 ALTERNATIVE 2: PROPOSED ACTION ALTERNATIVE

2.3.1 Maintenance and Repair

Under the Proposed Action, road maintenance and repair would include as-needed maintenance and repair activities (e.g., resolving damage from use or severe weather events) and preventive/scheduled maintenance and repair activities designed to ensure ongoing operability and environmental sustainability (e.g., soil erosion preventive measures) on 33.7 miles of existing roads on BLM lands within San Diego and Imperial counties. All maintenance and repair would occur via a periodic work plan based on anticipated situations within each sector and funding availability. Maintenance and repair requirements could change over time based on changes in usage or priority, but would not exceed the scope of this EA.

Table 2.1 Road Segments on BLM-administered Lands in California

County	BLM Field Office	USBP Station	USBP Sector	Road Name	BLM Route Designation	BLM Segment Length (miles)	Average Road Width (feet)	Figure Number
San Diego	Palm Springs/ South Coast	Brownfield	San Diego	Little Otay Truck Trail	Closed	0.27	18	2a
San Diego	Palm Springs/ South Coast	Brownfield	San Diego	End of Fence Spur	Closed	0.08	18	2a
San Diego	Palm Springs/ South Coast	El Cajon	San Diego	Reyes (Canyon City) Road	Limited	0.12	18	2b
San Diego	Palm Springs/ South Coast	Campo	San Diego	Cameron Truck Trail	Limited	0.02	20	2b
San Diego	Palm Springs/ South Coast	Campo	San Diego	La Posta Circle	Limited	0.08	18	2b
San Diego	Palm Springs/ South Coast	Campo	San Diego	Track Access	Limited	0.39	12	2b
San Diego	Palm Springs/ South Coast	Campo	San Diego	4x4 Course	Limited	0.30	18	2b
San Diego	Palm Springs/ South Coast	Campo	San Diego	Gloriosa Way	Limited	0.79	17	2b
San Diego	Palm Springs/ South Coast	Campo	San Diego	Cedillo Road	Closed	0.99	17	2b
San Diego	El Centro	Boulevard	San Diego	O'Neill Valley Access Road	Limited	0.06	25	2c
San Diego/ Imperial	El Centro	El Centro	San Diego/ El Centro	Elliot Mine Road	Limited	0.84	20	2c
Imperial	El Centro	El Centro	El Centro	Mica Davie's Crossover	Limited	2.57	20	2c
Imperial	El Centro	El Centro	El Centro	Mica Mine Road	Limited	0.54	15	2c
Imperial	El Centro	EL Centro	El Centro	Davie's Valley Road	Limited	1.78	17	2c
Imperial	El Centro	EL Centro	El Centro	Davie's Clark Crossover	Limited	0.55	15	2c
Imperial	El Centro	El Centro	El Centro	West Desert Drag Road	Limited	8.95	20	2d
Imperial	El Centro	El Centro	El Centro	Roy's Road	Limited	2.20	20	2d
Imperial	El Centro	El Centro	El Centro	Cat Exit 4	Limited	1.69	15	2d
Imperial	El Centro	El Centro	El Centro	Signal Road Legacy Fence Access Road 1	Limited	1.82	17	2d
Imperial	El Centro	El Centro	El Centro	Signal Road Legacy Fence Access Road 2	Limited	1.36	17	2d
Imperial	El Centro	El Centro	El Centro	Signal Road Legacy Fence Access Road 3	Limited	0.25	17	2d
Imperial	El Centro	Yuma	Yuma	Canal Road	Limited	5.98	15	2e
Imperial	El Centro	Yuma	Yuma	Poleline Extension	Open	2.10	20	2e
				Total Length of Roads		33.73		

Within existing road segments that have the potential for sensitive habitats (Quino checkerspot butterfly [*Euphydryas editha quino*] and arroyo toad [*Bufo californicus*] habitats), maintenance and repair would be restricted to the existing road footprint, as shown in Table 2.2, specifically the following road segments: Little Otay Truck Trail, End of Fence Spur, Reyes Road, Cameron Truck Trail, La Posta Circle, Track Access, 4x4 Course, Gloriosa Way, Cedillo Road, O'Neill Valley Access Road, and Elliot Mine Road.

Table 2.2 Road Segments within BLM-Administered Lands Proposed for Maintenance and Repair within Sensitive Habitats

Road Name	Sensitive Habitat
Little Otay Truck Trail	Yes[1]
End of Fence Spur	Yes[1]
Reyes (Canyon City) Road	Yes[1, 2]
Cameron Truck Trail	Yes[1]
La Posta Circle	Yes[1]
Track Access	Yes[1]
4x4 Course	Yes[1]
Gloriosa Way	Yes[1]
Cedillo Road	Yes[1]
O'Neill Valley Access Road	Yes[1]
Elliot Mine Road	Yes[1]
Mica Davie's Crossover	No
Mica Mine Road	No
Davie's Valley Road	No
Davie's Clark Crossover	No
West Desert Drag Road	No
Roy's Road	No
Cat Exit 4	No
Signal Road Legacy Fence Access Road 1	No
Signal Road Legacy Fence Access Road 2	No
Signal Road Legacy Fence Access Road 3	No
Canal Road	No
Poleline Extension	No

[1]Quino checkerspot butterfly habitat
[2]Arroyo toad habitat

Within existing road segments outside sensitive habitats, road maintenance and repair would remain primarily within existing road footprints. These road segments are considered operations roads used by USBP but were not constructed by CBP as part of tactical infrastructure and are not covered under the most recent Tactical Infrastructure Design Standards (CBP 2020); however, when possible, roads would be maintained to an FC-4 standard. Maintenance and repair would occur within existing road disturbed areas; however, limited areas that no longer meet minimum width requirements may require cut and fill work to achieve the desired road operating and safety standards and to be restored to their intended functional classification.

Maintenance and repair would consist of grading and resurfacing areas of the existing graded earth roads and two-track roads that have been heavily eroded by surface water flows.

Maintenance and repair of roads would consist primarily of filling of potholes, removing protruding boulders, regrading road surfaces, implementing improved water drainage measures, applying soil stabilization agents, controlling vegetation and debris (mechanical control only), and adding lost road surface material to reestablish intended surface elevation, needed for adequate drainage. Trees and other vegetation within or overhanging the existing roadway would be trimmed, grubbed, or cut back to facilitate safe vehicle passage. Any vegetation that has established within the existing road would be removed, cleared, or trampled. The objective of these maintenance and repair activities would be to remain within the existing road and not increase the road width.

Some areas may include the addition of lost road surface material to reestablish intended surface elevation needed for adequate drainage. Nearby native soil from within the existing road footprint would be used as fill, or crusher fines would be brought in for use if native soil is not available. Locations where fill or crusher fines are collected from, if needed, will be provided to the appropriate BLM Field Office. Imported aggregate material would be added to achieve a well-graded roadbed shaped with a defined crown section. All necessary materials such as gravel, topsoil, or fill would be obtained from existing developed or previously used sources, not from undisturbed areas adjacent to the project areas. Supplemental imported material may be required to improve the roads if erosion occurs from annual rainfall. All materials would be certified as weed-free as only sterile or weed-free sources would be used per Best Management Practices (BMPs; see Section 6.0 of this EA).

With the exception of roads within sensitive habitats where mitigative design features require avoidance of areas outside the road footprint, some activities may need to be conducted in areas immediately adjacent to the existing road footprint (road edges). For example, equipment might need to be operated off existing roads to remove debris from culverts and ditches, and to access and maintain roads. Temporary impacts on vegetation and soil resulting from these activities would be minimized through appropriate heavy equipment operation techniques such as installation of temporary construction mats, reduced operating speeds, use of the initial ingress and egress points, and selection of appropriately sized equipment for the area and project. In those cases where equipment is not authorized outside of the road base, activities would be accomplished on foot to minimize the impacts that would be caused by heavy equipment. These activities would be limited to the existing road disturbed areas within Quino checkerspot butterfly and arroyo toad habitat (sensitive habitats) and BMPs would be implemented within special status species habitats (see Section 6.0 of this EA).

Maintenance of the existing roads would be in accordance with the established maintenance and repair standards (Appendix E) and BLM Gold Book Standards, Chapter 4 (Road Maintenance) (BLM 2007). All the standards CBP would follow are developed based on comprehensive engineering analysis, established BMPs (see Section 6.0) adopted by other Federal agencies, and mitigation measures derived from consultation with both regulatory and resource agencies. All maintenance and repair activities would also be performed in accordance with CBP BMPs to minimize or eliminate potential impacts to the environment. All necessary erosion-control BMPs would be adopted to ensure stabilization of repaired roads (see Section 6.0 of this EA).

Improved water drainage measures would be implemented, as needed, consisting of articulated concrete mats at low water crossings (Figure 3). Articulated concrete mats are a flexible,

interlocking matrix of machine-compressed, cellular concrete blocks of uniform size, shape, and weight used for hard armor erosion control (see Figure 3). Mats are typically 8 feet wide. Placement of mats would result in disturbance of approximately 20 feet on each side of the road centerline and 20 feet on each end (top and bottom) at low water crossings (10 feet of permanent disturbance and 10 feet of temporary disturbance to vegetation). For existing water-control features (such as ditches and culverts) activities would include cleaning, maintaining, repairing, or replacing features, as needed. Implementing improved water drainage measures includes ensuring road crowns shed water and runoff flows to established drainage ditches, culverts, or other water-control features as needed to control runoff and prevent deterioration to existing infrastructure or surrounding land. Best management practices and avoidance measures, as outlined in Section 2.4.2, would be incorporated to avoid impacts to sensitive habitats.

Figure 3. Low Water Crossing and Concrete Mat Example

The stabilization of roads may require the use of soil stabilization agents, e.g., PennzSuppress or Soiltac™ (Safety Data Sheets for these are found in Appendix F), soil binders, which would function to reduce erosion and improve road strength. The application of the soil stabilization agent would be completed on an annual basis or less frequently, depending on need.

Heavy equipment would be needed for activities such as grading, filling, and compacting. Equipment staging would occur within existing established laydown yards used for various CBP projects or within the existing road footprint disturbed areas. Materials are typically only stored for 24 hours or less within the existing road footprint/disturbed areas. All equipment would be hauled into sites as needed. Standard equipment needed would likely include an excavator, dump

truck, road grader, backhoe, dozer, drum roller/compactor, and water trucks. A backhoe may be needed in some areas where low water crossings require excavation. Water trucks would be employed to aid in dust suppression.

Initial maintenance and repair of the roads would be completed within a 120-day period between November and February. Maintenance of aggregate roads requires annual inspections with supplemental inspections after storm events. Repairs and maintenance include blading to remove ruts or wash-boarding and placing additional material as needed (CBP 2020). All maintenance and repair would occur according to a periodic work plan based on anticipated situations within each sector and funding availability. Maintenance and repair requirements could change over time based on changes in usage or priority but would not exceed the scope of the Proposed Action as described in this section. Future road maintenance would also be performed as needed between November and February. The roads would be used year-round.

2.3.2 Best Management Practices

All maintenance and repair activities would also be performed in accordance with CBP BMPs to minimize or eliminate potential impacts to the environment. All necessary erosion-control BMPs would be adopted to ensure stabilization of repaired roads. BMPs are generally accepted and applied measures or practices to lessen the adverse effects of actions on the environment, including vegetation, wildlife, migratory birds, threatened and endangered species, archaeological sites, paleontological localities, and water resources. It is the responsibility of CBP to ensure that all personnel performing maintenance to comply with the BMPs, and any required mitigation measures and BLM Conservation and Management Actions (CMAs), unless otherwise noted. BMPs apply to all maintenance and repair activities. BMPs are detailed in Section 6.0 of this EA.

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED

2.4.1 Upgrade Existing Roads to Functional Class 2 All-Weather Roads

Under this alternative, all existing roads would be upgraded to Functional Class 2 all-weather road classification, which are unpaved, all-weather two-lane roads consisting of a surface of imported aggregate material such as milled bituminous material or processed stone and gravel, with a total road width of 24 feet. Adopting this alternative would be cost-prohibitive and cause significant environmental impacts. Grading of the ROW outside the existing roads to widen them to 24 feet would be required, which would remove existing native vegetation, disturb soils, and remove wildlife habitat, potentially resulting in significant impacts to natural resources. This alternative would greatly enhance CBP's capability to improve border security; however, this alternative was eliminated from further detailed study due to prohibitive costs and significant environmental impacts.

2.4.2 Maintenance and Repair of Patrol and Access Roads within BLM-Administered Public Lands in California, Including Wilderness Areas

Under this alternative, maintenance and repair would occur on patrol and access roads within BLM-administered public lands in southern California, including within federally designated Wilderness areas. The Wilderness Act states that Wilderness is an area "of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human

habitation." Wilderness has minimal evidence of modern human occupation or modification. This quality is impaired by the presence of structures or installations, and by use of motor vehicles, motorized equipment, or mechanical transport that increases the public's ability to occupy or modify the environment.

The uses prohibited in Wilderness are outlined in the Act as follows:

> Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structures or installation within any such area.

Maintenance and repair of roads within Wilderness areas on BLM-administered public lands would likely be prohibited under the Wilderness Act and would cause significant adverse impacts to the primeval character of Wilderness areas as well as environmental impacts. This alternative would enhance CBP's capability to improve border security; however, this alternative was eliminated from further detailed study due to the significant impacts to Wilderness areas and the environment.

2.5 PLAN CONFORMANCE

This EA has been prepared in accordance with NEPA, CEQ regulations (40 CFR 1500-1508) implementing NEPA, as amended in 2005, the FLPMA of 1976, the DHS Instructional Manual 023-01-001-01, Revision 01, other pertinent federal environmental statutes, regulations, and compliance requirements, and is in conformance with the following applicable BLM land use plans.

Land Use Plan (LUP) Name: California Desert Conservation Area Plan (CDCA)

Date Approved: 1980

The Proposed Action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decision(s): The Proposed Action is subject to the 1980 CDCA Plan, as amended. As part of the 1976 FLPMA, the CDCA Plan was developed to guide land use management of BLM-administered public lands within this portion of California. The Proposed Action includes an area located on BLM-administered public lands in Imperial County, California. The CDCA Plan states that the issuance of permits and authorizations for uses of the public lands is governed by the controlling Federal Regulations or as determined by the BLM office.

LUP Amendment Name: Desert Renewable Energy Conservation Plan (DRECP)/BLM Land Use Plan Amendment (LUPA)

Date Approved: 2016

The Proposed Action is in conformance with the applicable LUPA because it is specifically provided for in the following LUPA decision(s): The DRECP LUPA to the CDCA created new

land use allocations to replace the multiple use classes within the CDCA for those areas of the CDCA within the DRECP LUPA Decision Area. Under the Proposed Action, four roads occur on BLM-administered public lands designated as General Public Land (GPL). These roads include Mica Mine Road, Mica Davie's Crossover, Davie's Clark Crossover, and Davie's Valley Road. GPLs are defined as lands where no specific land use allocation has been designated.

Six roads occur on BLM-administered public lands designated as National Conservation Lands and Area of Critical Environmental Concern (within the Yuha Basin Area of Critical Environmental Concern [ACEC]), these roads include: West Desert Drag Road, Roy's Road, Cat Exit 4, Signal Legacy Fence Access Road 1, Signal Legacy Fence Access Road 2, and Signal Legacy Fence Access Road 3. The Yuha Basin ACEC is managed for the protection of the cultural and ecological values, particularly habitat for the flat-tailed horned lizard (*Phrynosoma mcallii*; FTHL).

The Proposed Action is in conformance but must adhere to applicable DRECP's CMAs. CMAs are proactive measures, as well as measures and criteria which are to be applied to day-to-day activities, which protect sensitive resource values. Applicable CMAs for the LUPA-wide, GPL, and National Conservation Land/ACEC designations of the Proposed Action locations are detailed in Appendix G (relevant CMA checklists).

LUP Name: Eastern San Diego County Resource Management Plan (ESDC RMP)

Date Approved: 2008

The Proposed Action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decision(s): The Proposed Action is subject to the 2008 ESDC RMP. The Proposed Action includes an area located on BLM-administered public lands in San Diego County, California. Under the ESDC RMP, ROW grants are considered and authorized on a case-by-case basis to meet public demand consistent with exclusion and avoidance areas identified in the RMP/Record of Decision. The proposed road maintenance and repair would not occur within exclusion or avoidance areas.

LUP Name: South Coast Resource Management Plan (SCRMP)

Date Approved: 1994

The Proposed Action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decision(s): The Proposed Action is subject to the 1994 South Coast Resource Management Plan. Under the SCRMP, ROW grants are considered and authorized on a case-by-case basis to meet public demand consistent with exclusion and avoidance areas identified in the RMP/Record of Decision. The proposed road maintenance and repair would not occur within exclusion or avoidance areas.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL EFFECTS

This chapter provides a characterization of the affected environment and an analysis of the potential impacts of the Proposed Action and No Action alternatives. Resources considered for analysis are shown in Table 3.1 below. The impact analysis includes short- and/or long-term impacts; direct or indirect impacts; and adverse or beneficial impacts.

The impact magnitude is characterized as negligible, minor, moderate, or major. Negligible impacts are generally those that might be perceptible but are at the 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. This information will used to determine the overall level of significance of the environmental impacts; either less than significant, or significant. As described in section 1.5.2 above, actions resulting in significant impacts would require either 1) revising the Proposed Action to eliminate the significant impacts, 2) committing to mitigation to reduce the impacts to less than significant, 3) preparing of a Notice of Intent to prepare an environmental impact statement, or 4) terminating the Proposed Action.

Cumulative impacts are defined in Section 1508.7 of the CEQ regulations, 40 CFR Sections 1500-1508. According to these federal regulations, cumulative impacts result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions.

A cumulative effect would occur if the Proposed Action or No Action Alternative, combined with the past, present, and reasonably foreseeable Federal and non-Federal projects or activities would affect the resources even where the alternatives alone would not. Within the Project Area, past, present, and reasonably foreseeable projects and activities include: CBP tactical infrastructure development and maintenance; USBP border security activities; energy infrastructure (including renewable energy and transmission lines); recreational activities (including off-highway vehicle recreation); and transportation infrastructure projects (development, maintenance, and repair).

3.1 RESOURCES/CONCERNS CONSIDERED FOR ANALYSIS

The following table (Table 3.1) is a list of all resources considered in the evaluation of the Proposed Action and alternatives. The resources that may be affected by this proposal have been carried forward for analysis and are discussed further in this chapter. The resources that are not present or found to not be impacted by the Proposed Action because they would be completely mitigated with the implementation of standard BMPs will not be discussed further.

3.2 NATURAL RESOURCES

3.2.1 Affected Environment

The portions of southern California adjacent to the U.S./Mexico international border within the Project Area occur within two physiographic provinces: the Peninsular Ranges in the western portion and the Colorado Desert in the eastern portion. The topographic profile of the Project Area consists of mountainous/rugged terrain along the western portion and low-elevation desert

valley in the eastern portion. Elevations range from approximately 15 feet to 4,120 feet above mean sea level.

Table 3.1 Resources Considered in the Evaluation of the Proposed Action and Alternatives

Resource/Use	May Be Affected Yes/No	Rationale	Analyzed in EA
Air Quality	Yes	Minimal air pollutant emissions would be generated from grading, filling, compacting, trenching, and maintenance and repair operations. Emissions would be temporary and would not be expected to generate any off-site effects. BMPs have been incorporated to avoid and minimize the generation of emissions, primarily dust. No effects on regional or local air quality would occur. No violation of National Ambient Air Quality Standards or exceedance of limits for greenhouse gas thresholds would occur. The Proposed Action activities would include BMPs to ensure compliance with the Imperial County and San Diego County air quality requirements.	No
Areas of Critical Environmental Concern (ACEC)	No	West Desert Drag Road, Roy's Road, Cat Exit 4, and Signal Road Legacy Fence Access Road 1, 2 and 3 are all located within the Yuha Basin ACEC. Presence within an ACEC requires compliance with ground disturbance caps via mitigation requirements as outlined within the Desert Renewable Energy Conservation Plan (2016) amendment to the California Desert Conservation Area (1980). However, the Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).	No
Biological Resources: Jurisdictional Waters	No	Non-wetland waters/ephemeral washes exist within the Project Area; however, these do not meet the definition for being jurisdictional under Clean Water Act.	Yes, see Section 3.2
Biological Resources: Vegetation Resources	Yes	Vegetation disturbance would occur within the Project Area.	Yes, see Section 3.2
Biological Resources: Special Status Species	Yes	Federally listed species, migratory birds, and BLM Sensitive Species are known to occur within or in the vicinity of the Project Area.	Yes, see Section 3.2
Cultural Resources	Yes	Cultural resources are found within the Area of Potential Effect.	Yes, see Section 3.3
Environmental Justice	No	Due to the remote location of the Project Area, there would be no impact to or displacement of any low-income or minority populations.	No
Farmlands: Prime/Unique	No	There are no farmlands within or adjacent to the Project Area.	No
Fire Management	No	Minimal risk of fire and effect on fire management due to road maintenance and repair activities.	No
Fish Habitat	No	No perennial surface waters with the potential for fish habitat occur within or adjacent to the Project Area.	No
Floodplains	No	West Desert Drag Road (BLM Route 407) predominantly occurs within Flood Zone A, a zone with a high risk of flooding. BMP implementation would minimize impacts related to flooding.	No
Forestry Resources / Woodland Products	No	There are no forestry resources within or adjacent to the Project Area.	No
Human Health and Safety	No	BMPs would be implemented to minimize and avoid potential impacts related to hazardous wastes.	No

Table 3.1 Resources Considered in the Evaluation of the Proposed Action and Alternatives

Resource/Use	May Be Affected Yes/No	Rationale	Analyzed in EA
Land Use Authorizations	No	Several existing roads within the Project Area are located within the boundary of the Ocotillo Wind Energy Facility ROW. The Wind Energy ROW does not grant the holder exclusive use of the area and the continued use of BLM designated routes will not affect the existing land use authorization.	No
Lands with Wilderness Characteristics	No	There are no lands designated as having wilderness characteristics within the Project Area.	No
Livestock Grazing Management	No	There are no grazing allotments or grazing activities on public lands within the Project Area.	No
Mineral Resources	No	No mining claims or mining activities would be impacted by the Proposed Action.	No
Native American Religious Concerns/ Traditional Values	Yes	CBP is consulting with Native American Tribes as part of the National Historic Preservation Act (NHPA) Section 106 process to determine if Native American Religious Concerns or Traditional Values of the land are found within or adjacent to the Project Area (see Section 4.0 Consultation and Coordination for details).	No
Non-native, Invasive and Noxious Species	No	BMPs would be implemented to minimize the impacts related to invasive and noxious species.	No
Noise	Yes	Short-term, negligible adverse impacts may occur from Proposed Action activities and the presence of construction equipment. For road maintenance and repair activities adjacent to the Jacumba Wilderness, increased noise from activities would be short-term and generally attenuate from elements of the natural environment within 500 feet. Trails within the Jacumba Wilderness are located along the western portion, several miles from the proposed road maintenance and repair activities. Noise impacts to Wilderness would be short-term and negligible. Proposed BMPs would avoid and minimize potential adverse impacts.	No
Paleontological Resources	Yes	The Proposed Action has the potential to disturb paleontological resources. No known fossil localities are in the immediate areas of these roads.	Yes, see Section 3.4
Recreation	Yes	Short-term, negligible adverse impacts on recreational use of roads may occur due to temporary road closures during maintenance and repair activities. However, long-term beneficial effects to recreational use would occur from repaired and maintained roads resulting in continued access to recreational activities.	No
Socioeconomics	No	Due to the remote location of the Proposed Action and relatively minimal activities, there would be no impact to socioeconomics in the Project Area.	No
Soil Resources	Yes	Short- and long-term minor adverse effects may occur. Erosion and sediment control plans and BMPs would minimize impacts.	No
Travel and Transportation Management	Yes	Short-term, negligible adverse impacts on transportation would be expected within and adjacent to the road maintenance and repair areas (roads would be closed for short periods of time). Long-term beneficial effects to USBP travel and access would occur from repaired and maintained roads.	No
Visual Resources	No	The Proposed Action would be limited to short-term maintenance activities on existing roads and no new impacts to visual resources would occur.	No

Table 3.1 Resources Considered in the Evaluation of the Proposed Action and Alternatives

Resource/Use	May Be Affected Yes/No	Rationale	Analyzed in EA
Wastes – Hazardous or Solid	Yes	Short-term negligible adverse impacts may occur from Proposed Action activities and the presence of construction equipment that may contain hazardous fluids. Proposed BMPs would avoid and minimize potential adverse impacts.	No
Water Resources	No	No perennial surface waters occur in the Project Area. Road maintenance and repair activities would not affect groundwater resources.	No
Wetlands/ Riparian Zones	No	Based on surveys, no wetlands or riparian areas occur within or adjacent to the Project Area.	No
Wild and Scenic Rivers	No	No wild or scenic rivers occur within or adjacent to the Project Area.	No
Wild Horses and Burros	No	No wild horse or burro herd areas or herd management areas present within or adjacent to the Project Area.	No
Wilderness	No	Several roads within the Project Area are adjacent to, but outside of, the Jacumba Mountains Wilderness and Otay Mountains Wilderness.	No

Jurisdictional Waters

Wetland delineation surveys were conducted within all road segments. In November 2018, a wetland delineation was conducted within six road segments adjacent to the Jacumba Wilderness (RECON 2019a). These segments included Elliot Mine Road, Mica Mine Road, Mica Davie's Crossover, Davie's Valley Road, Davie's Clark Crossover, and West Desert Drag Road.

A wetland delineation survey was conducted within the remaining 17 road segments in December 2019 (Gulf South Research Corporation 2020). These segments included: Little Otay Truck Trail; End of Fence Spur; Reyes Road; Cameron Truck Trail; La Posta Circle; Track Access; 4x4 Course; Gloriosa Way; Cedillo Road; Cat Exit 4; O'Neil Valley Access Road; Roy's Road; Signal Road Legacy Fence Access Road 1; Signal Road Legacy Fence Access Road 2; Signal Road Legacy Fence Road 3; Canal Road; and Poleline Extension (Appendix A, Figures 4a–4k). The survey area for both delineations consisted of the road segments and a 50-foot buffer area on either side of the centerline of the roads.

No U.S. Army Corps of Engineers (USACE) or Regional Water Quality Control Board (RWQCB) jurisdictional waters were found within the road segments surveyed. No vegetation units with the potential to be wetlands were detected within the survey areas and no jurisdictional wetland waters were observed (RECON 2019a, 2020a, and Gulf South Research Corporation 2020). Non-wetland waters/ephemeral washes mapped within the survey area are listed in Table 3.2 by roadway segment. On BLM-administered public lands within the survey area (50 feet on either side of road centerlines), approximately 15.13 acres and 4.60 linear miles (24,278 feet) of non-wetland waters/ephemeral washes were found (Appendix A, Figures 4a–4k) based on the presence of ephemeral desert channels that contain an active floodplain delineated at the ordinary high-water mark based on the presence and abundance of geomorphic indicators. Based on the definition of Jurisdictional Waters of the U.S., the non-wetland waters/ephemeral washes are excluded from Clean Water Act jurisdiction.

Table 3.2 Non-Wetland Waters/Ephemeral Washes within the Survey Area by Road Segment

Road Name	Acres	Linear Feet	Miles
Little Otay Truck Trail	0.03	126	0.02
End of Fence Spur	0	0	0
Reyes (Canyon City) Road	0	0	0
Cameron Truck Trail	0	0	0
La Posta Circle	0	0	0
Track Access	0	0	0
4x4 Course	0	0	0
Gloriosa Way	0	0	0
Cedillo Road	0.30	451	0.09
O'Neill Valley Access Road	0	0	0
Elliot Mine Road	0.05	425	0.08
Mica Davie's Crossover	9.28	14,484	2.74
Mica Mine Road	0	0	0
Davie's Valley Road	1.44	1,965	0.37
Davie's Clark Crossover	0.53	1,122	0.21
West Desert Drag Road	1.90	1,524	0.29
Roy's Road	0	0	0
Cat Exit 4	0.10	2,118	0.40
Signal Road Legacy Fence Access Road 1	1.51	2,052	0.39
Signal Road Legacy Fence Access Road 2	0	0	0
Signal Road Legacy Fence Access Road 3	0	0	0
Canal Road	0	0	0
Poleline Extension	0	0	0
Total	15.13	24,278	4.60
Note: Based on the definition of Jurisdictional Waters of the U.S., the non-wetland waters/ ephemeral washes are excluded from Clean Water Act jurisdiction.			

Vegetation Resources

Biological resource surveys were conducted within all road segments. In November 2018, a biological survey was conducted on six segments of road (RECON 2019a). These segments included Elliot Mine Road, Mica Mine Road, Davie's Crossover, Davie's Valley Road, Davie's Clark Crossover, and West Desert Drag Road.

In October and November of 2018, a biological survey was conducted on 17 segments of road (HDR 2019a). These segments included: Little Otay Truck Trail; End of Fence Spur; Reyes Road; La Posta Circle; 4x4 Course; Track Access; Cameron Truck Trail; Cedillo Road; Gloriosa Way; O'Neil Valley Access Road; Roy's Road; Cat Exit 4; Signal Road Legacy Fence Access Road 1; Signal Road Legacy Fence Access Road 2; Signal Road Legacy Fence Access Road 3; Canal Road; and Poleline Extension.

Surveys were conducted by walking meandering transects to visually inspect the ground and vegetation up to approximately 50 feet on either side of the centerline of the roadways (HDR 2019a; RECON 2019a). Vegetation communities mapped within the Project Area are listed in

Table 3.3 by roadway segment (Appendix A, Figures 5a–5w), as described in the biological resource survey reports. Vegetation communities were classified to the Alliance using the Manual of California Vegetation (Sawyer et al. 2008).

Table 3.3 Vegetation Community Alliance by Road Segment within the Project Area

Road Name	Vegetation Community Alliance
Little Otay Truck Trail	*Eriogonum fasciculatum* Shrubland Alliance Annual and Perennial Grassland Semi-Natural Stands
End of Fence Spur	*Eriogonum fasciculatum* Shrubland Alliance
Reyes (Canyon City) Road	*Avena (barbata, fatua)* Semi-Natural Herbaceous Stands *Eriogonum fasciculatum* Shrubland Alliance
Cameron Truck Trail	*Adenostoma fasciculatum* Shrubland Alliance
La Posta Circle	*Adenostoma fasciculatum* Shrubland Alliance *Quercus berberidifolia-Adenostoma fasciculatum* Shrubland Alliance
Track Access	*Adenostoma fasciculatum* Shrubland Alliance *Artemisia tridentata* Shrubland Alliance *Eriogonum fasciculatum* Shrubland Alliance
4x4 Course	*Adenostoma fasciculatum* Shrubland Alliance *Eriogonum fasciculatum* Shrubland Alliance
Gloriosa Way	*Adenostoma fasciculatum* Shrubland Alliance *Eriogonum fasciculatum* Shrubland Alliance
Cedillo Road	*Adenostoma fasciculatum* Shrubland Alliance *Bromus (diandrus, hordeaceus)-Brachypodium distachyon* Semi-Natural Herbaceous Stands *Artemisia tridentata* Shrubland Alliance
O'Neill Valley Access Road	*Simmondsia chinensis* Provisional Shrubland Alliance
Elliot Mine Road	*Quercus cornelius-mulleri* Shrubland Alliance
Mica Davie's Crossover	*Psorothamnus spinosus* Woodland Alliance
Mica Mine Road	*Psorothamnus spinosus* Woodland Alliance
Davie's Valley Road	*Psorothamnus spinosus* Woodland Alliance
Davie's Clark Crossover	*Psorothamnus spinosus* Woodland Alliance
West Desert Drag Road	*Ambrosia salsola* Shrubland Alliance
Roy's Road	*Ambrosia salsola* Shrubland Alliance *Larrea tridentata* Shrubland Alliance
Cat Exit 4	*Larrea tridentata* Shrubland Alliance
Signal Road Legacy Fence Access Road 1	*Atriplex canescens* Shrubland Alliance *Larrea tridentata* Shrubland Alliance
Signal Road Legacy Fence Access Road 2	*Larrea tridentata* Shrubland Alliance
Signal Road Legacy Fence Access Road 3	*Larrea tridentata* Shrubland Alliance
Canal Road	*Larrea tridentata* Shrubland Alliance
Poleline Extension	*Larrea tridentata* Shrubland Alliance
SOURCE: HDR 2019a; RECON 2019a	

Federally Listed Threatened and Endangered Species

CBP determined that four federally listed threatened and endangered species have the potential to occur within the Project Area or have critical habitat present within 2 miles of the Project Area based on a U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation database search for listed species that occur in San Diego and Imperial counties (USFWS 2019a and 2020), species listing rules, recovery planning documents, and other information related to

these species (Table 3.4 and Appendix A, Figures 6a through 6e). These species are: Quino checkerspot butterfly, arroyo toad, coastal California gnatcatcher (*Polioptila californica californica*), and peninsular bighorn sheep (*Ovis canadensis nelsoni*). Descriptions, distributions, habitat requirements, and threats are described in the Biological Assessment (CBP and BLM 2020).

In April of 2020, focused surveys were conducted for Mexican flannelbush (*Fremontodendron mexicanum*) along the Little Otay Truck Trail and for Peirson's milk-vetch (*Astragalus magdalenae* var. *peirsonii*) along Canal Road and Poleline Extension Road. Focused surveys were conducted within a 100-foot corridor centered on the roads. No Mexican flannelbush or Peirson's milk-vetch were observed and were determined to not likely be present in the roadway areas surveyed (RECON 2020b).

The following federally listed species are not expected to occur within the Project Area based on a lack of suitable habitat: Mojave Desert tortoise (*Gopherus agassizii*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), California condor (*Gymnogyps californianus*), Mexican flannelbush, Peirson's milkvetch, Otay tarplant (*Deinandra (=Hemizonia) conjugens*), San Diego ambrosia (*Ambrosia pumila*), and San Diego thornmint (*Acanthomintha ilicifolia*). These species will not be discussed further.

Table 3.4 Potential Occurrence of Federally Listed Threatened and Endangered Species/Critical Habitat by Road Segment

Road Name	Species with Potential to Occur	Critical Habitat (within 2 miles or less)
Little Otay Truck Trail	Quino checkerspot butterfly Coastal California gnatcatcher	Quino checkerspot butterfly
End of Fence Spur	Quino checkerspot butterfly Coastal California gnatcatcher	No critical habitat
Reyes (Canyon City) Road	Quino checkerspot butterfly Coastal California gnatcatcher Arroyo toad	Arroyo toad
Cameron Truck Trail	Quino checkerspot butterfly	No critical habitat
La Posta Circle	Quino checkerspot butterfly	No critical habitat
Track Access	Quino checkerspot butterfly	No critical habitat
4x4 Course	Quino checkerspot butterfly	No critical habitat
Gloriosa Way	Quino checkerspot butterfly	No critical habitat
Cedillo Road	Quino checkerspot butterfly	Quino checkerspot butterfly
O'Neill Valley Access Road	Quino checkerspot butterfly Peninsular bighorn sheep	Peninsular bighorn sheep
Elliot Mine Road	Quino checkerspot butterfly Peninsular bighorn sheep	Peninsular bighorn sheep
Mica Davie's Crossover	Peninsular bighorn sheep	Peninsular bighorn sheep
Mica Mine Road	Peninsular bighorn sheep	Peninsular bighorn sheep
Davie's Valley Road	Peninsular bighorn sheep	Peninsular bighorn sheep
Davie's Clark Crossover	Peninsular bighorn sheep	Peninsular bighorn sheep
West Desert Drag Road	No suitable habitat for listed species	No critical habitat
Roy's Road	No suitable habitat for listed species	No critical habitat
Cat Exit 4	No suitable habitat for listed species	No critical habitat
Signal Road Legacy Fence Access Road 1	No suitable habitat for listed species	No critical habitat

Table 3.4 Potential Occurrence of Federally Listed Threatened and Endangered Species/Critical Habitat by Road Segment

Road Name	Species with Potential to Occur	Critical Habitat (within 2 miles or less)
Signal Road Legacy Fence Access Road 2	No suitable habitat for listed species	No critical habitat
Signal Road Legacy Fence Access Road 3	No suitable habitat for listed species	No critical habitat
Canal Road	No suitable habitat for listed species	No critical habitat
Poleline Extension	No suitable habitat for listed species	No critical habitat
SOURCE: HDR 2019a; RECON 2019a; USFWS 2019a		

Critical habitat for Quino checkerspot butterfly, arroyo toad, and peninsular bighorn sheep is present within 2 miles of the Project Area (see Table 3.4). Approximately 1.65 miles of Quino checkerspot butterfly and 0.12 mile of arroyo toad critical habitat occurs within or immediately adjacent to road segments. There is no peninsular bighorn sheep critical habitat within or immediately adjacent to road segments.

Critical habitat for the following species does not occur within the Project Area: coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, peninsular bighorn sheep, Mexican flannelbush, Otay tarplant, Peirson's milkvetch, and San Diego ambrosia.

Focused surveys for Quino checkerspot butterfly were conducted in March, April, and May 2018 along the Elliot Mine Road segment (RECON 2018). No Quino checkerspot butterflies or larval host plant species were observed within the survey area. Few nectar sources were present throughout the survey area in either quantity or variety. Potential nectar sources observed included California buckwheat (*Eriogonum fasciculatum*), sugar bush (*Rhus ovata*), chia (*Salvia columbariae*), cryptantha (*Cryptantha* sp.), blue dicks (*Dichelostemma capitatum*), common goldfields (*Lasthenia gracilis*), and popcorn flower (*Plagiobothrys* sp.) (RECON 2018). The potential for this road segment to support this species is low based on the results of the 2018 survey.

BLM Sensitive Species

BLM Sensitive Species with the potential to occur within the Project Area are listed in Table 3.5 below. This table also includes whether species were observed during biological resource surveys conducted along roadway segments.

Table 3.5 Potential Occurrence of BLM Sensitive Species by Road Segment

Road Name	Species with Potential to Occur	Observed During General Surveys
Little Otay Truck Trail	Golden Eagle (*Aquila chrysaetos*) Coast horned lizard (*Phrynosoma blainvilii*) Coronado skink (*Plestiodon skiltonianus interparietalis*) Western spadefoot toad (*Spea hammondii*) Thorne's hairstreak butterfly (*Callophrys thornei*)	No
End of Fence Spur	Golden Eagle Coast horned lizard Coronado skink Western spadefoot toad Thorne's hairstreak butterfly Dunn's mariposa lily (*Calochortus dunnii*)	No
Reyes (Canyon City) Road Cameron Truck Trail La Posta Circle Track Access 4x4 Course Gloriosa Way Cedillo Road	Golden Eagle Coast horned lizard Coronado skink Western spadefoot toad Thorne's hairstreak butterfly	No
O'Neill Valley Access Road	Golden Eagle Coast horned lizard Coronado skink Western spadefoot toad Thorne's hairstreak butterfly Borrego bedstraw (*Galium angustifolium ssp. borregoense*) Mount Laguna aster (*Dieteria asteroids var. lagunensis*)	No
Elliot Mine Road	Golden Eagle California leaf nosed bat (*Macrotus californicus*) Fringed myotis (*Myotis thysanodes*) Long-eared myotis (*Myotis evotis*) Pallid bat (*Antrozous pallidus*) Townsend's big-eared bat (*Corynorhinus townsendii*) Yuma myotis (*Myotis yumanensis*) Barefoot banded gecko (*Coleonyx switaki*) Coast horned lizard Coronado skink Delicate clarkia (*Clarkia delicate*) Jacumba milk-vetch (*Astragalus douglasii var. perstrictus*) Mountain Springs bush lupine (*Lupinus excubitus var. medius*) Mount Laguna aster (*Dieteria asteroides var. lagunensis*) Palmer's goldenbush (*Ericameria palmeri var. palmeri*) San Bernardino aster (*Symphyotrichum defoliatum*) San Diego sunflower (*Hulsea californica*) Southern jewel-flower (*Streptanthus campestris*)	No
Mica Davie's Crossover Mica Mine Road Davie's Valley Road Davie's Clark Crossover	Golden Eagle Barefoot banded gecko Mountain Springs bush lupine Flat-tailed horned lizard (*Phrynosoma mcalli*)	No
West Desert Drag Road	Golden Eagle Barefoot banded gecko Colorado desert fringe-toed lizard (*Uma notate*) Flat-tailed horned lizard	No

Table 3.5 Potential Occurrence of BLM Sensitive Species by Road Segment

Road Name	Species with Potential to Occur	Observed During General Surveys
Roy's Road	Golden Eagle Barefoot banded gecko Spotted bat (*Euderma maculatum*) Couch's spadefoot toad (*Scaphiopus couchi*)	No
Cat Exit 4		
Signal Road Legacy Fence Access Road 1		
Signal Road Legacy Fence Access Road 2		
Signal Road Legacy Fence Access Road 3		
Canal Road	Burrowing owl (*Athene cunicularia*) Golden Eagle Spotted bat Colorado desert fringe-toed lizard Wiggins' croton (*Croton wigginsi*) Algodones Dunes sunflower (*Helianthus niveus subsp. Tephrodes*)	Colorado desert fringe-toed lizard, Wiggins' croton, Algodones Dunes sunflower
Poleline Extension		
SOURCE: BLM 2014, 2015; California Natural Diversity Database 2019; HDR 2019a; RECON 2019a		

Habitat requirements for species listed in Table 3.5 are summarized in Table 3.6 below.

Table 3.6 BLM Special Status Species Habitat Requirements

Species	Habitat Requirements
Birds	
Burrowing owl	Open grassland, prairies, farmland, and airfields. Favors areas of flat open ground with very short grass or bare soil. Inhabit burrows created by small mammals.
Golden eagle	Open and semi-open country with native vegetation. Avoid developed areas and uninterrupted forest. Primarily found in mountains, canyonlands, rimrock terrain, and riverside cliffs and bluffs.
Mammals	
California leaf nosed bat	Preferred habitats are caves, mines, and rock shelters, mostly in Sonoran Desert scrub. Roost sites are usually located near foraging areas.
Fringed myotis	Optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood conifer, generally at elevations between 4,000 and 7,000 feet. Colonies located in caves, mines, buildings, or crevices.
Long-eared myotis	Prefer coniferous woodlands and forests, but found in nearly all brush, woodland, and forest habitats from sea level to 9,000 feet. Roosts un buildings, crevices, spaces under bark, and snags.
Pallid bat	Occupies grasslands, shrublands, woodlands, and forests from sea level to mixed conifer forests. Most common open, dry habitats with rocky areas for roosting.
Spotted bat	Found mostly in the foothills, mountains, and desert regions of southern California. Habitat includes arid deserts, grasslands, and mixed conifer forests. Prefers to roost in rock crevices in cliffs.
Townsend's big-eared bat	Most abundant in mesic habitats. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting.
Yuma myotis	Optimal habitats are open forests and woodlands with sources of water. Roosts in buildings, mines, caves, or crevices, but also abandoned swallow nests and under bridges.

Table 3.6 BLM Special Status Species Habitat Requirements

Species	Habitat Requirements
Reptiles and Amphibians	
Barefoot banded gecko	Found in arid rocky areas on flatlands, canyons, thorn scrub, especially where there are large boulders and rock outcrops, and where vegetation is sparse. Known to occur in the Coyote Mountains of southern California.
Coast horned lizard	Inhabits open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, frequently near ant hills.
Colorado desert fringe-toed lizard	Sparsely vegetated arid areas with fine wind-blown sand, including dunes, flats with sandy hummocks formed around the bases of vegetation, washes, and the banks of rivers. Needs fine, loose sand for burrowing.
Coronado skink	Grassland, woodlands, pine forests, chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers. Prefers rocky areas near streams with lots of vegetation. Also found in areas away from water.
Couch's spadefoot toad	Desert and arid regions of grassland, prairie, mesquite, creosote bush, thorn forest, and sandy washes. In California, occurs in scattered populations east of the Algodones sand dunes in Imperial County.
Flat-tailed horned lizard	Sand desert hardpan or gravel flats with scattered sparse vegetation of low species diversity. Most common in areas with a high density of harvester ants and fine windblown sand, but rarely occurs on dunes.
Western spadefoot toad	Prefers open areas with sandy or gravelly soils in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.
Invertebrates	
Thorne's hairstreak butterfly	Occurs in chaparral ecosystems in southern California. Occurs exclusively in the vicinity of Otay Mountain, confined to areas where Tecate cypress grows.
Plants	
Algodones Dunes sunflower	Found in dunes, primarily within the Algodones Dunes in Imperial County.
Borrego bedstraw	Found primarily on north-facing steep walls and rocky slopes of canyons and on hillsides in Anza-Borrego Desert State Park in eastern San Diego County.
Delicate clarkia	Occurs in San Diego County in woodland and chaparral of the Peninsular Ranges.
Dunn's mariposa lily	Known only from the Peninsular Ranges of San Diego County on rocky openings in chaparral or at the grassland/chaparral ecotone.
Jacumba milk-vetch	Found in desert, valley, chaparral and woodlands, and montane habitats, usually below 8,000 feet elevation.
Mount Laguna aster	Found in chaparral, oak woodland, and lower montane forests between 5,000 and 7,000 feet. Found in the Laguna Mountains of San Diego County.
Mountain Springs bush lupine	Found in southern and central California, primarily in the Tehachapi Mountains and Traverse Range region. Grows at elevations from 3,300 to 9,800 feet where it occurs in creosote bush scrub and pinyon-juniper woodlands.
Palmer's goldenbush	Found in southern and central California where it occurs on dry flats and slopes of the coast, inland valleys, and foothills.
San Bernardino aster	Known only from the San Bernardino and San Gabriel Mountains of the Traverse Ranges, and part of the Peninsular Ranges to the south. Found in grassland and meadow habitat and in disturbed areas.

Table 3.6 BLM Special Status Species Habitat Requirements

Species	Habitat Requirements
San Diego sunflower	Grows in the Peninsular Ranges in open areas such as forest clearings and occurs in the chaparral, especially after wildfire. Most populations are in San Diego County.
Southern jewel-flower	Grows in mountain chaparral, woodlands, and forests at elevations up to 7,500 feet.
Wiggins' croton	Occurs in stabilized and partially stabilized sand dunes in the Algodones Dunes in southeast Imperial County, primarily on the west side of the dune system.

Flat-tailed Horned Lizard Management Areas. Six road segments are located within the Yuha Desert FTHL Management Area (Appendix A, Figure 7a): West Desert Drag Road, Roy's Road, Cat Exit 4, Signal Road Legacy Fence Road 1, Signal Road Legacy Fence Road 2, and Signal Road Legacy Fence Road 3. Two road segments are located within 2 miles of the East Mesa FTHL Management Area (Appendix A, Figure 7b): Poleline Extension and Canal Road. Four road segments are located within FTHL suitable habitat (Appendix A, see Figure 7a): Mica Davie's Crossover, Mica Mine Road, Davie's Valley Road, and Davie's Clark Crossover.

FTHL Management Areas were designed to include areas of FTHL habitat previously identified as key areas and encompass as large an area as possible, but avoid extensive, existing, and predicted management conflicts (e.g., off-highway vehicle open use areas). The Management Areas are the core areas for maintaining self-sustaining populations of FTHLs in perpetuity (FTHL Interagency Coordinating Committee 2003).

Migratory Birds

The Migratory Bird Treaty Act (MBTA) protects migratory bird nests from possession, sale, purchase, barter, transport, import and export, and collection. Pursuant to Fish and Game Code Section 3513, the California Department of Fish and Wildlife (CDFW) enforces the MBTA consistent with rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Several migratory bird species are likely to occur within or adjacent to the Project Area road segments. The region is capable of supporting more than 400 bird species, including warblers (Parulidae), ducks (Anatidae), sandpipers (Scolopacidae), phalaropes (Genus *Phalaropus*), gulls (Laridae), terns (Laridae), sparrows (Passeridae), towhees (Emberizidae), and flycatchers (Tyrannidae). Most migratory bird nesting activity within the region occurs from 15 February through 31 August (California Audubon 2020).

3.2.2 Environmental Effects

Proposed Action Alternative

Jurisdictional Waters

Approximately 15.13 acres (4.6 miles/24,306 feet) of non-wetland non-jurisdictional waters/ephemeral washes (normally dry channels) were found within the 50-foot survey area of all road segments. These non-wetland waters were determined to consist entirely of ephemeral washes which are excluded from Clean Water Act jurisdiction.

Based on the disturbed area of the existing roadways and proposed road maintenance and repair activities, approximately 8.40 acres (3.36 miles/17,761 linear feet) of these ephemeral washes would potentially be impacted under the Proposed Action (Table 3.7).

Table 3.7 Potential Impacts to Non-Jurisdictional Ephemeral Washes within the Project Area by Road Segment

Road Name	Acres of Impact	Linear Feet of Impact	Square Feet of Impact
Little Otay Truck Trail	0.01	38	419
Cedillo Road	0.12	851	5,022
Elliot Mine Road	0.01	95	413
Mica Davie's Crossover	5.40	11,341	253,410
Davie's Valley Road	0.60	1,607	26,098
Davie's Clark Crossover	0.25	434	11,039
West Desert Drag Road	1.19	1,494	51,681
Cat Exit 4	0.02	102	909
Signal Legacy Fence Access Road 1	0.8	1,799	35,103
Total Approximate Impacts	8.40	17,761	366,094

Potential short-term adverse impacts could occur from grading and resurfacing activities, vegetation trimming, and debris removal, which could cause the deposition of fill materials or increased sedimentation into ephemeral washes. Road maintenance and repair construction equipment would compact and disturb roadway soils which would result in an increase in the erosion process because less water would likely infiltrate into the soil during high-intensity rainfall events, causing an increase in surface runoff and sedimentation into ephemeral washes. Maintenance and repair activities within the approximately 7.59 acres (3.02 miles/15,962 linear feet) of ephemeral washes would be disturbed and may result in a short-term potential increase of erosion and sedimentation if rain events occur during construction activities. Once maintenance and repair activities are completed, and culverts have been cleaned and repaired, erosion and sedimentation would decrease over the long-term. It is not anticipated that the ephemeral wash areas would be significantly altered or lost due to maintenance and repair activities. Impacts during maintenance and repair activities would be mitigated with the use of erosion-control BMPs.

Road maintenance and repair activities may also result in the potential for contaminants to enter ephemeral desert channels due to potential leaks or spills from construction equipment. Site-specific storm water pollution prevention plans and spill protection plans would be required, as well as erosion control BMPs, and other soil and water resource protection BMPs would be implemented to avoid and minimize potential impacts (see Section 6.0 of this EA).

Under the Proposed Action, maintenance and repair activities would include implementing improved water drainage measures, applying soil stabilization agents, and adding lost road surface material to reestablish the intended surface elevation needed for adequate drainage. For water-control features (such as ditches and culverts), activities would include cleaning, maintaining, repairing, or replacing features, as needed. Implementing improved water drainage measures includes ensuring road crowns shed water and runoff flows to established drainage ditches, culverts, or other water-control features as needed to control runoff and prevent

deterioration to existing infrastructure or surrounding land. These measures would reduce long-term erosion in ephemeral washes and channels.

Based on the above, the Proposed Action would result in short-term episodic and long-term minor, less than significant adverse impacts to non-jurisdictional ephemeral washes and channels from road maintenance and repair activities.

Vegetation Communities

Under the Proposed Action, most of the road maintenance and repair activities would be conducted within previously disturbed areas of the roadways, however, some activities may need to be conducted in areas immediately adjacent to the existing road footprint. For example, equipment might need to be operated off existing roads to remove debris from culverts and fences, and to access and maintain roads. These activities could result in crushing or trampling of vegetation, resulting in temporary impacts on vegetation. These activities would be minimized through appropriate heavy equipment operation techniques such as installation of temporary construction mats, reduced operating speeds, use of the initial ingress and egress points, and selection of appropriately sized equipment for the area and project.

Potential indirect impacts may also include habitat degradation associated with alterations in hydrology from maintenance and repair of culverts and stabilization of roads, which would change the flow of water along and adjacent to the roadways. Maintenance and repair activities may also result in disturbance of road edges which may increase potential for invasive species which may increase the fire potential. Road maintenance and repair activities would also result in short-term fugitive dust emissions during construction activities.

By implementing BMPs to reduce sedimentation and runoff, reducing the potential for invasive species and fire, and minimizing impacts from fugitive dust (see Section 6.0 of this EA), the Proposed Action would result in short-term negligible adverse impacts to vegetation communities during road maintenance and repair activities. It is anticipated that vegetation communities would recover in a relatively short period of time from any direct disturbance, and no long-term adverse significant impacts would occur.

Federally Listed Threatened and Endangered Species

The area of analysis for each of the federally listed species is defined as all areas that could be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (see Appendix A, Figures 6a–6e). The purpose of identifying the area of analysis is to provide a boundary around the areas in which the effects of the Proposed Action would occur. The area of analysis delineated for the road maintenance and repair under the Proposed Action includes the roads and an approximately 50-foot buffer on each side of the roads. Heavy equipment and other construction-related noise, dust, potential for the spread of invasive species, altered hydrology near roads, as well as vegetation disturbance could occur within this distance. In addition, the area of analysis for each road segment may include species-specific buffer or survey zones for federally listed species, where relevant (Table 3.8).

Table 3.8 Species-specific Areas of Analysis

Road Name	Species with Potential to Occur	Area of Analysis
Little Otay Truck Trail	Quino checkerspot butterfly Critical Habitat Coastal California gnatcatcher	500-foot buffer on each side of road to encompass potential occurrence of coastal California gnatcatcher and 3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
End of Fence Spur	Quino checkerspot butterfly Coastal California gnatcatcher	500-foot buffer on each side of road to allow for potential occurrence of coastal California gnatcatcher and 3,280-foot (=1 kilometer) buffer on each side of road to encompass suitable habitat use by Quino checkerspot butterfly.
Reyes (Canyon City) Road	Quino checkerspot butterfly Coastal California gnatcatcher Arroyo toad Critical Habitat	3,280-foot (=1 kilometer) buffer on each side of road to encompass suitable dispersal habitat use by arroyo toad and Quino checkerspot butterfly. 500-foot buffer on each side of road to encompass potential occurrence of coastal California gnatcatcher.
Cameron Truck Trail	Quino checkerspot butterfly	3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
La Posta Circle	Quino checkerspot butterfly	3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
Track Access	Quino checkerspot butterfly	3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
4x4 Course	Quino checkerspot butterfly	3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
Gloriosa Way	Quino checkerspot butterfly	3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
Cedillo Road	Quino checkerspot butterfly	3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
O'Neill Valley Access Road	Quino checkerspot butterfly Peninsular bighorn sheep	5,260 feet (=1-mile) buffer on each side of road to encompass suitable peninsular bighorn sheep habitat and 3,280-foot (=1 kilometer) buffer on each side of road to encompass potential habitat use by Quino checkerspot butterfly.
Elliot Mine Road	Quino checkerspot butterfly Peninsular bighorn sheep	5,260 feet (=1-mile) buffer on each side of road to encompass potential peninsular bighorn sheep habitat. Quino checkerspot butterfly surveys were conducted along this road segment in 2018, no butterflies or host plants were found.
Mica Davie's Crossover	Peninsular bighorn sheep	5,260 feet (=1-mile) buffer on each side of road to encompass suitable peninsular bighorn sheep habitat.
Mica Mine Road	Peninsular bighorn sheep	5,260 feet (=1-mile) buffer on each side of road to encompass suitable peninsular bighorn sheep habitat.

Table 3.8 Species-specific Areas of Analysis

Road Name	Species with Potential to Occur	Area of Analysis
Davie's Valley Road	Peninsular bighorn sheep	5,260 feet (=1-mile) buffer on each side of road to encompass suitable peninsular bighorn sheep habitat.
Davie's Clark Crossover	Peninsular bighorn sheep	5,260 feet (=1-mile) buffer on each side of road to encompass suitable peninsular bighorn sheep habitat.
West Desert Drag Road	No suitable habitat for listed species	50 feet on each side of road.
Roy's Road	No suitable habitat for listed species	50 feet on each side of road.
Cat Exit 4	No suitable habitat for listed species	50 feet on each side of road.
Signal Road Legacy Fence Access Road 1	No suitable habitat for listed species	50 feet on each side of road.
Signal Road Legacy Fence Access Road 2	No suitable habitat for listed species	50 feet on each side of road.
Signal Road Legacy Fence Access Road 3	No suitable habitat for listed species	50 feet on each side of road.
Canal Road	No suitable habitat for listed species	50 feet on each side of road.
Poleline Extension	No suitable habitat for listed species	50 feet on each side of road.
SOURCE: HDR 2019a; RECON 2019a; USFWS 2019a; USFWS 2020		

Potential impacts to federally listed species under the Proposed Action are summarized below. The Biological Assessment (CBP and BLM 2020) describes potential impacts in more detail.

Quino Checkerspot Butterfly. Maintenance and repair would be restricted to the existing road footprint, as shown in Figures 8a through 8u, specifically, the following road segments: Little Otay Truck Trail, End of Fence Spur. Reyes Road, Cameron Truck Trail, La Posta Circle, Track Access, 4x4 Course, Gloriosa Way, Cedillo Road, O'Neill Valley Access Road, and Elliot Mine Road. Road maintenance and repair would impact 9.95 acres of existing road disturbed area, with minimal trimming and clearing of vegetation that has established within the existing roadway (such as brush overhanging roadways or vegetation that has encroached into roadway). The objective of these maintenance and repair activities would be to remain within the existing road and not increase the road width. The amount of vegetation that may be trimmed during maintenance and repair activities would vary by road segment (depending on vegetation that has encroached into the existing road disturbed area), and by year (wet years may result in greater shrub/tree growth and possibility of vegetation encroachment into roadways). However, it is anticipated that the overall disturbance of vegetation within road segments with the potential for Quino checkerspot butterfly occurrence would be minimal as these roads have experienced regular use by law enforcement and recreationists.

Improved water drainage measures could be implemented, as needed and as funding is available, consisting of articulated concrete mats at low water crossings (see Figures 8a through 8u). Potential vegetation disturbance at low water crossings within suitable Quino checkerspot butterfly habitat would be permanent (removal of vegetation to allow for placement of the concrete mat) and temporary (disturbance and trampling of vegetation from construction

equipment). Permanent and temporary disturbance of vegetation for low water crossings would consist of the following:

- Permanent disturbance (removal of vegetation to allow for placement of the concrete mat) of approximately 0.11 acre of *Adenostoma fasciculatum* Shrubland Alliance within the Cedillo Road segment (see Figures 8o and 8p).
- Temporary disturbance (disturbance and trampling of vegetation from construction equipment) of approximately 0.42 acre within *Adenostoma fasciculatum* Shrubland Alliance within the Cedillo Road segment (see Figures 8o and 8p).
- Temporary disturbance (disturbance and trampling of vegetation from construction equipment) of approximately 0.01 acre within *Bromus* (*diandrus*, *hordeaceus*) *Brachypodium distachyon* Semi-Natural Herbaceous Stands within the Cedillo Road segment (see Figure 8p).
- Temporary disturbance of approximately 0.03 acre within Mediterranean California Naturalized Annual and Perennial Grassland Semi-Natural Stands within the Little Otay Truck Trail segment (see Figure 8a).
- Temporary disturbance (disturbance and trampling of vegetation from construction equipment) of approximately 0.06 acre within *Quercus Cornelius-mulleri* Shrubland Alliance within the Elliot Mine Road segment (see Figures 8s and 8t).

Potential indirect impacts on Quino checkerspot butterfly include habitat degradation from increased dust, and introduction and establishment of non-native species into suitable habitat. Dust may cover eggs and larvae and could either kill them through smothering or by reducing (interrupting) their lifecycle. Elevated dust levels may also affect the ability of the larvae and adults to respire normally. Insects are known to be adversely affected by coatings of oil films, emulsions, or dust particles that clog the respiratory openings (spiracles) on their bodies (Storer et al. 1972). Excessive dust could also degrade the suitability of Quino checkerspot butterfly habitat (i.e., host plants and nectar plants) by disrupting/hindering plant growth (photosynthesis), and reducing availability to pollinators, which in turn could result in reduced reproduction of the plants and decreasing the palatability of nectar plants to larvae.

All maintenance and repair activities within Quino checkerspot butterfly critical habitat would be restricted to within the existing road footprint. Vegetation clearing outside of previously disturbed areas would not occur in designated critical habitat of Quino checkerspot butterfly. Implementation of vegetation and species-specific BMPs would avoid and minimize potential effects to primary constituent elements of the designated critical habitat. The Proposed Action would not result in destruction or modification of Quino checkerspot butterfly critical habitat.

Under the Proposed Action, implementation of species-specific BMPs and avoidance measures outlined in Section 6.0 for Quino checkerspot butterfly would avoid and minimize potential adverse impacts. The Proposed Action would not likely cause habitat degradation or direct and indirect adverse effects to this species. However, because this species has potential to occur within roadway segments identified in Table 3.7, vegetation trimming and clearing activities inside the existing footprint and some infrequent maneuvering of equipment outside of the existing footprint of these roads could inadvertently harm and may affect Quino checkerspot

butterfly in various stages of development. The Proposed Action would have a moderate, less than significant adverse impact on Quino checkerspot butterfly.

Arroyo Toad. Under the Proposed Action, no maintenance and repair activities would occur within arroyo toad breeding habitats (i.e., occupied overflow pools, old flood channels, and pools with shallow margins associated with shallow, slow-moving stream habitats, riparian habitats that are disturbed naturally on a regular basis, nearby sand bars, and adjacent stream terraces). The drainages along Reyes Road, the only road segment located within a portion of arroyo toad critical habitat, are not expected to be suitable breeding habitat because they are first or second order streams with small watersheds and surface water is rarely present (typically for a few hours after rain events).

All maintenance and repair activities within arroyo toad critical habitat would be restricted to within the existing road footprint. Vegetation clearing outside of previously disturbed areas would not occur in designated critical habitat. Implementation of vegetation and species-specific BMPs would avoid and minimize potential effects to primary constituent elements of the designated critical habitat. The Proposed Action would not result in destruction or modification of arroyo toad critical habitat. Arroyo toads might use roads and trails as dispersal routes and might congregate on roads at night to feed (USFWS 1999). Potential direct impacts on arroyo toads include the risk of direct injury or mortality associated with trampling or crushing. Any use or storage of chemicals or fuels would be kept 0.3 mile away from critical habitat and other locations where arroyo toads occur. Potential indirect impacts on arroyo toads include increased predation from night lighting; habitat degradation from erosion, sedimentation, and dust; and the transmission of diseases.

The Proposed Action would result in temporary negligible effects to vegetation along Reyes Road adjacent to designated arroyo toad critical habitat; however, no activities would occur within critical habitat for the arroyo toad. Implementation of BMPs would avoid effects to adjacent designated critical habitat. CBP concludes that the Proposed Action would have no effect on arroyo toad critical habitat.

Under the Proposed Action, implementation of species-specific BMPs and avoidance measures outlined in Section 6.0 for arroyo toad would avoid and minimize potential adverse impacts. The Proposed Action would not likely cause habitat degradation or direct and indirect adverse effects to this species. However, because this species has potential to occur in a portion of the Project Area (Reyes Road), BMPs to reduce erosion, sedimentation, pollution, and dust, as well as regularly scheduled inspection and maintenance programs, would be implemented to avoid and minimize potential impacts. The Proposed Action would have a negligible adverse impact on arroyo toad.

Coastal California Gnatcatcher. Potential direct impacts to coastal California gnatcatcher within three road segments with the potential for occurrence (Little Otay Truck Trail, End of Fence Spur, and Reyes Road; see Table 3.4), depending on timing of the activity, disruption of critical stages of the life cycle (late February to early August), include noise disturbances from increased human presence, injury, or mortality from collisions with vehicles during maintenance and repair activities, and habitat degradation from vegetation removal. After initial maintenance and repair, future maintenance and repair would likely occur infrequently. Maintenance and

repair activities could increase the potential for direct injury and mortality of coastal California gnatcatcher within these road segments; however, birds are highly mobile and would flush or relocate in response to disturbances and the potential for direct injury or mortality is low and unlikely to occur.

Vegetation removal (e.g., trimming of branches and other vegetation removal where vegetation encroaches on road shoulders or ditches) within the road segments with the potential for occurrence would be limited to the minimum necessary to maintain drivable access and to maintain drainage functionality. Potential indirect impacts on coastal California gnatcatcher include increased vulnerability to predation and habitat degradation from increased potential for invasive species and fire. BMPs designed to limit predator vulnerability, prevent fires, reduce the spread of non-native invasive plant species, and otherwise avoid or minimize indirect impacts on these species would be implemented within the road segments with the potential for occurrence (see Section 6.0 of this EA).

There are no roads proposed for maintenance and repair within coastal California gnatcatcher critical habitat (see Appendix A, Figure 6a). Maintenance and repair activities under the Proposed Action would have no effect on critical habitat of the coastal California gnatcatcher.

Under the Proposed Action, implementation of measures outlined in Section 6.0 for coastal California gnatcatcher would avoid and minimize potential adverse impacts. The Proposed Action would not likely cause habitat degradation or direct and indirect adverse effects to this species. However, because this species has potential to occur in three road segments of the Project Area, BMPs to minimize maintenance and repair during the nesting season and minimize vegetation removal, would be implemented. Potential for direct injury or mortality, impacts of noise disturbance, and habitat degradation on coastal California gnatcatcher would be short-term and negligible.

Peninsular Bighorn Sheep. Potential direct impacts to peninsular bighorn sheep within four road segments with the potential for occurrence (O'Neill Valley Access Road, Elliot Mine Road, Mica Davie's Crossover, Davie's Valley Road, Davie's Clark Crossover, and Mica Mine Road; see Table 3.4) include the risk of behavioral and physiological impacts resulting from noise. The presence of maintenance and repair crews and equipment, and associated noise could cause peninsular bighorn sheep to temporarily move away from the work area or otherwise modify their behavior. Most repair and maintenance activities would be completed within an area in less than one day, and all would be completed within a few days. Any displacement or other associated adverse effects to peninsular bighorn sheep would be temporary and minor and activities would be timed to avoid species-specific sensitive seasons. Potential indirect impacts on peninsular bighorn sheep include habitat degradation from increased potential for invasive species and fire.

Although peninsular bighorn sheep designated critical habitat is located within 2 miles of the Proposed Action, maintenance and repair activities would not occur within or immediately adjacent to designated peninsular bighorn sheep critical habitat (see Figure 6c). The Proposed Action would have no effect on critical habitat of the peninsular bighorn sheep.

Under the Proposed Action, implementation of species-specific measures outlined in Section 6.0 for peninsular bighorn sheep would avoid and minimize potential adverse impacts. The Proposed Action would cause negligible disturbance from noise but would not harm or otherwise directly adversely affect this species. The potential for adverse effects would be discountable and any effects that might occur would be insignificant. The Proposed Action would not likely result in impacts on individuals that would reduce the survivorship or reproductive capabilities, nor is it expected to impair the recovery of this species. The Proposed Action would have a negligible adverse impact on peninsular bighorn sheep.

BLM Sensitive Species

Burrowing Owl (*Athene cunicularia*). Two road segments occur within potential burrowing owl habitat, Canal Road and Poleline Extension, although no burrowing owls were observed during biological surveys of the Project Area road segments. If burrowing owls are detected during future surveys of these road segments, potential direct impacts may include noise disturbances from increased human presence, injury, or mortality from collisions with vehicles during maintenance and repair activities, and habitat degradation from vegetation removal. After initial maintenance and repair, future maintenance and repair would likely occur infrequently. Burrowing owls would likely flush or relocate in response to disturbances and the potential for direct injury or morality is low. Injury to burrowing owls from maintenance vehicle strikes is unlikely to occur.

Under the Proposed Action, burrowing owl protocol surveys and burrowing owl avoidance measures would be implemented (CDFW 2012) to avoid and minimize potential adverse impacts within road segments where these owls have potential to occur (see Section 6.0 of this EA). If burrowing owls are found in the vicinity of these road segments, the Proposed Action would not likely result in habitat degradation as minimal vegetation removal and disturbance would occur, and direct and indirect adverse impacts to this species would be short-term and negligible.

Golden Eagle (*Aquila chrysaetos*). All roadway segments occur within the distribution range of golden eagles; however, no golden eagle or nests were observed near roadway segments. Based on the California Natural Diversity Database (2019), no golden eagle nests are located within five miles of the Project Area road segments. Road maintenance and repair activities would not likely result in direct or indirect impacts to golden eagles, nest sites, or foraging habitat.

Bats. Several road segments within the Project Area have the potential for occurrence of BLM Sensitive bat species; however, minimal potential roosting and foraging habitat exists within and adjacent to the roadways. Most of the maintenance and repair activities would occur within previously disturbed roadways with minimal disturbance to vegetation and no loss or disturbance to bat roosting and foraging habitat would occur. In addition, all maintenance and repair activities would occur during daylight hours; no nighttime work would occur and no lighting would be needed. Impacts to BLM Sensitive bat species with the potential to occur are not likely under the Proposed Action.

Flat-tailed Horned Lizard (*Phrynosoma mcallii*). Six road segments are located within the Yuha Desert FTHL Management Area (see Appendix A, Figure 7a): West Desert Drag Road, Roy's Road, Cat Exit 4, Signal Road Legacy Fence Road 1, Signal Road Legacy Fence Road 2, and Signal Road Legacy Fence Road 3. Two road segments are located within 2 miles of the East

Mesa FTHL Management Area (Appendix A, Figure 7b): Poleline Extension and Canal Road. Four road segments are located within FTHL suitable habitat (Appendix A, Figure 7a): Mica Davie's Crossover, Mica Mine Road, Davie's Valley Road, and Davie's Clark Crossover. However, no FTHL were observed along these road segments during biological surveys. Road maintenance and repair activities within the Yuha Desert FTHL Management Area and suitable FTHL habitat could result in direct mortality, injury, or harassment of FTHLs, including the potential crushing of individuals, disruption of essential behavior, and disturbance from construction equipment noise or vibrations. Potential indirect impacts include habitat degradation and increased potential for invasive species.

Most of the road maintenance and repair activities within the Management Area and suitable habitat would occur within the currently disturbed roadway, with minimal disturbance of vegetation and soils adjacent to the roadway. No activities would occur during the night and no lighting would be used. Potential direct and indirect adverse impacts to FTHL would be avoided or minimized by implementation of measures identified in the FTHL Rangewide Management Strategy (FTHL Interagency Coordinating Committee 2003), as well as vegetation and biological resource BMPs incorporated into Section 6.0. Potential adverse impacts of the Proposed Action on FTHL would be short-term, and with implementation of BMPs, would be negligible.

Reptiles and Amphibians. Of the BLM Sensitive reptiles and amphibians with the potential to occur in the Project Area road segments (see Table 3.4), only the Colorado fringe-toed lizard was observed during biological surveys (near Canal Road and Poleline Extension). Direct and indirect impacts to BLM listed reptiles and amphibians with the potential to occur would be like those discussed above for FTHL. Surveys for FTHL within the Yuha Basin FTHL Management Area may also result in detection of other BLM Sensitive reptile and amphibian species that may be present. Along Canal Road and Poleline Extension, visual encounter walking surveys would be conducted to avoid and minimize impacts to Colorado fringe-toed lizards. Potential adverse impacts of the Proposed Action on BLM Sensitive reptiles and amphibians would be short-term, and with implementation of FTHL, vegetation, and biological resource BMPs, would be negligible.

Thorne's Hairstreak Butterfly (*Callophrys thornei*). Although the Thorne's hairstreak butterfly has the potential to occur within two miles of several Project Area road segments (see Table 3.4), this species is confined to areas where Tecate cypress grows (see Table 3.5). No Tecate cypress habitat was observed in the vicinity of Project Area road segments during biological surveys. Due to a lack of potential habitat for this species, the Proposed Action would have no effect on the Thorne's hairstreak butterfly.

BLM Sensitive Plants. Several BLM Sensitive plant species have the potential to occur within or adjacent to the Project Area road segments (see Table 3.4). Of these species, the Wiggin's croton and Algodones Dunes sunflower were observed during biological surveys (near Canal and Poleline Extension roads). Potential direct impacts to these plants from maintenance and repair activities include direct injury and mortality from trampling, crushing by equipment, and minor habitat loss and degradation. Road maintenance and repair activities would occur within the currently disturbed roadway, with minimal disturbance of vegetation and soils adjacent to the roadway. Vegetation trimming and clearing activities in suitable habitat for these species would be avoided in areas with potential for occurrence unless their absence has been confirmed by a

survey conducted by a qualified biologist during the blooming season. With implementation of BMPs, the Proposed Action would result in negligible short-term impacts to BLM Sensitive plant species.

Migratory Birds

Under the Proposed Action, maintenance and repair activities could result in migratory birds being temporarily flushed from the immediate area due to disturbance from the presence of construction equipment and personnel. Potential indirect impacts include habitat degradation associated with alterations in hydrology, increased potential for invasive species and fire, and fugitive dust. It is anticipated that the overall disturbance to migratory bird species would be minimal as the Project Areas (existing roads) have experienced regular use by law enforcement and recreationists.

Under the Proposed Action, implementation of avoidance and minimization measures outlined in Section 6.0 for migratory birds and biological resources would avoid and minimize potential adverse impacts. The Proposed Action would not likely cause habitat degradation, and direct and indirect adverse effects to migratory bird species would be negligible. The Proposed Action could result in short-term, but negligible adverse impacts to migratory bird species, with no long-term adverse impacts anticipated.

No Action Alternative

Jurisdictional Waters

Under the No Action Alternative, road segments within the Project Areas would continue to be used for USBP patrol and access. The roads would remain in poor condition and in need of maintenance and repair; they would continue to deteriorate with continued USBP use and weather-related impacts. Continued deterioration from ongoing use would lead to continued erosion and sediment within ephemeral desert channels. The No Action Alternative would result in long-term minor, less than significant, adverse impacts to water resources.

Vegetation Communities

Under the No Action Alternative, ongoing negligible adverse impacts to vegetation communities would occur from continued use of the existing roads for USBP patrol and access, primarily from erosion, dust, and possible spread of invasive species.

Federally Listed Threatened and Endangered Species, BLM Sensitive Species, and Migratory Birds

Under the No Action Alternative, USBP patrol use and access of road segments within the Project Area would continue. Impacts of road use to federally listed threatened and endangered species, BLM Sensitive Species, and migratory birds in the Project Area would remain unchanged. Under the No Action Alternative, no additional adverse or beneficial impacts would occur.

3.2.3 Cumulative Effects

Proposed Action Alternative

Jurisdictional Waters

The Proposed Action would result in short-term minor less than significant adverse impacts to ephemeral washes/normally dry channels, determined to be non-jurisdictional under the Clean Water Act, from road maintenance and repair activities, and long-term beneficial impacts from road improved drainage, erosion control, and implementation of BMP measures. Given that implementation of BMPs would minimize erosion and sedimentation along the Project Area road segments, the Proposed Action would not significantly contribute to cumulative impacts on waters of the U.S. when combined with other past, present, or reasonably foreseeable future projects.

Vegetation Communities

Under the Proposed Action, road maintenance and repair activities may result in impacts to vegetation communities adjacent to roadways. However, most of the road maintenance and repair activities would occur within the existing roadway disturbed areas and any adverse impacts would be avoided and minimized with implementation of BMPs. Only negligible adverse impacts would likely occur, and the Proposed Action would not significantly contribute to cumulative impacts on vegetation communities when combined with other past, present, or reasonably foreseeable future projects.

Federally Listed Species, BLM Sensitive Species, and Migratory Birds

Under the Proposed Action, road maintenance and repair activities may result adverse in impacts to federally listed threatened and endangered species, BLM Sensitive Species, and migratory birds adjacent to roadways. However, most of the road maintenance and repair activities would occur within the existing roadway disturbed areas and any adverse impacts would be avoided and minimized with implementation of BMPs. Potential impacts to individual federally listed threatened and endangered species, BLM Sensitive Species, and migratory birds would not affect the local population levels for these species. Implementation of BMPs for these species would avoid and minimize potential adverse impacts. The Proposed Action would not significantly contribute to cumulative impacts on federally listed threatened and endangered species, BLM Sensitive Species, and migratory birds when combined with other past, present, or reasonably foreseeable future projects.

No Action Alternative

Under the No Action Alternative, roads would remain in poor condition and in need of maintenance and repair and would continue to deteriorate with continued USBP use and weather-related impacts and would result in long-term minor adverse impacts to water resources. Ongoing negligible adverse impacts to vegetation communities would occur from continued use of the existing roads for USBP patrol and access, primarily from erosion, dust and possible spread of invasive species. The No Action Alternative would not result in adverse impacts to federally listed species, BLM Sensitive Species, or migratory birds as the Proposed Action would not occur. The No Action Alternative would not significantly contribute to cumulative impacts on Waters of the U.S., vegetation communities, federally listed species, BLM Sensitive

Species, or migratory birds when combined with other past, present, or reasonably foreseeable future projects.

3.3 CULTURAL RESOURCES

3.3.1 Affected Environment

A cultural resource inventory was conducted within the Proposed Action's Area of Potential Effects (APE). The surface extent of the APE is 408 acres and includes 23 non-contiguous road segments that total 33.7 linear miles, with a 50-foot buffer on each side of the centerline. The APE also considers a maximum depth of two feet to account for grading activities.

In 2019, Class III cultural resource surveys were conducted along six road segments within Imperial County (RECON 2019b): Elliot Mine Road; Mica D'vie's Crossover; Mica Mine Road; D'vie's Valley Road; D'vie's Clark Crossover; and West Desert Drag Road. In December 2018 Class III surveys were conducted along 17 road segments (HDR 2019b) within Imperial and San Diego counties: Little Otay Truck Trail; End of Fence Spur; Reyes (Canyon City) Road; Cameron Truck Trail; La Posta Circle; Track Access; 4x4 Course; Gloriosa Way: Cedillo Road; O'Neil Valley Access Road; Roy's Road; Cat Exit 4; Signal Road Legacy Fence Road 1; Signal Road Legacy Fence Road 2; Signal Road Legacy Fence Road 3; Canal Road; Canal Road Extension; and Poleline Extension.

Between July 21 and 29, 2020, archaeological site testing was conducted at a prehistoric site within the APE to determine if the site included subsurface material, and if so, whether it exhibited the characteristics to be considered significant (RECON 2020c).

Surveys completed by RECON (2019b) and HDR (2019b) resulted in documenting ten previously recorded and six newly recorded cultural resources. Previously recorded resources included four historical structures (transmission line, the San Diego and Arizona Railroad, the All-American Canal and Old Highway 80), one prehistoric isolate (rock feature), and five prehistoric archaeological sites (lithic and ceramic scatters, rock alignments, trails, temporary camps and milling features). One of the previously recorded prehistoric sites was subject to testing, which resulted in the BLM formally determining the site as eligible for listing to the National Register of Historic Places (NRHP). Newly recorded resources included historical objects (two General Land Office survey markers), one structure (culvert), two prehistoric isolates (biface and core) and one new prehistoric temporary camp. Of those 16 recorded cultural resources within the APE, six have been recommended or formally determined eligible for listing in the NRHP (Table 3.9).

Table 3.9 Cultural Resources Design Features

Avoidance Area # and Resource	Location Relative to Proposed Action	Avoidance Method
Area 1) P13-007130, All-American Canal. Area 2) P13-012722, 2 segments of Old Highway 80	Located within the APE, but outside of and adjacent to two access roads that would be subject to maintenance.	Ensure these conspicuous resources are avoided by providing to maintenance staff a map and descriptions of the canal and roads resources that are to be avoided during maintenance work.
Area 3) P13-013875, Prehistoric multi-use site. Area 4) P13-13889, Prehistoric temporary camp.	Located within the APE, but on raised terrace and/or alluvial fan adjacent to road footprint where impacts would occur.	Ensure equipment remains on roadbed and the level surface adjacent to the roadbed. Do not make any cuts or remove soil for fill from the sides or surface of raised terraces and alluvial fans adjacent to roads.
Area 5) P13-017722, Prehistoric Temporary Camp.	Located within APE and bisected by a 365-foot segment of road that would be subject to maintenance.	Install permanent protective fencing along both sides of the road edge where it passes through the site, with archaeological and Native American monitors present. The signs should read "habitat restoration area" to minimize any potential to attract illegal artifact collection and vandalism.
Area 6) P37-024561, Prehistoric resource procurement and processing site with lithic scatter	Located within APE and bisected by a 14-foot-wide, 540-foot-long segment of road that will be subject to road grading.	In strict accordance with a prepared plan (RECON 2020d), construct a tapered cap atop access road that is at least three feet above grade along road footprint. Archaeological and Native American monitors are to be present during installation of cap.

3.3.2 Environmental Effects

Proposed Action Alternative

Under the Proposed Action, and with the incorporation of design features, road maintenance and repair activities would not impact six NRHP eligible properties within the APE. In four avoidance areas (1 through 4 in Table 3.9 and Section 6.0), properties are located within the APE, but outside of and adjacent to the road footprint. CBP would ensure avoidance by briefing maintenance equipment operators and providing maps with descriptions and avoidance requirements. In avoidance area 5, protection of the archaeological site would be ensured by installing permanent protective fencing along both edges of the access road where it bisects the site, and CBP informing maintenance staff of the limitation. Archaeological testing in avoidance area 6 confirmed that the site contains artifacts located on the surface outside of the access road, and subsurface below the access road.

The subsurface resources will be preserved in place by capping the road in accordance with a capping plan that has been developed in consultation with CBP (RECON 2020d). Capping comprises importing soil, gravel, or Class II base to raise the surface grade by a minimum of 3 feet across the 14-foot-wide road and tapering down to grade. Geotextile would be placed between the native soil and the fill, to prevent further grading of native soils. A qualified archaeologist and a Native American monitor would be present during construction of the permanent protective fencing and for the capping. The raised roadbed will protect the subsurface resources that would otherwise be impacted by grading, and the raised road will also serve to define where activities must remain in the road prism and cannot occur adjacent to the raised road, unless the work is accomplished on foot.

In addition to these design features, standard BMPs regarding inadvertent discoveries of resources or human remains would be required in accordance with applicable law, and BLM policy (see Section 6.0). Through avoidance, ESA fencing, capping and CBP project managers ensuring maintenance contractors are informed of avoidance requirements, the Proposed Action would not adversely affect formally determined or assumed historic properties as defined under Section 106. There is a potential for long-term, less than significant, beneficial impacts to cultural resources because of the added protection measures.

The California State Historic Preservation Officer (SHPO) was consulted regarding the Proposed Action (February 22, 2021) and in their response letter did not object to the finding of No Adverse Effect for the proposed undertaking (April 5, 2021).

No Action Alternative

Under the No Action Alternative, road segments within the Project Areas would continue to be used for USBP patrol and access. Water runoff and erosion would continue within road segments, particularly along Little Otay Truck Trail. However, no new ground disturbance from maintenance and repair activities would likely occur. Therefore, the No Action Alternative would not result in adverse impacts to cultural resources.

3.3.3 Cumulative Impacts

Proposed Action Alternative

Under the Proposed Action, road maintenance and repair activities would not adversely affect formally determined or assumed historic properties as defined under Section 106. The majority of road maintenance and repair activities would occur within the existing roadway disturbed areas and implementation of avoidance, ESA fencing, and capping would avoid impacts. The Proposed Action would not significantly contribute to cumulative impacts on cultural resources when combined with other past, present, or reasonably foreseeable future projects.

No Action Alternative

The No Action Alternative would be more likely to result in adverse, less than significant, impacts to cultural resources as compared to the Proposed Action. However, the No Action Alternative would not significantly contribute to cumulative impacts on cultural resources when combined with other past, present, or reasonably foreseeable future projects.

3.4 PALEONTOLOGICAL RESOURCES

3.4.1 Affected Environment

Occurrences of paleontological resources are closely tied to the geologic units that are known to support them. The probability for finding paleontological resources can be broadly predicted from the geologic units present at or near the surface of the ground, in addition to surficial deposits of older fossil bearing sediments delivered by alluvial fans. Using the BLM Potential Fossil Yield Classification (PFYC) system (BLM 2016), geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential. For purposes of this analysis, PFYCs are grouped into three categories based on the

level of management concern and the type of assessment and mitigation actions that could be required.

- **PFYC Classes 1 and 2: Low/Very Low (LVL).** Class 1 geologic units that are not likely to contain recognizable paleontological resources and management concerns are usually negligible or not applicable. Class 2 geologic units are not likely to contain paleontological resources and management concerns are generally low and further assessment is usually unnecessary, except where resources are known or found to exist.
- **PFYC Class 3: Moderate (M).** Sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence. Management concerns are moderate because the existence of significant paleontological resources is known to be low.
- **PFYC Classes 4 and 5: High/Very High (HVH).** Class 4 geologic units are known to contain a high occurrence of paleontological resources and management concerns are moderate to high, depending on the proposed action. Class 5 consists of highly fossiliferous geologic units that consistently and predictably produce significant paleontological resources. Management concerns in Class 5 areas are high to very high.
- **PFYC Class Unknown (U).** Class U is assigned to geologic units that cannot receive an informed PFYC assignment. Class U units can include areas with relatively favorable conditions for paleontological preservation; however, very little of the unit has been studied and there is little information available on the resources of the unit or area. Until provisional assignment is made, geologic units with an unknown potential have a medium to high management concern.

The following documents were reviewed to determine the potential for paleontological resources within the Project Area:

- Paleontological Resources of the Bureau of Land Management El Centro Field Office Administrative Area, Imperial County and Eastern San Diego County, California (San Diego Natural History Museum 2015)
- San Diego County Guidelines for Determining Significance, Paleontological Resources, Figure 2: Paleontological Resources Potential and Sensitivity
- Desert Renewable Energy Conservation Plan and Environmental Impact Report/Environmental Impact Study (EIR/EIS), Appendix R1.10, Table R1.10-2
- Desert Renewable Energy Conservation Plan and EIR/EIS, Figure III-10.2
- US Department of the Interior, Bureau of Land Management Instruction Memorandum No. 2008-009 and No. 2009-011

Based on the information provided in these documents, a PFYC ranking was assigned to each roadway segment (Table 3.10 and Appendix A, Figure 9). As shown in Table 3.10 and Appendix A, Figure 9, portions of five roadway segments within the Project Area are located within PFYC 4-5 (HVH) areas, which have potential to contain paleontological resources.

Table 3.10 Potential Fossil Yield Classification by Road Segment within the Project Area

County	USBP Sector	Road Name	PFYC Ranking
San Diego	San Diego	Little Otay Truck Trail	3 (M)
San Diego	San Diego	End of Fence Spur	1-2 (LVL)
San Diego	San Diego	Reyes (Canyon City) Road	1-2 (LVL)
San Diego	San Diego	Cameron Truck Trail	1-2 (LVL)
San Diego	San Diego	La Posta Circle	1-2 (LVL)
San Diego	San Diego	Track Access	1-2 (LVL)
San Diego	San Diego	4x4 Course	1-2 (LVL)
San Diego	San Diego	Gloriosa Way	1-2 (LVL)
San Diego	San Diego	Cedillo Road	1-2 (LVL)
San Diego	San Diego	O'Neill Valley Access Road	1-2 (LVL)
San Diego/ Imperial	San Diego/ El Centro	Elliot Mine Road	1-2 (LVL)
Imperial	El Centro	Mica Davie's Crossover	1-2 (LVL)
Imperial	El Centro	Mica Mine Road	1-2 (LVL)
Imperial	El Centro	Davie's Valley Road	1-2 (LVL)
Imperial	El Centro	Davie's Clark Crossover	1-2 (LVL)
Imperial	El Centro	West Desert Drag Road	4-5 (HVH): 0.73 mile 1-2 (LVL): 8.22 miles
Imperial	El Centro	Roy's Road	1-2 (LVL)
Imperial	El Centro	Cat Exit 4	4-5 (HVH): 0.89 mile 1-2 (LVL): 0.8 mile
Imperial	El Centro	Signal Road Legacy Fence Access Road 1	4-5 (HVH): 0.4 mile 1-2 (LVL): 1.42 miles
Imperial	El Centro	Signal Road Legacy Fence Access Road 2	4-5 (HVH): 0.07 mile 1-2 (LVL): 1.29 miles
Imperial	El Centro	Signal Road Legacy Fence Access Road 3	4-5 (HVH): 0.08 mile 1-2 (LVL): 0.17 mile
Imperial	Yuma	Canal Road	1-2 (LVL)
Imperial	Yuma	Poleline Extension	1-2 (LVL)
Sources: Desert Renewable Energy Conservation Plan and EIR/EIS, Appendix R1.10, Table R1.10-2; Desert Renewable Energy Conservation Plan and EIR/EIS, Figure III-10.2.			

3.4.2 Environmental Effects

Proposed Action Alternative

An adverse impact on paleontological resources would occur if surface disturbance associated with the Proposed Action would result in the loss, damage, or destruction of any vertebrate fossils or unique or significant invertebrate fossil. Under the Proposed Action, maintenance and repair activities within the portion of road segments with high/very high potential for fossils would result in periodic, localized, and shallow soil disturbances. However, maintenance and repair activities would occur within previously disturbed and graded roadways, and soils are disturbed during ongoing use of roadways. The potential to uncover paleontological resources within these existing roadway segments is unlikely as paleontological resources would likely have been recovered, altered, or destroyed during previous grading and earth disturbing activity.

However, due to the potential for maintenance and repair activities within roadway segments classified as PFYC 4-5 to remove protruding rocks and boulders and the need to achieve the desired road operating and safety standards, it is possible that road maintenance and repair

activities could uncover previously undisturbed rock formations. Therefore, road maintenance and repair activities within these road segments has the potential to cause direct adverse impacts to paleontological resources through the damage or destruction of fossils or the disturbance of the geologic content in which they are located. To avoid and minimize potential adverse impacts, activities would be monitored by a qualified (trained) paleontological monitor within roadway segments classified as PFYC 4-5 (see Table 3.8), allowing for the discovery and recovery of any larger fossil remains exposed by earth-moving activities (see Section 6.0 of this EA). The Proposed Action would result in no or negligible adverse effects on paleontological resources.

No Action Alternative

Under the No Action Alternative, no repair or maintenance of the roads would occur, roads would remain in poor condition, and would continue to deteriorate with continued USBP use and weather-related impacts. No action would be taken; thus, no equipment, grading, or other ground disturbing activities would occur. Therefore, the No Action Alternative would not result in an adverse effect related to paleontological resources.

3.4.3 Cumulative Impacts

Proposed Action Alternative

The majority of road maintenance and repair activities would occur within the existing roadway disturbed areas and any adverse impacts would be avoided and minimized with implementation of BMPs. The Proposed Action would not significantly contribute to cumulative impacts on paleontological resources when combined with other past, present, or reasonably foreseeable future projects.

No Action Alternative

The No Action Alternative would not result in impacts to paleontological resources as the Proposed Action would not occur. Therefore, there would be no cumulative impacts to paleontological resources.

4.0 CONSULTATION AND COORDINATION

4.1 CONSULTATION AND COORDINATION

4.1.1 State Historic Preservation Office

On October 30, 2019, CBP sent the California State Historic Preservation Office (SHPO) a letter to initiate NHPA Section 106 consultation (54 United States Code [U.S.C.] Section 306108) and its implementing regulations 36 Code of Federal Regulations (CFR) Part 800 (see Appendix B).

On February 22, 2021, CBP sent the California SHPO a follow-up letter requesting consultation with an update related to a testing program implemented at the Little Otay Truck Trail site. Because possible human bone fragments were discovered, the BLM Palm Springs South Coast Field Office conducted Tribal consultation under the Native American Graves Protection and Repatriation Act. On March 31, 2021, the BLM acknowledged that the entire collection from the Little Otay Truck Trail site had been repatriated/transferred to the Jamul, Indian Village.

On April 5, 2021, the California SHPO sent a letter to CBP stating that after review of all information, the SHPO had no objections to the identification and delineation of the APE pursuant to 36 CFR parts 800.4(a)(1) and 800.16(d). The SHPO did not object to the finding of No Adverse Effect for the purpose of the undertaking (Appendix H).

4.1.2 Tribes

In compliance with Section 106 of the NHPA and various Executive Orders, on October 30, 2019, CBP sent scoping letters describing the proposed project to the Tribes listed below (see Appendix B).

- Barona Group of the Capitan Grande
- Campo Band of Mission Indians
- Cocopah Indian Tribe
- Ewiiaapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja Band of Mission Indians
- Jamul Indian Village
- Kwaaymii Laguna Band of Laguna Indians
- La Posta Band of Kumeyaay Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- Quechan Tribe of the Fort Yuma Indian Reservation (California)
- San Pasqual Band of Diegueño Indians
- Sycuan Band of the Kumeyaay Nation
- Torres-Martinez Desert Cahuilla Indians
- Viejas Band of Kumeyaay Indians

On November 25, 2019, a response was received from the Viejas Band of Kumeyaay Indians stating that the Proposed Action did not have cultural significance or ties to the Viejas Band at that time. The Viejas Band requested that a Kumeyaay Cultural Monitor be on-site for ground

disturbing activities to provide information on any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

On February 22, 2021, CBP sent follow-up letters to Tribes notifying them that consultation with the California SHPO was being initiated (Appendix I). A response was received from Lisa K. Cumper, Tribal Historic Preservation Officer for the Jamul Indian Village (see Appendix I). Comments and CBP responses are as follows:

- **Was there a Kumeyaay Native American monitor present for the survey?** A Kumeyaay Native American monitor was not required during the surveys; however, a Kumeyaay Native American monitor from Santa Ysabel (Red Tail Environmental) was present during excavation at P-37-024561.
- **Has Dr. Hinkes identified the two possible human remains? The Kumeyaay relies on Dr. Hinkes determination.** Dr. Hinkes was the forensic osteologist that determined both bone fragments as being possible human remains. Dr. Sarah Lacy also examined the bone fragments and identified only one as being a human bone fragment.
- **Was the area where the HR were discovered secured and will there be more testing in this area?** The two shovel test pits where the bone fragments were recovered from have been backfilled and returned to existing conditions prior to the archaeological excavations. No open excavations remain; therefore, the site has been secured. There will be no further testing of the site but rather the project has been designed to minimize further impact to the site. The site will be capped with three feet of clean soils atop a geofabric grid on the existing surface.

4.1.3 U.S. Fish and Wildlife Service

CBP initiated formal consultation with the USFWS Carlsbad Ecological Services Field Office for threatened and endangered species that may occur within five miles of the Project Area by letter dated August 25, 2020 (Appendix J). Based on USFWS comments and questions, CBP provided a Biological Assessment Addendum on September 13, 2021. The USFWS provided draft conservation measures for BLM and CBP review on March 4, 2022. The USFWS submitted a final concurrence letter with agreed upon conservation measures to CBP on July 13, 2023 (see Appendix J).

Based on the analysis concerning the effects of the Proposed Action on these species, and after considering the cumulative effects, CBP made the effects determinations shown below for each of the potentially affected species.

No Effect

- Mojave desert tortoise
- least Bell's vireo
- southwestern willow flycatcher
- California condor
- Mexican flannelbush
- Otay tarplant
- Peirson's milk-vetch
- San Diego ambrosia
- San Diego thornmint

May Affect, Not Likely to Adversely Affect

- arroyo toad
- coastal California gnatcatcher
- Peninsular bighorn sheep
- Quino checkerspot butterfly

Will Not Destroy or Adversely Modify Critical Habitat

- Quino checkerspot butterfly
- arroyo toad
- coastal California gnatcatcher
- least Bell's vireo
- southwestern willow flycatcher
- Peninsular bighorn sheep
- Mexican flannelbush
- Otay tarplant
- Peirson's milk-vetch

4.1.4 U.S. Army Corps of Engineers, Regulatory Division, Los Angeles District

On November 5, 2020, CBP sent a letter to the U.S. Army Corps of Engineers (USACE), Los Angeles District, Carlsbad Office requesting an Approved Jurisdictional Determination and clarification whether a Department of the Army Permit would be required for the 31 ephemeral drainages within the proposed project area (Appendix K). On April 5, 2021, USACE determined that the ephemeral drainages were not waters of the United States pursuant to 33 CFR Part 325.9 and determined that a Department of the Army permit would not be required for the proposed activities. The USACE provided an Approved Jurisdictional Determination for the proposed project (see Appendix K).

4.1.5 Federal and State Agency Coordination

On October 30, 2019, CBP sent scoping letters describing the Proposed Action to the Federal, state, and local agencies listed below:

- U.S. Forest Service, Cleveland National Forest
- U.S. Bureau of Reclamation
- California Department of Fish and Wildlife
- California Department of Transportation
- California State Water Board
- CDFW, Inland Deserts and South Coast Regions
- California Department of Forestry and Fire Protection
- California Environmental Protection Agency
- California Highway Patrol, Border Division
- California State Clearing House
- California Native American Heritage Commission
- Colorado River RWQCB
- San Diego RWQCB
- County of San Diego, Department of Planning and Development Services
- County of Imperial, Planning and Development Services

- Imperial County Air Pollution Control District
- Imperial Irrigation District
- San Diego Air Pollution Control District

On November 27, 2019, the following response was received:

- California Department of Fish and Wildlife summary of comments:
  - Request that the "minimum road width requirements and desired road and safety standards be specifically defined and incorporated by reference into the EA."
  - EA should include assessment of impacts to the flat-tailed horned lizard. Standard Mitigation Measures should also be included in the Proposed Action and alternatives.
  - Burrowing owl surveys (a 500-foot survey area surrounding each road segment). A buffer area should be established for any occupied burrow/burrow surrogates.
  - EA should include a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, including specific measures to offset such impacts. The analysis should consider all relevant and reasonable mitigation measures that address the impacts of the project. A summary of NEPA recommendations was provided.

5.0 LIST OF PREPARERS

5.1 U.S. CUSTOMS AND BORDER PROTECTION

- John Petrilla, Environmental Protection Specialist
- Paul Enriquez, Director, Acquisitions, Real Estate, and Environmental
- Shelly Barnes, Environmental Planning Lead, Infrastructure Program
- Jeffrey Coron, DHS/CBP/USBP/PMOD, Tactical Infrastructure, Contractor: LMI
- Dana Sacoman, Contract Support, Tactical Infrastructure, Contractor: LMI, Environmental Specialist

5.2 BUREAU OF LAND MANAGEMENT EL CENTRO FIELD OFFICE

- Carrie Sahagun, Assistant Field Manager
- Katherine Crosmer, Archaeologist
- Kim Marsden, Botanist
- Tristan Riddell, Realty Specialist
- Peter DeJongh, Wildlife Biologist
- Dale Ohnmeiss, Planning and Environmental Specialist
- Chris Dalu, Archaeologist

5.3 RECON ENVIRONMENTAL, INC.

- Wendy Loeffler, Senior Biologist (Project Manager)
- Susy Morales, NEPA Coordinator
- Carmen Zepeda-Herman, Senior Archaeologist
- Gerry Scheid, Senior Biologist (jurisdictional wetlands/waters)
- Andrew Smisek, Biologist (jurisdictional wetlands/waters)
- Alex Fromer, Biologist (wildlife and vegetation)
- Frank McDermott, GIS Specialist
- Stacey Higgins, Production Specialist
- Jennifer Gutierrez, Production Specialist

6.0 BEST MANAGEMENT PRACTICES

The following BMPs would be implemented under the Proposed Action. CBP would use an established planning and work development process to identify the BMPs that must be implemented for the project. Many of these BMPs are outlined in the USFWS concurrence letter and are identified in parentheses as USFWS conservation measure (CM) numbers (e.g., USFWS CM 1).

To identify species-specific BMPs that must be implemented, Environmental Subject Matter Experts (ENV SMEs) would identify which species potentially occur in the geographic location of each maintenance and repair activity. They would then consider other available sources of information, such as prior survey data, aerial photographs, site visits, and previously developed environmental documentation, to evaluate whether suitable habitat for threatened and endangered species may occur at each project location. The ENV SME would also determine if pre-construction surveys conducted by a qualified biologist are required prior to maintenance and repair activities to determine if species or habitat is present and require a BMP. If necessary, the ENV SMEs would conduct further consultation with USFWS to clarify any compliance requirements.

It is the responsibility of CBP to ensure that all personnel performing maintenance comply with the BMPs, any required mitigation measures, and BLM CMAs, unless otherwise noted. BMPs apply to all maintenance and repair activities. All necessary erosion-control BMPs would be adopted to ensure stabilization of repaired roads (USFWS CM 1).

Land Use

1. CBP will notify the BLM at least five days in advance of any scheduled maintenance and repair activities on BLM-administered lands. Monitors required to ensure protection for biological, paleontological, or cultural resources during project activities shall be approved in advance by the BLM. In addition, archaeological and paleontological monitors must have an approved Fieldwork Authorization issued by the BLM Field Office.

Soil Resources

1. Silt fencing and floating silt curtains should be installed and maintained to prevent movement of soil and sediment and to minimize turbidity increases in water during maintenance and repair activities.
2. Implement routine road maintenance practices to avoid making wind rows with the soils once grading activities are complete and use any excess soils on site to raise and shape the road surface.
3. Only apply soil-binding agents during the late summer/early fall months to avoid impacts on federally listed species. Do not apply soil-binding agents in or near (within 100 feet) surface waters (e.g., wetlands, perennial streams, intermittent streams, washes). Only apply soil-binding agents to areas that lack any vegetation.
4. Obtain materials such as gravel, topsoil, or fill from sources that are compatible with the project area and are from legally permitted sites and are certified weed free. Materials

from undisturbed areas adjacent to the project site will not be used. Use construction and installation techniques, as approved by BLM, appropriate for the specific activity/project and site, that minimize new site disturbance, soil erosion and deposition, soil compaction, disturbance to topography, and removal of vegetation. Where possible, side casting shall be avoided where road construction requires cut-and-fill procedures. Cut material will be used as fill elsewhere as needed or disposed of off-site.

5. Vehicle refueling and maintenance will be limited to previously disturbed upland areas with established spill prevention equipment in place (e.g., straw wattles, lined or paved areas, areas with no direct drainage).

Air Quality

1. Good modern practices for earth moving/excavating activities would be implemented. These include using approved dust suppressants or adhesive soil stabilizers, paving, covering, landscaping, continuous wetting, or detouring maintenance and repair areas, barring access to maintenance and repair areas, or other acceptable means of reducing significant amounts of airborne dust. All Federal, state, county, and local ordinances would be adhered to during maintenance and repair of road segments.
2. Stabilize all disturbed areas with water, tarps, or dust suppressants.
3. During maintenance and repair activities, roads will be watered as a standard practice.

Noise

1. All Occupational Safety and Health Administration requirements would be followed with respect to maintenance and repair noise impacts. Ensure all motorized equipment possess properly working mufflers and are kept properly tuned to reduce backfires. Ensure all motorized generators will be in baffle boxes (a sound-resistant box that is placed over or around a generator), have an attached muffler, or use other noise-abatement methods in accordance with industry standards. For activities involving heavy equipment, seasonal restrictions might be required to avoid impacts on threatened or endangered species in areas where these species or their potential habitat occur. See species-specific BMPs.

Roadways and Traffic

1. To the maximum extent practicable, confine vehicular traffic to designated open routes of travel to and from the project site. Prohibit, within project boundaries, cross- country vehicle and equipment use outside of approved designated work areas to prevent unnecessary ground and vegetation disturbance. Ensure all parking is in designated disturbed areas. For longer-term projects, mark designated travel corridors with easily observed removable or biodegradable markers.
2. All contractors and maintenance personnel would operate within the designed/approved maintenance corridor.

Hazardous Materials and Waste Management

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

2. Implement proper and routine maintenance of all vehicles and other maintenance equipment such that emissions are within the design standards of all maintenance equipment.
3. 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.
4. In compliance with BLM CMAs, implement construction site standard practices to prevent toxic chemicals, hazardous materials, and other fluids from entering vegetation type streams, washes, and tributary networks through water runoff, erosion, and sediment transport by, at a minimum, implementing the following:
    - On project sites, vehicles and other equipment will be maintained in proper working condition and only stored in designated containment areas where runoff is collected or controlled and that are located outside of streams, washes, and distributary networks to minimize accidental fluids and hazardous materials spills.
    - Hazardous material leaks, spills, or releases will be immediately cleaned and equipment will be repaired upon identification. Removal and disposal of spill and related clean-up materials will occur at an approved off-site landfill.
    - Maintenance and operations vehicles will carry the appropriate equipment and materials to isolate, clean up, and repair any hazardous material leaks, spills, or releases.
5. In compliance with BLM CMAs, activity-specific drainage, erosion, and sedimentation control actions, which meet the approval of BLM and the applicable regulatory agencies, will be carried out during all appropriate phases of the approved project. These actions, as needed, will address measures to ensure the proper protection of water quality, site-specific stormwater and sediment retention, and design of the project to minimize site disturbance, including the following:
    - Implement measures to maintain natural drainages and to maintain hydrologic function in the event drainages are disturbed.
    - Reduce the amount of area covered by impervious surfaces through use of permeable pavement or other pervious surfaces. Direct runoff from impervious surfaces into retention basins.
    - Stabilize disturbed areas following grading in the manner appropriate to the soil type so that wind or water erosion is minimized.
    - Conduct regular inspections and maintenance of long-term erosion control measures to ensure long-term effectiveness.

Socioeconomic Resources, Environmental Justice, and Protection of Children

The Proposed Action would occur in unpopulated, remote locations. Therefore, there would be no impact to or displacement of any low-income or minority populations. No BMPs were identified for socioeconomic resources, environmental justice, or the protection of children.

Biological Resources

Water Resources

If biological monitors are required for any reason, the monitors will need to be approved by the BLM in advance of any work or project activities.

1. The CBP ENV SME must be consulted to validate the need for site-specific storm water pollution prevention plans (SWPPPs), spill protection plans, and regulatory approvals. Site-specific SWPPPs and spill protection plans would be prepared and regulatory approval sought, if necessary, in cases of highly sensitive work sites and large scopes of work that pose a significant risk. Where a site-specific SWPPP is not necessary, the personnel performing the maintenance would comply with a generic SWPPP and spill protection plan that covers most routine maintenance and repair activities. Prior to arrival on the work site, key personnel would understand correct implementation of these BMPs and their responsibility to address deficiencies.
2. The CBP ENV SME would provide locations that have the potential for wetlands or other waters of the United States. Prior to conducting any activities that have the potential to affect wetlands and other waters of the United States, all Federal and state Clean Water Act (CWA) Section 404 individual or applicable nationwide permits and 401 and other applicable permits would be obtained.
3. Prepare and implement a SWPPP prior to applicable maintenance activities (greater than one acre of exposed dirt or as required by BLM). Implement BMPs described in the SWPPP to reduce erosion. Consider areas with highly erodible soils when planning the maintenance activities and incorporate measures such as waddles, aggregate materials, and wetting compounds in the erosion-control BMPs.
4. Coordinate with the CBP ENV SME to determine which maintenance activities occur within the 100-year floodplain. Maintenance activities within the 100-year floodplain would be conducted in a manner consistent with Executive Order 11988 and other applicable regulations.
5. All maintenance contractors and personnel would review the CBP-approved spill protection plan and implement it during maintenance and repair activities.
6. Contact the CBP ENV SME to coordinate with waterway permitting agencies when performing work below the ordinary high-water mark.
7. Wastewater from pressure washing must be collected. A ground pit or sump can be used to collect the wastewater. Wastewater from pressure washing must not be discharged into any surface water.
8. If soaps or detergents are used, the wastewater and solids must be pumped/cleaned out and disposed of in an approved facility. If no soaps or detergents are used, the wastewater must first be filtered or screened to remove solids before being allowed to flow off-site. Detergents and cleaning solutions must not be oversprayed onto or discharged into surface waters.

9. If the surrounding area has dense, herbaceous cover (primarily grasses) and there are no listed plant species or habitat for such, the wastewater (with or without detergent) could be discharged directly to the grassy area without collection or filtering as long as it is well dispersed and all the wastewater can percolate into the grass and soil. If wastewater runs off the grassy area, it must be filtered.
10. Prevent runoff from entering drainages or storm drains by placing fabric filters, sandbag enclosures, or other capture devices around the work area. Empty or clean out the capture device at the end of each day and properly dispose of the wastes.
11. Avoid contaminating natural aquatic and wetland systems with runoff by limiting all equipment maintenance, staging, laydown, and dispensing hazardous liquids (e.g., fuel and oil) to designated previously disturbed upland areas.
12. Avoid contamination of ground and surface waters by storing concrete wash water in open containers and frequently disposing of it on site by application as a binder to riprap areas. Avoid contamination of ground and surface waters by storing any water that has been contaminated (e.g., with maintenance materials, oils, equipment residue) in closed containers on-site until removed for disposal. In upland areas, storage tanks must be on-ground containers.
13. Avoid contamination of ground and surface waters by ensuring that water tankers that convey untreated surface water do not discard unused water where it has the potential to enter any aquatic or wetland habitat.
14. Cease work during heavy rains and do not resume work until conditions are suitable for the movement of equipment and materials.
15. Except for emergency repairs required to protect human life, limit work within drainages to dry periods to reduce effects on downstream water quality.
16. Rip-rap should be placed on a layer of geotextile fabric to prevent underlying sediment from being washed out through the openings of the rip-rap.
17. Rip-rap should be keyed into the wash/streambed to ensure its stability and effectiveness.

Vegetation

1. When mechanical methods are used to remove invasive plants, the entire plant should be removed and placed in a disposal area. Training to identify nonnative invasive plants would be provided for CBP personnel or contractors, as necessary.
2. CBP will notify BLM ten days prior to implementing vegetation control activities.
3. Where vegetation to be controlled is on a levee, the method of removal would ensure that the integrity of the levee is maintained.
4. Coordinate with the CBP ENV SME to determine if the maintenance activities occur in a highly sensitive area or an area that poses an unacceptable risk of transmitting diseases and invasive species. If it is determined that maintenance activities occur in such an area, follow the CBP cleaning protocol. CBP cleaning protocol: all contracts would require cleaning of road maintenance and repair vehicles and equipment prior to entry into the Project Area. If operations occur at sites within the Project Area infested with non-native invasive species, all vehicles and equipment would also be cleaned prior to moving to

new sites. If vehicle or equipment cleaning must be done on-site, clean with water only in a designated bermed or covered area where the wash water will not be discharged into storm drains or surface waters.

5. Promote appropriate levels of dead and downed wood on the ground, outside of campground areas, to provide wildlife habitat, seed beds for vegetation establishment, and reduce soil erosion, as determined appropriate on an activity-specific basis.
6. In compliance with BLM CMAs, creosote bush rings larger than five meters in diameter (longest diameter if the "ring" forms an ellipse rather than a circle) shall be avoided.
7. In compliance with BLM CMAs, consistent with BLM state and Federal policies and guidance, integrated weed management actions will be carried out during all phases of activities, as appropriate, and at a minimum will include the following:
    - Thoroughly clean the tires and undercarriage of vehicles entering or reentering the project site to remove potential weeds.
    - Store project vehicles on-site in designated areas to minimize the need for multiple washings whenever vehicles re-enter the project site.
    - Properly maintain vehicle wash and inspection stations to minimize the introduction of invasive weeds or subsidy of invasive weeds.
    - Closely monitor the types of materials brought onto the site to avoid the introduction of invasive weeds and non-native species.
    - Reestablish native vegetation quickly on disturbed sites.
    - Monitor and quickly implement control measures to ensure early detection and eradication of weed invasions to avoid the spread of invasive weeds and non-native species on site and to adjacent off-site areas.
    - Use certified weed-free mulch, straw, hay bales, or equivalent fabricated materials for installing sediment barriers.
8. A fire prevention and suppression plan will be developed and implemented for all maintenance and repair activities that require welding or otherwise have a risk of starting a wildfire.
9. Identify fill material, sandbags, hay bales, and mulch brought in from outside the project area by its source location. Use sources that are sterile or weed-free to avoid the introduction of invasive weeds and non-native species.
10. Clearly demarcate the perimeter of all new areas to be disturbed during vegetation-control activities using flagging or temporary construction fencing. Do not allow any disturbance outside that perimeter.
11. Riparian vegetation removal should be minimized to maintain a buffer area around aquatic habitats and continuity of wildlife migration corridors during maintenance activities.
12. Avoid the removal of mature trees providing shade or bank stabilization within the riparian area of any waterway during maintenance or repair activities.

13. If vegetation must be removed, use methods that allow natural regeneration of native plants by keeping root systems intact rather than removing the plants entirely, such as: cutting vegetation with hand tools, mowing, trimming, or through implementation of crush and drive.
14. Vegetation targeted for retention would be flagged for avoidance to reduce the likelihood of being treated.
15. Periodic inspections of tactical infrastructure by the CBP ENV SME would be conducted to evaluate and document conditions, including erosion and to ensure that prescriptions are followed and performed in the appropriate community types. As necessary, maintenance will be scheduled to minimize erosion and correct other adverse conditions.
16. Control of riparian vegetation will not occur within 100 feet of aquatic habitats to provide a buffer area to protect the habitat from sedimentation.

Wildlife

1. Minimize animal collisions during maintenance and repair activities by not exceeding speed limits of 35 miles per hour (mph) on major unpaved roads (i.e., graded with drainage ditches on both sides) and 15 mph on all other unpaved roads (with minimal structural elements, which includes the majority of proposed maintenance and repair road segments). During periods of decreased visibility (e.g., night, poor weather, curves), do not exceed speeds of 15 mph.
2. No maintenance and repair activities will occur at night.
3. To prevent entrapment of wildlife species, ensure excavated, steep-walled holes or trenches are either completely covered by plywood or metal caps at the close of each workday or provided with one or more escape ramps (at no greater than 1,000-foot intervals and sloped less than 45 degrees) constructed of earth fill or wooden planks.
4. In compliance with BLM CMAs, subsidized predator standards, approved by BLM, in coordination with the USFWS and CDFW, will be implemented during all appropriate phases of activities to manage predator food subsidies, water subsidies, and breeding sites including the following:
    - Common raven management actions will be implemented for all activities to address food and water subsidies and roosting and nesting sites specific to the common raven. These include identification of monitoring reporting procedures and requirements; strategies for refuse management; as well as design strategies and passive repellant methods to avoid providing perches, nesting sites, and roosting sites for common ravens.
    - The application of water and/or other palliatives for dust abatement in construction areas and during project operations and maintenance will be done with the minimum amount of water necessary to meet safety and air quality standards and in a manner that prevents the formation of puddles, which could attract wildlife and wildlife predators.
    - Following the most recent national policy and guidance, the contractor will take actions to not introduce, dispose of, or release any non-native species into areas of

native habitat, suitable habitat, and natural or artificial waterways/water bodies containing native species.

- All activity work areas will be kept free of trash and debris. Particular attention will be paid to "micro-trash" (including such small items as screws, nuts, washers, nails, coins, rags, small electrical components, small pieces of plastic, glass or wire, and any debris or trash that is colorful or shiny) and organic waste that may subsidize predators. All trash will be covered, kept in closed containers, or otherwise removed from the project site at the end of each day or at regular intervals prior to periods when workers are not present at the site.

5. In compliance with BLM CMAs, implement the following for controlling nuisance animals and invasive species:
    - No fumigant, treated bait, or other means of poisoning nuisance animals including rodenticides will be used in areas where focus and BLM Special Status Species are known or suspected to occur.
6. In compliance with BLM CMAs, for activities that may impact focus or BLM special status species, implement the following CMA for noise:
    - To the extent feasible, and determined necessary by BLM to protect focus and BLM Sensitive wildlife species, locate stationary noise sources that exceed background ambient noise levels away from known or likely locations of and BLM Sensitive wildlife species and their suitable habitat.
    - Use noise controls on standard construction equipment including mufflers to reduce noise.

Migratory and Resident Birds

1. Vegetation trimming and clearing activities should be timed to avoid the migration, breeding, and nesting season of migratory and resident birds (February 1 through September 1). When initial mechanical or subsequent trimming and clearing activities must be implemented during February 1 through September 1, a survey for nesting migratory birds will be conducted immediately prior to the start of activities. If an active nest is found, a buffer zone will be established around the nest by a qualified biologist and no activities will occur within that zone until nestlings have fledged and abandoned the nest. Setbacks will be 200 feet for unlisted species, 300 feet for listed species, 500 feet for raptors, and 250 feet for burrowing owls. BLM will be consulted for species-specific setbacks.
2. If maintenance is scheduled to occur during the bird-nesting season, a survey for migratory birds will also be conducted prior to all other maintenance and repair activities to be implemented during the nesting period in areas where birds might be nesting.
3. If maintenance is scheduled to occur during the bird-nesting season, take steps to prevent birds from establishing nests in the potential impact area. These steps could include covering equipment and structures, trimming vegetation to reduce suitability for nesting, and use of various excluders (e.g., noise). Once a nest is established, it must be protected until all young have fledged and left the nest site. If nesting birds are found during the supplemental survey, defer construction or intrusive maintenance activities until the birds

have left the nest. Confirmation that all young have fledged should be made by a BLM-approved qualified biologist.

Threatened and Endangered Species and Other Protected Species

General BMPs

1. Pre-construction surveys by a qualified biologist will be conducted to determine if sensitive resources are present, identify and delineate resources setbacks, and determine which BMPs need to be implemented prior to construction activities.
2. Pre-construction surveys by a qualified biologist/biological monitor, approved by the USFWS and BLM, will be conducted to determine the presence of and potential impacts to, Quino checkerspot butterfly and its critical habitat, arroyo toad and its critical habitat, bighorn sheep, and coastal California gnatcatcher, identify and delineate resources setbacks, and determine which BMPs need to be implemented prior to construction activities (USFWS CM 2).
3. In areas where there are threatened and endangered or other species of concern, prior to beginning work, the CBP ENV SMEs will coordinate with the BLM, USFWS, biologist/biological monitor, and maintenance crew supervisor ’to determine which threatened and endangered species could occur in the vicinity of planned maintenance activities. In areas where there are no threatened and endangered or other species concern, the personnel performing the maintenance activity are responsible for monitoring the implementation of general maintenance and repair BMPs to avoid impacts on the environment (USFWS CM 3).
4. Qualified biological monitors, approved by the USFWS and BLM, will be present during construction activities in areas where there is potential to encounter sensitive species (USFWS CM 4).
5. To protect individuals of listed species that are observed within the Project Area, all work would be suspended in the immediate vicinity of the species until it moves out of harm’s way on its own, or a qualified biologist (individuals or agency personnel with a permit to handle the species and approved by the USFWS and BLM) flushes the individual out of harm’s way (USFWS CM 5).
6. Necessary temporary impacts on vegetation and soil will be minimized through appropriate heavy equipment operation techniques such as installation of temporary construction mats, reduced operating speeds, use of the initial ingress and egress points, and selection of appropriately sized equipment for the area and project. In those cases where equipment is not authorized outside of the road base, activities would be accomplished on foot to minimize the impacts that would be caused by heavy equipment. These activities would be limited to the existing road disturbed areas within Quino checkerspot butterfly and arroyo toad habitat (sensitive habitats) (USFWS CM 6).
7. In compliance with BLM CMAs, all pertinent information and training materials for biological resources for the areas where maintenance activities would occur will be presented in a Worker Environmental Awareness Program (WEAP) to be developed and implemented by a qualified biologist/biological monitor approved by the BLM (as applicable) and USFWS. The BLM will approve the WEAP prior to being presented to all project personnel prior to any ground-disturbing activities associated with the

project. A record of training attendance should be kept with the construction supervisor. Ensure key personnel understand the proper BMPs to implement should threatened and endangered species be encountered in the Project Area, penalties for violation of state and Federal laws, and reporting requirements. As appropriate based on the activity, the WEAP will contain information about the following (USFWS CM 7):

- Site-specific biological and non-biological resources.
- Information on the legal protection for protected resources and penalties for violation of Federal and state laws and administrative sanctions for failure to comply with CMA requirements intended to protect site-specific biological and non-biological resources.
- The required CMAs and project-specific measures for avoiding and minimizing effects during all project phases, including but not limited to resource setbacks, trash, speed limits, etc.
- Reporting requirements and measures to follow if protected resources are encountered, including potential work stoppage and requirements for notification of the designated biologist.
- Measures that personnel can take to promote the conservation of biological and non-biological resources.

8. Visible space underneath and around all maintenance vehicles and heavy equipment will be checked for listed species and other wildlife prior to moving vehicles and equipment at the beginning of each workday and after vehicles have sat idle for more than 15 minutes (USFWS CM 8).
9. Non-hazardous soil stabilization agents would be applied for the stabilization of roads. Prior to application, Safety Data Sheets for all agents will be provided to the BLM for review and approval. Non-hazardous soil stabilizer will be applied when the temperature is a minimum of 40 degrees Fahrenheit and when there is a minimum of 72 hours before the next forecasted rain. The application of the soil stabilization agent would be completed on an annual basis or less frequently, depending on need (USFWS CM 9).
10. Chemicals and hazardous materials will be stored in proper containers and within spill containment areas (USFWS CM 10).
11. Spill clean-up kits and drip pans will be maintained during maintenance and repair activities (USFWS CM 11).
12. CBP will equip water trucks with calibrated soil stabilizer spray bars that minimizes or avoids impacts to adjacent vegetation from overspray and pooling of non-hazardous soil stabilizer liquid within the roadway. Soiltac soil stabilizer, or similar soil stabilizer reviewed/approved by BLM and USFWS, will be applied when the temperature is a minimum of 40 degrees Fahrenheit and when there is a minimum of 72 hours before the next forecasted rain (USFWS CM 12).
13. In compliance with BLM CMAs, CBP will delineate the boundaries of areas to be disturbed within critical habitat or areas where federally listed species or critical habitats were identified or likely to occur or BLM Special Status Species are likely to occur with appropriate temporary construction fencing and flagging prior to construction and confine

disturbances, project vehicles, and equipment to the delineated project areas to ensure adjacent habitats are not disturbed (USFWS CM 13).

CBP will also 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) will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement. Fencing and erosion control devices will be installed in a manner that does not impact habitats to be avoided. CBP will submit to the USFWS for approval, at least 14 days prior to initiating project impacts, the final plans for project construction. These final plans will include photographs that show the temporary fencing and erosion control devices. If work occurs beyond the fenced limits of impact, all work will cease until the problem has been remedied to the satisfaction of the Service. Temporary fencing and erosion control devices will be removed upon project completion (USFWS CM13).

14. In compliance with BLM CMAs, to the maximum extent practicable, restrict construction activity to existing roads, routes, and utility corridors to minimize the number and length/size of new roads, routes, disturbance, laydown, and borrow areas (USFWS CM 14).
15. To the maximum extent practicable, CBP will confine vehicular traffic to designated open routes of travel to and from the project site, and prohibit, within project boundaries, cross-country vehicle and equipment use outside of approved designated work areas to prevent unnecessary ground and vegetation disturbance (USFWS CM 15).
16. In compliance with BLM CMAs, implement the following general standard practices (USFWS CM 16):
    - Feeding of wildlife, leaving of food or trash as an attractive nuisance to wildlife, collection of native plants, or harassing of wildlife on a site is prohibited.
    - Any wildlife encountered during the course of an activity, including construction, operation, and decommissioning will be allowed to leave the area unharmed.
    - Domestic pets are prohibited on sites. This prohibition does not apply to the use of domestic animals (e.g., dogs) that may be used to aid in official and approved monitoring procedures/protocols, or service animals (dogs) under Title II and Title III of the American with Disabilities Act.
    - The project site will be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site.
    - All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will occur within existing established laydown yards used for various CBP projects or within the existing road footprint disturbed areas outside of waters of the United States within the demarcated project impact limits. These designated areas will be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering waters of the United States and will be shown on project site plans and construction figures. Fueling of equipment will take place within existing paved areas greater than 50 feet from waters of the United States. Contractor equipment

will be checked for leaks prior to operation and repaired as necessary. "Approved-fueling zones" will be designated on construction plans.

- Impacts from fugitive dust will be avoided and minimized through watering and other appropriate measures.
- No work will occur at night.
- After road maintenance, CBP will remove and properly dispose of any surplus gravel, caliche, and/or other construction-related materials/equipment brought to the site as part of the project and restore the project site to preconstruction conditions.
- All necessary materials such as gravel, topsoil, or fill will be obtained from existing developed or previously used sources, not from undisturbed areas adjacent to the project, and will be certified as weed-free as only sterile or weed-free sources.

17. All construction materials will be visually checked for the presence of wildlife prior to their movement or use. Any wildlife encountered during the course of these inspections will be allowed to leave the construction area unharmed (USFWS CM 17).
18. All steep-walled trenches or excavations used during the project will be covered, except when being actively used, to prevent entrapment of wildlife. If trenches cannot be covered, they will be constructed with escape ramps, following up-to-date design standards to facilitate and allow wildlife to exit, or wildlife exclusion fencing will be installed around the trench(s) or excavation(s). Open trenches or other excavations will be inspected by a designated biologist immediately before backfilling, excavation, or other earthwork (USFWS CM 18).
19. Minimize natural vegetation removal through implementation of crush and drive or cut or mow vegetation rather than removing entirely (USFWS CM 19).
20. CBP will address unavoidable temporary and permanent impacts according to plans submitted to the BLM (as applicable) and USFWS for review and approval. These actions may include restoration of redundant roads or other disturbed areas as close to the impact site as possible (USFWS CM 20).
21. CBP will provide the Carlsbad Fish and Wildlife Office (CFWO) with a schedule of work planned on these roads 10 days prior to each quarter, consisting of a list of road segments from the roads addressed in this consultation and planned for maintenance and repair during the upcoming quarter. The Work Plans will include schedules for, and/or the results of pre-construction surveys, species-specific surveys as required, information on unavoidable temporary and permanent impacts, and proposed mitigation plans if applicable. The USFWS will review the Work Plans and work with CBP to amend this consultation as needed (USFWS CM 21).
22. CBP will submit an annual report to the CFWO on or before October 1 of each calendar year that documents activities conducted in each road segment within critical habitat or areas where federally listed species or critical habitats were identified or likely to occur and where maintenance occurred during the previous year and confirms that authorized

impacts were not exceeded. This report will document general compliance with the project as described in this consultation and the CMs (USFWS CM 22).

Species-Specific BMPs

Quino Checkerspot Butterfly

These measures apply to maintenance activities along the following road segments: Little Otay Truck Trail; End of Fence Spur; Reyes Road; Cameron Truck Trail; La Posta Circle; Track Access; 4x4 Course; Gloriosa Way; Cedillo Road; O'Neill Valley Access Road; and Elliot Mine Road.

1. Maintenance and repair activities will occur outside the Quino checkerspot butterfly reproduction season (December 1 to May 31) within the above-mentioned road segments (USFWS CM 23).
2. CBP will temporarily fence the limits of the maintenance and repair areas, including staging areas and access routes, to prevent habitat impacts and install erosion control devices to prevent the spread of silt from the maintenance and repair zones into adjacent habitat to be avoided. Erosion control devices (e.g., fiber rolls and bonded fiber matrix) will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement. Fencing and erosion control devices will be installed in a manner that does not impact habitats to be avoided. CBP will submit to the USFWS and the BLM for approval, at least 14 days prior to maintenance and repair, the final plans for maintenance and repair activities. These final plans will include photographs that show temporary fencing and erosion control devices. If work occurs beyond the fenced limits of impact, all work will cease until the problem has been remedied to the satisfaction of the USFWS and the BLM. Temporary fencing and erosion control devices will be removed upon completion of maintenance and repair activities (USFWS CM 13).
3. All maintenance and repair within Quino checkerspot butterfly critical habitat will be restricted to within the existing road footprint. Vegetation clearing outside of previously disturbed areas will not occur in Quino checkerspot butterfly critical habitat (USFWS CM 26).. Vegetation that has established within the existing road would only be removed, cleared, or trampled once host plant surveys are completed (see Measure 4 below).
4. A Quino checkerspot butterfly and host plant survey will be conducted during the host plant/nectar plant flowering season and adult flight season (December 1 through June 30) by a qualified biologist prior to implementing all maintenance activities within designated critical habitat and occupied habitat within 3,280 feet of all known Quino checkerspot butterfly occurrences along these specified road segments. Where there are property access rights, an ocular survey using binoculars will be conducted.

   If Quino checkerspot butterfly or host plants are identified in the survey area, the following measures will apply:

   - A qualified biologist will 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 will not be impacted. The USFWS will be notified of any Quino checkerspot butterfly relocation within 24 hours following relocation.

- All maintenance and repair activities within Quino checkerspot butterfly critical habitat would be restricted to within the existing road footprint. Vegetation clearing outside of previously disturbed areas would not occur in Quino checkerspot butterfly designated critical habitat.

5. To minimize impacts to Quino checkerspot butterfly from vehicle strikes, within unpaved road segments within Quino checkerspot butterfly habitat (as listed above), limit vehicle speeds to 15 miles per hour (USFWS CM 25).
6. CBP will staff a biologist/biological monitor, approved by the USFWS and the BLM, who will be responsible for monitoring and reporting compliance with avoidance and minimization measures for Quino checkerspot butterfly during maintenance and repair. The biologist must be knowledgeable of Quino checkerspot butterfly biology and ecology. CBP will submit the biologist's name, address, telephone number, and work schedule for the specified road segments to the USFWS and the BLM at least five days prior to initiating road maintenance and repair activities. The biologist will perform the following duties (USFWS CM 24):
   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 maintenance and repair activities. If found, host plants will be flagged and avoided to the maximum extent practicable. If Quino checkerspot butterfly are found or host plants cannot be avoided, CBP will contact the USFWS and BLM for further consultation.
   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 will include: (i) the purpose for resource protection within Quino checkerspot butterfly habitat; (ii) a description of Quino checkerspot butterfly and their habitat; (iii) the conservation measures that should be implemented during road maintenance and repair activities, including strictly limiting activities, vehicles, equipment, and construction materials to the project area to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the project site by fencing); (iv) environmentally responsible construction practices as outlined in USFWS CM 7; (v) the protocol to resolve conflicts that may arise at any time during the road maintenance and repair process; and (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 the USFWS and BLM to ensure the proper implementation of Quino checkerspot butterfly and habitat protection measures. The

biologist will report any violation to the USFWS and BLM within 24 hours of its occurrence.

g. Submit weekly email reports (including photographs) to the USFWS and BLM during road maintenance and repair activities within the specified road segments. The weekly reports will document that maintenance and repair remained within the existing road disturbance area and general compliance with all conditions. The weekly reports will document that authorized impacts were not exceeded and general compliance with all USFWS CMs. The reports will also outline the duration of monitoring, the location of maintenance and repair activities, the type of activities that occurred, and equipment used. These reports will specify numbers, locations, and sex of Quino checkerspot butterfly observed, if any, and remedial measures employed to avoid, minimize, and mitigate impacts. Raw field notes should be available upon request by the USFWS.

h. Submit a final report to the USFWS and BLM within 60 days of road maintenance and repair completion that includes: 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.

Arroyo Toad

These measures apply to maintenance activities along the Reyes Road segment, which is located within potential arroyo toad dispersal habitat; no breeding habitat occurs in the Project Area:

1. No impacts to known or potential arroyo toad breeding habitat will occur (USFWS CM 27).
2. Prior to the onset of maintenance and repair, a barrier fence will be installed around the perimeter of all work areas within potential arroyo toad habitat. The fence will consist of fabric or plastic at least 2 feet high, staked firmly to the ground with the lower 1 foot of material stretching outward along the ground and secured with a continuous line of gravel bags. No digging or vegetation removal will be associated with the installation of the fence, and the fence will be removed when the project is complete. Ingress and egress of equipment and personnel will use a single access point to the site. This access point will be as narrow as possible and will be closed off by exclusionary fence when personnel are not on the project site (USFWS CM 28).
3. A qualified biologist approved by BLM and USFWS will conduct surveys for arroyo toads within the maintenance and repair area prior to implementation. Surveys will be conducted during the appropriate climatic conditions during the appropriate time of night to maximize the likelihood of encountering arroyo toads. If the project biological monitor, in coordination with the USFWS staff, believes artificial watering is warranted to illicit a response from arroyo toads, such efforts will be enacted. This generally is done when climatic conditions are not appropriate for arroyo toad movement during clearance surveys and is done 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. CBP will submit the survey results to the USFWS. If arroyo toads are found within the project area CBP will contact the USFWS for further consultation (USFWS CM 29).

4. The transmission of diseases will be avoided by employing disease-prevention protocols in areas known or likely to harbor chytridiomycosis (CBP will confer with the USFWS to identify these areas). In such cases, if vehicle and equipment use will occur in more than one arroyo toad suitable habitat area, CBP would ensure that all equipment is clean and dry or disinfected before moving to another habitat area (USFWS CM 30).
5. High-velocity water releases from project activities (during and after maintenance) that could degrade breeding habitat will be avoided.
6. Any use or storage of chemicals or fuels at project sites will be kept 3,280 feet away from toad habitat (i.e., areas of known arroyo toad occurrence, arroyo toad breeding habitat [in-stream and immediately adjacent], or critical habitat) (USFWS CM 31).

Coastal California Gnatcatcher

These measures apply to maintenance activities along the following road segments: Little Otay Truck Trail, End of Fence Spur Road, and Reyes Road.

1. Maintenance and repair within 500 feet of coastal California gnatcatcher suitable habitat will occur between September 1 and February 14 to avoid the breeding season (or sooner if surveys determine that all nesting is complete). If project construction or maintenance are necessary between February 15 and August 31, CBP will conduct coastal California gnatcatcher nest surveys/monitoring as outlined below (USFWS CM 36).
2. A biologist approved by the BLM and USFWS will be on-site during maintenance and repair within 500 feet of coastal California gnatcatcher habitat to ensure compliance with applicable USFWS CMs. The biologist must be knowledgeable of coastal California gnatcatcher biology and ecology. CBP will submit the biologist's name, address, telephone number, and work schedule on the project to the BLM and USFWS at least 5 days prior to initiating project impacts. The biologist will perform the following duties (USFWS CM 37):
    a. Perform a minimum of three focused surveys, on separate days, to determine the presence of coastal California gnatcatchers in the disturbance area outside the coastal California gnatcatcher breeding season. Surveys will begin a maximum of 7 days prior to performing initial clearing/grubbing of coastal sage scrub/chamise chaparral and one survey will be conducted the day immediately prior to the initiation of clearing/grubbing. If any coastal California gnatcatchers are found within the disturbance area, the biologist will direct construction personnel to begin clearing/grubbing in an area away from the coastal California gnatcatchers. It will be the responsibility of the biologist to ensure that coastal California gnatcatchers are not in the area to be cleared/grubbed. The biologist will also record the number and location of coastal California gnatcatchers disturbed by clearing/grubbing. CBP will notify the BLM and USFWS at least 7 days prior to clearing/grubbing to allow the BLM and USFWS to coordinate with the biologist on bird flushing activities.
    b. If maintenance and repair is necessary during the coastal California gnatcatcher breeding seasons, the biologist will 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 these areas. The surveys will begin a maximum of 7 days prior

to project construction and one survey will be conducted the day immediately prior to the initiation of work. Additional surveys will be done once a week during project construction in the breeding season. These additional surveys may be suspended as approved by the USFWS. CBP will notify the BLM and USFWS at least 7 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 maintenance and repair, no project maintenance and repair will be conducted within 500 feet of the nest until the young have fledged.

3. Clearing and trimming back of trees or other vegetation in coastal California gnatcatcher suitable habitat with potential to impact this species will be limited to the minimum necessary to maintain drivable access and patrol roads. This limited vegetation clearing and trimming will be conducted outside of the nesting season (February 1-July 31), unless a qualified biologist has conducted focused surveys in accordance with USFWS protocols and it has been determined that the area is not occupied and does not contain the elements of the designated habitat.

Bighorn Sheep-Peninsular Ranges

These measures apply to maintenance activities along the following road segments: O'Neill Valley Access Road; Elliot Mine Road, Mica Mine Road, Davie's Valley Road, and Mica Davie's Crossover Road – possibly West Desert Drag Road west end.

1. Maintenance and repair in suitable bighorn sheep habitat will be prohibited during the lambing season (January 1 through June 30) (USFWS CM 32).
2. During maintenance activities within the above-listed road segments,
3. CBP will staff a biologist, approved by the BLM and USFWS, who will be responsible for monitoring and reporting compliance with avoidance and minimization measures for bighorn sheep if bighorn sheep are encountered within 1,500 feet of maintenance and repair project areas. The biologist must be knowledgeable of bighorn sheep biology and ecology. CBP will submit the biologist's name, address, telephone number, and work schedule on the project to the BLM and USFWS at least 5 days prior to initiating project construction and maintenance. The biologist will perform the following duties (USFWS CM 33):
    - Conduct a survey each morning before maintenance and repair begin to see if bighorn sheep are within 1,500 feet of the project.
    - Stop work until either the bighorn sheep moves away on its own and the biologist can flush the bighorn sheep from the project area without harm.
    - Record, on a daily basis, any bighorn sheep encounters that occurred at the day's work site and how they were resolved. The biologist should note where bighorn sheep are observed, gender, age, collar, ear tag, etc. The biologist should report all bighorn sheep encounters by email weekly (each Friday) to the BLM and Palm Springs Fish and Wildlife Office.
4. Construction vehicles should avoid driving off designated roads and should avoid driving at speeds above 15 mph where practicable (USFWS CM34).

5. The on-site project manager will encourage proper footwear hygiene to help prevent disease transmission from domestic animals to bighorn sheep. If workers have any potential contact with lands occupied by domestic sheep or goats (for example, at home, visiting a farm, attending a county fair, going to a petting zoo, etc.), they should disinfect their boots at an on-site boot disinfection station before going to a work zone in bighorn sheep habitat. Alternatively, personnel may be required to change their footwear so that contaminated boots are not used in work vehicles or in the work site (USFWS CM35).
6. Access to, and use of, designated water sources for desert bighorn sheep will not be impeded by activities in designated and new utility corridors.

BLM Special Status Species

Flat-tailed Horned Lizard

Within the Yuha Basin FTHL Management Area (West Desert Drag Road, Roy's Road, Cat Exit 4, Signal Road Legacy Fence Road 1, Signal Road Legacy Fence Road 2, Signal Road Legacy and Fence Road 3) (see Figure 7a). Two road segments are located within 2 miles of the East Mesa FTHL Management Area (see Figure 7b): Poleline Extension and Canal Road. Four road segments are located within FTHL suitable habitat (see Figure 7a): Mica Davie's Crossover, Mica Mine Road, Davie's Valley Road, and Davie's Clark Crossover:

1. Prior to road maintenance and repair activities initiation, an individual shall be designated as a field contact representative. The field contact representative shall have the authority to ensure compliance with protective measures for the FTHL and will be the primary agency contact dealing with these measures. The field contact representative shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
2. All project work areas shall be clearly flagged or similarly marked at the outer boundaries to define the limit of work activities. All construction workers shall restrict their activities and vehicles to areas that have been flagged to eliminate adverse impacts to the FTHL and its habitat. All workers shall be instructed that their activities are restricted to flagged and cleared areas.
3. Within the FTHL habitat, the area of disturbance of vegetation and soils shall be the minimum required for the project. Clearing of vegetation and grading shall be minimized. Wherever possible, rather than clearing vegetation and grading the ROW, equipment and vehicles shall use existing surfaces or previously disturbed areas. Where grading is necessary, surface soils shall be stockpiled and replaced following construction to facilitate habitat restoration. To the extent possible, disturbance of shrubs and surface soils due to stockpiling shall be minimized.
4. Designated roads shall be used for travel and equipment storage.
5. A biological monitor shall be present in each area of active surface disturbance throughout the workday from initial clearing through habitat restoration, except where the project is completely fenced and cleared of FTHL by a biologist.
6. A biological monitor approved by BLM will be present during road maintenance and repair activities that occur within FTHL habitat.

7. Comply with the conservation goals and objectives, criteria, and management planning actions identified in the most recent revision of the FTHL Rangewide Management Strategy (RMS). Activities will include appropriate design features using the most current information from the RMS and RMS Interagency Coordinating Committee to minimize adverse impacts during siting, design, pre-construction, construction, operation, and decommissioning; ensure that current or potential linkages and habitat quality are maintained; reduce mortality; minimize other adverse impacts during operation; and ensure that activities have a neutral or positive effect on the species.

Burrowing Owl

Within potential burrowing owl habitat (Canal Road and Poleline Extension):

1. Prior to road maintenance and repair activities, conduct burrowing owl surveys according to CDFW survey protocols (CDFW 2012). Each road segment with potential burrowing owl habitat should include a 500-foot (where practicable) survey area.

   If burrowing owls are found:

   a. Avoid disturbing occupied burrow during the nesting period, from 1 February through 31 August.
   b. Avoid impacting burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls.
   c. Develop and implement a worker awareness program to increase the on-site worker's recognition of and commitment to burrowing owl protection.
   d. Place visible markers near burrows to ensure that farm equipment or other machinery does not collapse burrows.
   e. If unoccupied burrows are found, owls may attempt to colonize or re-colonize the area. Ongoing surveillance at the project site during activities is recommended. The surveillance frequency/effort should be sufficient to detect burrowing owls if they return. Subsequent to their new occupancy or return to the site, take avoidance measures should be implemented.
   f. To protect occupied burrows/burrow surrogates, implement buffer zones, visual screens, or other measures while project activities are occurring to minimize disturbance (per CDFW guidelines).

2. If burrowing owls are present, a designated biologist will conduct appropriate activity-specific biological monitoring to ensure avoidance of occupied burrows and establishment of the 656 feet (200 meters) setback to sufficiently minimize disturbance during the nesting period on all activity sites, when practical.
3. If burrows cannot be avoided on-site, passive burrow exclusion by a designated biologist through the use of one-way doors will occur according to the BMP specifications or the most up-to-date agency BLM or CDFW specifications. Before exclusion, there must be verification that burrows are empty as specified in the most up-to-date BLM or CDFW protocols. Confirmation that the burrow is not currently supporting nesting or fledgling activities is required prior to any burrow exclusions or excavations.
4. Activity-specific active translocation of burrowing owls may be considered, in coordination with CDFW.

Colorado Fringe-toed Lizard

1. Conduct visual encounter walking surveys prior to road maintenance and repair activities.

BLM Sensitive Plants

1. Conduct special status native plant botanical surveys according to CDFW protocols. Conduct botanical field surveys when (CDFW 2018):
    a. Natural (or naturalized) vegetation occurs in an area that may be directly or indirectly affected by a project (project area), and it is unknown whether or not special status plants or sensitive natural communities occur in the project area;
    b. Special status plants or sensitive natural communities have historically been identified in a project area; or
    c. Special status plants or sensitive natural communities occur in areas with similar physical and biological properties as a project area.
2. Conduct botanical field surveys in a manner which maximizes the likelihood of locating special status plants and sensitive natural communities that may be present. Botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status (CDFW 2018).

Cultural Resources

1. Any cultural resources monitors must be approved in advance by the BLM and are required to hold a current BLM Cultural Resources Use Permit and Field Authorization.
2. At Avoidance Areas 1 and 2, ensure these conspicuous resources are avoided by providing a map to maintenance staff and descriptions of the canal and roads resources that are to be avoided during maintenance work.
3. At Avoidance Areas 3 and 4, ensure equipment remains on the roadbed and the level surface adjacent to the roadbed. Do not make any cuts or remove soil for fill from the sides or surface of raised terraces and alluvial fans adjacent to roads. In strict accordance with a prepared plan (RECON 2020d), construct a tapered cap atop the access road that is at least three feet above grade along road footprint. Archaeological and Native American monitors are to be present during installation of cap.
4. At Avoidance Area 5, install permanent protective fencing along both sides of the road edge where it passes through the site, with archaeological and Native American monitors present. The signs should read “habitat restoration area” to minimize any potential to attract illegal artifact collection and vandalism.
5. At Avoidance Area 6, in strict accordance with a prepared plan (RECON 2020d), construct a tapered cap atop access road that is at least three feet above grade along road footprint. Archaeological and Native American monitors are to be present during installation of cap. A qualified archaeologist and a Native American monitor would be present during construction of the permanent protective fencing and for the capping.
6. CBP would ensure avoidance by briefing maintenance equipment operators and providing maps with descriptions and avoidance requirements. In Avoidance Area 5, protection of the archaeological site would be ensured by installing permanent protective

fencing along both edges of the access road where it bisects the site, and CBP informing maintenance staff of the limitation. Archaeological testing in Avoidance Area 6 confirmed that the site contains artifacts located on the surface outside of the access road, and subsurface below the access road.

7. In the event of a cultural resource discovery, work would be stopped within the immediate area of the find until a professional archaeologist can determine the nature of the resources discovered. If any previously unrecorded human remains are inadvertently discovered during maintenance and repair activities, Federal law (Native American Graves Protection and Repatriation Act, Public Law 101-601; 25 U.S.C. § 3001-3013, 43 CFR §10.4) and CBP policy would be followed.
8. If human remains are discovered during maintenance and repair of tactical infrastructure, CBP will stop work within 15 meters (50 feet) of the discovery. CBP will then contact the BLM, the county coroner and a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in archaeology or history to determine the significance of the discovery. If appropriate, CBP and the BLM would coordinate and adhere to the Native American Graves Protection and Repatriation Act and its implementing regulations (43 CFR 19). Depending on the recommendations of the coroner or the archaeologist, the BLM will consult with culturally affiliated tribes and the California SHPO regarding their management and disposition in compliance with Native American Graves Protection and Repatriation Act.
9. Obtain all pertinent training materials for cultural resources for the areas where maintenance and repair activities would occur. Prior to arrival on the work site, ensure key personnel are aware of the cultural resources potentially occurring in the Project Area and understand the proper BMPs to implement should cultural resources be encountered in the Project Area.

Paleontological Resources

- To avoid and minimize potential adverse impacts, grading activities within road segments would be monitored by a qualified (trained) paleontological monitor within roadway segments classified as Potential Fossil Yield Class 4/5, allowing for the discovery and recovery of any larger fossil remains exposed by earth-moving activities. These road segments are: West Desert Drag Road (0.73 mile segment); Cat Exit 4 (0.89 mile segment); Signal Road/Legacy Fence Access Road 1 (0.4 mile segment); Signal Road/Legacy Fence Access Road #2 (0.07 mile segment); and Signal Road/Legacy Fence Access Road #3 (0.08 mile segment) (see Figure 9). Any paleontological monitoring shall be authorized under a BLM permit and Fieldwork authorization.

7.0 REFERENCES CITED

Buysse, J. and B. F. Smith. 2002. P-37-024562 Archaeological Site Record. On file, California Historical Resources Information System, South Coastal Information Center, San Diego University.

California Audubon. 2020. California Birds. Website accessed on January 15, 2020 at: https://ca.audubon.org/birds-0

California Department of Fish and Wildlife (formerly California Department of Fish and Game). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency. 36 pp.

_____. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Species Native Plant Populations and Sensitive Natural Communities. State of California, California Natural Resources Agency. 12 pp.

California Natural Diversity Database. 2019. Special Status Species along Six Road Segments within BLM-administered Lands in Imperial County, California.

Customs and Border Protection and BLM. 2020. Biological Assessment: Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California.

Flat-tailed Horned Lizard Interagency Coordinating Committee. 2003. Flat-tailed Horned Lizard Rangewide Management Strategy, 2003 Revision: An Arizona-California Conservation Strategy. 121 pp. May 2003.

Gulf South Research Corporation. 2020. Final Wetland Delineation Report for Proposed Maintenance and Repair of Patrol and access Roads; San Diego, El Centro, and Yuma Sectors, California. January. 138 pp.

HDR. 2019a. Biological Survey Report: United States Border Patrol Tactical Infrastructure Maintenance and Repair Roads, San Diego and Imperial Counties, California. 120 pp. May 2019.

_____. 2019b. Class III Cultural Resource and Historical Property Inventory of United States Border Patrol Tactical Infrastructure Maintenance and Repair Roads. 406 pp. June 2019.

RECON Environmental, Inc. 2018. Post-survey Notification of the 2018 Quino Checkerspot Butterfly Presence/Absence Survey for the El Centro Sector Jacumba Operational Roads Environmental Assessment Project. 43 pp. June 2018.

_____. 2019a. Draft Wetland Delineation for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California. 235 pp. October 2019.

_____. 2019b. Cultural Resources Survey Report for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California. 50 pp. October 2019.

_____. 2020a. Jurisdictional Resources Summary Letter for the Maintenance and repair of Patrol and Access Roads on Bureau of Land Management Lands in California. 8 pp.

_____. 2020b. 70B01C19F00001214 - WO 04 SDC ELC YUM BLM Road Maintain & Repair T&E Plant Species Survey. August. 8 pp.

_____.2020c. Results of the Archaeological Testing at P-37-02461, San Diego County, California. 52 pp.

_____.2020d. Archaeological Site Capping Plan for Site P-37-024561, San Diego County, California. 12 pp

San Diego Natural History Museum. 2015. Paleontological Resources of the Bureau of Land Management El Centro Field Office Administrative Area, Imperial County and Eastern San Diego County, California. 94 pp.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2008. A Manual of California Vegetation, Second Edition. California Native Plant Society in collaboration with the California Department of Fish and Game.

Storer, T. I., R. L. Usinger, R. C. Stebbins, and J. W. Nybakken. 1972. General Zoology. 5th Edition. McGraw-Hill, New York.

U.S. Department of the Interior, Bureau of Land Management (BLM). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development: The Gold Book. Fourth Edition. Website accessed on September 13, 2021 at: https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/the-gold-book

_____. 2016. Potential Fossil Yield Classification (PFYC) System. BLM Instruction Memorandum 2016-124, July 20, 2016. Website accessed on June 8, 2021 at: https://www.blm.gov/policy/im-2016-124

_____. 2014. BLM Special Status Animal Species by Field Office. 22 pp. September 2014.

_____. 2015. All BLM California Special Status Plants. 61 pp. May 2015.

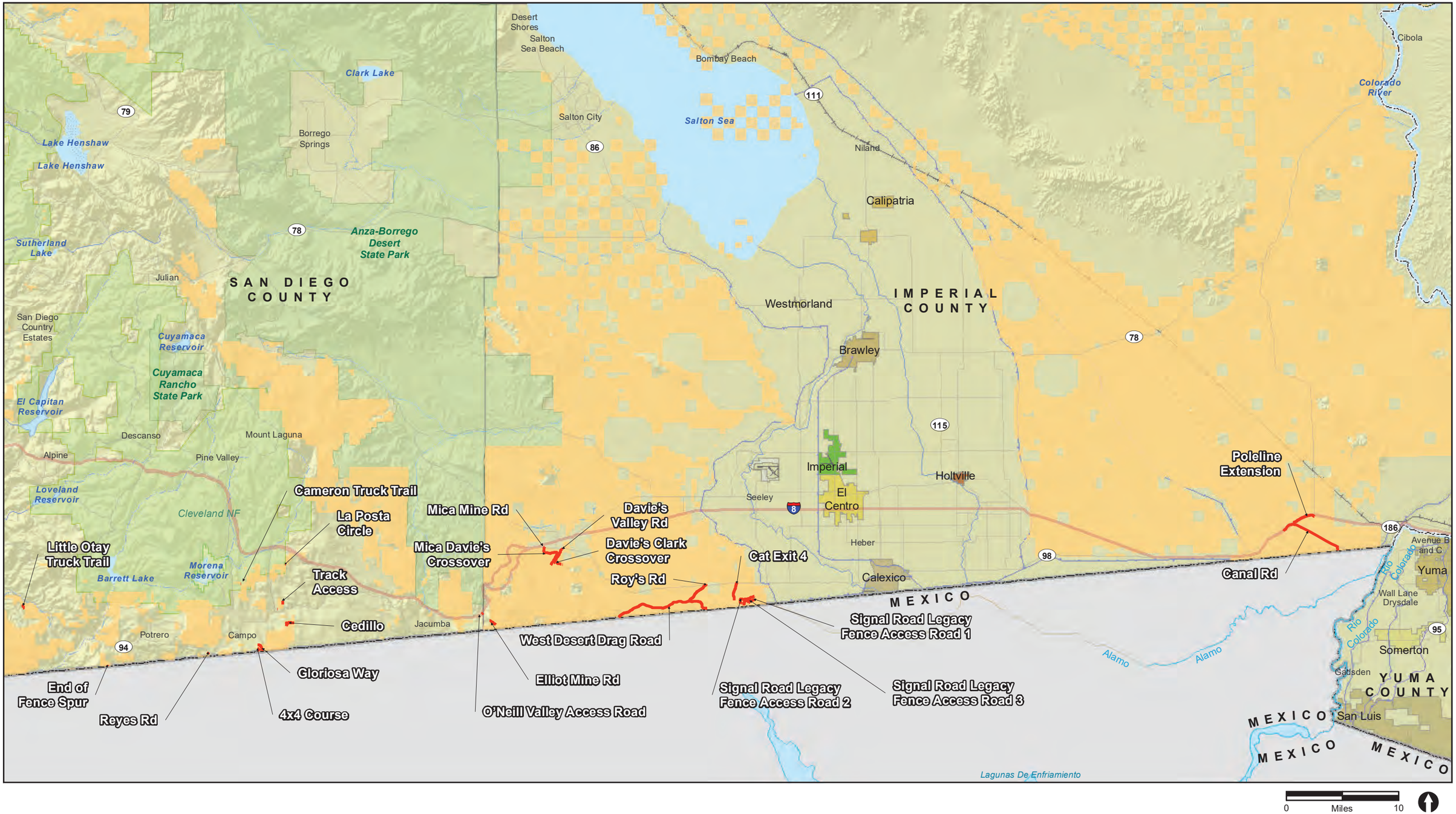
U.S. Department of the Interior, U.S. Fish and Wildlife Service. 2019a. Pacific Southwest Region 8 Species Range Data. Accessed on June 26, 2019 at: https://www.sciencebase.gov/catalog/item/5543b817e4b0a658d79416a7.

_____. 1999 Arroyo Southwestern Toad (*Bufo microscaphus californicus*) Recovery Plan. Portland, Oregon. 119 pp.

_____2019. Endangered and Threatened Wildlife and Plants; Draft Recovery Plan for *Astragalus magdalenae* var. *peirsonii* (Peirson's Milk-Vetch). *Federal Register* 84:26696-26697. June 2019.

_____. 2020. List of Threatened and Endangered Species that may Occur in the Proposed Project Location. List for each roadway segment.

APPENDIX A
Figures



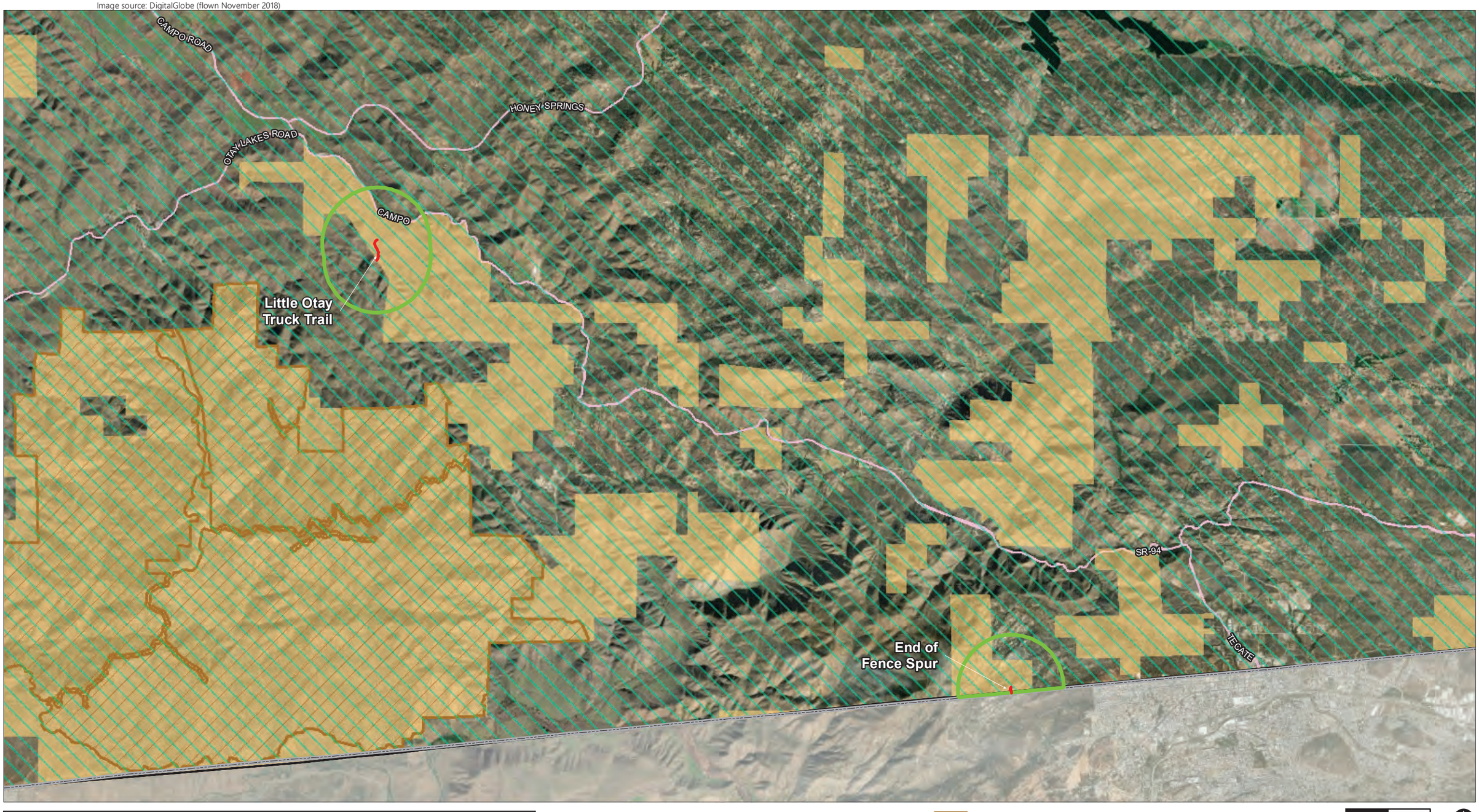
Road Segments on BLM-administered Lands

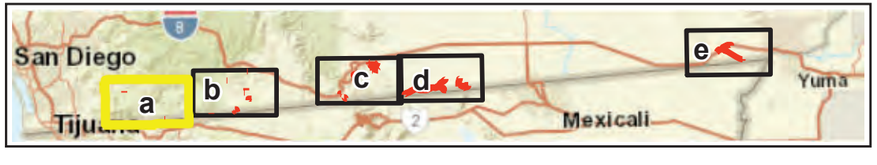
BLM-administered Lands

FIGURE 1

Regional Location

Image source: DigitalGlobe (flown November 2018)





Road Segments on BLM-administered Lands

- Open
- Limited
- Closed
- Action Area

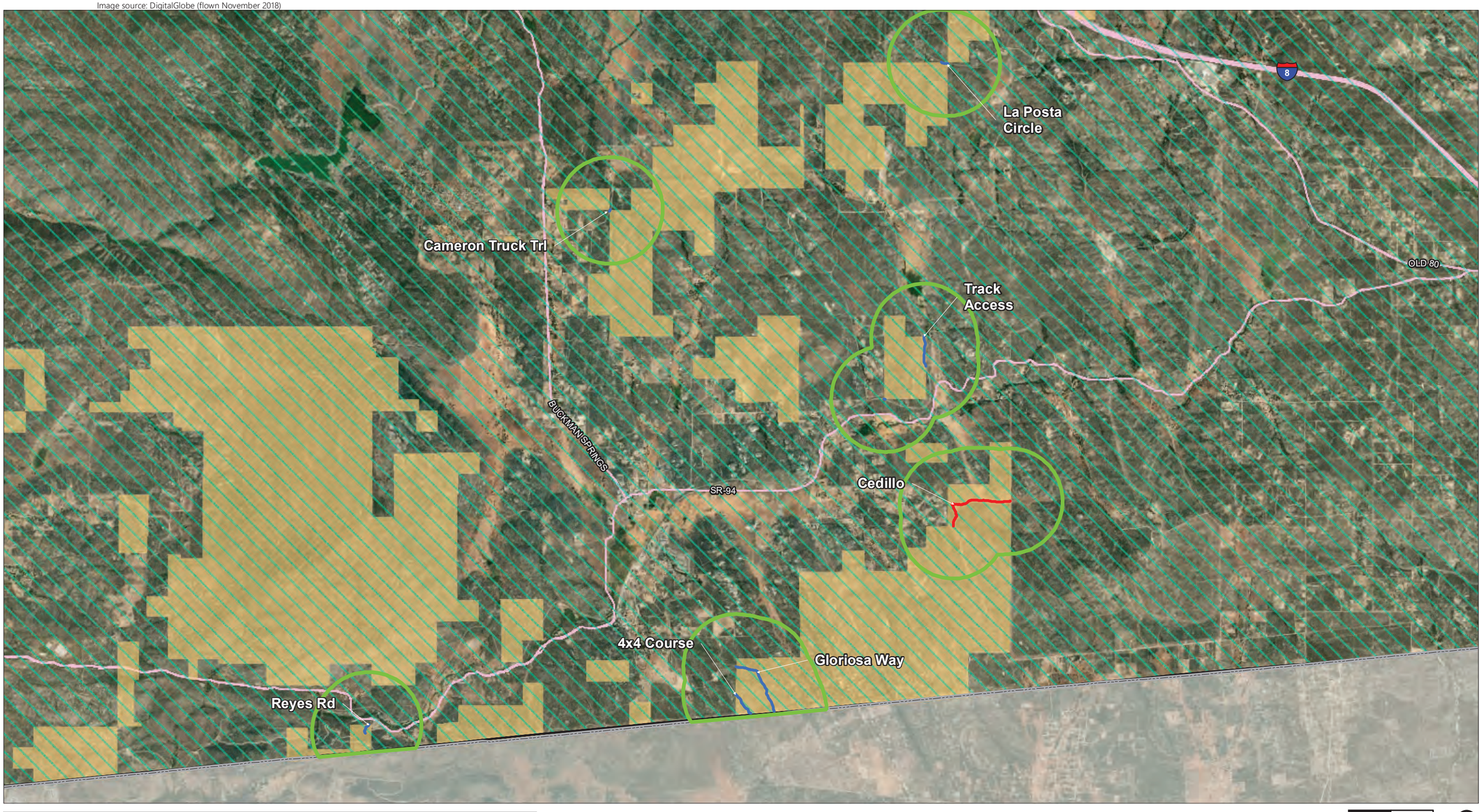
- BLM Wilderness
- BLM-administered Lands
- San Diego Border Patrol Sector

0 Miles 1

FIGURE 2a

Road Segments on BLM-administered Lands in California

Image source: DigitalGlobe (flown November 2018)



Road Segments on BLM-administered Lands

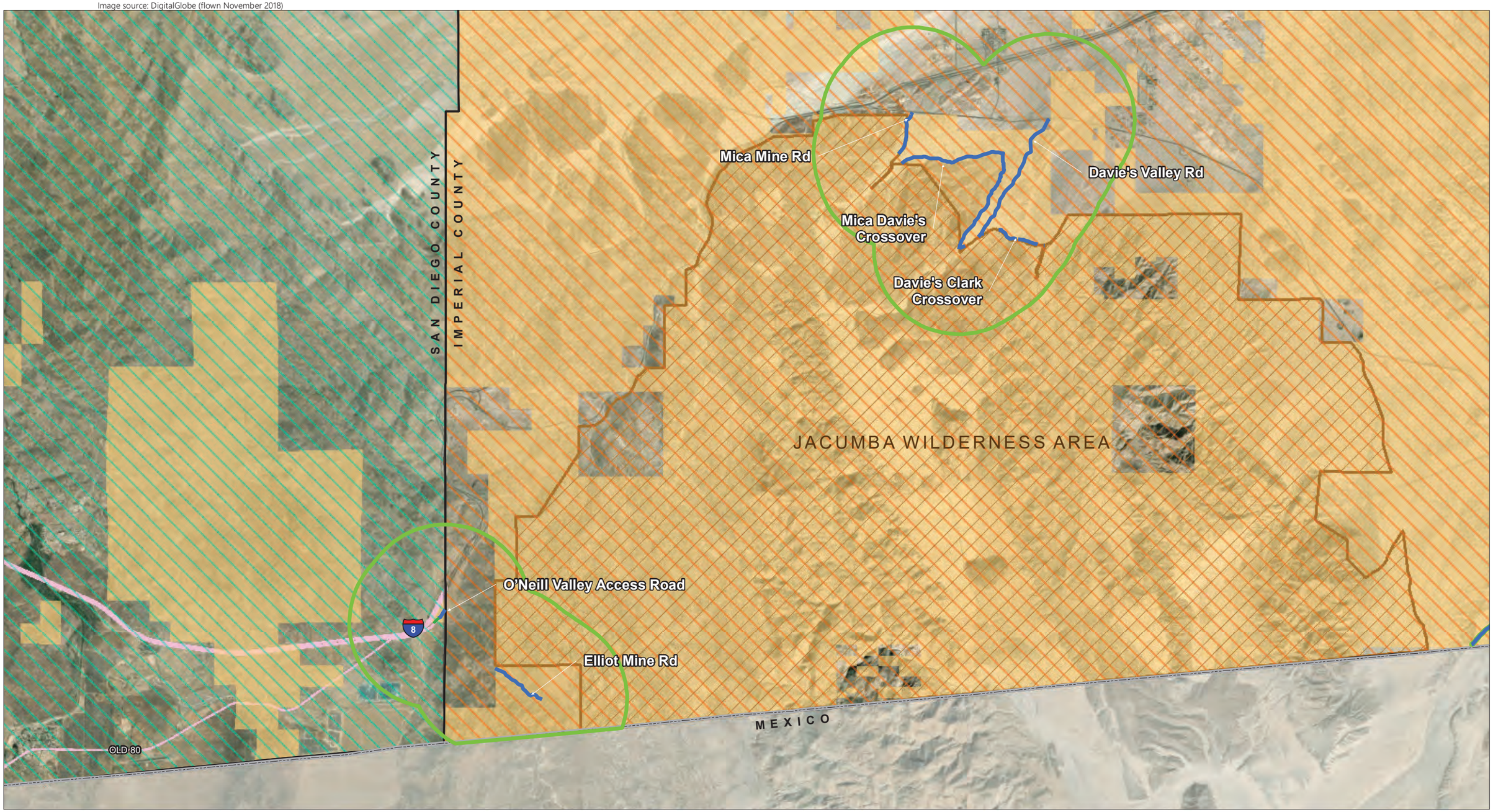
- Open
- Limited
- Closed
- Action Area
- BLM-administered Lands
- San Diego Border Patrol Sector

0 Miles 1

FIGURE 2b

Road Segments on BLM-administered Lands in California

Image source: DigitalGlobe (flown November 2018)



Road Segments on BLM-administered Lands

- Open
- Limited
- Closed
- Action Area

- BLM Wilderness
- BLM-administered Lands
- San Diego Border Patrol Sector
- El Centro Border Patrol Sector

0 Miles 1

FIGURE 2c

Road Segments on BLM-administered Lands in California

Image source: DigitalGlobe (flown November 2018)

Cat Exit 4

Roy's Rd

Signal Road Legacy
Fence Access Road 1

West Desert Drag Road

Signal Road Legacy
Fence Access Road 2

Signal Road Legacy
Fence Access Road 3

Road Segments on BLM-administered Lands

- Open
- Limited
- Closed
- Action Area

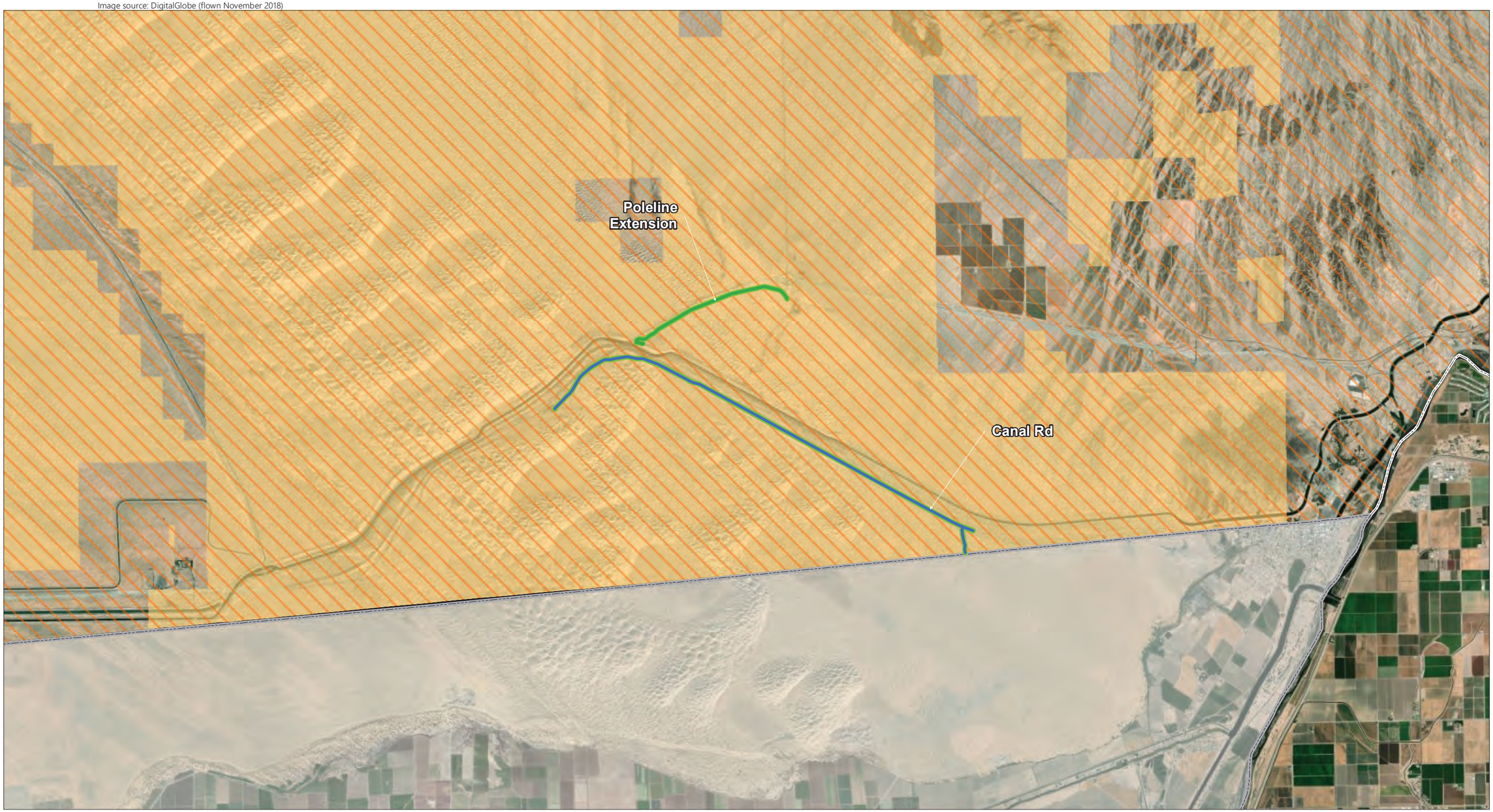
- BLM Wilderness
- BLM-administered Lands
- El Centro Border Patrol Sector

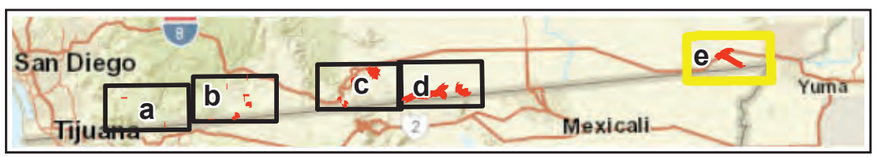
0 Miles 1

FIGURE 2d

Road Segments on BLM-administered Lands in California

Image source: DigitalGlobe (flown November 2018)





Road Segments on BLM-administered Lands

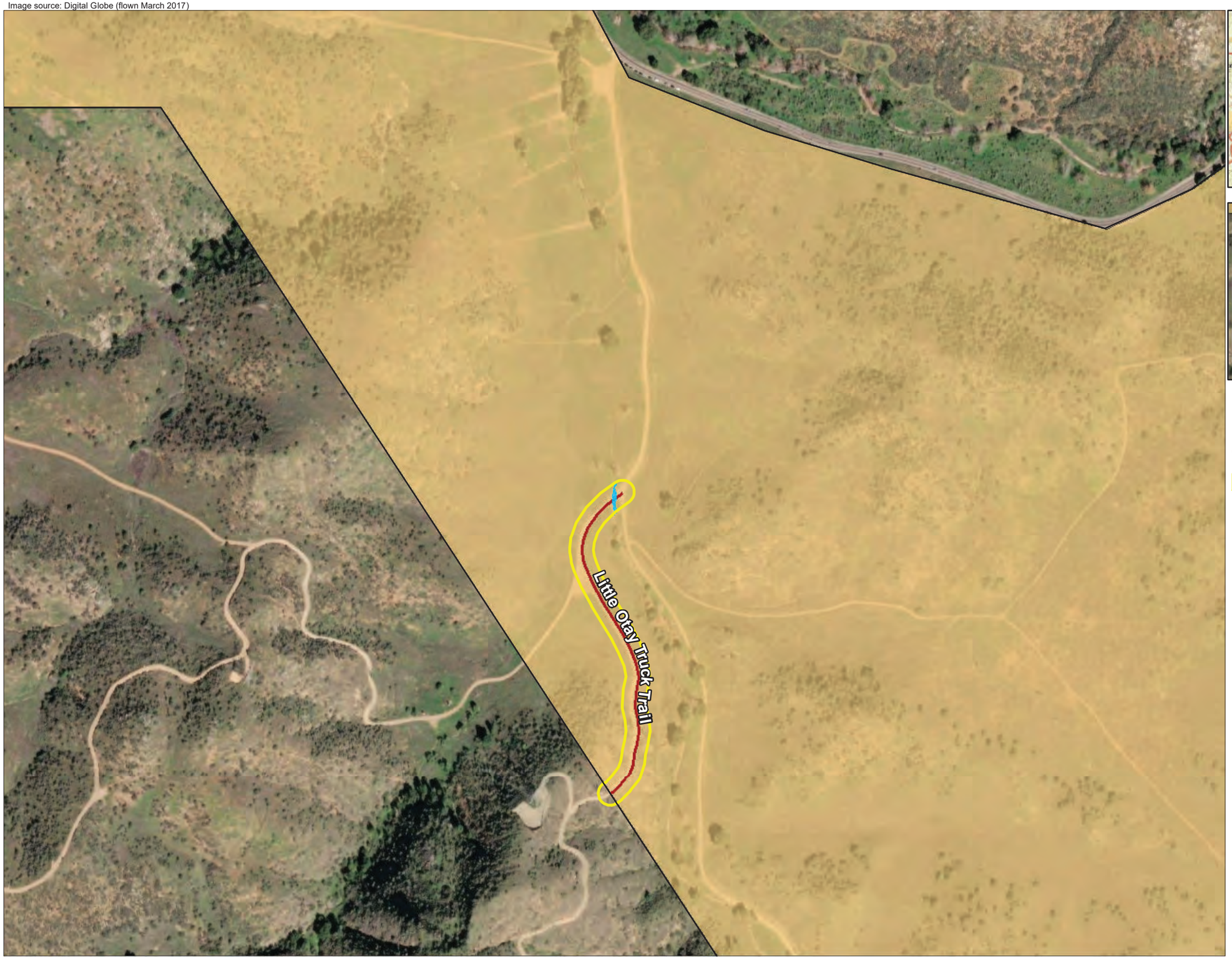
- Open
- Limited
- Closed
- Action Area
- BLM-administered Lands
- El Centro Border Patrol Sector

0 Miles 1

FIGURE 2e

Road Segments on BLM-administered Lands in California

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

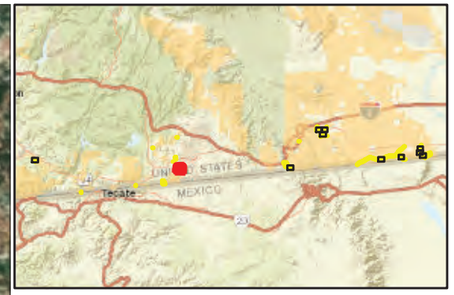
Non-wetland Waters/ Ephemeral Washes

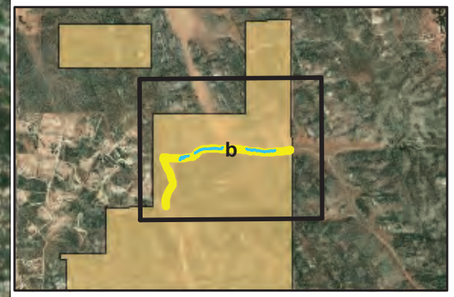
0 Feet 400

FIGURE 4a

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

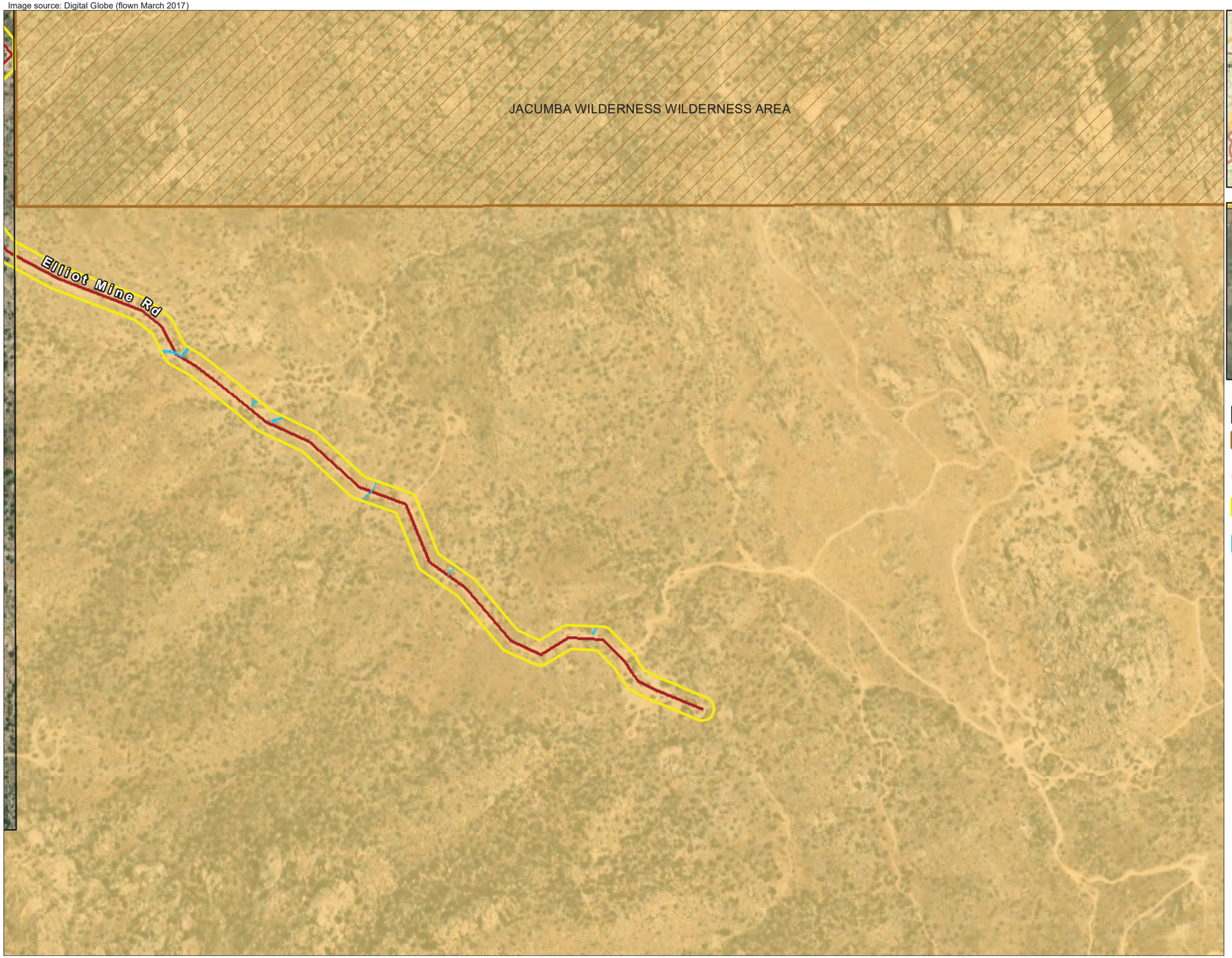
Non-wetland Waters/ Ephemeral Washes

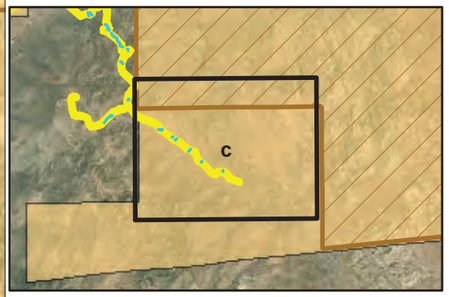
0 Feet 400

FIGURE 4b

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

BLM Wilderness

Road Segments on BLM-administered Lands

Survey Area

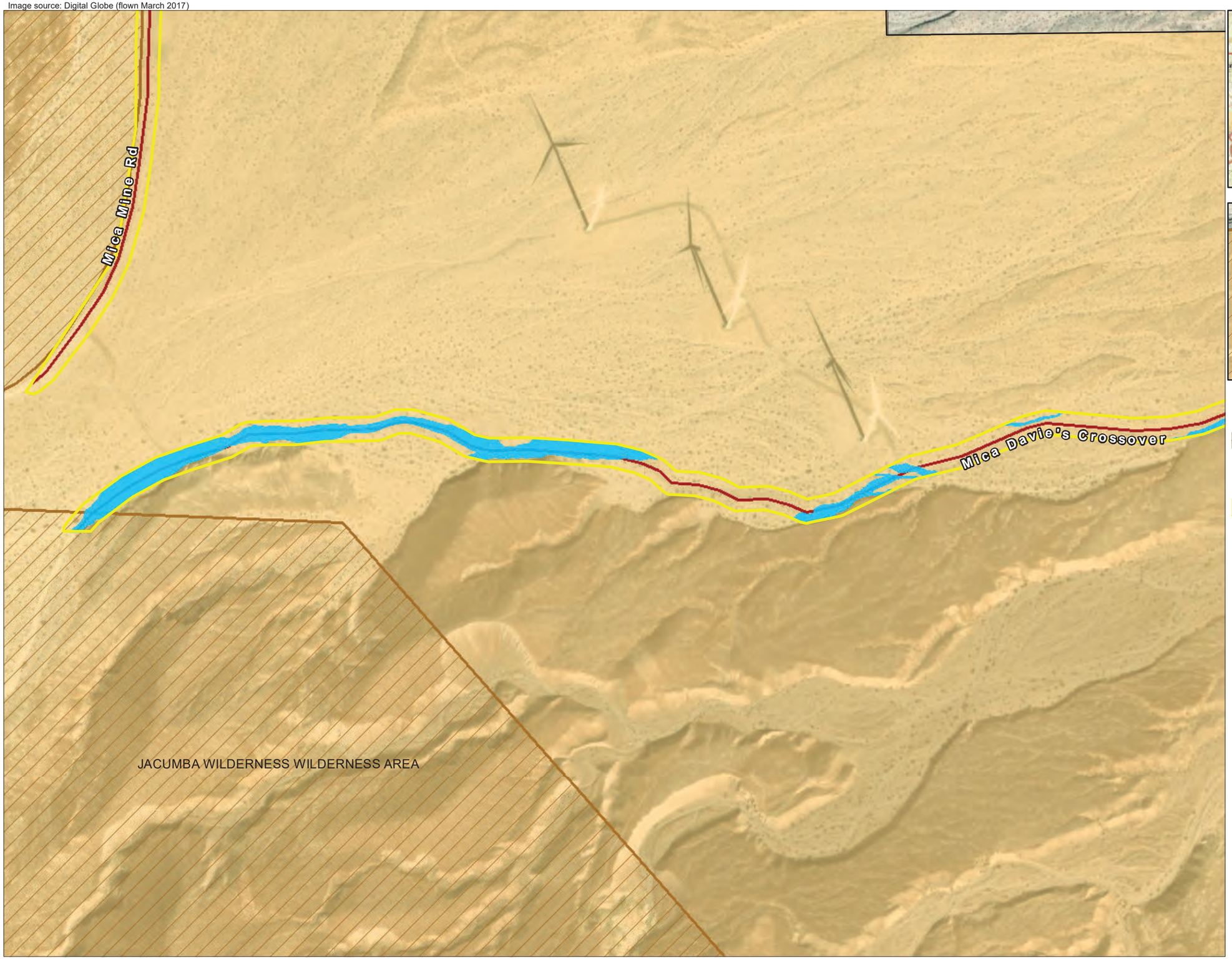
Non-wetland Waters/ Ephemeral Washes

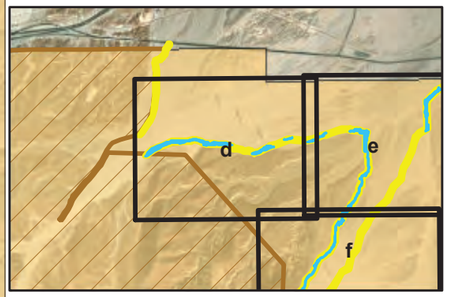
0 Feet 400

FIGURE 4c

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

BLM Wilderness

Road Segments on BLM-administered Lands

Survey Area

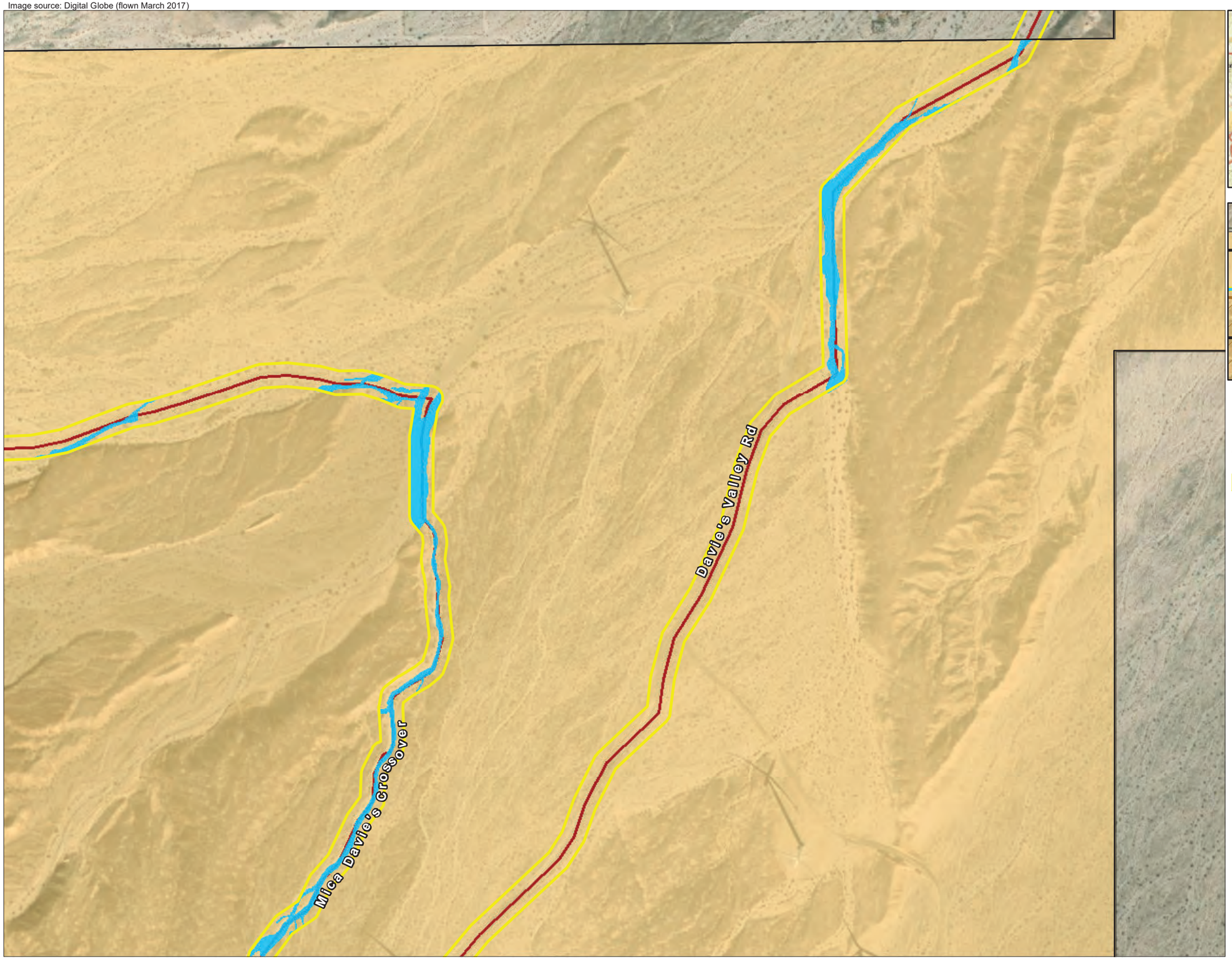
Non-wetland Waters/ Ephemeral Washes

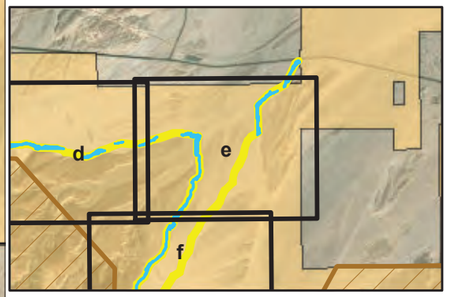
0 Feet 400

FIGURE 4d

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

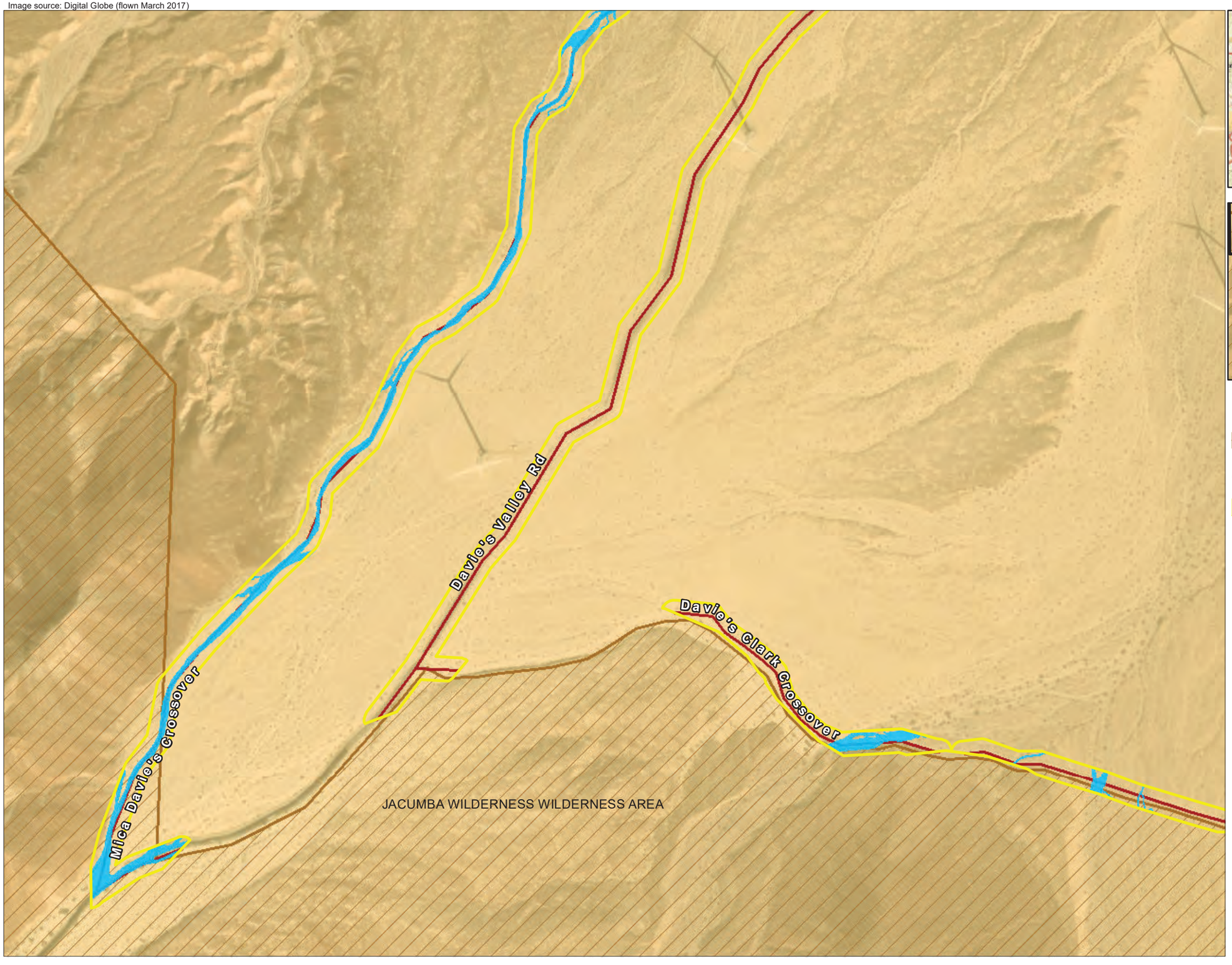
Non-wetland Waters/ Ephemeral Washes

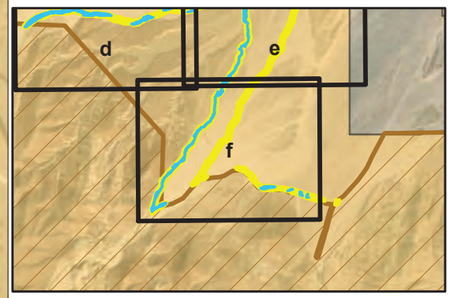
0 Feet 400

FIGURE 4e

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

BLM Wilderness

Road Segments on BLM-administered Lands

Survey Area

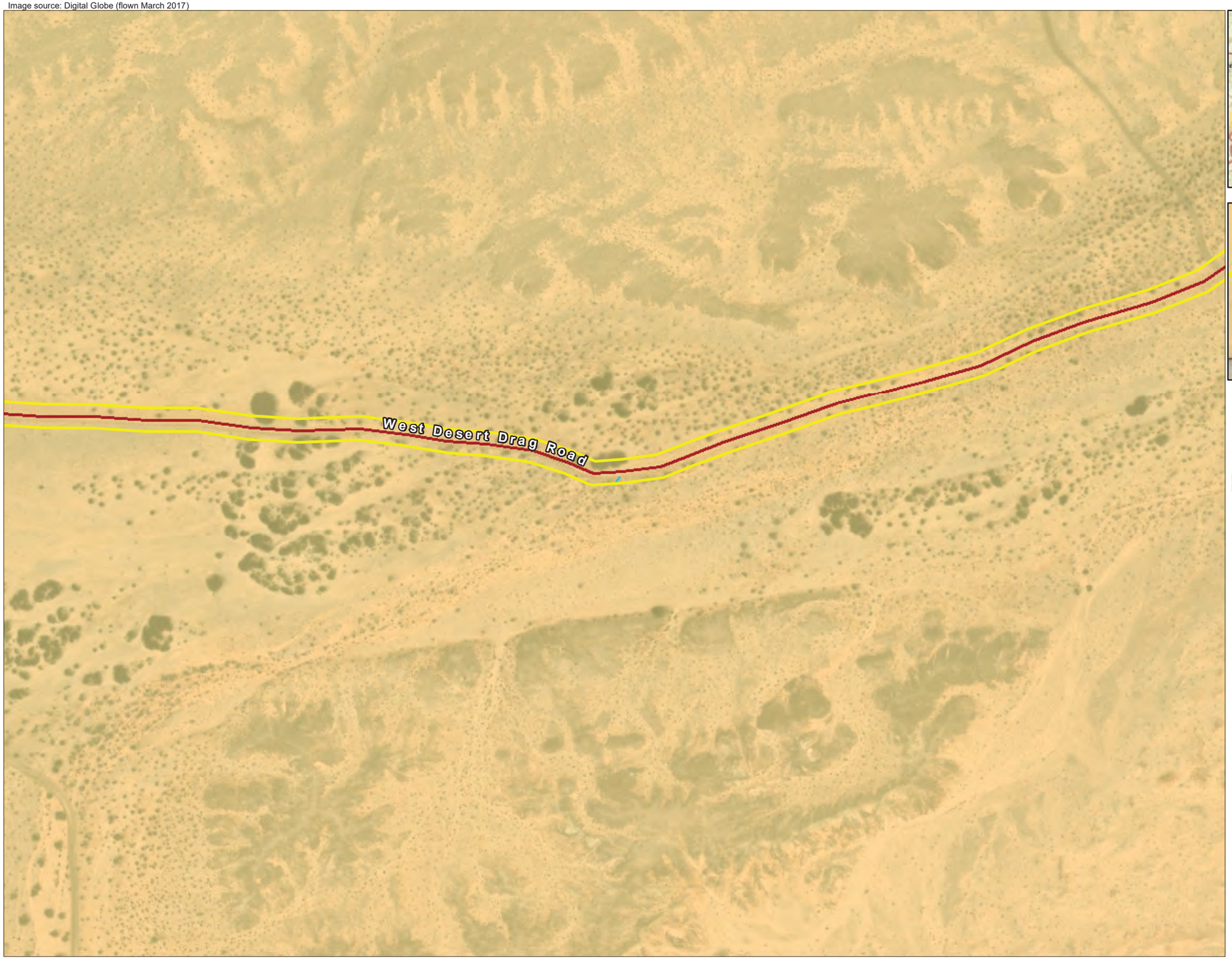
Non-wetland Waters/ Ephemeral Washes

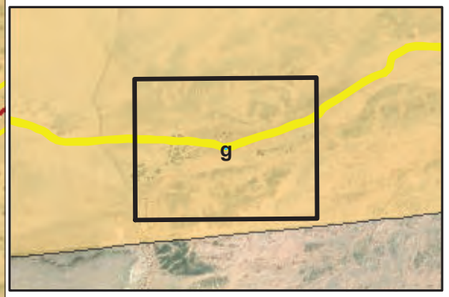
0 Feet 400

FIGURE 4f

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

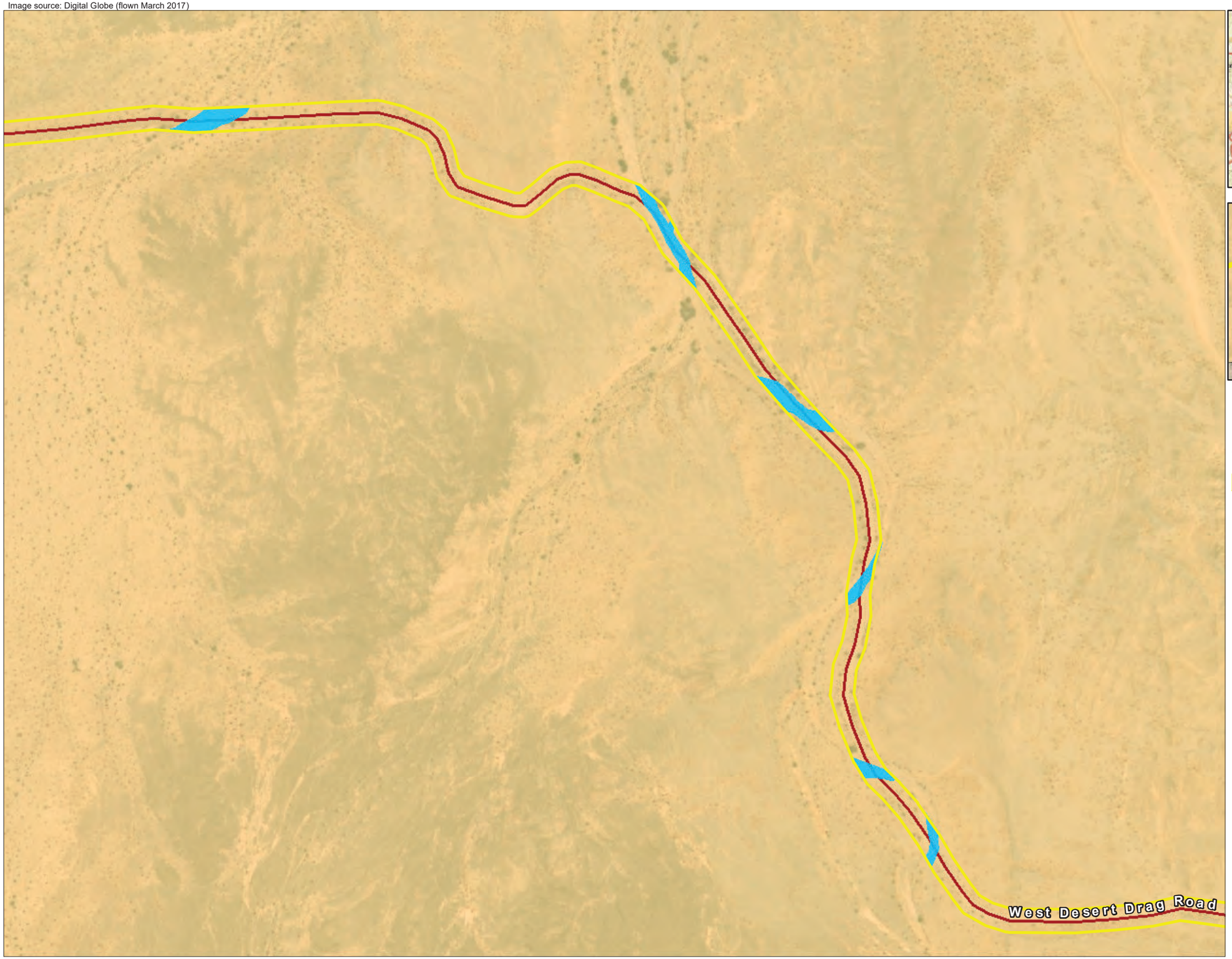
Non-wetland Waters/ Ephemeral Washes

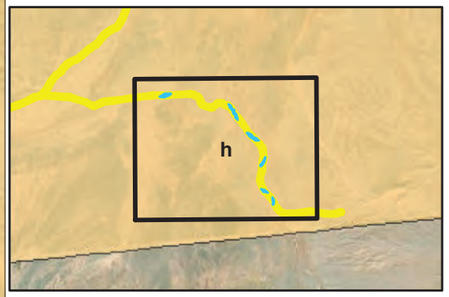
0 Feet 400

FIGURE 4g

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

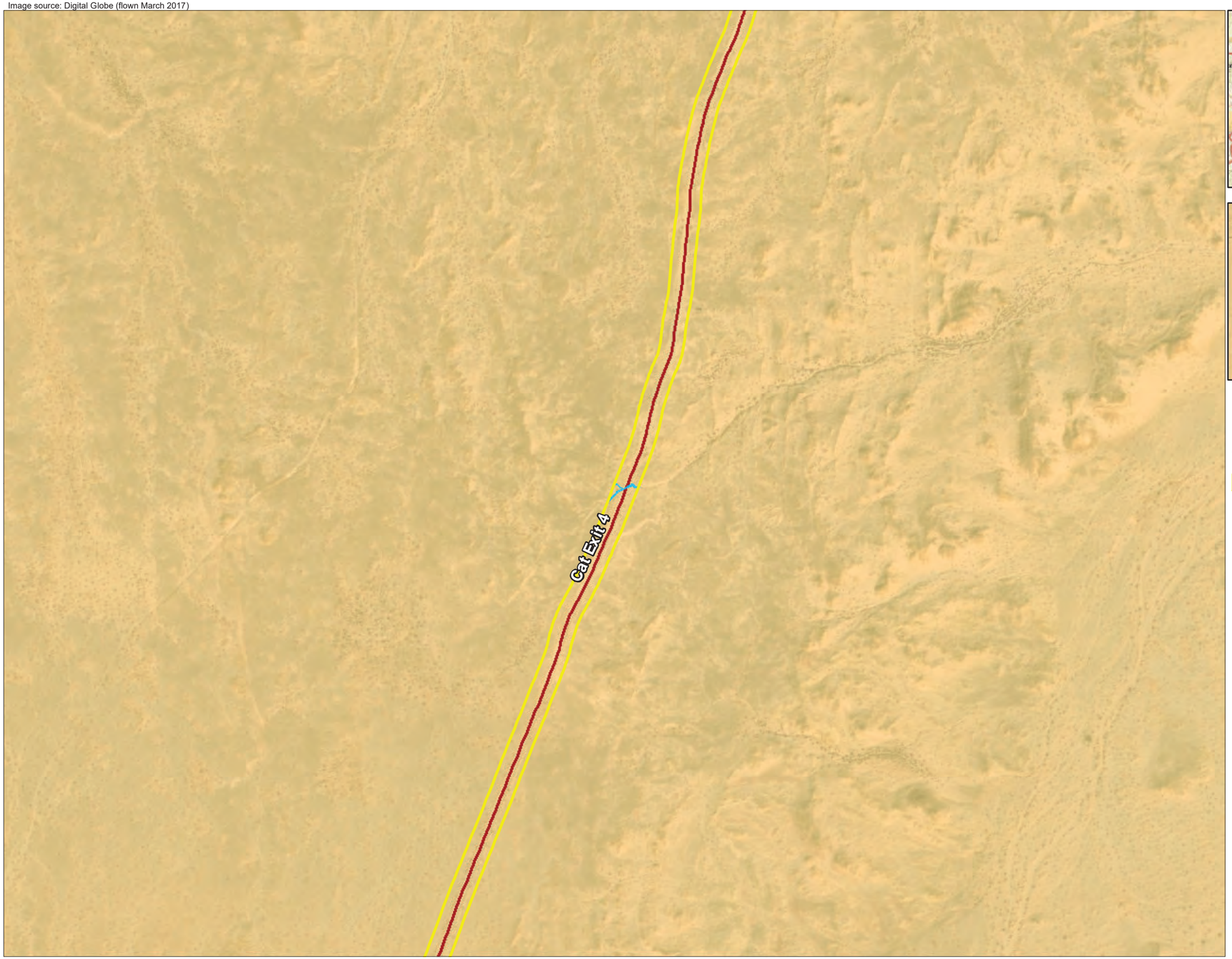
Non-wetland Waters/ Ephemeral Washes

0 Feet 400

FIGURE 4h

Surface Water Resources

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

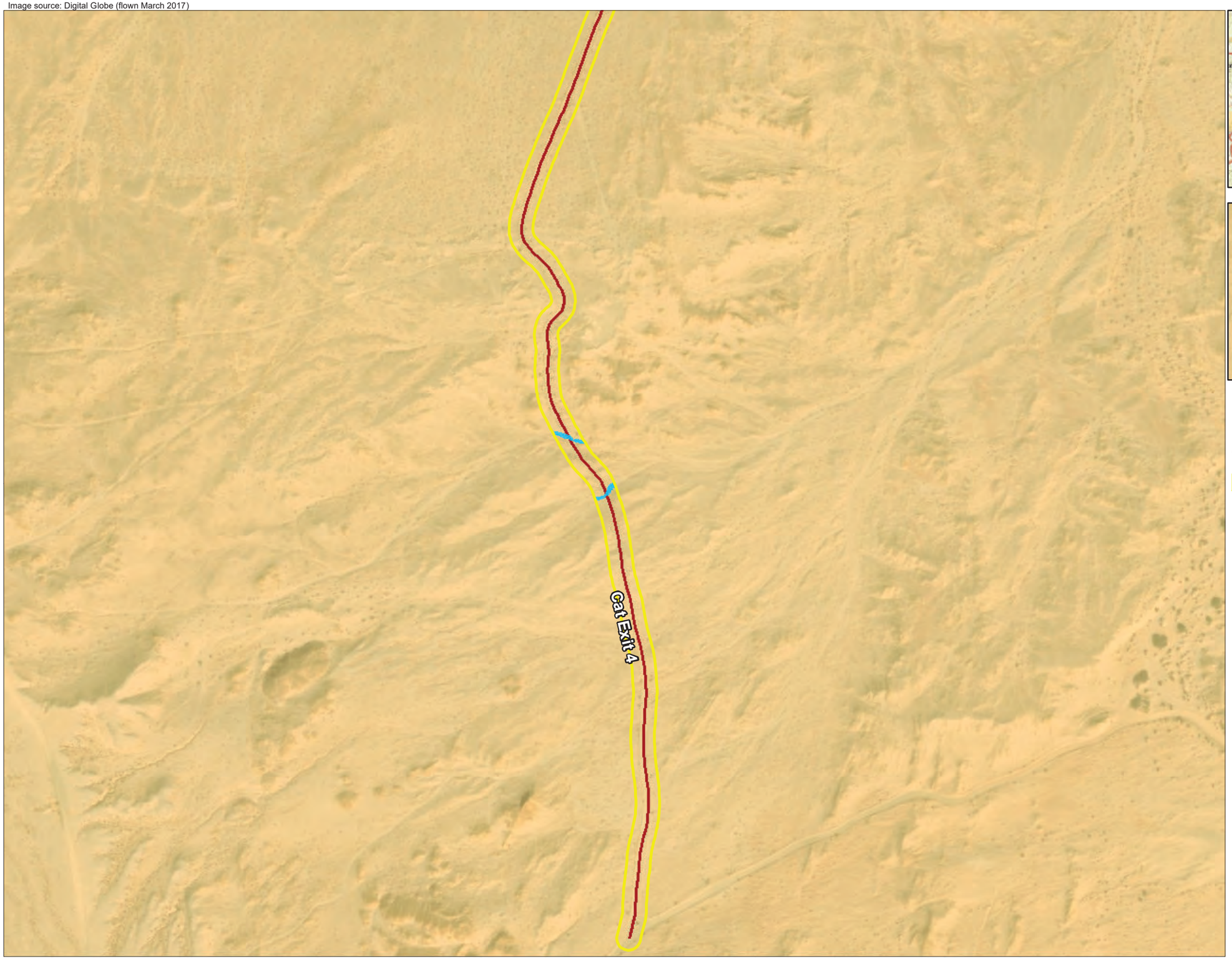
Non-wetland Waters/ Ephemeral Washes

0 Feet 400

FIGURE 4i

Surface Water Resources

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

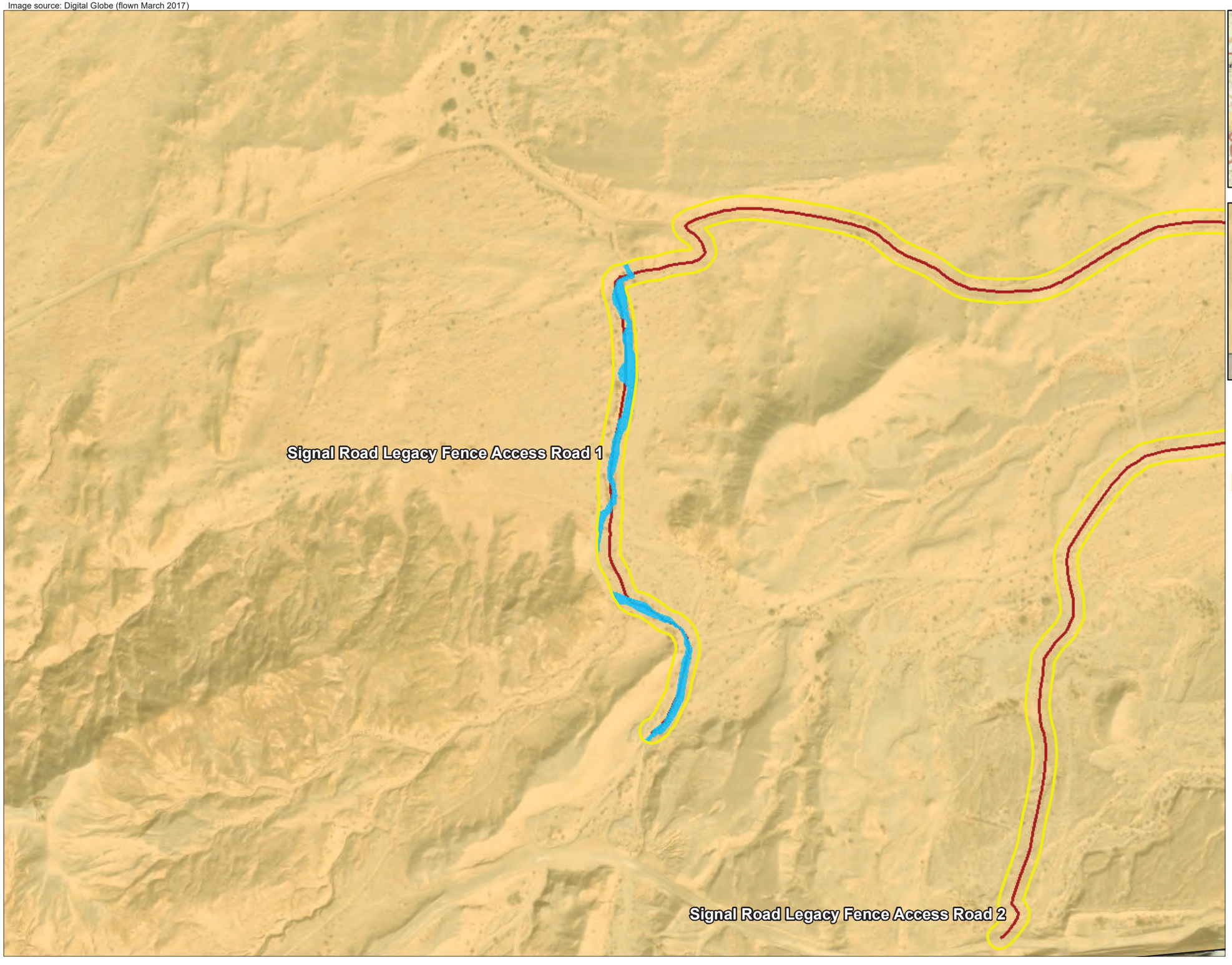
Non-wetland Waters/ Ephemeral Washes

0 Feet 400

FIGURE 4j

Surface Water Resources

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Road Segments on BLM-administered Lands

Survey Area

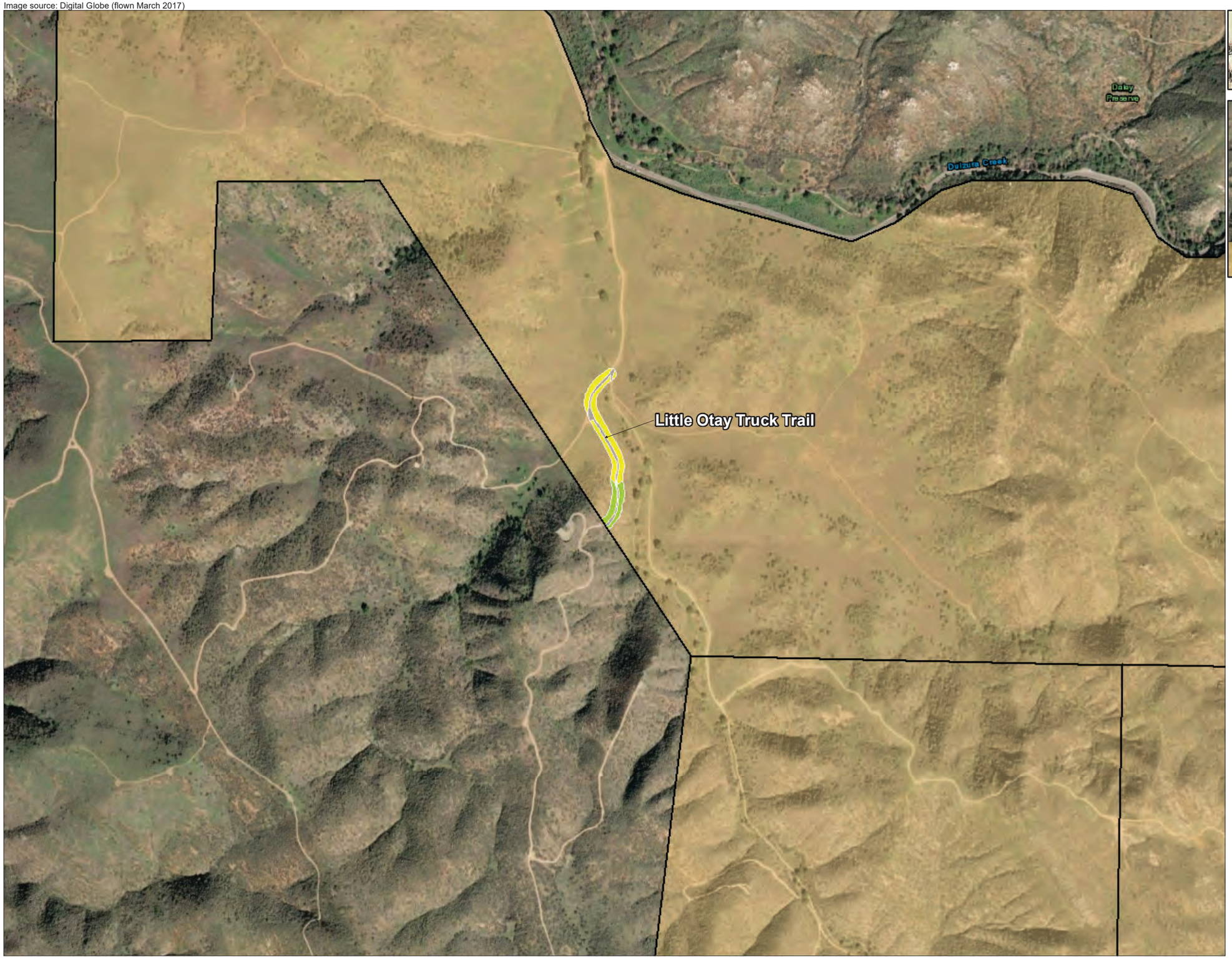
Non-wetland Waters/ Ephemeral Washes

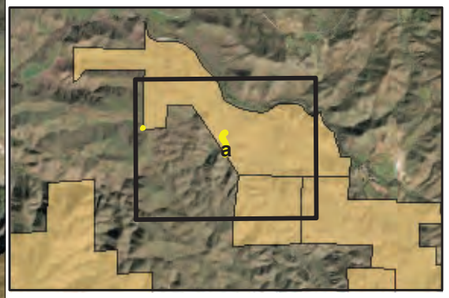
0 Feet 400

FIGURE 4k

Surface Water Resources

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Annual and Perennial Grassland Semi-Natural Stands

Eriogonum fasciculatum Shrubland Alliance

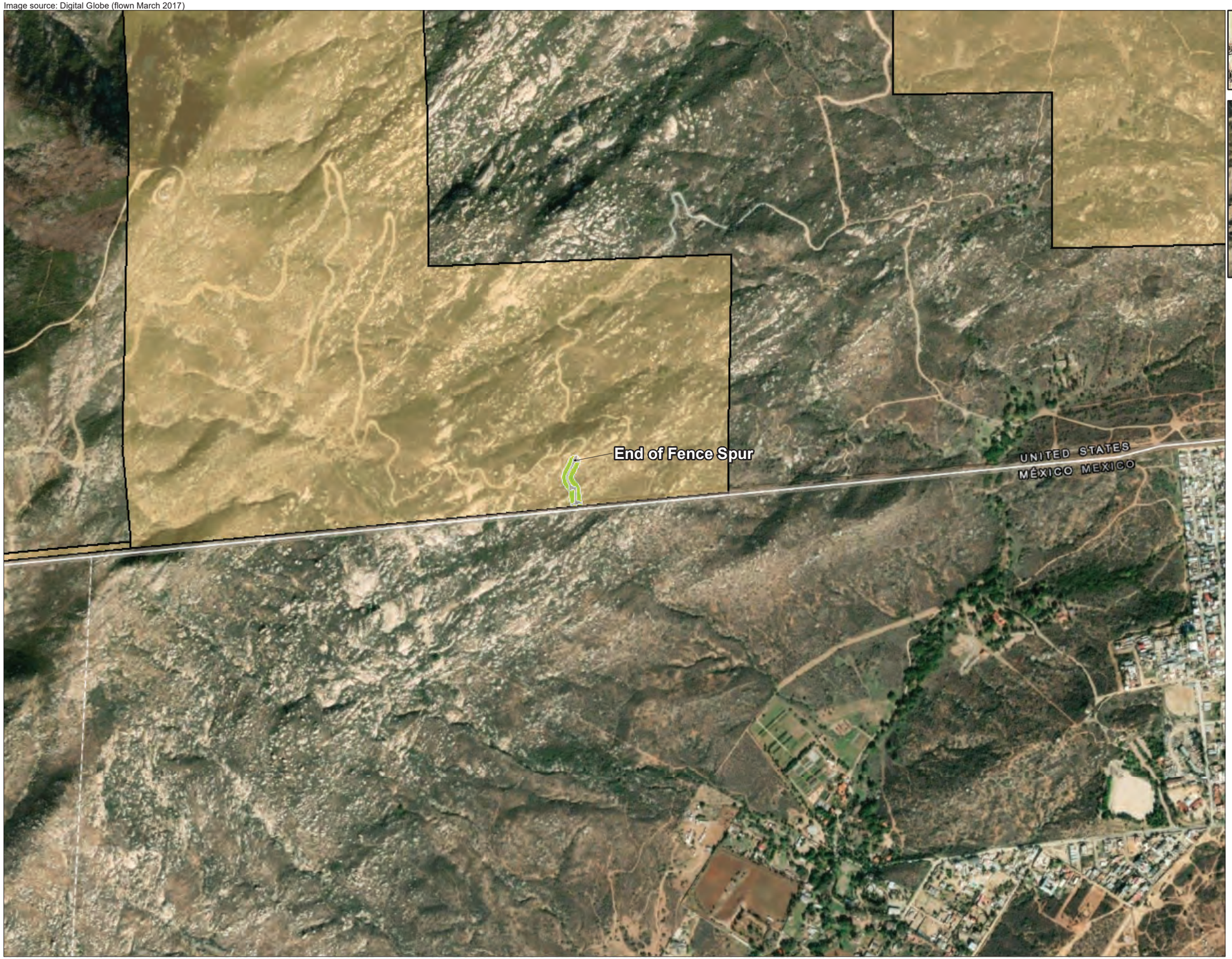
Developed - Road

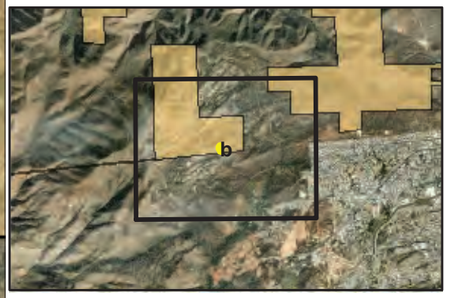
0 Feet 800

FIGURE 5a

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Eriogonum fasciculatum Shrubland Alliance

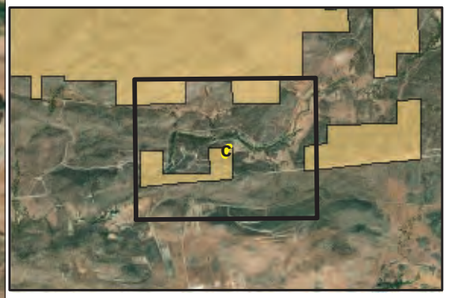
Developed - Road

0 Feet 800

FIGURE 5b

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Avena (barbata, fatua)
Semi-Natural Herbaceous Stands

Eriogonum fasciculatum
Shrubland Alliance

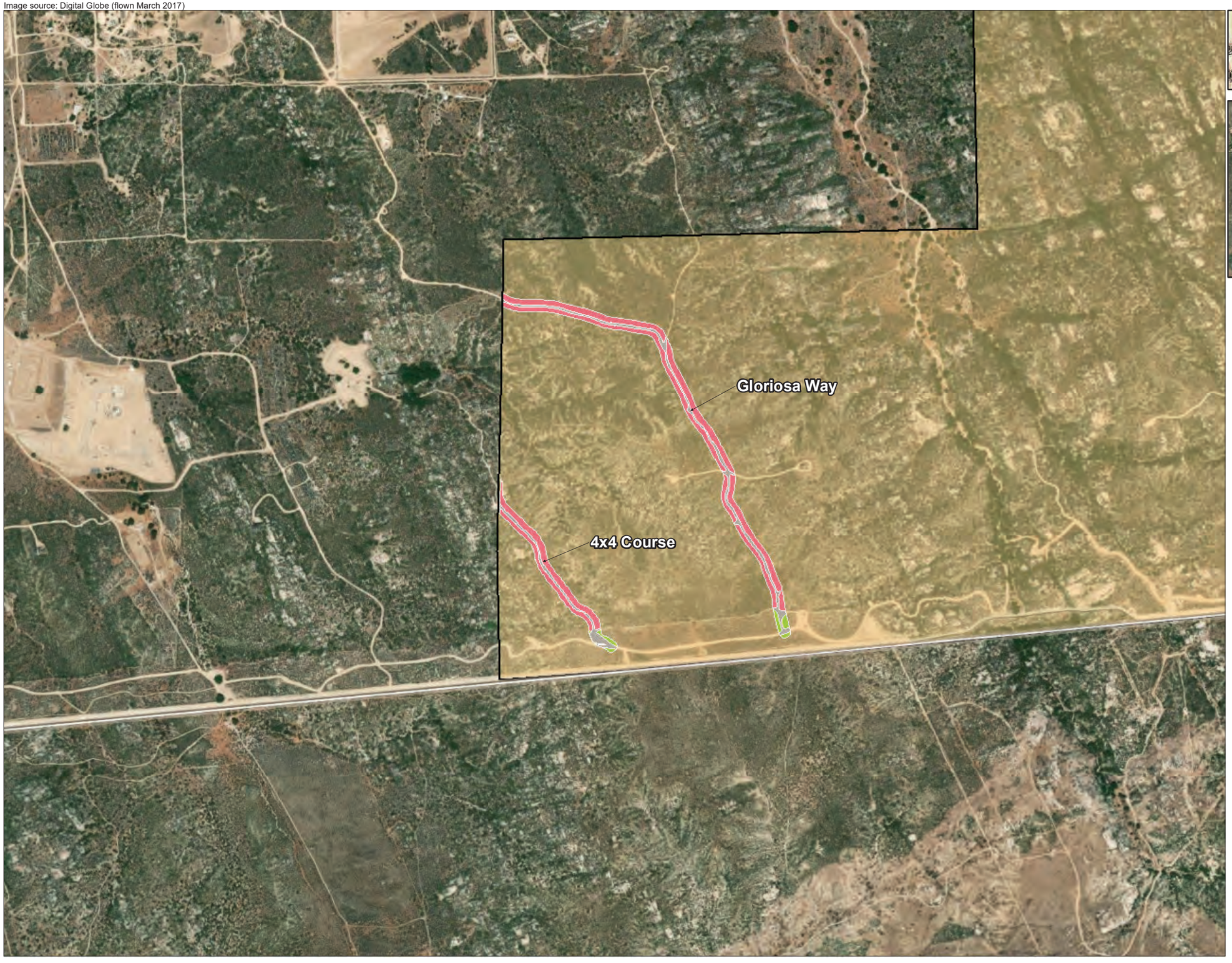
Developed - Road

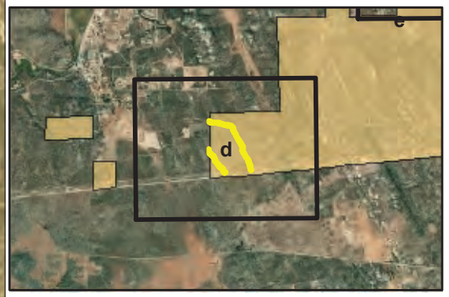
0 Feet 800

FIGURE 5c

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

Eriogonum fasciculatum Shrubland Alliance

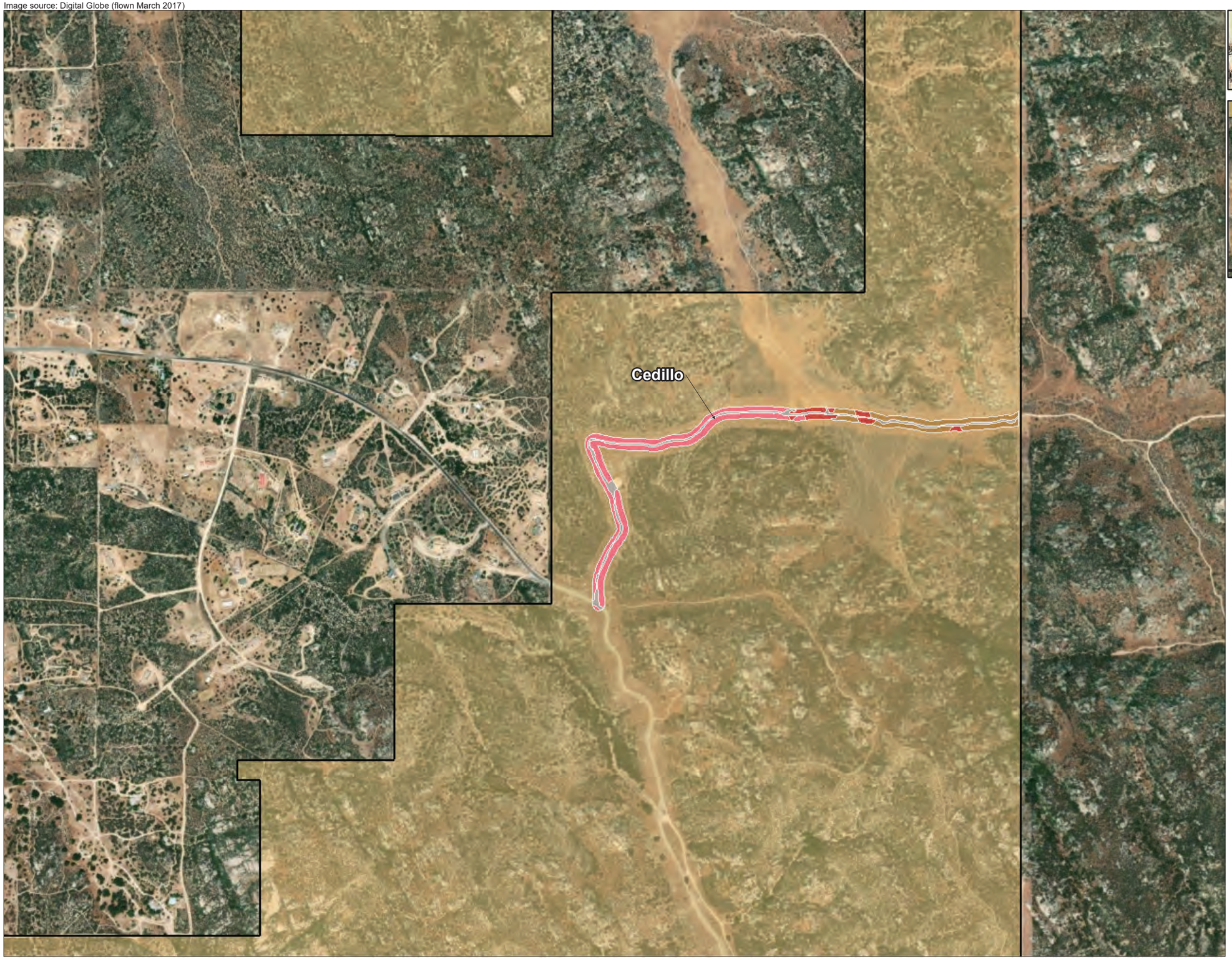
Developed - Road

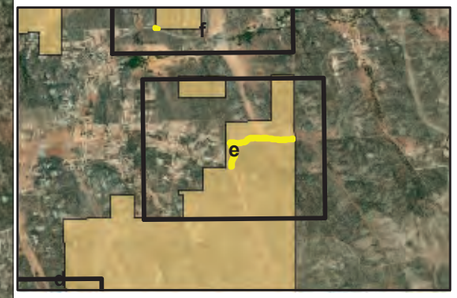
0 Feet 800

FIGURE 5d

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

Artemisia tridentata Shrubland Alliance

Bromus (diandrus, hordeaceus) – Brachypodium distachyon Semi-Natural Herbaceous Stands

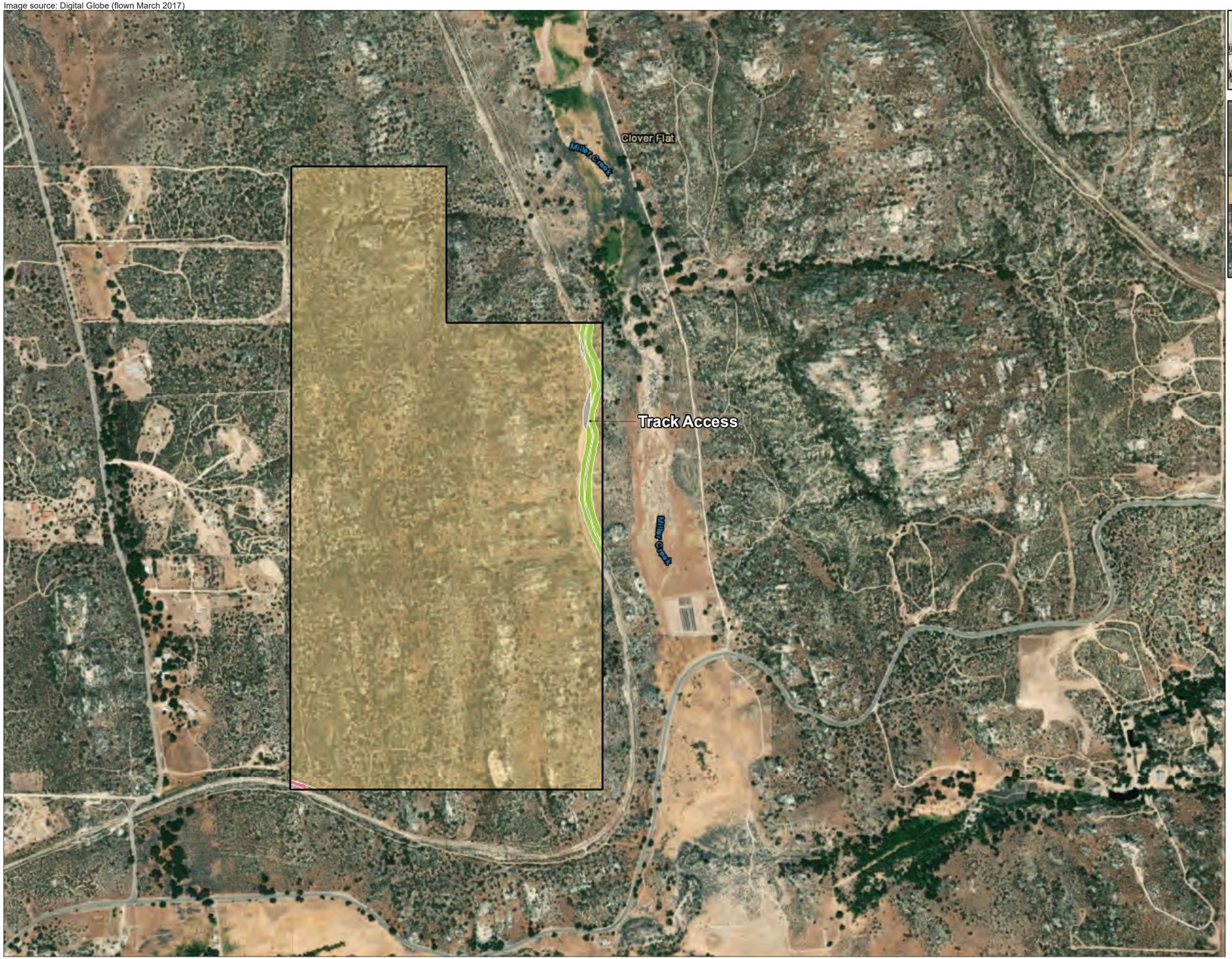
Developed - Road

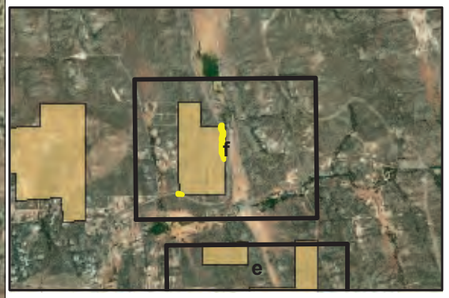
0 Feet 800

FIGURE 5e

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

Artemisia tridentata Shrubland Alliance

Eriogonum fasciculatum Shrubland Alliance

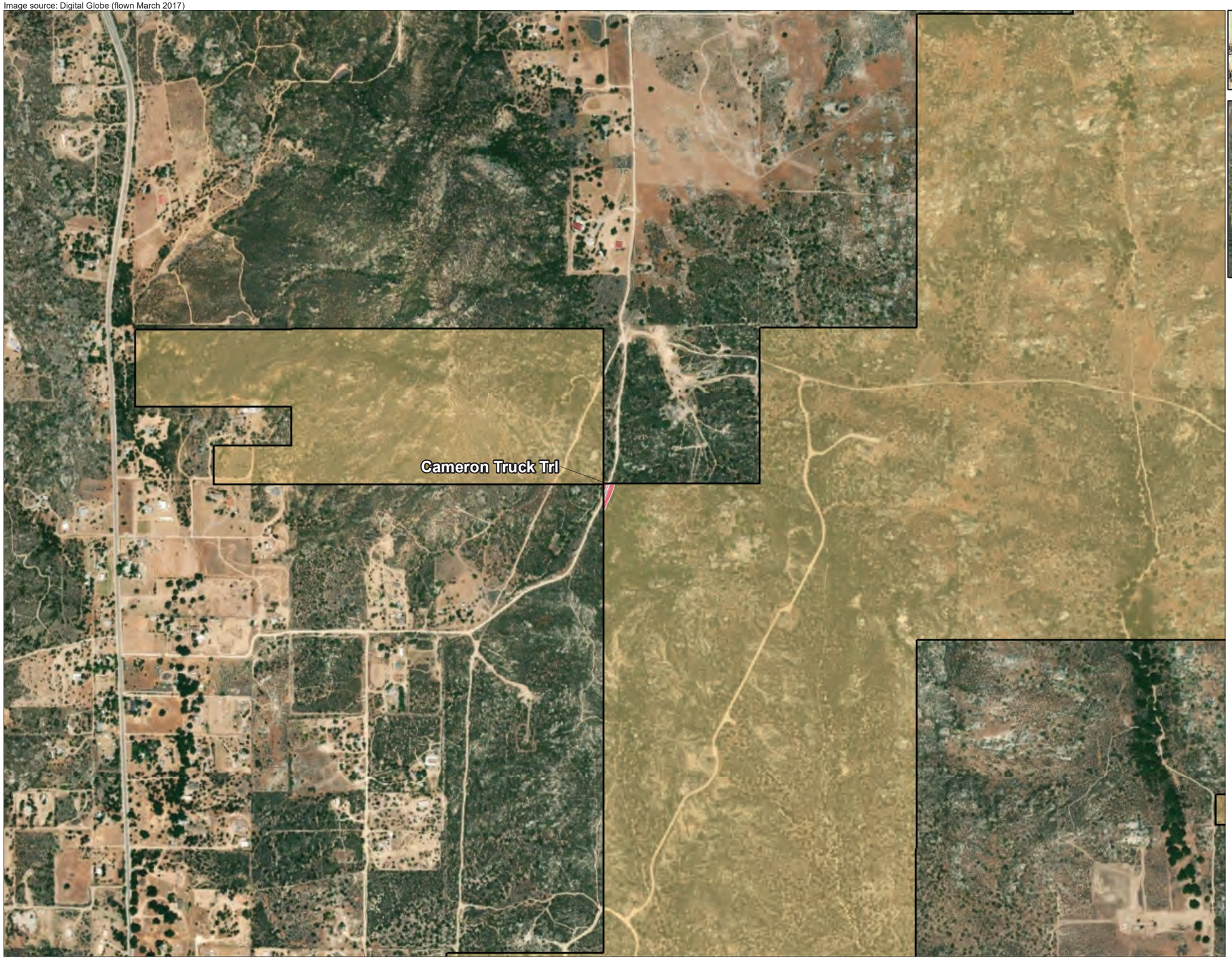
Developed - Road

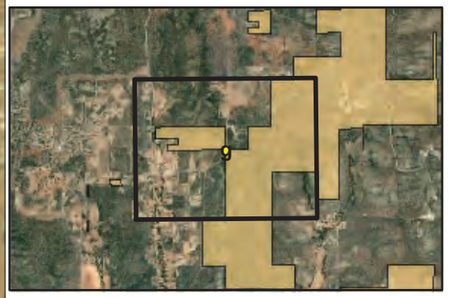
0 Feet 800

FIGURE 5f

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

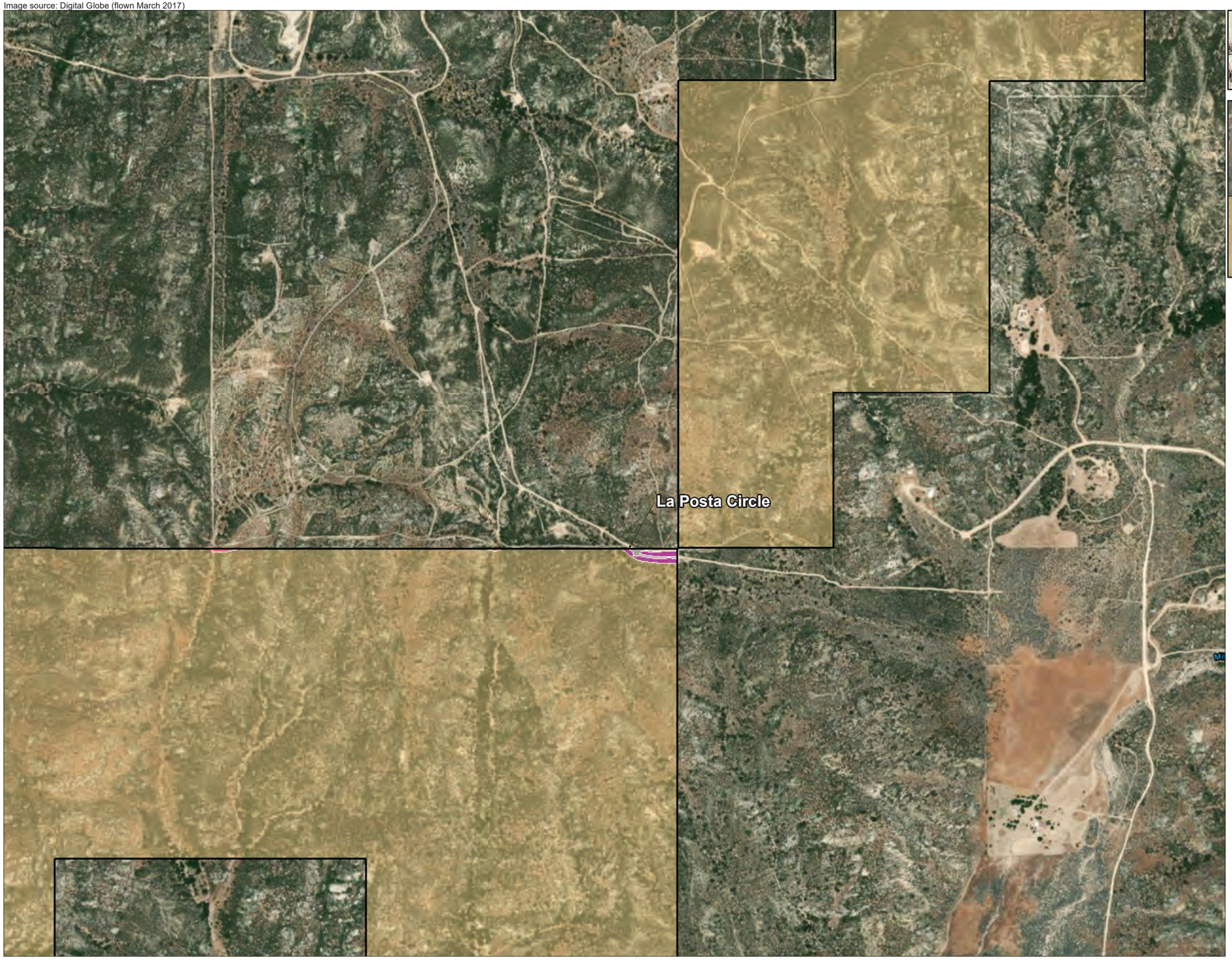
Developed - Road

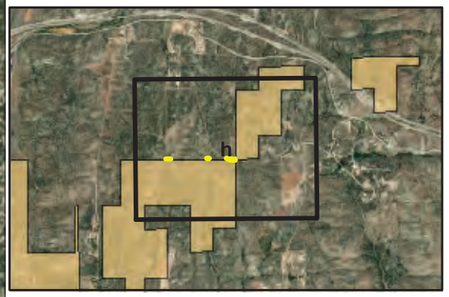
0 Feet 800

FIGURE 5g

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

Quercus berberidifolia – Adenostoma fasciculatum Shrubland Alliance

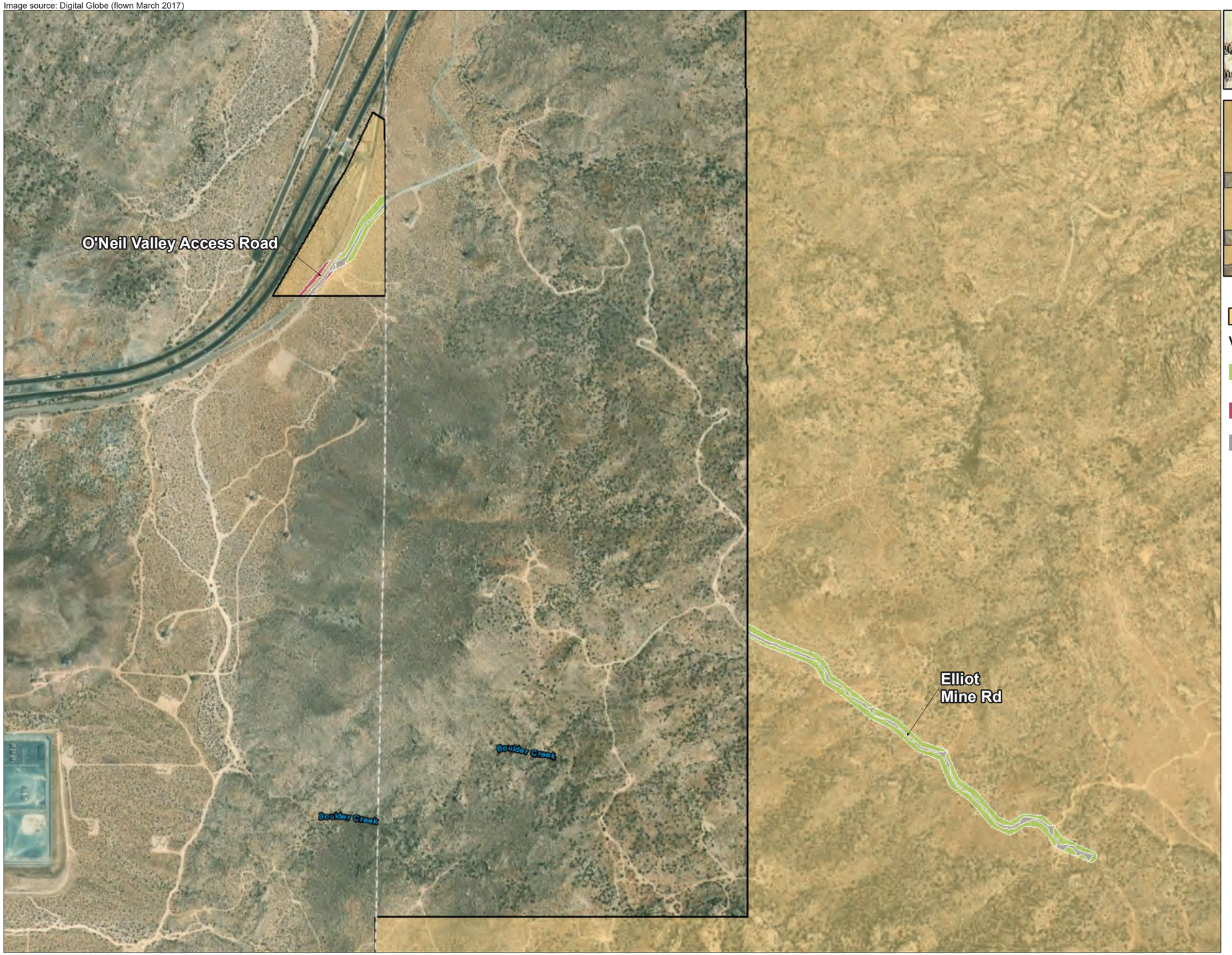
Developed - Road

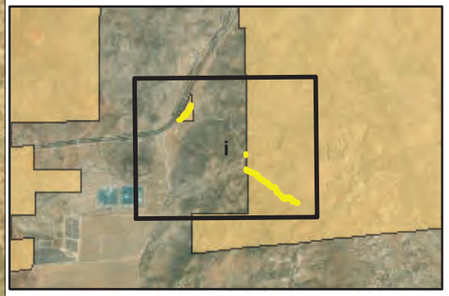
0 Feet 800

FIGURE 5h

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Quercus cornelius-mulleri Shrubland Alliance

Simmondsia chinensis Provisional Shrubland Alliance

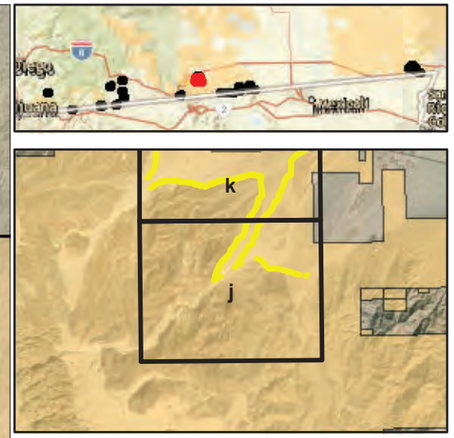
Developed - Road

0 Feet 800

FIGURE 5i

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Psorothamnus spinosus Woodland Alliance

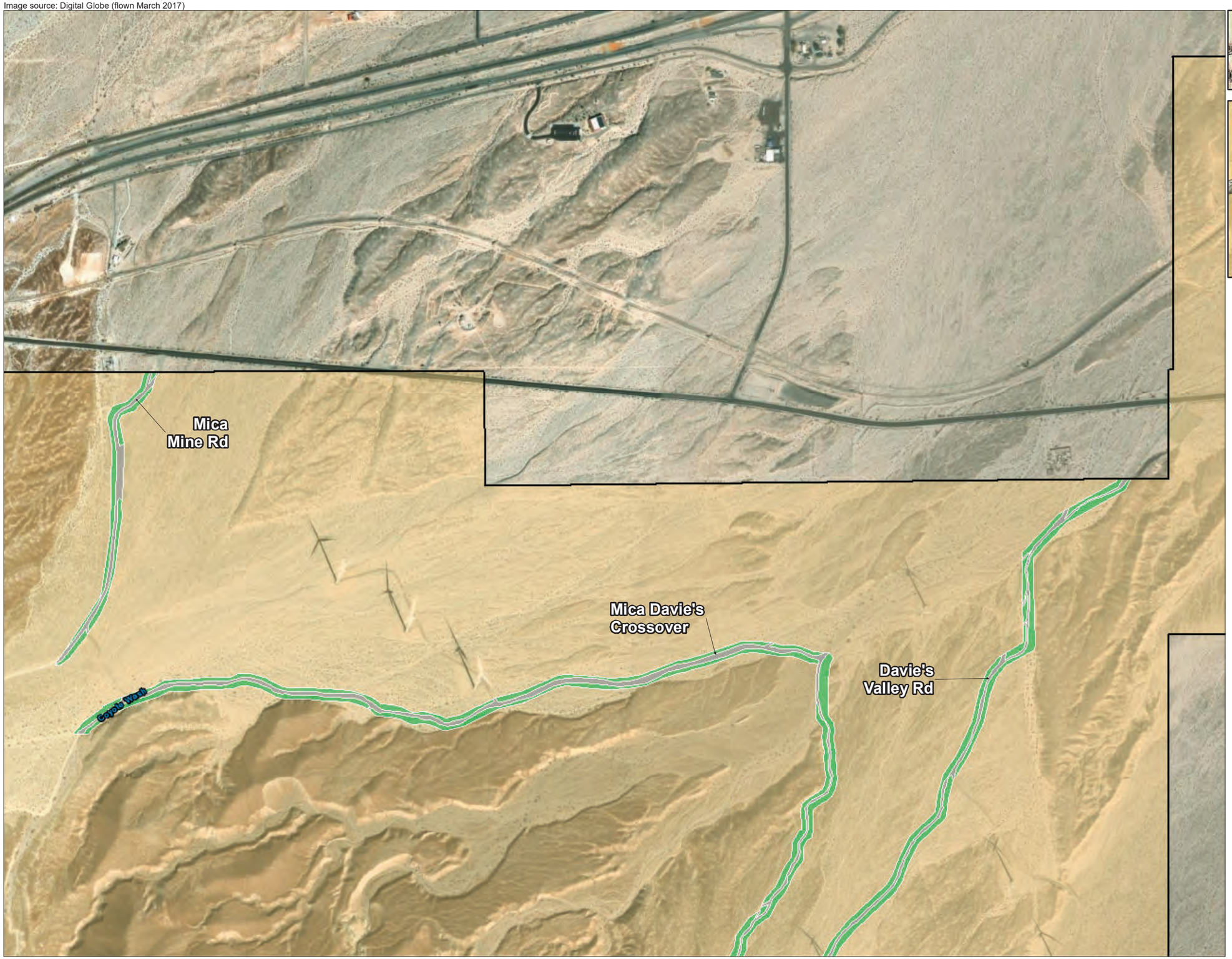
Developed - Road

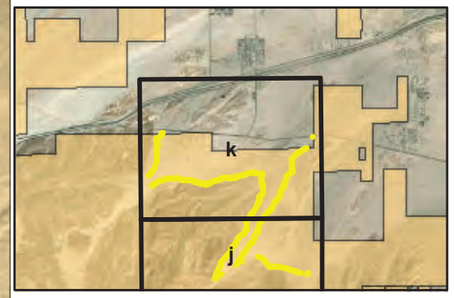
0 Feet 800

FIGURE 5j

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Psorothamnus spinosus
Woodland Alliance

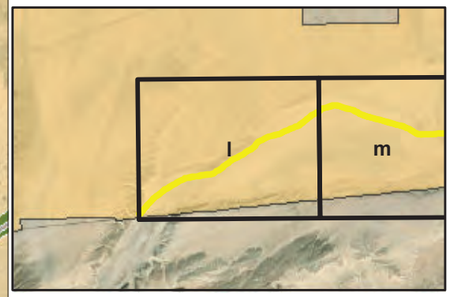
Developed - Road

0 Feet 800

FIGURE 5k

Vegetation Communities
within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Ambrosia salsola Shrubland Alliance

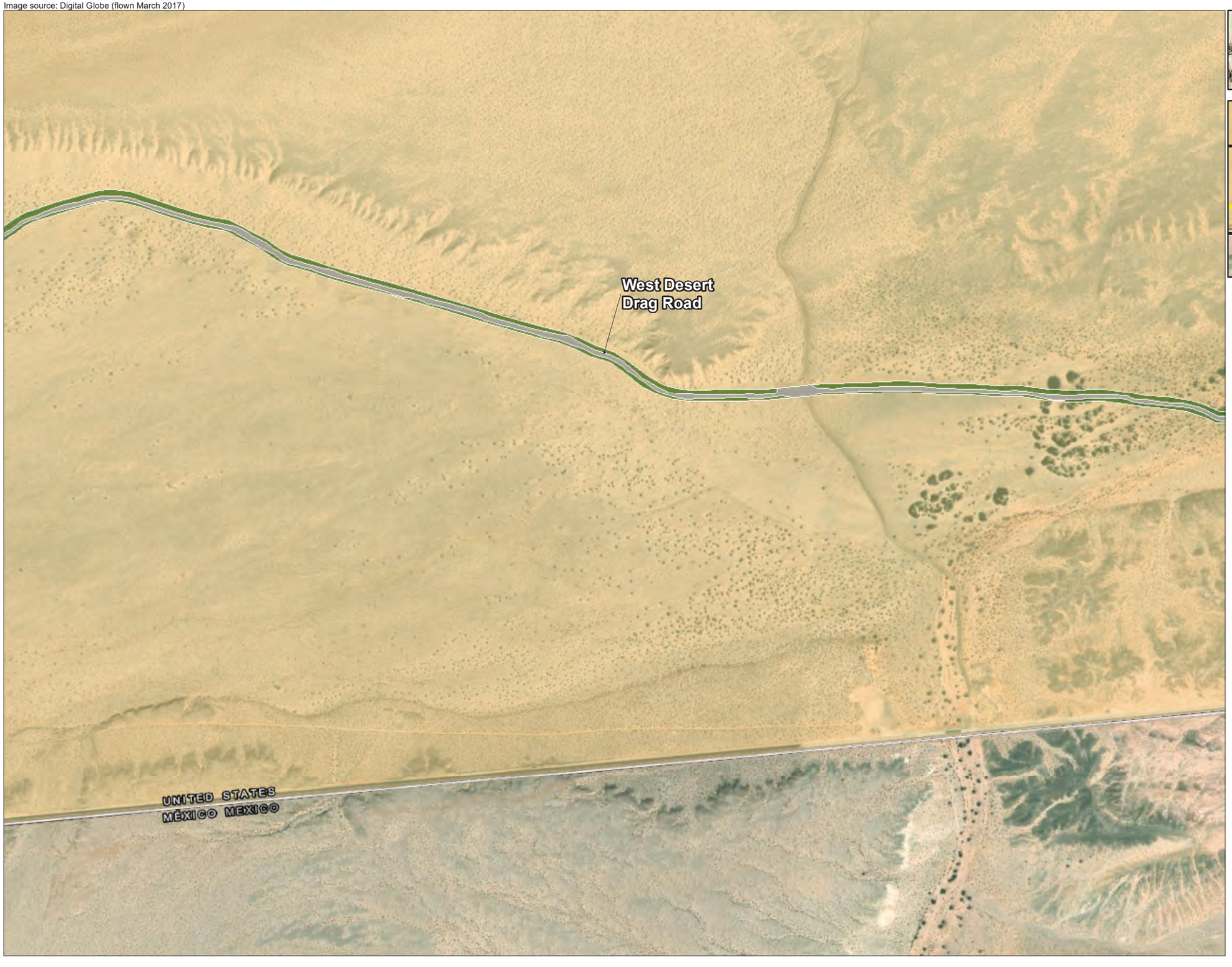
Developed - Road

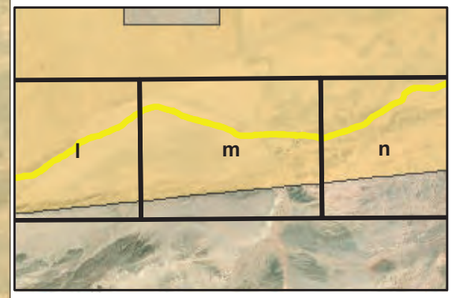
0 Feet 800

FIGURE 5l

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Ambrosia salsola Shrubland Alliance

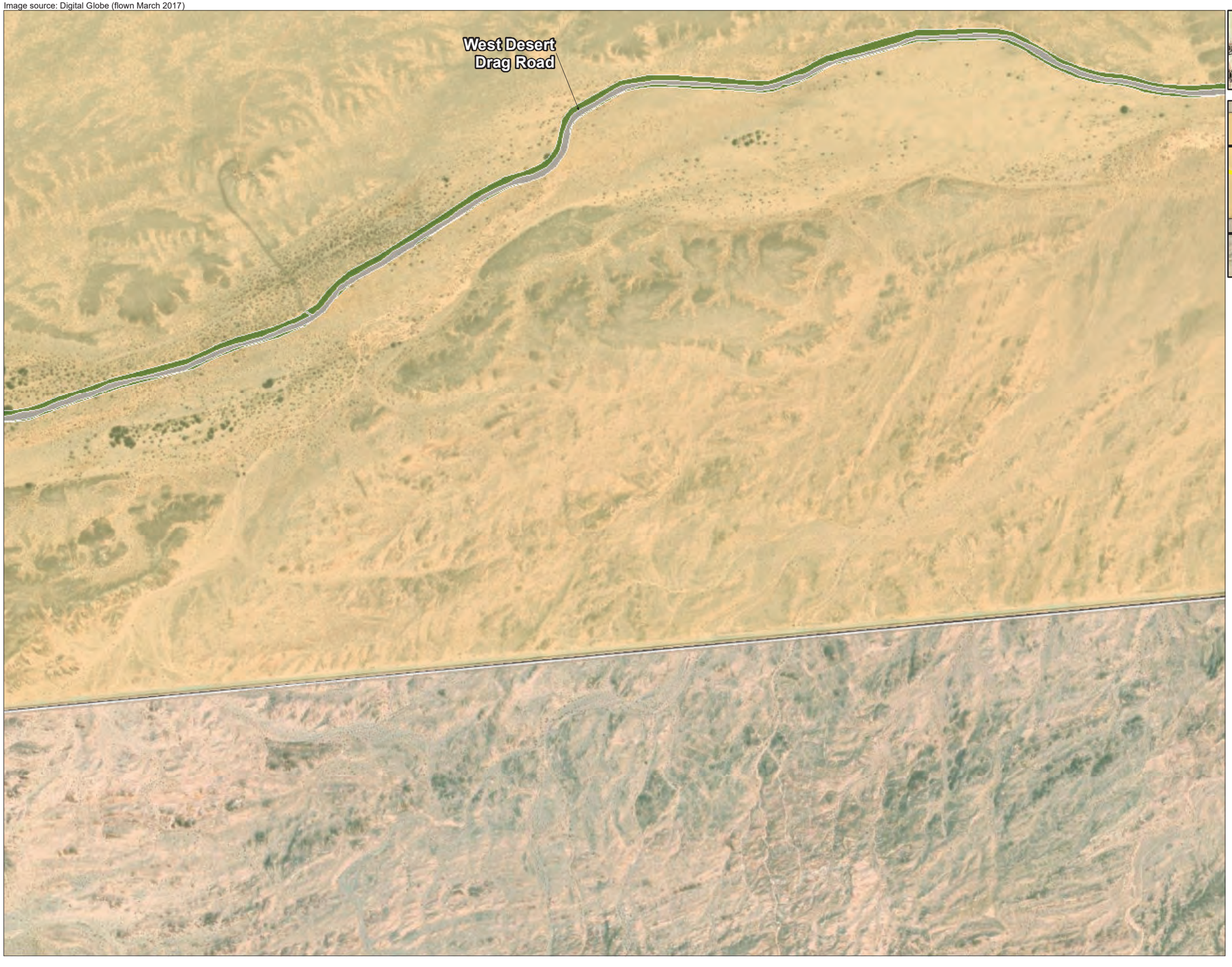
Developed - Road

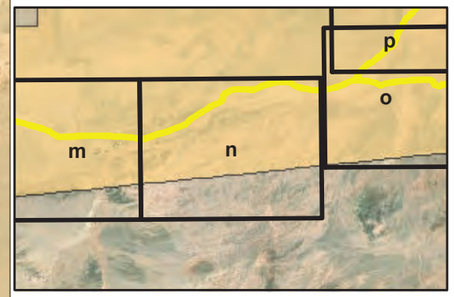
0 Feet 800

FIGURE 5m

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Ambrosia salsola Shrubland Alliance

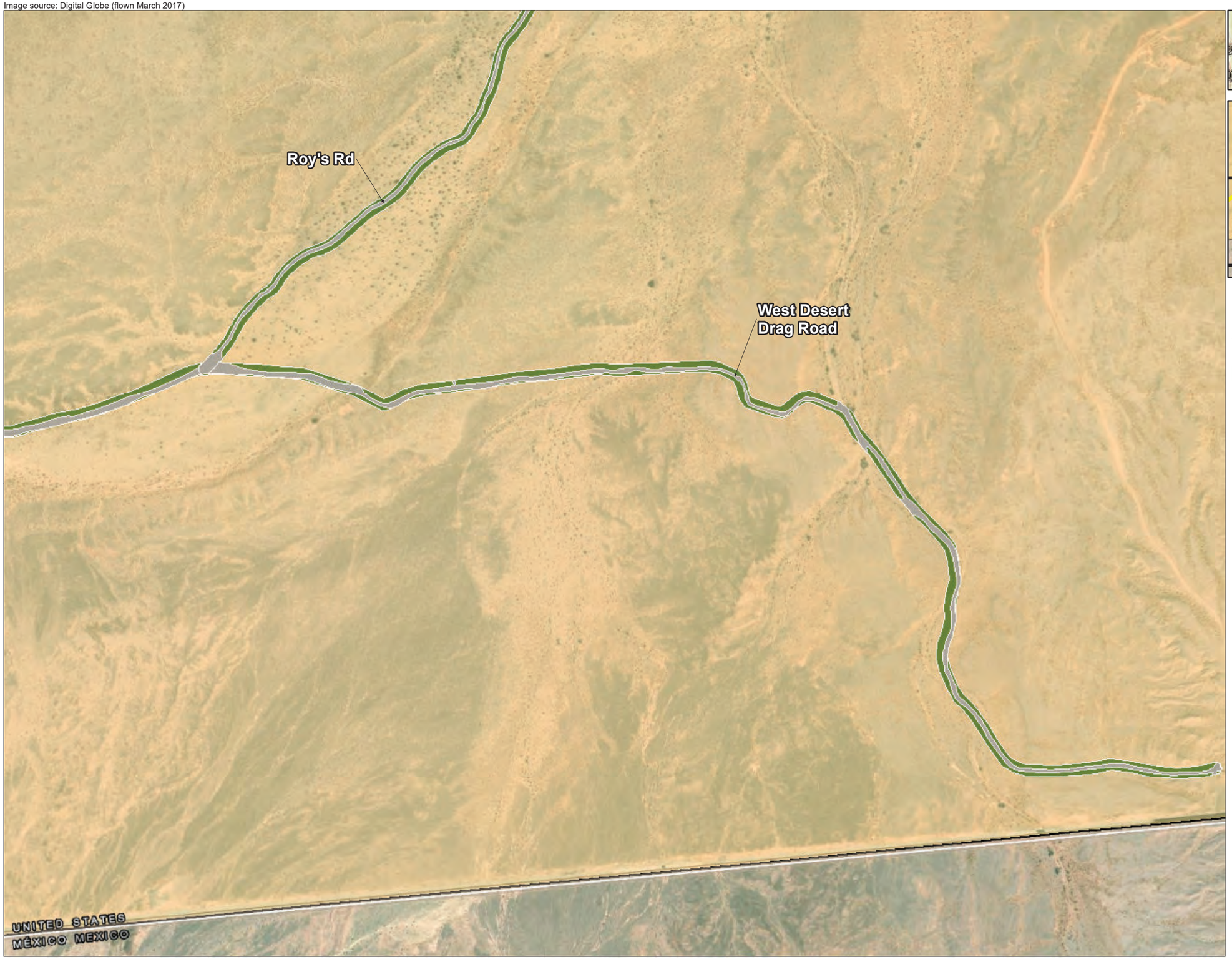
Developed - Road

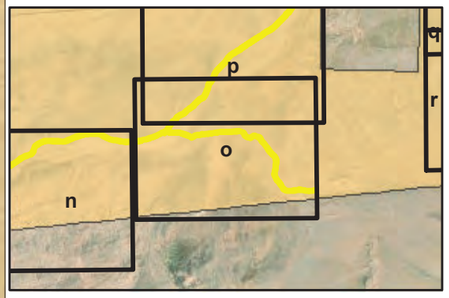
0 Feet 800

FIGURE 5n

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Ambrosia salsola Shrubland Alliance

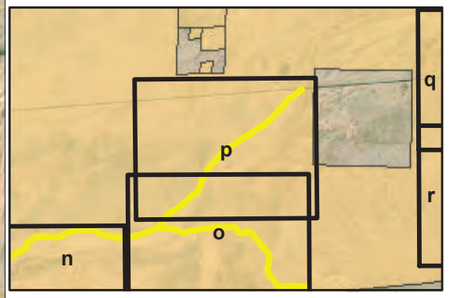
Developed - Road

0 Feet 800

FIGURE 5o

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Ambrosia salsola Shrubland Alliance

Larrea tridentata Shrubland Alliance

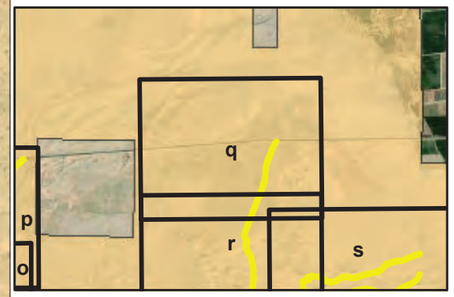
Developed - Road

0 Feet 800

FIGURE 5p

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Larrea tridentata Shrubland Alliance

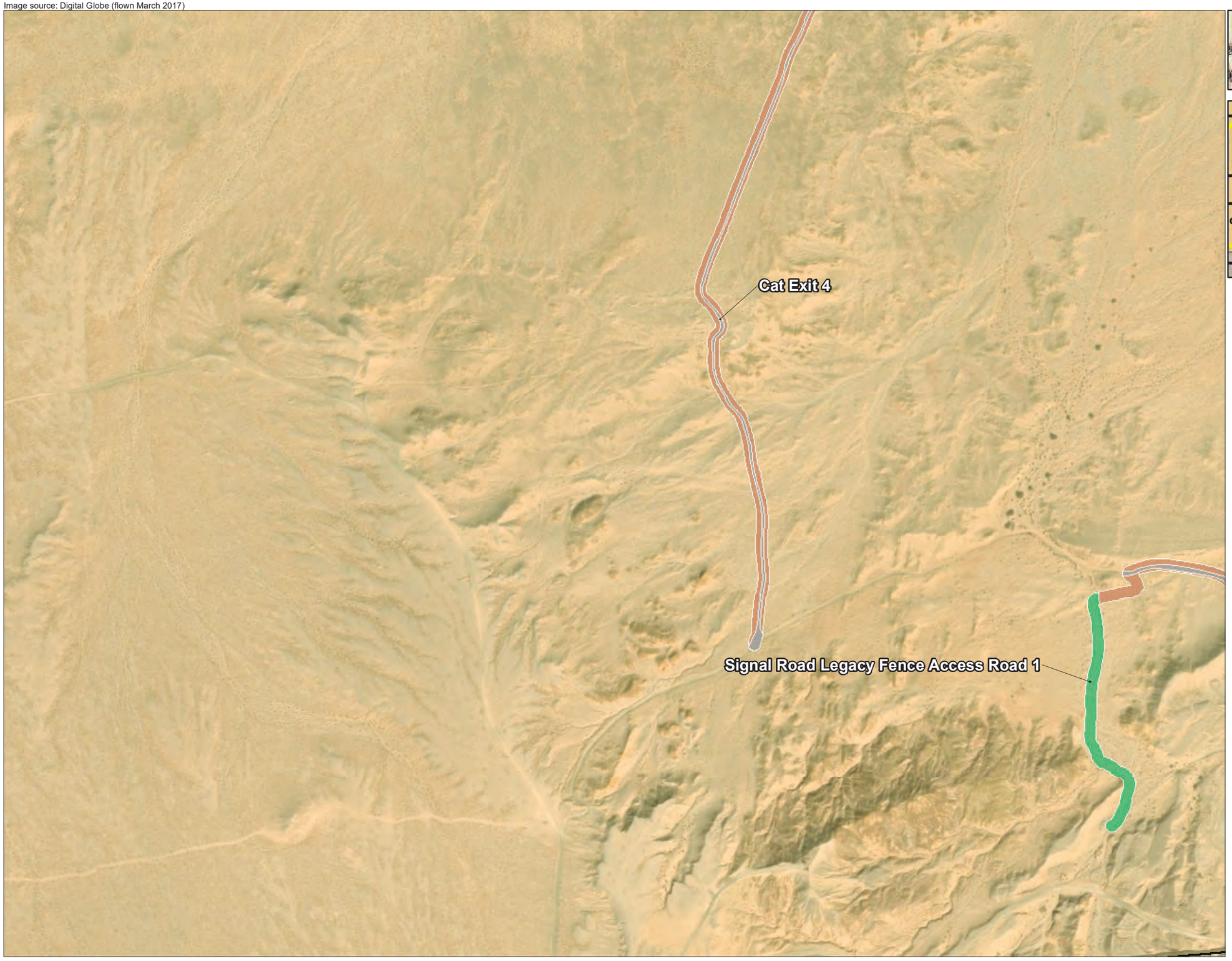
Developed - Road

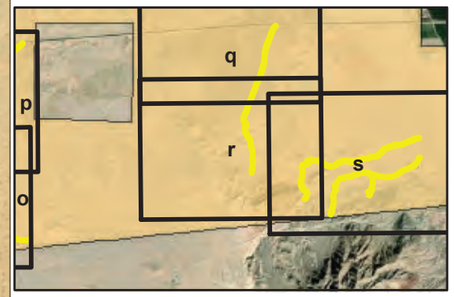
0 Feet 800

FIGURE 5q

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Atriplex canescens Shrubland Alliance

Larrea tridentata Shrubland Alliance

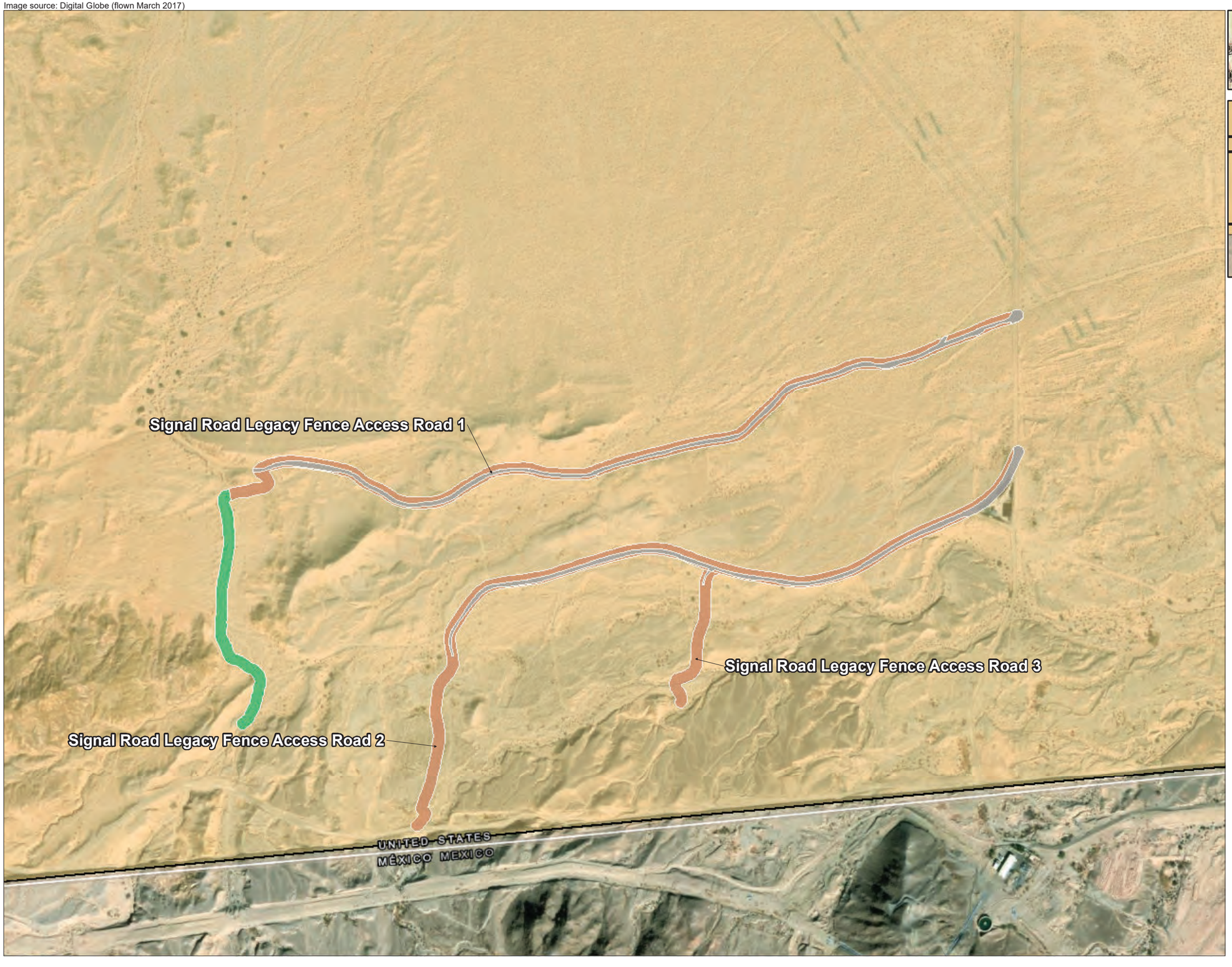
Developed - Road

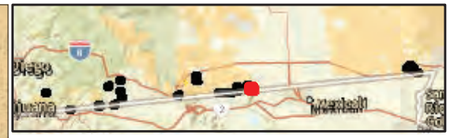
0 Feet 800

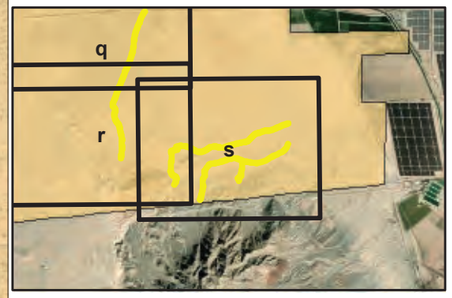
FIGURE 5r

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)







BLM-administered Lands

Vegetation Communities

Atriplex canescens Shrubland Alliance

Larrea tridentata Shrubland Alliance

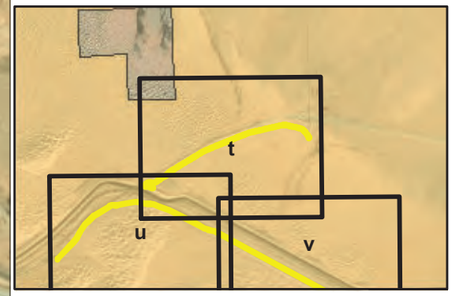
Developed - Road

0 Feet 800

FIGURE 5s

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Larrea tridentata Shrubland Alliance

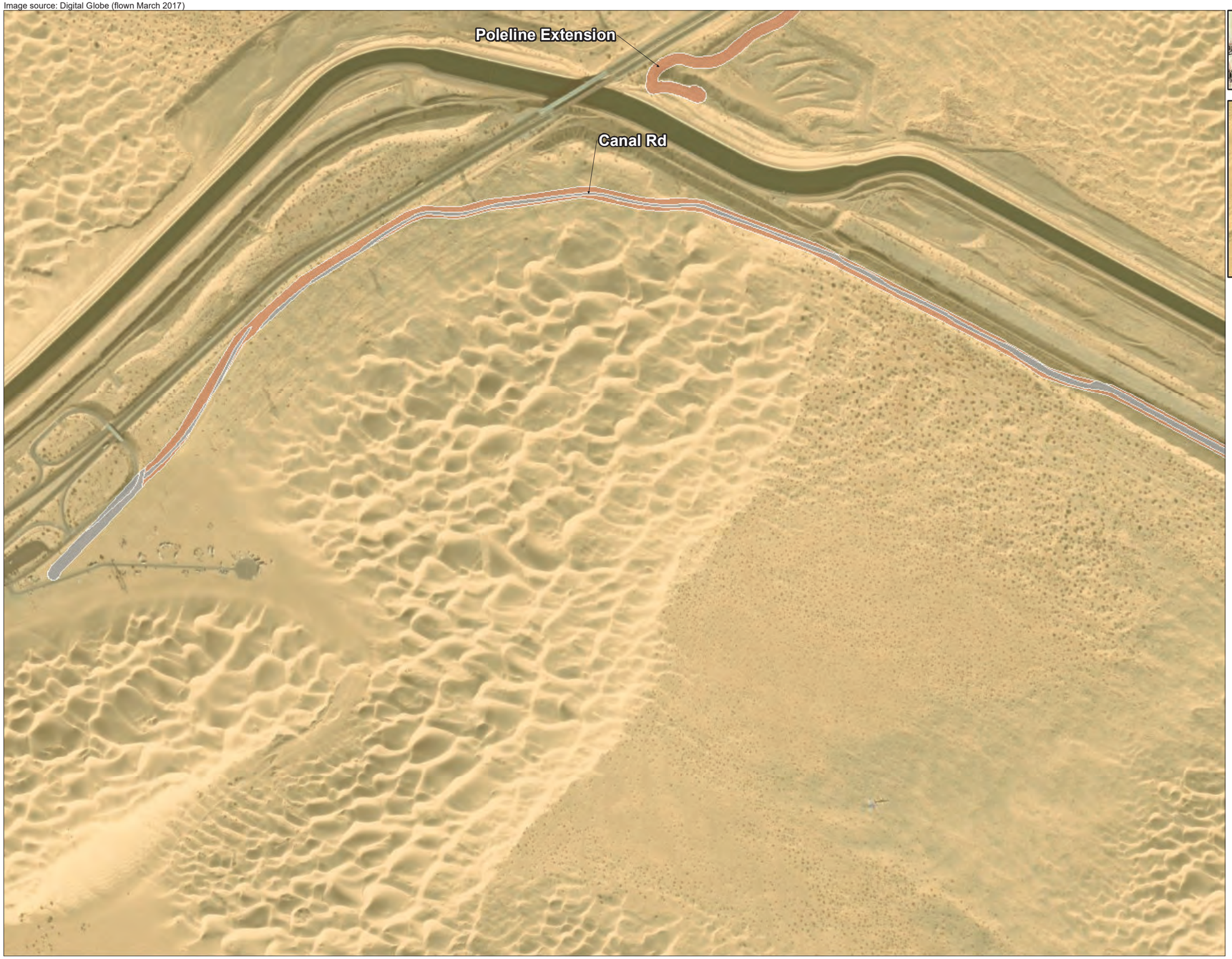
Developed - Road

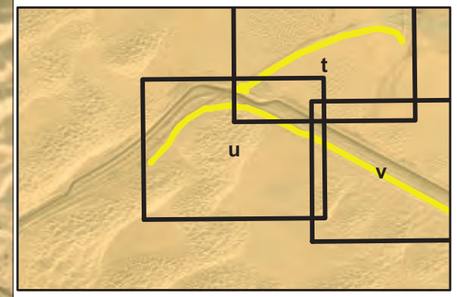
0 Feet 800

FIGURE 5t

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)





BLM-administered Lands

Vegetation Communities

Larrea tridentata Shrubland Alliance

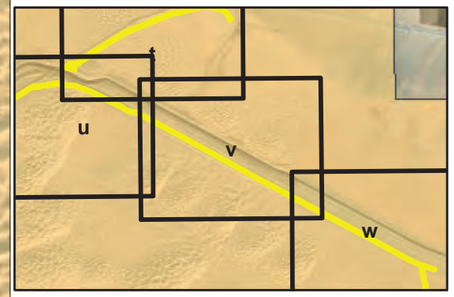
Developed - Road

0 Feet 800

FIGURE 5u

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Larrea tridentata Shrubland Alliance

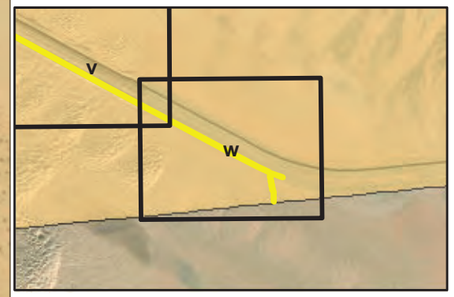
Developed - Road

0 Feet 800

FIGURE 5v

Vegetation Communities within the Survey Area

Image source: Digital Globe (flown March 2017)



BLM-administered Lands

Vegetation Communities

Larrea tridentata Shrubland Alliance

Developed - Road

0 Feet 800

FIGURE 5w

Vegetation Communities within the Survey Area

Image source: DigitalGlobe (flown November 2018)

- Road Segments on BLM-administered Lands
- San Diego Fairy Shrimp FCH
- ArroyoToad FCH
- Coastal California Gnatcatcher FCH
- Mexican Flannelbush FCH
- Least Bell's Vireo FCH
- Quino Checkerspot Butterfly FCH

0 Miles 1

FIGURE 6a
Federally Listed Species Critical Habitats within the Project Areas

Image source: DigitalGlobe (flown November 2018)

La Posta Circle

Cameron Truck Trl

Track Access

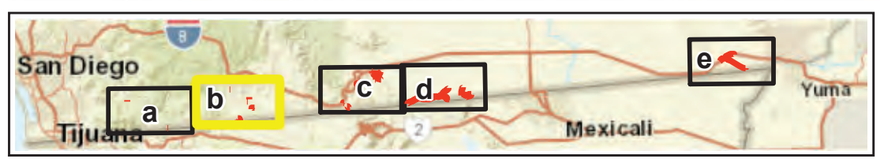
Cedillo

4x4 Course

Gloriosa Way

Reyes Rd

MEXICO



Road Segments on BLM-administered Lands

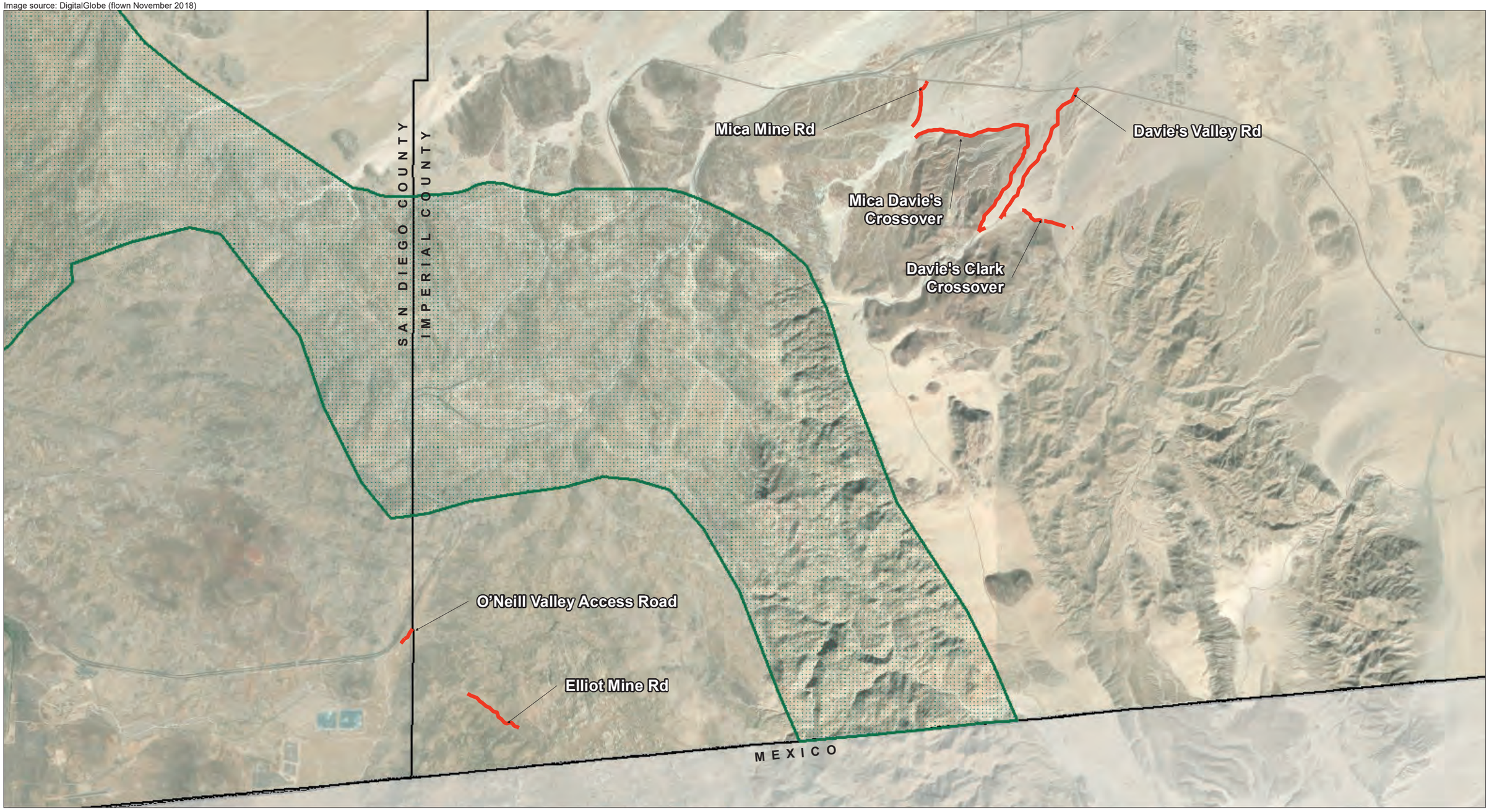
ArroyoToad FCH

Quino Checkerspot Butterfly FCH

0 Miles 1

FIGURE 6b
Federally Listed Species Critical Habitats within the Project Areas

Image source: DigitalGlobe (flown November 2018)



Road Segments on BLM-administered Lands

Penninsular Bighorn Sheep FCH

0 Miles 1

FIGURE 6c
Federally Listed Species Critical Habitats within the Project Areas

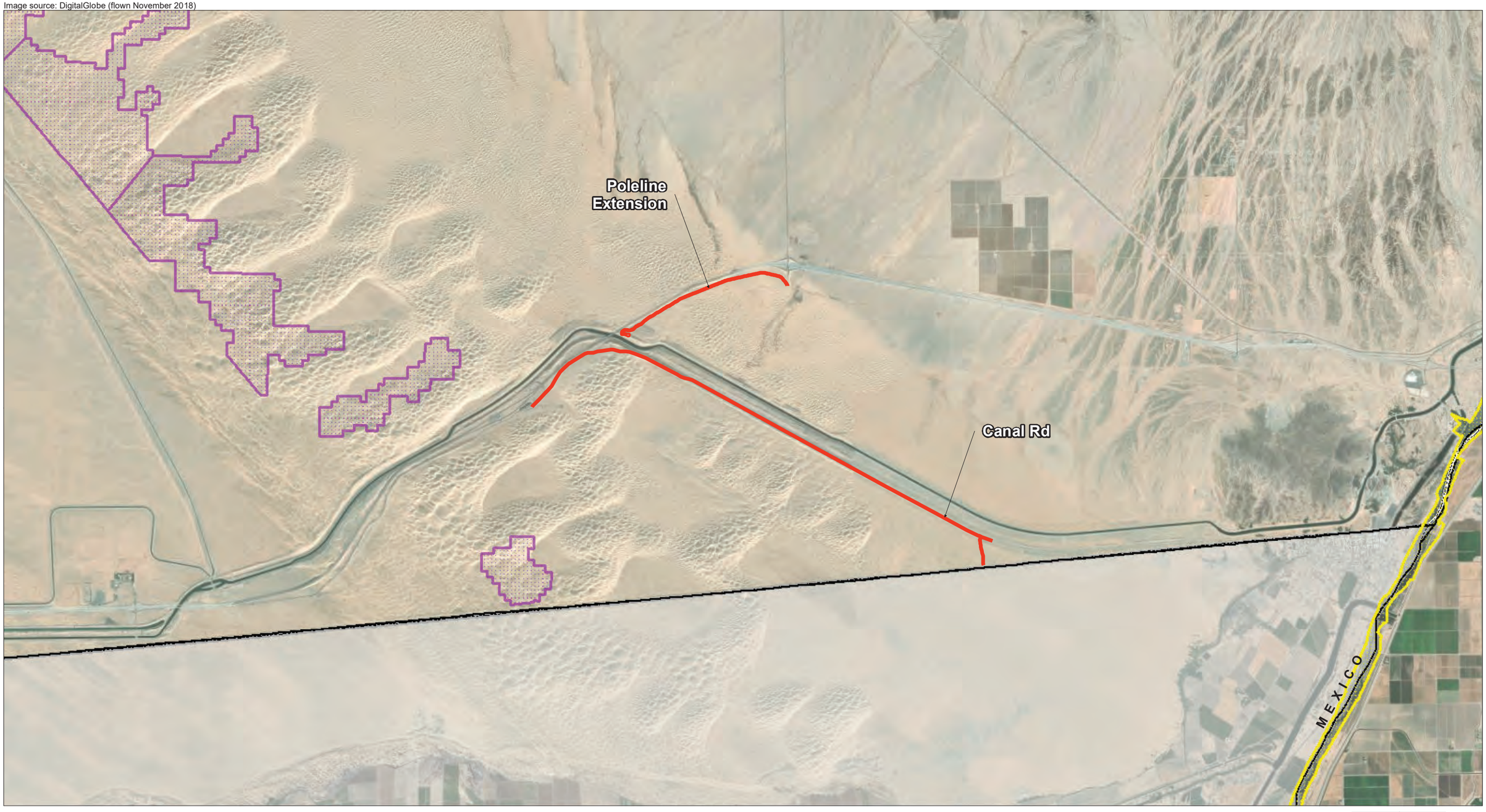
Image source: DigitalGlobe (flown November 2018)

Road Segments on BLM-administered Lands

0 Miles 1

FIGURE 6d
Federally Listed Species Critical Habitats within the Project Areas

Image source: DigitalGlobe (flown November 2018)



Road Segments on BLM-administered Lands

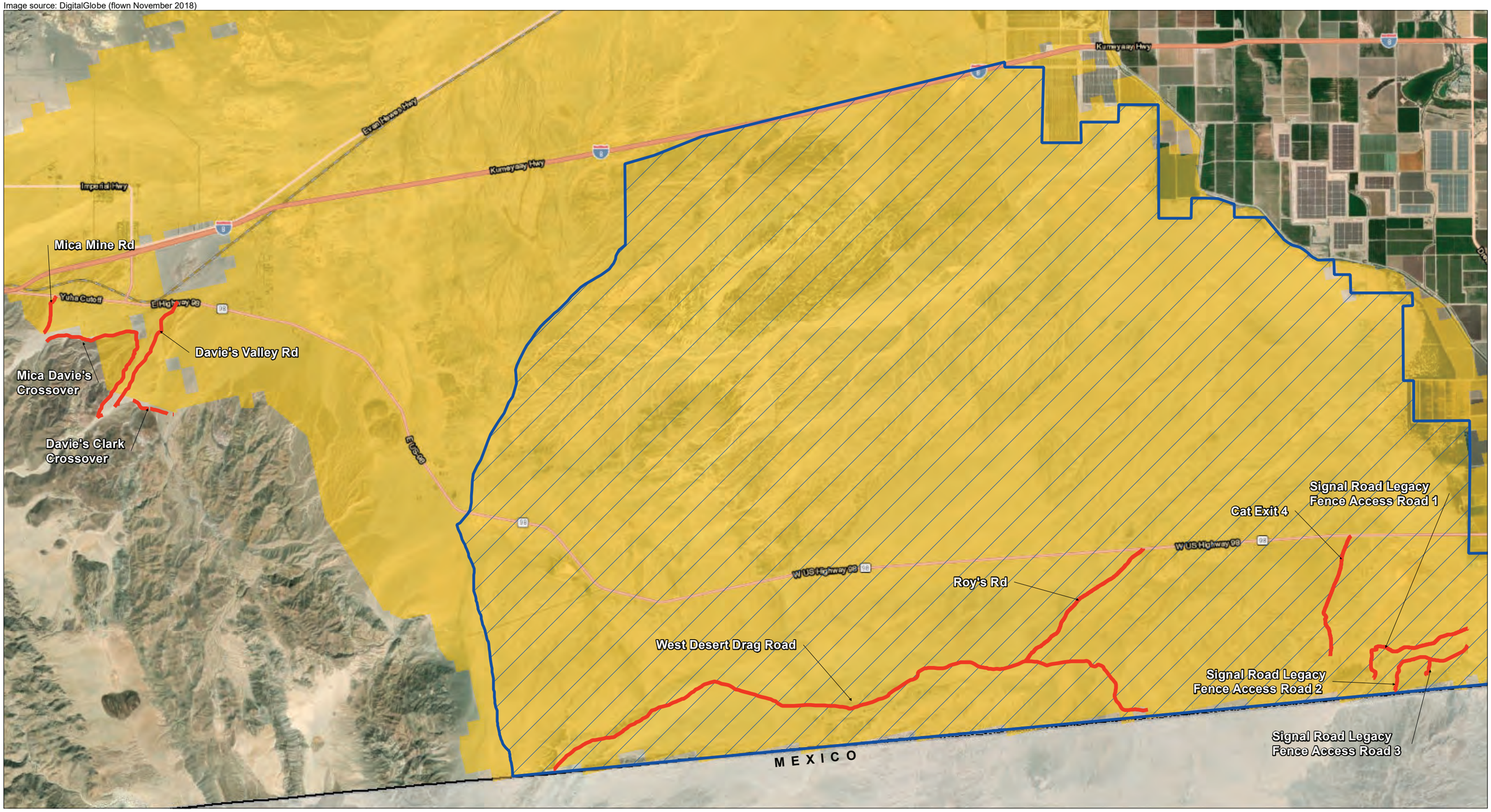
Peirson's Milk-vetch FCH

Yellow Billed Cuckoo PCH

0 Miles 1

FIGURE 6e
Federally Listed Species Critical Habitats within the Project Areas

Image source: DigitalGlobe (flown November 2018)



Road Segments on BLM-administered Lands

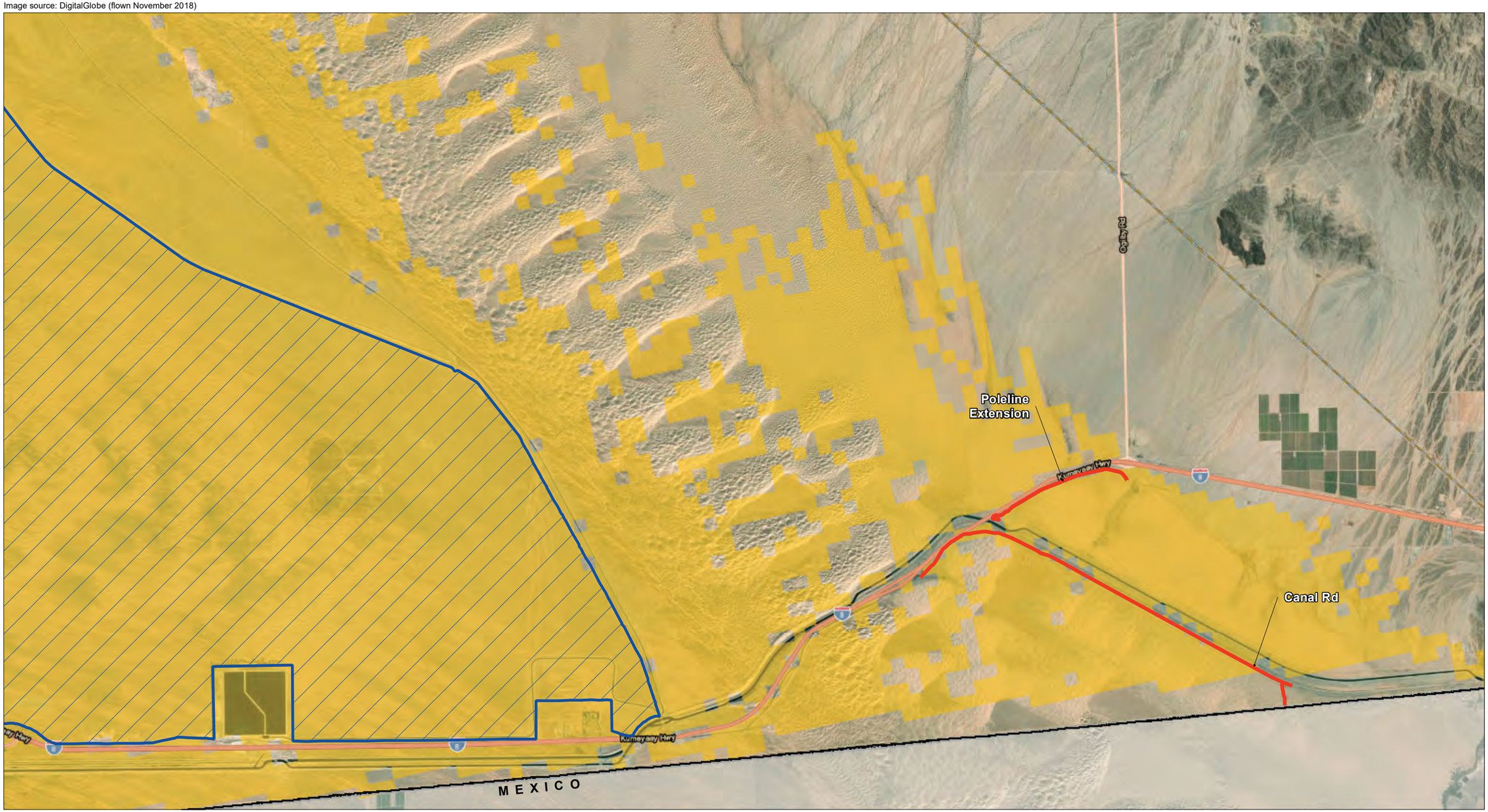
Yuha Basin Flat-Tailed Horned Lizard Management Area

Flat-Tailed Horned Lizard Suitable Habitat

FIGURE 7a

Yuha Basin Flat-Tailed Horned Lizard Management Area
and Flat-Tailed Horned Lizard Suitable Habitat

Image source: DigitalGlobe (flown November 2018)



Road Segments on BLM-administered Lands

East Mesa Flat-Tailed Horned Lizard Management Area

Flat-Tailed Horned Lizard Suitable Habitat

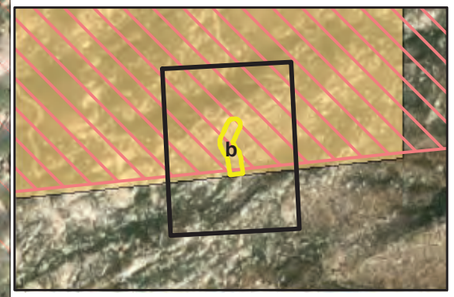
FIGURE 7b
East Mesa Flat-Tailed Horned Lizard Management Area
and Flat-Tailed Horned Lizard Suitable Habitat

Image source: Maxar (flown March 2019)

FIGURE 8a

Little Otay Truck Trail Quino Checkerspot Butterfly Federal Critical Habitat and USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Eriogonum fasciculatum Shrubland Alliance

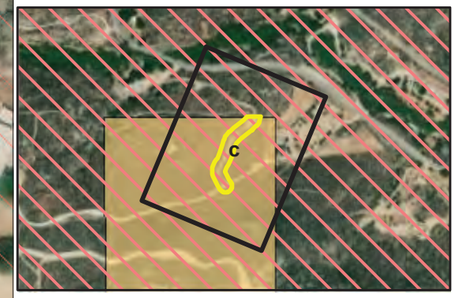
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8b

End of Fence Spur Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Avena (barbata, fatua)
Semi-Natural Herbaceous Stands

Eriogonum fasciculatum
Shrubland Alliance

Developed - Road
(maintenance and repair impact area)

0 Feet 100

FIGURE 8c
Reyes (Canyon City) Road
Quino Checkerspot Butterfly
USFWS Designated Survey Area

Image source: Maxar (flown March 2019)

Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

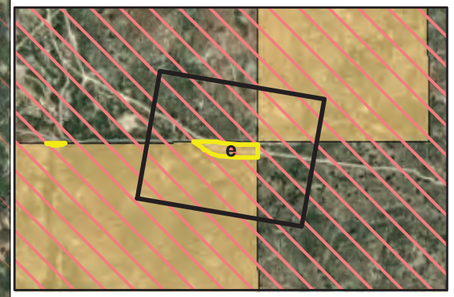
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8d

Cameron Truck Trail Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

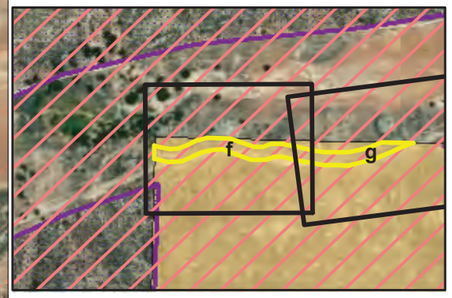
Quercus berberidifolia – Adenostoma fasciculatum Shrubland Alliance

Developed - Road
(maintenance and repair impact area)

0 Feet 100

FIGURE 8e
La Posta Circle Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

Quino Checkerspot Butterfly FCH

USFWS Designated QCB Survey Area

Road Width in Feet

Railroad

Vegetation Communities

Eriogonum fasciculatum Shrubland Alliance

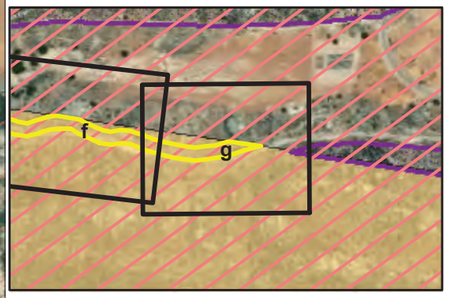
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8f

Track Access Quino Checkerspot Butterfly Federal Critical Habitat and USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

Quino Checkerspot Butterfly FCH

USFWS Designated QCB Survey Area

Road Width in Feet

Railroad

Vegetation Communities

Eriogonum fasciculatum Shrubland Alliance

Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8g

Track Access Quino Checkerspot Butterfly Federal Critical Habitat and USFWS Designated Survey Area

Image source: Maxar (flown March 2019)

Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

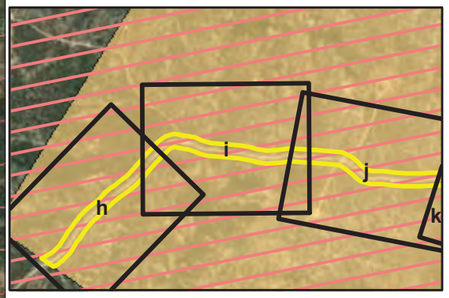
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8h

Gloriosa Way Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

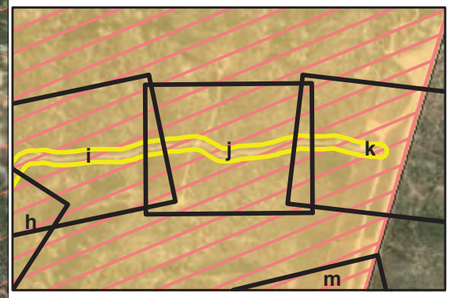
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8i

Gloriosa Way Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

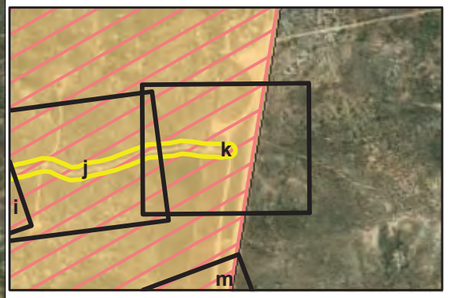
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8j

Gloriosa Way Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

Eriogonum fasciculatum Shrubland Alliance

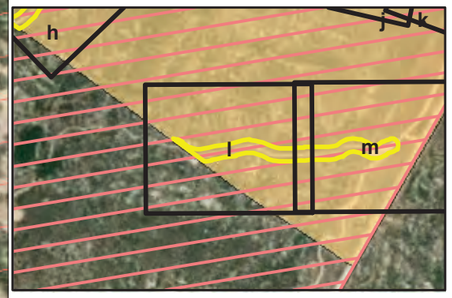
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8k

Gloriosa Way Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

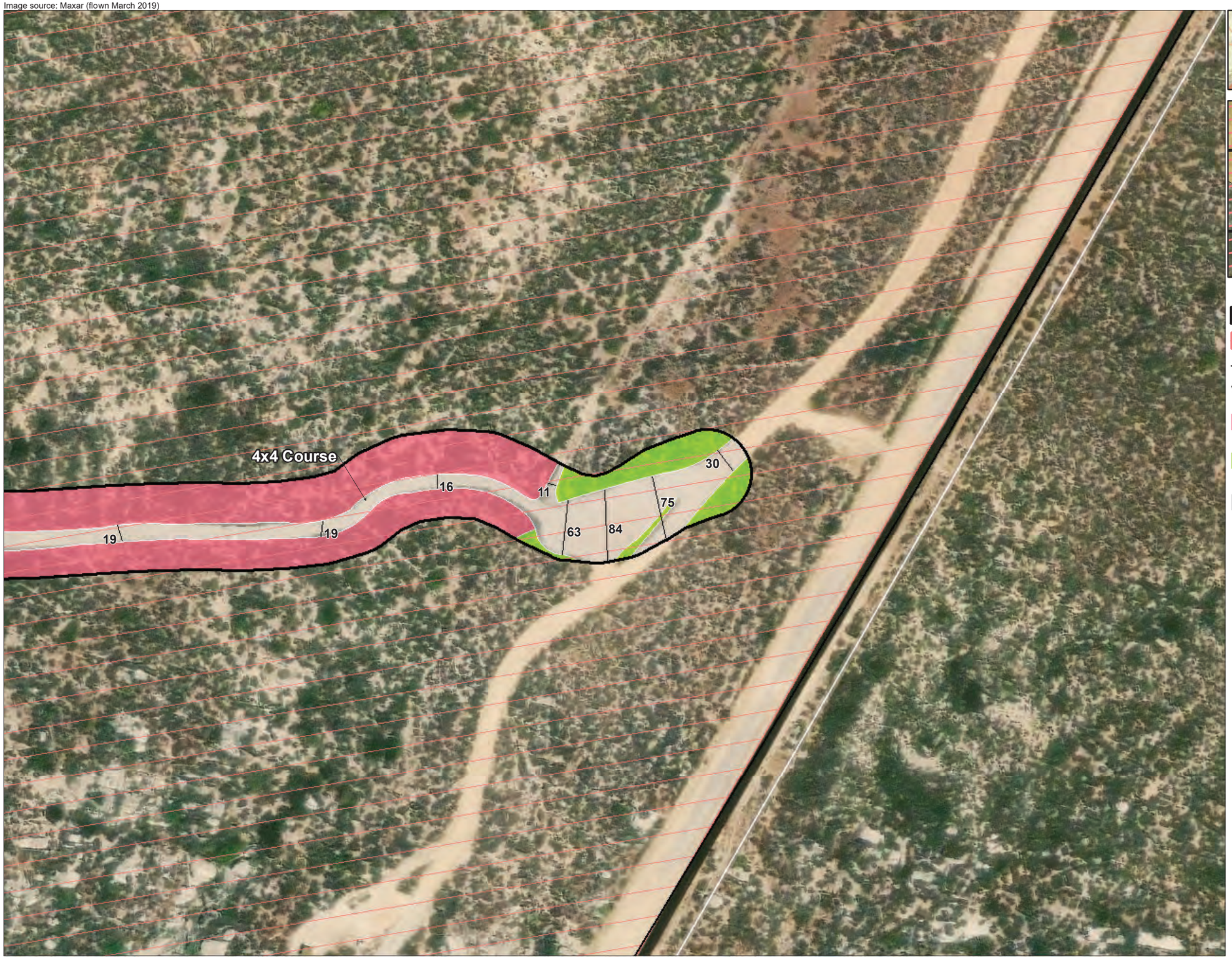
Developed - Road (maintenance and repair impact area)

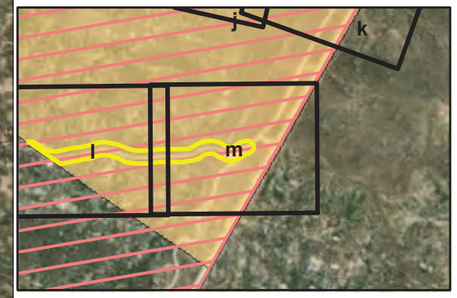
0 Feet 100

FIGURE 8l

4x4 Course Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)





Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

Eriogonum fasciculatum Shrubland Alliance

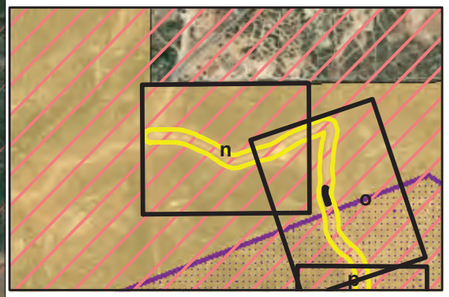
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8m

4x4 Course Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

Quino Checkerspot Butterfly FCH

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

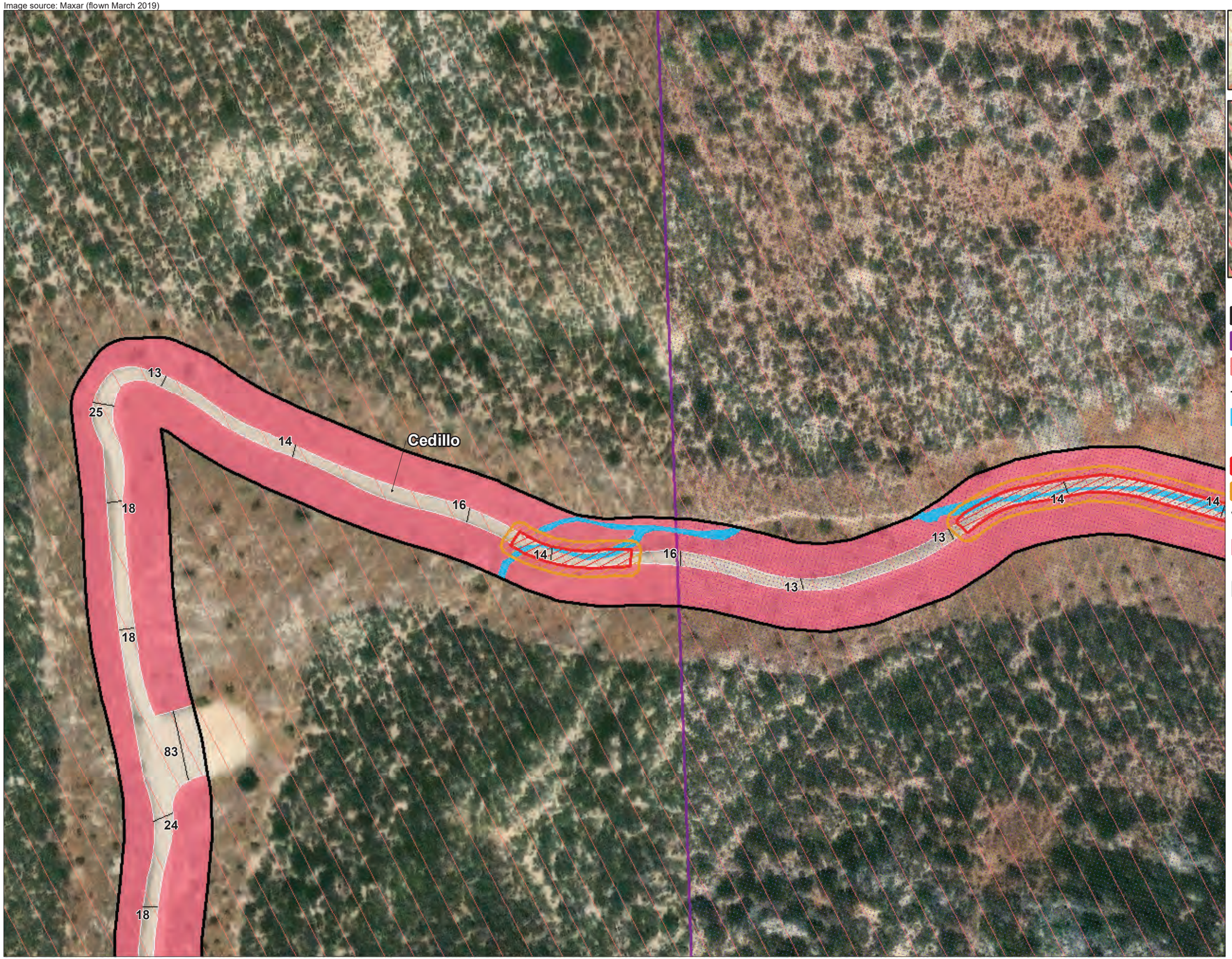
Developed - Road (maintenance and repair impact area)

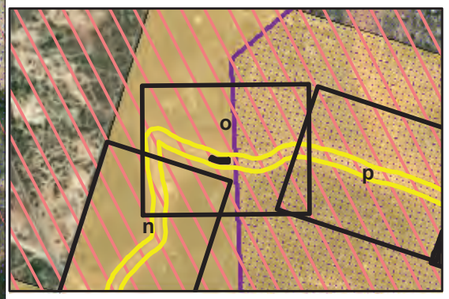
0 Feet 100

FIGURE 8n

Cedillo Quino Checkerspot Butterfly Federal Critical Habitat and USFWS Designated Survey Area

Image source: Maxar (flown March 2019)





Survey Area

Quino Checkerspot Butterfly FCH

USFWS Designated QCB Survey Area

Road Width in Feet

Ephemeral Wash

Low Water Crossing Mats

Permanent Impacts

Temporary Impacts

Vegetation Communities

Adenostoma fasciculatum Shrubland Alliance

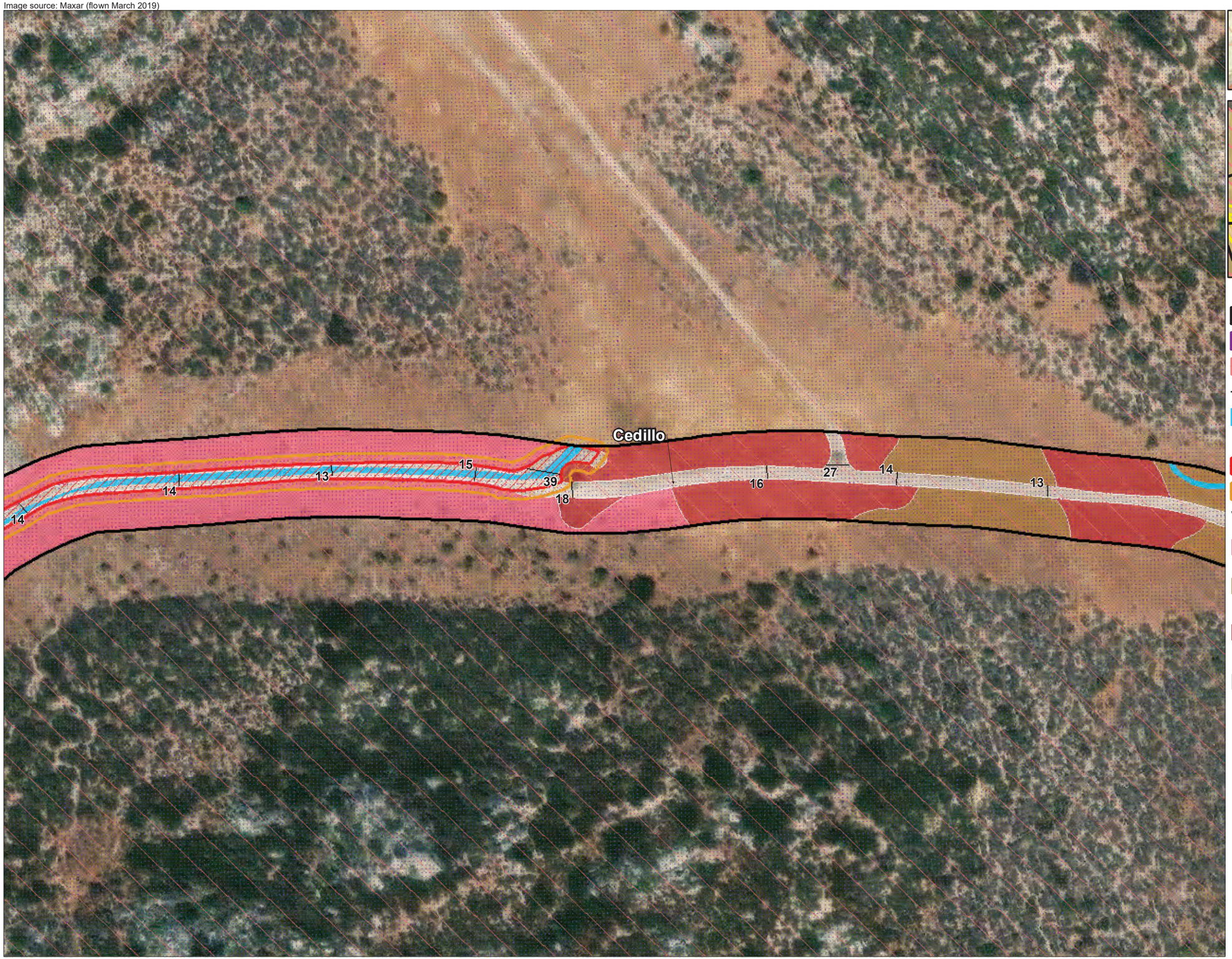
Developed - Road (maintenance and repair impact area)

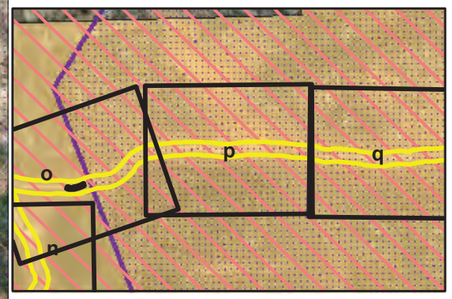
0 Feet 100

FIGURE 8o

Cedillo Quino Checkerspot Butterfly Federal Critical Habitat and USFWS Designated Survey Area

Image source: Maxar (flown March 2019)





Survey Area

Quino Checkerspot Butterfly FCH

USFWS Designated QCB Survey Area

Road Width in Feet

Ephemeral Wash

Low Water Crossing Mats

Permanent Impacts

Temporary Impacts

Vegetation Communities

Adenostoma fasciculatum
Shrubland Alliance

Artemisia tridentata
Shrubland Alliance

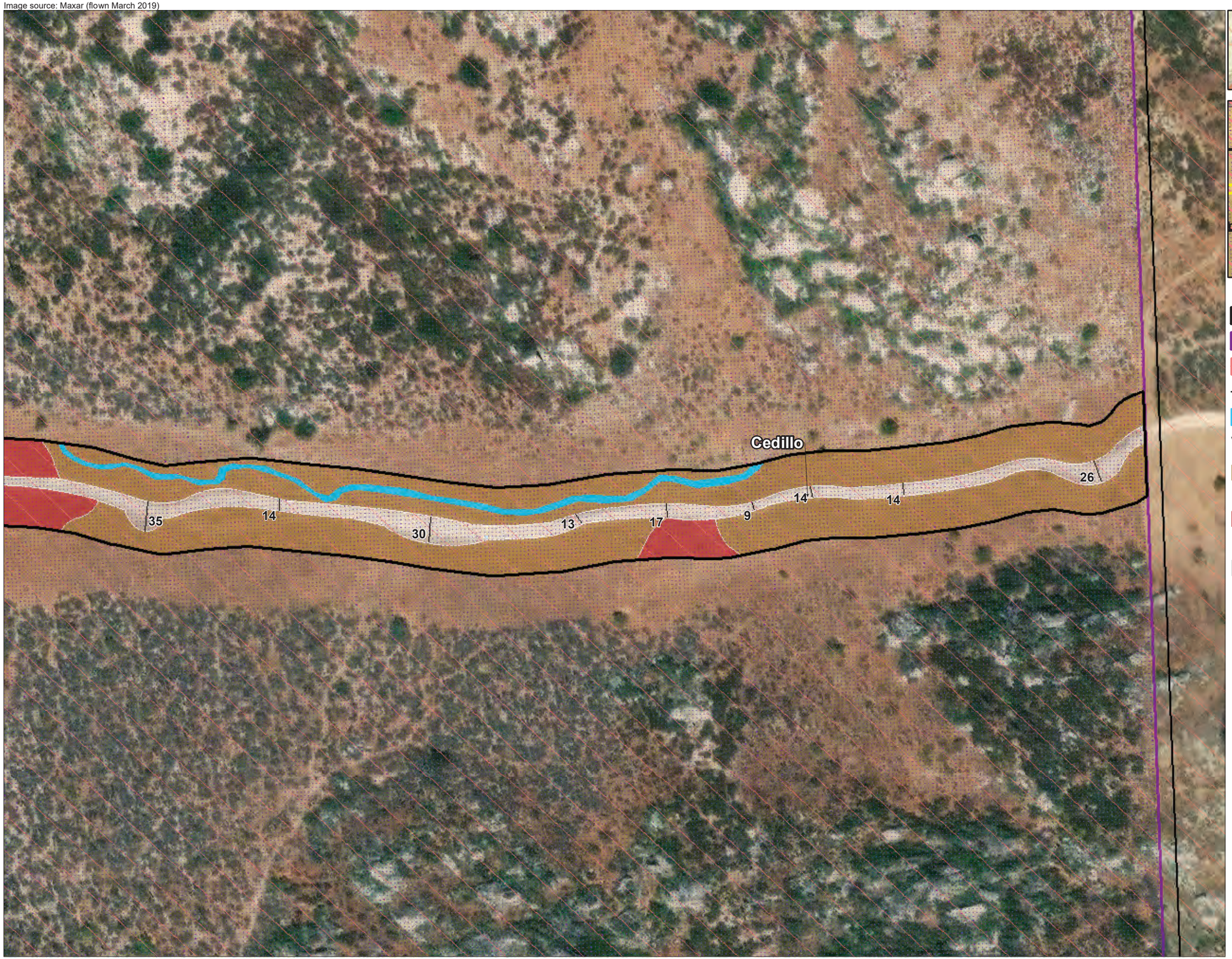
Bromus (diandrus, hordeaceus)
– Brachypodium distachyon
Semi-Natural Herbaceous Stands

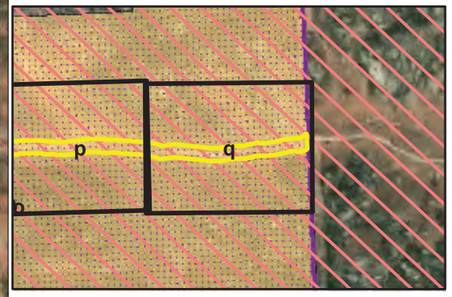
Developed - Road
(maintenance and repair impact area)

0 Feet 100

FIGURE 8p
Cedillo Quino Checkerspot Butterfly Federal Critical Habitat and USFWS Designated Survey Area

Image source: Maxar (flown March 2019)





Survey Area

Quino Checkerspot Butterfly FCH

USFWS Designated QCB Survey Area

Road Width in Feet

Ephemeral Wash

Vegetation Communities

Artemisia tridentata Shrubland Alliance

Bromus (diandrus, hordeaceus) – Brachypodium distachyon Semi-Natural Herbaceous Stands

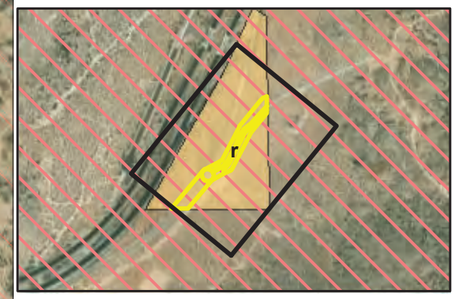
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8q

Cedillo Quino Checkerspot Butterfly Federal Critical Habitat and USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Vegetation Communities

Quercus cornelius-mulleri Shrubland Alliance

Simmondsia chinensis Provisional Shrubland Alliance

Paved - Road

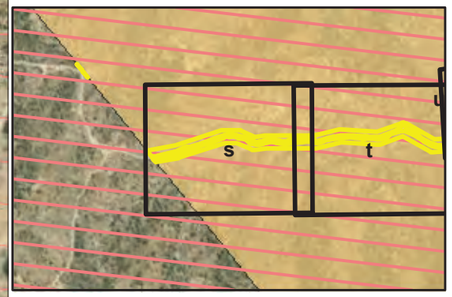
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8r

O'Neill Valley Access Road and Elliot Mine Road Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Ephemeral Wash

Low Water Crossing Mats

Permanent Impacts

Temporary Impacts

Vegetation Communities

Quercus cornelius-mulleri Shrubland Alliance

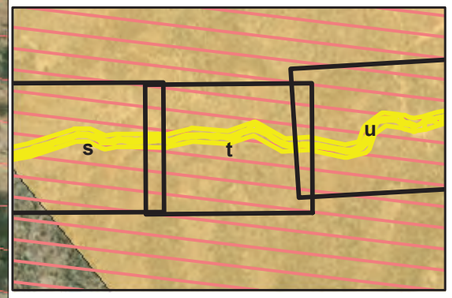
Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8s

Elliot Mine Road Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)



Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Ephemeral Wash

Low Water Crossing Mats

Permanent Impacts

Temporary Impacts

Vegetation Communities

Quercus cornelius-mulleri Shrubland Alliance

Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8t

Elliot Mine Road Quino Checkerspot Butterfly USFWS Designated Survey Area

Image source: Maxar (flown March 2019)

Survey Area

USFWS Designated QCB Survey Area

Road Width in Feet

Ephemeral Wash

Vegetation Communities

Quercus cornelius-mulleri Shrubland Alliance

Developed - Road (maintenance and repair impact area)

0 Feet 100

FIGURE 8u

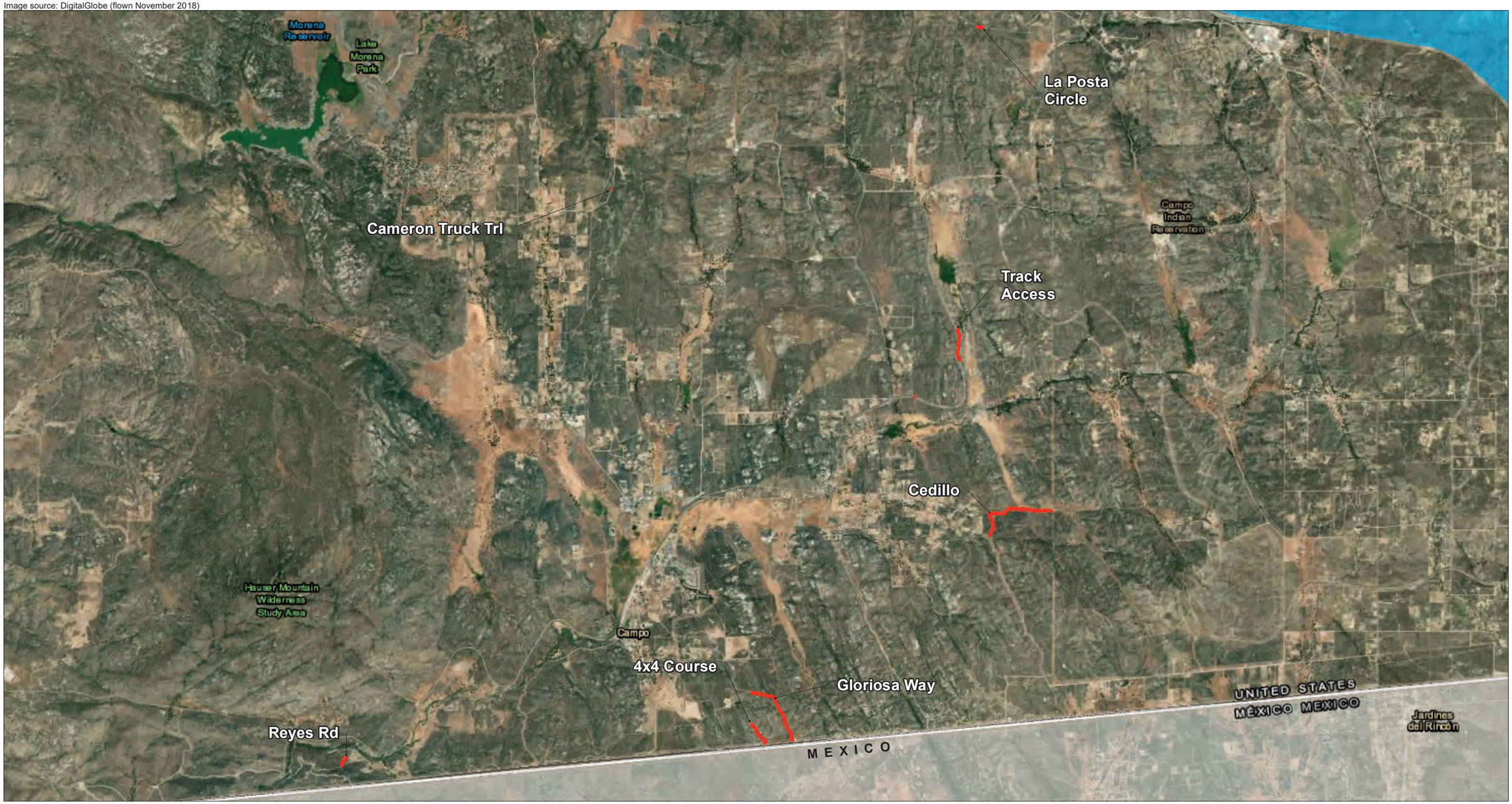
Elliot Mine Road Quino Checkerspot Butterfly USFWS Designated Survey Area

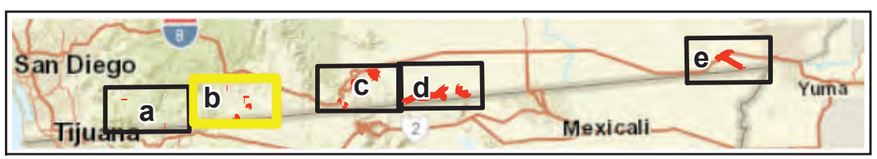
Image source: DigitalGlobe (flown November 2018)

FIGURE 9a

Potential Fossil Yield Classifications by Road Segment

Image source: DigitalGlobe (flown November 2018)





Road Segments on BLM-administered Lands

Potential Fossil Yield Classification

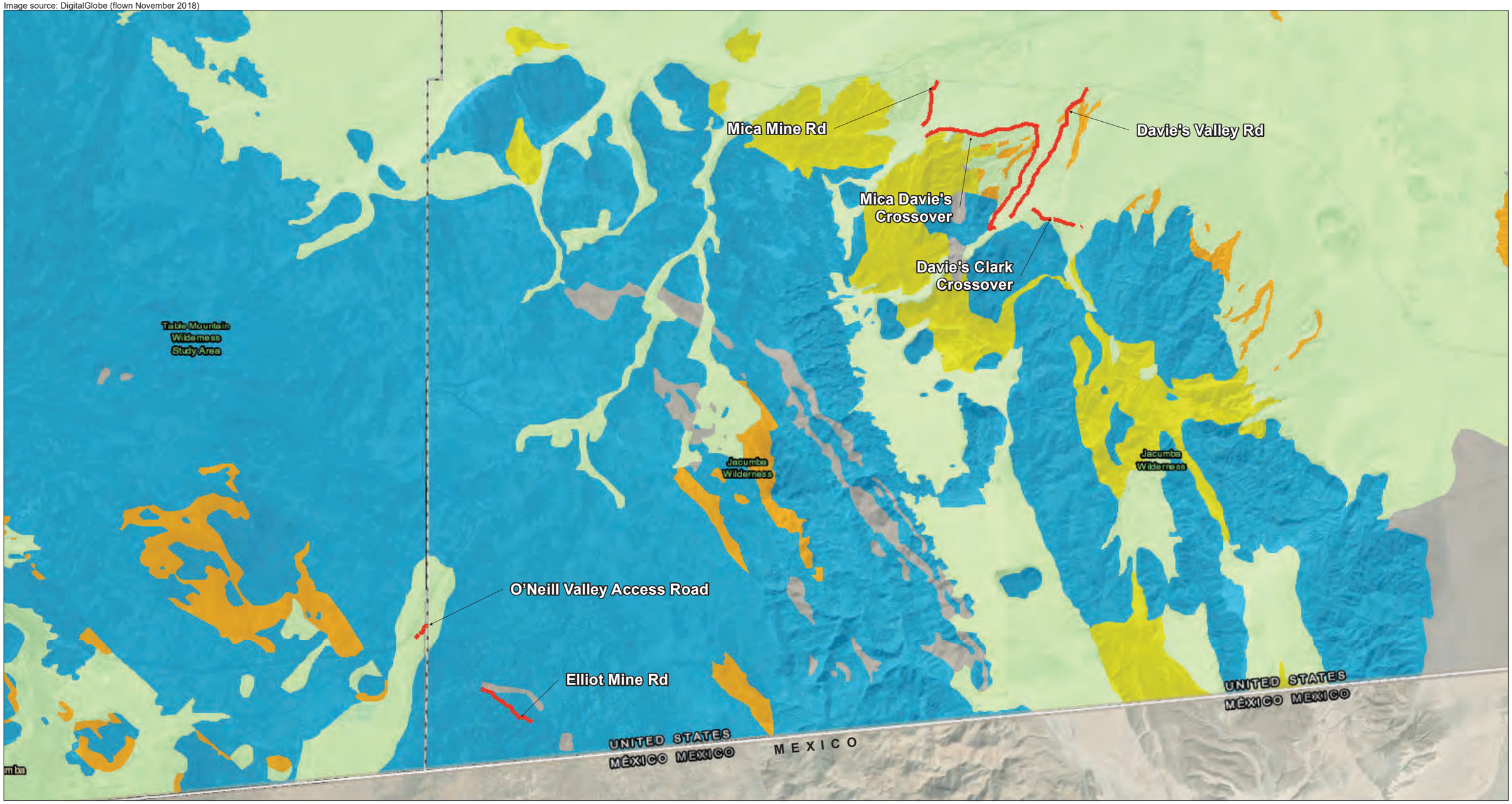
Very low

0 Miles 1

FIGURE 9b

Potential Fossil Yield Classifications by Road Segment

Image source: DigitalGlobe (flown November 2018)



Road Segments on BLM-administered Lands

Potential Fossil Yield Classification

- Very low
- Low
- Moderate
- High
- Unknown

0 Miles 1

FIGURE 9c

Potential Fossil Yield Classifications by Road Segment

Image source: DigitalGlobe (flown November 2018)

Cat Exit 4

Roy's Rd

Signal Road Legacy Fence Access Road 1

West Desert Drag Road

Signal Road Legacy Fence Access Road 2

UNITED STATES
MÉXICO MEXICO

Signal Road Legacy Fence Access Road 3

MEXICO

Road Segments on BLM-administered Lands

Potential Fossil Yield Classification

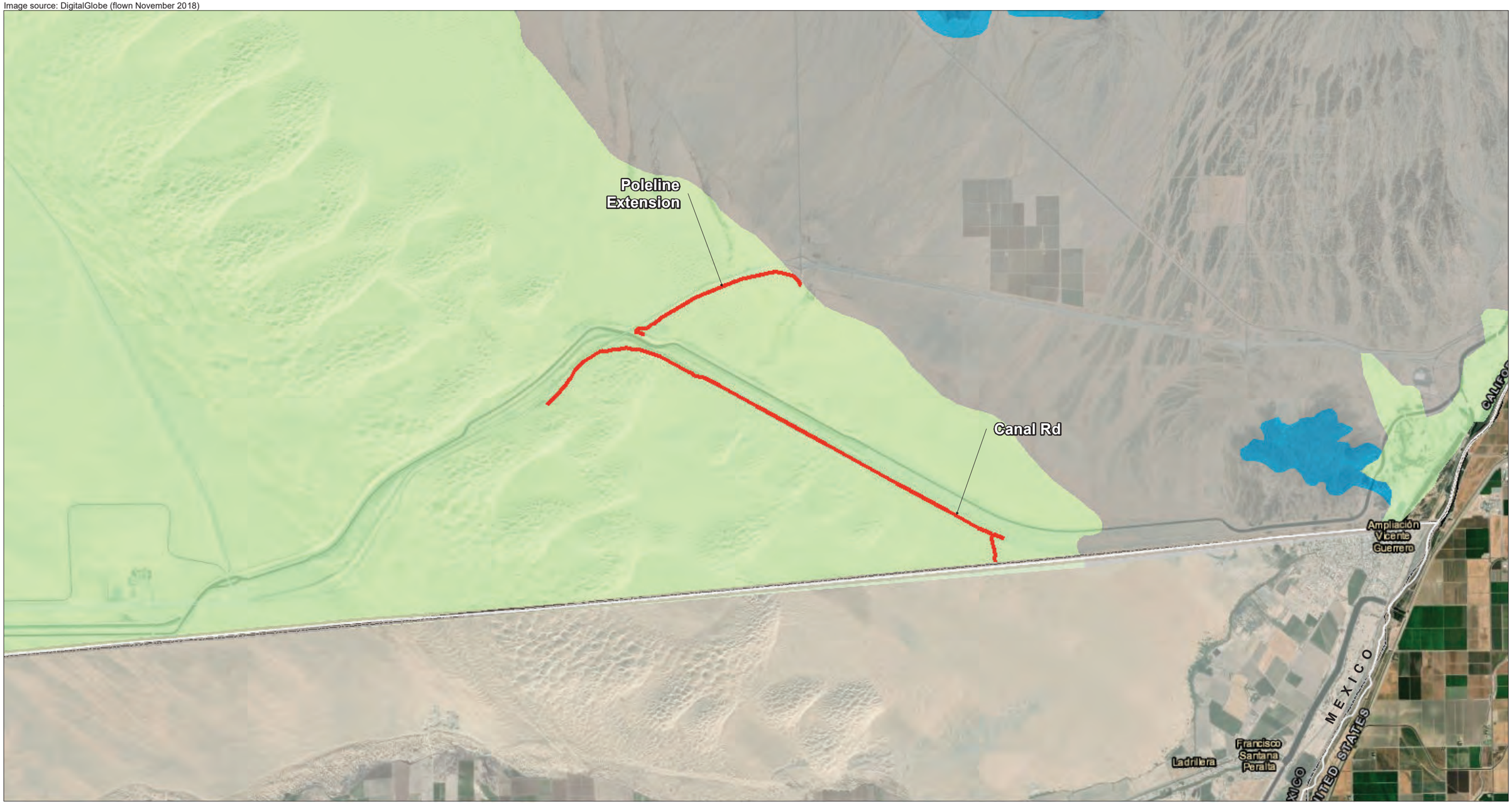
- Very low
- Low
- Moderate
- High
- Unknown

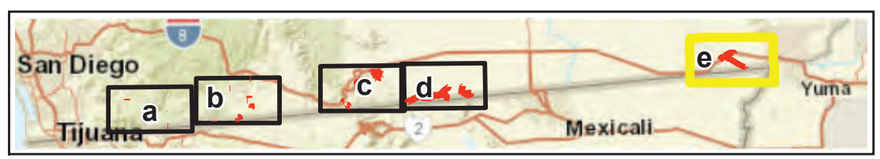
0 Miles 1

FIGURE 9d

Potential Fossil Yield Classifications by Road Segment

Image source: DigitalGlobe (flown November 2018)





Road Segments on BLM-administered Lands

Potential Fossil Yield Classification

- Very low
- Low
- Unknown

0 Miles 1

FIGURE 9e

Potential Fossil Yield Classifications by Road Segment

APPENDIX B
Scoping Letters

Scoping Letter Recipient List
(Federal, Tribal, State, and Local)

Name	Organization	Address
FEDERAL		
--	U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office	2177 Salk Ave., Suite 250 Carlsbad, CA 92008
--	U.S. Army Corps of Engineers, Los Angeles District, Carlsbad Field Office	5900 La Place Court, Suite 100 Carlsbad, CA 92008
--	Cleveland National Forest	10845 Rancho Bernardo Rd., Suite 200 San Diego, CA 92127
--	Cleveland National Forest, Descanso Ranger District	3348 Alpine Blvd. Alpine, CA 91901
--	U.S. Bureau of Reclamation, Southern California Office	27226 Via Industria, Suite A Temecula, CA 92590
TRIBAL		
Edwin Romero	Barona Band of Mission Indians	1095 Barona Rd., Lakeside, CA 92040
Bonnie LaChappa	Barona Band of Mission Indians	1095 Barona Rd. Lakeside, CA 92040
Sherry Cordova	Cocopah Indian Tribe	14515 S. Veterans Dr. Somerton, AZ 85350
Justin Brundin	Cocopah Indian Tribe	14515 S. Veterans Dr. Somerton, AZ 85350
Ralph Goff	Campo Band of Mission Indians	36190 Church Rd., Suite 1 Campo, CA 91906
Paul Cuero	Campo Band of Mission Indians	36190 Church Rd., Suite 1 Campo, CA 91906
Robert Pinto Sr.	Ewiiaapaayp Band of Kumeyaay Indians	4054 Willows Rd. Alpine, CA 91901
Michael Garcia	Ewiiaapaayp Band of Kumeyaay Indians	4054 Willows Rd. Alpine, CA 91901
Will Micklin	Ewiiaapaayp Band of Kumeyaay Indians	4054 Willows Rd. Alpine, CA 91901
Jordan D. Joaquin	Fort Yuma Quechan Indian Tribe	P.O. Box 1899 Yuma, AZ 85366
Virgil Smith	Fort Yuma Quechan Indian Tribe	P.O. Box 1899 Yuma, AZ 85366
Manfred Scott	Fort Yuma Quechan Indian Tribe	P.O. Box 1899 Yuma, AZ 85366
Virgil Perez	Iipay Nation of Santa Ysabel	P.O. Box 130 Santa Ysabel, CA 92070
Clint Linton	Iipay Nation of Santa Ysabel	P.O. Box 130 Santa Ysabel, CA 92001
Rebecca Osuna	Inaja-Cosmit Band of Indians	2005 S. Escondido Blvd. Escondido, CA 92025
Erica Pinto	Jamul Indian Village	P.O. Box 612 Jamul, CA 91935
Carlene A. Chamberlain	Jamul Indian Village	P.O. Box 612 Jamul, CA 91935
Lisa K. Cumper	Jamul Indian Village	P.O. Box 612 Jamul, CA 91935
Carmen Lucas	Kwaaymii Laguna Band of Indians	P.O. Box 775 Pine Valley, CA 91962
Gwendolyn Parada	La Posta Band of Kumeyaay Indians	8 ½ Crestwood Rd. Boulevard, CA 91905

Scoping Letter Recipient List
(Federal, Tribal, State, and Local)

Name	Organization	Address
Stephen Rochester	La Posta Band of Kumeyaay Indians	8 ½ Crestwood Rd. Boulevard, CA 91905
Angela Elliot Santos	Manzanita Band of Kumeyaay Indians	P.O. Box 1302 Boulevard, CA 91905
Lisa Haws	Manzanita Band of Kumeyaay Indians	P.O. Box 1302 Boulevard, CA 91905
Mike Linton	Mesa Grande Band of Mission Indians	P.O. Box 270 Santa Ysabel, CA 92070
Allen Lawson Jr.	San Pasqual Band of Diegueño Indians	P.O. Box 365 Valley Center, CA 92082
David Toler	San Pasqual Band of Diegueño Indians	P.O. Box 365 Valley Center, CA 92082
Tilda Green	San Pasqual Band of Diegueño Indians	P.O. Box 365 Valley Center, CA 92082
Cody J. Martinez	Sycuan Band of Kumeyaay Nation	1 Kwaaypaay Court El Cajon, CA 92019
Thomas Tortez	Torres-Martinez Desert Cahuilla Indians	P.O. Box 1160 Thermal, CA 92274
Michael Mirelez	Torres-Martinez Desert Cahuilla Indians	P.O. Box 1160 Thermal, CA 92274
Rober J. Welch Jr.	Viejas Band of Kumeyaay Indians	P.O. Box 908 Alpine, CA 91903
Ernest Pingleton	Viejas Band of Kumeyaay Indians	P.O. Box 908 Alpine, CA 91903
STATE		
--	California Department of Fish and Wildlife, Inland Deserts Region	3602 Inland Empire Blvd., Suite C-220 Ontario, CA 91764
--	California Department of Fish and Wildlife, South Coast Region	3883 Ruffin Rd. San Diego, CA 92123
--	Native American Heritage Commission	1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691
--	Office of Historic Preservation	1725 23rd St., Suite 100 Sacramento, CA 95816
--	San Diego Regional Water Quality Control Board	2375 Northside Dr., Suite 100 San Diego, CA 92108
--	Colorado River Regional Water Quality Control Board	73-720 Fred Waring Dr. Palm Desert, CA 92260
LOCAL		
--	County of Imperial	940 W. Main St. El Centro, CA 92243
--	County of San Diego, Department of Planning and Development Services	5510 Overland Ave. San Diego, CA 92123
--	San Diego Air Pollution Control District	10124 Old Grove Rd. San Diego, CA 92131
--	Imperial Air Pollution Control District	150 S. 9th St. El Centro, CA 92243
--	Imperial Irrigation District	1699 W. Main St., Suite A El Centro, CA 92243

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

October 30, 2019

U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

Subject: Preparation of an Environmental Assessment Addressing the Proposed Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California Project in San Diego and Imperial Counties, California

U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office:

U.S. Customs and Border Protection (CBP), under the Department of Homeland Security (DHS), and the Bureau of Land Management (BLM), an agency of the Department of the Interior, are in the process of preparing an Environmental Assessment (EA) for the proposed Maintenance and Repair of Patrol and Access Roads on BLM Lands in California (Proposed Action). The BLM and CBP are joint lead agencies for the purpose of preparing the EA in accordance with the National Environmental Policy Act.

The Proposed Action would implement maintenance and repair of approximately 33.6 miles of roads near the United States (U.S.)/Mexico international border in California within three U.S. Border Patrol (USBP) sectors: San Diego, El Centro, and Yuma. The USBP San Diego and El Centro sectors are entirely within California, and a portion of the Yuma sector is within California. Enclosure 1 contains a map of the Proposed Action location. Road maintenance and repair on BLM-administered lands would be done in order to facilitate USBP patrol, interdiction, and emergency response along the border to deter and prevent illegal cross-border activity. Road maintenance and repair would consist primarily of grading and resurfacing areas of the roads that have been heavily eroded by surface water flows, filling potholes, and removing protruding boulders. Roads would not be widened, but limited areas that no longer meet minimum width requirements may require cut and fill work to achieve the desired road operating and safety standards. USBP operations on these roads would remain unchanged and are not analyzed as part of the EA.

The EA will consider at least two alternatives in detail: the Proposed Action and the No Action Alternative. Should you have comments or information about the Proposed Action or alternatives that you would like considered during preparation of the EA, please send them within 30 days of receipt of this letter using one of the following methods:

- By U.S. mail: Proposed Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California 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 or 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 John Petrilla by email at John.P.Petrilla@cbp.dhs.gov or by telephone at (949) 643-6385.

Sincerely,

Joseph Zidron
Real Estate and Environmental Branch Chief
Border Patrol and Air and Marine Program Management Office

Enclosure: Map of Proposed Action location

VIEJAS
TRIBAL GOVERNMENT

P.O Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
Fax: 6194455337
viejas.com

November 25, 2019

John Petrilla
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

RE: Maintenance and Repair Of Patrol and Access Roads

Dear Mr. Petrilla,

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site 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 me at 619-659-2312 or Ernest Pingleton at 619-659-2314 or email, rteran@viejas-nsn.gov or epingleton@viejas-nsn.gov , for scheduling. Thank you.

Sincerely,

Ray Teran, Resource Management
VIEJAS BAND OF KUMEYAAY INDIANS

APPENDIX C
Draft Environmental Assessment Notice of Availability

NOTICE OF AVAILABILITY
OF DRAFT ENVIRONMENTAL ASSESSMENT AND
DRAFT FINDING OF NO SIGNIFICANT IMPACT
for the MAINTENANCE AND REPAIR OF PATROL AND ACCESS ROADS
ON BUREAU OF LAND MANAGEMENT LANDS IN CALIFORNIA
San Diego and Imperial Counties, California

AGENCY: Department of Homeland Security, U.S. Customs and Border Protection, and Department of the Interior, Bureau of Land Management, as Joint Lead Agencies

ACTION: Notice of Availability

SUMMARY: U.S. Customs and Border Protection (CBP) and Bureau of Land Management (BLM) are advising the public of the availability of a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the proposed Maintenance and Repair of Patrol and Access Roads on BLM Lands in California (Proposed Action). CBP and BLM have prepared a Draft EA and Draft FONSI to identify and assess the potential environmental impacts of the Proposed Action, consisting of maintenance and repair activities of approximately 33.7 miles of existing roads on BLM-administered public lands near the U.S./Mexico international border in California (Project Area).

Project Location

The Project Area is located near the U.S./Mexico international border in California within three USBP sectors: San Diego, El Centro, and Yuma. The USBP San Diego and El Centro sectors are entirely within California, and a portion of the Yuma sector is within California. The Project Area is located on BLM-administered public lands in California under the jurisdiction of the El Centro and Palm Springs-South Coast Field Offices.

DATES: CBP and BLM invite comments on the Draft EA and Draft FONSI during the 30-day comment period beginning on November 19, 2021 and ending on December 20, 2021.

ADDRESSES: The Draft EA and Draft FONSI are available at the following libraries:

- El Centro Public Library, 140 N. Imperial Avenue, El Centro, CA
- San Diego Main Library, 330 Park Boulevard, San Diego, CA

The Draft EA and Draft FONSI are also available electronically at the CBP document review link: https://www.cbp.gov/about/environmental-management-sustainability/documents/docs-review
and the BLM public link (Reference NEPA number DOI-BLM-CA-D070-2022-0002-EA: https://eplanning.blm.gov/eplanning-ui/project/2016309/510.

You may submit comments by using one of the following methods:

- By e-mail to: SanDiegoComents@cbp.dhs.gov
- By U.S. mail to: Maintenance and Repair of Patrol and Access Roads on BLM Lands in California EA, c/o Michelle Barnes, U.S. Customs and Border Protection, U.S. Border Patrol Headquarters, 1300 Pennsylvania Ave., 6.5E Mailstop 1039, Washington, D.C. 20229-1100
- By U.S. mail to: BLM El Centro Field Office, 1661 S. 4th Street, El Centro, CA 92243

When submitting comments, please include your name and address, and identify the comments as being for the Maintenance and Repair of Patrol and Access Roads on BLM Lands in California EA in the subject line. To ensure consideration, comments must be received by December 20, 2021. Once the final environmental and decision documents are complete, they will also be posted on the websites mentioned above.

APPENDIX D
Draft Environmental Assessment Public Comment and Agency Response Table

CBP Maintenance and Repair of Patrol Roads on BLM Lands in California
Public Review Environmental Assessment Comments Received

Comment	Commenter	Comment	Draft Response
1	Ben Burr, Executive Director, BlueRibbon Coalition	We support any additional comments that encourage the BLM to designate the maximum number of routes in this area as open.	Route decisions (open/closed/limited) are outside the scope of the CBP Patrol Road Maintenance and Repair Proposed Action. These designations would be included as part of a BLM Travel Management Planning process. See Chapter 3, Table 3.1 of the Environmental Assessment that states that only short-term closures of designated routes would occur during maintenance and repair activities under the Proposed Action.
2	Ben Burr, Executive Director, BlueRibbon Coalition	Many of our members are individuals and organizations with extensive on-the-ground experience in the Logandale TMA. If any route or area specific comments are made which identify missing routes or errors in the maps that lead to restricted access, we support BLM addressing these comments in the development of an alternative that maximizes motorized recreation access to the planning area.	The Logandale TMA is outside the BLM California Desert planning area. The comment is outside the scope of the proposed action.
3	Ben Burr, Executive Director, BlueRibbon Coalition	The BlueRibbion Coalition (BRC) supports the proposed road maintenance and repairs and believes the BLM should grant the ROW and the maintenance and repairs. We would like to see the proposed action alternative move forward as it best benefits the most users.	Comment noted.
4	Ben Burr, Executive Director, BlueRibbon Coalition	It is identified that recreation will be impacted by the proposed actions. Overall, maintaining roads will help with future access and the recreation community would like to see these projects move forward. The BLM needs to be specific about the temporary road closures and give a date when the closures would re-open to prevent these from becoming permanent closures.”	Comment noted. BLM has considered the impacts related to recreational access in Chapter 3 of the EA. Best Management Practices have been included in Chapter 6 of the EA to avoid and minimize impacts. Road maintenance and repair under the Proposed Action would be conducted based on CBP funding availability, as described in Section 2.3.1 of the EA.
5	Ben Burr, Executive Director, BlueRibbon Coalition	The majority of road maintenance would occur in already disturbed areas. This project will not create extra disturbances that will be detrimental to habitat or wildlife. We commend the BLM to propose appropriate management solutions such as fencing to mitigate impact.	Comment noted. BLM has considered potential impacts to wildlife and habitat in Chapter 3 of the EA. Best Management Practices have been included in Chapter 6 of the EA to avoid and minimize impacts.

Comment	Commenter	Comment	Draft Response
6	Ben Burr, Executive Director, BlueRibbon Coalition	The BLM should strongly consider keeping open as much area as possible to recreation users so they are not concentrated to smaller areas to mitigate impacts that come from concentrated use. The BLM needs to re-evaluate and strongly consider Mica Mine Road, Mica Davie's Crossover, Davie's Clark Crossover, and Davie's Valley Road for permanent Open status. This land should benefit as many users as possible.	Route decisions (open/closed/limited) are outside the scope of the CBP Patrol Road Maintenance and Repair Proposed Action. These designations would be included as part of a BLM Travel Management Planning process.
7	Ben Burr, Executive Director, BlueRibbon Coalition	BRC does not support the restoration of routes as all routes have been created for a significant reason. If there is a possibility that the route could cause harm to resources the route should be re-routed or the BLM should find adequate ways to manage the impact rather than closure. Land agencies are required to manage the land through proactive management and education and not hardwire closure as the correct first response to mitigate impact.	Comment noted.
8	Ben Burr, Executive Director, BlueRibbon Coalition	Dispersed camping is popular in the area with its close proximity to other recreation opportunities. This plan should ultimately identify reasonable standards for allowing dispersed camping. Keeping open roads will allow use for dispersed camping and help mitigate impact as campers won't be concentrated into small areas. Management strategies should be exhausted before restrictions and closures of areas to any type of recreational use. BRC supports all recreational activities if done responsibly.	Route decisions (open/closed/limited) and recreational designations are outside the scope of the CBP Patrol Road Maintenance and Repair Proposed Action. These designations would be included as part of a BLM Travel Management Planning or Resource Management Planning process.
9	Ben Burr, Executive Director, BlueRibbon Coalition	Local communities rely on motorized recreation for economic opportunities. There has been a surge of use throughout the nation on public lands. Local groups have worked hard to put the area on the map so that they could reap the economic benefits. Closing roads would greatly hinder economic opportunity. Many local organizations and businesses recognize the influx of traffic and believe that any user conflict can be mitigated through better signage and education.	Comment noted. Route decisions (open/closed/limited) are outside the scope of the CBP Patrol Road Maintenance and Repair Proposed Action. These designations would be included as part of a BLM Travel Management Planning process. See Chapter 3, Table 3.1 of the Environmental Assessment that states that only short-term closures of designated routes would occur during maintenance and repair activities under the Proposed Action.

Comment	Commenter	Comment	Draft Response
10	Ben Burr, Executive Director, BlueRibbon Coalition	BlueRibbon Coalition has members who enjoy recreation in the proposed project area and who will be irreparably harmed by the proposed implementations. This will cause immediate loss of access to various areas. In 2019 the Bureau of Economic Analysis showed outdoor recreation contributed $459.8 billion. The desire and need for outdoor recreation and meaningful experiences with nature has only increased since then and will continue to increase. Closures will also lead to a loss in local economies. Local economies should be able to benefit from this trend as long as the BLM uses proper management techniques.	Comment noted. The CBP Patrol Road Maintenance and Repair Proposed Action does not include changes to recreation management or route designations. The comment is outside the scope of the proposed action. See Chapter 3, Table 3.1 of the Environmental Assessment that states that only short-term closures of designated routes would occur during maintenance and repair activities under the Proposed Action.
11	Ben Burr, Executive Director, BlueRibbon Coalition	We recommend that the BLM use this planning process to finally begin to reverse its decades-long systematic discrimination against those with mobility impairment-related disabilities.	The CBP Patrol Road Maintenance and Repair Proposed Action does not include changes to BLM recreation management or travel management, including outdoor recreation access. The comments are outside the scope of the proposed action.
12	Ben Burr, Executive Director, BlueRibbon Coalition	We would like to close by saying we support "shared use". As long as overall visitation numbers are appropriate for the affected resources, motorized and non-motorized users can be compatible with one another so long as individual users understand designations and plan their activities accordingly. Indeed, motorized and nonmotorized recreation use often overlap as OHV's often increase accessibility to non-motorized recreational activities such as hiking, camping, equestrian use, etc. We also hold that responsible recreational use of public lands can exist in harmony with ecosystem needs.	Comment noted.
13	Ben Burr, Executive Director, BlueRibbon Coalition	BRC would like to be considered an interested public for this project. Information can be sent to the following address and email address: Ben Burr BlueRibbon Coalition P.O. Box 5449 Pocatello, ID 83202 brmedia@sharetrails.org	Comment noted. BRC has been included as an interested public for the CBP Maintenance and Repair of Patrol Roads on BLM Lands in California project.

APPENDIX E
Tactical Infrastructure Classifications and Maintenance and Repair Standards

APPENDIX C

Road Classifications and Maintenance and Repair Standards

INTRODUCTION

Roads would be maintained in accordance with proven maintenance and repair standards. All of the standards U.S. Customs and Border Protection (CBP) is adopting are developed based on comprehensive engineering analysis, proven Best Management Practices (BMPs) adopted by other Federal agencies, and mitigation measures derived from extensive consultation with both regulatory and resources agencies. Below is a description of road classifications and maintenance and repair standards.

ROAD CLASSIFICATION

CBP has developed a road classification system whereby roads are maintained to specific standards dependent upon their classification. Under the CBP classification system, five standards for roads have been developed:

- *FC-1 Paved Road* – Paved, all-weather road constructed of any material. Road is two lane with a total road width of 24 feet (see **Figures C-1** and **C-2**).
- *FC-2 All-Weather Road* – Unpaved, all-weather road consisting of a surface of imported aggregate material such as milled bituminous material or processed stone and gravel. Road is two-lane with a total road width of 24 feet (see **Figures C-3** and **C-4**).
- *FC-3 Graded Earth Road* – Unpaved road constructed of graded, native material. Road is two-lane with a total road width of 20 feet (see **Figures C-5** and **C-6**).
- *FC-4 Two-Track Road* – Unpaved road on natural ground consisting of a single lane with an overall road width of 10 feet (see **Figures C-7** and **C-8**).
- *FC-5 Sand Road* – Unpaved, sand road consisting of natural ground conditions, two lanes, and an overall road width of 16 to 18 feet (see **Figures C-9** and **C-10**).

Figure C-1. FC-1 Paved Road (Photograph)

FC 1 – Paved Roads

The proposed paved road facility consists of two (2) 3.6 m (12 ft) travel lanes with 0.6 m (2 ft) shoulders at a 2% cross slope. The proposed pavement design for this section consists of 200 mm (8 in) of compacted aggregate base with a two (2) coarse surface treatment. Parallel ditches with a 1V:3H front slope and a 1V:4H back slope are proposed to provide proper drainage. Existing FC 1 roadways may vary from proposed roadway specifications.

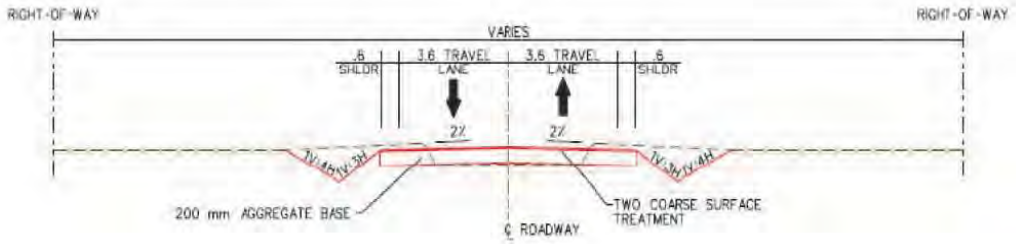


Figure C-2. FC-1 Paved Road (Diagram)

Figure C-3. FC-2 All-Weather Road (Photograph)

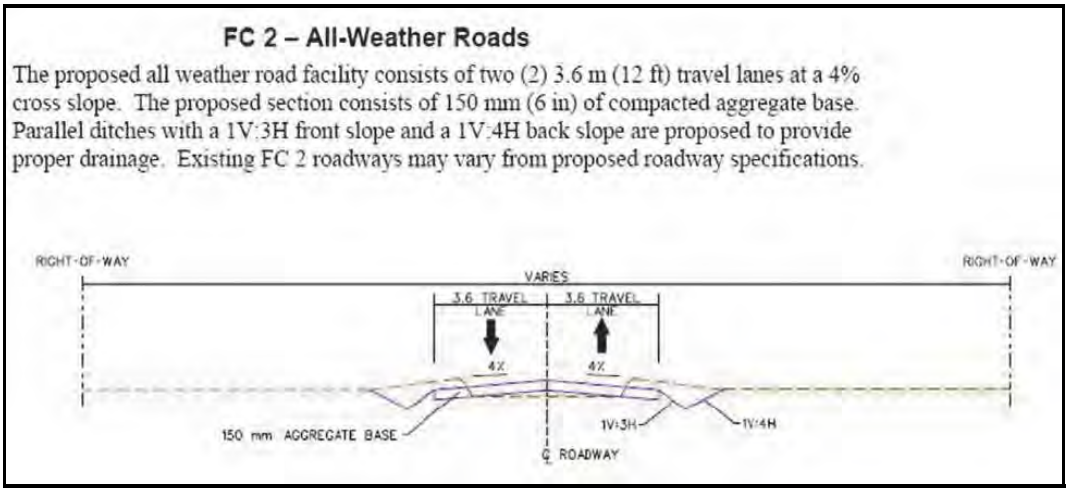


Figure C-4. FC-2 All-Weather Road (Diagram)

Figure C-5. FC-3 Graded Earth Road (Photograph)

FC 3 – Graded Earth Roads

The proposed graded earth road facility consists of two (2) 3.0 m (10 ft) travel lanes at a 4% cross slope. The proposed section consists of natural ground. Parallel ditches with a 1V:3H front slope and a 1V:4H back slope are proposed to provide proper drainage. Existing FC 3 roadways may vary from proposed roadway specifications.

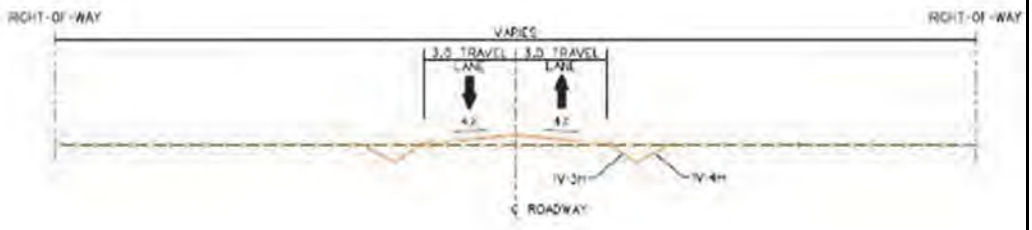


Figure C-6. FC-3 Graded Road (Diagram)

Figure C-7. FC-4 Two-Track Road (Photograph)

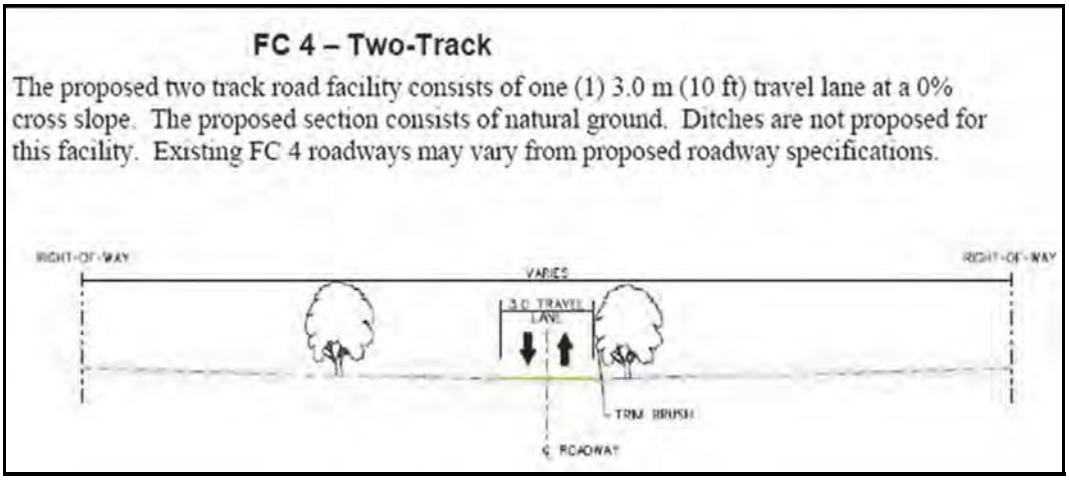


Figure C-8. FC-4 Two-Track Road (Diagram)

Figure C-9. FC-5 Sand Road (Photograph)

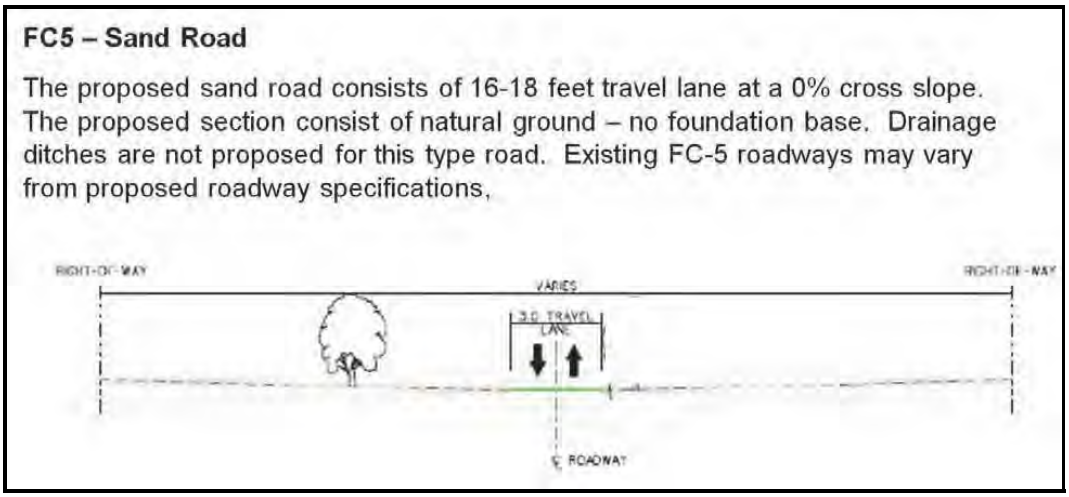


Figure C-10. FC-5 Sand Road (Diagram)

ROAD MAINTENANCE AND REPAIR

The maintenance and repair of FC-1 and FC-2 roads within state, county, or municipal government's purview is completed by their transportation departments. Maintenance and repair of FC-1 and FC-2 roads located on Federal land are maintained in coordination and performed where necessary by agreement with the appropriate Federal agency. In general, CBP would adhere to U.S. Forest Service (USFS) standards for road maintenance, which have been tried and proven over many years and in a variety of environmental conditions.

Some of the roads on Federal lands (e.g., BLM, USFS) are covered by the Secretary's waiver and are the responsibility of CBP to maintain and repair. In the instances where CBP is

required to maintain FC-1 and FC-2 roads, maintenance and repair would be restricted to minor resurfacing to address potholes in paved surfaces and rutting and raveling in all-weather roads. Minor work to shoulder areas of these roads would also be required to maintain the integrity of the road surfaces and road beds. The majority of proposed maintenance and repair is planned for FC-3 and FC-4 roads. Because of their lack of formal construction design, FC-3 and FC-4 roadways are subject to the greatest deterioration if left unmaintained. When subjected to heavier traffic, rutting occurs, which in turn is exacerbated by rain events that further erode the surface. Unmanaged storm water flow also causes general erosion to occur, washing out complete sections of road and in many instances making roads impassable.

Grading with the use of commercial grading equipment (see **Figure C-11**) is proposed to restore an adequate surface to FC-3 roads. USBP sector personnel and contract support personnel well-versed in grading techniques would be employed for such activity. A poorly regraded surface often results in rapid deterioration of the surface. The restored road should be slightly crowned and absent of windrows in the gutter line to avoid ponding and channeling within the road during rain events. Any associated roadside drainage would be maintained to ensure that runoff is relieved from the road surface quickly and effectively without creating further erosion issues. The addition of material to these roads to achieve the proposed objective would be kept to a minimum. All necessary erosion-control BMPs would be adopted to ensure stabilization of the roads.

Figure C-11. Standard Grading Equipment

The frequency of maintenance would depend on usage and weather conditions (e.g., heavy rain seasons could require an increase in maintenance and repair). Maintenance and repair activities would include inspections to determine surface irregularities (e.g., potholes,

washout), then grading, compacting, and reshaping of the road would occur generally using onsite soils as necessary. The addition of material to these roads to achieve the proposed objective would be kept to a minimum, but may be necessary to fill depressions or to grade the surface of the road back up to match shoulder grades.

Roads could occasionally need to be scarified, have aggregate added, and the surface re-compacted. It is recommended that these roads be inspected and, if necessary, maintained every six months and after major storm events. Debris and sedimentation removal from low water crossings, culverts, and ditches to minimize flooding, water diversion, and erosion would also occur every six months and after major storm events. All necessary erosion-control BMPs would be adopted to ensure stabilization of the roads (see **Appendix D**).

FC-4 roads consist of two parallel tracks created by the loss of vegetation where the tires contact and compact the earth; between which may lay a strip of low-growth vegetation. These roads receive very little maintenance consisting primarily of occasional brush and boulder clearing, and possibly but much less frequently grading with small tractor mounted box blades. Two-track roads have no crown, and generally do not have any improved drainage features or ditches, although culverts and low water crossings may be installed where continuous erosion issues occur.

Activities to maintain FC-5 roads would be similar to those described above for FC-3 roads.

APPENDIX F
Safety Data Sheets

SAFETY DATA SHEET
According to 29 CFR 1910.1200
PennzSuppress D, D3/1 and G
Revision Number 1, Revision Date August 9, 2018

1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

Product Name: PennzSuppress D, D 3/1 and G

Product Code: 5000 / 5003 / 5007

Recommended Use: *Controls dust, stabilizes soil and controls erosion*
Product Type: Mixture

Manufacturer

American Refining Group, Inc.
77 North Kendall Avenue
Bradford, PA 16701
www.amref.com
msds@amref.com

Importer, Supplier

PennzSuppress Corp
PO Box 543173
Grand Prairie, Texas 75054
469.853.6168
www.pennzsuppress.com

EMERGENCY TELEPHONE NUMBER

CHEMTREC: 1-800-424-9300 (24 Hours)
PennzSuppress Corp 469-853-6168
ARG: 814-368-1297 (24 Hours)

2. HAZARDS INDENTIFICATION

GHS Classification: This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Signal Word, Hazard Statements, Other Hazards, GHS Pictogram, Precautionary Statements: NOT APPLICABLE

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS No.	COMPONENT	PERCENT
This Product does not contain ingredients that are hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).		

CAS	Component	Percentages
8052-42-4	Paraffinic Resins	50-55
7732-18-5	Water	25-30
Proprietary	Hydrosoluable Anionic Surfactant	20-25
Proprietary	Non-Ionic Sufactant	1-5

4. FIRST AID MEASURES

Eyes	• Check for and remove any contact lenses. • Flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. • Get medical attention if irritation develops.
Skin	• In case of contact, flush skin with plenty of soap and water while removing contaminated clothing and shoes. • Wash clothing before reuse. • Clean shoes before reuse. • Get medical attention if irritation develops.
Inhalation	• Move exposed person to fresh air. • Get medical if irritation develops.
Ingestion	• First aid is normally not required. • Get medical attention if discomfort develops.
Notes to Physicians	• No specific treatment. • Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use dry chemical, CO2, water spray (FOG) or foam
Unsuitable Extinguishing Media	Avoid solid water stream as it may scatter and spread fire
Specific Hazards Arising from Chemical	Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposing products may include the following materials: Carbon dioxide and Carbon monoxide.
Protective Equipment and Precautions for Firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	• Put on appropriate personal protective equipment.
Environmental Precautions	• Prevent product from entering drains. • Prevent entry into waterways, sewers, basements or confined areas.
Methods for Containment	• Stop leak if without risk.
Methods for Cleanup	• Cover liquid spill with sand, earth or other noncombustible absorbent material. • Cover powder spill will plastic sheet or tarp to minimize spreading. • Pick up and transfer to properly labeled container. • Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

Handling Procedures	• Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. • Workers should wash hands and face before eating, drinking and smoking. • Remove contaminated clothing and protective equipment before entering eating areas. • Do not get in eyes or on skin or clothing. • Do not ingest. • Avoid breathing vapor or mist. • Use only with adequate ventilation. • Use non-sparking tools.
Shipping and Storing Procedures	• Keep container tightly closed in a dry and well-ventilated area. • Keep away from heat • Protect from light • Keep in properly labeled containers • Keep out of reach of children

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits	When mists / aerosols can occur the following are recommended: 5mg/m^3 – ACGIH TLV (inhalable fraction), 5mg/m^3 – OSHA PEL. *Product has 0 kPa pressure at 68°F and is not expected to present any inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolized or misting of this product. Oil mist, if generated, is considered hazardous according to the OSHA Hazard Communication Standard.
Engineering Controls	• Material should be handled in enclosed vessels and equipment only if aerosolized and / or misted. • Use only in adequate ventilation if this occurs. • Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Eye/Face Protection	• Safety glasses
Skin Protection	No skin protection is required for single, short duration use For prolonged or repeated exposures use: • Normal work gloves are appropriate.
Respiratory Protection	No special requirements under ordinary conditions of use and with adequate ventilation.
General Hygiene	• Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. • Appropriate techniques should be used to remove potentially contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Opaque	**Flammability**	Not available
Physical State	Liquid	**Upper / Lower Flammability Limits**	Not available
Odor	Petroleum Oil	**Vapor Pressure**	Not available
Odor Threshold	Not available	**Vapor Density**	Not available
pH	Not available	**Relative Density (lbs/gal)**	8.6
Melting / Freezing Point (°F)	Not available	**Water Soluble**	Yes
Initial Boiling Point (°F)	>212	**Partition Coefficient: n-Octanol / water**	3.3 to >6
Boiling Range (°F)	Not available	**Auto-ignition Temperature (ºF)**	Not available
Flash Point (°F)	430	**Decomposition Temperature (ºF)**	Not available
Evaporation Rate	Not available	**Viscosity, cSt @ 40ºC** (within 24 hrs)	532 (TM- ASTM D-445)
Pour Point (°F)	45	**Viscosity @ 77 ºF (25 ºC)**	188 (TM- ASTM D-244)

10. CHEMICAL STABILTY & REACTIVITY INFORMATION

Reactivity Polymerization will not occur

Chemical Stability: Stable under normal conditions

Hazardous Reactions: None, under normal processing

Conditions to Avoid: High temperatures, flames and sparks

Incompatibility: Strong acids and oxidizing materials

Hazardous Decomposition Products: Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

11. TOXICOLOGICAL INFORMATION

Acute Exposure Respiratory Irritation	• Not expected to pose respiratory irritation
Eye Irritation	• Not expected to cause eye irritation
Skin Irritation	• Not expected to cause skin irritation
Sensitization	• Not expected to cause skin or respiratory sensitization.
Chronic Exposure Target Organ Effects	• No data available to indicate product of components present at greater than 1% are chronic health hazards.
Carcinogenicity	• This product contains mineral oils which are considered to be severely refined and not considered carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractible by the IP 346 test.
Mutagenicity	• No data available to indicate product or any components present at greater than .1% are a mutagenic or genotoxic.

11. TOXICOLOGICAL INFORMATION cont'd

Reproductive Toxicity	• No data available to indicate either product or components present at greater than .1% that may cause reproductive toxicity.
Teratogenicity	• No data available to indicate product or any components contained at greater than .1% may cause birth defects.

Analysis – LD50 / LC50

- **Inhalation LC50 Rat** 23.6 mg/L
- **Oral LD50 Rat** >5000 mg/kg
- **Dermal LD50 Rabbit** >2000 mg/kg

12. ECOLOGICAL INFORMATION

Component Analysis - Ecotoxicity – Aquatic Life

Duration/Test/Species	Concentration/Conditions
96 HR LL50: WAF Aquatic Vertebrates	>1000 mg/L

Persistence & Degradability Readily degraded
Bioaccumulation Potential Not determined
Soil Mobility Not determined
Other Adverse Effects Not determined

13. DISPOSAL CONSIDERATIONS

Disposal Instructions
The generation of waste should be avoided or minimized wherever possible.
Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. This product is not characterized as hazardous according to federal regulations (TCLP-SAFE)

14. TRANSPORTATION INFORMATION

Emergency Response Guide No. 171 *North American Emergency Response Guide Book*

UN Number Shipping Name (technical name)
Hazard Class
Packing Group
Placard

U.S. DOT: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

15. REGULATORY INFORMATION

SARA Extremely Hazardous Substances (Sections 302 & 304)	• This product does not contain greater than 1% of any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.
SARA Section 313	• This product does not contain greater than 1.0% of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
SARA Section 311 & 312 Classifications	• **Acute Hazard** No • **Chronic Hazard** No • **Fire Hazard** No • **Reactivity Hazard** No
CERCLA	• This product does not contain any "hazardous substances" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.
Clean Water Act / Oil Pollution Act	• This product contains heavy resins and is subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. • Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.
California Prop 65	• This product does not contain chemical(s) known to the state of California to cause cancer and/ or birth defects based on maximum impurity levels of components.

Global Chemical Inventories

Inventory	Component
	All components
US TSCA	Present
EU	Present
Japan	Not Available
Australia	Present
New Zealand	Present
Canada	Present
Switzerland	Not Available
Korea	Present
Philippines	Present
China	Present
Taiwan	Not Available

16. OTHER INFORMATION

US NFPA Ratings

Health	Fire	Reactivity
0	0	0

HMIS Ratings

Health	Fire	Reactivity
0	0	0

Revision Date: **August 9, 2018**

Revision Reason: Composition add / Physical & Chemical Properties Update

Prepared By: American Refining Group / PennzSuppress Corp

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS

SOILTAC® SAFETY DATA SHEET

SECTION 1 –IDENTIFICATION

PRODUCT NAME

SOILTAC®
Soil Stabilizer & Dust Control Agent

CHEMICAL FAMILY

Synthetic Copolymer Dispersion

MANUFACTURER

Soilworks®, LLC – Soil Stabilization & Dust Control
11520 E Germann Rd
Chandler, Arizona 85286 USA
(800) 545-5420 USA
+1 (480) 545-5454 International
info@soilworks.com
www.soilworks.com

EMERGENCY PHONE NUMBERS

(800) 545-5420 USA
+1 (480) 545-5454 International

U.S. DATA UNIVERSAL NUMBERING SYSTEM (DUNS NUMBER)

Soilworks, LLC	131946159

U.S. DEPARTMENT OF DEFENSE COMMERCIAL AND GOVERNMENT ENTITY CODE (CAGE CODE)

Soilworks, LLC	3FTH5

U.S. DEPARTMENT OF DEFENSE NATIONAL STOCK NUMBERS (NSN)

275-gallon (1,041 Liter)	Intermediate Bulk Container (IBC) Tote	6850-01-519-4708
55-gallon (208 Liter)	Drum	6850-01-519-4706

U.S. GENERAL SERVICES ADMINISTRATION (GSA) CONTRACT

Soilworks, LLC	GS-07F-5364P	October 31, 2018

SYNONYMS/OTHER MEANS OF IDENTIFICATION

Soiltac is a formulated, high molecular weight, engineered, prime synthetic copolymer dispersion.

INTENDED USES

For industrial use only. Major industries include construction, mining, military, municipal, oil & gas, energy & renewable energy and transportation.

Abate dust, air quality control, control dust, controlling dust, desertification prevention, dune stabilization, dust abatement, dust control, dust control agent, dust control material, dust control product, dust elimination, dust inhibitor, dust mitigation, dust palliative, dust pollution control, dust pollution prevention, dust prevention, dust reduction, dust retardant, dust stabilization, dust stabilizer, dust suppressant, dust suppression, eliminate dust, erosion control, erosion control material, erosion control product, erosion prevention, fines preservation, fugitive dust control, hydromulch tackifier, hydroseed tackifier, inhibit dust, mitigate dust, pm10 control, pm2.5 control, prevent dust, reduce dust, retard dust, road stabilization, road stabilizer, sand stabilization, soil additive, soil amendment, soil binder, soil crusting agent, soil solidifier, soil stabilization, soil stabilizer, stabilize dust, stabilize soil, stockpile capping, stop dust, suppress dust, surface wear course, wind erosion control.

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview	
Appearance:	Milky white liquid (transparent once cured)
Odor:	Sweet and mild (no odor once cured)
Health Hazards:	Under normal conditions of industrial use, this material is NOT expected to be a primary route of exposure
Safety Hazards:	Nonflammable
Environmental Hazards:	NOT classified as dangerous for the environment

HEALTH HAZARDS

INHALATION	Under normal conditions of industrial use, this material is NOT expected to be a primary route of exposure.
SKIN CONTACT	Under normal conditions of industrial use, this material is NOT expected to be a primary route of exposure.
EYE CONTACT	Under normal conditions of industrial use, this material is NOT expected to be a primary route of exposure.
INGESTION	Under normal conditions of industrial use, this material is NOT expected to be a primary route of exposure.

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS)

Not a hazardous substance or mixture.

U.S. HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) RATING

	0	No significant risk to health
	0	Material will not burn
	0	Stable, non-reactive and non-explosive
Personal Protection	-	No special hazard under normal use

This material does NOT contain hazardous ingredients and is NOT considered hazardous according to OSHA criteria.

#	COMPONENT	%	CAS Number
1.	Synthetic Vinyl Copolymer Dispersion	55%	Non-Hazardous
2.	Water	45%	7732-18-5

BYPRODUCT / RECYCLED CONTENT

None

Provide medical care provider with this Safety Data Sheet.

EYE CONTACT

If irritation or redness develops from exposure, flush eyes with clean water. If irritation persists, seek medical attention.

SKIN CONTACT

No treatment necessary under normal conditions of use. Remove contaminated clothing. Wash affected area with mild soap and water. If irritation or redness develops and persists, seek medical attention.

INHALATION

No treatment necessary under normal conditions of use. If breathing difficulties develop move victim away from source of exposure and into fresh air in a position comfortable for breathing. If symptoms persist, seek medical attention.

INGESTION

If swallowed do not induce vomiting. If symptoms persist, seek medical attention.

SECTION 5 – FIRE-FIGHTING MEASURES

FLAMMABILITY

Nonflammable and NOT combustible.
This material is an aqueous mixture that will not burn.
Dried material will burn in a fire.

FLASH POINT

Nonflammable

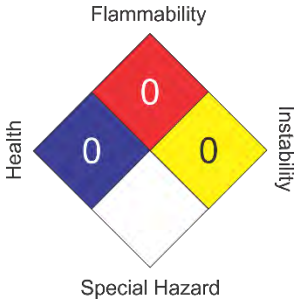
EXTINGUISHING MEDIA

Use water spray, foam, dry chemical or carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES & PROTECTIVE EQUIPMENT

Cool closed containers exposed to fire with water spray. Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

U.S. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 704 HAZARD CLASS



Legend
0 – Minimal
1 – Slight
2 – Moderate
3 – Serious
4 – Severe

SECTION 6 – ACCIDENTAL RELEASE MEASURES

For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

PROTECTIVE MEASURES

Stop the leak, if possible. Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches, sewers, rivers or open bodies of water by using sand, earth or other appropriate barriers.

CLEAN-UP METHODS

Avoid accidents, clean up immediately. Slippery when spilled. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

ADDITIONAL ADVICE

Local authorities should be advised if significant spillages cannot be contained.

SECTION 7 - HANDLING AND STORAGE

GENERAL PRECAUTIONS

Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

STORAGE

Keep container tightly closed in a cool, well-ventilated place. Use properly labelled and closeable containers. Maintain storage temperature ≥40 °F (4 °C) to avoid freezing and destabilization. Ideal storage temperature is 72 °F (22 °C).

HANDLING

Avoid breathing vapors or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. When handling material in drums, safety footwear should be worn and proper handling equipment should be used.

RECOMMENDED MATERIALS

For containers or container linings, use mild steel or high density polyethylene.

ADDITIONAL INFORMATION

Do not freeze.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

Contains no substances with occupational exposure limit values.

EXPOSURE CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

RESPIRATORY PROTECTION

Respiratory protection is NOT required under normal conditions of use in a well-ventilated workplace. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors.

HAND PROTECTION

Where hand contact with the material may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed with soap and water and dried thoroughly.

EYE PROTECTION

Eye protection is NOT required under normal conditions of use. If material is handled such that it could be splashed into eyes, wear splash-proof safety goggles or full face shield.

PROTECTIVE CLOTHING

Skin protection is NOT required under normal conditions of use or for single, short duration exposures. For prolonged or repeated exposures, use impervious chemical resistant boots, gloves and/or aprons over parts of the body subject to exposure.

MONITORING METHODS

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	>212 °F (>100 °C)
COLOR	Milky white (transparent once cured)
DENSITY	8.85-9.15 lb./gal (1.06-1.1 kg/l)
DYNAMIC VISCOSITY	290 cP @ 140 °F (60 °C)
DYNAMIC VISCOSITY	420 cP @ 104 °F (40 °C)
EVAPORATION RATE	<1 (BuAc = 1)
FLASH POINT	Nonflammable
FREEZING POINT	<32 °F (<0 °C)
ODOR	Sweet and mild (no odor once cured)
PH	5
PHYSICAL FORM	Liquid
SPECIFIC GRAVITY	1.05-1.10
VAPOR DENSITY	>1 (Air = 1)
WATER SOLUBILITY	100% dispersible, completely (until cured)

SECTION 10- STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable. Coagulation may occur following freezing, thawing or boiling.

Stability at 72 °F (22 °C) is ≥12 months.

CONDITIONS TO AVOID

Freezing (until cured).

HAZARDOUS REACTIONS

Hazardous polymerization does not occur.

HAZARDOUS DECOMPOSITION

Hazardous decomposition products are NOT expected to form during normal storage.

CORROSIVITY

Non-corrosive.

SECTION 11 - TOXICOLOGICAL INFORMATION

CARCINOGENICITY

Components ≥0.1% are NOT known to be associated with carcinogenic effects.

ACGIH	American Conference of Governmental Industrial Hygienists	Not listed as carcinogenic
IARC	World Health Organization International Agency for Research on Cancer	Not listed as carcinogenic
NTP	U.S. National Toxicology Program	Not listed as carcinogenic
OSHA	U.S. Occupational Safety and Health Administration	Not listed as carcinogenic
Prop 65	California Office of Environmental Health Hazard Assessment Proposition 65	Not listed as carcinogenic

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY

NOT expected to be a hazard.

DIOXINS & FURANS (PCDD's / PCDF's)	None Detected – QC066-97, GC-MS
METALS	None Detected – EPA 6020 & 3050
POLYCHLORINATED BIPHENYL (PCBs) **AROCLORS**	None Detected – EPA 8082
POLYCYCLIC AROMATIC HYDROCARBONS (PAH's)	None Detected – EPA 3510, GC-MS
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC)	None Detected - EPA 8270, GC-MS
VOLATILE ORGANIC COMPOUNDS	None Detected – EPA 8260, GC-MS

SECTION 12 - ECOLOGICAL INFORMATION

Based on EPA guidelines, this material is classified as practically non-toxic to all species. When used and applied properly, this material is not known to pose any ecological problems.

AQUATIC TOXICITY

Bacterium	Aliivibrio fischeri	15 minute	IC_{50}	>6,200 mg/L
Fathead Minnow	Pimephales promelas	7 day	IC_{50}	>95,000 mg/L
Fathead Minnow	Pimephales promelas	7 day	LC_{50}	>240,000 mg/L
Fathead Minnow	Pimephales promelas	96 hour	LC_{50}	>1,200 mg/L
Microalga	Pseudokirchneriella subcapitata	96 hour	IC_{50}	>250,000 mg/L
Microalga	Pseudokirchneriella subcapitata	96 hour	LC_{50}	>1,000 mg/L
Rainbow Trout	Oncorhynchus mykiss	96 hour	LC_{50}	>1,000 mg/L
Water Flea	Daphnia magna	48 hour	LC_{50}	>175,000 mg/L

TERRESTRIAL TOXICITY

Earthworm	Eisenia andrei	14 day	LC_{50}	>1,000,000 mg/L
Lettuce	Root elongation	120 hour	EC_{50}	>1,000,000 mg/L
Lettuce	Seed germination	120 hour	LC_{50}	>1,000,000 mg/L

OTHER ADVERSE EFFECTS

The material contains non-volatile components, which are NOT expected to be released to air in any significant quantities. The material is NOT expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

SECTION 13 - DISPOSAL CONSIDERATIONS

MATERIAL DISPOSAL

Recover or recycle if possible. Do NOT dispose into the environment, in drains or in water courses. To the best of our knowledge, this material does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

CONTAINER DISPOSAL

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

LOCAL LEGISLATION

Dispose in accordance with applicable regional, national and local laws and regulations.

SECTION 14 - TRANSPORT INFORMATION

NOT dangerous goods.

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

NOT regulated. This material is NOT subject to DOT regulations under 49 CFR Parts 171-180.

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

NOT regulated. This material is NOT classified as dangerous under IMDG regulations.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

NOT regulated. This material is either NOT classified as dangerous under IATA regulations or needs to follow country specific requirements.

SECTION 15 - REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

U.S. FEDERAL REGULATIONS

EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)

This material does NOT contain any chemicals with U.S. EPA CERCLA reportable quantities.

EPA SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA)

This material does NOT contain any chemicals with SARA reportable quantities.

EPA TOXIC SUBSTANCES CONTROL ACT (TSCA)

All components listed or in compliance with the inventory.

EPA CERCLA/SARA SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES AND TPQS

This material does NOT contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

EPA CERCLA/SARA SECTION 311/312 (TITLE III HAZARD CATEGORIES)

Acute Health:	No
Chronic Health:	No
Fire Hazard:	No
Pressure Hazard:	No
Reactive Hazard:	No

EPA CERCLA/SARA SECTION 313 AND 40 CFR 372

This material does NOT contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372.

CLEAN AIR ACT (CAA)

This material does NOT contain any hazardous air pollutants (HAP, as defined by the CAA Section 12 (40 CFR 61).

U.S. STATE REGULATIONS

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65)

This material does NOT contain any chemicals known to the State of California to cause cancer, birth defects or reproductive harm.

CANADIAN REGULATIONS

This material has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the regulations.

CANADIAN DOMESTIC SUBSTANCES LIST (DSL)

All components listed or in compliance with the inventory.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHIMIS)

None. This material is NOT a controlled material under the Canadian WHIMIS.

BUREAU DE NORMALIZATION DU QUÉBEC (BNQ)

Soiltac conformed as a dust control agent for non-asphalted roads and other similar surfaces.

Certificate of Conformity:	2014-08-06 – 2015-06-30
Certificate #:	1743
Standard #:	BNQ 2410-300/2009-10-01
Certification Protocol #:	BNQ 2410-900/2010-01-12

INVENTORY REGULATIONS

Australia	AICS	All components listed or in compliance with the inventory.
Canada	DSL/NDSL	All components listed or in compliance with the inventory.
China	IECSC	All components listed or in compliance with the inventory.
Japan	ENCS	All components listed or in compliance with the inventory.
Korea	KECI	All components listed or in compliance with the inventory.
Philippines	PICCS	All components listed or in compliance with the inventory.
United States	TSCA	All components listed or in compliance with the inventory.

INVENTORIES LEGEND

AICS	Australian Inventory of Chemical Substances
DSL	Canadian Domestic Substances List
ENCS	Japanese Existing and New Chemical Substances
IECSC	China Existing Chemical Inventory
KECI	Korea Existing Chemicals Inventory
NDSL	Canadian Non-Domestic Substances List
PICCS	Philippine Inventory of Chemicals and Chemical Substances
TSCA	Toxic Substances Control Act

800.545.5420 USA
001.480.545.5454 Intl
info@soilworks.com
www.soilworks.com

SECTION 16 – OTHER INFORMATION

SDS VERSION NUMBER 1.2

SDS EFFECTIVE DATE 7/13/2015

SDS REGULATIONS

The content and format of this SDS is in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SDS DISTRIBUTION

The information in this document should be made available to all who may handle the material.

DISCLAIMER

The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE MATERIAL, THE SAFETY OF THIS MATERIAL, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the material, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the material for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

APPENDIX G
Desert Renewable Energy Conservation Plan Conservation Management Action Checklist

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
Biological Resources	**LUPA-BIO-1**	Conduct a habitat assessment (see Glossary of Terms) of Focus and BLM Special Status Species' suitable habitat for all activities and identify and/or delineate the DRECP vegetation types, rare alliances, and special features (e.g., Aeolian sand transport resources, Joshua tree, microphyll woodlands, carbon sequestration characteristics, seeps, climate refugia) present using the most current information, data sources, and tools (e.g., DRECP land cover mapping, aerial photos, DRECP species models, and reconnaissance site visits) to identify suitable habitat (see Glossary of Terms) for Focus and BLM Special Status Species. If required by the relevant species specific CMAs, conduct any subsequent protocol or adequate presence/absence surveys to identify species occupancy status and a more detailed mapping of suitable habitat to inform siting and design considerations. If required by relevant species specific CMAs, conduct analysis of percentage of impacts to suitable habitat and modeled suitable habitat.	Yes		Biological resource surveys and assessments were conducted for each road segment. Refer to Section 3.2.1 of the Environmental Assessment (EA). BA is incorporated by reference in the EA.
		• BLM will not require protocol surveys in sites determined by the designated biologist to be unviable for occupancy of the species, or if baseline studies inferred absence during the current or previous active season.	Yes		Refer to Section 3.2.1 of the EA. Also refer to Best Management Practices (BMPs) in EA Appendix D outlining surveys required
		Utilize the most recent and applicable assessment protocols and guidance documents for vegetation types and jurisdictional waters and wetlands that have been approved by BLM, and the appropriate responsible regulatory agencies, as applicable.	Yes		Refer to Section 3.2.1 of the EA. Jurisdictional Waters survey reports are included in the administrative record.
	LUPA-BIO-2	Designated biologist(s) (see Glossary of Terms), will conduct, and oversee where appropriate, activity-specific required biological monitoring during pre-construction, construction, and decommissioning to ensure that avoidance and minimization measures are appropriately implemented and are effective. The appropriate required monitoring will be determined during the environmental analysis and BLM approval process. The designated biologist(s) will submit monitoring reports directly to BLM.	Yes		Refer to Section 3.2.1 of the EA. Also refer to Appendix D of the EA, Biological Resource BMPs.
Resource Setback Standards	**LUPA-BIO-3**	Resource setbacks (see Glossary of Terms) have been identified to avoid and minimize the adverse effects to specific biological resources. Setbacks are not considered additive and are measured as specified in the applicable CMA. Allowable minor incursions (see Glossary of Terms), as per specific CMAs do not affect the following setback measurement descriptions. Generally, setbacks (which range in distances for different biological resources) for the appropriate resources are measured from:	Yes		Resource setbacks are identified in the EA Appendix D (Biological Resource BMPs)
		• The edge of each of the DRECP desert vegetation types, including but not limited to those in the riparian or wetland vegetation groups (as defined by alliances within the vegetation type descriptions and mapped based on the vegetation type habitat assessments described in LUPA-BIO-1).	No	Resource not found on the project site	No riparian or wetland areas found in or adjacent to road segments
		• The edge of the mapped riparian vegetation or the Federal Emergency Management Agency (FEMA) 100-year floodplain, whichever is greater, for the Mojave River.	No	Project is not located in or near the area specified in the CMA.	No road segments are found within the vicinity of the Mojave River
		• The edge of the vegetation extent for specified Focus and BLM sensitive plant species.	No	Resource not found on the project site	No sensitive plants were detected
		• The edge of suitable habitat or active nest substrates for the appropriate Focus and BLM Special Status Species.	Yes		Species specific setbacks are identified in the EA Appendix D (BMPs)
Seasonal Restrictions	**LUPA-BIO-4**	For activities that may impact Focus and BLM Special Status Species, implement all required species-specific seasonal restrictions on pre-construction, construction, operations, and decommissioning activities.	Yes		Seasonal restrictions are identified in BMPs in Appendix D
		Species-specific seasonal restriction dates are described in the applicable CMAs.	Yes		Species specific seasonal restrictions are identified in the EA Appendix D (BMPs)
		Alternatively, to avoid a seasonal restriction associated with visual disturbance, installation of a visual barrier may be evaluated on a case-by-case basis that will result in the breeding, nesting, lambing, fawning, or roosting species not being affected by visual disturbance from construction activities subject to seasonal restriction. The proposed installation and use of a visual barrier to avoid a species seasonal restriction will be analyzed in the activity/project specific environmental analysis.	No	Land use does not occur on project site.	
Worker Education	**LUPA-BIO-5**	All activities, as determined appropriate on an activity-by-activity basis, will implement a worker education program that meets the approval of the BLM. The program will be carried out during all phases of the project (site mobilization, ground disturbance, grading, construction, operation, closure/decommissioning or project abandonment, and restoration/reclamation activities). The worker education program will provide interpretation for non-English speaking workers, and provide the same instruction for new workers prior to their working on site. As appropriate based on the activity, the program will contain information about:	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Site-specific biological and nonbiological resources.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Information on the legal protection for protected resources and penalties for violation of federal and state laws and administrative sanctions for failure to comply with LUPA CMA requirements intended to protect site-specific biological and nonbiological resources.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• The required LUPA and project-specific measures for avoiding and minimizing effects during all project phases, including but not limited to resource setbacks, trash, speed limits, etc.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Reporting requirements and measures to follow if protected resources are encountered, including potential work stoppage and requirements for notification of the designated biologist.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Measures that personnel can take to promote the conservation of biological and nonbiological resources.	Yes		Refer to EA Appendix D, Wildlife General BMPs
Subsidized Predators Standards	**LUPA-BIO-6**	Subsidized predator standards, approved by BLM, in coordination with the USFWS and CDFW, will be implemented during all appropriate phases of activities, including but not limited to renewable energy activities, to manage predator food subsidies, water subsidies, and breeding sites including the following:	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Common Raven management actions will be implemented for all activities to address food and water subsidies and roosting and nesting sites specific to the Common Raven. These include identification of monitoring reporting procedures and requirements; strategies for refuse management; as well as design strategies and passive repellant methods to avoid providing perches, nesting sites, and roosting sites for Common Ravens.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• The application of water and/or other palliatives for dust abatement in construction areas and during project operations and maintenance will be done with the minimum amount of water necessary to meet safety and air quality standards and in a manner that prevents the formation of puddles, which could attract wildlife and wildlife predators.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Following the most recent national policy and guidance, BLM will take actions to not introduce, dispose of, or release any non- native species into areas of native habitat, suitable habitat, and natural or artificial waterways/water bodies containing native species.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		All activity work areas will be kept free of trash and debris. Particular attention will be paid to "micro-trash" (including such small items as screws, nuts, washers, nails, coins, rags, small electrical components, small pieces of plastic, glass or wire, and any debris or trash that is colorful or shiny) and organic waste that may subsidize predators. All trash will be covered, kept in closed containers, or otherwise removed from the project site at the end of each day or at regular intervals prior to periods when workers are not present at the site.	Yes		Refer to EA Appendix D, Wildlife General BMPs

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		• In addition to implementing the measures above on activity sites, each activity will provide compensatory mitigation that contributes to LUPA-wide raven management.	No	Not applicable per BLM El Centro Field Office	
Restoration of Areas Disturbed by Construction Activities But Not Converted by Long-Term Disturbance	**LUPA-BIO-7**	Where DRECP vegetation types or Focus or BLM Special Status Species habitats may be affected by ground- disturbance and/or vegetation removal during pre-construction, construction, operations, and decommissioning related activities but are not converted by long-term (i.e., more than two years of disturbance, see Glossary of Terms) ground disturbance, restore these areas following the standards, approved by BLM authorized officer, following the most recent BLM policies and procedures for the vegetation community or species habitat disturbance/impacts as appropriate, summarized below:	No	Resource not found on the project site	Minimal vegetation removal would occur within existing road area. Primarily vegetation trimming and removal from existing road surface. Restoration is not proposed as part of this project.
		• Implement site-specific habitat restoration actions for the areas affected including specifying and using:	No	Land use does not occur on project site.	
		○ The appropriate seed (e.g., certified weed- free, native, and locally and genetically appropriate seed)	No	Land use does not occur on project site.	
		○ Appropriate soils (e.g., topsoil of the same original type on site or that was previously stored by soil type after being salvaged during excavation and construction activities)	No	Land use does not occur on project site.	
		○ Equipment	No	Land use does not occur on project site.	
		○ Timing (e.g., appropriate season, sufficient rainfall)	No	Land use does not occur on project site.	
		○ Location	No	Land use does not occur on project site.	
		○ Success criteria	No	Land use does not occur on project site.	
		○ Monitoring measures	No	Land use does not occur on project site.	
		○ Contingency measures, relevant for restoration, which includes seeding that follows BLM policy when on BLM administered lands.	No	Land use does not occur on project site.	
		• Salvage and relocate cactus, nolina, and yucca from the site prior to disturbance using BLM protocols. To the maximum extent practicable for short-term disturbed areas (see Glossary of Terms), the cactus and yucca will be re-planted back to the original site.	No	Resource not found on the project site	
		• Restore and reclaim short-term (i.e. 2 years or less, see Glossary of Terms) disturbed areas, including pipelines, transmission projects, staging areas, and short-term construction-related roads immediately or during the most biologically appropriate season as determined in the activity/project specific environmental analysis and decision, following completion of construction activities to reduce the amount of habitat converted at any one time and promote recovery to natural habitats and vegetation as well as climate refugia and ecosystem services such carbon storage.	No	Land use does not occur on project site.	
General Closure and Decommissioning Standards	**LUPA-BIO-8**	All activities that are required to close and decommission the site (e.g., renewable energy activities) will specify and implement project-specific closure and decommissioning actions that meet the approval of BLM, and that at a minimum address the following:	No	Land use does not occur on project site.	Road maintenance and repair would occur within existing roads that are not planned for decommission
		• Specifying and implementing the methods, timing (e.g., criteria for triggering closure and decommissioning actions), and criteria for success (including quantifiable and measureable criteria).	No	Land use does not occur on project site.	
		• Recontouring of areas that were substantially altered from their original contour or gradient and installing erosion control measures in disturbed areas where potential for erosion exists.	No	Land use does not occur on project site.	
		• Restoring vegetation as well as soil profiles and functions that will support and maintain native plant communities, associated carbon sequestration and nutrient cycling processes, and native wildlife species.	No	Resource not found on the project site	
		• Vegetation restoration actions will identify and use native vegetation composition, native seed composition, and the diversity to values commensurate with the natural ecological setting and climate projections.	No	Land use does not occur on project site.	
Water and Wetland Dependent Species Resources	**LUPA-BIO-9**	Implement the following general LUPA CMA for water and wetland dependent resources	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		• Implement construction site standard practices to prevent toxic chemicals, hazardous materials, and other fluids from entering vegetation type streams, washes, and tributary networks through water runoff, erosion, and sediment transport by, at a minimum, implementing the following:			
		○ On project sites, vehicles and other equipment will be maintained in proper working condition and only stored in designated containment areas where runoff is collected or controlled and that are located outside of streams, washes, and distributary networks to minimize accidental fluids and hazardous materials spills.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Hazardous material leaks, spills, or releases will be immediately cleaned and equipment will be repaired upon identification. Removal and disposal of spill and related clean-up materials will occur at an approved off-site landfill.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Maintenance and operations vehicles will carry the appropriate equipment and materials to isolate, clean up, and repair any hazardous material leaks, spills, or releases.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		• Activity-specific drainage, erosion, and sedimentation control actions, which meet the approval of BLM and the applicable regulatory agencies, will be carried out during all appropriate phases of the approved project. These actions, as needed, will address measures to ensure the proper protection of water quality, site-specific stormwater and sediment retention, and design of the project to minimize site disturbance, including the following:	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Identify site-specific surface water runoff patterns and implement measures to prevent excessive and unnatural soil deposition and erosion.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Implement measures to maintain natural drainages and to maintain hydrologic function in the event drainages are disturbed.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Reduce the amount of area covered by impervious surfaces through use of permeable pavement or other pervious surfaces. Direct runoff from impervious surfaces into retention basins.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Stabilize disturbed areas following grading in the manner appropriate to the soil type so that wind or water erosion is minimized.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Minimize irrigation runoff by using low or no irrigation native vegetation landscaping for landscaped retention basins.	No	Land use does not occur on project site.	No revegetation or irrigation would be implemented under the Proposed Action
		○ Conduct regular inspections and maintenance of long-term erosion control measures to ensure long-term effectiveness.	Yes		Refer to EA Appendix D, Hazardous Materials and Waste Management BMPs
		○ Project applicants for sites that may affect intermittent and perennial streams, springs, swales, ephemeral washes, wetland vegetation, other DRECP water land covers, or sites occupied by aquatic or riparian Focus and BLM Special Status Species due to groundwater or surface water extraction will conduct hydrologic studies during project planning to determine the potential effect of groundwater and surface water extraction on the hydrologic unit. These studies will include both watershed effects as well as effects on perched, alluvial, and regional aquifers. Projects that are likely to affect ground-water resources in a manner that would result in substantial loss of riparian or wetland communities or habitat for riparian or aquatic Focus and BLM Special Status Species are prohibited.	No	Land use does not occur on project site.	Proposed Action road maintenance and repair would not require groundwater or surface water extraction.

LUPA Wide					
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		○ The use of evaporation ponds for water management will be avoided when the water could harm birds or other terrestrial wildlife due to constituents of concern present in the wastewater (e.g., selenium, hypersalinity, etc.). Evaporation ponds will be configured to minimize attractiveness to shorebirds (e.g., maintain water depths over two feet; maintain steep slopes along edge; enclose evaporation ponds in long-term structures; or obscure evaporation ponds from view using materials that blend in with the natural surroundings).	No	Land use does not occur on project site.	Proposed Action road maintenance and repair would no require evaporative ponds.
		• Ramps that allow the egress of wildlife from ponds or other water management infrastructure will be installed.	No	Resource not found on the project site	Proposed Action road maintenance and repair would no require water management infrastructure.
Standard Practices for Weed Management	**LUPA-BIO-10**	Consistent with BLM state and national policies and guidance, integrated weed management actions, will be carried out during all phases of activities, as appropriate, and at a minimum will include the following:	Yes		Refer to EA Appendix D, Vegetation BMPs
		• Thoroughly clean the tires and undercarriage of vehicles entering or reentering the project site to remove potential weeds.	Yes		Refer to EA Appendix D, Vegetation BMPs
		• Store project vehicles on site in designated areas to minimize the need for multiple washings whenever vehicles re-enter the project site.	Yes		Refer to EA Appendix D, Vegetation BMPs
		• Properly maintain vehicle wash and inspection stations to minimize the introduction of invasive weeds or subsidy of invasive weeds.	Yes		Refer to EA Appendix D, Vegetation BMPs
		• Closely monitor the types of materials brought onto the site to avoid the introduction of invasive weeds and non-native species.	Yes		Refer to EA Appendix D, Vegetation BMPs
		• Reestablish native vegetation quickly on disturbed sites.	Yes		Refer to EA Appendix D, Vegetation BMPs
		• Monitor and quickly implement control measures to ensure early detection and eradication of weed invasions to avoid the spread of invasive weeds and non-native species on site and to adjacent off-site areas.	Yes		Refer to EA Appendix D, Vegetation BMPs
		• Use certified weed-free mulch, straw, hay bales, or equivalent fabricated materials for installing sediment barriers.	Yes		Refer to EA Appendix D, Vegetation BMPs
Nuisance Animals and Invasive Species	**LUPA-BIO-11**	Implement the following CMAs for controlling nuisance animals and invasive species:	Yes		Refer to EA Appendix D, Wildlife BMPs
		• No fumigant, treated bait, or other means of poisoning nuisance animals including rodenticides will be used in areas where Focus and BLM Special Status Species are known or suspected to occur.	Yes		Refer to EA Appendix D, Wildlife BMPs
		• Manage the use of widely spread herbicides and do not apply herbicides effective against dicotyledonous plants within 1,000 feet from the edge of a 100-year floodplain, stream and wash channels, and riparian vegetation or to soils less than 25 feet from the edge of drains. Exceptions will be made when targeting the base and roots of invasive riparian species such as tamarisk and Arundo donax (giant reed). Manage herbicides consistent with the most current national and California BLM policies.	No	Land use does not occur on project site.	No herbicides will be used.
		• Minimize herbicide, pesticide, and insecticide treatment in areas that have a high risk for groundwater contamination.	No	Land use does not occur on project site.	No herbicides, pesticides, or insecticides will be used.
		• Clean and dispose of pesticide containers and equipment following professional standards. Avoid use of pesticides and cleaning containers and equipment in or near surface or subsurface water.	No	Land use does not occur on project site.	No herbicides, pesticides, or insecticides will be used.
		• When near surface or subsurface water, restrict pesticide use to those products labeled safe for use in/near water and safe for aquatic species of animals and plants.	No	Land use does not occur on project site.	No herbicides, pesticides, or insecticides will be used.
Noise	**LUPA-BIO-12**	For activities that may impact Focus or BLM Special Status Species, implement the following LUPA CMA for noise:	Yes		Refer to EA Appendix D, Wildlife BMPs
		• To the extent feasible, and determined necessary by BLM to protect Focus and BLM sensitive wildlife species, locate stationary noise sources that exceed background ambient noise levels away from known or likely locations of and BLM sensitive wildlife species and their suitable habitat.	Yes		Refer to EA Appendix D, Wildlife BMPs
		• Implement engineering controls on stationary equipment, buildings, and work areas including sound-insulation and noise enclosures to reduce the average noise level, if the activity will contribute to noise levels above existing background ambient levels.	No	Land use does not occur on project site.	No stationary sources would be required during road maintenance and repair activities.
		• Use noise controls on standard construction equipment including mufflers to reduce noise	Yes		Refer to EA Appendix D, Wildlife BMPs
General Siting and Design	**LUPA-BIO-13**	Implement the following CMA for project siting and design	No	Land use does not occur on project site.	Road maintenance and repair would occur within existing roads.
		• To the maximum extent practicable site and design projects to avoid impacts to vegetation types, unique plant assemblages, climate refugia as well as occupied habitat and suitable habitat for Focus and BLM Special Status Species (see "avoid to the maximum extent practicable" in Glossary of Terms).	No	Land use does not occur on project site.	Road maintenance and repair would occur within existing roads.
		• The siting of projects along the edges (i.e. general linkage border) of the biological linkages identified in Appendix D (Figures D-1 and D-2) will be configured (1) to maximize the retention of microphyll woodlands and their constituent vegetation type and inclusion of other physical and biological features conducive to Focus and BLM Special Status Species' dispersal, and (2) informed by existing available information on modeled focus and BLM Special Status Species habitat and element occurrence data, mapped delineations of vegetation types, and based on available empirical data, including radio telemetry, wildlife tracking sign, and road-kill information. Additionally, projects will be sited and designed to maintain the function of F Special Status Species connectivity and their associated habitats in the following linkage and connectivity areas:	No	Land use does not occur on project site.	Road maintenance and repair would occur within existing roads.
		○ Within a 5-mile-wide linkage across Interstate 10 centered on Wiley's Well Road to connect the Mule and McCoy mountains (the majority of this linkage is within the Chuckwalla ACEC and Mule-McCoy Linkage ACEC) .	No	Project not located on federal lands with this designation.	The El Centro Field Office boundary is 10+ miles south of Interstate 10.
		○ Within a 3-mile-wide linkage across Interstate 10 to connect the Chuckwalla and Palen mountains.	No	Project not located on federal lands with this designation.	
		○ Within a 1.5-mile-wide linkage across Interstate 10 to connect the Chuckwalla Mountains to the Chuckwalla Valley east of Desert Center.	No	Project not located on federal lands with this designation.	
		○ The confluence of Milpitas Wash and Colorado River floodplain within 2 miles of California State Route 78 (this linkage is entirely within the Chuckwalla ACEC) .	No	Project is not located in or near the area specified in the CMA.	Road maintenance and repair would not occur within the Chuckwalla ACEC.
		• Delineate the boundaries of areas to be disturbed using temporary construction fencing and flagging prior to construction and confine disturbances, project vehicles, and equipment to the delineated project areas to protect vegetation types and focus and BLM Special Status Species.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Long-term nighttime lighting on project features will be limited to the minimum necessary for project security, safety, and compliance with Federal Aviation Administration requirements and will avoid the use of constant-burn lighting.	No	Land use does not occur on project site.	No night-time work would occur.
		• All long-term nighttime lighting will be directed away from riparian and wetland vegetation, occupied habitat, and suitable habitat areas for Focus and BLM Special Status Species. Long- term nighttime lighting will be directed and shielded downward to avoid interference with the navigation of night-migrating birds and to minimize the attraction of insects as well as insectivorous birds and bats to project infrastructure.	No	Land use does not occur on project site.	No night-time work would occur.
		• To the maximum extent practicable (see Glossary of Terms), restrict construction activity to existing roads, routes, and utility corridors to minimize the number and length/size of new roads, routes, disturbance, laydown, and borrow areas.	Yes		Refer to EA Appendix D, Wildlife General BMPs

LUPA Wide					
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		• To the maximum extent practicable (see Glossary of Terms), confine vehicular traffic to designated open routes of travel to and from the project site, and prohibit, within project boundaries, cross- country vehicle and equipment use outside of approved designated work areas to prevent unnecessary ground and vegetation disturbance.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• To the maximum extent practicable(see Glossary of Terms) , construction of new roads and/or routes will be avoided within Focus and BLM Special Status Species suitable habitat within identified linkages for those Focus and BLM Special Status Species, unless the new road and/or route is beneficial to minimize net impacts to natural or ecological resources of concern. These areas will have a goal of "no net gain" of project roads and/or routes	No	Land use does not occur on project site.	No new roads would be constructed.
		• To the maximum extent practicable (see Glossary of Terms), any new road and/or route considered within Focus and BLM Special Status Species suitable habitat within identified linkages for those Focus and BLM Special Status Species will not be paved so as not to negatively affect the function of identified linkages.	No	Land use does not occur on project site.	No new roads would be constructed.
		• Use nontoxic road sealants and soil stabilizing agents.	Yes		Non-toxic soil stabilizing agents like SoilTac or EnviroTac would be used.
Biology: General Standard Practices	**LUPA-BIO-14**	Implement the following general standard practices to protect Focus and BLM Special Status Species:	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Feeding of wildlife, leaving of food or trash as an attractive nuisance to wildlife, collection of native plants, or harassing of wildlife on a site is prohibited.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Any wildlife encountered during the course of an activity, including construction, operation, and decommissioning will be allowed to leave the area unharmed.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Domestic pets are prohibited on sites. This prohibition does not apply to the use of domestic animals (e.g., dogs) that may be used to aid in official and approved monitoring procedures/protocols, or service animals (dogs) under Title II and Title III of the American with Disabilities Act.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• All construction materials will be visually checked for the presence of wildlife prior to their movement or use. Any wildlife encountered during the course of these inspections will be allowed to leave the construction area unharmed.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• All steep-walled trenches or excavations used during the project will be covered, except when being actively used, to prevent entrapment of wildlife. If trenches cannot be covered, they will be constructed with escape ramps, following up-to-date design standards to facilitate and allow wildlife to exit, or wildlife exclusion fencing will be installed around the trench(s) or excavation(s). Open trenches or other excavations will be inspected by a designated biologist immediately before backfilling, excavation, or other earthwork.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		• Minimize natural vegetation removal through implementation of crush and drive or cut or mow vegetation rather than removing entirely.	Yes		Refer to EA Appendix D, Wildlife General BMPs
	LUPA-BIO-15	Use state-of-the-art, as approved by BLM, construction and installation techniques, appropriate for the specific activity/project and site, that minimize new site disturbance, soil erosion and deposition, soil compaction, disturbance to topography, and removal of vegetation.	Yes		Refer to EA Appendix D, Soil BMPs
Activity-Specific Bird and Bat CMAs	**LUPA-BIO-16**	For activities that may impact Focus and BLM sensitive birds, protected by the ESA and/or Migratory Bird Treaty Act of 1918, and bat species, implement appropriate measures as per the most up-to-date BLM state and national policy and guidance, and data on birds and bats, including but not limited to activity specific plans and actions. The goal of the activity -specific bird and bat actions is to avoid and minimize direct mortality of birds and bats from the construction, operation, maintenance, and decommissioning of the specific activities.	Yes		Refer to EA Appendix D, Wildlife General BMPs
		Activity-specific measures to avoid and minimize impacts may include, but are not limited to:	No	Land use does not occur on project site.	Maintenance and repair activities would occur within previously disturbed roadways with minimal disturbance to vegetation and no loss or disturbance to bat roosting and foraging habitat would occur. BMPs for migratory and resident birds are include in EA Appendix D.
		• Siting and designing activities will avoid high bird and bat movement areas that separate birds and bats from their common nesting and roosting sites, feeding areas, or lakes and rivers.	No	Land use does not occur on project site.	Maintenance and repair activities would occur within previously disturbed roadways with minimal disturbance to vegetation and no loss or disturbance to bat roosting and foraging habitat would occur. BMPs for migratory and resident birds are include in EA Appendix D.
		• For activities that impact bird and bat Focus and BLM Special Status Species, during project siting and design, conducting monitoring of bird and bat presence as well as bird and bat use of the project site using the most current survey methods and best procedures available at the time.	Yes		Maintenance and repair activities would occur within previously disturbed roadways with minimal disturbance to vegetation and no loss or disturbance to bat roosting and foraging habitat would occur. BMPs for migratory and resident birds are include in EA Appendix D.
		• Reusing or co-locating new transmission facilities and other ancillary facilities with existing facilities and disturbed areas to reduce habitat destruction and avoid additional collision risks.	No	Land use does not occur on project site.	Project does not propose new transmission or other ancillary facilities .
		• Reducing bird and bat collision hazards by utilizing techniques such as unguyed monopole towers or tubular towers. Where the use of guywires is unavoidable, demarcate guywires using the best available methods to minimize avian species strikes.	No	Land use does not occur on project site.	Project does not propose new transmission or other ancillary facilities .
		• When fencing is necessary, use bird and bat compatible design standards.	No	Land use does not occur on project site.	Project does not propose new fencing.
		• Using lighting that does not attract birds and bats or their prey to project sites including using non-steady burning lights (red, dual red and white strobe, strobe- like flashing lights) to meet Federal Aviation Administration requirements, using motion or heat sensors and switches to reduce the time when lights are illuminated, using appropriate shielding to reduce horizontal or skyward illumination, and avoiding the use of high-intensity lights (e.g., sodium vapor, quartz, and halogen).	No	Land use does not occur on project site.	No work would occur at night-time and no lighting would be used.
		• Implementing a robust monitoring program to regularly check for wildlife carcasses, document the cause of mortality, and promptly remove the carcasses.	No	Land use does not occur on project site.	Maintenance and repair activities would occur within previously disturbed roadways with minimal disturbance to vegetation and no loss or disturbance to bat roosting and foraging habitat would occur. BMPs for migratory and resident birds are include in EA Appendix D.
		• Incorporating a bird and bat use and mortality monitoring program during operations using current protocols and best procedures available at time of monitoring	No	Land use does not occur on project site.	Maintenance and repair activities would occur within previously disturbed roadways with minimal disturbance to vegetation and no loss or disturbance to bat roosting and foraging habitat would occur. BMPs for migratory and resident birds are include in EA Appendix D.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
Activity-Specific Bird and Bat CMAs	**LUPA-BIO-17**	For activities that may result in mortality to Focus and BLM Special–Status bird and bat species, a Bird and Bat Conservation Strategy (BBCS) will be prepared with the goal of assessing operational impacts to bird and bat species and incorporating methods to reduce documented mortality. The BBCS actions for impacts to birds and bats during these activities will be determined by the activity-specific bird and bat operational actions. The strategy shall be approved by BLM in coordination with USFWS, and CDFW as appropriate, and may include, but is not limited to:	No	Land use does not occur on project site.	Maintenance and repair activities would occur within previously disturbed roadways with minimal disturbance to vegetation and no loss or disturbance to bat roosting and foraging habitat would occur. BMPs for migratory and resident birds are include in EA Appendix D.
		• Incorporating a bird and bat use and mortality monitoring program during operations using current protocols and best procedures available at time of monitoring.	No	Land use does not occur on project site.	
		• Activity-specific operational avoidance and minimization actions that reduce the level of mortality on the populations of bird and bat species, such as:	No	Land use does not occur on project site.	
		○ Use techniques that minimize attraction of birds to hazardous situations that are mistaken to be or simulate natural habitats (e.g., bodies of water).	No	Land use does not occur on project site.	
		○ Implement operational management techniques that minimize impacts to migratory birds during diurnal and seasonal cycles (e.g., positioning of heliostats to decrease surface area exposed to avian species).	No	Land use does not occur on project site.	
		○ Evaluation and installation of the best available bird and bat detection and deterrent technologies available at the time of construction.	No	Land use does not occur on project site.	
		Known important Focus and BLM Special Status bird areas are:	No	Resource not found on the project site	
		• Dry lakes and playas of the north Mojave region, which include China Lake, Koehn Lake, Harper Lake, and Searles Lake (as shown in the Audubon Important Bird Areas in Appendix D)	No	Project is not located in or near the area specified in the CMA.	
		• Antelope Valley (as shown in the Audubon Important Bird Areas in Appendix D)	No	Project is not located in or near the area specified in the CMA.	
		• Lower Colorado River Valley (as shown in the Audubon Important Bird Areas in Appendix D)	No	Project is not located in or near the area specified in the CMA.	
		• The Salton Sea and bordering areas including agricultural land of the Imperial Valley (as shown in the Audubon Important Bird Areas in Appendix D)	No	Project is not located in or near the area specified in the CMA.	
		• Documented avian movement corridors along the north slope of the San Gabriel and San Bernardino mountain ranges	No	Resource not found on the project site	
		• Other regionally important seasonal use areas and migratory corridors identified in future studies or otherwise documented in the scientific literature over the term of the LUPA	No	Resource not found on the project site	
		The following provides the DRECP vegetation type, and Focus and BLM Special Status Species biological CMAs to be implemented throughout the LUPA Decision Area.	No	Land use does not occur on project site.	
		Riparian and Wetland Vegetation Types and Associated Species (RIPWET)	No	Resource not found on the project site	No riparian or wetland vegetation occurs along road segments.
		Riparian Vegetation Types	No	Resource not found on the project site	
		• Madrean Warm Semi-Desert Wash Woodland/Scrub	No	Resource not found on the project site	No riparian or wetland vegetation occurs along road segments.
		• Mojavean Semi-Desert Wash Scrub	No	Resource not found on the project site	
		• Sonoran-Coloradan Semi-Desert Wash Woodland/Scrub	No	Resource not found on the project site	
		• Southwestern North American Riparian Evergreen and Deciduous Woodland	No	Resource not found on the project site	
		• Southwestern North American Riparian/Wash Scrub	No	Resource not found on the project site	
		Wetland Vegetation Types	No	Resource not found on the project site	
		• Arid west freshwater emergent marsh	No	Resource not found on the project site	
		• Californian Warm Temperate Marsh/Seep	No	Resource not found on the project site	
		• North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat	No	Resource not found on the project site	
		• Southwestern North American Salt Basin and High Marsh	No	Resource not found on the project site	
		Riparian and Wetland Bird Focus Species	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Willow Flycatcher	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Southwestern Willow Flycatcher	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Least Bell's Vireo	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Western Yellow-billed Cuckoo	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Yuma Clapper Rail	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• California Black Rail	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Tricolored Blackbird	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		Fish Focus Species	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Desert pupfish	No	Resource not found on the project site	Refer to EA BMPs in Appendix D. BA incorporated by reference in EA
		• Mohave Tui Chub • Owens Tui Chub • Owens Pupfish			
Other Riparian & Wetland Focus Species: Tehachapi Slender Salamander	**LUPA-BIO-RIPWET-1**	The riparian and wetland DRECP vegetation types and other features listed in **Table 17** will be avoided to the maximum extent practicable, except for allowable minor incursions (see Glossary of Terms for "avoidance to the maximum extent practicable" and "minor incursion") with the specified setbacks.	No	Resource not found on the project site	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
		For minor incursion (see "minor incursion" in the Glossary of Terms) to the DRECP riparian vegetation types, wetland vegetation types, or encroachments on the setbacks listed in **Table 17**, the hydrologic function of the avoided riparian or wetland communities will be maintained.	No	Resource not found on the project site	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
		• Minor incursions in the riparian and wetland vegetation types or other features including the setbacks listed in **Table 17** will occur outside of the avian nesting season, February 1 through August 31 or otherwise determined by BLM, USFWS and CDFW if the minor incursion(s) is likely to result in impacts to nesting birds.	No	Resource not found on the project site	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	LUPA-BIO-RIPWET-2	Hydrologic function of the following DRECP vegetation types will be maintained: North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat, Southwestern North American Salt Basin and High Marsh, and other undifferentiated wetland-related land covers (i.e., "Playa," "Wetland," and "Open Water").	No	Resource not found on the project site	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
BLM Special Status Riparian Bird Species	**LUPA-BIO-RIPWET-3**	For activities that occur within 0.25 mile of a riparian or wetland DRECP vegetation type and may impact BLM Special Status riparian and wetland birds species, conduct a pre-construction/activity nesting bird survey for BLM Special Status riparian and wetland birds according to agency-approved protocols.	No	Project not within the range or habitat of this species.	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
		• Based on the results of the nesting bird survey above, setback activities that are likely to impact BLM Special Status riparian and wetland bird species, including but not limited to pre-construction, construction and decommissioning, 0.25 mile from active nests Special Status during the breeding season (February 1 through August 31 or otherwise determined by BLM, USFWS and CDFW). For activities in areas covered by this provision that occur during the breeding season and that last longer than one week, nesting bird surveys may need to be repeated, as determined by BLM, in coordination with USFWS and CDFW, as appropriate. No pre-activity nesting bird surveys are necessary for activities occurring outside of the breeding season.	No	Project not within the range or habitat of this species.	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
Federally Listed Fish Species	**LUPA-BIO-RIPWET-4**	Setback pre-construction, construction, and decommissioning activities and other activities that may impact federally listed fish species, 0.25 mile from the edge of existing or newly discovered occurrences of federally listed fish species, except for minor incursions (see Glossary of Terms).	No	Resource not found on the project site	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
		• Demonstrate neutral or beneficial long-term hydrologic effects on federally listed fish species and the adjoining riparian and wetland habitat prior to seeking authorization for and commencing a minor incursion.	No	Project not within the range or habitat of this species.	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
	LUPA-BIO-RIPWET-5	Site and design activities to fully avoid operational impacts to existing and newly discovered occurrences of federally listed fish species.	No	Project not within the range or habitat of this species.	Refer to EA Section 3.2.1, no wetland or riparian areas located within road segments.
Tehachapi Slender Salamander	**LUPA-BIO-RIPWET-6**	Avoid pre-construction, construction, and decommissioning activities or other activities that may impact the Tehachapi slender salamander within 0.25 mile of existing or newly discovered occurrences of or suitable habitat for Tehachapi slender salamander, except for minor incursions (see Glossary of Terms).	No	Project not within the range or habitat of this species.	
	LUPA-BIO-RIPWET-7	Construct culverts or other suitable below-grade crossings for new or improved roadways that bisect suitable habitat for the Tehachapi Slender Salamander. • Construct barriers to reduce at-grade crossings along new or improved roadways that bisect suitable habitat.	No	Project not within the range or habitat of this species.	
Dune DRECP Vegetation Types, Aeolian Processes and Associated Species (DUNE): Aeolian Processes	**LUPA-BIO-DUNE-1**	Because DRECP sand dune vegetation types and Aeolian sand transport corridors are, by definition, shifting resources, activities that potentially occur within or bordering the sand dune DRECP vegetation types and/or Aeolian sand transport corridors must conduct studies to verify the location [refer to Appendix D, Figure D-7] and extent of the sand resource(s) for the activity-specific environmental analysis to determine:	No	Land use does not occur on project site.	Project occurs within existing road beds and no expansion of roads would occur. No impacts to sand dunes or sand transport would occur. No change in existing land use/condition would occur and no effects to sand dunes or transport would occur. Proposed land use would not change existing sand dunes conditions
		• Whether the proposed activity(s) occur within a sand dune or an Aeolian sand transport corridor	No	Land use does not occur on project site.	Two roads occur within or adjacent to sand dune areas. Road maintenance and repair would not affect sand transport.
		• If the activity(s) is subject to dune/Aeolian sand transport corridor CMAs	No		Project occurs on existing roads, no changes to roads would occur and no effects to sand transport would occur.
		• If the activity(s) needs to be reconfigured to satisfy applicable avoidance requirements	No		Project occurs on existing roads, no changes to roads would occur and no effects to sand transport would occur.
	LUPA-BIO-DUNE-2	Activities that potentially affect the amount of sand entering or transported within Aeolian sand transport corridors will be designed and operated to:	No		Project occurs on existing roads, no changes to roads would occur and no effects to sand transport would occur.
		• Maintain the quality and function of Aeolian transport corridors and sand deposition zones, unless related to maintenance of existing [at the time of the DRECP LUPA ROD] facilities/operations/activities	No		Project occurs on existing roads, no changes to roads would occur and no effects to sand transport would occur.
		• Avoid a reduction in sand-bearing sediments within the Aeolian system	No		Project occurs on existing roads, no changes to roads would occur and no effects to sand transport would occur.
		• Minimize mortality to DUNE associated Focus and BLM Special Status Species	Yes		Surveys conducted for dune special status plant species, none were found. Refer to EA Appendix D, BLM Rare Plant BMPs
	LUPA-BIO-DUNE-3	Any facilities or activities that alter site hydrology (e.g., sediment barrier) will be designed to maintain continued sediment transport and deposition in the Aeolian corridor in a way that maintains the Aeolian sorting and transport to downwind deposition zones. Site designs for maintaining this transport function must be approved by BLM in coordination with USFWS and CDFW as appropriate.	No		No activities that would aleter hydrology would occur under the Proposed Action
Mohave Fringe-Toed Lizard	**LUPA-BIO-DUNE-4**	Dune formations and other sand accumulations (i.e., sand ramps, sand sheets) with suitable habitat characteristics for the Mojave fringe-toed lizard (i.e., unconsolidated blow-sand) will be mapped according to mapping standards established by the BLM National Operations Center. For minor incursions (see "minor incursion" in the Glossary of Terms) into sand dunes and sand transport areas the activity will be sited in the mapped zone with the least impacts to sand dunes and sand transport and Mojave fringe-toed lizards.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-DUNE-5	If suitable habitat characteristics are identified during the habitat assessment, clearance surveys (see Glossary of Terms) for Mojave fringe-toed lizard will be performed in suitable habitat areas.	No	Project not within the range or habitat of this species.	
		The following CMAs will be implemented for bat Focus and BLM Special Status Species, including but not limited to those listed below:	No	Resource not found on the project site	Minimal potential roosting and foraging habitat exists within and adjacent to the roadways. All maintenance and repair activities would occur during daylight hours; no nighttime work would occur and no lighting would be needed. No impacts to BLM Sensitive bat species with the potential to occur are not likely under the Proposed Action
		• California Leaf-nosed Bat	No	Project not within the range or habitat of this species.	Minimal potential roosting and foraging habitat exists within and adjacent to the roadways. All maintenance and repair activities would occur during daylight hours; no nighttime work would occur and no lighting would be needed. No impacts to BLM Sensitive bat species with the potential to occur are not likely under the Proposed Action

LUPA Wide					
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		• Pallid Bat	No	Project not within the range or habitat of this species.	Minimal potential roosting and foraging habitat exists within and adjacent to the roadways. All maintenance and repair activities would occur during daylight hours; no nighttime work would occur and no lighting would be needed. No impacts to BLM Sensitive bat species with the potential to occur are not likely under the Proposed Action
		• Townsend's Big-eared Bat	No	Project not within the range or habitat of this species.	Minimal potential roosting and foraging habitat exists within and adjacent to the roadways. All maintenance and repair activities would occur during daylight hours; no nighttime work would occur and no lighting would be needed. No impacts to BLM Sensitive bat species with the potential to occur are not likely under the Proposed Action
Bat Species (BAT)	**LUPA-BIO-BAT-1**	Activities, except wind projects, will not be sited within 500 feet of any occupied maternity roost or presumed occupied maternity roost as described below. Refer to CMA **DFA-VPL-BIO-BAT-1** for distances within DFAs and VPLs.	No	Resource not found on the project site	
	LUPA-BIO-BAT-2	Mines will be assumed to be occupied bat roosts, unless appropriate surveys for bat use have been conducted during all seasons (including maternity, lekking or swarming, and winter use). Mines not considered potential bat roosts are only those that have no structure/workings (adits or shafts or crevices out of view).	No	Resource not found on the project site	No mines or bat roosts known to occur near road segments.
		The following CMAs will be implemented for all plant Focus and BLM Special Status Species, including but not limited to those listed below	No	Project not within the range or habitat of this species.	
		• Alkali mariposa-lily	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Bakersfield cactus	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Barstow woolly sunflower	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Desert cymopterus	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Little San Bernardino Mountains linanthus	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Mojave monkeyflower	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Mojave tarplant	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Owens Valley checkerbloom	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Parish's daisy	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
		• Triple-ribbed milk-vetch	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA
Plant Species (PLANT): Plant Focus and BLM Special Status Species CMAs	**LUPA-BIO-PLANT-1**	Conduct properly timed protocol surveys in accordance with the BLM's most current (at time of activity) survey protocols for plant Focus and BLM Special Status Species.	Yes		Protocol surveys conducted for Mexican flannel-bush and Pierson's milk-vetch
	LUPA-BIO-PLANT-2	Implement an avoidance setback of 0.25 mile for all Focus and BLM Special Status Species occurrences. Setbacks will be placed strategically adjacent to occurrences to protect ecological processes necessary to support the plant Species (see Appendix Q, Baseline Biology Report, in the Proposed LUPA and Final EIS [2015], or the most recent data and modeling).	No	Resource not found on the project site	No Focus of BLM Special Status Species found during biological surveys and focused plant surveys. Refer to Section 3.2.1 of EA.
	LUPA-BIO-PLANT-3	Impacts to suitable habitat for Focus and BLM Special Status plant species should be avoided to the extent feasible, and are limited [capped] to a maximum of 1% of their suitable habitat throughout the entire LUPA Decision Area. The baseline condition for measuring suitable habitat is the DRECP modeled suitable habitat for these species utilized in the EIS analysis (2014 and 2015), or the most recent suitable habitat modeling.	No	Resource not found on the project site	No Focus of BLM Special Status Species found during biological surveys and focused plant surveys. Refer to Section 3.2.1 of EA.
		• For those plants with Species Specific DFA Suitable Habitat Impact Caps listed in **Table 23**, those caps apply in the DFAs only. Refer to CMA DFA-PLANT-1.	No	Resource not found on the project site	No Focus of BLM Special Status Species found during biological surveys and focused plant surveys. Refer to Section 3.2.1 of EA.
Special Vegetation Features (SVF)	**LUPA-BIO-SVF-1**	For activity-specific NEPA analysis, a map delineating potential sites and habitat assessment of the following special vegetation features is required: Yucca clones, creosote rings, Saguaro cactus, Joshua tree woodland, microphyll woodland, Crucifixion thorn stands. BLM guidelines for mapping/surveying cactus, yuccas, and succulents shall be followed.	No	Resource not found on the project site	All work would occur within existing road prism.
	LUPA-BIO-SVF-2	Yucca clones larger than 3 meters in diameter (longest diameter if the clone forms an ellipse rather than a circular ring) shall be avoided.	No	Resource not found on the project site	No yucca plants were observed within or adjacent to road segments. Refer to Section 3.2.1 of EA.
	LUPA-BIO-SVF-3	Creosote bush rings (see Glossary of Terms) larger than 5 meters in diameter (longest diameter if the "ring" forms an ellipse rather than a circle) shall be avoided.	Yes		Refer to EA Appendix D, Vegetation BMPs
	LUPA-BIO-SVF-4	Saguaro cactus should be managed in such a way as to provide long-term habitat for the California populations not just individual plants, except in DFAs.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-SVF-5	Joshua tree woodland (*Yucca brevifolia* Woodland Alliance): impacts to Joshua tree woodlands (see Glossary of Terms) will be avoided to the maximum extent practicable (see Glossary of Terms), except for minor incursions (see Glossary of Terms).	No	Project not within the range or habitat of this species.	
	LUPA-BIO-SVF-6	Microphyll woodland: impacts to microphyll woodland (see Glossary of Terms) will be avoided, except for minor incursions (see Glossary of Terms).	No	Resource not found on the project site	No microphyll woodland vegetation occurs within or adjacent to road segments.
	LUPA-BIO-SVF-7	Crucifixion thorn stands: (*Castela emoryi* Shrubland Special Stands) Crucifixion thorn stands with greater than 100 individuals will be avoided.	No	Resource not found on the project site	No crucifixion thorn were observed within or adjacent to road segments.
General Vegetation Management (VEG)	**LUPA-BIO-VEG-1**	Management of cactus, yucca, and other succulents will adhere to current up-to-date BLM policy.	No	Resource not found on the project site	Minimal vegetation disturbance would occur. No salvage or transplant would occur. Work would occur within existing road beds, no specific management would be required.

LUPA Wide					
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	LUPA-BIO-VEG-2	Promote appropriate levels of dead and downed wood on the ground, outside of campground areas, to provide wildlife habitat, seed beds for vegetation establishment, and reduce soil erosion, as determined appropriate on an activity-specific basis.	Yes		Refer to EA Appendix D, Vegetation BMPs
	LUPA-BIO-VEG-3	Allow for the collection of plant material consistent with the maintenance of natural ecosystem processes.	No	Land use does not occur on project site.	Collection of plant material is not proposed.
	LUPA-BIO-VEG-4	Within the Bishop Field Office area, provide yearlong protection of endangered, threatened, candidate, and sensitive plant and animal habitats. Yearlong protection means that no discretionary actions which would adversely affect target resources will be allowed.	No	Project not located on federal lands with this designation.	
	LUPA-BIO-VEG-5	All activities will follow applicable BLM state and national regulations and policies for salvage and transplant of cactus, yucca, other succulents, and BLM Sensitive plants.	No	Land use does not occur on project site.	Minimal vegetation disturbance would occur. No salvage or transplant would occur.
	LUPA-BIO-VEG-6	BLM may consider disposal of succulents through public sale, as per current up-to-date state and national policy.	No	Land use does not occur on project site.	
Individual Focus Species (IFS): Desert Tortoise	**LUPA-BIO-IFS-1**	Activities within desert tortoise linkages, identified in Appendix D, that may have a negative impact on the linkage will require an evaluation, in the environmental document(s), of the effects on the maintenance of long- term viable desert tortoise populations within the affected linkage. The analysis will consider the amount of suitable habitat, including climate refugia, required to ensure long-term viability within each linkage given the linkage's population density, long-term demographic and genetic needs, degree of existing habitat disturbance/impacts, mortality sources, and most up-to-date population viability modeling. Activities that would compromise the long-term viability of a linkage population or the function of the linkage, as determined by the BLM in coordination with USFWS and CDFW, are prohibited and will require reconfiguration or re-siting.	No	Project not within the range or habitat of this species.	Refer to Section 3.2.1 of EA. BA incorporated by reference in EA
	LUPA-BIO-IFS-2	Construction of new roads and/or routes will be avoided to the maximum extent practicable (see Glossary of Terms) within desert tortoise habitat in tortoise conservation areas (TCAs) or tortoise linkages identified in Appendix D, unless the new road and/or route is beneficial to minimize net impacts to natural or ecological resources of concern for desert tortoise. TCAs and identified linkages should have the goal of "no net gain" of road density.	No	Project not within the range or habitat of this species.	
		Any new road considered within a TCA or identified linkage will not be paved and will be designed and sited to minimize the effect to the function of identified linkages or local desert tortoise populations and shall have a maximum speed limit of 25 miles per hour.	No	Project not within the range or habitat of this species.	
		Roads requiring the installation of long-term desert tortoise exclusion fencing for construction or operation will incorporate wildlife underpasses (e.g., culverts) to reduce population fragmentation.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-3	All culverts for access roads or other barriers will be designed to allow unrestricted access by desert tortoises and will be large enough that desert tortoises are unlikely to use them as shelter sites (e.g., 36 inches in diameter or larger). Desert tortoise exclusion fencing may be utilized to direct tortoise use of culverts and other passages.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-4	In areas where protocol and clearance surveys are required (see Appendix D), prior to construction or commencement of any long-term activity that is likely to adversely affect desert tortoises, desert tortoise exclusion fencing shall be installed around the perimeter of the activity footprint (see Glossary of Terms) in accordance with the Desert Tortoise Field Manual (USFWS 2009) or most up-to- date USFWS protocol. Additionally, short-term desert tortoise exclusion fencing will be installed around short-term construction and/or activity areas (e.g., staging areas, storage yards, excavations, and linear facilities), as appropriate, per the Desert Tortoise Field Manual (USFWS 2009) or most up-to-date USFWS protocol.	No	Project not within the range or habitat of this species.	
		• Exemption from desert tortoise protocol survey requirements can be obtained from BLM, in coordination with USFWS, and CDFW as applicable, on a case-by-case basis if a designated biologist determines the activity site does not contain the elements of desert tortoise habitat, is unviable for occupancy, or if baseline studies inferred absence during the current or previous active season.	No	Project not within the range or habitat of this species.	
		• Construction of desert tortoise exclusion fences will occur during the time of year when tortoise are less active in order to minimize impacts and to accommodate subsequent desert tortoise surveys. Any exemption or modification of desert tortoise exclusion fencing requirements will be based on the specifics of the activity and the site-specific population and habitat parameters. Sites with low population density and disturbed, fragmented, or poor habitat are likely to be candidates for fencing requirement exemptions or modifications. Substitute measures, such as on-site biological monitors in the place of the fencing requirement, may be required, as appropriate.	No	Project not within the range or habitat of this species.	
		• After an area is fenced, and until desert tortoises are removed, the designated biologist is responsible for ensuring that desert tortoises are not being exposed to extreme temperatures or predators as a result of their pacing the fence. Remedies may include the use of shelter sites placed along the fence, immediate translocation, removal to a secure holding area, or other means determined by the BLM, USFWS, and CDFW, as applicable.	No	Project not within the range or habitat of this species.	
		• Modification or elimination of the above requirement may also be approved if the activity design will allow retention of desert tortoise habitat within the footprint. If such a modification is approved, modified protective measures may be required to minimize impacts to desert tortoises that may reside within the activity area.	No	Project not within the range or habitat of this species.	
		• Immediately prior to desert tortoise exclusion fence construction, a designated biologist (see Glossary of Terms) will conduct a clearance survey of the fence alignment to clear desert tortoises from the proposed fence line's path.	No	Project not within the range or habitat of this species.	
		• All desert tortoise exclusion fencing will incorporate desert tortoise proof gates or other approved barriers to prevent access of desert tortoises to work sites through access road entry points.	No	Project not within the range or habitat of this species.	
		• Following installation, long-term desert tortoise exclusion fencing will be inspected for damage quarterly and within 48 hours of a surface flow of water due to a rain event that may damage the fencing.	No	Project not within the range or habitat of this species.	
		• All damage to long-term or short-term desert tortoise exclusion fencing will be immediately blocked to prevent desert tortoise access and repaired within 72 hours.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-5	Following the clearance surveys (see Glossary of Terms) within sites that are fenced with long-term desert tortoise exclusion fencing a designated biologist (see Glossary of Terms) will monitor initial clearing and grading activities to ensure that desert tortoises missed during the initial clearance survey are moved from harm's way.	No	Project not within the range or habitat of this species.	
		A designated biologist will inspect construction pipes, culverts, or similar structures: (a) with a diameter greater than 3 inches, (b) stored for one or more nights, (c) less than 8 inches aboveground and (d) within desert tortoise habitat (such as, outside the long-term fenced area), before the materials are moved, buried, or capped.	No	Project not within the range or habitat of this species.	
		As an alternative, such materials shall be capped before storing outside the fenced area or placing on pipe racks. Pipes stored within the long-term fenced area after completing desert tortoise clearance surveys will not require inspection.	No	Project not within the range or habitat of this species.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	LUPA-BIO-IFS-6	When working in areas where protocol or clearance surveys are required (see Appendix D), biological monitoring will occur with any geotechnical boring or geotechnical boring vehicle movement to ensure no desert tortoises are killed or burrows are crushed.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-7	A designated biologist (see Glossary of Terms) will accompany any geotechnical testing equipment to ensure no tortoises are killed and no burrows are crushed.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-8	Inspect the ground under the vehicle for the presence of desert tortoise any time a vehicle or construction equipment is parked in desert tortoise habitat outside of areas fenced with desert tortoise exclusion fencing. If a desert tortoise is seen, it may move on its own. If it does not move within 15 minutes, a designated biologist may remove and relocate the animal to a safe location.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-9	Vehicular traffic will not exceed 15 miles per hour within the areas not cleared by protocol level surveys where desert tortoise may be impacted.	No	Project not within the range or habitat of this species.	
Flat-Tailed Horned Lizard	**LUPA-BIO-IFS-10**	Comply with the conservation goals and objectives, criteria, and management planning actions identified in the most recent revision of the Flat-tailed Horned Lizard Rangewide Management Strategy (RMS). Activities will include appropriate design features using the most current information from the RMS and RMS Interagency Coordinating Committee to minimize adverse impacts during siting, design, pre-construction, construction, operation, and decommissioning; ensure that current or potential linkages and habitat quality are maintained; reduce mortality; minimize other adverse impacts during operation; and ensure that activities have a neutral or positive effect on the species.	Yes		Refer to EA Appendix D, Wildlife BMPs
Bendire's Thrasher	**LUPA-BIO-IFS-11**	If Bendire's thrasher is present, conduct appropriate activity-specific biological monitoring (see Glossary of Terms) to ensure that Bendire's thrasher individuals are not directly affected by operations (i.e., mortality or injury, direct impacts on nest, eggs, or fledglings).	No	Project not within the range or habitat of this species.	
Burrowing Owl	**LUPA-BIO-IFS-12**	If burrowing owls are present, a designated biologist (see Glossary of Terms) will conduct appropriate activity-specific biological monitoring (see Glossary of Terms) to ensure avoidance of occupied burrows and establishment of the 656 feet (200 meter) setback to sufficiently minimize disturbance during the nesting period on all activity sites, when practical.	Yes		Refer to EA Appendix D, Wildlife BMPs
	LUPA-BIO-IFS-13	If burrows cannot be avoided on-site, passive burrow exclusion by a designated biologist (see Glossary of Terms) through the use of one-way doors will occur according to the specifications in Appendix D or the most up-to-date agency BLM or CDFW specifications. Before exclusion, there must be verification that burrows are empty as specified in Appendix D or the most up-to-date BLM or CDFW protocols. Confirmation that the burrow is not currently supporting nesting or fledgling activities is required prior to any burrow exclusions or excavations.	Yes		Refer to EA Appendix D, Wildlife BMPs
	LUPA-BIO-IFS-14	Activity-specific active translocation of burrowing owls may be considered, in coordination with CDFW.	Yes		Refer to EA Appendix D, Wildlife BMPs
California Condor	**LUPA-BIO-IFS-15**	All activities will be designed and sited in a manner to avoid or minimize the likelihood of contact, injury, and mortality of California condors. If a condor is identified at a site, the BLM biological staff and USFWS will be immediately notified for guidance.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-16	Flight activity (e.g., surveys, construction, as well as operation and maintenance activities) related to any activities will not be allowed in the airspace extending to 3,000 feet above condor nest sites.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-17	In the range of the California condor, structures supported by guy wires will be marked with recommended bird deterrent devices at the appropriate spacing intervals.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-18	In the range of the California condor, all equipment and work-related materials that are potentially hazardous to condors, including but not limited to items that can be ingested, picked up, or carried away (e.g., loose-wires, open containers with fluids, some construction materials, etc.) will be kept in closed containers either in the work area or placed inside vehicles when they are not being used and at the end of every work day.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-19	In the range of the California condor, when feasible, ethylene glycol-based anti-freeze or other ethylene glycol-based liquid substances will be avoided, and propylene glycol-based antifreeze will be used. Vehicles and equipment using ethylene glycol based substances will be inspected before and after field use as well as during storage on sites for leaks and puddles. Standing fluid will be remediated without unnecessary delay.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-20	Activities that are determined to have a potential risk of taking condors will implement the best detect, deter, and curtailment strategy available at the time of the activity to minimize adverse effects, and avoid or minimize the likelihood of condor injury and mortality. (An example of a 2015 curtailment strategy is shutting down wind generation operations when condor(s) are present, or wind generation facilities switching to night operations only). The strategy must be approved by the BLM and USFWS, in coordination with CDFW as appropriate.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-21	If condors begin to regularly visit a site, BLM may require, in coordination with USFWS, and CDFW as appropriate, the implementation of additional measures to minimize potential impacts to condors. These measures will be based on best available data, activity and areas specifics, and may include, but are not limited to: • Barriers, including welded wire fabric or hardware cloth, will be installed to prevent access around any facility element that poses a danger to condors. • Stainless steel lines, rather than poly chemical lines will be used to preclude condors from obtaining and ingesting pieces of poly chemical lines. • Landing deterrents attached to the walking perching substrates, such as porcupine wire or Daddi Long Legs ®.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-22	Operations and/or activities that reach an activity-specified trigger for condor injury and/or mortality as determined by BLM and USFWS, and CDFW as appropriate, will curtail operations and/or activities using best available techniques, as determined by BLM and USFWS, and CDFW as appropriate. (An example of a 2015 curtailment strategy is shutting down wind generation operations when condor(s) are present, or wind generation facilities switching to night operations only.) If curtailment techniques are not viable or available, then operations and/or activities will be suspended until the injury and/or condor mortality issue is resolved to the satisfaction of BLM and USFWS, and CDFW, as appropriate.	No	Project not within the range or habitat of this species.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	LUPA-BIO-IFS-23	In the range of the California condor, if an activity may have an impact on California condors, a Condor Operations Strategy (COS) will be developed and implemented on a activity-specific basis in order to avoid and/or reduce the likelihood of injury and mortality from activities. The COS shall be approved by BLM in coordination with USFWS, and CDFW as appropriate for third party activities, and may include, but is not limited, to detailing specifics on: the activity-specific detect, deter and curtailment strategy; monitoring approach to detect condor use of the site; adaptive management approach if condors are found to visit the site; and, activity-specific measures that assist in the recovery of condor.	No	Project not within the range or habitat of this species.	
Golden Eagle	**LUPA-BIO-IFS-24**	Provide protection from loss and harassment of active golden eagle nests through the following actions: • Activities that may impact nesting golden eagles, will not be sited or constructed within 1-mile of any active or alternative golden eagle nest within an active golden eagle territory, as determined by BLM in coordination with USFWS as appropriate.	No	Project not within the range or habitat of this species.	No golden eagles were observed during biological resource surveys and no suitable habitat is found within road segments.
	LUPA-BIO-IFS-25	Cumulative loss of golden eagle foraging habitat within a 1 to 4 mile radius around active or alternative golden eagle nests (as identified or defined in the most recent USFWS guidance and/or policy) will be limited to less than 20%. See **CONS-BIO-IFS-5** for the requirement in Conservation Lands.	No	Land use does not occur on project site.	No golden eagles were observed during biological resource surveys and no suitable habitat is found within road segments.
	LUPA-BIO-IFS-26	For activities that impact golden eagles, applicants will conduct a risk assessment per the applicable USFWS guidance (e.g. the Eagle Conservation Plan Guidance) using best available information as well as the data collected in the pre-project golden eagle surveys.	No	Resource not found on the project site	
	LUPA-BIO-IFS-27	If a permit for golden eagle take is determined to be necessary, an application will be submitted to the USFWS in order to pursue a take permit.	No	Resource not found on the project site	
	LUPA-BIO-IFS-28	In order to evaluate the potential risk to golden eagles, the following activities are required to conduct 2 years of pre-project golden eagle surveys in accordance with USFWS Eagle Conservation Plan Guidance as follows: • Wind projects and solar projects involving a power tower • Other activities for which the BLM, in coordination with USFWS, and CDFW as appropriate, determines take of golden eagle is reasonably foreseeable or there is a potential for take of golden eagle	No No No	Resource not found on the project site Resource not found on the project site Resource not found on the project site	
	LUPA-BIO-IFS-29	For active nests with recreational conflicts that risk the occurrence of take, provide public notification (e.g., signs) of the sensitive area and implement seasonal closures as appropriate.	No	Land use does not occur on project site.	No recreational conflicts associated with the Proposed Project and golden eagle nests would occur, nearest eagle occurrence is more than 7 miles west of road segments.
	LUPA-BIO-IFS-30	For activities where ongoing take of golden eagles is anticipated, develop advanced conservation practices per USFWS Eagle Conservation Plan Guidance.	No	Resource not found on the project site	Take of golden eagles is not anticipated.
	LUPA-BIO-IFS-31	As determined necessary by BLM in coordination with USFWS, and CDFW as appropriate, for activities/projects that are likely to impact golden eagles implement site-specific golden eagle mortality monitoring in support of the pre-construction, pre-activity risk assessment surveys.	No	Resource not found on the project site	
Swainson's Hawk	**LUPA-BIO-IFS-32**	Avoid use of rodenticides and insecticides within five miles of active Swainson's hawk nest.	No	Land use does not occur on project site.	No rodenticides or insecticides would be applied as part of the project.
Desert Bighorn Sheep	**LUPA-BIO-IFS-33**	Access to, and use of, designated water sources for desert bighorn sheep will not be impeded by activities in designated and new utility corridors.	Yes		Refer to EA Appendix D, Species Specific BMPs
	LUPA-BIO-IFS-34	Transmission projects and new utility corridors will minimize effects on access to, and use of, designated water sources for desert bighorn sheep.	No	Land use does not occur on project site.	
Mohave Ground Squirrel	**LUPA-BIO-IFS-35**	Protocol surveys (see Glossary of Terms) are required for activities in Mohave ground squirrel key population centers and linkages as indicated in Appendix D. Results of protocol surveys will be provided to BLM and CDFW to consult on, as appropriate, for third party activities.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-36	Activities in Mohave ground squirrel key population centers, as identified in Appendix D, requiring an Environmental Impact Statement are required to assess the effect of the activity on the long term function of the affected key population center. • Activities within a key population center, as identified in Appendix D, must be designed to avoid adversely impacting the long-term function of the affected key population center.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-37	Activities in key population centers will be sited in previously disturbed areas, areas of low habitat quality and in areas with low habitat intactness, to the maximum extent practicable (see Glossary of Terms).	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-38	Disturbance of suitable habitat from activities, requiring an EA or EIS, within the Mohave ground squirrel key population centers and linkages (as identified in Appendix D) will not occur during the typical dormant season (August 1 through February 28) unless absence is inferred and supported by protocol surveys or other available data during the previous active season.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-39	During the typical active Mohave ground squirrel season (February 1 through August 31), conduct clearance surveys throughout the site, immediately prior to initial ground disturbance in the areas depicted in Appendix D. In the cleared areas, perform monitoring to determine if squirrels have entered cleared areas. Contain ground disturbance to within areas cleared of squirrels. • Detected occurrences of Mohave ground squirrel will be flagged and avoided, with a minimum avoidance area of 50 feet, until the squirrels have moved out of harm's way. A designated biologist (see Glossary of Terms) may also actively move squirrels out of harm's way.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-40	Activities sited in a Mohave ground squirrel linkage (see Appendix D) that may impact the linkage are required to analyze the potential effects on connectivity through the linkage. The activity must be designed to maintain the function of the linkage after construction/implementation and during project/activity operations. Linkage function will be assessed by considering pre- and post-activity ability of the area to support resident Mohave ground squirrels and provide for dispersal of their offspring to key population centers outside the linkage, and dispersal through the linkage between key population centers. Activities that occur in Mohave ground squirrel linkages shown in Appendix D must be configured and located in a manner that does not diminish Mohave ground squirrel populations in the linkage.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-41	For any ground-disturbing (e.g., vegetation removal, earthwork, trenching) activities, occurrences of Mohave ground squirrel will be flagged and avoided, with a minimum avoidance area of 50 feet, until the squirrels have moved out of harm's way. A designated biologist (see Glossary of Terms) may also actively move squirrels out of harm's way.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-IFS-42	Rodenticides will not be used to manage rodents on activity within the range of the Mohave ground squirrel. Use of rodenticide inside of buildings is allowed.	No	Project not within the range or habitat of this species.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
Compensation	**LUPA-BIO-COMP-1**	Impacts to biological resources, identified and analyzed in the activity specific environmental document, from activities in the LUPA Decision Area will be compensated using the standard biological resources compensation ratio, except for the biological resources and specific geographic locations listed as compensation ratio exceptions, specifics in CMAs **LUPA-BIO-COMP-2** through **-4**, and previously listed CMAs. Compensation acreage requirements may be fulfilled through non-acquisition (i.e., restoration and enhancement), land acquisition (i.e., preserve), or a combination of these options, depending on the activity specifics and BLM approval/authorization.	No	Land use does not occur on project site.	No new ground disturbance would occur.
		Compensation for the impacts to designated desert tortoise critical habitat will be in the same critical habitat unit as the impact (see **Table 18**). Compensation for impacts to desert tortoise will be in the same recovery unit as the impact.	No	Project not within the range or habitat of this species.	
		Refer to CMA **LUPA-COMP-1** and **2** for the timing requirements for initiation or completion of compensation.	No	Project not within the range or habitat of this species.	
	LUPA-BIO-COMP-2	Birds and Bats – The compensation for the mortality impacts to bird and bat Focus and BLM Special Status Species from activities will be determined based on monitoring of bird and bat mortality and a fee re-assessed every 5 years to fund compensatory mitigation. The initial compensation fee for bird and bat mortality impacts will be based on pre-project monitoring of bird use and estimated bird and bat species mortality from the activity. The approach to calculating the operational bird and bat compensation is based on the total replacement cost for a given resource, a Resource Equivalency Analysis. This involves measuring the relative loss to a population (debt) resulting from an activity and the productivity gain (credit) to a population from the implementation of compensatory mitigation actions. The measurement of these debts and gains (using the same "bird years" metric as described in Appendix D) is used to estimate the necessary compensation fee.	No	Land use does not occur on project site.	Mortality of bird and bat Focus and BLM Special Status Species are not anticipated with implementation of BMPs outlined in Appendix D for general wildlife and species specific BMPs.
		Each activity, as determined appropriate by BLM in coordination with USFWS, and CDFW as applicable, will include a monitoring strategy to provide activity-specific information on mortality effects on birds and bats in order to determine the amount and type of compensation required to offset the effects of the activity, as described above and in detail in Appendix D. Compensation will be satisfied by restoring, protecting, or otherwise improving habitat such that the carrying capacity or productivity is increased to offset the impacts resulting from the activity. Compensation may also be satisfied by non-restoration actions that reduce mortality risks to birds and bats (e.g., increased predator control and protection of roosting sites from human disturbance). Compensation will be consistent with the most up to date DOI mitigation policy.	No	Land use does not occur on project site.	Mortality of bird and bat Focus and BLM Special Status Species are not anticipated with implementation of BMPs outlined in Appendix D for general wildlife and species specific BMPs.
	LUPA-BIO-COMP-3	Golden eagle – BLM and third-party initiated activities, will provide specific golden eagle compensation in accordance with the most up to date BLM or USFWS policies, including applicable USFWS Eagle Conservation Plan Guidance.	No	Resource not found on the project site	
	LUPA-BIO-COMP-4	Golden eagle – Third-party applicant/activity proponents are required to contribute to a DRECP-wide golden eagle monitoring program, if the activity/project(s) has been determined, through the environmental analysis, to likely impact golden eagles.	No	Resource not found on the project site	
Air Resources	**LUPA-AIR-1**	All activities must meet the following requirements:	Yes		Refer to Table 3.1 of EA
		• Applicable National Ambient Air Quality Standards (Section 109)	Yes		Refer to Table 3.1 of EA
		• State Implementation Plans (Section 110)	Yes		Refer to Table 3.1 of EA
		• Control of Pollution from Federal Facilities (Section 118) including non-point source	No	Resource not found on the project site	
		• Prevention of Significant Deterioration, including visibility impacts to mandatory Federal Class I Areas (Section 160 et seq.)	No	Land use does not occur on project site.	
		• Conformity Analyses and Determinations (Section 176[c])	No	Land use does not occur on project site.	
		• Apply best management practices on a case by case basis	Yes		Refer to EA Appendix D, Air Quality BMPs
		• Applicable local Air Quality Management Jurisdictions (e.g., 403 SCAQMD)	Yes		Refer to Table 3.1 of EA
	LUPA-AIR-2	Because project authorizations are a federal undertaking, air quality standards for fugitive dust may not exceed local standards and requirements.	Yes		Refer to Table 3.1 of EA
	LUPA-AIR-3	Where impacts to air quality may be significant under NEPA, requiring analysis through an Environmental Impact Statement, require documentation for activities to include a detailed discussion and analysis of Ambient Air Quality conditions (baseline or existing), National Ambient Air Quality Standards, criteria pollutant nonattainment areas, and potential air quality impacts of the proposed project (including cumulative and indirect impacts and greenhouse gas emissions). This content is necessary to disclose the potential impacts from temporary or cumulative degradation of air quality. The discussion will include a description and estimate of air emissions from potential construction and maintenance activities, and proposed mitigation measures to minimize net PM_{10} and $PM_{2.5}$ emissions. The documentation will specify the emission sources by pollutant from mobile sources, stationary sources, and ground disturbance. A Construction Emissions Mitigation Plan will be developed.	No	Land use does not occur on project site.	The Proposed action annual emissions would not exceed any General Conformity de minimus levels and no impacts to air quality are anticipated. Refer to Table 3.1 of the EA.
	LUPA-AIR-4	Because fugitive dust is the number one source of PM_{10} and $PM_{2.5}$ emissions in the Mojave and Sonoran Deserts, fugitive dust impacts to air quality must be analyzed for all activities/projects requiring an Environmental Impact Statement and Environmental Assessment.	Yes		Refer to Table 3.1 of the EA
		• The NEPA air quality analysis may include modelling of the sources of PM10 and PM2.5 that occur prior to construction and/or ground disturbance from the activity/project, and show the timing, duration and transport of emissions off site. When utilized, the modeling will also identify how the generation and movement of PM10 and PM2.5 will change during and after construction and/or ground disturbance of the activity/project under all activity/project specific NEPA alternatives. The BLM air resource specialist and Authorizing Officer will determine if modelling is required as part of the NEPA analysis based on estimated types and amounts of emissions.	No	Land use does not occur on project site.	The Proposed action annual emissions would not exceed any General Conformity de minimus levels and no impacts to air quality are anticipated. Refer to Table 3.1 of the EA.
	LUPA-AIR-5	A fugitive Dust Control Plan will be developed for all projects where the NEPA analysis shows an impact on air quality from fugitive dust.	No	Land use does not occur on project site.	The Proposed action annual emissions would not exceed any General Conformity de minimus levels and no impacts to air quality are anticipated. Refer to Table 3.1 of the EA.
		II.4.2.1.3 Comprehensive Trails and Travel Management	No	Land use does not occur on project site.	Project does not include travel management
		Components of a Designated Travel Network	No		
		In 2006, the BLM issued Instruction Memorandum No. 2006-173, which established policy for the use of terms and definitions associated with the management of transportation-related linear features. It also set a data standard and a method for storing electronic transportation asset data. According to the memorandum, all transportation assets are defined as follows:	No		
		• Road: A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use. These may include ROW roads granted by the BLM to other entities.	No		

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		• Primitive Road: A linear route managed for use by four-wheel drive or high-clearance vehicles. These routes do not normally meet any BLM road design standards.	No		
		• Trail: A linear route managed for human-powered, stock, or OHV forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.	No		
		Designated Roads, Primitive Roads, and Trails are categorized as follows:	No		
		• Tier 1: Roads and Primitive Roads with high values for commercial, recreational, casual uses, and/or to provide access to other recreation activities.	No		
		• Tier 2: Roads and Primitive Roads with high values for recreation and other motorized access (i.e., important through routes).	No		
		• Tier 3: Primitive Roads and Trails with high value for motorized and non-motorized recreational pursuits (i.e., spur routes).	No		
		Off Highway Vehicle Management	No	Land use does not occur on project site.	Project does not include Off-highway Vehicle Management
		OHVs are synonymous with off-road vehicles. As defined in 43 CFR 8340.0-5 (a): Off-road vehicle means any motorized/battery-powered vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain.	No		
		In accordance with 43 CFR 8342.1, the BLM's regulations for OHV management, "the authorized officer shall designate all public lands as open, limited, or closed to [OHVs]." As such, all public lands within the Planning Area have been designated in one of three OHV designation categories, as follows:	No		
		• Open Area Designations are used for intensive OHV or other transportation use areas where there are no special restrictions or where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel.	No		
		• Limited Area Designations are used where travel must be restricted to meet specific resource/resource use objectives. For areas classified as limited, the BLM must consider a range of possibilities, including travel that will be limited to the following:	No		
		○ Types or modes of travel, such as foot, equestrian, bicycle, and motorized	No		
		○ Existing roads and trails	No		
		○ Time or season of use; limited to certain types of vehicles (OHVs, motorcycles, all-terrain vehicles, high clearance, etc.); limited to licensed or permitted vehicles or use	No		
		○ BLM administrative use only	No		
		○ Other types of limitations	No		
		• Closed Area Designations prohibit vehicular travel, both motorized and mechanized, transportation cross-country and on routes, except for where valid rights continue to allow access, such as within a designated Wilderness Area. Areas are designated closed if closure to all vehicular use is necessary to protect resources, promote visitor safety, or reduce use conflicts.			
		Back Country Byways Program	No	Land use does not occur on project site.	Project does not include Back Country Byway Program
		The BLM developed the Back County Byway Program to complement the National Scenic Byway Program established by the U.S. Secretary of Transportation. Back County Byways highlight the spectacular nature of the western landscapes. These routes vary from narrow graded roads that are passable only during a few months of the year to two-lane paved highways with year-round access.	No		
		BLM will comply with the policy and guidelines of the BLM Back Country Byway Program and intent to showcase routes with high scenic and outstanding natural, cultural, historic or other values consistent with the designation. Where appropriate and feasible, BLM will highlight the spectacular nature of the western landscapes through education and interpretation along linear travel routes which provide recreational driving opportunities that allow for the experiences of solitude and isolation by:	No		
		• Maintaining or improving access to BLM recreational destinations and activities			
		• Helping meet the increasing demand for pleasure driving in back country environments.	No		
		• Facilitating effective partnerships at the local, state, and national levels	No		
		• Contributing to local and regional economies through increased tourism	No		
		• Increasing public awareness of the availability of outstanding recreation attractions on public lands	No		
		• Enhancing the visitors' recreation experience and communicate the multiple-use management message through an effective wayside interpretive program	No		
		• Increasing the visibility of BLM as a major supplier of outdoor recreation opportunities	No		
		• Managing the increased use created through the program to minimize impacts to the environment	No		
		• Contributing to the National Scenic Byways Program in a way that is uniquely suited to national public lands managed by BLM	No		
		Back country byways are designated by the type of road and the vehicle needed to safely travel the byway. Some back country byways vary from a single track bike trail to a low speed paved road that traverses back country areas. Segments of Back Country Byways are subdivided into four types based on the characteristic of the road.	No		
		Due to their remoteness, byway travelers should always inquire locally as to byway access and road conditions.	No		
		• Type I – Roads are paved or have an all-weather surface and have grades that are negotiable by 2-wheel drive vehicles and passenger cars. Most of these roads are narrow, slow speed, secondary routes though public lands.	No		
		• Type II – Roads that require high-clearance type vehicles such as trucks or 4-wheel drive vehicles. These roads are usually not paved, but may have some type of surfacing. Grades, curves, and road surface are such that they can be negotiated with a 2-wheel drive high clearance vehicle without undue difficulty.	No		
		• Type III – Roads require 4-wheel drive vehicles or other specialized vehicles such as dirt bikes, all-terrain vehicles (ATVs), etc. These roads are usually not surfaced, but are managed to provide for safety and resource protection needs. These roads can often have steep grades, uneven tread surfaces, and other characteristics that will require specialized vehicles to negotiate usually at slow speeds.	No		
		• Type IV – Trails are managed specifically to accommodate dirt bike, mountain bike, snowmobile or all-terrain vehicle use. Most of these routes are single track trails.	No		
LUPA-Wide Conservation and Management Actions for Comprehensive Trails and Travel Management	**LUPA-CTTM-1**	Maintain and manage adequate Road, Primitive Road, and Trail Access to and within SRMAs, ERMAs, OHV Open Areas, and Level 1, 2, and 3 Recreation Facilities.	No	Resource not found on the project site	Road segments to not access SRMAs, ERMA,s, OHV Open Areas, or Level 1, 2, and 3 Recreation Facilities

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	LUPA-CTTM-2	Avoid activities that would have a significant adverse impact on use and enjoyment within 0.5 mile from centerline of tier 2 Roads/Primitive Roads, and 300 feet from centerline of tier 3 primitive roads/trails. If avoidance of Tier 2 and 3 roads, primitive roads and trails is not practicable, relocate access to the same or higher standard and maintain the setting characteristics and access to recreation activities, facilities, and destinations.	Yes		Road segment maintenance and repair would maintain access to primitive roads and trails.
	LUPA-CTTM-3	Manage other significant linear features such as Mojave Road, Bradshaw Trail, or other recognized linear features to protect their important recreation activities, experiences and benefits. Prohibit activities that have a significant adverse impact on use and enjoyment within 0.5 mile (from centerline) of such linear features.	No	Resource not found on the project site	
	LUPA-CTTM-4	If residual impacts to Tier 1 and Tier 2 roads/primitive roads, Back Country Byways, or significant linear features occur from adjacent DFAs or other activities, commensurate compensation in the form of enhanced recreation operations, access, recreation facilities or opportunities will be required.	No	Land use does not occur on project site.	
	LUPA-CTTM-5	Manage OHV use per the appropriate Transportation and Travel Management Plan/RMP and/or the SRMA Objectives as outlined in Appendix C as Open, Limited or Closed.	No	Land use does not occur on project site.	
	LUPA-CTTM-6	Manage Back Country Byways as a component of BLM Recreation and Travel and Transportation Management program.	No	Resource not found on the project site	
	LUPA-CTTM-7	Manage Recreation Facilities consistent with the objectives for the recreation management areas and facilities (see also Section II.4.2.1.10).	No	Resource not found on the project site	
Cultural Resources and Tribal Interests	**LUPA-CUL-1**	Continue working with the California Office of Historic Preservation (OHP) to develop and implement a program for record keeping and tracking agency actions that meets the needs of BLM and OHP organizations pursuant to existing State and National agreements and regulation (BLM State Protocol Agreement; BLM National Programmatic Agreement).	No	Land use does not occur on project site.	CMA addresses inter-agency coordination and is outside the scope of the Proposed Action.
	LUPA-CUL-2	Using relevant archaeological and environmental data, identify priority geographic areas for new field inventory, based upon a probability for unrecorded significant resources and other considerations.	Yes		Pertinent archaeological and environmental data were reviewed and surveys of the road segments were conducted. Refer to Section 3.3 of the EA.
	LUPA-CUL-3	Identify places of traditional cultural and religious importance to federally recognized Tribes and maintain access to these locations for traditional use.	Yes		Pertinent archaeological and environmental data were reviewed and surveys of the road segments were conducted. Refer to Section 3.3 of the EA.
	LUPA-CUL-4	Design activities to minimize impacts on cultural resources including places of traditional cultural and religious importance to federally recognized Tribes.	Yes		Refer to EA Appendix D, Cultural BMPs
	LUPA-CUL-5	Develop interpretive material to correspond with recreational uses to educate the public about protecting cultural resources and avoiding disturbance of archaeological sites.	No	Resource not found on the project site	The Proposed Action road maintenance and repair activities as designed would not impact cultural resources because all resources occur outside the existing road beds/prism.
	LUPA-CUL-6	Develop partnerships to assist in the training of groups and individuals to participate in site stewardship programs.	No	Resource not found on the project site	
	LUPA-CUL-7	Coordinate with visual resources staff to ensure VRM Classes consider cultural resources and tribal consultation to include landmarks of cultural significance to Native Americans (TCPs, trails, etc.).	No	Resource not found on the project site	
	LUPA-CUL-8	Conduct regular contact and consultation with federally recognized Tribes and individuals, consistent with statute, regulation and policy.	Yes		The BLM and Customs and Border Protection have conducted and continue to conduct consultation with federally recognized Tribes and individuals, consistent with statute, regulation, and policy, as part of the NEPA process, as described in Section 4.0 of the EA.
	LUPA-CUL-9	Promote DRECP desert vegetation types/communities by avoiding them where possible, then use required compensatory mitigation, off-site mitigation, and other means to ensure Native American vegetation collection areas and practices are maintained.	Yes		Refer to EA Section 3.2 and EA Appendix D, Vegetation BMPs
	LUPA-CUL-10	Promote and protect desert fan palm oasis vegetation type/communities by avoiding where possible, then use required compensatory mitigation, off-site mitigation, and other means to ensure Native American cultural values are maintained.	No	Resource not found on the project site	
	LUPA-CUL-11	Promote and protect desert microphyll woodland vegetation type/communities to ensure Native American cultural values are maintained.	No	Resource not found on the project site	
Lands and Realty	**LUPA-LANDS-1**	Identify acquired lands as right-of-way exclusion areas when development is incompatible with the purpose of the acquisition.	No	Project is not associated with a land exchange.	
	LUPA-LANDS-2	Prioritize acquisition of land within and adjacent to conservation designation allocations. Acquired land in any land use allocation in this Plan will be managed according to the applicable allocation requirements and/or for the purposes of the acquisition. Management boundaries for the allocation may be adjusted to include the acquired land if the acquisition lies outside the allocation area through a future land use plan amendment process.	No	Project is not associated with a land exchange.	
	LUPA-LANDS-3	Within land use allocations where renewable energy and ancillary facilities are not allowed, an exception exists for geothermal development. Geothermal development will be an allowable use if a geothermal-only DFA overlays the allocation and the lease includes a no surface occupancy stipulation with exception of three specific parcels in the Ocotillo Wells SRMA (refer to the Ocotillo Wells SRMA Special Unit Management Plan in Appendix C).	No	Resource not found on the project site	
	LUPA-LANDS-4	Nonfederal lands within the boundaries of BLM LUPA land use allocations are not affected by the LUPA.	No	Land use does not occur on project site.	
	LUPA-LANDS-5	The MUCs used to determine land tenure in the CDCA Plan will be replaced by areas listed in the CMAs below.	No	Resource not found on the project site	
	LUPA-LANDS-6	Any activities on Catellus Agreement lands will be consistent with deed restrictions	No	Land use does not occur on project site.	
	LUPA-LANDS-7	Any activities on Catellus Agreement lands will be subject to the approval of the California State Director.	No	Land use does not occur on project site.	
	LUPA-LANDS-8	The CDCA Plan requirement that new transmission lines of 161kV or above, pipelines with diameters greater than 12 inches, coaxial cables for interstate communications, and major aqueducts or canals for interbasin transfers of water will be located in designated utility corridors, or considered through the plan amendment process outside of designated utility corridors, remains unchanged. The only exception is that transmission facilities may be located outside of designated corridors within DFAs without a plan amendment. This CMA does not apply the Bishop and Bakersfield RMPs.	No	Land use does not occur on project site.	
Exchanges with the State of California	**LUPA-LANDS-8**	Continue land exchanges with the State of California, as per the LUPA goals and objectives in Section II.4.1.4. Refer to Appendix F.	No	Project is not associated with a land exchange.	
	LUPA-LANDS-9	Enter into land exchanges with the California State Lands Commission (CSLC) which convey BLM lands suitable for, or developed as, large-scale renewable energy related projects in exchange for CSLC school lands located in and adjacent to designated conservation areas. These exchanges will follow the procedures outlined in Memorandum of Agreement Relating to Land Exchanges to Consolidate Land Parcels signed by the BLM and CSLC on May 21, 2012.	No	Project is not associated with a land exchange.	
	LUPA-LANDS-10	Prioritize land exchange proposals from the CSLC on available lands if there are competing land tenure proposals (e.g., land sale or exchange), CSLC proposals that enhance revenues for schools will generally be given priority.	No	Project is not associated with a land exchange.	
Livestock Grazing	**LUPA-LIVE-1**	Adopt the Standards of Rangeland Health and Guidelines for Grazing Management, as detailed below, for the CDCA. This CMA does not apply in the Bishop and Bakersfield RMPs. **Standards of Rangeland Health and Guidelines for Grazing Management**	No	Land use does not occur on project site.	

LUPA Wide

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		Regional Public Land Health Standards and Guidelines are required for all BLM administered lands in accordance with Part 43 of the CFR subsection 4180. These regulations require that State Directors, in consultation with Resource Advisory Councils, develop Standards for Rangeland Health and Guidelines for grazing management. The BLM in coordination and consultation with the California Desert District Advisory Committee (see Section 601 of the FLPMA as amended) developed standards and guidelines for the CDCA and used the following land use plan amendments to analyze the specific standard and guideline and to provide the public and opportunity to comment. • Northern and Eastern Colorado Desert Management Plan—NECO—ROD signed Dec. 2002 (BLM 2002a) • Northern and Eastern Mojave Desert Management Plan—NEMO—ROD signed Dec. 2002 (BLM 2002b) • West Mojave Plan—WEMO—ROD signed March 2006 (BLM 2006) The regulations require approval by the Secretary of the Interior prior to full implementation of standards and guidelines. Until approval is received, the fallback standards and guidelines will be used. The regulations require approval by the Secretary of the Interior prior to full implementation of the California Desert District standards and guidelines. Until approval is received, the fallback standards and guidelines will be used in the 5 Desert District Offices. Bakersfield and Bishop Field Offices are covered under the Central California Standards and Guidelines and require no additional approval to continue to use that document. **Standards and Guidelines for the CDCA** **Standards** of land health are expressions of levels of physical and biological condition or degree of function required for healthy lands and sustainable uses, and define minimum resource conditions that must be achieved and sustained (BLM 2001). **Guideline.** A practice, method or technique determined to be appropriate to ensure that standards can be met or that significant progress can be made toward meeting the standard. Guidelines are tools such as grazing systems, vegetative treatments, or improvement projects that help managers and permittees achieve standards. Guidelines may be adapted or modified when monitoring or other information indicates the guideline is not effective, or a better means of achieving the applicable standard becomes appropriate (H-4180-1 Rangeland Health Standards). The following **Standards** for the CDCA are from the NECO, NEMO, WEMO, and Palm Springs South Coast Resource Management Plan (PSSCRMP) land use plan amendments. **Soils** Soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, geology, land form, and past uses. Adequate infiltration and permeability of soils allow accumulation of soil moisture necessary for optimal plant growth and vigor, and provide a stable watershed, as indicated by: • Canopy and ground cover are appropriate for the site. • There is a diversity of plant species with a variety of root depths. • Litter and soil organic matter are present at suitable sites. • Microbiotic soil crusts are maintained and in place at appropriate locations. • Evidence of wind or water erosion does not exceed natural rates for the site. • Soil permeability, nutrient cycling, and water infiltration are appropriate for the soil type. **Native Species** Healthy, productive, and diverse habitats for native species, including Special Status Species (federal threatened and endangered, federally proposed, federal candidates, BLM sensitive, or California State threatened and endangered, and Unique Plant Assemblages), are maintained in places of natural occurrence, as indicated by: • Photosynthetic and ecological processes are continuing at levels suitable for the site, season, and precipitation regimes. • Plant vigor, nutrient cycle, and energy flow are maintaining desirable plants and ensuring reproduction and recruitment. • Plant communities are producing litter within acceptable limits. • Age class distribution of plants and animals are sufficient to overcome mortality fluctuations. • Distribution and cover of plant species and their habitats allow for reproduction and recovery from localized catastrophic events. • Alien and noxious plants and wildlife do not dominate a site or do not require action to prevent the spread and introduction of noxious/invasive weeds. • Appropriate natural disturbances are evident. • Populations and their habitats are sufficiently distributed and healthy to prevent the need for new listing as Special Status Species. **Riparian/Wetland and Stream Function** Wetland systems associated with subsurface, running, and standing water function properly and have the ability to recover from major disturbances. Hydrologic conditions are maintained, as indicated by: • Vegetative cover adequately protects banks and dissipates energy during peak water flows. • Dominant vegetation is an appropriate mixture of vigorous riparian species. • Recruitment of preferred species is adequate to sustain the plant community. • Stable soils store and release water slowly. • Plant species present indicate soil moisture characteristics are being maintained. • There is minimal cover of shallow-rooted invader species, and they are not displacing deep-rooted native species. • Shading of stream courses and water courses is sufficient to support riparian vertebrates and invertebrates. • Stream is in balance with water and sediment being supplied by the watershed. • Stream channel size (depth and width) and meander is appropriate for soils, geology, and landscape. • Adequate organic matter (litter and standing dead plant material) is present to protect the site from excessive erosion and to replenish soil nutrients through decomposition. **Water Quality** Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California State standards, as indicated by: • The following do not exceed the applicable requirements: chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment, and dissolved oxygen. • Standards are achieved for riparian, wetlands, and water bodies. • Aquatic organisms and plants (e.g., macro-invertebrates, fish, algae, and plants) indicate support for beneficial uses. • Monitoring results or other data show water quality is meting the Standard.			

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		The following **Guidelines** for grazing in the CDCA are from the NECO, NEMO, WEMO, and PSSCRMP land use plan amendments. • Facilities will be located away from riparian-wetland areas whenever they conflict with achieving or maintaining riparian-wetland functions. • The development of springs and seeps or other projects affecting water and associated resources will be designed to protect the ecological functions and processes of those sites. • Grazing activities at an existing range improvement that conflict with achieving proper functioning conditions (PFC) and resource objectives for wetland systems (lentic, lotic, springs, adits, and seeps) would be modified so PFC and resource objectives can be met, and incompatible projects would be modified to bring them into compliance. The BLM would consult, cooperate, and coordinate with affected interests and livestock producers prior to authorizing modification of existing projects and initiation of new projects. New range improvement facilities would be located away from wetland systems if they conflict with achieving or maintaining PFC and resource objectives. • Supplements (e.g., salt licks) will be located one-quarter mile or more away from wetland systems so they do not conflict with maintaining riparian-wetland functions. • Management practices will maintain or promote perennial stream channel morphology (e.g., gradient, width/depth ratio, channel roughness, and sinuosity) and functions that are appropriate to climate and landform. • Grazing management practices will meet state and federal water quality Standards. Impoundments (stock ponds) having a sustained discharge yield of less than 200 gallons per day to surface or groundwater, are excepted from meeting state drinking water standards per California State Water Resources Control Board Resolution Number 88-63. • Refer to the most-up-to-date BLM Fire Policy for information related to suppression and use of wildland fire within the planning area. • In years when weather results in extraordinary conditions, seed germination, seedling establishment, and native plant species growth should be allowed by modifying grazing use. • Grazing on designated ephemeral rangeland could be allowed only if reliable estimates of production have been made, an identified level of annual growth or residue to remain on site at the end of the grazing season has been established, and adverse effects on perennial species are avoided. • During prolonged drought, range stocking will be reduced to achieve resource objectives and/or prescribed perennial forage utilization. Livestock utilization of key perennial species on year-long allotments should be checked about March 1 when the Palmer Severity Drought Index/Standardized Precipitation Index indicates dry conditions are expected to continue. • Through the assessment process or monitoring efforts, the extent of invasive and/or exotic plants and animals should be recorded and evaluated for future control measures. Methods and prescriptions should be implemented, and an evaluation would be completed to ascertain future control measures for undesirable species. • Restore, maintain or enhance habitats to assist in the recovery of federally listed threatened and endangered species. Restore, maintain or enhance habitats of Special Status Species including federally proposed, federal candidates, BLM sensitive, or California State threatened and endangered to promote their conservation. • Grazing activities should support biological diversity across the landscape, and native species and microbiotic crusts are to be maintained. • Experimental research efforts should be encouraged to provide answers to grazing management and related resource concerns through cooperative and collaborative efforts with outside agencies, groups, and entities. • Livestock utilization limits of key perennial species will be as shown in (see **Table 19**) for the various range types. **Monitoring** Monitoring of grazing allotment resource conditions would be routinely assessed to determine if Public Land Health Standards are being met. In those areas not meeting one or more Standards, monitoring processes would be established where none exist to monitor indicators of health until the Standard or resource objective has been attained. Livestock trail networks, grazed plants, livestock facilities, and animal waste are expected impacts in all grazing allotments and these ongoing impacts would be considered during analysis of the assessment and monitoring process. Activity plans for other uses or resources that overlap an allotment could have prescribed resource objectives that may further constrain grazing activities (e.g., ACEC). In an area where a Standard has not been met, the results from monitoring changes to grazing management required to meet Standards would be reviewed annually. During the final phase of the assessment process, the Range Determination includes the schedule for the next assessment of resource conditions. To attain Standards and resource objectives, the best science would be used to determine appropriate grazing management actions. Cooperative funding and assistance from other agencies, individuals, and groups would be sought to collect prescribed monitoring data for indicators of each Standard.			
LUPA Wide Conservation and Management Actions for Livestock Grazing	**LUPA-LIVE-2**	In the CDCA only, accept grazing permit/lease donations in accordance with legislation in the Fiscal Year 2012 Appropriations Act (Public Law 112-74).	No	Land use does not occur on project site.	
	LUPA-LIVE-3	In the Bishop and Bakersfield RMPs, determine whether continued livestock grazing would be compatible with achieving land use plan management goals and objectives in the event that the permit/lease is relinquished.	No	Land use does not occur on project site.	
	LUPA-LIVE-4	If the BLM determines that the grazing allotment is to be put to a different public purpose than grazing, follow the notification requirements outline in the Grazing Regulations at 43 CFR 4110.4-2(b) and BLM Instruction Memorandum (IM) 2011-181 (BLM 2011), or future policy replacing IM 2011-181.	No	Land use does not occur on project site.	
	LUPA-LIVE-5	For grazing allotments within the CDCA that BLM has received a voluntary request for relinquishment prior to fiscal year 2012, continue the planning process for making these allotments unavailable for grazing.	No	Land use does not occur on project site.	
	LUPA-LIVE-6	Complete the process for approving rangeland health standards and guidelines for the CDCA Plan (NEMO, WEMO, NECO and PSSCRMP).	No	Land use does not occur on project site.	
	LUPA-LIVE-7	Make Pilot Knob, Valley View, Cady Mountain, Cronese Lake, and Harper Lake allotments, allocations unavailable for livestock grazing and change to management for wildlife conservation and ecosystem function. Reallocate the forage previously allocated to grazing use in these allotments to wildlife and ecosystem functions. Pilot Knob was closed in the WEMO plan amendment. The Cronese Lake, Harper Lake, and Cady Mountain allotments were closed as mitigation for the impacts to the Agassiz's desert tortoise resulting from the Fort Irwin expansion. All forage allocated to livestock grazing in these allotments will be reallocated to wildlife use and ecosystem function.	No	Land use does not occur on project site.	
	LUPA-LIVE-8	The following vacant grazing allotments within the CDCA will have all vegetation previously allocated to grazing use reallocated to wildlife use and ecosystem functions and will be closed and unavailable to future livestock grazing: Buckhorn Canyon, Crescent Peak, Double Mountain, Jean Lake, Johnson Valley, Kessler Springs, Oak Creek, Chemehuevi Valley, and Piute Valley.	No	Land use does not occur on project site.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	LUPA-LIVE-9	Allocate the forage that was allocated to livestock use in the Lava Mountain and Walker Pass Desert allotments (which have already been relinquished under the 2012 Appropriations Act) to wildlife use and ecosystem function and permanently eliminate livestock grazing on the allotments.	No	Land use does not occur on project site.	
Minerals	**LUPA-MIN-1**	High Potential Mineral Areas (identified in CA GEM data)	No	Land use does not occur on project site.	
		• These areas have been identified as mineral lands having existing and/or historic mining activity and a reasonable probability of future mineral resource development. These identified areas will be designated as mineral land polygons on DRECP maps, recognized as probable future development areas for planning purposes and allowable use areas.	No	Land use does not occur on project site.	
		• If an activity is proposed in a High Potential Mineral Area, analyze and consider the mineral resource value in the NEPA analysis.	No	Land use does not occur on project site.	
	LUPA-MIN-2	Existing Mineral/Energy Operations	No	Land use does not occur on project site.	
		Existing authorized mineral/energy operations, including existing authorizations, modifications, extensions and amendments and their required terms and conditions, are designated as an allowable use within all BLM lands in the LUPA Decision Area, and unpatented mining claims subject to valid existing rights. Amendments and expansions authorized after the signing of the DRECP LUPA ROD are subject to applicable CMAs, including ground disturbance caps within Ecological and Cultural Conservation Areas, subject to valid existing rights, subject to governing laws and regulations.	No	Land use does not occur on project site.	
	LUPA-MIN-3	Existing High Priority Mineral/Energy Operations Exclusion Areas	No	Land use does not occur on project site.	
		• Existing high-priority operation footprints and their identified expansion areas are excluded from DFA and conservation CMAs, but must comply with LUPA-wide CMAs subject to the governing laws and regulations.	No	Land use does not occur on project site.	
		• High priority operation exclusions are referenced by name with their respective footprint (acreage) below.	No	Land use does not occur on project site.	
		○ MolyCorp REE (General Legal Description: 35º 26'N; 115º 29'W)—10,490.9 surface acres	No	Land use does not occur on project site.	
		○ Briggs Au, Etna (General Legal Description: 35º 56'N; 117º 11'W)—3,216.9 surface acres	No	Land use does not occur on project site.	
		○ Cadiz Evaporites (General Legal Description: 34º 17'N; 115º 23'W)—2,591.5 surface acres	No	Land use does not occur on project site.	
		○ Searles Dry Lake (Evaporate) Operation (General Legal Description: 35º 43'N; 117º 19'W)—72,000 surface acres	No	Land use does not occur on project site.	
		○ Bristol Dry Lake (Evaporate) Operation (General Legal Description: 34º 29'N; 115º 43'W)—3,500 surface acres	No	Land use does not occur on project site.	
		○ Mesquite Gold Mine (General Legal Description: 33º 04'N; 114º 59'W)—4,500 surface acres	No	Land use does not occur on project site.	
		○ Hector Mine (Hectorite Clay) (General Legal Description: 34º 45'N; 116º 25'W)—1,500 surface acres	No	Land use does not occur on project site.	
		○ Castle Mountain/Viceroy Mine (Gold) (General Legal Description: 35º 17'N; 115º 3'W)—5,000 surface acres	No	Land use does not occur on project site.	
	LUPA-MIN-4	Access to Existing Operations	No	Land use does not occur on project site.	
		• Established designated, approved, or authorized access routes to the aforementioned existing authorized operations and areas will be designated as allowable uses.	No	Land use does not occur on project site.	
		• Access routes to Plans of Operations and Notices approved under 43 CFR 3809 will be granted subject to valid existing rights listed in 43 CFR 3809.100.	No	Land use does not occur on project site.	
	LUPA-MIN-5	Areas Located Outside Identified Mineral Areas	No	Land use does not occur on project site.	
		• Areas which could not be characterized due to insufficient data and mineral potential may fluctuate dependent on market economy, extraction technology, and other geologic information- requiring periodic updating. Authorizations are subject to the governing laws and regulations and LUPA requirements.	No	Land use does not occur on project site.	
	LUPA-MIN-6	New or expanded mineral operations will be evaluated on a case-by-case basis, and authorizations are subject to LUPA requirements, and the governing laws and regulations.	No	Land use does not occur on project site.	
National Recreation Trails	**LUPA-NRT-1**	The Nadeau Road NRT was designated by the Secretary of the Interior in June 2013. The California Desert District nominates the Sperry Wash Road, El Mirage Interpretive Trail East, and El Mirage Interpretive Trail West for NRT designation.	No	Project not located on federal lands with this designation.	
	LUPA-NRT-2	The Nadeau NRT Management Corridor will be protected and activities impacting use and enjoyment of the trail will be avoided within 0.5 mile from centerline of the route.	No	Project not located on federal lands with this designation.	
Paleontology	**LUPA-PALEO-1**	If not previously available, prepare paleontological sensitivity maps consistent with the Potential Fossil Yield Classification for activities prior to NEPA analysis.	Yes		Paleontological sensitivity map created, refer to Section 3.4 Paleontological Resources of the EA.
	LUPA-PALEO-2	Incorporate all guidance provided by the Paleontological Resources Protection Act.	Yes		Refer to Section 3.4 Paleontological Resources of the EA.
	LUPA-PALEO-3	Ensure proper data recovery of significant paleontological resources where adverse impacts cannot be avoided or otherwise mitigated.	No	Resource not found on the project site	No adverse impacts to paleontological resources anticipated
	LUPA-PALEO-4	Paleontological surveys and construction monitors are required for ground disturbing activities that require an EIS.	No	Resource not found on the project site	No adverse impacts to paleontological resources anticipated
Recreation and Visitor Services	**LUPA-REC-1**	Maintain, and where possible enhance, the recreation setting characteristics – physical components of remoteness, naturalness and facilities; social components of contact, group size and evidence of use; and operational components of access, visitor services and management controls.	No	Land use does not occur on project site.	
	LUPA-REC-2	Cooperate with the network of communities and recreation service providers active within the planning area to protect the principal recreation activities and opportunities, and the associated conditions for quality recreation, by enhancing appropriate visitor services, and by identifying and mitigating impacts from development, inconsistent land uses and unsustainable recreation practices such as minimizing impacts to known rockhounding gathering areas.	No	Resource not found on the project site	
	LUPA-REC-3	Manage lands not designated as SRMAs or ERMAs to meet recreation and visitor services and resource stewardship needs as described in Resource Management Plans (RMPs).	No	Project is not located in or near the area specified in the CMA.	
	LUPA-REC-4	Prohibit activities that have a significant adverse impact and that do not enhance conservation or recreation values within one mile of Level 1 and Level 2 Recreation facility footprint.	No	Project is not located in or near the area specified in the CMA.	
	LUPA-REC-5	Avoid activities that have a significant adverse impact and that do not enhance conservation or recreation values within one-half mile of Level 3 Recreation facility footprint including route access and staging areas. If avoidance is not practicable, the facility must be relocated to the same or higher recreation standard and maintain recreation objectives and setting characteristics.	No	Project is not located in or near the area specified in the CMA.	
	LUPA-REC-6	Limit signage to that necessary for recreation facility/area identification, interpretation, education and safety/regulatory enforcement.	No	Resource not found on the project site	
	LUPA-REC-7	Refer to local RMPs, RMP amendments, and activity level planning for specially designated areas for Vehicular Stopping, Parking, and Camping limitations.	No	Project not located on federal lands with this designation.	
	LUPA-REC-8	Provide on-going maintenance of recreation and conservation facilities, interpretive and regulatory signs, roads, and trails.	No	Land use does not occur on project site.	
Soil and Water General	**LUPA-SW-1**	Stipulations or conditions of approval for any activity will be imposed that provide appropriate protective measures to protect the quantity and quality of all water resources (including ephemeral, intermittent, and perennial water bodies) and any associated riparian habitat (see biological CMAs for specific riparian habitat CMAs). The water resources to which this CMA applies will be identified through the activity-specific NEPA analysis.	Yes		Refer to EA Section 3.2 Biological Resources (including jurisdictional and non-jurisdictional water resources) and EA Appendix D, Water Resources BMPs

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	LUPA-SW-2	Buffer zones, setbacks, and activity limitations specifically for soil and water (ground and surface) resources will be determined on an activity/site-specific basis through the environmental review process, and will be consistent with the soil and water resource goals and objectives to protect these resources . Specific requirements, such as buffer zones and setbacks, may be based, in part, on the results of the Water Supply Assessment defined below. In general, placement of long-term facilities within buffers or protected zones for soil and water resources is discouraged, but may be permitted if soil and water resource management objectives can be maintained.	No	Land use does not occur on project site.	
	LUPA-SW-3	Where a seeming conflict between CMAs within or between resources arises, the CMA(s) resulting in the most resource protection apply.	Yes		Should a conflict between CMAs occur within or between resources, the Proposed Action would comply with LUPA-SW-2
	LUPA-SW-4	Nothing in the "Exceptions" below applies to or takes precedence over any of the CMAs for biological resources.	Yes		CMAs for biological resources based on LUPA-SW-5 would take precedence, per LUPA-SW-4
Groundwater Resources	**LUPA-SW-5**	Exceptions to any of the specific soil and water stipulations contained in this section, as well as those listed below under the subheadings "Soil Resources," "Surface Water," and "Groundwater Resources," may be granted by the authorized officer if the applicant submits a plan, or, for BLM-initiated actions, the BLM provides documentation, that demonstrates:	Yes		Refer to Table 3.1 of the EA
		• The impacts are minimal (e.g., no predicted aquifer drawdown beyond existing annual variability in basins where cumulative groundwater use is not above perennial yield and water tables are not currently trending downward) or can be adequately mitigated.	Yes		Refer to Table 3.1 of the EA
Soil Resources	**LUPA-SW-6**	In addition to the applicable required governmental safeguards, third party activities will implement up-to-date standard industry construction practices to prevent toxic substances from leaching into the soil.	Yes		Refer to EA Appendix D, Water Resources and Hazardous Materials and Waste Management BMPs
	LUPA-SW-7	Prepare an emergency response plan, approved by the BLM contaminant remediation specialist, that ensures rapid response in the event of spills of toxic substances over soils.	No	Land use does not occur on project site.	
	LUPA-SW-8	As determined necessary on an activity specific basis, prepare a site plan specific to major soil types present (≥5% of footprint or laydown surfaces) in Wind Erodibility Groups 1 and 2 and in Hydrology Soil Class D as defined by the USDA Natural Resource Conservation Service to minimize water and air erosion from disturbed soils on activity sites.	No	Resource not found on the project site	
	LUPA-SW-9	The extent of desert pavement within the proposed boundary of an activity shall be mapped if it is anticipated that the activity may create erosional or ecologic impacts. Mapping will use the best available data and standards, as determined by BLM. Disturbance of desert pavement within the boundary of an activity shall be limited to the extent possible. If disturbance from an activity is likely to exceed 10% of the desert pavement mapped within the activity boundary, the BLM will determine whether the erosional and ecologic impacts of exceeding the 10% cap by the proposed amount would be insignificant and/or whether the activity should be redesigned to minimize desert pavement disturbance.	No	Resource not found on the project site	
	LUPA-SW-10	The extent of additional sensitive soil areas (cryptobiotic soil crusts, hydric soils, highly corrosive soils, expansive soils, and soils at severe risk of erosion) shall be mapped if it is anticipated that an activity will impact these resources. To the extent possible, avoid disturbance of desert biologically intact soil crusts, and soils highly susceptible to wind and water erosion.	No	Resource not found on the project site	
	LUPA-SW-11	Where possible, side casting shall be avoided where road construction requires cut- and-fill procedures.	Yes		Refer to EA Appendix D, Soil Resources BMPs
Surface Water	**LUPA-SW-12**	Except in DFAs, exclude long-term structures in, playas (dry lake beds), and Wild and Scenic River corridors, except as allowed with minor incursions (see definition in the Glossary of Terms).	No	Resource not found on the project site	
	LUPA-SW-13	BLM will manage all riparian areas to be maintained at, or brought to, proper functioning condition.	No	Resource not found on the project site	
	LUPA-SW-14	All relevant requirements of Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands) will be complied with.	Yes		Refer to Section 3.2 of the EA related to floodplains and Appendix D, Water Resource BMPs. No wetlands occur within the project area.
	LUPA-SW-15	Surface water diversion for beneficial use will not occur absent a state water right.	No	Land use does not occur on project site.	No diversion of surface waters proposed as part of road maintenance and repair of existing roads.
	LUPA-SW-16	The 100-year floodplain boundaries for any surface water feature in the vicinity of the project will be identified. If maps are not available from the Federal Emergency Management Agency (FEMA), these boundaries will be determined via hydrologic modeling and analysis as part of the environmental review process. Construction within, or alteration of, 100-year floodplains will be avoided where possible, and permitted only when all required permits from other agencies are obtained.	Yes		Refer to Section 3.2 of the EA and Appendix D, Water Resource BMPs
Groundwater	**LUPA-SW-17**	An activity's groundwater extraction shall not contribute to exceeding the estimated perennial yield for the basin in which the extraction is taking place. Perennial yield is that quantity of groundwater that can be withdrawn from the groundwater basin without exceeding the long-term recharge of the basin or unreasonably affecting the basin's physical, chemical, or biological integrity. It is further clarified arithmetically below.	No	Land use does not occur on project site.	
	LUPA-SW-18	Water extracted or consumptively used for the construction, operation, maintenance, or remediation of the project shall be solely for the beneficial use of the project or its associated mitigation and remediation measures, as specified in approved plans and permits.	No	Land use does not occur on project site.	
	LUPA-SW-19	Water flow meters shall be installed on all extraction wells permitted by BLM.	No	Land use does not occur on project site.	
	LUPA-SW-20	After application of applicable avoidance and minimization measures, all remaining unavoidable residual impacts to surface waters from the proposed activity shall be mitigated to ensure no net loss of function and value, as determined by the BLM.	Yes		BMPs will be in place to minimize impacts to surface water drainages. Drainages are not subject to Clean Water Act mitigation requirements.
	LUPA-SW-21	Consideration shall be given to design alternatives that maintain the existing hydrology of the site or redirect excess flows created by hardscapes and reduced permeability from surface waters to areas where they will dissipate by percolation into the landscape.	No	Land use does not occur on project site.	No hardscape would occur as a result of the Proposed Action
	LUPA-SW-22	All hydrologic alterations shall be avoided that could reduce water quality or quantity for all applicable beneficial uses associated with the hydrologic unit in the project area, or specific mitigation measures shall be implemented that will minimize unavoidable water quality or quantity impacts, as determined by BLM in coordination with USFWS, CDFW, and other agencies, as appropriate. These beneficial uses may include municipal, domestic, or agricultural water supply; groundwater recharge; surface water replenishment; recreation; water quality enhancement; flood peak attenuation or flood water storage; and wildlife habitat.	Yes		Not regulated by Clean Water Act, BMPs included to minimize impacts to water quality within drainages.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	LUPA-SW-23	A Water (Groundwater) Supply Assessment shall be prepared in conjunction with the activity's NEPA analysis and prior to an approval or authorization. This assessment must be approved by the BLM in coordination with USFWS, CDFW, and other agencies, as appropriate, prior to the development, extraction, injection, or consumptive use of any water resource. The purpose of the Water Supply Assessment is to determine whether over-use or over-draft conditions exist within the project basin(s), and whether the project creates or exacerbates these conditions. The Assessment shall include an evaluation of existing extractions, water rights, and management plans for the water supply in the basin(s) (i.e., cumulative impacts), and whether these cumulative impacts (including the proposed project) can maintain existing land uses as well as existing aquatic, riparian, and other water-dependent resources within the basin(s). This assessment shall identify:			
		• All relevant groundwater basins or sub-basins and their relationships.	No	Resource not found on the project site	
		• All known aquifers in the basin(s), including their dimensions, whether confined or unconfined, estimated hydraulic conductivity and transmissivity, groundwater surface elevations, and direction and movement of groundwater.	No	Resource not found on the project site	
		• All surface water basin(s) related to water runoff, delivery, and supply, if different from the groundwater basin(s).	No	Resource not found on the project site	
		• All sites of surface outflow (springs or seeps) contained within the basin(s), including historic sites.	No	Resource not found on the project site	
		• All other surface water bodies in the basins(s), including rivers, streams, ephemeral washes/drainages, lakes, wetlands, playas, and floodplains.	No	Resource not found on the project site	
		• The water requirements of the proposed project and the source(s) of that water.	No	Resource not found on the project site	
		• An analysis demonstrating that water of sufficient quantity and quality is available from identified source(s) for the life of the project.	No	Resource not found on the project site	
		• An analysis of potential project-related impacts on water quality and quantity needed for beneficial uses, reserved water rights, existing groundwater users, or habitat management within or down gradient of the groundwater basin within which the project would be constructed.	No	Resource not found on the project site	
		• The above analyses shall be in the form of a numerical groundwater model. The model extent shall encompass the groundwater basin within which the project would be constructed, and any groundwater-dependent resources within or down gradient of that basin.	No	Resource not found on the project site	
		The primary product of the Water Supply Assessment shall be a baseline water budget, which shall be established based on the best-available data and hydrologic methods for the identified basin(s). This water budget shall classify and describe all water inflow and outflow to the identified basin(s) or system using best-available science and the following basic hydrologic formula or a derivation: $P – R – E – T – G = \Delta S$	No	Resource not found on the project site	
		where P is precipitation and all other water inflow or return flow, R is surface runoff or outflow, E is evaporation, T is transpiration, G is groundwater outflow (including consumptive component of existing pumping), and ΔS is the change in storage. The volumes in this calculation shall be in units of either acre-feet per year or gallons per year. The water budget shall quantify the existing perennial yield of the basin(s). Perennial yield is defined arithmetically as that amount such that $P – R – E – T – G$ is greater than or equal to 0	No	Resource not found on the project site	
		Water use by groundwater-dependent resources is implicitly included in the definition of perennial yield. For example, in many basins the transpiration component (T) includes water use by groundwater-dependent vegetation. Similarly, groundwater outflow (G) includes discharge to streams, springs, seeps, and wetlands. If one or more budget components is altered, then one or more of the remaining components must change for the hydrologic balance to be maintained. For example, an increase in the consumptive component of groundwater pumping can lower the water table and reduce transpiration by groundwater-dependent vegetation. The groundwater that had been utilized by the groundwater-dependent vegetation would then be considered "captured" by groundwater pumping. Similarly, increased groundwater consumption can capture groundwater that discharges to streams, springs, seeps, wetlands and playas. These changes can occur slowly over time, and may require years or decades before the budget components are fully adjusted. Accordingly, the water/groundwater supply assessment requires that the best-available data and hydrologic methods be employed to quantify these budgets, and that groundwater consumption effects on groundwater-dependent ecosystems be identified and addressed.	No	Resource not found on the project site	
		The Water Supply Assessment shall also address:	No	Resource not found on the project site	
		• Estimates of the total cone of depression considering cumulative drawdown from all potential pumping in the basin(s), including the project, for the life of the project through the decommissioning phase	No	Resource not found on the project site	
		• Potential to cause subsidence and loss of aquifer storage capacity due to groundwater pumping	No	Resource not found on the project site	
		• Potential to cause injury to other water rights, water uses, and land owners	No	Resource not found on the project site	
		• Changes in water quality and quantity that affect other beneficial uses	No	Resource not found on the project site	
		• Effects on groundwater dependent vegetation and groundwater discharge to surface water resources such as streams, springs, seeps, wetlands, and playas that could impact biological resources, habitat, or are culturally important to Native Americans	No	Resource not found on the project site	
		• Additional field work that may be required, such as an aquifer test, to evaluate site specific project pumping impacts and if necessary, establish trigger points that can be used for a Groundwater Water Monitoring and Mitigation Plan	No	Resource not found on the project site	
		• The mitigation measures required, if there are significant or potentially significant impacts on water resources include but are not limited to, the use of specific technologies, management practices, retirement of active water rights, development of a recycled water supply, or water imports	No	Resource not found on the project site	
	LUPA-SW-24	A Groundwater Monitoring and Reporting Plan, and Mitigation Action Plan shall be prepared to verify the Water Supply Assessment and adaptively manage water use as part of project operations. This plan shall be approved by BLM, in coordination with USFWS, CDFW, and other agencies as appropriate, prior to the development, extraction, injection, or consumptive use of any water resource. The quality and quantity of all surface water and groundwater used for the project shall be monitored and reported using this plan. Groundwater monitoring includes measuring the effects of a project's groundwater extraction on groundwater surface elevations, groundwater flow paths, changes to groundwater-dependent vegetation, and of aquifer recovery after project decommissioning. Surface water monitoring, if applicable, shall monitor for changes in the flows, water volumes, channel characteristics, and water quality as a result of a project's surface water use. Monitoring frequency and geographic scope and reporting frequency shall be decided on a project and site-specific basis and in coordination with the appropriate agencies that manage the water and land resources of the region. The geographic scope may include at the very least, all basins/sub-basins that potentially receive inflow from the basin where the proposed project may be sited, and all basins/sub-basins that may potentially contribute inflow to the basin where the proposed project is located. The plan shall also detail any mitigation measures that may be required as a result of the project. This plan and all monitoring results shall be made available to BLM. BLM will make the plan and results available to USFWS, CDFW, and other applicable agencies.	No	Resource not found on the project site	

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	LUPA-SW-25	Where groundwater extraction, in conjunction with other cumulative impacts in the basin, has potential to exceed the basin's perennial yield or to impact water resources, one or more "trigger points," or specified groundwater elevations in specific wells or surface water bodies, shall be established by BLM. If the groundwater elevation at the designated monitoring wells falls below the trigger point(s)(or exceeds the trigger pumping rate), additional mitigation measures, potentially including cessation of pumping, will be imposed.	No	Resource not found on the project site	
	LUPA-SW-26	Groundwater pumping mitigation shall be imposed if groundwater monitoring data indicate impacts on water-dependent resources that exceed those anticipated and otherwise mitigated for in the NEPA analysis and ROD, even if the basin's perennial yield is not exceeded. Water-dependent resources include riparian or phreatophytic vegetation, springs, seeps, streams, and other approved domestic or industrial uses of groundwater. Mitigation measures may include changes to pumping rates, volume, or timing of water withdrawals; coordinating and scheduling groundwater pumping activities in conjunction with other users in the basin; acquisition of project water from outside the basin; and/or replenishing the groundwater resource over a reasonably short timeframe. For permitted activities, permittees may also be required to contribute funds to basin-wide groundwater monitoring networks in basins such as those encompassed by the East Riverside DFA or in the Calvada Springs/South Pahrump Valley area, and to cooperate in the compilation and analysis of groundwater data.	No	Resource not found on the project site	
	LUPA-SW-27	Water-conservation measures shall be required in basins where current groundwater demand is high and has the future potential to rise above the estimated perennial yield (e.g., Pahrump Valley). These measures may include the use of specific technology, management practices, or both. A detailed discussion and analysis of the effectiveness of mitigation measures must be included. Application of these measures shall be detailed in the Groundwater Water Monitoring and Mitigation Plan.	No	Resource not found on the project site	
	LUPA-SW-28	Groundwater extractions from adjudicated basins, such as the Mojave River Basin, may be subject to additional restrictions imposed by the designated authority; examples include the Mojave Water Agency and San Bernardino County (see County Ordinance 3872). Where provisions of the adjudication allow for acquisition of water rights, project developers could be required to retire water rights at least equal in volume to those necessary for project operation or propose an alternative offset based on the conditions unique to the adjudicated basin.	No	Project is not located in or near the area specified in the CMA.	Proposed Action us not located near the Mojave River.
	LUPA-SW-29	Groundwater pumping mitigation may be imposed if monitoring data indicate impacts on groundwater or groundwater-dependent habitats outside the DRECP area, including those across the border in Nevada. See **LUPA-SW-26** for potential mitigation measures.	No	Resource not found on the project site	
	LUPA-SW-30	Activities shall comply with local requirements for any long term or short term domestic water use and wastewater treatment.	No	Resource not found on the project site	
	LUPA-SW-31	The siting, construction, operation, maintenance, remediation, and abandonment of all wells shall conform to specifications contained in the California Department of Water Resources Bulletins #74-81 and #74-90 and their updates.	No	Resource not found on the project site	
	LUPA-SW-32	Colorado River hydrologic basin - The concepts, principles and general methodology used in the Colorado River Accounting Surface Method, as defined in U.S. Geological Survey Scientific Investigations Report 2008-5113 (USGS 2009), and existing and future updates or a similar methodology, are considered the best available data for assessing activity/project related ground water impacts in the Colorado River hydrologic basin. The best available data and methodology shall be used to determine whether activity/project-related pumping would result in the extracted water being replaced by water drawn from the Colorado River. If activity/project-related groundwater pumping results in the static groundwater level at the well being near (within 1 foot), equal to, or below the Accounting Surface in a basin hydrologically connected to the Colorado River, that consumption shall be considered subject to the Law of the River (Colorado River Compact of 1922 and amendments). In such circumstances, BLM shall require the applicant to offset or otherwise mitigate the volume of water causing drawdown below the Accounting Surface. Details of such mitigation measures and the right to the use of water shall be described in the Groundwater Water Monitoring and Mitigation Plan.	No	Resource not found on the project site	
Soil, Water, and Water-Dependent Resources Restricted to Specific Areas on BLM Lands	**LUPA-SW-33**	**Stipulations for groundwater development in the proximity of Devils Hole**: Any development scenario for an activity within 25 miles of Devils Hole shall include a plan to achieve *zero-net* or *net-reduced* groundwater pumping to reduce the risk of adversely affecting senior federal reserved water rights, the designated critical habitat of the endangered Devils Hole pupfish, and the free-flowing requirements of the Wild and Scenic Amargosa River. This plan will require operators to acquire one or more minimization water rights (MWRs) in the over-appropriated, over-pumped, and hydraulically connected Amargosa Desert Hydrographic Basin in Nevada. The MWR(s) shall be: (1) an amount equal (at minimum) to that which is needed for construction and operations; (2) historically fully utilized, preferably for agricultural use; and (3) senior and closer to Devils Hole than the proposed point of diversion.	No	Project is not located in or near the area specified in the CMA.	
	LUPA-SW-34	**Stipulations for groundwater development in the Calvada Springs/South Pahrump Valley area:** Activities in this area shall be required to acquire one or more MWRs in the Pahrump Valley Hydrographic Basin in Nevada. The acquired MWR(s) must: (1) be at least equal to the amount proposed to be required and actually used for project construction and operations; and (2) be fully utilized for at least the prior ten years.	No	Project is not located in or near the area specified in the CMA.	
	LUPA-SW-35	Stipulations for activities in the vicinity of Death Valley National Park, Joshua Tree National Park, or Mojave National Preserve: The NEPA for activities involving groundwater extraction that are in the vicinity of Death Valley National Park, Joshua Tree National Park, or the Mojave National Preserve shall analyze and address any potential impacts of groundwater extraction on Death Valley National Park, Joshua Tree National Park, or Mojave National Preserve. BLM will consult with the National Park Service on this process. The analysis or analyses shall include:	No	Project is not located in or near the area specified in the CMA.	
		• Potential impacts on the water balances of groundwater basins within these parks and preserves	No	Project is not located in or near the area specified in the CMA.	
		• A map identifying all potentially impacted surface water resources in the vicinity of the project, including a narrative discussion of the delineation methods used to discern those surface waters in the field	No	Project is not located in or near the area specified in the CMA.	
		• Any project-related modifications to surface water resources, both temporary and permanent	No	Project is not located in or near the area specified in the CMA.	
		• Analysis of any potential impacts on perennial streams, intermittent streams, and ephemeral drainages that could negatively impact natural riparian buffers	No	Project is not located in or near the area specified in the CMA.	
		• Impacts of any project proposed truncation, realignment, channelization, lining, or filling of surface water resources that could change drainage patterns, reduce available riparian habitat, decrease water storage capacity, or increase water flow velocity or sediment deposition, in particular where storm water diverted around or through the project site is returned to natural drainage systems downslope of the project	No	Project is not located in or near the area specified in the CMA.	
		• Any potential indirect project-related causes of hydrologic changes that could exacerbate flooding, erosion, scouring, or sedimentation in stream channels	No	Project is not located in or near the area specified in the CMA.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		• Alternatives and mitigation measures proposed to reduce or eliminate such impacts	No	Project is not located in or near the area specified in the CMA.	
Visual Resources Management	**LUPA-VRM-1**	Manage Visual Resources in accordance with the VRM classes shown on Figure 9.	Yes		Refer to Table 3.1 of the EA
	LUPA-VRM-2	Ensure that activities within each of the VRM Class polygons meets the VRM objectives described above, as measured through a visual contrast rating process.	No	Land use does not occur on project site.	
	LUPA-VRM-3	Ensure that transmission facilities are designed and located to meet the VRM Class objectives for the area in which they are located. New transmission lines routed through designated corridors where they do not meet VRM Class Objectives will require RMP amendments to establish a conforming VRM Objective. All reasonable effort must be made to reduce visual contrast of these facilities in order to meet the VRM Class before pursing RMP amendments. This includes changes in routing, using lattice towers (vs. monopole), color treating facilities using an approved color from the BLM Environmental Color Chart CC-001 (dated June 2008, as updated on April 2014, or the most recent version) (vs. galvanized) on towers and support facilities, and employing other BMPs to reduce contrast. Such efforts will be retained even if an RMP amendment is determined to be needed. Visual Resource BMPs that reduce adverse visual contrast will be applied in VRM Class conforming situations. For a reference of BMPs for reducing visual impacts see the "Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands", available at http://www.blm.gov/style/medialib/blm/wo/MINERALS__REALTY__AND_RESOURCE_PROTECTION_/energy/renewable_references.Par.1568.File.dat/RenewableEnergyVisualImpacts_BMPs.pdf, or the most recent version of the document or BMPs for VRM, as determined by BLM.	No	Resource not found on the project site	
Wilderness Characteristics	**LUPA-WC-1**	Complete an inventory of areas for proposed activities that may impact wilderness characteristics if an updated wilderness characteristics inventory is not available.	No	Land use does not occur on project site.	
	LUPA-WC-2	Employ avoidance measures as described under DFAs and approved transmission corridors.	No	Land use does not occur on project site.	
	LUPA-WC-3	For inventoried lands found to have wilderness characteristics but not managed for those characteristics compensatory mitigation is required if wilderness characteristics are directly impacted. The compensation will be:	No	Project is not located in or near the area specified in the CMA.	
		• 2:1 ratio for impacts from any activities that impact those wilderness characteristics, except in DFAs and transmission corridors	No	Project is not located in or near the area specified in the CMA.	
		• 1:1 ratio for impact from any activities that impact the wilderness characteristics in DFAs and transmission corridors	No	Project is not located in or near the area specified in the CMA.	
		Wilderness compensatory mitigation may be accomplished through acquisition and donation, by willing landowners, to the federal government of (a) wilderness inholdings, (b) wilderness edge holdings that have inventoried wilderness characteristics, or (c) other areas within the LUPA Decision Area that are managed to protect wilderness characteristics. Restoration of impaired wilderness characteristics in Wilderness, Wilderness Study Area, and lands managed to protect wilderness characteristics could be substituted for acquisition.	No	Project is not located in or near the area specified in the CMA.	
	LUPA-WC-4	For areas identified to be managed to protect wilderness characteristics, identified in Figure 7, the following CMAs are required:	No	Project is not located in or near the area specified in the CMA.	
		• Include a no surface occupancy stipulation for any leasable minerals with no exceptions, waivers, or modifications.	No	Project is not located in or near the area specified in the CMA.	
		• Exclude these areas from land use authorizations, including transmission.	No	Project is not located in or near the area specified in the CMA.	
		• Close areas to construction of new roads and routes. Vehicles will continue to be permitted on existing designated routes.	No	Project is not located in or near the area specified in the CMA.	
		• Close areas to mineral material sales.	No	Project is not located in or near the area specified in the CMA.	
		• Prohibit commercial or personal-use permits for extraction of materials (e. g. no wood-cutting permits).	No	Project is not located in or near the area specified in the CMA.	
		• Manage the area as VRM II.	No	Project is not located in or near the area specified in the CMA.	
		• Require that new structures and facilities are related to the protection or enhancement of wilderness characteristics or are necessary for the management of uses allowed under the land use plan.	No	Project is not located in or near the area specified in the CMA.	
		• Make lands unavailable for disposal from federal ownership.	No	Project is not located in or near the area specified in the CMA.	
	LUPA-WC-5	Manage the following Wilderness Inventory Units to protect wilderness characteristics:	No	Project is not located in or near the area specified in the CMA.	
		• 132A-2 / 132A-3 / 132B / 136 / 136-1 / 145-1-1 / 145-2-1 / 145-3-1 / 149-2 / 150-2-2 / 158-1 / 158-2 / 159 / 159-1 / 159A-1 / 160 / 160-1 / 160B-2A / 160B-2B / 160B-2F / 160B-3A / 160B-4A / 160B-3B / 160B-4B / 170-1 / 170-3 / 193-1 / 206-1-1 / 206-1-2 / 206-1-3 / 206-1-4 / 222-2-1 / 251-1 / 251-1-1 / 251-1-2 / 251-2-2 / 251-3 / 251A / 252 / 259-1 / 259-2 / 266-1 / 276-1 / 276-3 / 277 / 277A-1 / 278 / 280 / 294-1 / 294-2 / 295 / 295A / 304-2 / 305-1 / 305-2 / 307-1 / 307-2 / 307-1-1 / 307-1-2 / 307-1-3 / 312-1 / 312-2 / 312-3 / 322-1 / 325-1 / 325-2 / 325-3 / 325-4 / 325-5 / 325-7 / 325-8 / 315-14 / 325-17 / 329 / 352-2 / 352A / 352A-1 / 354 / 355-1 / 355-2 / 355-3	No	Project is not located in or near the area specified in the CMA.	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Comprehensive Trails &Travel Management	**NLCS-CTTM-1**	**Comprehensive Trails and Travel Management –** Trails and Travel Management in California Desert National Conservation Lands will be in accordance with the applicable Transportation and Travel Management Plan. Future Transportation and Travel Management Plans for National Conservation Lands would be developed in accordance to the appropriate BLM guidance and policy. The California Desert National Conservation Land designation will be addressed in those subsequent plans with an emphasis on routes that provide for the conservation, protection, and restoration, as well as recreational use and enjoyment of the California Desert National Conservation Lands that is compatible with the values for which the areas were designated.	No	Project does not include trails or travel management	
Cultural Resources & Tribal Interests	**NLCS-CUL-1**	Any adverse effects to historic properties resulting from allowable uses will be addressed through the Section 106 process of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800. Resolution of adverse effects will in part be addressed via alternative mitigation that includes regional synthesis and interpretation of existing archaeological data in addition to mitigation measures determined through the Section 106 consultation process.	No	Resource not found on the project site	Refer to Section 3.3 Cultural Resources of the EA. No adverse effects to historic properties would occur.
Ground Disturbance Caps	**NLCS-DIST-1**	**Ground Disturbance Caps –** Development in California Desert National Conservation Lands are limited by the 1% ground disturbance cap which is the total ground disturbance (existing [past and present] plus future), or to the level allowed by collocated ACEC(s) with its smaller ground disturbance cap units, whichever is more restrictive. Refer to Appendix B for the ACEC Special Unit Management Plans. The ground disturbance caps will be used, managed and implemented following the methodology in the California Desert National Conservation Lands and ACEC land allocation sections, and repeated in, **NLCS-DIST-2** and **ACEC-DIST-2**.	No		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
	NLCS-DIST-2	**Ground Disturbance Cap Management and Implementation.** Specifically, the ground disturbance caps would be implemented as a limitation and objective using the following process:	No		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• Limitation: If the ground disturbance condition of the California Desert National Conservation Lands and/or ACEC unit is below the designated ground disturbance cap (see calculation method), the ground disturbance cap is a limitation on ground-disturbing activities within the California Desert National Conservation Lands and/or ACEC, and precludes approval of future discretionary ground disturbing activities (see exceptions below) above the cap.	No		Exempt

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Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• Objective, triggering disturbance mitigation: If the ground disturbance condition of the California Desert National Conservation Lands and/or ACEC is at or above its designated cap, the cap functions as an objective, triggering the specific ground disturbance mitigation requirement. Ground disturbance mitigation is unique to ground disturbance cap implementation and a discrete form of compensatory mitigation, separate from other required mitigation in the DRECP LUPA (see Glossary of Terms). The ground disturbance mitigation requirement remains in effect for all (see exceptions below) activities until which time the California Desert National Conservation Lands and/or ACEC drops below the cap, at which time the cap becomes a limitation and the ground disturbance mitigation is no longer a requirement. If ground disturbance mitigation opportunities do not exist in a unit (see below for "unit" of measurement), ground disturbing activities (see exceptions below) will not be allowed in that unit until which time opportunities for ground disturbance mitigation in the unit become available (see types and forms of ground disturbance mitigation below) or the unit recovers and drops below the cap.			Exempt
		• Actions necessary to control the immediate impacts of an emergency that are urgently needed to reduce the risk to life, property, or important natural, cultural, or historic resources, in accordance with 43 Code of Federal Regulations (CFR) 46.150, are an exception to the ground disturbance cap limitation, objective and ground disturbance mitigation requirements. Ground disturbance from emergency actions will count in the ground disturbance calculation for other activities, and also be available for ground disturbance mitigation opportunities and restoration, as appropriate.	No		Exempt
		Calculating ground disturbance: Ground disturbance will be calculated on BLM managed land at the time of an individual proposal, by BLM for a BLM initiated action or by a third party for an activity needing BLM approval or authorization, for analysis in the activity-specific National Environmental Policy Act (NEPA) document. Once BLM approves/accepts or conducts a calculation for a ACEC, that calculation is considered the baseline of past and present disturbance and is valid for 12 months, and can be used by other proposed activities in the same unit. Ground disturbances, that meet the criteria below, would be added into the calculation for the 12 month period without having to revisit the entire calculation. After a 12 month period has passed and a proposed action triggers the disturbance calculation, BLM will examine the existing ground disturbance calculation to determine: 1) if the calculation is still reliable, in which case add in any additional disturbance that has occurred since that calculation; or 2) if the disturbance must be recalculated in its entirety. Once completed for a specific activity, the ground disturbance calculation may be used throughout the activity's environmental analysis. However, the BLM may recalculate the affected unit(s) or portions of the unit(s) if it determines such recalculation is necessary for the BLM's environmental analysis.	No		Exempt

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Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		Unit of measurement: When calculating the ground disturbance, it is necessary to identify the appropriate unit level at which the disturbance will be calculated. For ground disturbing activities that occur within California Desert National Conservation Lands, the disturbance calculation will be based on the California Desert National Conservation Lands, ACEC unit boundary, or the boundary of the disturbance cap area(s), whichever area is smaller. If there is overlap between California Desert National Conservation Lands and an ACEC, the calculation will take place based on the smallest unit. If an activity/project overlaps two or more smaller units, the cap will be calculated, individually, for all affected units.	No		Exempt
		Ground disturbance includes: The calculation shall include existing ground disturbance in addition to the estimated ground disturbance from the proposed activity (future) determined at the time of the individual proposal:	No		Exempt
		• Authorized/approved ground disturbing activities – built and not yet built	No		Exempt
		• BLM identified routes – all routes, trails, etc., authorized and unauthorized, identified in the Ground Transportation Linear Feature (GTLF) and/or other BLM route network database (i.e., BLM local databases that contain the best available data on routes and trails, replacement for GTLF, etc.), following applicable BLM standards and policy for identification of routes (authorized and unauthorized)	No		Exempt
		• Assumptions may be used to identify the percentage/degree/area/etc. of ground disturbance for a specific authorized/approved activity or activity-type based on:	No		Exempt
		○ Activity-specific environmental analysis, such as NEPA or ESA Section 7 Biological Assessment	No		Exempt
		○ Known and documented patterns of ground disturbance	No		Exempt
		○ Other documented site-specific factors that limit or play a role in ground disturbance, such as topography, geography, hydrology (e.g. desert washes obliterating authorized routes on a regular basis), historical and predicted patterns of use	No		Exempt
		• Any unauthorized disturbance that can be seen at a 1:10,000 scale using the best available aerial imagery	No		Exempt
		• Ground disturbance from wildfire, animals, or other disturbances that can be seen at a 1:10,000 scale using the best available aerial imagery	No		Exempt
		• Historic Route 66 maintenance - potential ground disturbance estimates:	No	Project is not located in or near the area specified in the CMA.	
		– As part of the ground disturbance calculation, the potential disturbance associated with estimated operations related to the maintenance of Historic Route 66 will automatically be included in the ground disturbance calculation as existing ground disturbance for the units specified below, until which time these estimated acres are no longer necessary due to approved operations:	No		Exempt
		▪ South Amboy-Mojave California Desert National Conservation Lands 221 acres	No	Project is not located in or near the area specified in the CMA.	
		▪ Bristol Mountains ACEC 92 acres		Project is not located in or near the area specified in the CMA.	
		▪ Chemehuevi ACEC 43 acres	No	Project is not located in or near the area specified in the CMA.	
		▪ Pisgah ACEC 86 acres	No	Project is not located in or near the area specified in the CMA.	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		○ The estimated ground disturbance acreage includes disturbance associated with potential access to the locations if no current access exists.	No	Land use does not occur on project site.	
		○ The estimated ground disturbance acres for maintenance of Historic Route 66 in the before mentioned conservation units is not approval of these activities by BLM. Activities associated with the management and maintenance of Historic Route 66 on BLM administered land will follow all applicable laws, regulations and policies.	No	Project is not located in or near the area specified in the CMA.	
		Exceptions to the disturbance calculation:	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• Actions necessary to control the immediate impacts of an emergency that are urgently needed to reduce the risk to life, property, or important natural, cultural, or historic resources, in accordance with 43 CFR 46.150, will not be required to conduct a disturbance calculation. If the actions are ground disturbing, that disturbance will count towards the disturbance cap when next calculated for non-emergency activities.	No	Project is not located in or near the area specified in the CMA.	
		• Actions that are authorized under a Department of Interior (DOI) or BLM NEPA Categorical Exclusion will not be required to conduct a disturbance calculation; however, these actions are not exempt from the disturbance mitigation requirement if a unit is at or above its cap. Although the BLM is not required to calculate the disturbance cap before approving an activity under a Categorical Exclusion, if the BLM knows an area is at or exceeding the cap, the disturbance mitigation requirements would apply to that activity.	No	Project is not located in or near the area specified in the CMA.	
		• BLM authorized/approved research or restoration activities that are designed or intended to promote and enhance the nationally significant landscape values for which the California Desert National Conservation Land was designated.	No	Project is not located in or near the area specified in the CMA.	
		• Actions that are entirely within the footprint of an existing authorized/approved site of ground disturbance that is within the calculation above.	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• Livestock grazing permit renewals (however, water developments or other range improvements requiring an Environmental Assessment or Environmental Impact Statement would be subject to the disturbance calculation and any mitigation requirements).	No	Land use does not occur on project site.	
		Ground disturbance mitigation: The purpose of ground disturbance mitigation (disturbance mitigation) is to allow actions to occur in California Desert National Conservation Lands and/or ACEC that is at or above its designated disturbance cap(s), while at the same time providing a restoration mechanism that will, over time, improve the condition of the unit(s) and take them below their cap. Disturbance mitigation is compensatory. Disturbance mitigation is unique to ground disturbance cap implementation and a discrete form of compensatory mitigation, separate from other required mitigation in the DRECP (see Glossary of Terms).	No		Exempt

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		Disturbance mitigation may only be used for ground disturbance that is otherwise allowed by the LUPA and consistent with the purposes for which the California Desert National Conservation Lands and/or ACEC was designated. Areas used for disturbance mitigation are still considered disturbed until which time they meet the "Ground Disturbance Recovery" criteria in the description below.	No		Exempt
		Unit for implementing disturbance mitigation: The appropriate unit level for implementing disturbance mitigation is the same as that used for calculating ground disturbance. For ground disturbing activities that occur within California Desert National Conservation Lands, the disturbance mitigation will be required within the California Desert National Conservation Lands, ACEC boundary, or the boundary of the disturbance cap area(s), whichever area is smaller. If there is overlap between California Desert National Conservation Lands and an ACEC, the disturbance mitigation will take place in the smallest unit. If an activity/project overlaps two or more smaller units, disturbance mitigation will be required for all units that are at or over their specified disturbance cap.	No		Exempt
		No disturbance mitigation required: If the calculated ground disturbance for the unit(s) is under the cap:	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• No disturbance mitigation required; use activity design features to minimize new ground disturbance and help stay below cap.	Yes		Refer to Appendix D BMPs
		Disturbance mitigation required: If the calculated ground disturbance is at or above the unit(s) cap, disturbance mitigation is required:	No		Exempt
		• Use activity design features to minimize new ground disturbance to the extent practicable.	No		Exempt
		• For the portion of the proposed activity that is located on land within an area previously disturbed by an authorized/approved action that has been terminated the required disturbance mitigation ratio is 1.5 (1½):1.	No		Exempt
		• For the portion of the proposed activity that is located on undisturbed land or land disturbed by unauthorized activities, the required disturbance mitigation ratio is 3:1.	No		Exempt
		• Although the BLM is not required to calculate the ground disturbance cap before approving/authorizing an activity under a Categorical Exclusion, if the BLM knows an area is at or exceeding the cap, the disturbance mitigation requirements would apply to that activity.	No		Exempt
		• In the rare circumstance where the BLM authorizes activities on areas restored (e.g., as disturbance or other forms of mitigation), the required disturbance mitigation ratio requirement is doubled, that is, 3:1 or 6:1, respectively.	No		Exempt
		• If disturbance mitigation opportunities do not exist in a unit, ground-disturbing activities (see exceptions below) will not be allowed in that unit until which time opportunities for disturbance mitigation in the unit become available (see types and forms of disturbance mitigation below) or the unit recovers and drops below the cap.	No		Exempt
		Exceptions to the disturbance mitigation requirement:	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• Any portion of the proposed activity that is located on land previously disturbed by an existing, valid authorized/approved action.	Yes		Road maintenance and repair would occur within existing roads
		• Livestock grazing permit renewals (however, water developments or other range improvements requiring an Environmental Assessment or Environmental Impact Statement would be subject to the disturbance calculation and any mitigation requirements).	No	Land use does not occur on project site.	
		• Land use authorization assignments and renewals with no change in use.	No	Land use does not occur on project site.	
		• BLM authorized/approved activities that are designed and implemented to reduce existing ground disturbance, such as ecological, cultural, or habitat restoration or enhancement activities.	No	Land use does not occur on project site.	
		• Non-discretionary actions, where BLM has no authority to require compensatory mitigation.	No	Land use does not occur on project site.	
		Types and forms of disturbance mitigation:	No	Exempt	
		• Restoration of previously disturbed BLM lands within the boundary of the specific California Desert National Conservation Lands and/or ACEC unit(s) being impacted.	No	Land use does not occur on project site.	
		• Acquisition of undisturbed lands within the boundary of the specific California Desert National Conservation Lands and/or ACEC unit being impacted.	No	Land use does not occur on project site.	
		• Ground disturbance mitigation can be "nested" (i.e., combined) with other resource mitigation requirements, when appropriate. For example, a parcel restored for desert tortoise habitat mitigation may also satisfy the disturbance mitigation requirement if the parcel is within the appropriate unit of California Desert National Conservation Lands, ACEC boundary, or smaller disturbance cap unit.	No	Land use does not occur on project site.	
		Ground Disturbance Recovery	No		Exempt
		In general, California Desert National Conservation Lands and/or ACEC ground disturbance recovery would be determined during the decadal ground disturbance threshold ecoregion trend monitoring assessments (see below, and Monitoring and Adaptive Management). California Desert National Conservation Lands and/or ACEC recovery may be assessed at intermediate intervals, in between the decadal assessments, at BLM's discretion based on adequate funding and staffing. Between the decadal assessments, BLM will assume disturbed areas and units (same as used for calculations and mitigation) are not yet recovered until data is presented and BLM determines the area meets one of the two criteria below:	No		Exempt
		• Field verification that disturbed area(s) are dominated by the establishment of native shrubs, as appropriate for the site, and demonstrated function of ecological processes (e.g., water flow, soil stability).	No		Exempt
		• Ground disturbance can no longer be seen at the 1:10,000 scale using the best available aerial imagery.	No		Exempt
		Areas within California Desert National Conservation Lands and/or ACEC(s) may be determined recovered by BLM at any time, once one of the two criteria above are met, prior to the entire unit (of calculation and mitigation) being determined recovered. Areas determined recovered by BLM would be removed from the subsequent ground disturbance calculation for that unit.	No		Exempt

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Lands & Realty	NLCS-LANDS-1	Renewable energy activities and related ancillary facilities are not allowed. New transmission and interconnect (i.e. generation tie lines) lines are allowed in designated corridors only. California Desert National Conservation Lands are a right-of-way avoidance areas for all other land use authorizations. Right-of-way avoidance areas are defined as areas to be avoided but may be available for location of right-of-ways with special stipulations.	No	Land use does not occur on project site.	
	NLCS-LANDS-2	Avoid use authorizations that negatively affect the values for which the California Desert National Conservation Lands are designated, unless mitigation, including compensatory mitigation, result in a net benefit to the California Desert National Conservation Lands.	No		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
	NLCS-LANDS-3	Public access will be designed to facilitate or enhance the use, enjoyment, conservation, protection, and restoration of California Desert National Conservation Land values identified for the ecoregion.	No		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
	NLCS-LANDS-4	All lands within California Desert National Conservation Lands are identified for retention. If the BLM determines that disposal through exchange would result in a net benefit to the values of the California Desert National Conservation Lands, it may consider that exchange through a land use plan amendment.	No	Project is not associated with a land exchange.	
	NLCS-LANDS-5	Site authorizations that protect or enhance conservation values, such as those granted as compensatory mitigation or for habitat restoration, are allowed. Compensatory mitigation measures sited on California Desert National Conservation Lands are not be limited to mitigation for activities on BLM-managed public land.	No	Project is not located in or near the area specified in the CMA.	
Minerals	NLCS-MIN-1	**High Potential Mineral Areas**	No	Project is not located in or near the area specified in the CMA.	
		• In California Desert National Conservation Lands and ACECs, determine if reasonable alternatives exist outside of the California Desert National Conservation Lands and ACECs prior to proposing mineral resource development within one of these areas.	No	Resource not found on the project site	
		• In California Desert National Conservation Lands, subject to valid existing rights, if mineral resource development is proposed on a parcel of public land administered by the BLM for conservation purposes and designated as part of the NLCS within the CDCA, pursuant to Omnibus Public Land Management Act Section 2002(b)(2)(D):	No	Resource not found on the project site	
		o Identify, analyze, and consider the resources and values for which that parcel of public land is administered for conservation purposes.	No	Resource not found on the project site	
		o Determine whether development of mineral resources is compatible with the BLM's administration of that parcel of public land for conservation purposes. If development is incompatible, the mineral resource would not be developed, subject to valid existing rights.	No	Resource not found on the project site	
		o Approve any operation for which valid existing rights have been determined, subject to the applicable CMAs in the DRECP LUPA, including LUPA-MIN-1 through 6.	No	Resource not found on the project site	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• In California Desert National Conservation Lands, to protect the values for which a California Desert National Conservation Land unit was designated, and avoid, minimize, and compensate impacts to those values that results in net benefit for California Desert National Conservation Lands values, all Plans of Operation will meet the performance standards found at 43 CFR 3809.420, specifically 43 CFR 3809.420(a)(3)—Land-use plans, and 43 CFR 3809.420(b)(7)—Fisheries, wildlife and plant habitat, and will be subject to the regulations found at 43 CFR 3809.100 and 43 CFR 3809.101, if applicable.	No	Resource not found on the project site	
	NLCS-MIN-2	For the purposes of locatable minerals, California Desert National Conservation Lands are treated as "controlled" or "limited" use areas in the CDCA, requiring a Plan of Operations for greater than casual use under 43 CFR 3809.11.	No	Resource not found on the project site	
	NLCS-MIN-3	California Desert National Conservation Lands are available for mineral material sales and solid mineral leases, and would require mitigation, including compensatory mitigation, that results in net benefit for California Desert National Conservation Lands values consistent with applicable statutes and regulations.	No	Project not located on federal lands with this designation.	
	NLCS-MIN-4	California Desert National Conservation Lands are available for geothermal leasing only in the specified areas where a DRECP LUPA DFA overlaps with the California Desert National Conservation Lands and the geothermal lease contains a specific no surface occupancy stipulation.	No	Resource not found on the project site	
	NLCS-MIN-5	Geothermal and other leasing must protect groundwater quality and quantity.	No	Land use does not occur on project site.	
National Scenic & Historic Trails	NLCS-NSHT-1	**Management of National Scenic and Historic Trails –** Manage National Scenic and Historic Trails as units of the BLM's NLCS per PL 111-11, and components of the National Trails System under the National Trails System Act. Where National Scenic and Historic Trails overlap California Desert National Conservation Lands or other NLCS units (e.g., Wilderness Areas), the more protective CMAs or land use allocations apply.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-2	**Management Corridor –** The National Trail Management Corridor, on BLM land, has a width generally 1 mile from the centerline of the trail, 2-mile total width. Where the National Trail Management Corridors overlap California Desert National Conservation Lands or other NLCS units, the more protective CMAs or land use allocations will apply.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-3	**Site Authorization –** NSHT Management Corridors are right-of-way avoidance areas for land use authorizations. Sites authorizations will require mitigation, including compensatory mitigation resulting in net benefit to the NSHT. Authorizations that interfere with the Nature and Purpose for which the NSHT was established are not be allowed, as required by the National Trail Systems Act.	No	Project not located on federal lands with this designation.	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	NLCS-NSHT-4	**Linear Rights-of-Way –** Generally, the NSHT Management Corridors are avoidance areas for linear rights-of-way, except in existing designated transmission/utility corridors, which are available for linear rights-of-way. Cultural landscapes, high potential historic sites, and high potential route segments within or along National Historic Trail Management Corridors are excluded from transmission activities, except in existing designated transmission/utility corridors. For all linear rights-of-way adversely impacting NSHT Management Corridors, the BLM will follow the protocol in BLM Manual 6280 to coordinate, as required, and complete an analysis showing that the development does not substantially interfere with the nature and purposes of the NSHT, and that mitigation results in a net benefit to the NSHT.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-5	**Renewable Energy Rights-of-Way –** Renewable energy activities are not be allowed within NSHT Management Corridors, except in LUPA approved DFAs. Where development may adversely impact NSHT Management Corridors, the BLM will follow the protocol in BLM Manual 6280 as required and complete an analysis to ensure that it does not substantially interfere with the nature and purposes of the NSHT, avoids activities incompatible with NSHT nature and purposes, and that mitigation, including compensatory mitigation, results in a net benefit to the NSHT.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-6	**Land Tenure –** All lands within NSHT Management Corridors are identified for retention. If the BLM determines that disposal through exchange would result in a net benefit to the values of the NSHT, it may consider that exchange through a land use plan amendment.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-7	**Locatable Minerals –** For the purposes of locatable minerals, NSHT Management Corridors are treated as "controlled" or "limited" use areas in the CDCA, requiring a Plan of Operations for greater than casual use under 43 CFR 3809.11.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-8	**Mineral Material Sales –** NSHT Management Corridors are available for mineral material sales if the sale does not conflict or cause adverse impact on resources, qualities, values, settings, or primary uses or substantially interfere with nature and purpose of NSHT, and avoids activities inconsistent with NHST purposes. The sale must require mitigation/compensation and must result in net benefit to NSHT values.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-9	**Solid Mineral Leases –** NSHT Management Corridors will be available for solid mineral leases if the lease does not conflict or cause adverse impact on resources, qualities, values, settings, or primary uses or substantially interfere with nature and purpose of NSHT, and avoids activities inconsistent with NHST purposes. The lease must require mitigation/compensation and result in net benefit to NSHT values.		Project not located on federal lands with this designation.	
	NLCS-NSHT-10	**Geothermal Leasable Minerals –** NSHT Management Corridors are available for geothermal leasing in LUPA approved DFAs only and with a no surface occupancy stipulation, as long as the action would not substantially interfere with the nature and purposes of the NSHT, and will follow the most recent national policy and guidance.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-11	**Recreation and Visitor Services –** Commercial and competitive Special Recreation is a discretionary action and will be considered on a case-by-case basis for activities consistent with the NSHT nature and purposes.	No	Project not located on federal lands with this designation.	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	NLCS-NSHT-12	**Cultural Resources –** Any adverse effects to historic properties resulting from allowable uses will be addressed through the Section 106 process of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-13	**Cultural Resources –** All high potential NHT segments will be assumed to contain remnants, artifacts and other properties eligible for the National Register of Historic Places, pending evaluation.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-14	**Visual Resources Management –** All NSHT Management Corridors are designated as VRM Class I or II dependent on the CMA's or land use allocation, except within existing approved transmission/utility corridors (VRM Class III) and DFAs (VRM Class IV). However, state of the art VRM BMPs for renewable energy will be employed commensurate with the protection of nationally significant scenic resources and cultural landscapes to minimize the level of intrusion and protect trail settings.	No	Project not located on federal lands with this designation.	
	NLCS-NSHT-15	**Mitigation Requirements –** If there is overlap between a National Scenic or Historic Trail, National Trail Management Corridor on BLM land, or trail under study for possible designation and a DFA, BLM Manual 6280 must be followed. Efforts will be made to avoid conflicting activities and approved activities will be subject to mitigation for adverse impacts to the resources, qualities, values, settings, and primary use or uses (RQVs), including, but not limited to, the following: avoidance, the cost of trail relocation, on-site mitigation and off-site mitigation. Compensation can include acquisition or restoration of corridor RQVs, features and landscapes will be at a minimum of 2:1, and must result in a net benefit to the overall trail corridor. Proposed development of high potential route segments must not substantially interfere with the nature and purposes of the National Scenic or Historic Trail.	No	Project not located on federal lands with this designation.	
Recreation & Visitor Services	NLCS-REC-1	Commercial and competitive Special Recreation Permits are a discretionary action and will be issued on a case by case basis, for activities that do not diminish the values of the California Desert National Conservation Lands unit and will be prohibited if the proposed activities would adversely impact the nationally significant ecological, cultural or scientific values for which the area was designated.	No	Project is not located in or near the area specified in the CMA.	
	NLCS-SW-1	Apply for water rights on a case by case basis to protect water dependent California Desert National Conservation Land values.	No	Resource not found on the project site	

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Cultural Resources & Tribal Interests	**ACEC-CUL-1**	Survey, identify and record new cultural resources within ACEC boundaries prioritizing ACECs where the relevant and important criteria include cultural resources.	Yes		Refer to Section 3.3 Cultural Resources of the EA
	ACEC-CUL-2	Update records for existing cultural resources within ACECs, prioritizing ACECs where the relevant and important criteria include cultural resources.	Yes		Refer to Section 3.3 Cultural Resources of the EA
	ACEC-CUL-3	Develop baseline assessment of specific natural and man-made threats to cultural resources in ACECs (i.e., erosion, looting and vandalism, grazing, OHV), prioritizing ACECs where the relevant and important criteria include cultural resources.	Yes		Refer to Section 3.3 Cultural Resources of the EA
	ACEC-CUL-4	Provide on-going monitoring for cultural resources based on the threat assessment, prioritizing ACECs where the relevant and important criteria include cultural resources.	Yes		Refer to Section 3.3 Cultural Resources of the EA and Appendix D Cultural Resource BMPs
	ACEC-CUL-5	Identify, develop or incorporate standard protection measures and best management practices to address threats.	Yes		Refer to EA Appendix D Cultural Resources BMPs
	ACEC-CUL-6	Where specific threats are identified, implement protection measures consistent with agency NHPA Section 106 responsibilities.	Yes		Road maintenance and repair activities as designed would not impact cultural resources because resources occur outside the existing road beds.
Ground Disturbance Cap	**ACEC-DIST-1**	Development in ACECs is limited by specified ground disturbance caps which are the total ground disturbance (existing [past and present] plus future). The specific ACEC ground disturbance caps are delineated in each of the individual ACEC Special Unit Management Plans (Appendix B). The ground disturbance caps will be used, managed and implemented following the methodology for California Desert National Conservation Lands and ACECs identified in Section II.2 and repeated in CMAs **NLCS-DIST-2**, and **ACEC-DIST-2**.	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
	ACEC-DIST-2	Specifically, the ground disturbance caps would be implemented as a limitation and objective using the following process:	No		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• Limitation: If the ground disturbance condition of the ACEC is below the designated ground disturbance cap (see calculation method), the ground disturbance cap is a limitation on ground-disturbing activities within the California Desert National Conservation Lands and/or ACEC, and precludes approval of future discretionary ground disturbing activities (see exceptions below) above the cap.	No		Exempt

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• Objective, triggering disturbance mitigation: If the ground disturbance condition of the ACEC is at or above its designated cap, the cap functions as an objective, triggering the specific ground disturbance mitigation requirement. Ground disturbance mitigation is unique to ground disturbance cap implementation and a discrete form of compensatory mitigation, separate from other required mitigation in the DRECP LUPA (see Glossary of Terms). The ground disturbance mitigation requirement remains in effect for all (see exceptions below) activities until which time the ACEC drops below the cap, at which time the cap becomes a limitation and the ground disturbance mitigation is no longer a requirement. If ground disturbance mitigation opportunities do not exist in a unit (see below for "unit" of measurement), ground disturbing activities (see exceptions below) will not be allowed in that unit until which time opportunities for ground disturbance mitigation in the unit become available (see types and forms of ground disturbance mitigation below) or the unit recovers and drops below the cap.	No		Exempt
		• Actions necessary to control the immediate impacts of an emergency that are urgently needed to reduce the risk to life, property, or important natural, cultural, or historic resources, in accordance with 43 Code of Federal Regulations (CFR) 46.150, are an exception to the ground disturbance cap limitation, objective and ground disturbance mitigation requirements. Ground disturbance from emergency actions will count in the ground disturbance calculation for other activities, and also be available for ground disturbance mitigation opportunities and restoration, as appropriate.	No		Exempt
		Calculating ground disturbance: Ground disturbance will be calculated on BLM managed land at the time of an individual proposal, by BLM for a BLM initiated action or by a third party for an activity needing BLM approval or authorization, for analysis in the activity-specific National Environmental Policy Act (NEPA) document. Once BLM approves/accepts or conducts a calculation for a ACEC, that calculation is considered the baseline of past and present disturbance and is valid for 12 months, and can be used by other proposed activities in the same unit. Ground disturbances, that meet the criteria below, would be added into the calculation for the 12 month period without having to revisit the entire calculation After a 12 month period has passed and a proposed action triggers the disturbance calculation, BLM will examine the existing ground disturbance calculation to determine: 1) if the calculation is still reliable, in which case add in any additional disturbance that has occurred since that calculation; or 2) if the disturbance must be recalculated in its entirety. Once completed for a specific activity, the ground disturbance calculation may be used throughout the activity's environmental analysis. However, the BLM may recalculate the affected unit(s) or portions of the unit(s) if it determines such recalculation is necessary for the BLM's environmental analysis.	No		Exempt

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		Unit of measurement: When calculating the ground disturbance, it is necessary to identify the appropriate unit level at which the disturbance will be calculated. For ground disturbing activities that occur within an ACEC, the disturbance calculation will be based on the ACEC unit boundary, or the boundary of the disturbance cap area(s), whichever area is smaller. If there is overlap between California Desert National Conservation Lands and an ACEC, the calculation will take place based on the smallest unit. If an activity/project overlaps two or more smaller units, the cap will be calculated, individually, for all affected units.	No		Exempt
		Ground disturbance includes: The calculation shall include existing ground disturbance in addition to the estimated ground disturbance from the proposed activity (future) determined at the time of the individual proposal:	No		Exempt
		• Authorized/approved ground disturbing activities – built and not yet built	No		Exempt
		• BLM identified routes – all routes, trails, etc., authorized and unauthorized, identified in the Ground Transportation Linear Feature (GTLF) and/or other BLM route network database (i.e., BLM local databases that contain the best available data on routes and trails, replacement for GTLF, etc.), following applicable BLM standards and policy for identification of routes (authorized and unauthorized)	No		Exempt
		• Assumptions may be used to identify the percentage/degree/area/etc. of ground disturbance for a specific authorized/approved activity or activity-type based on:	No		Exempt
		○ Activity-specific environmental analysis, such as NEPA or ESA Section 7 Biological Assessment	No		Exempt
		○ Known and documented patterns of ground disturbance	No		Exempt
		○ Other documented site-specific factors that limit or play a role in ground disturbance, such as topography, geography, hydrology (e.g. desert washes obliterating authorized routes on a regular basis), historical and predicted patterns of use	No		Exempt
		• Any unauthorized disturbance that can be seen at a 1:10,000 scale using the best available aerial imagery	No		Exempt
		• Ground disturbance from wildfire, animals, or other disturbances that can be seen at a 1:10,000 scale using the best available aerial imagery	No		Exempt
		• Historic Route 66 maintenance - potential ground disturbance estimates:	No	Project is not located in or near the area specified in the CMA.	
		– As part of the ground disturbance calculation, the potential disturbance associated with estimated operations related to the maintenance of Historic Route 66 will automatically be included in the ground disturbance calculation as existing ground disturbance for the units specified below, until which time these estimated acres are no longer necessary due to approved operations:	No	Project is not located in or near the area specified in the CMA.	
		▪ South Amboy-Mojave California Desert National Conservation Lands 221 acres	No	Project is not located in or near the area specified in the CMA.	
		▪ Bristol Mountains ACEC 92 acres	No	Project is not located in or near the area specified in the CMA.	
		▪ Chemehuevi ACEC 43 acres	No	Project is not located in or near the area specified in the CMA.	

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		▪ Pisgah ACEC 86 acres	No	Project is not located in or near the area specified in the CMA.	
		○ The estimated ground disturbance acreage includes disturbance associated with potential access to the locations if no current access exists.	No	Project is not located in or near the area specified in the CMA.	
		○ The estimated ground disturbance acres for maintenance of Historic Route 66 in the before mentioned conservation units is not approval of these activities by BLM. Activities associated with the management and maintenance of Historic Route 66 on BLM administered land will follow all applicable laws, regulations and policies.	No	Project is not located in or near the area specified in the CMA.	
		Exceptions to the disturbance calculation:	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• Actions necessary to control the immediate impacts of an emergency that are urgently needed to reduce the risk to life, property, or important natural, cultural, or historic resources, in accordance with 43 CFR 46.150, will not be required to conduct a disturbance calculation. If the actions are ground disturbing, that disturbance will count towards the disturbance cap when next calculated for non-emergency activities.	No	Project is not located in or near the area specified in the CMA.	
		• Actions that are authorized under a Department of Interior (DOI) or BLM NEPA Categorical Exclusion will not be required to conduct a disturbance calculation; however, these actions are not exempt from the disturbance mitigation requirement if a unit is at or above its cap. Although the BLM is not required to calculate the disturbance cap before approving an activity under a Categorical Exclusion, if the BLM knows an area is at or exceeding the cap, the disturbance mitigation requirements would apply to that activity.	No	Project is not located in or near the area specified in the CMA.	
		• BLM authorized/approved research or restoration activities that are designed or intended to promote and enhance the relevant and important values for which the ACEC was designated.	No	Land use does not occur on project site.	
		• Actions that are entirely within the footprint of an existing authorized/approved site of ground disturbance that is within the calculation above.	Yes		Wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan)
		• Livestock grazing permit renewals (however, water developments or other range improvements requiring an Environmental Assessment or Environmental Impact Statement would be subject to the disturbance calculation and any mitigation requirements).	No	Land use does not occur on project site.	

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		Ground disturbance mitigation: The purpose of ground disturbance mitigation (disturbance mitigation) is to allow actions to occur in California Desert National Conservation Lands and/or ACEC that is at or above its designated disturbance cap(s), while at the same time providing a restoration mechanism that will, over time, improve the condition of the unit(s) and take them below their cap. Disturbance mitigation is compensatory. Disturbance mitigation is unique to ground disturbance cap implementation and a discrete form of compensatory mitigation, separate from other required mitigation in the DRECP (see Glossary of Terms).	No		
					Exempt
		Disturbance mitigation may only be used for ground disturbance that is otherwise allowed by the LUPA and consistent with the purposes for which the California Desert National Conservation Lands and/or ACEC was designated. Areas used for disturbance mitigation are still considered disturbed until which time they meet the "Ground Disturbance Recovery" criteria in the description below.	No		
					Exempt
		Unit for implementing disturbance mitigation: The appropriate unit level for implementing disturbance mitigation is the same as that used for calculating ground disturbance. For ground disturbing activities that occur within an ACEC, the disturbance mitigation will be required within the ACEC unit boundary, or the boundary of the disturbance cap area(s), whichever area is smaller. If there is overlap between California Desert National Conservation Lands and an ACEC, the disturbance mitigation will take place in the smallest unit. If an activity/project overlaps two or more smaller units, disturbance mitigation will be required for all units that are at or over their specified disturbance cap.	No		
					Exempt
		No disturbance mitigation required: If the calculated ground disturbance for the unit(s) is under the cap:	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• No disturbance mitigation required; use activity design features to minimize new ground disturbance and help stay below cap.	Yes		Refer to Appendix D BMPs
		Disturbance mitigation required: If the calculated ground disturbance is at or above the unit(s) cap, disturbance mitigation is required:	No		Exempt
		• Use activity design features to minimize new ground disturbance to the extent practicable.	No		Exempt
		• For the portion of the proposed activity that is located on land within an area previously disturbed by an authorized/approved action that has been terminated the required disturbance mitigation ratio is 1.5 (1½):1.	No		Exempt
		• For the portion of the proposed activity that is located on undisturbed land or land disturbed by unauthorized activities, the required disturbance mitigation ratio is 3:1.	No		Exempt
		• Although the BLM is not required to calculate the ground disturbance cap before approving/authorizing an activity under a Categorical Exclusion, if the BLM knows an area is at or exceeding the cap, the disturbance mitigation requirements would apply to that activity.	No		Exempt

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• In the rare circumstance where the BLM authorizes activities on areas restored (e.g., as disturbance or other forms of mitigation), the required disturbance mitigation ratio requirement is doubled, that is, 3:1 or 6:1, respectively.	No		Exempt
		• If disturbance mitigation opportunities do not exist in a unit, ground-disturbing activities (see exceptions below) will not be allowed in that unit until which time opportunities for disturbance mitigation in the unit become available (see types and forms of disturbance mitigation below) or the unit recovers and drops below the cap.	No		Exempt
		Exceptions to the disturbance mitigation requirement:	Yes		The Proposed Action qualifies as an exception to the mitigation requirement as it is wholly located on lands previously disturbed by an existing approved action (BLM designated routes under the 2003 Western Colorado Desert Plan).
		• Any portion of the proposed activity that is located on land previously disturbed by an existing, valid authorized/approved action.	Yes		Exempt
		• Livestock grazing permit renewals (however, water developments or other range improvements requiring an Environmental Assessment or Environmental would be subject to the disturbance calculation and any mitigation requirements).	No	Land use does not occur on project site.	
		• Land use authorization assignments and renewals with no change in use.	No	Land use does not occur on project site.	
		• BLM authorized/approved activities that are designed and implemented to reduce existing ground disturbance, such as ecological, cultural, or habitat restoration or enhancement activities.	No	Land use does not occur on project site.	
		• Non-discretionary actions, where BLM has no authority to require compensatory mitigation.	No	Land use does not occur on project site.	
		Types and forms of disturbance mitigation:	No		Exempt
		• Restoration of previously disturbed BLM lands within the boundary of the specific ACEC unit(s) being impacted.	No		Exempt
		• Acquisition of undisturbed lands within the boundary of the specific ACEC unit being impacted.	No		Exempt
		• Ground disturbance mitigation can be “nested” (i.e., combined) with other resource mitigation requirements, when appropriate. For example, a parcel restored for desert tortoise habitat mitigation may also satisfy the disturbance mitigation requirement if the parcel is within the appropriate unit of California Desert National Conservation Lands, ACEC boundary, or smaller disturbance cap unit.	No		Exempt
		Ground Disturbance Recovery	No		Exempt
		In general, California Desert National Conservation Lands and/or ACEC ground disturbance recovery would be determined during the decadal ground disturbance threshold ecoregion trend monitoring assessments (see below, and Monitoring and Adaptive Management). California Desert National Conservation Lands and/or ACEC recovery may be assessed at intermediate intervals, in between the decadal assessments, at BLM’s discretion based on adequate funding and staffing. Between the decadal assessments, BLM will assume disturbed areas and units (same as used for calculations and mitigation) are not yet recovered until data is presented and BLM determines the area meets one of the two criteria below:	No		Exempt

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• Field verification that disturbed area(s) are dominated by the establishment of native shrubs, as appropriate for the site, and demonstrated function of ecological processes (e.g., water flow, soil stability).	No		Exempt
		• Ground disturbance can no longer be seen at the 1:10,000 scale using the best available aerial imagery.	No		Exempt
		Areas within California Desert National Conservation Lands and/or ACEC(s) may be determined recovered by BLM at any time, once one of the two criteria above are met, prior to the entire unit (of calculation and mitigation) being determined recovered. Areas determined recovered by BLM would be removed from the subsequent ground disturbance calculation for that unit.	No		Exempt
Lands & Realty	**ACEC-LANDS-1**	Renewable energy activities are not allowed. ACECs are right-of-way avoidance areas for all other land use authorizations, except when identified as right-of-way exclusion areas in the individual unit's Special Management Plan (Appendix B). Transmission is allowed. Re-powering of an existing wind facility is allowed if the re-power project remains within the existing approved wind energy ROW and reduces environmental impacts.	No	Land use does not occur on project site.	
	ACEC-LANDS-2	All lands within Areas of Critical Environmental Concern are identified for retention. If the BLM determines that disposal through exchange would result in a net benefit to the values of the ACEC, it may consider that exchange through a land use plan amendment.	No	Project is not associated with a land exchange.	
Minerals	**ACEC-MIN-1**	**High Potential Mineral Areas**	No	Resource not found on the project site	
		• In California Desert National Conservation Lands and ACECs, determine if reasonable alternatives exist outside of the California Desert National Conservation Lands/ACEC areas prior to proposing mineral resource development within one of these areas.	No	Resource not found on the project site	
	ACEC-VRM-1	Manage Manzanar ACEC to conform to VRM Class II standards.	No	Project is not located in or near the area specified in the CMA.	

General Public Lands

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	GPL-1	DRECP LUPA Biological and Cultural Conservation Design – Activities that may have a measurable (i.e. the effect can be evaluated) adverse impact (direct, indirect or cumulative) on the biological or cultural conservation strategies, including individual California Desert National Conservation Lands, ACEC and/or Wildlife Allocation units of the DRECP LUPA are not allowed.	No	Project not located on federal lands with this designation.	
	GPL-2	DRECP LUPA Recreation Design - Activities that may have a measureable (i.e. the effect can be evaluated) adverse impact (direct, indirect or cumulative) on the recreation design, including individual SRMAs and ERMAs, of the DRECP LUPA are not allowed.	No	Project not located on federal lands with this designation.	
	GPL-3	DRECP LUPA Renewable Energy and Transmission Design - Activities that may have a measurable (i.e. the effect can be evaluated) adverse impact (direct, indirect, or cumulative) on the renewable energy and transmission design, including individual DFAs and VPLs, are not allowed.	No	Project not located on federal lands with this designation.	
	GPL-4	Renewable Energy Activities – A renewable energy activity that is not transmission aligned (see Glossary of Terms), as per the DRECP energy development design, is not allowed.	No	Project not located on federal lands with this designation.	
	GPL-5	DRECP LUPA – Activities that may have a measurable (i.e. the effect can be evaluated) adverse impact (direct, indirect, or cumulative) on the LUPA-wide structure, and implementation of the DRECP LUPA are not allowed.	No	Project not located on federal lands with this designation.	
Comprehensive Trails and Travel Management	**GPL-CTTM-1**	Avoid Tier 1, Tier 2, Tier 3 roads/primitive roads/trails, Backcountry Byways, and other significant linear features (as defined in the LUPA-wide CMAs). If avoidance is not practicable, relocate access to the same or higher standard and maintain the recreation setting characteristics and access to recreation activities, facilities, and destination.	No	Project not located on federal lands with this designation.	
	GPL-CTTM-2	If residual impacts to Tier 1 and Tier 2 roads/primitive roads/trails, Backcountry Byways, or other significant linear features cannot be protected and maintained, commensurate compensation in the form of an enhanced recreation operations, recreation facilities or opportunities will be required.	No	Project not located on federal lands with this designation.	
		The following CMAs are for renewable energy and transmission land use authorizations. All other activities will be subject to the NHPA Section 106 process.	No	Project not located on federal lands with this designation.	
Cultural Resources and Tribal Interests	**GPL-CUL-1**	For renewable energy activities and transmission, the applicant is required to pay all appropriate costs associated with the following processes, through the appropriate BLM funding mechanism:	No	Land use does not occur on project site.	
		• All appropriate costs associated with the BLM's analysis of the DRECP geodatabase and other sources for cultural resources sensitivity.	No	Land use does not occur on project site.	
		• All appropriate costs associated with preliminary sensitivity analysis.	No	Land use does not occur on project site.	
		• All appropriate costs associated with the Section 106 process including the identification and defining of cultural resources. These costs may also include logistical, travel, and other support costs incurred by tribes in the consultation process.	No	Land use does not occur on project site.	
		All appropriate costs associated with updating the DRECP cultural resources geodatabase with project specific results.	No	Land use does not occur on project site.	
	GPL-CUL-2	For renewable energy activities and transmission, management fee, defined at a per acre rate and annual escalation provision for the life of the grant, will paid to the BLM as partial mitigation for the cumulative effects on cultural resources across the DRECP Plan Area and may be used to develop regional research designs and other forms of off-site and compensatory mitigation.	No	Land use does not occur on project site.	

General Public Lands

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	GPL-CUL-3	For renewable energy activities and transmission, the management fee rate will be determined through the NHPA programmatic Section 106 consultation process that will be completed as part of the DRECP LUPA.	No	Land use does not occur on project site.	
	GPL-CUL-4	For renewable energy activities and transmission, applicant must demonstrate that results of cultural resources sensitivity, based on the DRECP geodatabase, and other sources, are used as part of the initial planning pre-application process and to select of specific footprints for further consideration.	No	Land use does not occur on project site.	
	GPL-CUL-5	For renewable energy activities and transmission, applicants will provide a statistically significant sample survey as part of the pre-application process, unless the BLM determines the DRECP geodatabase and other sources are adequate to assess cultural resources sensitivity of specific footprints.	No	Land use does not occur on project site.	
	GPL-CUL-6	For renewable energy activities and transmission, applicants will provide justification in the application why the project considerations merit moving forward if the specific footprint lies within an area identified or forecast as sensitive for cultural resources by the BLM.	No	Land use does not occur on project site.	
	GPL-CUL-7	For renewable energy activities and transmission, applicants will complete the NHPA Section 106 Process as specified in 36 CFR Part 800, or via an alternate procedure, allowed for under 36 CFR Part 800.14 prior to issuing a ROD or ROW grant on any utility-scale renewable energy or transmission project. For utility-scale solar energy developments, the BLM may follow the Solar Programmatic Agreement, if applicable.	No	Land use does not occur on project site.	
Lands and Realty	GPL-LANDS-1	Lands within GPL are unavailable for disposal.	No	Project is not associated with a land exchange.	
	GPL-LANDS-2	Cost recovery funding used to process a ROW application may be used to adjudicate and remedy any conflicting land withdrawals, if necessary.	No	Project is not associated with a land exchange.	
Livestock Grazing	GPL-LIVE-1	Avoid siting solar developments in active livestock grazing allotments. If a ROW is granted for solar development in an active livestock grazing allotment, prior to solar projects being constructed in active livestock allotments, an agreement must be reached with the grazing permittee/lessee on the 2-year notification requirements. If any rangeland improvements such as, but not limited to, fences, corrals, or water storage projects, are to be impacted by energy projects, reach agreement with the BLM and the grazing permittee/lessee on moving or replacing the range improvement. This includes the costs for NEPA, clearances, and materials.	No	Land use does not occur on project site.	
	GPL-LIVE-2	In California condor use areas, wind energy ROWs will include a term and condition requiring the permittee and wind operator to eliminate grazing of livestock.	No	Land use does not occur on project site.	
	GPL-LIVE-3	A no surface occupancy stipulation will be included on geothermal leases in active grazing allotments.	No	Land use does not occur on project site.	
		Recreation and Visitor Services	No	Project not located on federal lands with this designation.	
Recreation and Visitor Services	GPL-REC-1	Retain, to the extent possible, the identified recreation setting characteristics: physical components of remoteness, naturalness and facilities; social components of contact, group size and evidence of use; and operational components of access, visitor services and management controls (see recreation setting characteristics matrix).	No	Project is not located in or near the area specified in the CMA.	
	GPL-REC-2	Avoid large-scale ground disturbance within one-half mile of Level 3 Recreation facility footprint including route access and staging areas. If avoidance isn't practicable, the facility must be relocated to the same or higher standard and maintain recreation objectives and setting characteristics.	No	Project is not located in or near the area specified in the CMA.	

General Public Lands

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	GPL-REC-3	When considering large-scale development in the GPL areas, retain to the extent possible existing, approved recreation activities.		Project is not located in or near the area specified in the CMA.	
		GPL Recreation Mitigation Measures	No	Project is not located in or near the area specified in the CMA.	
		If impacts to recreation opportunities or setting characteristics identified in RMPs, or activity plans for designated recreation areas (SRMA, ERMA, OHV Areas, etc.), from proposed activities are identified, one or more of the following mitigation measures will be applied.	No	Project not located on federal lands with this designation.	
GPL Recreation Mitigation Measures	GPL-REC-4	For displacement of dispersed recreation opportunities, commensurate compensation in the form of enhanced recreation operations, recreation facilities or opportunities will be required. If recreation displacement results in resource damage due to increased use in other areas, mitigate that damage through whatever measures are most appropriate as determined by the Authorized Officer.	No	Project is not located in or near the area specified in the CMA.	
	GPL-REC-5	Where activities displace authorized facilities, similar new recreation facilities/campgrounds (including but not limited to the installation of new structures including pit toilets, shade structures, picnic tables, installing interpretive panels, etc.), will be provided.	No	Project is not located in or near the area specified in the CMA.	
	GPL-REC-6	If designated vehicle routes are directly impacted by activities (includes modification of existing route to accommodate industrial equipment, restricted access or full closure of designated route, pull outs, and staging area's to the public, etc.), mitigation will include the development of alternative routes to allow for continued vehicular access with proper signage, with a similar recreation experience. In addition, mitigation will also include the construction of an "OHV touring route" which circumvents the activity area and allows for interpretive signing materials to be placed at strategic locations along the new touring route, if determined to be appropriate by the Authorized Officer.	No	Project is not located in or near the area specified in the CMA.	
	GPL-REC-7	Impacts from third-party activities to authorized Special Recreation Permit activities will be mitigated by providing necessary planning and NEPA compliance documentation for Special Recreation Permit replacement activities, as determined appropriate on a case-by-case basis.	No	Project is not located in or near the area specified in the CMA.	
	GPL-REC-8	If residual impacts to SRMAs occur from third party activity impacts in GPLs areas, commensurate mitigation through relocation or replacement of facilities or compensation (in the form of a recreation operations and enhancement fund) will be required.	No	Project not located on federal lands with this designation.	
	GPL-REC-9	Within ERMAs, impacts from third-party development projects that do not enhance conservation or recreation goals will require commensurate mitigation through relocation or replacement of facilities.	No	Project not located on federal lands with this designation.	
Visual Resources Management	GPL-VRM-1	Development in GPLs is required to incorporate visual design standards and include the best available, most recent BMPs, as determined by BLM (e.g. Solar, Wind, West Wide Energy Corridor, and Geothermal PEISs, the Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands, and other programmatic BMP documents).	No	Project is not located in or near the area specified in the CMA.	The Proposed Action would be limited to short-term maintenance activities on existing roads and no new impacts to visual resources would occur.
	GPL-VRM-2	**Required Visual Resource BMPs.** All development will abide by the BMPs addressed in the most recent version of the document "*Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*" or its replacement, including, but not limited to the following:	No	Project is not located in or near the area specified in the CMA.	
		• Transmission:	No	Land use does not occur on project site.	
		○ Color-treat monopoles Shadow Gray per the BLM Environmental Color Chart CC001 unless a more effective color choice is selected by the local Field Office VRM specialist.	No	Land use does not occur on project site.	

General Public Lands

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		○ Lattice towers and conductors will have non-specular qualities.	No	Land use does not occur on project site.	
		○ Lattice Towers will be located a minimum of 3/4 miles away from Key Observation Points such as roads, scenic overlooks, trails, campgrounds, navigable rivers and other areas people tend to congregate and located against a landscape backdrop when topography allows.	No	Land use does not occur on project site.	
		• Solar – Color treat all facilities Shadow Gray from the BLM Environmental Color Chart CC001 unless a more effective color is selected by the Field Office VRM specialist, including but not limited to:	No	Land use does not occur on project site.	
		○ Concentrated solar thermal parabolic trough panel backs	No	Land use does not occur on project site.	
		○ Solar power tower heliostats	No	Land use does not occur on project site.	
		○ Solar power towers	No	Land use does not occur on project site.	
		○ Cooling towers	No	Land use does not occur on project site.	
		○ Power blocks	No	Land use does not occur on project site.	
		• Wind – Color treat all facilities Shadow Gray with the exception of the wind turbine and towers 200 vertical feet or more.	No	Land use does not occur on project site.	
		Night Sky – BMPs to minimize impacts to night sky including light shielding will be employed.	No	Project is not located in or near the area specified in the CMA.	
	GPL-VRM-3	Regional mitigation is required for visual impacts in GPLs. Mitigation will be based on the VRI class and the underlying visual values (scenic quality, sensitivity, and distance zone) for the development area as it stands at the time the ROD is signed for the DRECP. Compensation may involve reclamation of visual impacts that are present within other areas designated as BLM VRM Class I or II lands (so that they are no longer visible in the long term), mitigation on BLM lands inventoried as having equal to or greater visual resource values, or amending RMP for lands located within VRM Class III or IV to a higher level of protection (VRM Class I or II) for areas that are visually intact with no cultural modifications and have visual resource inventoried values that are equal to or greater in value and place a protective Visual ACEC delineated around the compensatory mitigated area. The following mitigation ratios will be applied:	No	Project is not located in or near the area specified in the CMA.	The Proposed Action would be limited to short-term maintenance activities on existing roads and no new impacts to visual resources would occur.
		• VRI Class II 2:1 ratio	No	Project is not located in or near the area specified in the CMA.	
		• VRI Class III 1:1 ratio	No	Project is not located in or near the area specified in the CMA.	
		• VRI Class IV no mitigation required	No	Project is not located in or near the area specified in the CMA.	
		Additional mitigation will be required where projects affect viewsheds of specially designated areas (e.g., National Scenic and Historic Trails).	No	Project is not located in or near the area specified in the CMA.	

APPENDIX H
National Historic Preservation Act State Historic Preservation Office Consultation

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and
Border Protection

February 22, 2021

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

SUBJECT: National Historic Preservation Act Section 106 Consultation – Maintenance and Repair of Patrol and Access Roads on BLM Lands in California, San Diego and Imperial Counties

Dear Ms. Polanco:

The purpose of this letter is to initiate National Historic Preservation Act (NHPA) Section 106 consultation (54 United States Code [U.S.C.] Section 306108) and its implementing regulations 36 Code of Federal Regulations (CFR) Part 800, for the Maintenance and Repair of Patrol and Access Roads on the Bureau of Land Management (BLM) lands in California project. Customs and Border Protection (CBP), under the Department of Homeland Security (DHS), proposes to implement maintenance and repair of approximately 33.7 miles of roads near the United States/Mexico international border in California within three U.S. Border Patrol (USBP) sectors: San Diego, El Centro, and Yuma. The USBP San Diego and El Centro sectors are entirely within California and a portion of the Yuma sector is within California (Figure 1). The project is an undertaking, as defined in Section 106 of the NHPA. Section 106, as implemented (36 CFR Part 800), requires Federal agencies to enter into consultation with interested Native American Tribes.

Description of Proposed Undertaking

CBP and the BLM are joint lead agencies, with CBP requesting right-of-way (ROW) authorization for maintenance and repair activities and the BLM providing the ROW grant upon review and approval. Road maintenance and repair on BLM-administered lands would be done in order to facilitate USBP patrol, interdiction, and emergency response along the border to deter and prevent illegal cross-border activity. For CBP to maintain effective control of the border and enhance the safety of USBP agents, it must have safe and reliable access within the Project Area. Road maintenance and repair would consist primarily of grading and resurfacing areas of the roads that have been heavily eroded by surface water flows. Maintenance and repair consists of filling of potholes, regrading road surfaces, implementing improved water drainage measures, applying soil stabilization agents, controlling vegetation and debris, and adding lost road surface material to reestablish intended surface elevation for adequate drainage.

Trees and other vegetation within or overhanging the roadway would be grubbed or cut back to facilitate safe vehicle passage. All maintenance and repair would occur via a periodic work plan based on anticipated situations within each sector and funding availability. Maintenance and repair requirements could change over time based on changes in usage but would not exceed the scope of the proposed undertaking as described.

The Area of Potential Effect (APE) consists of a 100-foot-wide corridor for each road segment (Figure 2).

Identification of Historic Properties and Evaluation of Eligibility

In an effort to identify cultural resources within the APE and to assess effects to resources found eligible for the National Register of Historic Places (NRHP), CBP hired two consultants to conduct archaeological surveys of portions of the APE. RECON Environmental surveyed 14.39 miles consisting of six road segments and HDR surveyed 19.3 miles consisting of 18 road segments. Prior to each survey, records searches were requested for each roadway segment, with a one-mile search radius, from the South Coastal Information Center. Copies of the archaeological survey reports are attached (Attachments 1 and 2).

RECON Environmental identified four prehistoric sites, one historic feature, and two prehistoric isolated artifacts within the APE of the six road segments (Table 1). Three of the prehistoric sites have been recommended as eligible for the NRHP under Criterion A for their potential to yield information important to prehistory. The historic feature, the redeposited lithic and ceramic scatter, and isolated artifacts are not considered eligible for the NRHP as they are not associated with a significant event, important person, or constructed in a unique manner or designed by a master architect.

Table 1
Current Cultural Resources within the Area of Potential Effect of 6 Roads

Primary	Trinomial (CA-)	Road	Site Type	NRHP Eligibility
Imperial County				
P-13-017721	n/a	Elliott Mine Road	Isolate: Biface fragment	Not eligible
P-13-017722	IMP-13051	Elliott Mine Road	Lithic, ceramic scatter, bedrock milling	Eligible
P-13-013875	IMP-11810	Mica Davie's Crossover	Cleared circles, rock features, trails, lithic scatter, ceramic scatter, ground stone	Eligible
P-13-013886	IMP-11821	Mica Davie's Crossover	Redeposited lithic scatter, ceramic scatter	Not eligible
P-13-013889	IMP-11825	Mica Davie's Crossover	Rock feature, lithic scatter, ceramic scatter	Eligible
P-13-015297	IMP-12601	Mica Mine Road	Historic rock feature	Not eligible
P-13-017723	n/a	West Drag Road	Isolate: core	Not eligible

HDR identified one prehistoric site and five historic sites within the APE of the 18 road segments (Table 2). Three resources, two historic and one prehistoric, have been recommended as eligible for the NRHP. The All-American Canal was previously recommended as eligible for the NRHP under Criterion A for association with the agricultural development and settlement of the Imperial and Coachella valleys, and under Criterion C as a component of an NRHP eligible district. Old Highway 80 has been previously recommended as eligible for the NRHP under Criterion A as a historic district for its contributions in the areas of transportation, exploration/settlement, and recreation. HDR also recommended that the segment of Old Highway 80 along Canal Road is eligible under Criterion C for its engineering. CA-SDI-16291 is eligible under Criterion D for its potential to yield information important

to prehistory. More details are provided below. The other three historic sites are considered not eligible as they are not associated with a significant event, an important person, or constructed in a unique manner or designed by a master architect.

Table 2
Current Cultural Resources within the Area of Potential Effect of 18 Roads

Primary	Trinomial (CA-)	Road	Site Type	NRHP Eligibility
Imperial County				
P-13-007130	IMP-7130	Poleline Extension, Canal Road	All-American Canal segment	Eligible
P-13-012722	IMP-8356	Canal Road, O'Neill Valley Access Road	Segments of Old Highway 80	Eligible
San Diego County				
P-37-024561	SDI-16291	Little Otay Truck Trail	Habitation Site, bedrock milling, lithic scatter	Eligible
P-37-025680	n/a	Rope, Track Access	San Diego & Arizona Railroad	Not eligible
P-37-036514	n/a	Cameron Truck Trail, La Posta Circle	Tie-Line 629	Not eligible
P-37-038261	n/a	Gloriosa Way	20th century culvert	Not eligible

A testing program was implemented at the Little Otay Truck Trail site (CA-SDI-16291/P-37-024561) to determine if the site is eligible for the NRHP and would require mitigation of adverse effects. The following were recovered from surface collection and shovel test pits: three surface collected artifacts (a core, a thumbnail scraper, and a flake); 162 debitage pieces, 1 mano, 11 flaked lithic artifacts, 5 Tizon Brown Ware ceramic sherds, 1 non-human bone fragment, and 2 possible human bone fragments. A portion of CA-SDI-16291/P-37-024561 is recommended eligible under Criterion D for its likelihood to yield important information regarding subsistence, site function, and chronology and dating research questions (Attachment 3). Because possible human bone fragments were discovered, the BLM Palm Springs South Coast Field Office is conducting Tribal consultation under the Native American Graves Protection and Repatriation Act. Results of the consultation are pending.

Determination of Effects

The project would not result in any direct or indirect impacts to CA-IMP-11810, IMP-11825, IMP-13051, SDI-16291, IMP-7130, and IMP-8356. CA-IMP-11810 and IMP-11825 occur outside the existing road beds and would not be impacted.

The project roads parallel IMP-7130 and the segments of IMP-8356. Grading and maintenance activities would occur along the edge of the two latter resources. All project roads have been continually graded and maintained in the past. The additional maintenance and repair activities would occur within already existing road beds; therefore, no additional widening outside the road beds would be required. To further avoid impacts to the segment of IMP-8356 along Canal Road, the road extent would be identified to construction personnel as an area to avoid.

Elliott Mine Road bisects IMP-13051 and Little Otay Truck Trail bisects SDI-16291/P-37-024561. The proposed project would preserve the existing cultural resources in place. To ensure resource avoidance of Elliott Mine Road (IMP-13051) permanent Environmentally Sensitive Area (ESA) fencing on both sides would be installed. A qualified archaeologist and a Native American monitor would be present during installation of permanent ESA fencing.

To ensure resource avoidance at site P-37-024561, Little Otay Truck Trail would be capped, which comprises importing soil, gravel, or Class II base to raise the surface grade by a minimum of three feet with geotextile in between the native soil and the fill, to prevent further grading of native soils. A qualified archaeologist and a Native American monitor would be present during installation of site capping. Construction personnel would be briefed on procedures to follow in the event buried human remains or unanticipated cultural resources are encountered. A copy of the mitigation plan is attached (Attachment 4).

Through avoidance, ESA fencing, site capping, and construction monitoring by a qualified archaeologist and Native American monitor near ESA fenced areas, the proposed project will not adversely affect historic properties as defined under Section 106 of the NHPA.

In accordance with Section 106 of the NHPA, CBP is also notifying tribal governments of its determination. The BLM El Centro Field Office was contacted and CBP received a list of tribes to notify. Tribes contacted include the following:

- Barona Group of the Capitan Grande
- Campo Band of Mission Indians
- Cocopah Indian Tribe
- Ewiiaapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja Band of Mission Indians
- Jamul Indian Village
- Kwaaymii Laguna Band of Laguna Indians
- La Posta Band of Kumeyaay Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- Quechan Tribe of the Fort Yuma Indian Reservation (California)
- San Pasqual Band of Diegueño Indians
- Sycuan Band of the Kumeyaay Nation
- Torres-Martinez Desert Cahuilla Indians
- Viejas Band of Kumeyaay Indians

CBP respectfully invites you to enter into government-to-government consultation regarding the proposed undertaking within 30 days of receipt of this letter. If CBP has not received a response from your office within 30 days of your receipt of this determination, CBP will consider its responsibilities under Section 106 to have been fulfilled. Please provide any comments or concerns you have regarding the proposed undertaking by March 23, 2021. You may provide comments to Shelly Barnes, Environmental Planning Lead, via the following:

a) by email to: Michelle.L.Barnes@cbp.dhs.gov

b) by mail to: Shelly Barnes
Infrastructure Program
Program Management Office Directorate
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

c) or by phone at: (202) 425-1669

CBP appreciates your interest and concern regarding the proposed undertaking. We look forward to continuing the Section 106 consultation process with you.

Sincerely,

Paul Enriquez
Director
Acquisitions, Real Estate, and Environmental
Program Management Office Directorate
United States Border Patrol

Attachments:

- Attachment 1: Cultural Resources Survey Report for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California. RECON 2019.
- Attachment 2: Class III Cultural Resource and Historical Property Inventory of United States Border Patrol Tactical Infrastructure Maintenance and Repair of Roads. HDR 2019.
- Attachment 3: Results of the Archaeological Testing at P-37-024561 San Diego County, California. RECON 2020.
- Attachment 4: Archaeological Site Capping Plan for Site P37-024561, San Diego County, California. RECON 2020.

ATTACHMENTS

ATTACHMENT 1

Cultural Resources Survey Report for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California,
prepared by RECON Environmental, Inc., October 2019

ATTACHMENT 2

Class III Cultural Resource and Historical Property Inventory of United States Border Patrol Tactical Infrastructure Maintenance and Repair Roads,
prepared by HDR, Inc., June 2019

ATTACHMENT 3

Draft Results of the Archaeological Testing at P-37-024561,
prepared by RECON Environmental, Inc., October 2020

ATTACHMENT 4

Archaeological Site Capping Plan for Site P-37-024561,
prepared by RECON Environmental, Inc., October 2020

State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

April 05, 2021

Reply In Reference To: CBP_2021_0222_001

VIA ELECTRONIC MAIL

Mr. Paul Enriquez, Director
Acquisition, Real Estate and Environmental
Infrastructure Program
Program Management Office Directorate
U. S Customs and Border Protection
1300 Pennsylvania Avenue NW
Washington, D.C. 20229

RE: Proposed Maintenance, and Repair of Patrol and Access Roads on BLM Lands in California, San Diego and Imperial Counties (your letter of February 22, 2021 and e-mail of March 30, 2021)

Dear Mr. Enriquez:

The U. S. Customs and Border Protection (CBP) is initiating consultation with the Office of Historic Preservation (SHPO) on the above-cited undertaking, in accordance with Section 106 of the *National Historic Preservation Act* (54 U.S.C. §306108) , as amended, and its implementing regulations found at 36 CFR Part 800. The CBP proposes to maintain and repair 24 road segments totaling approximately 33.7 miles located near the United States/Mexico international border in Imperial and San Diego Counties. For CBP to maintain effective control of the border and enhance the safety of CBP agents, it must have safe and reliable access within the project area. All of the activities involved in this proposed undertaking and the area of potential effects (APE) are described adequately in your submission.

As documentation for your finding of effect, you provided two cultural resources survey reports prepared by: (1) Michael Connolly, Kristin Tennesen, and Daniel Leonard (HDR, Inc.) and dated June 2019; and (2) Richard D. Schultz and Carmen Zepeda-Herman (RECON Environmental, Inc.) and dated October 14, 2019. Records reviews were conducted at the South Coastal Information Center at CSU-San Diego and pedestrian surveys of the APE was conducted in 2018 and 2019. As a result of the records reviews and pedestrian surveys, 13 cultural resources were identified as being located in the APE. Of those cultural resources, 6 were determined to be eligible for listing on the National Register of Historic Places (NRHP).

Those eligible sites are identified as follows:

Trinomial numbers	Primary numbers	Site type
CA-IMP-7130	P-13-007130	All-American Canal segment
CA-IMP-8356	P-13-012722	Segments of Old Highway 80
CA-IMP-11810	P-13-013875	Cleared circles, rock features, trails, lithic scatter, ceramic scatter, and ground stone
CA-IMP-11825	P-13-013889	Rock feature, lithic scatter, and ceramic scatter
CA-IMP-13051	P-13-017722	Lithic scatter, ceramic scatter, and bedrock milling
CA-SDI-16291	P-37-024561	Habitation site, bedrock milling, and lithic scatter

The CBP evaluated the potential effect that the proposed undertaking could have on these eligible sites and concluded the following:

- CA-IMP-11810 and CA-IMP-11825 are located outside of the existing road beds and will not be impacted by the proposed undertaking;
- The existing road beds parallel both CA-IMP-7130 and CA-IMP-8356, but the maintenance work will be performed only within the existing road beds and will not impact either eligible site.
- The existing road beds bisect both CA-IMP-13051 and CA-SDI-16291. To protect CA-IMP-13051, Environmental Sensitive Area fencing will be installed along both sides of the road. To protect CA-SDI-16291, it will be capped with soil, gravel, or Class II base to raise the surface grade by a minimum of three feet with geotextile in between the native soil and the fill. For both the fencing and capping, archaeological and Native American monitors will be present. Consequently, the proposed undertaking will not impact either site.

The CBP consulted with 16 Native American tribes in regards to the proposed undertaking and received the following two comments:

- The Quechan Tribe had no comments on the project; and
- The Jamul Indian Village of California requested additional information about the proposed undertaking. That information was provided to the tribe and it has not commented further.

Based on the records reviews, the survey reports, and the conditions described above, the CBP has determined that a finding of No Adverse Effect is appropriate for the proposed undertaking. The CBP has requested the SHPO to review and comment on their identification of the APE and their finding of No Adverse Effect for the proposed undertaking.

After reviewing the information submitted with your letter, the SHPO offers the following comments:

- The SHPO has no objections to your identification and delineation of the APE, pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d);

- If the CBP receives any additional information and/or comments from the tribes, the SHPO requests the CBP to provide that information to us; and
- The SHPO does not object to your finding of No Adverse Effect 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 Susan Hogue Negrete at (916) 445-7042 or Susan.Negrete@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

cc: Michelle.L.Barnes@cbp.dhs.gov

APPENDIX I
National Historic Preservation Act
Section 106 Tribal Consultation

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and
Border Protection

February 22, 2021

«Title» «First_Name» «Last_Name», «Position»
«Company_Name»
«Address_Line_1»
«City», «State» «ZIP_Code»

SUBJECT: Tribal Consultation – Maintenance and Repair of Patrol and Access Roads on BLM Lands in California, San Diego and Imperial Counties

Dear «Title» «Last_Name»:

The United States (U.S.) Customs and Border Protection (CBP) is initiating consultation with the California State Historic Preservation Office pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 Code of Federal Regulations (CFR) Part 800, regarding CBP's proposed Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management (BLM) lands in California project. CBP, under the Department of Homeland Security, proposes to implement maintenance and repair of approximately 33.7 miles of roads near the U.S. /Mexico international border in California within three U.S. Border Patrol (USBP) sectors: San Diego, El Centro, and Yuma. The USBP San Diego and El Centro sectors are entirely within California and a portion of the Yuma sector is within California (Figure 1). The project is an undertaking, as defined in Section 106 of the NHPA. Section 106, as implemented (36 CFR Part 800), requires Federal agencies to enter into consultation with interested Native American Tribes.

Description of Proposed Undertaking

CBP and the BLM are joint lead agencies, with CBP requesting right-of-way authorization for maintenance and repair activities and the BLM providing the right-of-way grant upon review and approval. Road maintenance and repair on BLM-administered lands would be done in order to facilitate USBP patrol, interdiction, and emergency response along the border to deter and prevent illegal cross-border activity. For CBP to maintain effective control of the border and enhance the safety of USBP agents, it must have safe and reliable access within the Project Area. Road maintenance and repair would consist primarily of grading and resurfacing areas of the roads that have been heavily eroded by surface water flows. Maintenance and repair consists of filling of potholes, regrading road surfaces, implementing improved water drainage measures, applying soil stabilization agents, controlling vegetation and debris, and adding lost road surface material to reestablish intended surface elevation for adequate drainage.

Trees and other vegetation within or overhanging the roadway would be grubbed or cut back to facilitate safe vehicle passage. All maintenance and repair would occur via a periodic work plan based on anticipated situations within each sector and funding availability. Maintenance and repair requirements could change over time based on changes in usage but would not exceed the scope of the proposed undertaking as described.

The Area of Potential Effect (APE) consists of a 100-foot-wide corridor for each road segment (Figure 2).

Identification of Historic Properties and Evaluation of Eligibility

In an effort to identify cultural resources within the APE and to assess effects to resources found eligible for the National Register of Historic Places (NRHP), CBP hired two consultants to conduct archaeological surveys of portions of the APE. RECON Environmental, Inc. (RECON) surveyed 14.39 miles consisting of six road segments and HDR surveyed 19.3 miles consisting of 18 road segments. Prior to each survey, records searches were requested for each roadway segment, with a one-mile search radius, from the South Coastal Information Center. The archaeological survey reports are provided as Attachment 1 and 2.

RECON identified four prehistoric sites, one historic feature, and two prehistoric isolated artifacts within the APE of the six road segments (Table 1). Three of the prehistoric sites have been recommended as eligible for the NRHP under Criterion A for their potential to yield information important to prehistory. The historic feature, the redeposited lithic and ceramic scatter, and isolated artifacts are not considered eligible for the NRHP as they are not associated with a significant event, important person, or constructed in a unique manner or designed by a master architect.

Table 1
Current Cultural Resources within the Area of Potential Effect of 6 Roads

Primary	Trinomial (CA-)	Road	Site Type	NRHP Eligibility
Imperial County				
P-13-017721	n/a	Elliott Mine Road	Isolate: Biface fragment	Not eligible
P-13-017722	IMP-13051	Elliott Mine Road	Lithic, ceramic scatter, bedrock milling	Eligible
P-13-013875	IMP-11810	Mica Davie's Crossover	Cleared circles, rock features, trails, lithic scatter, ceramic scatter, ground stone	Eligible
P-13-013886	IMP-11821	Mica Davie's Crossover	Redeposited lithic scatter, ceramic scatter	Not eligible
P-13-013889	IMP-11825	Mica Davie's Crossover	Rock feature, lithic scatter, ceramic scatter	Eligible
P-13-015297	IMP-12601	Mica Mine Road	Historic rock feature	Not eligible
P-13-017723	n/a	West Drag Road	Isolate: core	Not eligible

HDR identified one prehistoric site and five historic sites within the APE of the 18 road segments (Table 2). Three resources, two historic and one prehistoric, have been recommended as eligible for the NRHP. The All-American Canal was previously recommended as eligible for the NRHP under Criterion A for association with the agricultural development and settlement of the Imperial and Coachella valleys, and under Criterion C as a component of an NRHP eligible district. Old Highway 80 has been previously recommended as eligible for the NRHP under Criterion A as a historic district for its contributions in the areas of transportation, exploration/settlement, and recreation. HDR also recommended that the segment of Old Highway 80 along Canal Road is eligible under Criterion C for its engineering. CA-SDI-16291 is eligible under Criterion D for its potential to yield information important to prehistory. More details are provided below. The other three historic sites are considered not eligible as they are not associated with a significant event, an important person, or constructed in a unique manner or designed by a master architect.

Table 2
Current Cultural Resources within the Area of Potential Effect of 18 Roads

Primary	Trinomial (CA-)	Road	Site Type	NRHP Eligibility
Imperial County				
P-13-007130	IMP-7130	Poleline Extension, Canal Road	All-American Canal segment	Eligible
P-13-012722	IMP-8356	Canal Road, O'Neill Valley Access Road	Segments of Old Highway 80	Eligible
San Diego County				
P-37-024561	SDI-16291	Little Otay Truck Trail	Habitation Site, bedrock milling, lithic scatter	Eligible
P-37-025680	n/a	Rope, Track Access	San Diego & Arizona Railroad	Not eligible
P-37-036514	n/a	Cameron Truck Trail, La Posta Circle	Tie-Line 629	Not eligible
P-37-038261	n/a	Gloriosa Way	20th century culvert	Not eligible

A testing program was implemented at the Little Otay Truck Trail site (CA-SDI-16291/P-37-024561) to determine if the site is eligible for the NRHP and would require mitigation of adverse effects. The following were recovered from surface collection and shovel test pits: three surface collected artifacts (a core, a thumbnail scraper, and a flake); 162 debitage pieces, 1 mano, 11 flaked lithic artifacts, 5 Tizon Brown Ware ceramic sherds, 1 non-human bone fragment, and 2 possible human bone fragments. A portion of CA-SDI-16291/P-37-024561 is recommended eligible under Criterion D for its likelihood to yield important information regarding subsistence, site function, and chronology and dating research questions (Attachment 3). Because possible human bone fragments were discovered, the BLM Palm Springs South Coast Field Office is conducting Tribal consultation under the Native American Graves Protection and Repatriation Act. Results of the consultation are pending.

Determination of Effects

The project would not result in any direct or indirect impacts to CA-IMP-11810, IMP-11825, IMP-13051, SDI-16291, IMP-7130, and IMP-8356. CA-IMP-11810 and IMP-11825 occur outside the existing road beds and would not be impacted.

The project roads parallel IMP-7130 and the segments of IMP-8356. Grading and maintenance activities would occur along the edge of the two latter resources. All project roads have been continually graded and maintained in the past. The additional maintenance and repair activities would occur within already existing road beds; therefore, no additional widening outside the road beds would be required. To further avoid impacts to the segment of IMP-8356 along Canal Road, the road extent would be identified to construction personnel as an area to avoid.

Elliott Mine Road bisects IMP-13051 and Little Otay Truck Trail bisects SDI-16291/P-37-024561. The proposed project would preserve the existing cultural resources in place. To ensure resource avoidance of Elliott Mine Road (IMP-13051) permanent Environmentally Sensitive Area (ESA) fencing on both sides would be installed. A qualified archaeologist and a Native American monitor would be present during installation of permanent ESA fencing.

To ensure resource avoidance at site P-37-024561, Little Otay Truck Trail would be capped, which comprises importing soil, gravel, or Class II base to raise the surface grade by a minimum of three feet with geotextile in between the native soil and the fill, to prevent further grading of native soils. A qualified archaeologist and a Native American monitor would be present during installation of site capping. Construction personnel would be briefed on procedures to follow in the event buried human remains or unanticipated cultural resources are encountered. The Archaeological Site Capping Plan is included as Attachment 4.

Through avoidance, ESA fencing, site capping, and construction monitoring by a qualified archaeologist and Native American monitor near ESA fenced areas, the proposed project will not adversely affect historic properties as defined under Section 106 of the NHPA.

CBP respectfully invites you to enter into government-to-government consultation regarding the proposed undertaking within 30 days of receipt of this letter. If CBP has not received a response from your office within 30 days of your receipt of this determination, a concurrence will be presumed. Please provide any comments or concerns you have regarding the proposed undertaking by March 17, 2021. You may provide comments to Shelly Barnes, MSCP Restrictive Covenant, via the following:

a) by email to: Michelle.L.Barnes@cbp.dhs.gov

b) by mail to: Shelly Barnes
Infrastructure Program

Program Management Office Directorate
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

c) or by phone at: (202) 425-1669

CBP appreciates your interest and concern regarding the proposed undertaking. We look forward to continuing the Section 106 consultation process with you.

Sincerely,

Paul Enriquez
Director
Acquisitions, Real Estate, and Environmental
Program Management Office Directorate

Attachments:

- Attachment 1: Cultural Resources Survey Report for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California. RECON 2019.
- Attachment 2: Class III Cultural Resource and Historical Property Inventory of United States Border Patrol Tactical Infrastructure Maintenance and Repair of Roads. HDR 2019.

- Attachment 3: Results of the Archaeological Testing at P-37-024561 San Diego County, California
- Attachment 4: Archaeological Site Capping Plan for Site P37-024561, San Diego County, California. RECON 2020.

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prepared by RECON Environmental, Inc., October 2019

ATTACHMENT 2

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prepared by HDR, Inc., June 2019

ATTACHMENT 3

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prepared by RECON Environmental, Inc., October 2020

ATTACHMENT 4

Archaeological Site Capping Plan for Site P-37-024561,
prepared by RECON Environmental, Inc., October 2020

Susy Morales

From: Lisa Cumper <lcumper@jiv-nsn.gov>
Sent: Tuesday, February 23, 2021 9:50 AM
To: Jennifer Gutierrez
Cc: empinto747@yahoo.com; cchamberlain@sctdv.net; JEFFREY.L.CORON@associates.cbp.dhs.gov; DANA.SACOMAN@associates.cbp.dhs.gov; MICHELLE.L.BARNES@cbp.dhs.gov; Susy Morales; Erica Pinto; Carlene Chamberlain
Subject: [External] Re: Tribal Consultation – Maintenance and Repair of Patrol and Access Roads on BLM Lands in California, San Diego and Imperial Counties

Follow Up Flag: Follow up
Flag Status: Completed

Good Morning Jennifer,

I hope that this mail finds you well! Was there a Kumeyaay Native American monitor present for the survey? and has Dr. Hinkes identified the 2 possible human remains? The Kumeyaay relies on Dr. Hinkes determination and lastly was the area where the HR were discovered secured and will there be more testing in this area?

Please update the email address for:

Chairwoman, Erica M. Pinto: epinto@jiv-nsn.gov

Secretary Carlene A. Chamberlain: cchamberlain@jiv-nsn.gov

Thanks,
Lisa

Kindest Regards,

Lisa K. Cumper, THPO

Tribal Historic Preservation Officer
Cultural Resources Manager,
The Jamul Indian Village of California
Secretary, Kumeyaay Cultural Repatriation Committee
KCRC, Kumeyaay Nation

P.O. Box 612, Jamul CA 91935
desk: 619.669.4855
cell: 619.928.8689
fax: 619.669.4817

email: lcumper@jiv-nsn.gov
web: www.jamulindianvillage.com

The ground on which we stand is sacred ground, it is the blood of our ancestors. Chief Plenty Coups, Crow.

On Mon, Feb 22, 2021 at 2:02 PM Jennifer Gutierrez <jgutierrez@reconenvironmental.com> wrote:

> Per the request of U.S. Customs and Border Protection (CBP) please consider the attached letter notification in accordance with the provisions of Section 106 of the National Historic Preservation Act to initiate consultation regarding the CBP's proposed Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California. Please click on the link below to access the letter (PDF).
>
> 1. **Pinto_Jamul Indian Village.pdf** (56.78 MB)
> https://recon-us.filegenius.com/downloadPublic/2ke61wse7hzmkzv
>
> This file will be deleted on **11/18/23 at 01:06 pm PST**
>
> ---
>
> **Powered by FileGenius -** http://www.filegenius.com
>
> **Need Help?** Download the **User Quick Start Guide:**
> https://recon-us.filegenius.com/userQuickStart
>
> If any link in this email doesn't work, please copy and paste it into your web browser's address or URL field.
>
> Did this email not find its way to your Inbox? Add notifications@filetransfers.net to your address book or whitelist it to ensure you receive future emails from this source.
>
>
>
> **Transaction Source:** RECON Environmental, Inc. FILETRANSFER SITE, https://recon-us.filegenius.com
> **Time/Date of Transaction:** 02/22/21 at 01:06 pm PST

From: Quechan Historic Preservation Officer <historicpreservation@quechantribe.com>
Sent: Thursday, March 4, 2021 1:16 PM
To: BARNES, MICHELLE L <MICHELLE.L.BARNES@cbp.dhs.gov>
Cc: ENRIQUEZ, PAUL <paul.enriquez@cbp.dhs.gov>
Subject: Tribal Consultation - Maintenance and Repair of Patrol and Access Roads on BLM Lands in California, San Diego and Imperial Counties

This email is to inform you that we have no comments on this project.

Thank you,
H. Jill McCormick, M.A.

Quechan Indian Tribe
Historic Preservation Officer
P.O. Box 1899
Yuma, AZ 85366-1899
Office: 760-572-2423
Cell: 928-261-0254
E-mail: historicpreservation@quechantribe.com

APPENDIX J
U.S. Fish and Wildlife Service Section 7 Consultation

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

August 25, 2020

Scott Sobiech
Field Supervisor, Carlsbad Fish and Wildlife Office
U.S. Fish and Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008
Sent via email to: scott_sobiech@fws.gov

SUBJECT: Request for Formal Section 7 Consultation for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California

Dear Mr. Sobiech:

U.S. Customs and Border Protection (CBP), under the Department of Homeland Security (DHS), and Bureau of Land Management (BLM), under the Department of the Interior, are proposing to implement maintenance and repair of approximately 33.6 miles of roads near the United States (U.S.)/Mexico international border in California within three U.S. Border Patrol (USBP) sectors: San Diego, El Centro, and Yuma (Proposed Action). The USBP San Diego and El Centro sectors are entirely within California, and a portion of the Yuma sector is within California. Road maintenance and repair on BLM-administered lands would be done in order to facilitate USBP patrol interdiction, and emergency response along the border to deter and prevent illegal cross-border activity.

Enclosed is the Biological Assessment prepared for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California.

Road maintenance and repair would include reactive maintenance and repair activities (e.g., resolving damage from use or severe weather events) and preventive/scheduled maintenance and repair activities designed to ensure ongoing operability and environmental sustainability (e.g., soil erosion preventive measures on 33.6 miles of roads on BLM lands within San Diego and Imperial counties). All maintenance and repair would occur via a periodic work plan based on anticipated situations within each sector and funding availability. Maintenance and repair requirements could change over time based on changes in usage or priority, but would not exceed the scope of the Proposed Action as described in this section.

Based on known occurrences and presence of suitable habitat in the immediate vicinity of the Proposed Action, the Biological Assessment evaluates the effect of the Proposed Action on the following federally listed wildlife species and their critical habitat, where applicable: Quino

checkerspot butterfly (*Euphydryas editha quino*), arroyo toad (*Anaxyrus californicus*), Mojave desert tortoise (*Gopherus agassizii*), coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), California condor (*Gymnogyps californianus*). Peninsular bighorn sheep (*Ovis canadensis nelsoni*), Otay tarplant (*Deinandra* (*=Hemizonia) conjugens*), San Diego ambrosia (*Ambrosia pumila*), San Diego thornmint (*Acanthomintha ilicifolia*), Mexican flannelbush (*Fremontodendron mexicanum*), and Peirson's milkvetch (*Astragulus magdalenae var. peirsonii*).

Based on the analysis concerning the effects of the Proposed Action on these species, and after considering the cumulative effects, CBP made the effects determinations shown below for each of the potentially affected species. These determinations represent the net effect of all positive and negative influences associated with the Proposed Action. They represent the overall finding concerning the need to consult, pursuant to Section 7 of the federal Endangered Species Act of 1973.

No Effect

- Mojave desert tortoise
- least Bell's vireo
- southwestern willow flycatcher
- California condor
- Mexican flannelbush
- Otay tarplant
- Peirson's milk-vetch
- San Diego ambrosia
- San Diego thornmint

May Affect, Not Likely to Adversely Affect

- arroyo toad
- coastal California gnatcatcher
- Peninsular bighorn sheep

May Affect, Likely to Adversely Affect

- Quino checkerspot butterfly

Will Not Destroy or Adversely Modify Critical Habitat

- Quino checkerspot butterfly
- arroyo toad
- coastal California gnatcatcher
- least Bell's vireo
- southwestern willow flycatcher
- peninsular bighorn sheep

- Mexican flannelbush
- Otay tarplant
- Peirson's milk-vetch
- San Diego ambrosia

We appreciate your assistance. If you have any questions or concerns, please contact Mr. John Petrilla by telephone at (949) 643-6385 or by email at john.p.petrilla@cbp.dhs.gov.

Sincerely,

Paul Enriquez
Director
Acquisition, Real Estate and Environmental
Infrastructure Program
Program Management Office Directorate
U.S. Border Patrol

cc (via email):
John Petrilla, Customs and Border Protection
Tristan Riddell, BLM El Centro Field Office
Carrie Sahagun, BLM El Centro Field Office
Patrick Gower, USFWS, Carlsbad Fish and Wildlife Office
David Zoutendyk, USFWS, Carlsbad Fish and Wildlife Office

United States Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

In Reply Refer to:
FWS-SDG-23-0007923-S7-I

July 13, 2023
Sent Electronically

Michelle Barnes
Environmental Branch Chief
Program Management Office Directorate
United States Border Patrol
1300 Pennsylvania Ave NW, Suite 6.5E
Mail Stop 1039
Washington, D.C. 20229

Subject: Section 7 Consultation for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands Near the U.S. Mexico Border in California

Dear Michelle Barnes:

This is in response to the U.S. Customs and Border Protection's (CBP) August 25, 2020, letter requesting our concurrence pursuant to section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*), that the proposed Maintenance and Repair of Patrol and Access Roads on Bureau of Land (BLM) Management Lands in California Project (project) is not likely to adversely affect the federally endangered Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) and its designated critical habitat, arroyo toad {a. southwestern t. [*Anaxyrus californicus* (*Bufo microscaphus* c.)]; arroyo toad} and its designated critical habitat, Peninsular bighorn sheep [Peninsular Range DPS; Peninsular bighorn sheep (*Ovis canadensis nelsoni*); bighorn sheep],and the federally threatened coastal California gnatcatcher (*Polioptila californica californica*; gnatcatcher). This consultation may be amended to cover future maintenance and repair of patrol and access roads within 10 miles of the U.S./Mexico border in California.

The CBP determined that the project will not affect the federally endangered Mojave Desert tortoise (*Gopherus agassizii*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), California condor (*Gymnogyps californianus*), Mexican flannelbush (*Fremontodendron mexicanum*), Otay tarplant (*Deinandra (=Hemizonia) conjugens*), Peirson's milk-vetch (*Astragalus magdalenae var. peirsonii*), San Diego ambrosia (*Ambrosia pumila*) and San Diego thornmint (*Acanthomintha ilicifolia*) or their respective designated critical habitats. Therefore, these species and their critical habitats are not addressed in this consultation.

Our analysis is based on information provided in: 1) *Final Biological Assessment Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California* (CBP 2020); 2) *Addendum Biological Assessment For The Maintenance And Repair Of Patrol*

Roads On Bureau Of Land Management Lands In California (CBP 2021) and 3) correspondence, notes, maps, and other information compiled during discussions with CBP. The complete project file addressing this consultation is maintained at the Carlsbad Fish and Wildlife Office (CFWO).

The currently proposed project includes the maintenance and repair of 23 existing road segments (33.7 miles) on BLM lands in San Diego and Imperial Counties (Figure 1, Table 1) near the U.S./Mexico border in California (Figure 1) within three U.S. Border Patrol (USBP) sectors: San Diego, El Centro, and Yuma (Proposed Action). The USBP San Diego and El Centro sectors are entirely within California, and a portion of the Yuma sector is within California.

The road maintenance and repair on BLM lands that will occur as part of the project are intended to facilitate USBP patrol, interdiction, and emergency response along the border to deter and prevent illegal cross-border activity. Most maintenance and repair activity that is part of the project will occur on graded earth roads and two-track roads (Attachment A). Maintenance and repair of roads consists primarily of filling of potholes, regrading road surfaces, implementing improved water drainage measures, applying soil stabilization agents, trimming vegetation and removing debris, and adding lost road surface material to reestablish intended surface elevation needed for adequate drainage. For water-control features (such as ditches and culverts), activities will include cleaning, maintaining, repairing, or replacing features, as needed. Improved water drainage measures will be implemented, as needed, consisting of articulated concrete mats at low water crossings. Low water crossing drainage features will consist of 8-foot-wide concrete mats. Placement of mats will impact up to approximately 20 feet on each side of the road centerline and 20 feet on each end (top and bottom) at low water crossings (10 feet of permanent disturbance and 10 feet of temporary disturbance to vegetation). Implementing improved water drainage measures also includes ensuring road crowns shed water and runoff flows to established drainage ditches, culverts, or other water-control features as needed to control runoff and prevent deterioration to existing infrastructure or surrounding land.

Heavy equipment will be needed for activities such as grading, filling, and compacting. Equipment staging will occur within existing established laydown yards used for various CBP projects or within the existing road footprint disturbed areas. Materials are typically only stored for 24 hours or less within the existing road footprint/disturbed areas. All equipment will be hauled into sites as needed. Required equipment will likely include a dump truck, road grader, backhoe, dozer, drum roller/compactor, and water trucks. Water trucks will be employed to aid in dust suppression.

Roads will not be widened; however, there may be road segments that no longer meet minimum width requirements. Road segments that no longer meet minimum width requirements may require cut and fill work to achieve the desired road operating and safety standards and to be restored to their intended functional classification. Trees and other vegetation within or overhanging the existing roadway will be trimmed, grubbed, or cut back to facilitate safe vehicle passage. Any vegetation that has established within the existing road will be removed, cleared, or trampled. The objective of the maintenance and repair activities that will be executed as part of the project is to remain within the existing road and not increase the road width.

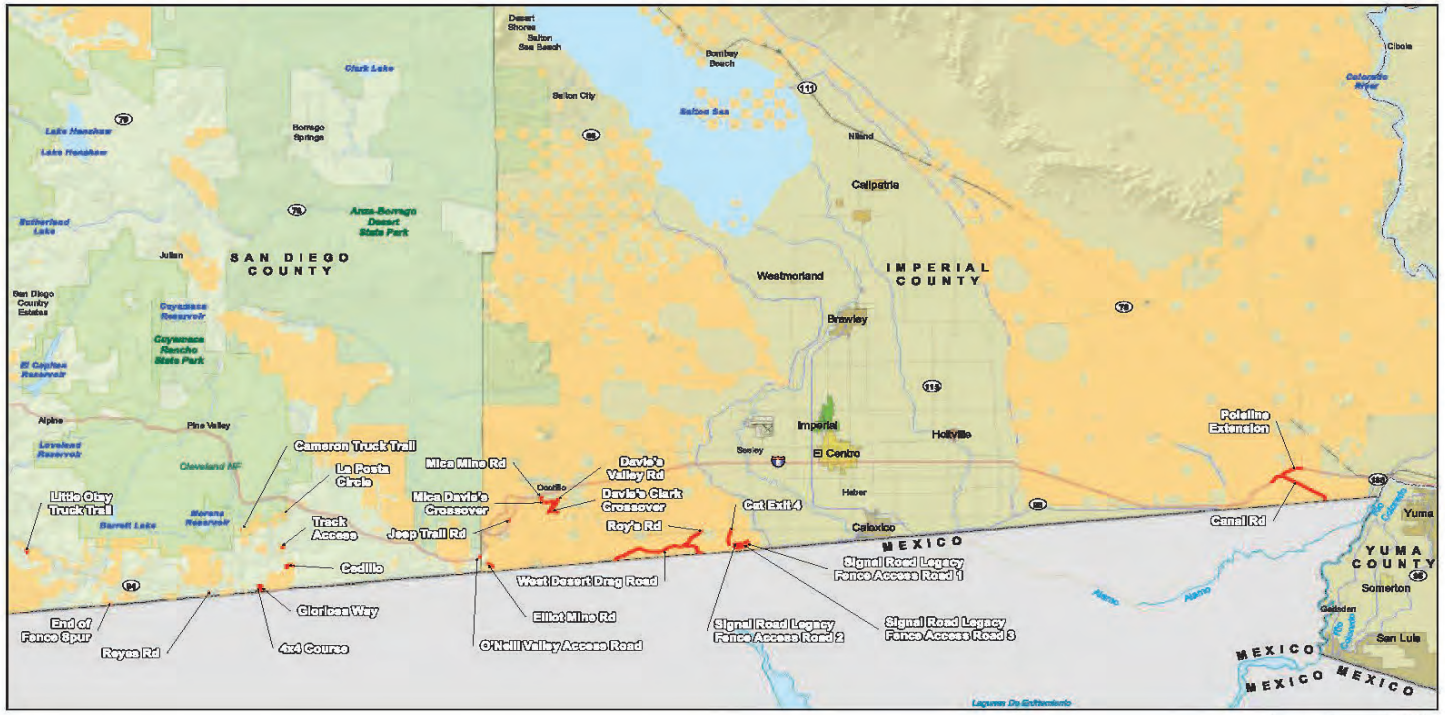
Some project activities may need to be conducted in areas immediately adjacent to the existing road footprint (road edges). For example, equipment might need to be operated off existing roads to remove debris from culverts and ditches and to access and maintain roads. Temporary impacts on

vegetation and soil resulting from these activities will be minimized through appropriate heavy equipment operation techniques such as installation of temporary construction mats, reduced operating speeds, use of the initial ingress and egress points, and selection of appropriately sized equipment for the area and project.

When fill is need for maintenance or repair, nearby native soil, obtained from previously disturbed areas approved by BLM, will be used as fill, or crusher fines will be brought in for use if native soil is not available. Supplemental imported material may be required to improve the roads if erosion occurs from annual rainfall. All materials will be certified as weed-free as only sterile or weed-free sources will be used per best management practices (BMPs; Attachment B). The stabilization of roads with the use of Soiltac™, or other soil stabilizing agent, will function to reduce erosion and improve road strength. The application of the soil stabilization agent will be completed on an annual basis or less frequently, depending on need. Imported aggregate material will be added to achieve a well-graded roadbed shaped with a defined crown section.

Project activities will be conducted in accordance with established maintenance and repair standards (Attachment A). All the standards that CBP has developed are based on a comprehensive engineering analysis and proven BMPs (Attachment B) that have been adopted by other Federal agencies. As part of the project, CBP will also implement mitigation measures derived from consultation with both regulatory and resource agencies.

Figure 1:Map of BLM lands in San Diego and Imperial Counties near US/Mexico Border



calendar year, the majority of the maintenance and repair to be performed as part of the project will be completed within the 120-day period between November and February. Additional road maintenance will also be performed as needed between November and February. The roads will be used year-round. Maintenance and repair activities will comply with the BLM Gold Book Standards (BLM 2007). All maintenance and repair activities will also be performed in accordance with CBP BMPs to minimize or eliminate potential impacts to the environment. All necessary erosion-control BMPs will be adopted to ensure stabilization of repaired roads (see Appendix D, Best Management Practices).

The CBP determined 11 of the 23 currently proposed road segments on BLM lands may affect listed species and their critical habitats [Little Otay Truck Trail, End of Fence Spur, Reyes (Canyon City) Road, Cameron Truck Trail, La Posta Circle, Track Access, 4x4 Course, Gloriosa Way, Cedillo, O'Neill Valley Access Road and Elliot Mine Road (approximately 3.94 miles)]. Upon review we have determined that 4 more segments [Mica Davie's Crossover, Davie Clark Crossover, Mica Mine Road, Davie's Valley Road (5.44 miles)] may affect big horn sheep, for a total of 15 road segments (9.38 miles) on BLM lands that will be addressed in this consultation.

The Action Area for this consultation includes all of 23 existing road segments and a 50-foot buffer on each side of the roads.

The CBP proposes the following conservation measures (CMs) as part of the project to avoid, minimize and offset adverse effects to Quino and its critical habitat, arroyo toad and its critical habitat, bighorn sheep, and gnatcatcher:

General Measures

CM 1. All maintenance and repair will be performed in accordance with CBP BMPs to minimize or eliminate potential impacts to the environment. All necessary erosion-control BMPs will be adopted to ensure stabilization of repaired roads (attached). BMPs are generally accepted and applied measures or practices to lessen potential adverse effects of actions on the environment, including vegetation, wildlife, migratory birds, threatened and endangered species, and water resources. It is the responsibility of the CBP to ensure that all personnel performing maintenance comply with the BMPs, any required mitigation measures, and BLM Conservation and Management Actions (CMAs), unless otherwise noted. BMPs apply to all maintenance and repair actions.

CM 2. Pre-construction surveys by a qualified biologist/biological monitor, approved by the Service and BLM, will be conducted to determine the presence of and potential impacts to Quino and its critical habitat, arroyo toad and its critical habitat, bighorn sheep, and gnatcatcher, identify and delineate resources setbacks, and determine which BMPs need to be implemented prior to construction activities.

CM 3. In areas where there are threatened and endangered species, prior to beginning work, the CBP Environmental Subject Matter Experts (ENV SMEs) will coordinate with the Service, BLM, biologist/biological monitor, and maintenance crew supervisor to determine which threatened and endangered species could occur in the vicinity of planned maintenance activities. In areas where there are no threatened and endangered or other species concerns, the personnel performing the maintenance activity are responsible for monitoring the implementation of general maintenance and repair BMPs to avoid impacts on the environment.

CM 4. Qualified biological monitors, approved by the Service and BLM, will be present during construction activities in areas where there is potential to encounter sensitive species.

CM 5. To protect individuals of listed species that are observed within the Action Area, all work would be suspended in the immediate vicinity of the species until it moves out of harm's way on its own, or a qualified biologist approved by the Service and BLM flushes the individual out of harm's way.

CM 6. Necessary temporary impacts on vegetation and soil will be minimized through appropriate heavy equipment operation techniques such as installation of temporary construction mats, reduced operating speeds, use of the initial ingress and egress points, and selection of appropriately sized equipment for the area and project. In those cases where equipment is not authorized outside of the road base, activities would be accomplished on foot to minimize the impacts that would be caused by heavy equipment. These activities would be limited to the existing road disturbed areas within Quino checkerspot butterfly and arroyo toad habitat (sensitive habitats).

CM 7. All pertinent information and training materials for biological resources for the areas where maintenance activities would occur will be presented in a Worker Environmental Awareness Training (WEAT) to be developed and implemented by a qualified biologist/biological monitor approved by the BLM and Service. The BLM will approve the WEAT prior to being presented to all project personnel prior to any ground-disturbing activities associated with the project. A record of training attendance should be kept with the construction supervisor. Ensure key personnel understand the proper BMPs to implement should threatened and endangered species be encountered in the Action Area, penalties for violation of state and Federal laws, and reporting requirements. As appropriate based on the activity, the WEAT will contain information about:

- Site-specific biological and non-biological resources.
- Information on the legal protection for protected resources and penalties for violation of federal and state laws and administrative

sanctions for failure to comply with CMA requirements intended to protect site-specific biological and non-biological resources.

- The required CMAs and project-specific measures for avoiding and minimizing effects during all project phases, including but not limited to resource setbacks, trash, speed limits, etc.

- Reporting requirements and measures to follow if protected resources are encountered, including potential work stoppage and requirements for notification of the designated biologist.

- Measures that personnel can take to promote the conservation of biological and non-biological resources.

CM 8. Visible space underneath and around all maintenance vehicles and heavy equipment will be checked for listed species and other wildlife prior to moving vehicles and equipment at the beginning of each workday and after vehicles have sat idle for more than 15 minutes.

CM 9. Non-hazardous soil stabilization agents will be applied for the stabilization of roads. Prior to application, Safety Data Sheets for all agents will be provided to the BLM for review and approval. Non-hazardous soil stabilizer will be applied when the temperature is a minimum of 40 degrees Fahrenheit and when there is a minimum of 72 hours before the next forecasted rain. The application of the soil stabilization agent would be completed on an annual basis or less frequently, depending on need.

CM 10. Chemicals and hazardous materials will be stored in proper containers and within spill containment areas

CM 11. Spill clean-up kits and drip pans will be maintained during maintenance and repair activities.

CM 12. The CBP will equip water trucks with calibrated soil stabilizer spray bars that minimizes or avoids impacts to adjacent vegetation from overspray and pooling of non-hazardous soil stabilizer liquid within the roadway. Soiltac soil stabilizer, or similar soil stabilizer reviewed/approved by the Service and BLM, will be applied when the temperature is a minimum of 40 degrees Fahrenheit and when there is a minimum of 72 hours before the next forecasted rain.

CM 13. The CBP will delineate the boundaries of areas to be disturbed within critical habitat or areas where federally listed species were identified or likely to occur with appropriate temporary construction fencing and/or flagging prior to construction and confine disturbances, project vehicles, and equipment to the delineated project areas to ensure adjacent habitats are not disturbed. The CBP will also 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) will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement. Fencing and erosion control devices will be installed in a manner that does not impact habitats to be avoided. The CBP will submit to the Service and BLM for approval, at least 14 days prior to initiating project impacts, the final plans for project construction. These final plans will include photographs that show the temporary fencing and erosion control devices. If work occurs beyond the fenced limits of impact, all work will cease until the problem has been remedied to the satisfaction of the Service. Temporary fencing and erosion control devices will be removed upon project completion.

CM 14. To the maximum extent practicable, the CBP will restrict construction activity to existing roads, routes, and utility corridors to minimize the number and length/size of new roads, routes, disturbance, laydown, and borrow areas.

CM 15. To the maximum extent practicable, the CBP will confine vehicular traffic to designated open routes of travel to and from the project site, and prohibit, within project boundaries, cross- country vehicle and equipment use outside of approved designated work areas to prevent unnecessary ground and vegetation disturbance.

CM 16. The CBP will implement the following general standard practices:

- Feeding of wildlife, leaving of food or trash as an attractive nuisance to wildlife, collection of native plants, or harassing of wildlife on a site is prohibited.

- Any wildlife encountered during the course of an activity, including construction, operation, and decommissioning will be allowed to leave the area unharmed.

- Domestic pets are prohibited on sites. This prohibition does not apply to the use of domestic animals (e.g., dogs) that may be used to aid in official and approved Title III of the American with Disabilities Act.

- The project site will be kept as clean of debris as possible. All food related trash items will be enclosed in sealed containers and regularly removed from the site.

- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will occur within existing established laydown yards used for various CBP projects, or within the existing disturbed road footprint areas outside of waters of the United States within the demarcated project impact limits. These designated areas will be located in previously compacted and disturbed areas to the maximum extent practicable in such a

manner as to prevent any runoff from entering waters of the United States and will be shown on project site plans and construction figures. Fueling of equipment will take place within existing paved areas greater than 50 feet from waters of the United States. Contractor equipment will be checked for leaks prior to operation and repaired as necessary. "Approved-fueling zones" will be designated on construction plans.

- Impacts from fugitive dust will be avoided and minimized through watering and other appropriate measures.

- No work will occur at night.

- After road maintenance, the CBP will remove and properly dispose of any surplus gravel, caliche, and/or other construction-related materials/equipment brought to the site as part of the project and restore the project site to preconstruction conditions.

- All necessary materials such as gravel, topsoil, or fill will be obtained from existing developed or previously used sources, not from undisturbed areas adjacent to the project, and will be certified as weed-free as only sterile or weed-free sources.

- CBP protocol for cleaning vehicles and equipment will be implemented prior mobilizing to the project areas to avoid the spread of invasive species.

CM 17. All construction materials will be visually checked for the presence of wildlife prior to their movement or use. Sightings/encounters with listed species will be reported to the BLM and Service (e.g., bighorn sheep, gnatcatcher, Quino, arroyo toad). Any wildlife encountered during the course of these inspections will be allowed to leave the construction area unharmed.

CM 18. All steep-walled trenches or excavations used during the project will be covered, except when being actively used, to prevent entrapment of wildlife. If trenches cannot be covered, they will be constructed with escape ramps, following up-to-date design standards to facilitate and allow wildlife to exit, or wildlife exclusion fencing will be installed around the trench(s) or excavation(s). Open trenches or other excavations will be inspected by a designated biologist immediately before backfilling, excavation, or other earthwork.

CM 19. Minimize natural vegetation removal through implementation of crush and drive or cut or mow vegetation rather than removing entirely.

CM 20. The CBP will address unavoidable temporary and permanent impacts according to plans submitted to the Service and BLM for review and approval. These actions

may include restoration of redundant roads or other disturbed areas as close to the impact site as possible.

CM 21. The CBP will provide the CFWO with a schedule of work planned on these roads 10 days prior to each quarter, consisting of a list of road segments from the roads addressed in this consultation and planned for maintenance and repair during the upcoming quarter. The Work Plans will include schedules for, and/or the results of pre-construction surveys, species specific surveys as required, information on unavoidable temporary and permanent impacts, and proposed mitigation plans if applicable. The Service will review the Work Plans and work with the CBP to amend this consultation as needed.

CM 22. The CBP will submit an Annual report to the CFWO on or before October 1 of each calendar year that documents activities conducted in each road segment within critical habitat or areas where federally listed species or critical habitats were identified or likely to occur and where maintenance occurred during the previous year and confirms that authorized impacts were not exceeded. This report will document general compliance with the project as described in this consultation and the CMs.

Quino [Little Otay Truck Trail, End of Fence Spur, Reyes (Canyon City) Road, Cameron Truck Trail, La Posta Circle, Track Access, 4x4 Course, Gloriosa Way, Cedillo, O'Neill Valley Access Road, Elliot Mine Road and applicable future projects] and its Critical Habitat

CM 23. All maintenance and repair will occur outside the Quino reproduction season (December 1 to May 31).

CM 24. The CBP will staff a biologist/biological monitor, approved by the Service and BLM, who will be responsible for monitoring and reporting compliance with avoidance and minimization measures for Quino during maintenance and repair. The biologist must be knowledgeable of Quino biology and ecology. The CBP will submit the biologist's name, address, telephone number, and work schedule on the project to the Service at least 5 days prior to initiating maintenance and repair. The biologist will perform the following duties:

- Be on site during all vegetation clearing/grubbing and project construction within 500 feet of habitat to be avoided.
- 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.
- Conduct Quino and host plant surveys in the impact area within 1 week prior to impacts. If found, host plants will be flagged and

avoided to the maximum extent practicable. If Quino are found or host plants cannot be avoided, CBP will contact the Service for further consultation.

- Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.

- 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 will 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 project area to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the project site by fencing); (iv) environmentally responsible construction practices as outlined in CM 7; (v) the protocol to resolve conflicts that may arise at any time during the construction process; (vi) the general provisions of the Act, the need to adhere to the provisions of the Act, and the penalties associated with violating the Act.

- Halt work, if necessary, and confer with the Service to ensure the proper implementation of CMs. The biologist will report any violation to the Service within 24 hours of its occurrence.

- Submit weekly email reports (including photographs of impact areas) to the Service during vegetation clearing and/or project construction. The weekly reports will document that authorized impacts were not exceeded and general compliance with all CMs. The reports will also outline the duration of monitoring, the location of construction activities, the type of construction which occurred, and equipment used. These reports will specify numbers, locations, and sex of sensitive species observed and remedial measures employed to avoid, minimize, and mitigate impacts to Quino. Raw field notes should be available upon request by the Service.

- Submit a final report to the Service within 60 days of project completion that includes: as-built project site plans and construction figures 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 CMs of this consultation was achieved.

CM 25. To minimize impacts to Quino from vehicle strikes, limit vehicle speeds to 15 miles per hour.

CM 26. All maintenance and repair within Quino critical habitat will be restricted to within the existing road footprint. Vegetation clearing outside of previously disturbed areas will not occur in Quino critical habitat.

Arroyo toad [Reyes (Canyon City) Road and applicable future projects] and its Critical Habitat

CM 27. No impacts to known or potential arroyo toad breeding habitat will occur.

CM 28. Prior to the onset of maintenance and repair, a barrier fence will be installed around the perimeter of all work areas within potential arroyo toad habitat. The fence will consist of fabric or plastic at least 2 feet high, staked firmly to the ground with the lower 1 foot of material stretching outward along the ground and secured with a continuous line of gravel bags. No digging or vegetation removal will be associated with the installation of the fence, and the fence will be removed when the project is complete. Ingress and egress of equipment and personnel will use a single access point to the site. This access point will be as narrow as possible and will be closed off by exclusionary fence when personnel are not on the project site.

CM 29. A Service and BLM-approved biologist will conduct surveys for arroyo toads within the maintenance and repair area. Surveys will be conducted during the appropriate climatic conditions during the appropriate time of night to maximize the likelihood of encountering arroyo toads. If the project biological monitor, in coordination with the Service staff, believes artificial watering is warranted to illicit a response from arroyo toads, such efforts will be enacted. This generally is done when climatic conditions are not appropriate for arroyo toad movement during clearance surveys and is done 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. The CBP will submit the survey results to the Service. If arroyo toads are found within the project area CBP will contact the Service for further consultation.

CM 30. The transmission of diseases will be avoided by employing disease-prevention protocols in areas known or likely to harbor chytridiomycosis (CBP will confer with the USFWS to identify these areas). In such cases, if vehicle and equipment use will occur in more than one arroyo toad suitable habitat area, CBP would ensure that all equipment is clean and dry or disinfected before moving to another habitat area.

CM 31. Any use or storage of chemicals or fuels at project sites will be kept 3,280 feet away from arroyo toad habitat [i.e., areas of known arroyo toad occurrence, arroyo toad breeding habitat (in-stream and immediately adjacent), or critical habitat].

Bighorn sheep (O'Neill Valley Access Road, Elliot Mine Road, Mica Davie's Crossover, Mica Mine Road, Davie's Valley Road, Davie's Clark Crossover and applicable future projects)

CM 32. Maintenance and repair in suitable bighorn sheep habitat will be prohibited during the lambing season (January 1 through June 30).

CM 33. The CBP will staff a biologist, approved by the Service and BLM, who will be responsible for monitoring and reporting compliance with avoidance and minimization measures for bighorn sheep if bighorn sheep are encountered within 1,500 feet maintenance and repair. The biologist must be knowledgeable of bighorn sheep biology and ecology. The CBP will submit the biologist's name, address, telephone number, and work schedule on the project to the Service at least 5 days prior to initiating project construction and maintenance. The biologist will perform the following duties:

- Conduct a survey each morning before maintenance and repair begin to see if bighorn sheep are within 1,500 feet of the project.
- Stop work until either the bighorn sheep moves away on its own and the biologist can flush the bighorn sheep from the project area without harm.
- Record on a daily basis any bighorn sheep encounters that occurred at the day's work site and how they were resolved. The biologist should note where bighorn sheep are observed, gender, age, collar, ear tag, etc.. The biologist should report all bighorn sheep encounters by email weekly (each Friday) to the Palm Springs Fish and Wildlife Office.

CM 34. Construction vehicles should avoid driving off designated roads and should avoid driving at speeds above 15 miles per hour where practicable.

CM 35. The onsite project manager will encourage proper footwear hygiene to help prevent disease transmission from domestic animals to bighorn sheep. If workers have any potential contact with lands occupied by domestic sheep or goats (for example, at home, visiting a farm, attending a county fair, going to a petting zoo, etc.), they should disinfect their boots at an onsite boot disinfection station before going to a work zone in bighorn sheep habitat. Alternatively, personnel may be required to change their footwear so that contaminated boots are not used in work vehicles or in the work site.

Gnatcatcher [Little Otay Truck Trail, End of Fence Spur, Reyes (Canyon City) Road, and applicable future projects]

CM 36. Maintenance and repair within 500 feet of gnatcatcher suitable habitat, will occur between September 1 and February 14 to avoid the breeding season (or sooner if surveys determine that all nesting is complete). If project construction or maintenance are necessary between February 15 and August 31, the CBP will conduct gnatcatcher nest surveys/monitoring as outlined in CM 37, a and b.

CM 37. In addition to the duties in CM 24, a biologist approved by the Service and BLM will be onsite during maintenance and repair within 500 feet of gnatcatcher habitat to ensure compliance with applicable CMs. The biologist must be knowledgeable of gnatcatcher biology and ecology. The CBP will submit the biologist's name, address, telephone number, and work schedule on the project to the Service at least 5 days prior to initiating project impacts. The biologist will perform the following duties:

a. Perform a minimum of three focused surveys, on separate days, to determine the presence of gnatcatchers in the disturbance area outside the gnatcatcher breeding season. Surveys will begin a maximum of 7 days prior to performing initial clearing/grubbing of coastal sage scrub/chamise chaparral and one survey will be conducted the day immediately prior to the initiation of clearing/grubbing. If any gnatcatchers are found within the disturbance area, the biologist will direct construction personnel to begin clearing/grubbing in an area away from the gnatcatchers. It will be the responsibility of the biologist to ensure that gnatcatchers are not in the area to be cleared/grubbed. The biologist will also record the number and location of gnatcatchers disturbed by clearing/grubbing. The CBP will notify the Service at least 7 days prior to clearing/grubbing to allow the Service to coordinate with the biologist on bird flushing activities.

b. If maintenance and repair is necessary during the gnatcatcher breeding seasons, the biologist will perform a minimum of three focused surveys, on separate days, to determine the presence of gnatcatcher nest building activities, egg incubation activities, or brood rearing activities in, or within, 500 feet of these areas. The surveys will begin a maximum of 7 days prior to project construction and one survey will be conducted the day immediately prior to the initiation of work. Additional surveys will be done once a week during project construction in the breeding season. These additional surveys may be suspended as approved by the Service. The CBP will notify the Service at least 7 days prior to the initiation of surveys, and within 24 hours of locating any gnatcatchers.

c. If a gnatcatcher nest is found in or within 500 feet of maintenance and repair, no project maintenance and repair will be conducted within 500 feet of the nest until the young have fledged.

Environmental Baseline for Currently Known Projects on BLM Lands

The project impact footprints will be the existing roadbeds and mostly comprised of bare ground or articulated concrete mats. The following vegetation types are located adjacent to the road segments: Diegan coastal sage scrub, Gabbroic northern mixed chaparral, southern mixed chaparral, Big sagebrush scrub and non-native grassland, Sonoran mixed woody and succulent

scrub, Sonoran creosote bush scrub, Mojave desert wash scrub and Semi-desert chaparral (Table 1). Minimal vegetation is expected to overhang or be established within the existing roadbeds.

Table 1: Vegetation Groups Adjacent to the Known Road Segments

Road Segment	Gabbroic Northern Mixed Chaparral	Big Sagebrush Scrub	Non-Native Grassland	Developed	Diegan Coastal Sage Scrub	Southern Mixed Chaparral	Semi-Desert Chaparral	Sonoran Mixed Woody And Succulent Scrub	Mojave Desert wash scrub
Little Otay Truck Trail			X	X	X				
End of Fence Spur				X	X				
Reyes Rd			X	X	X				
Cameron Truck Trail	X			X					
La Posta Circle	X			X		X			
Track Access	X	X		X	X				
4x4 Course	X			X	X				
Gloriosa Way	X			X	X				
Cedillo	X	X		X					
O'Neil Valley Access Road				X				X	
Elliot Mine Road				X			X		
Mica Davie's Crossover				X					X
Mica Mine Road				X					X
Davie's Valley Road				X					X
Davie's Clark Crossover				X					X

Focused Quino surveys were conducted from March to May in 2018 within the Elliot Mine Road (RECON 2018). Neither Quino checkerspot butterfly adults nor host plants were observed during the focused surveys and very few potential nectar sources were observed (RECON 2018). While O'Neill Valley Access Road was not directly included in this survey, this small road segment is directly adjacent to the area surveyed and the habitat is similar. Biological resources surveys conducted in October and November of 2018 within the remaining portions of the Action Area found potentially suitable habitat (HDR 2019) within 10 additional road segments; however, focused surveys were not conducted.

Based on the above and other survey data in the Service's GIS database, Quino are known or have the potential to occur in the vicinity of Little Otay Truck Trail, End of Fence Spur, Reyes (Canyon City) Road, Cameron Truck Trail, La Posta Circle, Track Access, 4x4 Course, Gloriosa Way, Cedillo, O'Neill Valley Access Road, and Elliot Mine Road (Table 2). Quino adults, eggs and/or pre- or post-diapause larvae may occur on or adjacent to these road segments.

The entire O'Neill Valley Access Road (0.69 acre) and part of Cedillo (1.14 acres) are within Unit 8 and Unit 9 of designated Quino critical habitat, respectively, consisting of disturbed/roadbed which has physical or biological features (PBFs[1]) of critical habitat (Table 2). Unit 8 contains all of the features essential to the conservation of Quino that may require special management considerations or protection to minimize impacts from loss and fragmentation of habitat and landscape connectivity due to development, maintenance and recreational activities, trash dumping, invasion by nonnative plants, fire, enhanced soil nitrogen, and climate change. The project is also located within the Southwest San Diego Unit of the Quino recovery plan (Service 2003b).

No road segments occur within potential arroyo toad breeding habitat. The Reyes (Canyon City) Road is within potentially suitable arroyo toad upland dispersal and aestivation habitat.

Part of Reyes (Canyon City) Road (0.14 acre) is also within Subunit 19E of designated arroyo toad critical habitat consisting of disturbed/roadbed which has PBFs of critical habitat. Subunit 19E contains all of the features essential to the conservation of arroyo toad that may require special management considerations or protection to address threats from grazing, and nonnative plants and predators.

No focused surveys were done for bighorn sheep. However, bighorn sheep are known or have the potential to occur in the vicinity of O'Neill Valley Access Road, Elliot Mine Road, Mica Davie's Crossover, Mica Mine Road, Davie's Valley Road, and Davie's Clark Crossover.

[1] The designation of critical habitat uses the term primary constituent element (PCE) or essential features. The new critical habitat regulations (81 FR 7214) replace this term with physical or biological features (PBFs). The shift in terminology does not change the approach used in conducting an impact analysis, which is the same regardless of whether the original designation identified primary constituent elements, physical or biological features, or essential features. In this informal consultation, we use the term PBF to mean PCE or essential feature, as appropriate for the gnatcatcher critical habitat.

Bighorn sheep may traverse across these road segments. None of the road segments occur in bighorn sheep critical habitat.

No protocol surveys were done for gnatcatchers. However, gnatcatchers are known or have the potential to occur in the vicinity of Little Otay Truck Trail, End of Fence Spur, Reyes (Canyon City) Road. Coastal sage scrub and chamise chaparral in, and within 500 feet of these road segments may be occupied gnatcatchers. None of the road segments occur in gnatcatcher critical habitat.

Table 2: Species Occurrences and Critical Habitat

Road Segment	Species with Potential to Occur [a]	Critical Habitat in Project Area (acres)	Road Segment Length (miles)	Impact (acres)
Little Otay Truck Trail	1,4	1(0.69)	0.27	0.69
End of Fence Spur	1,4	-	0.08	0.25
Reyes (Canyon City) Road	1,2,4	2 (0.15)	0.12	0.35
Cameron Truck Trail	1	-	0.02	0.05
La Posta Circle	1	-	0.08	0.27
Track Access	1	-	0.39	0.95
4x4 Course	1	-	0.30	0.91
Gloriosa Way	1	-	0.79	1.83
Cedillo	1	1(1.14)	0.99	2.20
O'Neill Valley Access Road	1,3	-	0.06	0.19
Elliot Mine Road	1,3	-	0.84	2.25
Mica Davie's Crossover	3	-	2.57	9.07
Mica Mine Road	3	-	0.54	2.15

Davie's Valley Road	3	-	1.78	4.29
Davie's Clark Crossover	3	-	0.55	1.44
Subtotal				**26.89**
West Desert Drag Road	-	-	8.95	42.23
Roy's Road	-	-	2.20	8.51
Cat Exit 4	-	-	1.69	4.91
Signal Road Legacy Fence Access Road 1	-	-	1.82	5.46
Signal Road Legacy Fence Access Road 2	-	-	1.36	5.00
Signal Road Legacy Fence Access Road 3	-	-	0.25	0.05
Canal Road	-	-	5.98	33.68
Poleline Extension	-	-	2.10	25.51
Subtotal				**125.36**
Total	-	-	**33.7**	152.25

[a] Species with the potential to occur are 1) Quino, 2) bighorn sheep, 3) arroyo toad, and 4) gnatcatcher.

Effects of the Action

General

The majority of maintenance and repair will occur within the existing roadbed, with minimal trimming and clearing of vegetation that has established within the existing roadbed (such as brush overhanging roadways or vegetation that has encroached into the roadbed). The objective of maintenance and repair is to remain within the existing road and not increase the road width. The amount of vegetation that may be trimmed, cleared, or trampled during maintenance and repair activities would vary by road segment (depending on surrounding vegetation), and by year (wet years may result in greater shrub/tree growth and possibility of vegetation encroachment

into roadways). However, it is anticipated that the overall disturbance of vegetation would be minimal as these roads have experienced regular use by law enforcement and recreationists.

All maintenance and repair will be performed in accordance with CBP BMPs to minimize or eliminate potential impacts to the environment. All necessary erosion-control BMPs would be adopted to ensure stabilization of repaired roads (attached). BMPs are generally accepted and applied measures or practices to lessen the adverse effects of actions on the environment, including vegetation, wildlife, migratory birds, threatened and endangered species, and water resources. It is the responsibility of the CBP to ensure that all personnel performing maintenance comply with the BMPs, as well as any required mitigation measures and BLM CMAs, unless otherwise noted. BMPs apply to all maintenance and repair.

Pre-construction surveys by a qualified biologist will be conducted to determine the presence of, and potential impacts to, Quino and its critical habitat, arroyo toad and its critical habitat, bighorn sheep, and gnatcatcher, identify and delineate resources setbacks, and determine which BMPs need to be implemented prior to construction activities.

The CBP will fence project areas within critical habitat or areas where federally listed species were identified or likely to occur with appropriate temporary construction fencing and/or flagging prior to construction and confine disturbances, project vehicles, and equipment to the delineated project areas to ensure adjacent habitats are not disturbed.

Necessary temporary impacts on vegetation and soil will be minimized through appropriate heavy equipment operation techniques such as installation of temporary construction mats, reduced operating speeds, use of the initial ingress and egress points, and selection of appropriately sized equipment for the area and project. In those cases where equipment is not authorized outside of the road base, activities would be accomplished on foot to minimize the impacts that would be caused by heavy equipment. These activities would be limited to the existing road disturbed areas within Quino and arroyo toad habitats (sensitive habitats).

The CBP will address unavoidable temporary and permanent impacts according to plans submitted to the BLM (as applicable) and Service for review and approval. These actions may include restoration of redundant roads or other disturbed areas as close to the impact site as possible.

The CBP will provide the CFWO with a schedule of work planned on these roads 10-days prior to each quarter, consisting of a list of road segments from the roads addressed in this consultation and planned for maintenance and repair during the upcoming quarter. The Work Plans will include schedules for, and/or the results of pre-construction surveys, species specific surveys as required, information on unavoidable temporary and permanent impacts, and proposed mitigation plans if applicable. The Service will review the Work Plans and work with the CBP to amend this consultation as needed. In addition, the CBP will submit an Annual report to the CFWO on or before October 1 of each calendar year that documents activities conducted in each road segment within sensitive or critical habitat where federally listed species or critical habitats were identified or likely to occur and where maintenance occurred during the previous year and

confirms that authorized impacts were not exceeded. This report will document general compliance with the project as described in this consultation and the CMs.

Quino and its Designated Critical Habitat

The roadbeds at Little Otay Truck Trail, End of Fence Spur, Reyes (Canyon City) Road, Cameron Truck Trail, La Posta Circle, Track Access, 4x4 Course, Gloriosa Way, Cedillo, O'Neill Valley Access Road, and Elliot Mine Road, may provide Quino basking and movement habitat. Implementation of the project is not expected to modify or remove these functions.

Improved water drainage measures could be implemented, as needed and as funding is available, consisting of articulated concrete mats at low water crossings. Potential vegetation disturbance at low water crossing within suitable Quino habitat will be permanent (removal of vegetation to allow for placement of the concrete mat) and temporary (disturbance and trampling of vegetation from construction equipment). If funding is available, low water crossing will impact the following:

- Permanent and temporary impacts to approximately 0.11 acre and 0.42 acre of Gabbroic northern mixed chaparral, respectively, within Cedillo Road.
- Temporary impacts to approximately 0.01 acre of non-native grassland within Cedillo Road.
- Temporary impacts to approximately 0.03 acre of non-native grassland within Little Otay
- Truck Trail.
- Temporary impacts to 0.06-acre semi-desert chaparral within Elliot Mine Road.

If maintenance and repair occur during the Quino reproduction season (December 1 to May 31), Quino adults, eggs and/or pre- or post-diapause larvae may occur within these road segments and be crushed, killed or injured by workers or equipment. Adults, if present, are mobile and may be able to avoid equipment and workers. Outside the reproduction season, diapausing larvae may occur within these areas and be crushed or injured by project activities.

During maintenance and repair, Quino and its critical habitat may be impacted by fugitive dust which may cover Quino host and nectar plants and eggs and larvae and could either kill them through smothering or by reducing (interrupting) their lifecycle. Elevated dust levels may also affect the ability of the larvae and adults to respire normally. Insects are known to be adversely affected by coatings of oil films, emulsions, or dust particles that clog the respiratory openings (spiracles) on their bodies (Storer *et al*. 1972). Excessive dust could also degrade the suitability of Quino habitat (i.e., host plants and nectar plants) by hindering plant growth (photosynthesis) and reducing availability to pollinators, which in turn could result in reduced reproduction of the plants and decreasing the palatability of nectar plants to Quino larvae. Maintenance and repair could also introduce of non-native species which may out-compete larval host species and nectar-providing species and degrade Quino habitat.

Maintenance and repair on Little Otay Truck Trail and Cedillo will also impact 0.69 acre and 1.14 acres of disturbed/roadbed all with PBFs of critical habitat in Unit 8 and 9, respectively.

The CBP will implement CMs to reduce potential impacts to Quino and its designated critical habitat. All maintenance and repair within Quino critical habitat will be restricted to within the existing road footprint. Vegetation clearing outside of previously disturbed areas will not occur in Quino critical habitat. The CBP will conduct maintenance and repair outside the Quino reproduction season (December 1 to May 31). The CBP will have a biologist familiar with Quino present; install temporary fencing and erosion control devices (i.e., install fiber rolls and silt socks) around project construction; and minimize fugitive dust from construction activities by watering exposed soil during ground-disturbing activities, to help prevent impacts to adjacent vegetation during maintenance and repair. The biologist will also conduct Quino and host plant surveys in the impact area within 1 week prior to impacts. If found, host plants will be flagged and avoided to the maximum extent practicable. If Quino are found or host plants cannot be avoided, CBP will contact the Service for further consultation. Once maintenance and repair are complete, all temporary fencing and erosion control devices will be removed. The CBP will also equip water trucks with appropriate spray bars to ensure Soiltac soil stabilizer overspray or ponding does not impact adjacent vegetation. The CBP will only apply Soiltac if temperatures are greater than 40 degrees Fahrenheit, and there is no precipitation expected within 72 hours of application. Therefore, we expect that the potential for Soiltac to be toxic and/or migrate off-site via runoff or erosion will be low and short-lived. If CBP uses an alternative soil stabilizing agent, CBP will provide information on the agent for the Service's review and approval. In addition, the biologist will help ensure all CMs are implemented.

All necessary materials such as gravel, topsoil, or fill will be obtained from existing developed or previously used sources, not from undisturbed areas adjacent to the project, and will be certified as weed-free as only sterile or weed-free sources. In addition, the CBP will coordinate with contractors to determine if the maintenance activities occur in a highly sensitive area or an area that poses an unacceptable risk of transmitting invasive species. If it is determined that maintenance activities occur in such an area, the CBP protocol for cleaning vehicles and equipment to avoid the spread of invasive species would be followed.

Post construction, we do not anticipate the project will substantially obstruct Quino movement or fragment Quino habitat, or substantially impact the functioning of Unit 8 and 9 of Quino critical habitat.

Arroyo Toad and its Designated Critical Habitat

The Reyes (Canyon City) Road may provide arroyo toad dispersal and aestivating habitat. No potential arroyo toad breeding habitat will be impacted. Maintenance and repair will impact approximately 0.35 acre of potential arroyo toad dispersal and aestivating habitat in the Reyes (Canyon City) Road, all of which is developed/roadbed. Arroyo toads within the impact area could be killed or injured by maintenance and repair. Light during nighttime construction could also make dispersing arroyo toads more susceptible to predation. Once maintenance and repair

are complete the roadbed is expected to continue to support arroyo toad dispersal and preclude arroyo toad aestivation.

Potential indirect impacts on arroyo toads include increased predation from night lighting; habitat degradation from erosion, sedimentation, and dust; and the transmission of diseases. Changes in water runoff patterns could result from road maintenance and repair (i.e., repeated grading) and can lead to erosion. Maintenance and repair could also result in deposition of oil, fuel, or other toxic substances into waterways, which could result in injury or mortality of arroyo toads.

Road maintenance and repair on Reyes (Canyon City) Road will impact 0.14 acre of disturbed/roadbed all with PBFs of arroyo toad critical habitat in Subunit 19E.

The CBP will implement CMs to reduce potential impacts to arroyo toad and its designated critical habitat. All maintenance and repair within arroyo toad habitat will be restricted to within the existing road footprint. Vegetation clearing outside of previously disturbed areas will not occur in arroyo toad habitat. Road maintenance will be limited to daylight hours during dry conditions. Exclusionary fencing will be installed prior to construction to prevent arroyo toads from moving into maintenance and repair areas. A biologist knowledgeable of arroyo toad biology and ecology will survey the maintenance and repair area during the appropriate climatic conditions at night to maximize the likelihood of encountering arroyo toads. If the biologist, in coordination with the Service, believes artificial watering is warranted to illicit a response from arroyo toads, such efforts will be enacted. Before each workday begins, the biologist will also check to see if arroyo toads are in the maintenance and repair area. If arroyo toads are found, CBP will further consult with the Service.

BMPs designed to minimize or avoid impacts on arroyo toads would be implemented. For example, any use or storage of chemicals or fuels will be kept 0.3 mile away from critical habitat and other locations where this species occurs. In addition, a site-specific SWPPP and a spill protection plan will be prepared, and regulatory approval sought, as required by regulations, for maintenance and repair activities that could result in sedimentation and that occur within 0.6 mile of suitable habitat.

The CBP will use BLM approved dust suppressants or adhesive soil stabilizers, paving, covering, landscaping, continuous wetting, or detouring maintenance and repair areas; barring access to maintenance and repair areas; or other acceptable means of reducing significant amounts of airborne dust.

The transmission of diseases will be avoided by employing disease-prevention protocols in areas known or likely to harbor chytridiomycosis (the CBP will consult with the USFWS to identify these areas). In such cases, if vehicle and equipment use will occur in more than one arroyo toad suitable habitat area, the CBP would ensure that all equipment is clean and dry or disinfected before moving to another habitat area.

Post construction, we do not anticipate the project will substantially obstruct arroyo toad movement or fragment arroyo toad habitat, or substantially impact the functioning of Subunit 13E of arroyo toad critical habitat.

Bighorn Sheep

Road maintenance and repair at O'Neill Valley Access Road, Elliot Mine Road, Mica Davie's Crossover, Mica Mine Road, Davie's Valley Road, and Davie's Clark Crossover may indirectly impact bighorn sheep through increase in noise or human presence, especially during the lambing season (January 1 through June 30). Workers could also inadvertently transmit disease from domestic animals to bighorn sheep. Any sheep that enter the project construction areas may also be injured or killed by vehicles or equipment. Any trash or food left by workers could also attach predators of bighorn sheep such as coyotes.

To ensure impacts to lambing bighorn sheep do not occur, project construction and maintenance in suitable bighorn sheep habitat will be prohibited during the lambing season (January 1 through June 30). In addition, since there are no identified lambing areas for bighorn sheep within the project areas, any bighorn sheep present will likely be traveling through the work areas and are expected to move away from project impacts. The CBP will also have a monitor onsite to ensure no impacts occur to bighorn sheep.

Construction vehicles should avoid driving off designated roads and should avoid driving at speeds above 15 miles per hour where practicable. The onsite project manager will also encourage proper footwear hygiene to help prevent disease transmission from domestic animals to bighorn sheep. In addition, all food related trash items will be enclosed in sealed containers and regularly removed from the site.

Gnatcatcher

Road maintenance and repair at the Little Otay Truck Trail, End of Fence Spur, and Reyes (Canyon City) Road could injure or harm gnatcatcher from disruption of breeding or habitat loss. The CBP will implement CMs to reduce these potential impacts to gnatcatcher. Project construction and maintenance within 500 feet of gnatcatcher suitable habitat will occur between September 1 and February 14 to avoid the breeding season (or sooner if surveys determine that all nesting is complete). If project construction or maintenance are necessary between February 15 and August 31, a biologist will conduct gnatcatcher nest surveys. If a gnatcatcher nest is found in or within 500 feet of project construction or maintenance, no project construction or maintenance will be conducted within 500 feet of the nest until the young have fledged. A biologist will also conduct gnatcatcher surveys prior to performing any vegetation clearing/grubbing in gnatcatcher suitable habitat outside the gnatcatcher breeding season. If any gnatcatchers are found within the disturbance area, the biologist will direct construction personnel to begin vegetation clearing/grubbing in an area away from the gnatcatchers. It will be the responsibility of the biologist to ensure that gnatcatchers are not in the area to be cleared/grubbed.

Direct impacts to gnatcatcher habitat are expected to be minimal. Although we do not expect gnatcatchers to be killed or injured, the relatively small impacts to suitable habitat along the roads may force gnatcatchers to adjust their territory boundaries slightly or result in a limited increase in territorial interactions with any neighboring pairs but are not expected to result in a substantial increase in mortality or reproductive output (i.e., effects would not rise to the level of "take").

Potential indirect effects of the proposed project include construction-related noise, light, human activity and/or dust. Any trash or food left by workers could also attach predators of gnatcatchers such as coyotes. Following construction, the project may also cause soil erosion and increased occurrence of nonnative plants and animals in gnatcatcher habitat.

Project construction and maintenance will be limited to outside the gnatcatcher breeding season as discussed above, daylight hours during dry conditions. All food related trash items will be enclosed in sealed containers and regularly removed from the site. The CBP will use BLM approved dust suppressants or adhesive soil stabilizers, paving, covering, landscaping, continuous wetting, or detouring maintenance and repair areas; barring access to maintenance and repair areas; or other acceptable means of reducing significant amounts of airborne dust.

All necessary materials such as gravel, topsoil, or fill will be obtained from existing developed or previously used sources, not from undisturbed areas adjacent to the project, and will be certified as weed-free as only sterile or weed-free sources. In addition, the CBP will coordinate with contractors to determine if the maintenance activities occur in a highly sensitive area or an area that poses an unacceptable risk of transmitting invasive species. If it is determined that maintenance activities occur in such an area, the CBP protocol for cleaning vehicles and equipment to avoid the spread of invasive species would be followed.

Conclusion

Based on the site and species information described above and the CBP's commitment to implement the CMs, we concur that all project potential impacts to the Quino and its critical habitat, arroyo toad and its critical habitat, bighorn sheep, and gnatcatcher will be avoided or reduced to a level of insignificance, supporting the CBP's determination that the project is not likely to adversely affect these species and critical habitats. Any future projects proposed for an amendment to this consultation will be evaluated as needed. The Service anticipates that any future projects consistent with the project description and CMs in this consultation will also be not likely to adversely affect these species and critical habitats.

Therefore, the interagency consultation requirements of section 7 of the Act have been satisfied. Should project plans change or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered, and further section 7 consultation may be required.

Please direct any questions or comments to Patrick Gower[2] of my staff

Sincerely,

Jonathan D. Snyder
Assistant Field Supervisor

[2] patrick_gower@fws.gov

APPENDIX K
Army Corps of Engineers Approved Jurisdictional Determination

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

November 5, 2020

United States Army Corps of Engineers
Los Angeles District – Carlsbad Office
5900 La Place Ct., Suite 100
Carlsbad, CA 92008-8832

SUBJECT: Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California Project – Request for Approved Jurisdictional Determination

To Whom It May Concern:

United States (U.S.) Customs and Border Protection (CBP; applicant), is requesting an approved jurisdictional determination (AJD) for the proposed Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California Project (Project). The entire Project Area covers approximately 33.7 miles of road occurring in the vicinity of the U.S./Mexico border. The Project Review Area, which includes the access roads proposed for maintenance and a 50-foot buffer on these roads (25 feet on either side of the centerline of the roads), totals 407.20 acres.

The applicant will decide to accompany the U.S. Army Corps of Engineers (USACE) on site visits on a case-by-case basis. The USACE must contact the applicant prior to visiting the site. The contact information for the applicant is:

Property Owner: U.S. Department of the Interior – Bureau of Land Management
Applicant: U.S. Customs and Border Protection
Primary Contact: Paul Enriquez
Telephone: (949) 643-6365
E-mail: paul.enriquez@cbp.dhs.gov

CBP designates RECON Environmental to act as an agent in support of this process.

Designated Agent: RECON Environmental, Inc
Primary Contact: Andrew Smisek, Associate Biologist/Wetlands Specialist
Telephone: (619) 308-9333, ext.158
E-mail: asmisek@reconenvironmental.com

The purpose of the Project is to enable CBP to fulfill its mission of protecting the U.S. southern border and to enhance the safety of U.S. Border Patrol agents in carrying out their duties. For CBP to maintain effective control of the border and enhance the safety of U.S. Border Patrol agents, it must have safe and reliable access within the Project Area.

In support of this AJD, please see the attached Appendix 1 – Request for Corps Jurisdictional Determination. Also attached are the completed AJD Form and its associated exhibits, including two jurisdictional waters/wetland delineation reports prepared for distinct portions of the Project and a letter report summarizing the jurisdictional resources throughout the entire Project Review Area. The AJD Form includes 31 non-wetland water (ephemeral drainages) features occurring within the Project Review Area that may qualify as excluded under the Navigable Waters Protection Rule.

After review of the AJD Form and supplemental information, please reach out if you need any additional information.

Sincerely,

Paul Enriquez
Director
Acquisition, Real Estate and Environmental
Program Management Office Directorate
U.S. Border Patrol

Attachments

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017

May 3, 2021

SUBJECT: Approved Jurisdictional Determination

Andrew Smisek
RECON Environmental, Inc.
3111 Camino del Rio N Ste 600
San Diego, CA 92108-5726

Dear Mr. Smisek:

I am responding to your request (File No. SPL-2020-00649) dated November 5, 2020, for an Approved Jurisdictional Determination (AJD) and clarification whether a Department of the Army Permit is required for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California Project (project; see specific locations in referenced AJD), located in both San Diego and Imperial Counties, California. The proposed project involves 31 ephemeral drainage features (totaling approximately 13.74 acres; 23,179 linear feet), centered at approximately lat. 32.647195°N, long. -115.829107°W.

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act.

Based on the jurisdictional determination provided, it appears the 31 ephemeral drainages referenced within the project site are not waters of the United States pursuant to 33 CFR Part 325.9. The basis for our determination can be found in the enclosed AJD form. Due to this determination, a Department of the Army permit would not be required for activities involving these referenced 31 ephemeral drainages within the project site.

This letter includes an approved jurisdictional determination for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California Project. If you wish to submit new information regarding this jurisdictional determination, please do so within 60 days. We will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. If you object to this or any revised or reissued jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) and Request for Appeal (RFA) form. If you wish to

appeal this decision, you must submit a completed RFA form within 60 days of the date on the NAP to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division, CESPD-PDO
450 Golden Gate Ave.
San Francisco, CA 94102

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 (see below), and that it has been received by the Division Office by **July 2, 2021**.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request, and is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact me at 951-258-8121 or via e-mail at james.e.mace@usace.army.mil. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

James E. Mace
Lead, Orange and Riverside Counties Team
South Coast Branch
Regulatory Division

Enclosure(s)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND

Applicant: Agent, Andrew Smisek, RECON	File Number: SPL-2020-00649	Date: MAY 3, 2021
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

James Mace
U.S. Army Corps of Engineers
Los Angeles District
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017

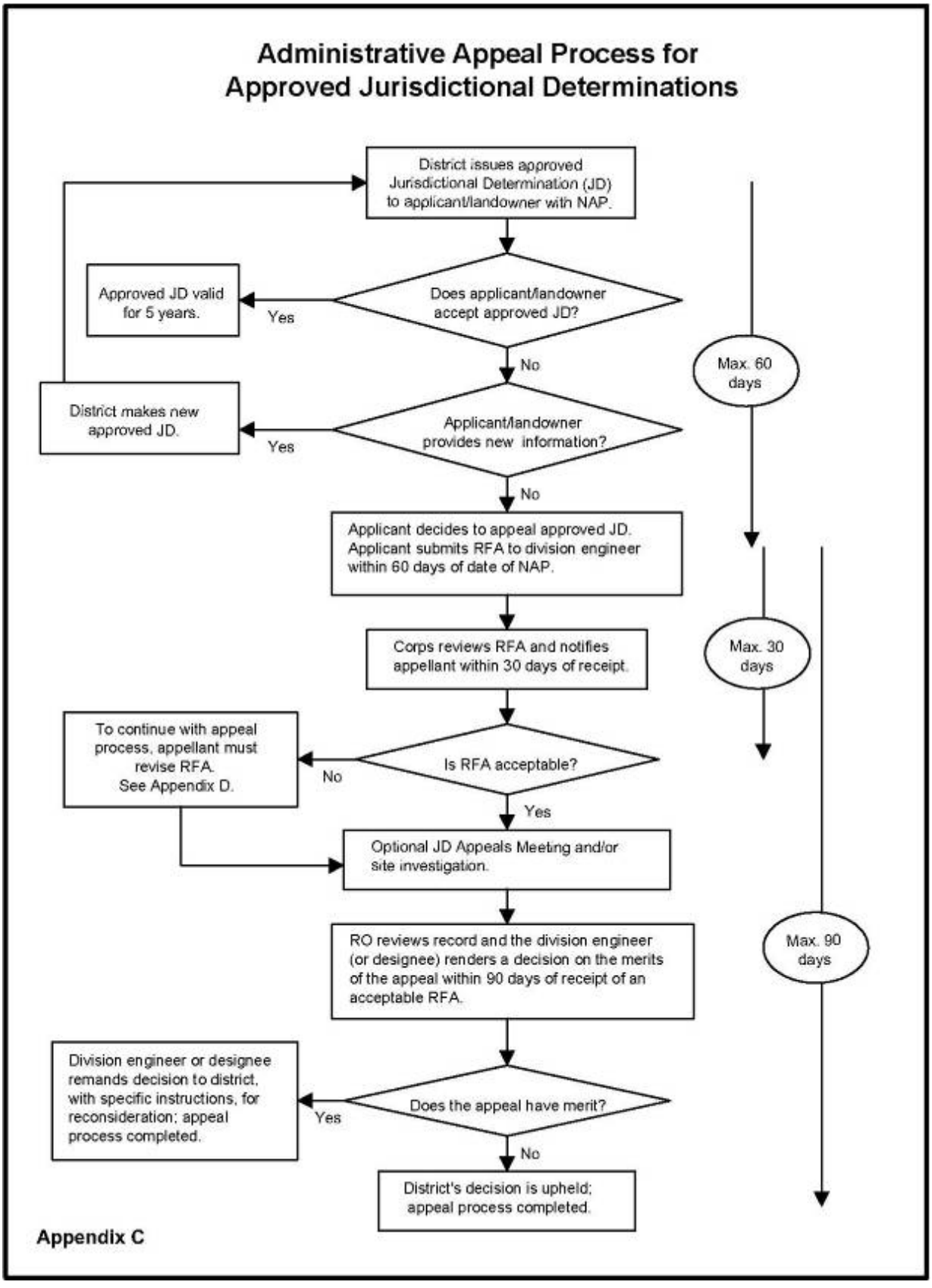
Phone: 951-258-8121
Email: james.e.mace@usace.army.mil

If you only have questions regarding the appeal process you may also contact: Thomas J. Cavanaugh

Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division
450 Golden Gate Ave.
San Francisco, CA 94102
Phone: (415) 503-6574 Fax: (415) 503-6646
Email: thomas.j.cavanaugh@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		


Administrative Appeal Process for
Approved Jurisdictional Determinations
District issues approved Jurisdictional Determination (JD) to applicant/landowner with NAP.
Does applicant/landowner accept approved JD?
Yes
Approved JD valid for 5 years.
No
Applicant/landowner provides new information?
Yes
District makes new approved JD.
No
Applicant decides to appeal approved JD. Applicant submits RFA to division engineer within 60 days of date of NAP.
Max. 60 days
Corps reviews RFA and notifies appellant within 30 days of receipt.
Is RFA acceptable?
No
To continue with appeal process, appellant must revise RFA. See Appendix D.
Yes
Optional JD Appeals Meeting and/or site investigation.
Max. 30 days
RO reviews record and the division engineer (or designee) renders a decision on the merits of the appeal within 90 days of receipt of an acceptable RFA.
Does the appeal have merit?
Yes
Division engineer or designee remands decision to district, with specific instructions, for reconsideration; appeal process completed.
No
District's decision is upheld; appeal process completed.
Max. 90 days
Appendix C

§ 331.5 Criteria.

(a) *Criteria for appeal* —(1) *Submission of RFA.* The appellant must submit a completed RFA (as defined at §331.2) to the appropriate division office in order to appeal an approved JD, a permit denial, or a declined permit. An individual permit that has been signed by the applicant, and subsequently unilaterally modified by the district engineer pursuant to 33 CFR 325.7, may be appealed under this process, provided that the applicant has not started work in waters of the United States authorized by the permit. The RFA must be received by the division engineer within 60 days of the date of the NAP.

(2) *Reasons for appeal.* The reason(s) for requesting an appeal of an approved JD, a permit denial, or a declined permit must be specifically stated in the RFA and must be more than a simple request for appeal because the affected party did not like the approved JD, permit decision, or the permit conditions. Examples of reasons for appeals include, but are not limited to, the following: A procedural error; an incorrect application of law, regulation or officially promulgated policy; omission of material fact; incorrect application of the current regulatory criteria and associated guidance for identifying and delineating wetlands; incorrect application of the Section 404(b)(1) Guidelines (see 40 CFR Part 230); or use of incorrect data. The reasons for appealing a permit denial or a declined permit may include jurisdiction issues, whether or not a previous approved JD was appealed.

(b) *Actions not appealable.* An action or decision is not subject to an administrative appeal under this part if it falls into one or more of the following categories:

(1) An individual permit decision (including a letter of permission or a standard permit with special conditions), where the permit has been accepted and signed by the permittee. By signing the permit, the applicant waives all rights to appeal the terms and conditions of the permit, unless the authorized work has not started in waters of the United States and that issued permit is subsequently modified by the district engineer pursuant to 33 CFR 325.7;

(2) Any site-specific matter that has been the subject of a final decision of the Federal courts;

(3) A final Corps decision that has resulted from additional analysis and evaluation, as directed by a final appeal decision;

(4) A permit denial without prejudice or a declined permit, where the controlling factor cannot be changed by the Corps decision maker (e.g., the requirements of a binding statute, regulation, state Section 401 water quality certification, state coastal zone management disapproval, etc. (See 33 CFR 320.4(j));

(5) A permit denial case where the applicant has subsequently modified the proposed project, because this would constitute an amended application that would require a new public interest review, rather than an appeal of the existing record and decision;

(6) Any request for the appeal of an approved JD, a denied permit, or a declined permit where the RFA has not been received by the division engineer within 60 days of the date of the NAP;

(7) A previously approved JD that has been superceded by another approved JD based on new information or data submitted by the applicant. The new approved JD is an appealable action;

(8) An approved JD associated with an individual permit where the permit has been accepted and signed by the permittee;

(9) A preliminary JD; or (10) A JD associated with unauthorized activities except as provided in §331.11.

U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 5/3/2021
ORM Number: SPL-2020-00649
Associated JDs: N/A
Review Area Location[1]: State/Territory: CA City: N/A County/Parish/Borough: San Diego and Imperial
Center Coordinates of Review Area: Latitude 32.647195 Longitude -115.829107

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

[1] Map(s)/figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
NWW_G1	126	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the Ordinary High Water Mark (OHWM) which averages approximately 10 feet in width. Hydrology indicators were used to identify the OHWM, including surface water, change in sediment texture, change in vegetation species, change in vegetation cover, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW_G2	2,118	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 6 feet in width. Hydrology indicators were used to identify the OHWM, including change in vegetation cover, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation
NWW_G3	451	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which is between 6 and 15 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, and mudcracks. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation
NWW_G4	2,052	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which is between 30 and 45 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in

[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
				vegetation species, change in vegetation cover, bed and bank, and mudcracks. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW_G5	26	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 8 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation
NWW_G6	26	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 6 feet in width. Hydrology indicators were used to identify the OHWM, including change in vegetation species, change in vegetation cover, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation
NWW01	139	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 2 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW02	976	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 5 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, bed and bank, and drift deposits. This channel did not contain any of

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
				the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation
NWW03	155	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 2 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW04	123	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 5 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation
NWW05	65	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 17 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation
NWW06	315	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 3 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
				algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW07	136	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 8 feet in width. Hydrology indicators were used to identify the OHWM, including change in vegetation cover, change in vegetation species, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW08	36	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 8 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW09	49	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 7 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW10	107	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 2 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
NWW11	59	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 1 foot in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW12	39	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 4 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW13	186	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 15 feet in width. Hydrology indicators were used to identify the OHWM, including change in vegetation cover, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW14	523	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 1.5 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW15	5,207	linear feet	(b)(3) Ephemeral feature, including an ephemeral	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which is between 8 and 70 feet in width. Hydrology

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
			stream, swale, gully, rill, or pool.	indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, drift deposits, and benching. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW16	8,892	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 20 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, drift deposits, and benching. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW17	386	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 25 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, drift deposits, and benching. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW18	3,153	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which is between 20 and 40 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank drift deposits, mudcracks, and benching. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
NWW19	530	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 40 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species bed and bank, drift deposits, mudcracks, and benching. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW20	152	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 5 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW21	234	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 35 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species bed and bank, drift deposits, mudcracks, and benching. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW22	206	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 3 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, drift deposits, and benching. This channel did not contain any of the following indicators: fish, benthic

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
				macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW23	33	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 6 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW24	186	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which averages approximately 160 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, and bed and bank. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.
NWW25	1,304	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Within the Review Area, this ephemeral feature was delineated at the extent of the OHWM which is between 30 and 60 feet in width. Hydrology indicators were used to identify the OHWM, including change in sediment texture, change in vegetation cover, change in vegetation species, bed and bank, and drift deposits. This channel did not contain any of the following indicators: fish, benthic macroinvertebrates, filamentous algae, hydrophytic vegetation, or hydric soils. This channel has ephemeral flow as a direct result of precipitation.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: RECON Environmental, Inc., Wetland Delineation for the Maintenance and Repair of Patrol and Access Roads on Bureau of Land Management Lands in California, September 1, 2020 (Exhibit 3); Gulf South Research Corporation,

Wetland Delineation Report for Proposed Maintenance and Repair of Patrol and Access Roads, San Diego, El Centro, and Yuma Sectors, California, January 2020 (Exhibit 4).

This information is sufficient for purposes of this AJD.

Rationale: N/A

☐ Data sheets prepared by the Corps:

☒ Photographs: Other: (Exhibit 2 photograph dates: 5, 6, 7, and 9 November 2018; 19, 21, 24, and 25 November 2019.

☐ Corps site visit(s) conducted on: Date(s).

☐ Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).

☒ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

☒ USDA NRCS Soil Survey: 1981 Soil Survey, Imperial Valley Area, California and 1973 Soil Survey, San Diego Area, California

☒ USFWS NWI maps: accessed at www.fws.gov/wetlands/data/Mapper.html on October 7, 2020

☒ USGS topographic maps: 1976a Mount Signal 7.5-minute Topographical Map. 1976b Yuha Basin 7.5-minute Topographical Map. 1979a Coyote Wells 7.5-minute Topographical Map. 1979b Grays Well 7.5-minute Topographical Map. 1988a Dulzura 7.5-minute Topographical Map. 1988b Ogilby 7.5-minute Topographical Map. 1996a Tecate 7.5-minute Topographical Map. 1996b Potrero 7.5-minute Topographical Map. 1996c Campo 7.5-minute Topographical Map. 1997a Cameron Corners 7.5-minute Topographical Map. 1997b In-Ko-Pah Gorge 7.5-minute Topographical Map.

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A
Other Sources	Google Earth (historic and recent aerial photography)

B. Typical year assessment(s): The Antecedent Precipitation Tool (APT) was used to analyze the 30-day rolling total and the 30-year normal range of precipitation data for the nearest recording weather stations to the Review Areas. Because the non-wetland water features observed occur throughout the approximately 34-mile Review Area, one APT analysis was conducted for each feature. The data presented in the APT graphics indicate that portions of the Review Area contained either normal, wetter than normal, or drier than normal conditions at the time each portion was surveyed during the wetland delineation effort. Specifically, conditions at the westernmost portions of the Review Area (NWW_G1, NWW_G2, NWW_G5, and NWW_G6 in the Otay and La Posta areas) contained either wetter than normal or normal conditions during the survey. The portions of the Review Area occurring in the low desert (NWW_G3, NWW_G4, and NWW15 through NWW25) all contained either normal or wetter than normal conditions at the time of the survey. The portions of the Review Area near Jacumba (NWW01 through NWW14) all contained drier than normal conditions at the time of the survey. For those non-wetland water features that were surveyed during normal or wetter than normal conditions, it is assumed that any indicators of either intermittent or perennial water flow would have been detected during the survey. The features that were surveyed during drier than normal conditions all occur in the steep slopes near Jacumba. Although conditions were drier than normal during the survey, the location and characteristics of these features indicate that these features are ephemeral in nature. These drainages are small in size and likely only contain flow in response to rain events. Because these drainages occur in steeply sloped areas and contain small

watersheds, they likely stop flowing soon after the end of rain events. No indicators of intermittent or perennial flow were observed in these features during the surveys.

C. Additional comments to support AJD: N/A