DOCKETED	
Docket Number:	24-OPT-01
Project Title:	Perkins Renewable Energy Project
TN #:	254445
Document Title:	Apx A - E, Legal Desc, Notification List, Preparers, BMPs, PDFs, CMAs, Other Requirements
Description:	Appendix A is the Legal Land Description and Existing Authorizations and Leaseholders on BLM Lands, Appendix B is the Notification List, Appendix C are the Preparers, Appendix D are BMPs, Project Design Features, and DRECP Conservation and Management Actions. Appendix E are other requirements.
Filer:	Emily Capello
Organization:	Panorama Environmental, Inc.
Submitter Role:	Applicant Consultant
Submission Date:	2/14/2024 5:27:51 AM
Docketed Date:	2/14/2024

Appendix A Legal Land Description and Existing Authorizations and Leaseholders on BLM Lands

Appendix A.1 Legal Land Description

Legal Land Description

The Project Application Area is located within Imperial County, Township 16 South, Ranges 17 East and 18 East, San Bernardino Meridian. The Project Application Area land is managed by the Bureau of Land Management (BLM), Bureau of Reclamation (BOR), and Imperial County. The specific township, range, and section information per the BLM National Public Land Survey System (PLSS), and corresponding Assessor Parcel Number (APN) and land manger per Project component, is listed in Table 1. Maps at a scale of 1:24,000 (1" = 2,000') are presented in Figure 1, Figure 2, Figure 3, Figure 4, and Figure 5.

Table 1 Legal Land Description

Project component	Public Land Survey System	APN	Land manager
Project site	T. 16S., R. 17E., sec. 21, E1/2	056-170-003-000	BLM
Project site	T. 16S., R. 17E., sec. 28, E1/2	056-170-015-000	BLM
Project site	T. 16S., R. 17E., sec. 33, NE1/4, N1/2SE1/4	056-170-022-000	BLM
Project site	T. 16S., R. 17E., sec. 22, S1/2, S1/2NW1/4	056-170-006-000	BLM
Project site	T. 16S., R. 17E., sec. 27	056-170-014-000	BLM
Project site	T. 16S., R. 17E., sec. 23, S1/2SW1/4, S1/2SE1/4, NW1/4SW1/4	056-170-007-000	BLM
Project site	T. 16S., R. 17E., sec. 26	056-170-013-000	BLM
Project site	T. 16S., R. 17E., sec. 34, N1/2, N1/2SW1/4, N1/2SE1/4	056-170-025-000	BLM
Project site	T. 16S., R. 17E., sec. 35, N1/2, N1/2SW1/4, N1/2SE1/4	056-170-026-000	BLM
Project site	T. 16S., R. 17E., sec. 25, S1/2, NW1/4, W1/2NE1/4, SE1/4NE1/4	056-170-012-000	BLM
Project site	T. 16S., R 18E., sec. 30, lots 4 thru 6, SE1/4, E1/2SW1/4, SE1/4NW1/4	056-190-014-000	BLM

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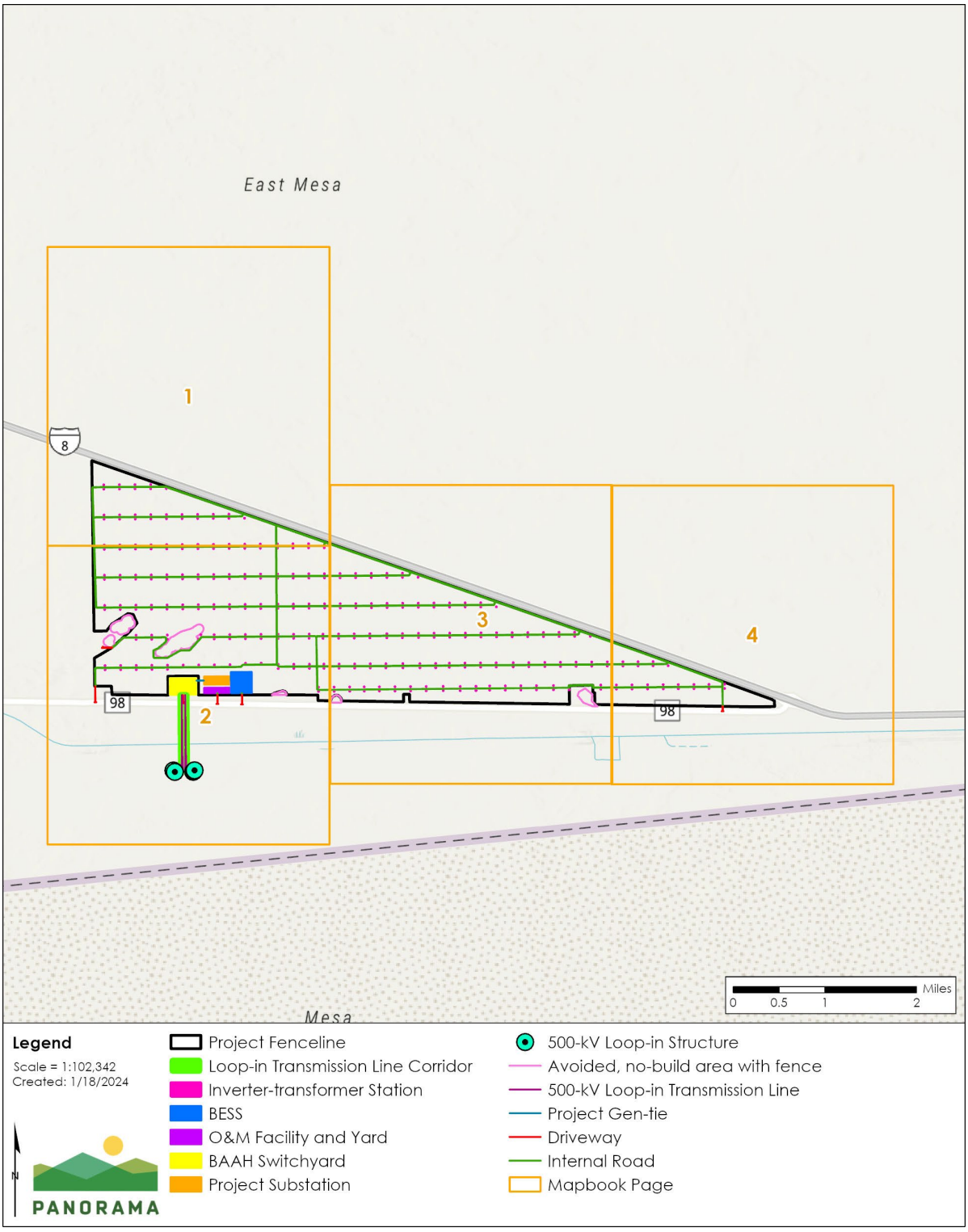
Project site	T. 16S., R. 18E., sec. 29, S1/2SW1/4, SW1/4SE1/4	056-190-012-000	BLM
Project site	T. 16S., R. 18E., sec. 33, S1/2, NW1/4, S1/2NE1/4	056-190-020-000	BLM/BOR
Project site	T. 16S., R. 18E., sec. 31, lots 3 thru 6, E1/2, E1/2NW1/4, E1/2SW1/4	056-190-015-000	BLM/BOR
Project site	T. 16S., R. 18E., sec. 32, N1/2, SW1/4, N1/2SE1/4, SW1/4SE1/4	056-190-018-000	BLM/BOR
Project site	T. 16S., R. 18E., sec. 34, SW1/4, S1/2SE1/4, NW1/4SE1/4	056-190-023-000	BLM/BOR
Project site	T. 16S., R. 17E., sec. 36, SE1/4NW1/4	056-180-003-000	Imperial County
Project site	T. 16S., R. 17E., sec. 36, NE1/4, SW1/4, W1/2SE1/4, SE1/4SE1/4	056-180-005-000	Imperial County
Project site	T. 16S., R. 17E., sec. 36, SE1/4NE1/4	056-180-006-000	Imperial County
Project site	T. 16S., R. 17E., Sec. 36, W1/2NW1/4	056-180-013-000	Imperial County
Project site	T. 16S., R. 17E., sec. 36, E1/2NW1/4, NW1/4NW1/4	056-180-014-000	Imperial County
Project site	T. 16S., R. 17E., sec. 36, NE1/4SE1/4	056-180-015-000	Imperial County
BAAH switchyard	T. 16S., R. 17E., sec. 34 NE1/4SW1/4, NW1/4SE1/4	056-170-025-000	BLM
500 kV loop-in transmission lines	T. 16S., R. 17E., sec. 34, SE1/4SW1/4, SW1/4SE1/4	056-170-024-000	BLM
500 kV loop-in transmission lines	T. 16S., R. 17E., sec. 34, E1/2SW1/4, W1/2SE1/4	056-170-025-0000	BLM
500 kV loop-in transmission lines	T. 17S., R. 17E., sec. 2, NW1/4, N1/2SW1/4	059-310-011-000	BOR

Note: APNs 056-180-008-000 and 056-180-016-000 are not a part of the Project.

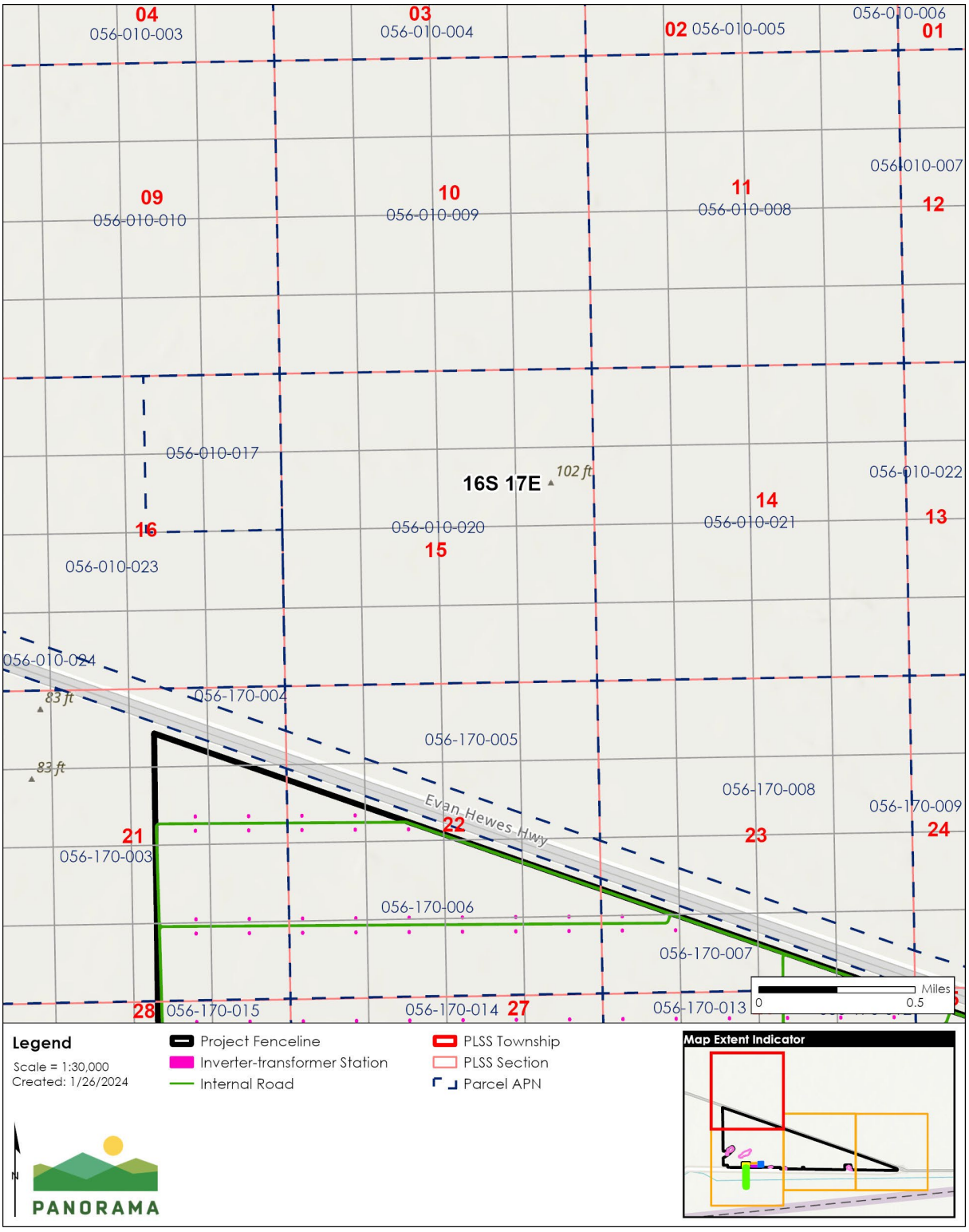
Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b) (BLM, California State Office 2023) (Intersect Power 2024)

Figure 1 PLSS Mapbook Overview



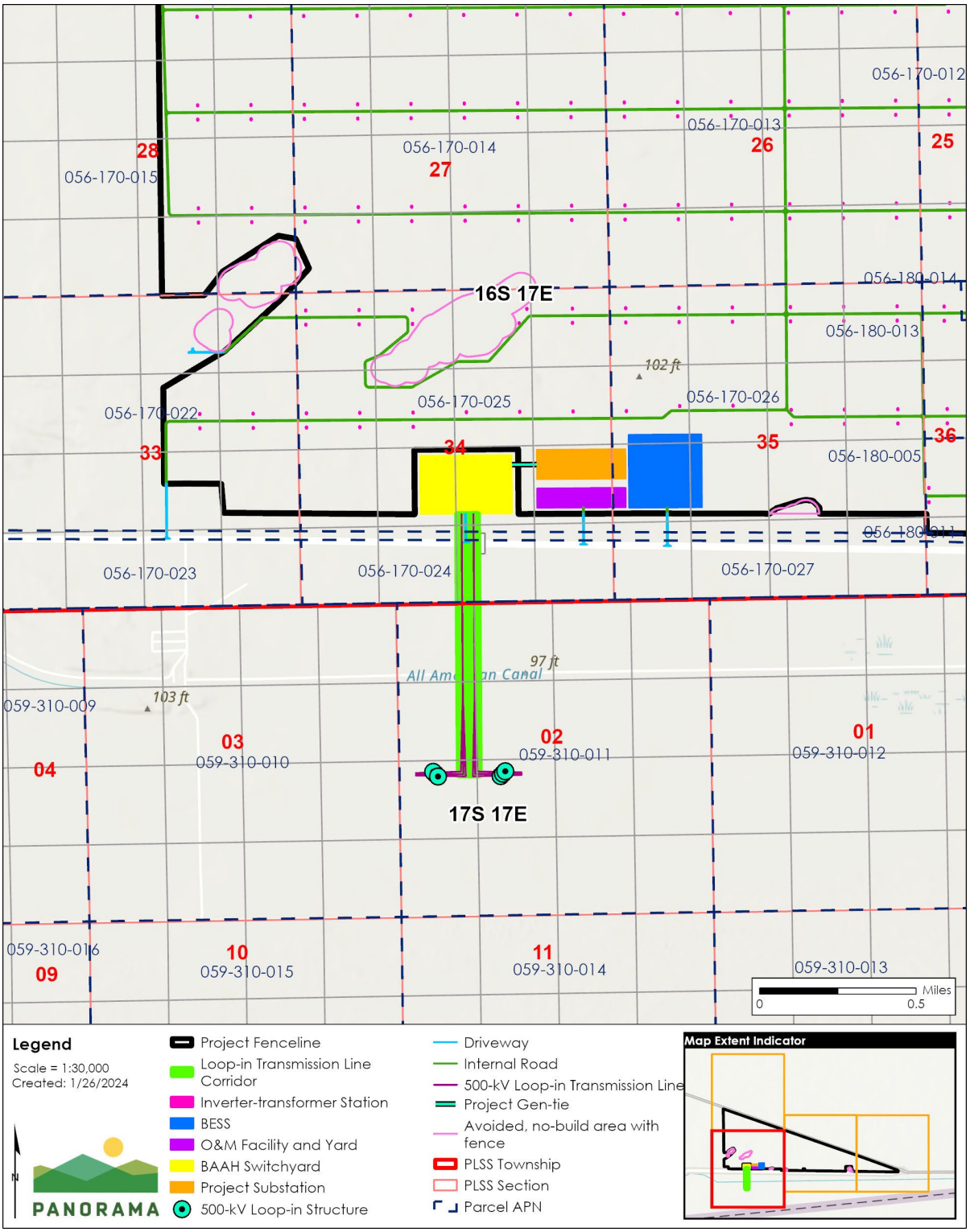
Source: (Intersect Power 2023)

Figure 2 PLSS Mapbook Sheet 1



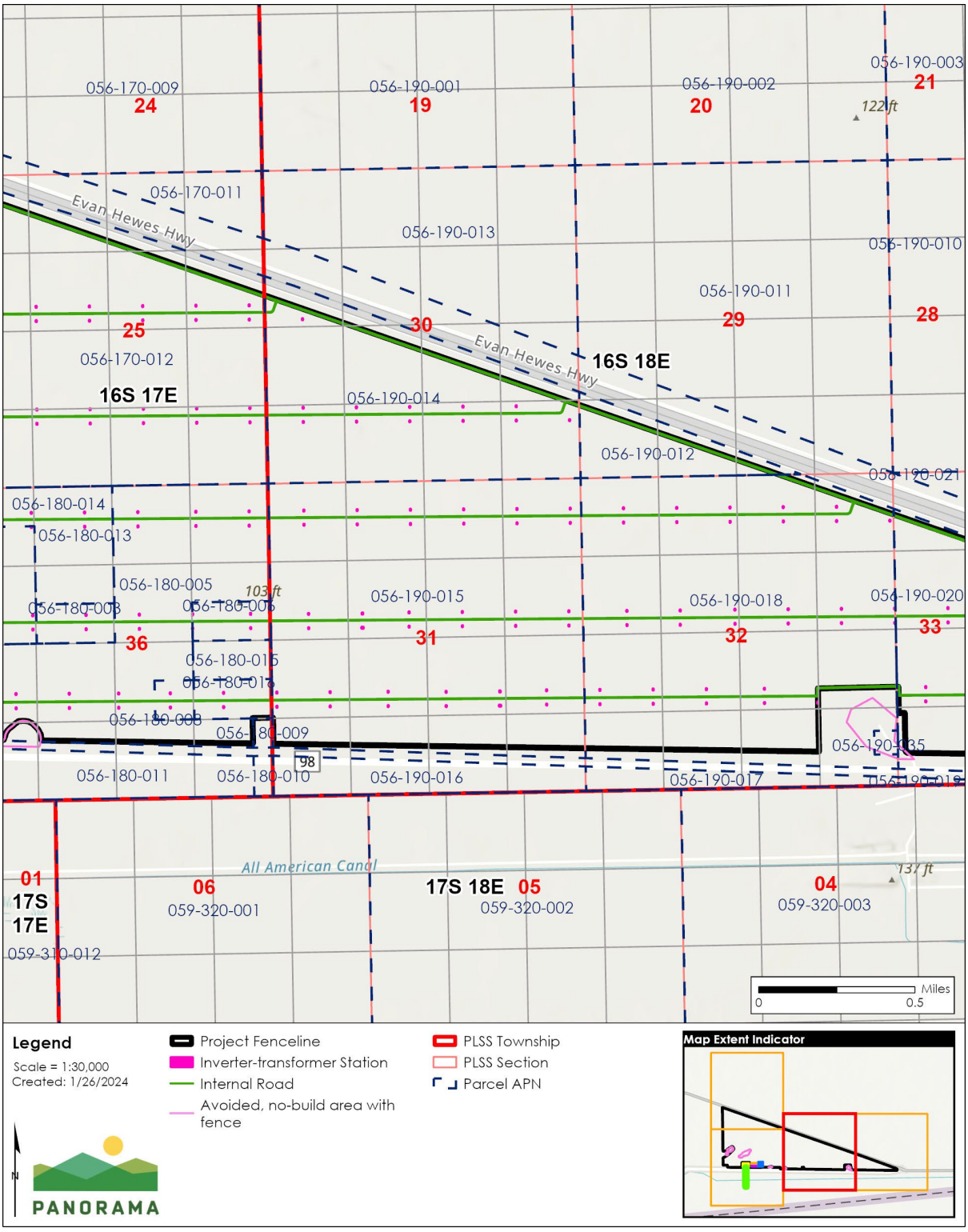
Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b)

Figure 3 PLSS Mapbook Sheet 2



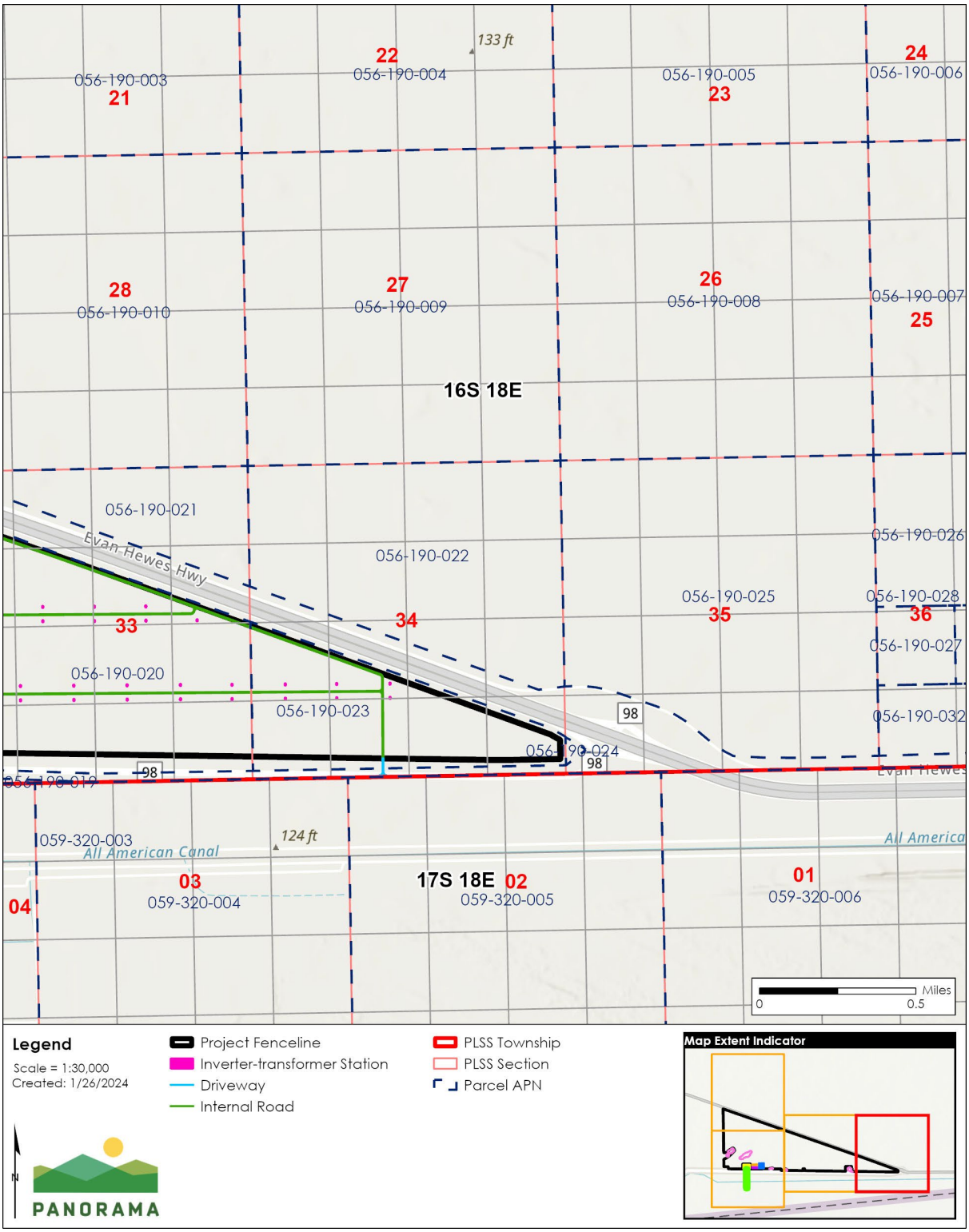
Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b)

Figure 4 PLSS Mapbook Sheet 3



Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b)

Figure 5 PLSS Mapbook Sheet 4



Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b)

Appendix A.2 Existing Authorizations and Leaseholders on BLM Lands

Existing Authorizations and Leaseholders on BLM Land

The existing authorizations and leaseholders within approximately two miles of the Project Application Area are listed in Table 2 and presented in Figure 6, Figure 7, Figure 8, Figure 9, Figure 10, and Figure 11.

Table 2 Existing Authorizations and Leaseholders on BLM Land

Authorizations/ leaseholders and Serial Number	Public Land Survey System	APN(s)	Overlap with Project?	Land manager
AT&T: communication site (CACA 057033)	T. 16S., R. 18E., sec. 32, SE1/4SE1/4.	056-190-018-000	No	Imperial County
BOR: irrigation facility (All-American Canal) distribution line (CALA 0077775)	T. 16S., R. 17E., secs. 33 thru 35.	056-180-010-000, 056-190-016-000, 056-190-017-000, 056-190-018-000, 056-190-019-000, 056-190-020-000, 059-310-001-000	No	BOR
California Department of Public Works: Federal Highway Administration, Highway 98 (CALA 0052461)	T. 16S., R. 17E., sec. 33, S1/2SW1/4, S1/2SE1/4; sec. 34, S1/2SW1/4, S1/2SE1/4; sec. 35, S1/2SW1/4, S1/2SE1/4; sec. 36, S1/2SW1/4, S1/2SE1/4; T. 16S., R. 18E., sec. 31, S1/2SW1/4, S1/2SE1/4; sec. 32, S1/2SW1/4, S1/2SE1/4; sec. 33, S1/2SW1/4, S1/2SE1/4; sec. 34, S1/2SW1/4, S1/2SE1/4.	Not applicable	No	BLM/BOR

California Department of Transportation: Federal Aid Highway, Interstate 8 (I-8) (CARI 0007237)	T. 16S., R. 17E., sec. 21, N1/2NE1/4, NE1/4NW1/4, SE1/4NE1/4; sec. 22, S1/2NE1/4, W1/2NW1/4, SE1/4NW1/4, N1/2SE1/4; sec. 23, N1/2SW1/4, SE1/4SW1/4, S1/2SE1/4; sec. 25, NE1/4, N1/2NW1/4; sec. 26, NE1/4NE1/4NE1/4; T. 16S., R. 18E., sec. 29, S1/2SW1/4; sec. 30, S1/2NW1/4, NE1/4SW1/4, N1/2SE1/4; sec. 32, N1/2NE1/4; sec. 33 N1/2NW1/4, SE1/4NW1/4, S1/2NE1/4; sec. 34, N1/2SW1/4, SE1/4.	Not applicable	No	BLM/BOR
Imperial Irrigation District (IID): road (CACA 048645)	T. 16S., R. 17E., sec. 33, SW1/4SE1/4	056-170-023-000, 059-310-010-000	No	BLM/BOR
IID: 161 kV transmission line (CARI 000140)	T. 16S., R. 17E., sec. 33, S1/2	056-170-022-000, 056-170-023-000	No	BLM/BOR
IID: 92 kV transmission lines and distribution line (unknown serial number)	T. 16S., R. 17E., sec. 21, NE1/4NW1/4, SE1/4NW1/4, NE1/4SW1/4, SE1/4SW1/4; sec. 28, NE1/4NW1/4, SE1/4NW1/4, NE1/4SW1/4, SE1/4SW1/4; sec. 33, NE1/4NW1/4, SE1/4NW1/4, NE1/4SW1/4, SE1/4SW1/4; T. 17S., R. 18E., sec. 3, N1/2NW1/4.	056-170-003-000, 056-170-015-000, 056-170-022-000, 056-170-023-000, 059-310-010-000.	No	BLM/BOR

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Level Three Communications: Fiber optic line (CACA 041192)	T. 16S., R. 17E., sec. 21, NE1/4NW1/4, SE1/4NW1/4, NE1/4SW1/4, SE1/4SW1/4; sec. 28, NE1/4NW1/4, SE1/4NW1/4, NE1/4SW1/4, SE1/4SW1/4; sec. 33, NE1/4NW1/4, SE1/4NW1/4, NE1/4SW1/4, SE1/4SW1/4; T. 17S., R. 18E., sec. 3, N1/2NW1/4.	056-170-003-000, 056-170-015-000, 056-170-022-000, 056-170-023-000, 059-310-010-000.	No	BLM/BOR
SW Trans Partners LLC: Transmission Line Proposal (on hold) (CACA 051575)[a]	T. 16S., R. 17E., sec. 21, 28, and 33.	056-170-003-000, 056-170-015-000, 056-170-022-000, 056-170-023-000.	No	BLM
Union Pacific Railroad: communication facility (CACA 042127)	T. 16S., R. 18E., Sec. 32, SE1/4SE1/4.	056-190-018-000	No	Imperial County
BLM: known geothermal resource area designation (CACA 017574)[a]	T. 16S., R. 17E., secs 21 thru 23, 25 thru 28; T. 16S., R. 18E., secs 29 and 30; sec 31, lots 3 and 4, E1/2NW1/4; secs 32 thru 34.	056-170-003-000, 056-170-006-000, 056-170-007-000, 056-170-012-000, 056-170-013-000, 056-170-014-000, 056-170-015-000, 056-190-011-000, 056-190-012-000. 056-190-014-000, 056-190-015-000, 056-190-018-000, 056-190-020-000, 056-190-021-000, 056-190-022-000, 056-190-023-000, 056-190-035-000.	Yes	BLM/BOR

BLM: withdrawal for solar development (CACA 050951)[a]	T. 16S., R. 17E., secs. 21 thru 23, 25 thru 28, 33 thru 35; T. 16S., R. 18E., secs. 29 and 30, sec. 31 lot 3, NE1/4, NE1/4NW1/4, SE1/4SW1/4, S1/2SE1/4; sec. 32, S1/2SW1/4, S1/2SE1/2, NW1/4SW1/4, N1/2NW1/4, POR of N1/2NE1/4 south of I-8; sec. 33, POR of N1/2 North and South of I-8 ROW, N1/2SE1/4; sec. 34, POR of N1/2SW1/4 North and South of I-8 ROW, POR of NW1/4SE1/4 North and South of I-8 ROW.	056-170-003-000, 056-170-004-000, 056-170-005-000, 056-170-006-000, 056-170-007-000, 056-170-008-000, 056-170-011-000, 056-170-012-000, 056-170-013-000, 056-170-014-000, 056-170-015-000, 056-170-022-000, 056-170-023-000, 056-170-024-000, 056-170-025-000, 056-170-026-000, 056-170-027-000, 056-190-011-000, 056-190-012-000, 056-190-013-000, 056-190-014-000, 056-190-015-000, 056-190-016-000, 056-190-017-000, 056-190-018-000, 056-190-020-000, 056-190-021-000, 056-190-022-000, 056-190-023-000.	Yes	BLM
IID: ROW Irrigation District Boundary (CALA 0039762)[a]	T. 16S., R. 17E., secs. 21 thru 23, 25 thru 28, 33 thru 35; T. 16S., R. 18E., secs. 29 thru 34.	056-170-003-000, 056-170-004-000, 056-170-005-000, 056-170-006-000, 056-170-007-000, 056-170-008-000, 056-170-011-000, 056-170-012-000, 056-170-013-000, 056-170-014-000, 056-170-015-000, 056-170-022-000, 056-170-024-000 056-170-025-000, 056-170-026-000, 056-170-027-000, 056-190-011-000, 056-190-012-000, 056-190-013-000, 056-190-014-000, 056-190-015-000, 056-190-016-000, 056-190-017-000, 056-190-018-000, 056-190-020-000, 056-190-021-000, 056-190-022-000, 056-190-023-000, 056-190-035-000.	Yes	BLM/BOR
Pending geothermal lease (CACA 057435)	T. 16S., R. 17E., secs. 24 and 25; T. 16S., R. 18E., secs. 15 and 17 thru 19.	056-170-009-000, 056-170-011-000, 056-170-012-000, 056-190-001-000, 056-020-013-000, 056-020-014-000, 056-020-022-000.	Yes	BLM
Pending geothermal lease (CACA 057437)	T. 16S., 18E., secs. 29 and 31 thru 35	056-190-011-000, 056-190-012-000, 056-190-015-000, 056-190-016-000, 056-190-017-000, 056-190-018-000, 056-190-020-000, 056-190-021-000. 056-190-022-000, 056-190-023-000, 056-190-025-000,	Yes	BLM/BOR

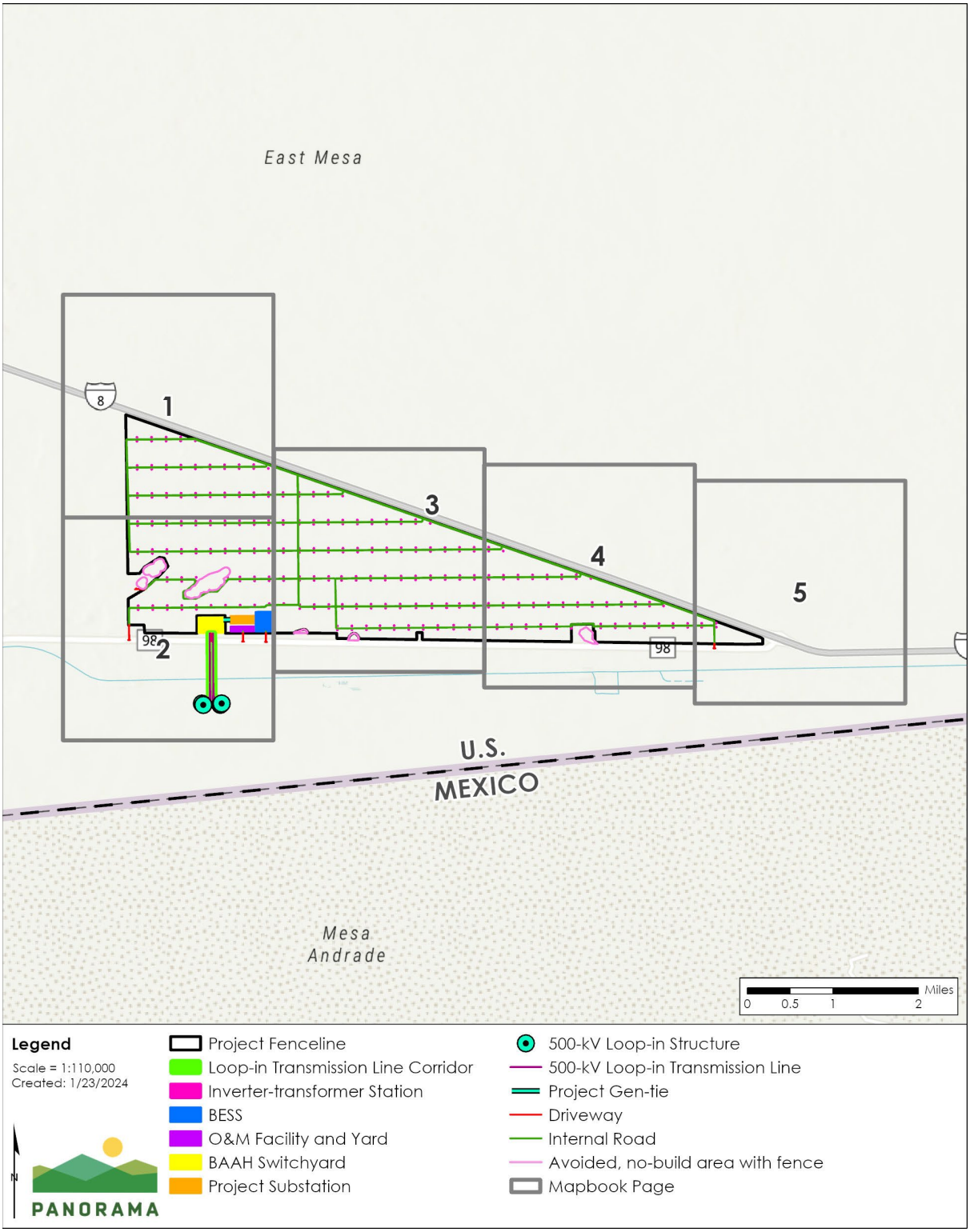
Pending geothermal lease (CACA 059461)	T. 16S., R 17E., secs. 23 thru 27, 35	056-170-007-000, 056-170-008-000, 056-170-009-000, 056-170-011-000, 056-170-012-000, 056-170-013-000, 056-170-014-000, 056-170-026-000, 056-170-027-000.	Yes	BLM
Pending Geothermal lease (CACA 059462)	T. 16S., R. 17E., secs. 20 thru 22, 28, 29, 33 and 34	056-170-002-000, 056-170-003-000, 056-170-004-000, 056-170-005-000, 056-170-006-000, 056-170-015-000, 056-170-016-000, 056-170-022-000, 056-170-023-000, 056-170-024-000, 056-170-025-000.	Yes	BLM

Note:

[a] The authorization or lease holder is not shown on Figure 6 through 11.

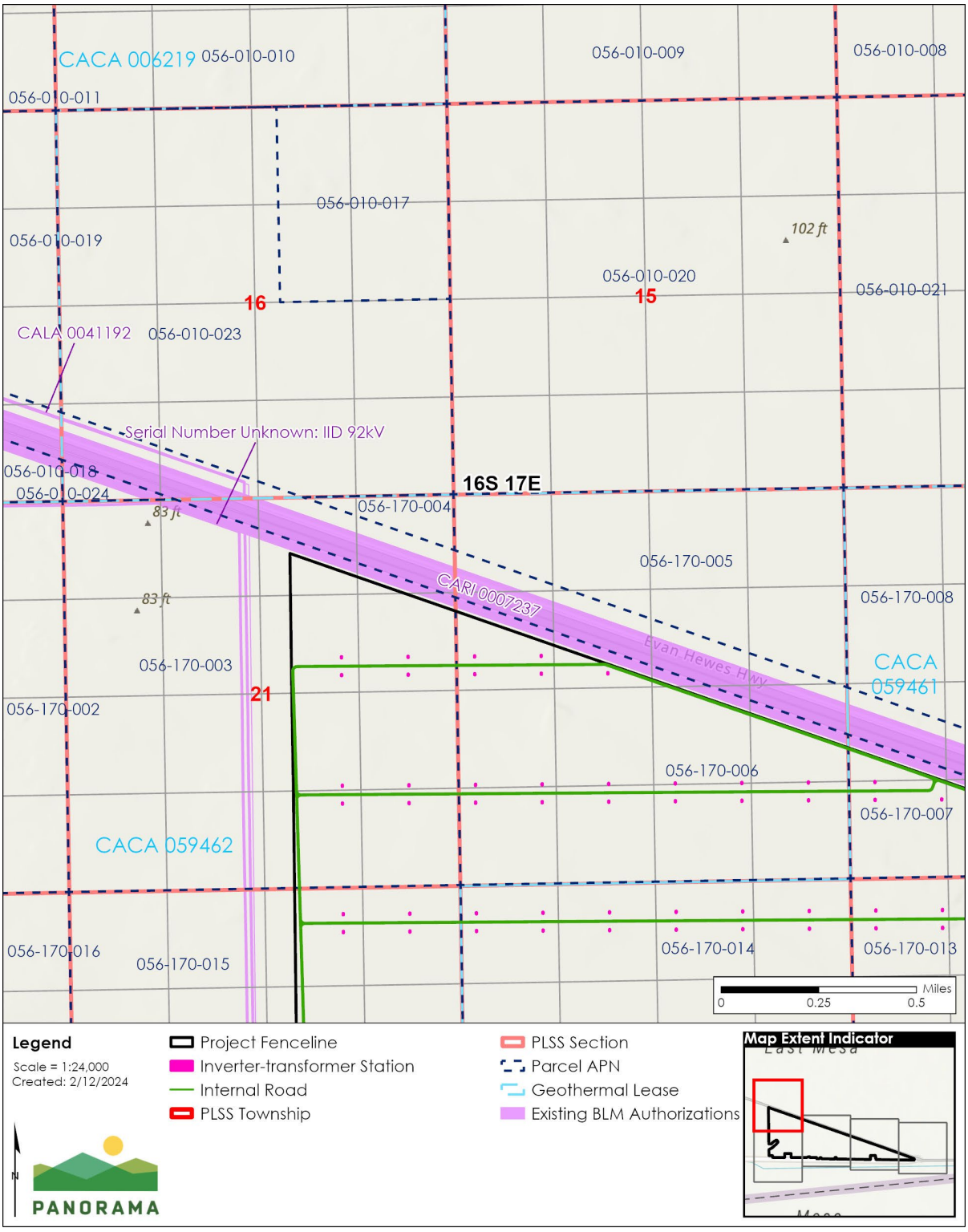
Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b) (BLM, California State Office 2023) (Intersect Power 2024)

Figure 6 Authorizations and Leaseholders on BLM Lands Mapbook Overview



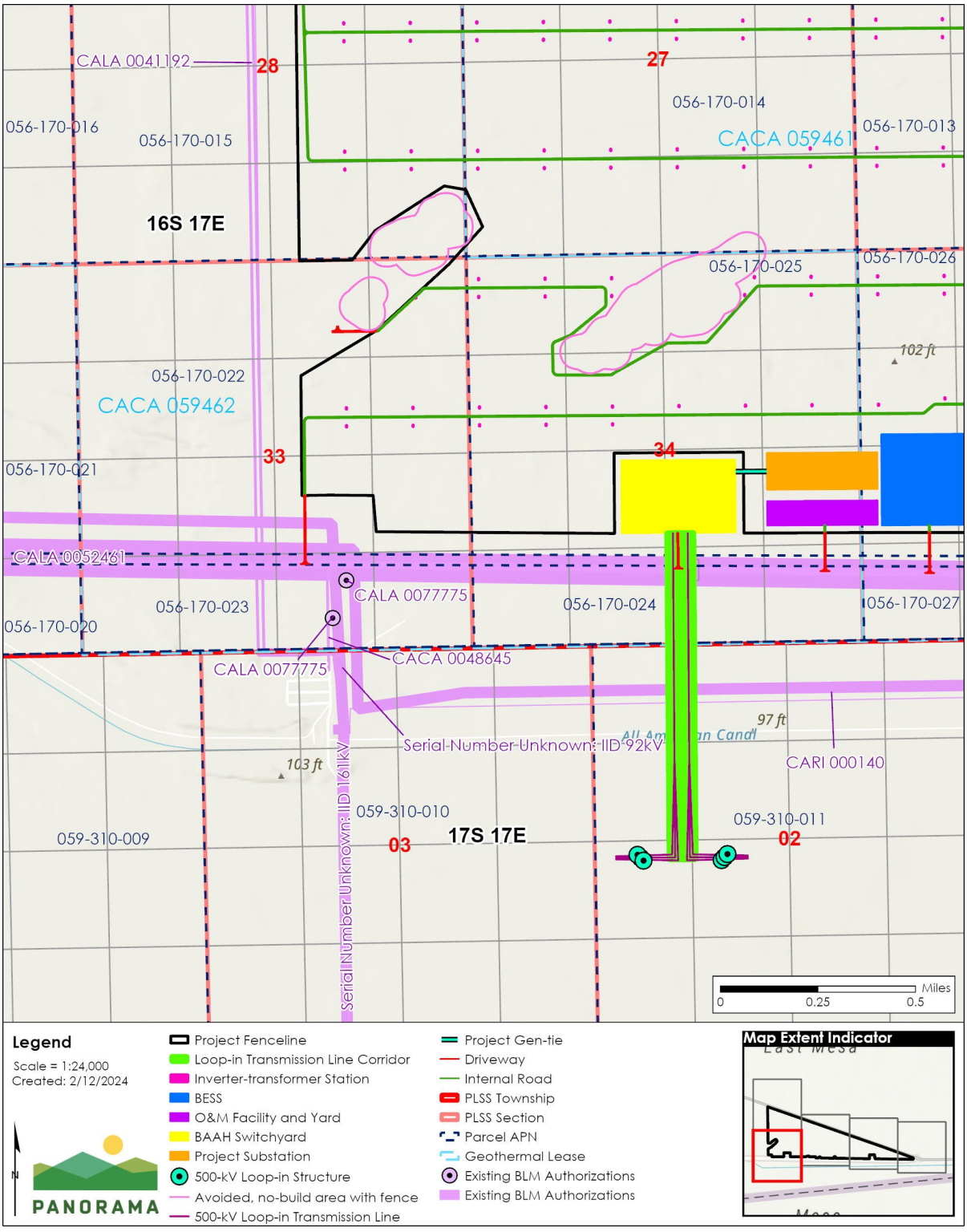
Source: (Intersect Power 2023)

Figure 7 Authorizations and Leaseholders on BLM Lands Mapbook Sheet 1



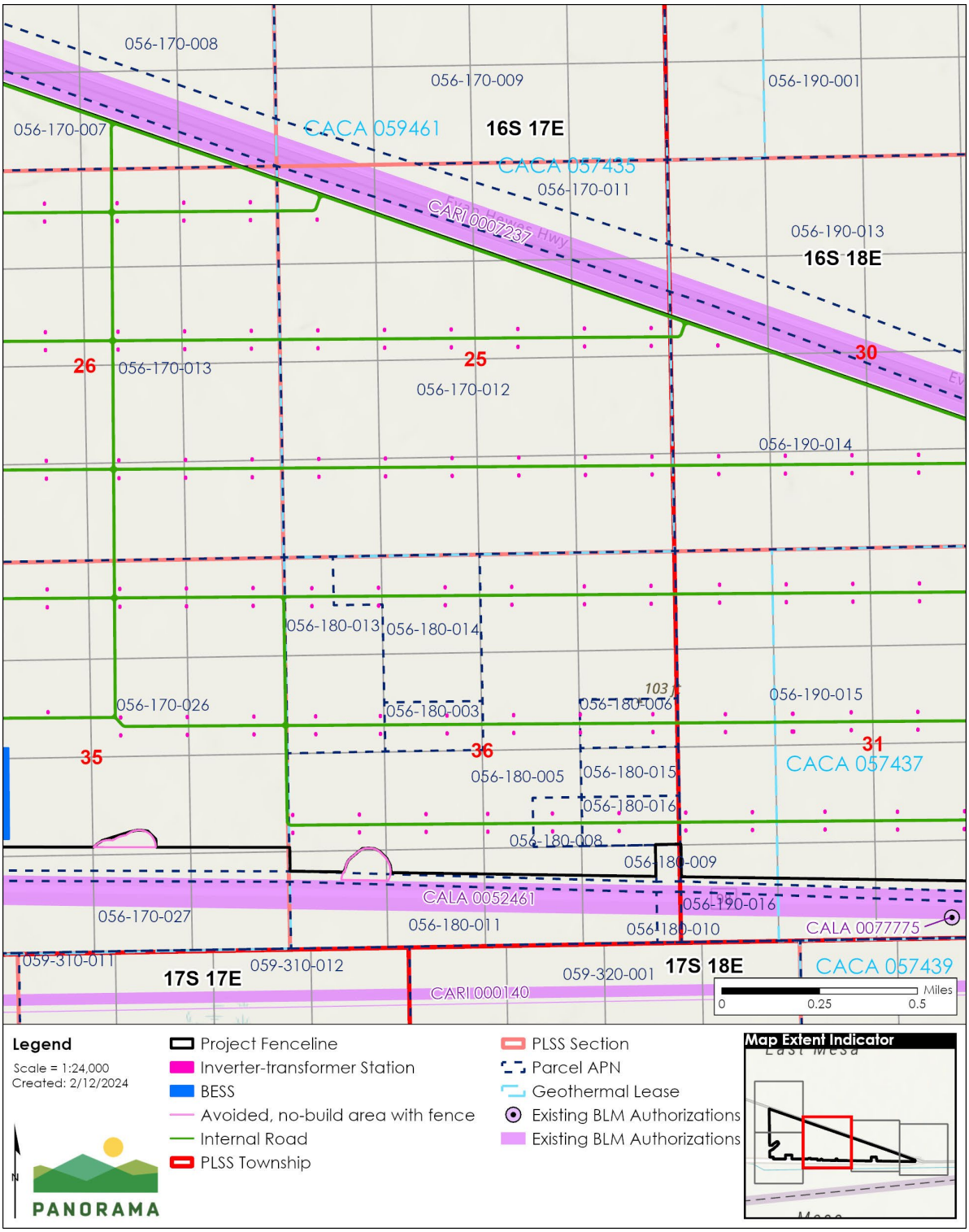
Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b) (BLM, California State Office 2023) (Intersect Power 2024)

Figure 8 Authorizations and Leaseholders on BLM Lands Mapbook Sheet 2



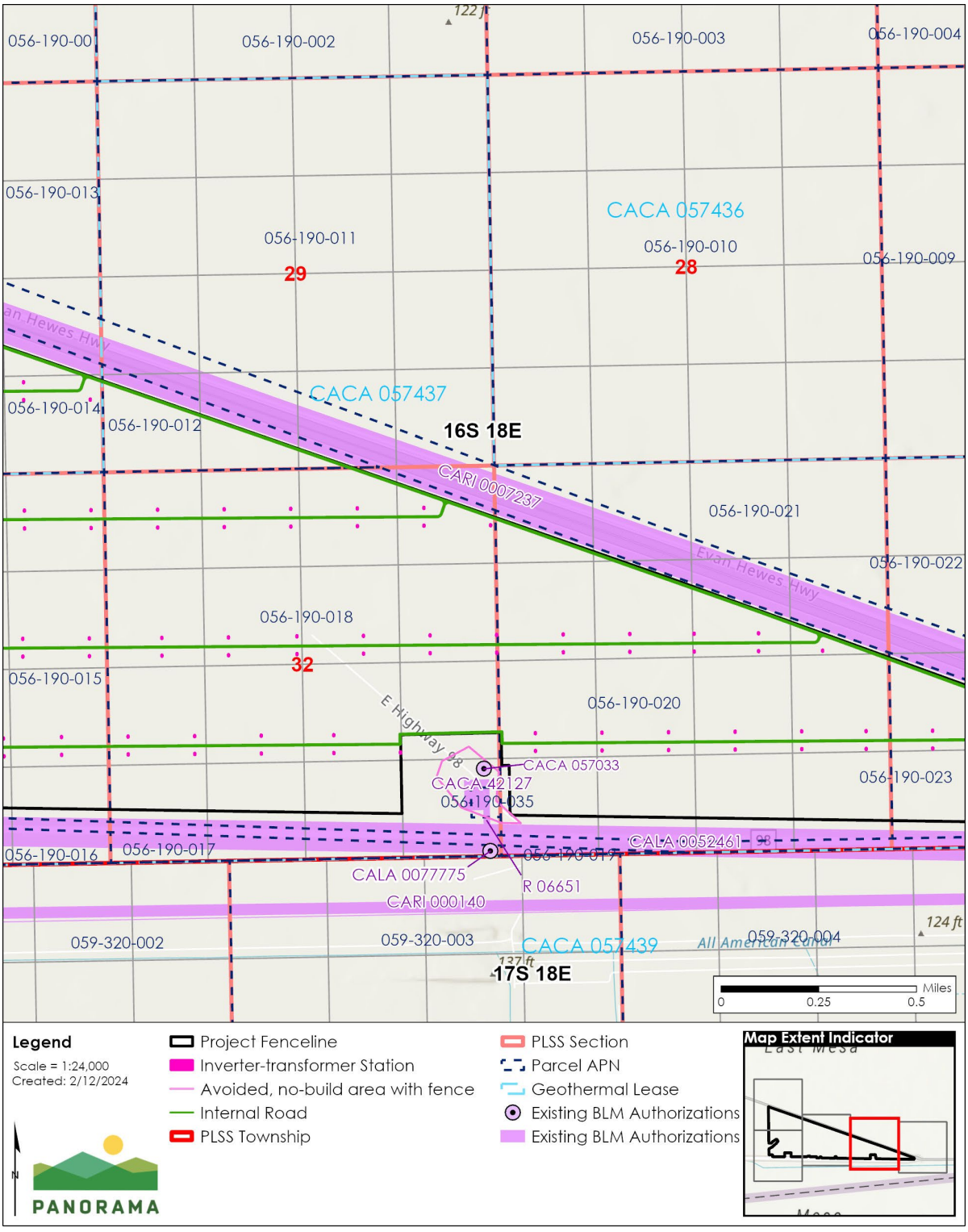
Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b) (BLM, California State Office 2023) (Intersect Power 2024)

Figure 9 Authorizations and Leaseholders on BLM Lands Mapbook Sheet 3



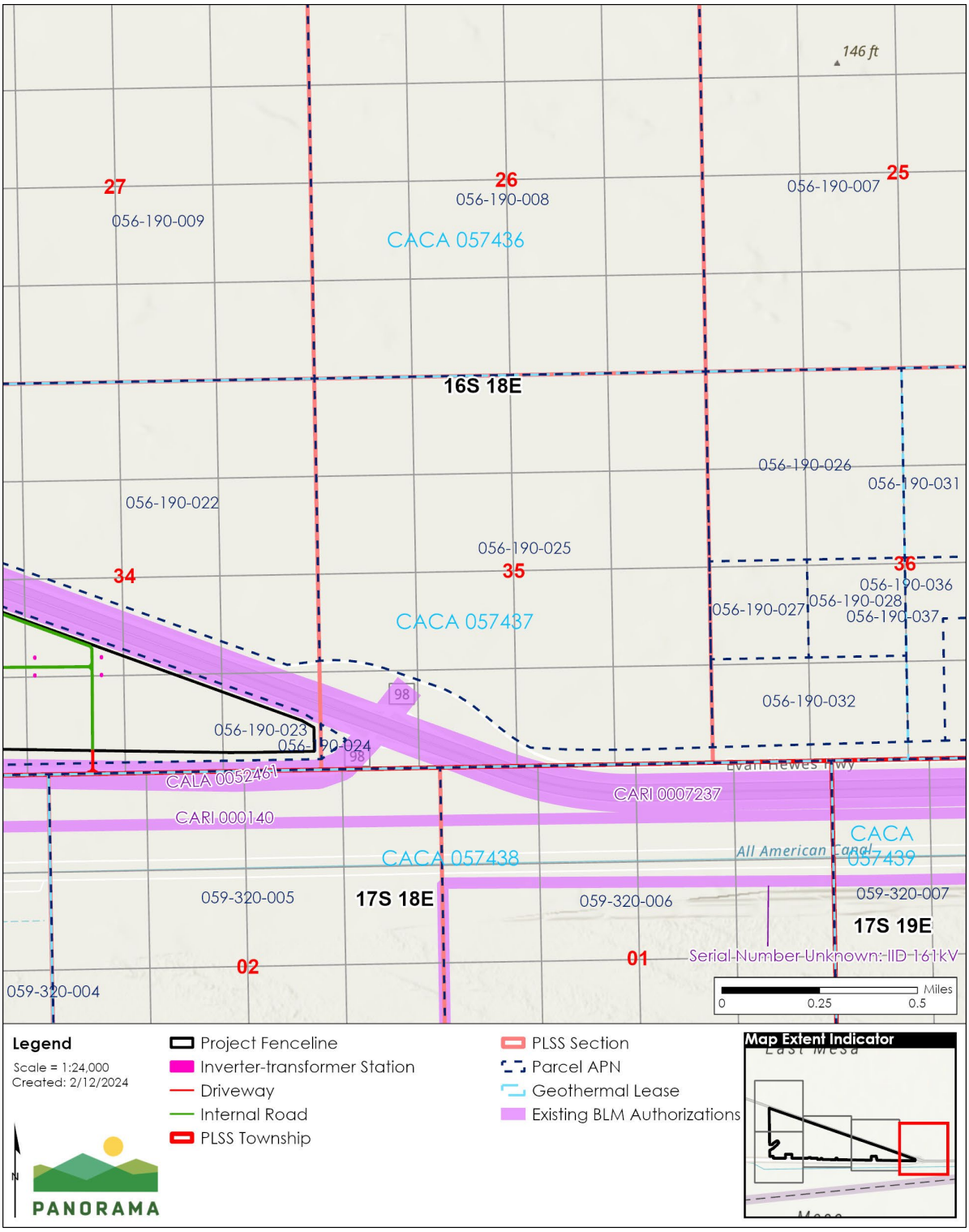
Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b) (BLM, California State Office 2023) (Intersect Power 2024)

Figure 10 Authorizations and Leaseholders on BLM Lands Mapbook Sheet 4



Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b) (BLM, California State Office 2023) (Intersect Power 2024)

Figure 11 Authorizations and Leaseholders on BLM Lands Mapbook Sheet 5



Source: (Intersect Power 2023) (BLM, n.d.) (BLM, n.d.-a) (BLM, n.d.-b) (BLM, California State Office 2023) (Intersect Power 2024)

Appendix B Public Notification Package

Public Notification Package

The current Assessor Parcel Numbers and owners' names and addresses for all parcels within 1,000 feet of the Project Site and BAAH Switchyard, and within 500 feet of the 500 kV loop-in transmission corridors, are listed in Table 1. Maps with the Project Application Area, Assessor Parcel Numbers, the BLM Public Land Survey System, and the 500 and 1,000 foot parcel notification buffers, are presented in Figure 1, Figure 2, Figure 3, Figure 4, and Figure 5.

Table 1 Public Notification Package

Assessor Parcel Number	Owner Name	Owner Address	Proximity to Project	Land manager
056-010-023-000	David B & Kimberly Smith	5480 Copper Canyon Road, Yorba Linda, CA 92887	Within 1,000 feet of Project Site and BAAH switchyard	Imperial County
056-170-003-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-004-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-005-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-006-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-007-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-008-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-009-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-011-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-012-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-013-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-015-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-020-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management

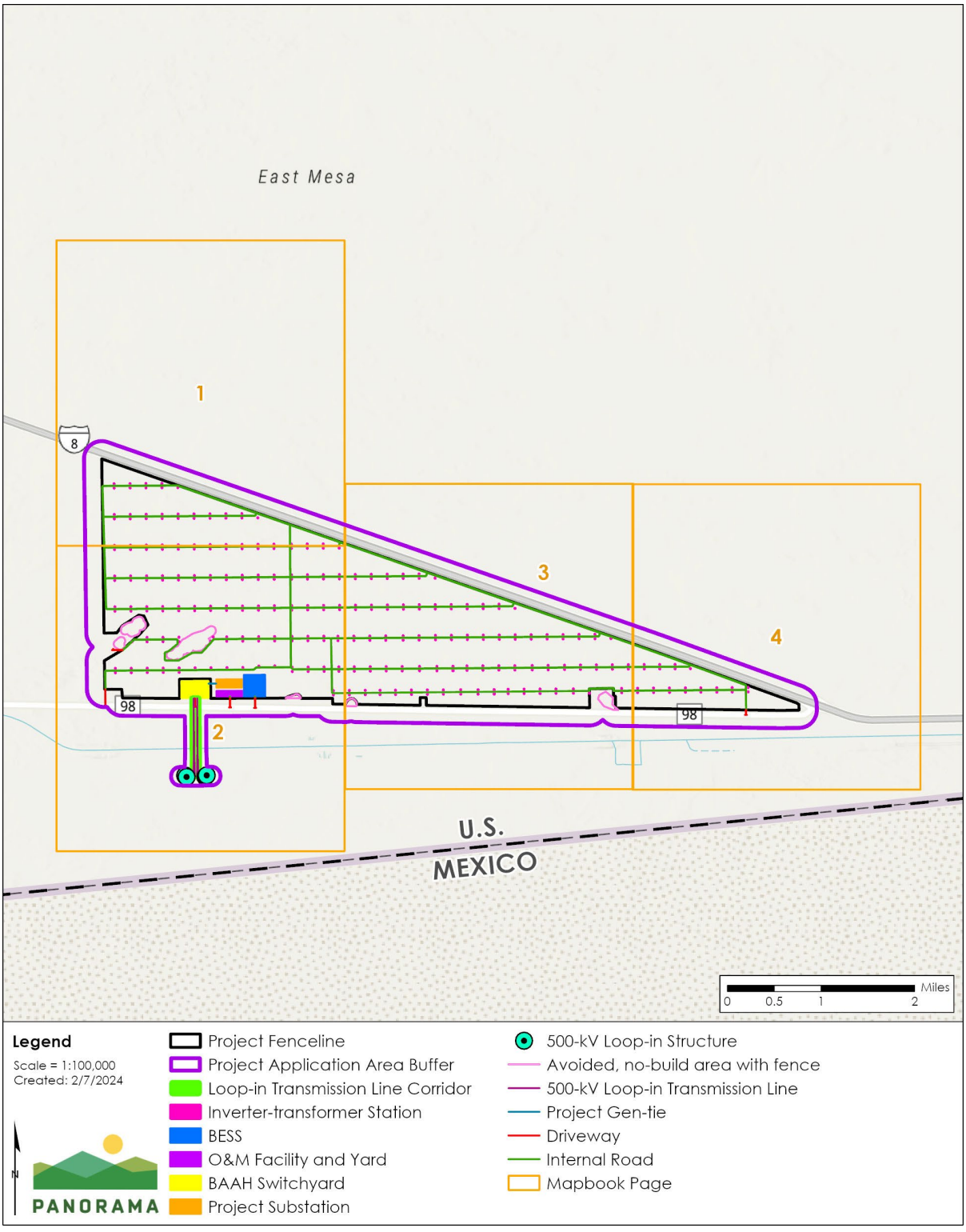
056-170-021-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-022-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-023-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-170-024-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 500 feet of 500 kV loop-in transmission lines	Bureau of Land Management
056-170-025-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 500 feet of 500 kV loop-in transmission lines	Bureau of Land Management
056-180-008-000	Dennis Allen Hanson	575 6th Avenue, San Diego, CA 92101	Within 1,000 feet of Project Site and BAAH switchyard	Imperial County
056-180-009-000	Richard E. Corbaley	53383 Timberview Road, North Fork, CA 93643	Within 1,000 feet of Project Site and BAAH switchyard	Imperial County
056-180-010-000	Richard E. & Lee Ann Corbaley Trust	53383 Timberview Road, North Fork, CA 93643	Within 1,000 feet of Project Site and BAAH switchyard	Imperial County
056-180-011-000	Joseph E. Maggio	2247 Corte Cicuta, Carlsbad, CA 92009	Within 1,000 feet of Project Site and BAAH switchyard	Imperial County
056-180-016-000	Dennis Allen Hanson	575 6th Avenue, San Diego, CA 92101	Within 1,000 feet of Project Site and BAAH switchyard	Imperial County
056-190-010-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-011-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-012-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-013-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-014-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-015-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-016-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-017-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management

056-190-018-000	Bureau of Land Management /Bureau of Reclamation	1661 South 4th Street, El Centro, CA 92243; 7301 Calle Agua Salada, Yuma, AZ 85364	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management /Bureau of Reclamation
056-190-019-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-020-000	Bureau of Land Management /Bureau of Reclamation	1661 South 4th Street, El Centro, CA 92243; 7301 Calle Agua Salada, Yuma, AZ 85364	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management /Bureau of Reclamation
056-190-021-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-022-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-023-000	Bureau of Land Management /Bureau of Reclamation	1661 South 4th Street, El Centro, CA 92243; 7301 Calle Agua Salada, Yuma, AZ 85364	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management /Bureau of Reclamation
056-190-024-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
056-190-025-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
059-310-001-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
059-310-009-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
059-310-010-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
059-310-011-000	Bureau of Reclamation	7301 Calle Agua Salada, Yuma, AZ 85364	Within 500 feet of 500 kV loop-in transmission lines	Bureau of Reclamation
059-310-012-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
059-320-002-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management

059-320-003-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
059-320-004-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management
059-320-005-000	Bureau of Land Management	1661 South 4th Street, El Centro, CA 92243	Within 1,000 feet of Project Site and BAAH switchyard	Bureau of Land Management

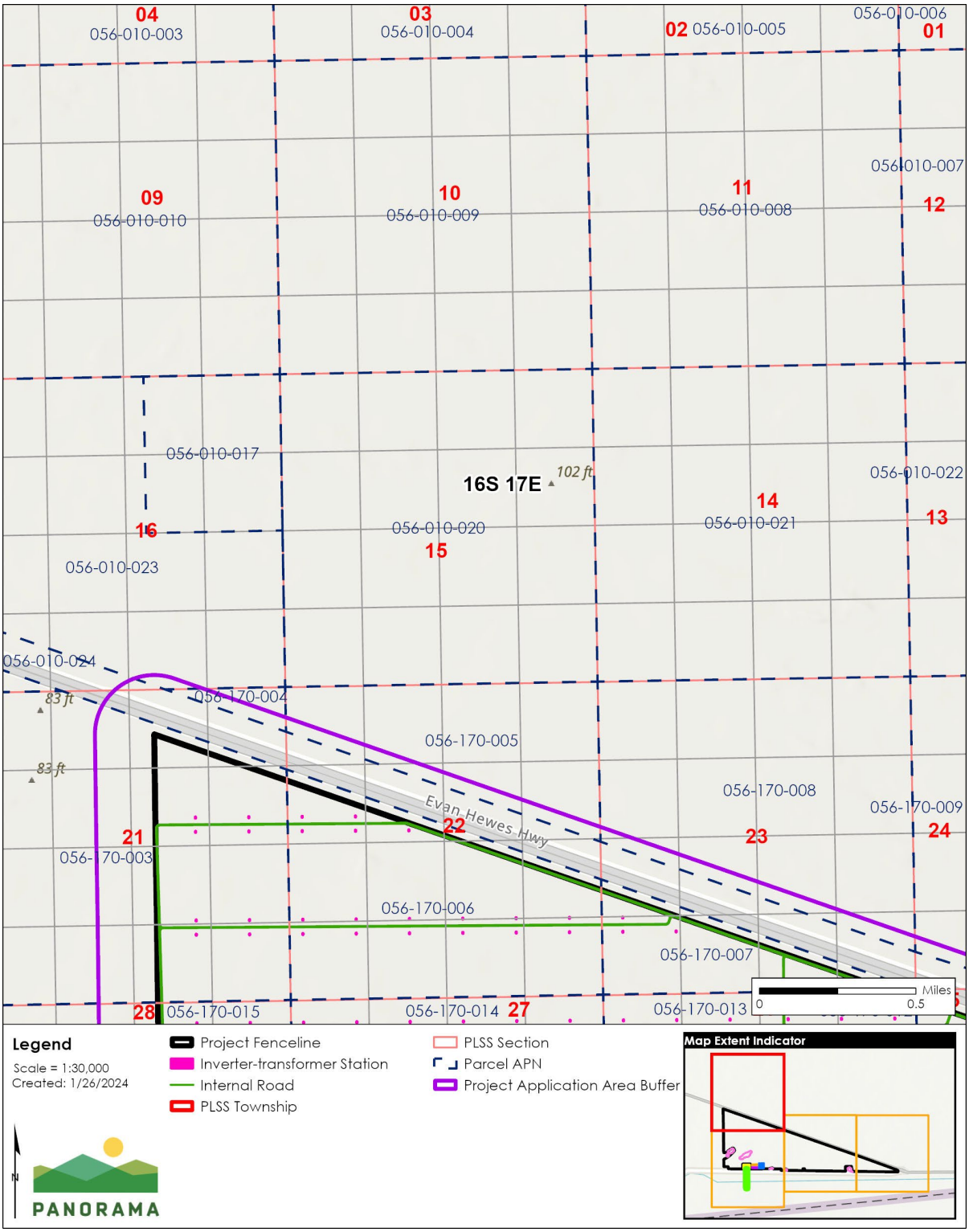
Source: (Intersect Power 2023) (BLM National PLSS Polygons 2023) (Imperial County Planning and Development Services 2019)

Figure 1 Public Notification Mapbook Overview



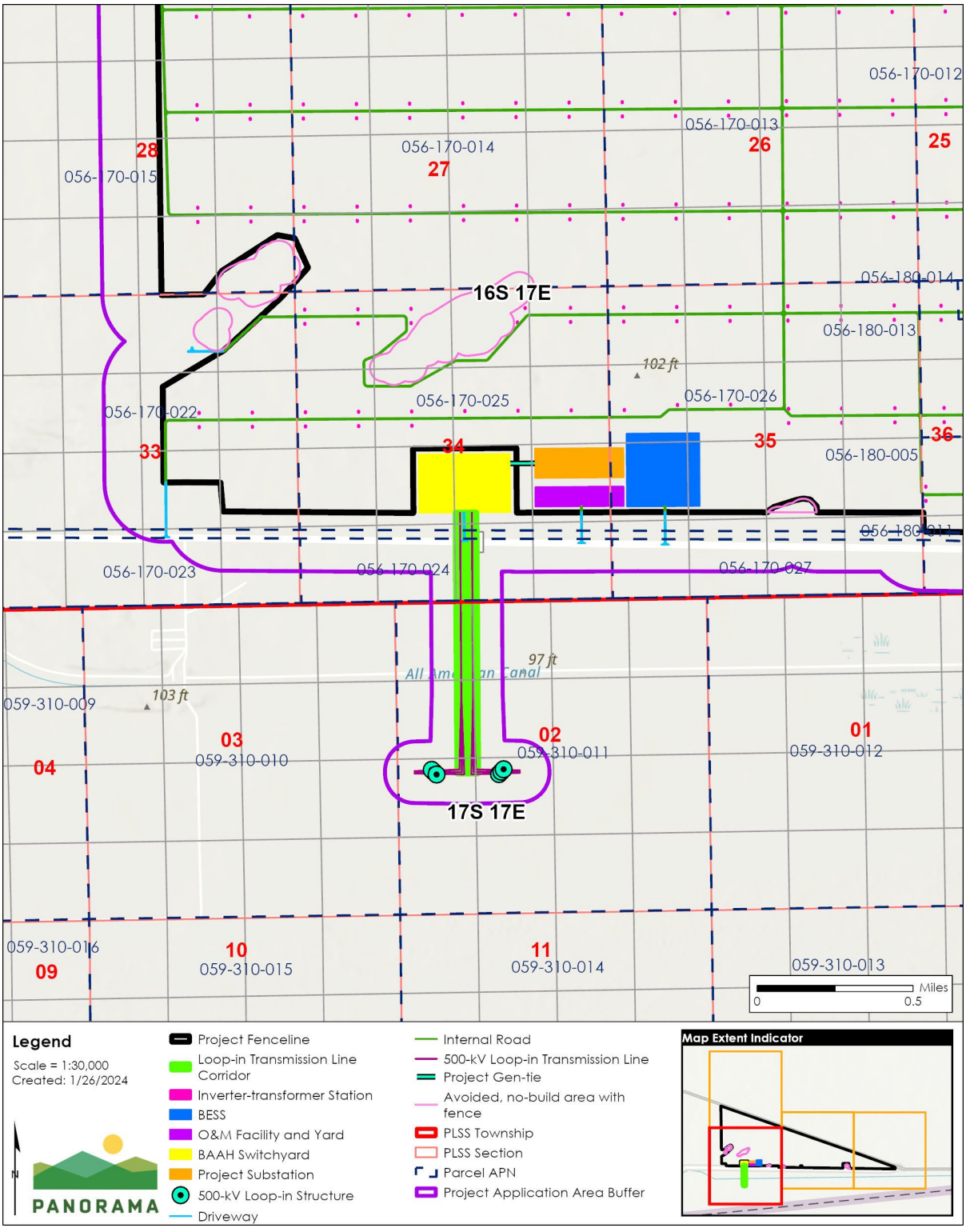
Source: (Intersect Power 2023)

Figure 2 Public Notification Mapbook Sheet 1



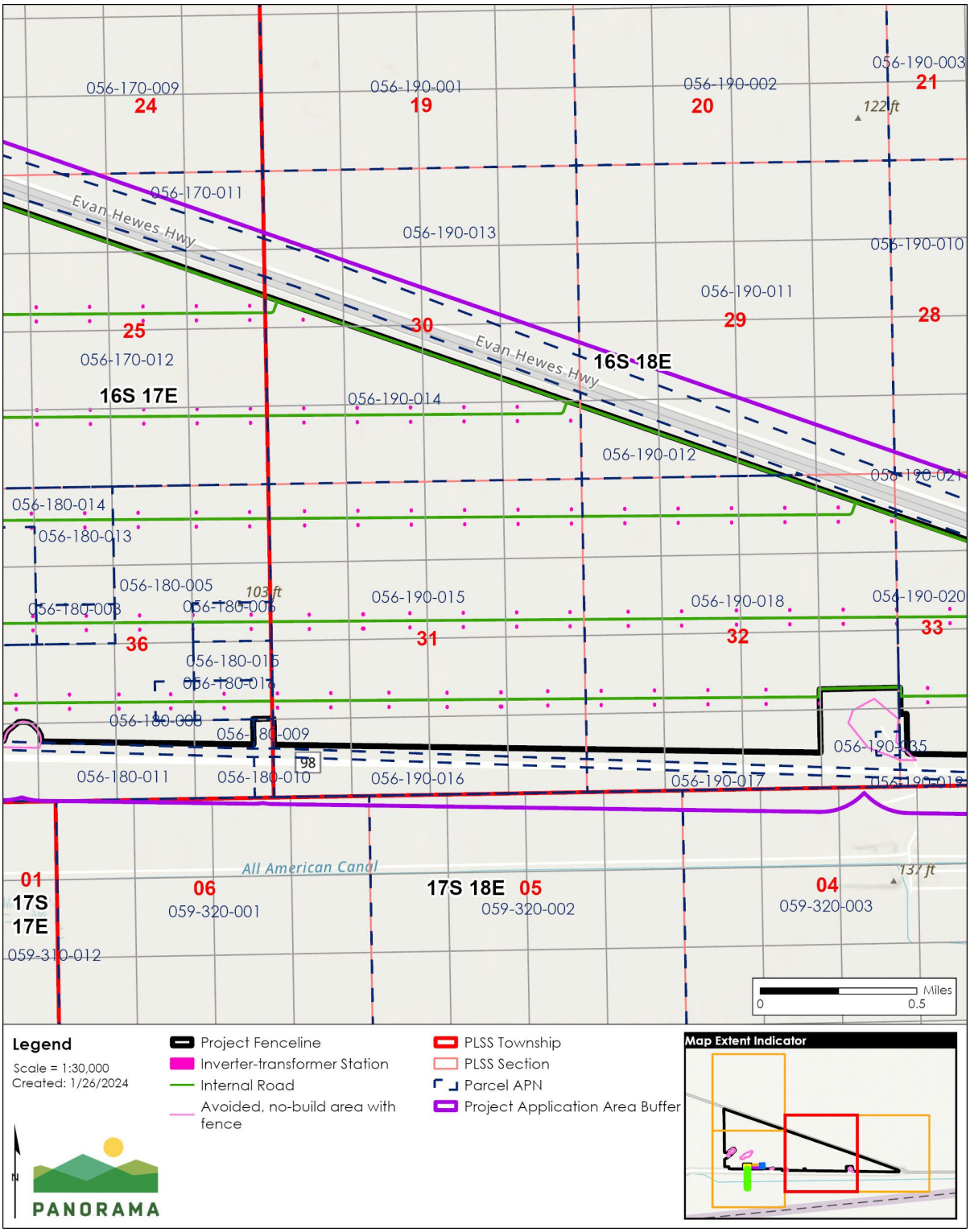
Source: (Intersect Power 2023) (BLM National PLSS Polygons 2023) (Imperial County Planning and Development Services 2019)

Figure 3 Public Notification Mapbook Sheet 2



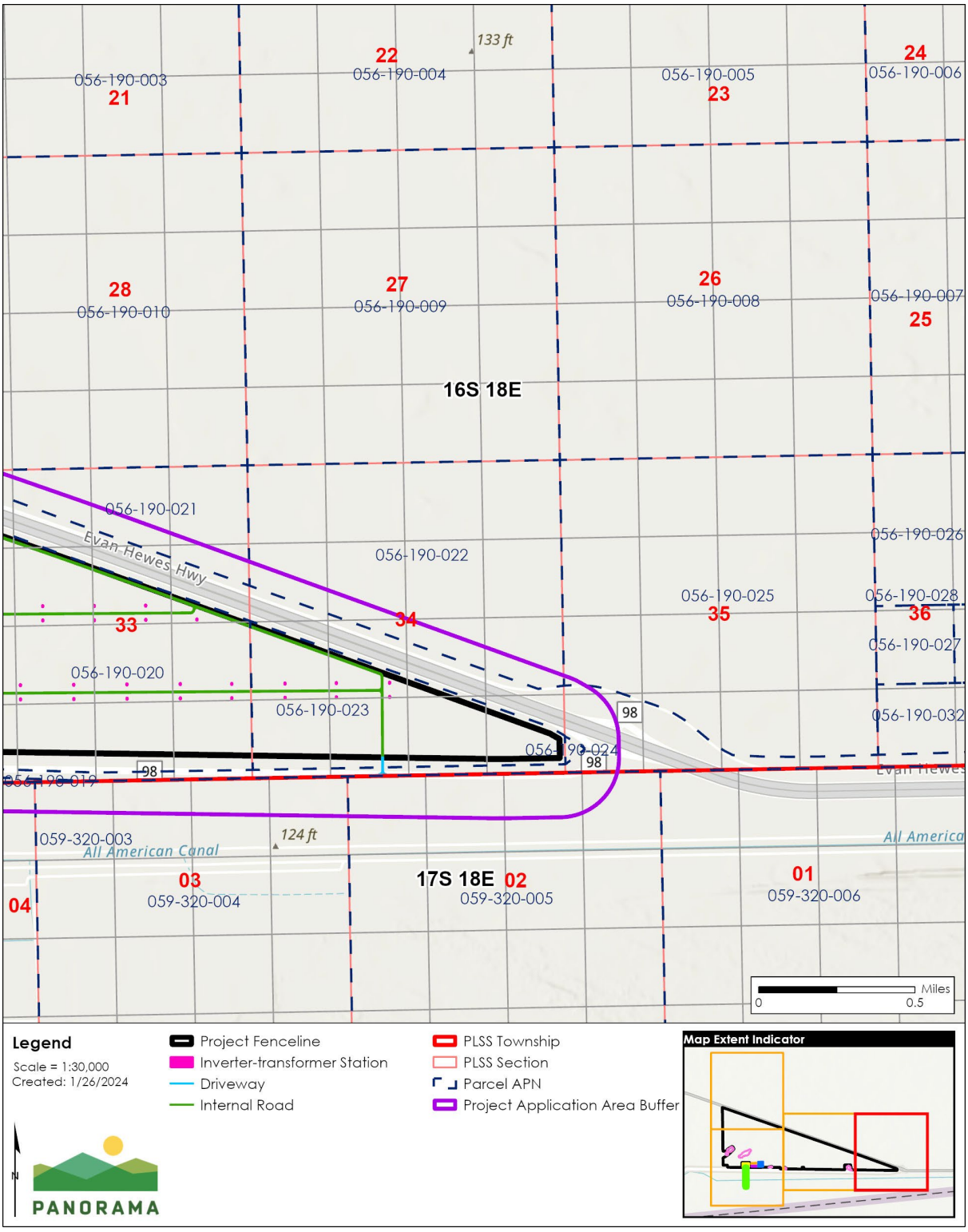
Source: (Intersect Power 2023) (BLM National PLSS Polygons 2023) (Imperial County Planning and Development Services 2019)

Figure 4 Public Notification Mapbook Sheet 3



Source: (Intersect Power 2023) (BLM National PLSS Polygons 2023) (Imperial County Planning and Development Services 2019)

Figure 5 Public Notification Mapbook Sheet 4



Source: (Intersect Power 2023) (BLM National PLSS Polygons 2023) (Imperial County Planning and Development Services 2019)

Appendix C List of Preparers

List of Preparers

Table 1 List of Preparers

Organization	Subject Area	Name
Intersect Power	Project Management/Overall Application Preparation	Camille Wasinger
Panorama Environmental	Project Management/Overall Application Preparation	Susanne Heim, Principal Emilly Capello, Project Manager
	Executive Summary	Sara Sloan, Environmental Planner
	Project Description	Emily Capello, Environmental Planner
	Engineering	Caitlin Gilleran, Environmental Planner
	Facility Design	Caitlin Gilleran, Environmental Planner
	Transmission System Design	Caitlin Gilleran, Environmental Planner
	Transmission System Safety and Nuisance	Caitlin Gilleran, Environmental Planner
	Reliability	Caitlin Gilleran, Environmental Planner
	Efficiency	Caitlin Gilleran, Environmental Planner
	Intro to Environmental Analysis	Sara Sloan, Environmental Planner
	Air Quality	Charlotte Hummer, Environmental Planner
	Biological Resources	Rachel Durben, Environmental Planner
	Geological Hazards and Resources	Anna Buising, Principal Geologist
	Hazardous Materials Handling	Garett Peterson, Environmental Planner
	Land Use	Cassidy Cunningham, Environmental Planner
	Noise	Charlotte Hummer, Environmental Planner
	Public Health	Charlotte Hummer, Environmental Planner
	Socioeconomics	Jenna Savois, Project Manager/Environmental Planner

APPENDIX C

Organization	Subject Area	Name
	Soils	Garett Peterson, Environmental Planner
	Traffic and Transportation	Cate Medlock, Environmental Planner
	Visual Resources and Glare Analysis	Aaron Lui/Sara Sloan, Environmental Planner
	Waste Management	Jenna Savois, Environmental Planner
	Water Resources	Rachel Durben, Environmental Planner
	Wildfire	Garett Peterson, Environmental Planner
	Worker Safety	Garett Peterson, Environmental Planner
	Alternatives	Emily Capello, Project Manager
	GIS and Figures	Caitlin Jensen, GIS Analyst
Chronicle Heritage	Cultural Resources and Tribal Cultural Resources	Heather Clifford/Matt Tennyson/Colin Recksieck – Archeologists
	Paleontological Resources	Heather Clifford/Matt Tennyson/Joy Vyhmeister – Archeologists
Ironwood	Biological Resources Technical Support	Lehong Chow/Mandy Wegmann - Biologists
Dave Evans Associates	Transportation Impact Analysis	
Baseline Environmental Consulting	Air Quality & Greenhouse Gases Technical Report, including Dust Control Protocols	Patrick Sutton, P.E.
Stantec Consulting Services Inc	Phase I ESA	Dion Monge, Senior Scientist Anne Perez, Geologic Associate Kyle Emerson, Managing Principal Geologist
Triple Point Strategic Consulting	Socioeconomics and Environmental Justice	Jeff Moffett, Principal
Terracon	Preliminary Geotechnical Engineering Report	Janna Valdez, Staff Engineer
Westwood	Site Plan	

APPENDIX C

Organization	Subject Area	Name
WRMA	2-D Hydraulic Study Summary Analysis Findings	

Appendix D Best Management Practices, Project Design Features, and DRECP Conservation and Management Actions

Appendix D.1 Best Management Practices, Project Design Features

PRELIMINARY BEST MANAGEMENT PRACTICES AND PROJECT DESIGN FEATURES

Perkins Renewable Energy Project

IP Perkins, LLC
IP Perkins BAAH, LLC
subsidiaries of Intersect Power, LLC

January 2024

CONTENTS

1. INTRODUCTION

1.1. Project Description

Subsidiaries of Intersect Power (IP), IP Perkins, LLC and IP Perkins BAAH, LLC, propose to construct, operate, maintain, and decommission the Perkins Renewable Energy Project (Project), an approximate 500 to 1,150 megawatt (MW) solar PV and battery energy storage facility on BLM and BOR administered public lands, and private lands in Imperial County east of El Centro, California (see Figures 1, and 2 in Appendix A). The Project would deliver clean power to ratepayers in California, minimize environmental impacts and land disturbance associated with solar development, and bring living-wage jobs to Imperial County.

The Project would generate and store 500 to 1,150 MW of renewable electricity via arrays of solar PV panels, a battery energy storage system (BESS), and appurtenant facilities. The final Project capacity will be based on optimization of buildable acreage and solar PV technology at the time of procurement. The Project would construct a new gen-tie line that would connect the project substation(s) to a new high-voltage breaker and a half (BAAH) switchyard. From the BAAH switchyard, two new 500 kV loop-in transmission lines would be constructed to interconnect to the existing SDG&E 500 kV transmission line that travels east-west just south of the Project site, crossing BOR lands and terminating in the Imperial Valley Substation (Substation) southwest of El Centro (see Figure 3 in Appendix A).

Depending upon the timeline of the interconnection agreement, the Project could be operational by as early as late 2027. The project could operate for up to 50 or more years.[1] At the end of its useful life, the Project would be decommissioned. Revegetation would be conducted in accordance with the Decommissioning and Revegetation Plan.

The Project boundary includes 7,324.3 total acres of which approximately 6,050.9 acres would be developed as part of the solar facility (solar PV panels, inverters/transformers, substation, BESS, BAAH, and O&M building). Other areas would be excluded for biological resource protection, utility corridor preservation, and existing development.

1.2. Purpose

These preliminary best management practices (BMPs) and Project design features are associated with the siting and design, construction, operation and maintenance, and decommissioning of the Perkins Renewable Energy Project (Project), and are subject to change as the Project proceeds through the permitting process. BMPs are state-of-the-art mitigation measures applied on a site-specific basis to avoid, minimize, reduce, rectify, or compensate for adverse environmental or social impacts. They are selectively applied to aid in achieving desired outcomes for safe, environmentally responsible development, by preventing, minimizing, or mitigating adverse impacts and reducing conflicts. Design features are requirements that must be incorporated into Project-specific plans and implemented by the contractor team. In general, the design features are accepted practices that are known to be effective when implemented properly.

2. BEST MANAGEMENT PRACTICES

[1] The BLM ROW Grant would be issued for an initial period of 30 years with the provision of renewal.

Table 2 provides Best Management Practices that would be incorporated into the Perkins Renewable Energy Project during all phases of the Project.

Table 2. Best Management Practices

No.	Topic	Description of Measures	Phase*
Air Quality			
1	Emissions	Vehicle use shall be reduced to the extent feasible. Carpooling will be used to reduce the amount of daily vehicle trips to the project site. The project will comply with LUPA-AIR-3.	C, O, D
2	Emissions	Idling of diesel equipment shall be limited to no more than 5 minutes unless idling must be maintained for proper operation (e.g., drilling, hoisting, and trenching). The project will comply with LUPA-AIR-3.	C, O, D
3	Emissions	Consider using electric vehicles, biodiesel, or alternative fuels during construction and operation phases to reduce the project's criteria and GHG pollutant emissions. The project will comply with LUPA-AIR-3.	C, O, D
4	Fugitive Dust	Workers shall be trained to comply with the speed limit, use good engineering practices, minimize drop height of materials, and minimize disturbed areas. The project will comply with LUPA-AIR-5.	C, O, D
5	Fugitive Dust	Construction shall be staged to limit the exposed area at any time, whenever practical. The project will comply with LUPA-AIR-5.	C, O, D
6	Fugitive Dust	Access to the construction site and staging areas shall be limited to authorized vehicles only through the designated treated roads. The project will comply with LUPA-AIR-5.	C, O, D
7	Fugitive Dust	Access roads, on-site roads, and parking lots shall be surfaced with aggregate with hardness sufficient to prevent vehicles from crushing the aggregate and thus causing dust or compacted soil conditions. Paving could also be used on access roads and parking lots. Alternatively, chemical dust suppressants (calcium chloride, FSB-100, Plas-Tex, Soil Sement, SRB-1000, etc.)) or durable polymeric soil stabilizers shall be used on these locations (e.g. Gorilla-Snot, Soiltac, or Earthguard pellets).. The project will comply with LUPA-AIR-5.	C, O, D
8	Fugitive Dust	All unpaved roads, disturbed areas (e.g., areas of scraping, excavation, backfilling, grading, and compacting), and loose materials generated during project activities shall be watered as frequently as necessary to minimize fugitive dust generation. In water-deprived locations, water spraying shall be limited to active disturbance areas only and non-water-based dust control measures shall be implemented in areas with intermittent or non-heavy use, such as stockpiles or access roads. The project will comply with LUPA-AIR-5.	C, O, D
9	Fugitive Dust	Speed limits (e.g., 15 mph) within the construction site shall be posted with visible signs and enforced to minimize airborne fugitive dust. The project will comply with LUPA-AIR-5.	C, D
10	Fugitive Dust	All vehicles transporting loose materials traveling on public roads shall be covered, and loads shall be sufficiently wet and kept below the freeboard of the truck. The project will comply with LUPA-AIR-5.	C, O, D
11	Fugitive Dust	Tires of all construction-related vehicles shall be inspected and cleaned as necessary to be free of dirt prior to entering paved public roadways. The project will comply with LUPA-AIR-5.	C, D
12	Fugitive Dust	Visible track-out or runoff dirt on public roadways from the construction site shall be cleaned (e.g., through street vacuum sweeping). The project will comply with LUPA-AIR-5.	C, D

No.	Topic	Description of Measures	Phase*
13	Fugitive Dust	Use wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) where soils are disturbed in construction, access and maintenance routes, and materials stockpile areas. Keep related windbreaks in place until the soil is stabilized or permanently covered with vegetation. The project will comply with LUPA-AIR-5.	C, O, D
14	Fugitive Dust	All soil disturbance activities and travel on unpaved roads shall be minimized. The project will comply with LUPA-AIR-5.	C, O, D
15	Fugitive Dust	Any stockpiles shall be sprayed with water, covered with tarpaulins, and/or treated with appropriate dust suppressants, especially in preparation for high wind or storm conditions. Chemical dust suppressants that emit volatile organic compounds (VOCs) shall be avoided within or near O_3 nonattainment areas. The project will comply with LUPA-AIR-5.	C
16	Fugitive Dust	Potential environmental impacts from the use of dust palliatives shall be minimized by taking all necessary measures to keep the chemicals out of sensitive soil and streams. In addition, the application of dust palliatives shall comply with federal, state, and local laws and regulations. The project will comply with LUPA-AIR-5.	C, O, D
Ecological			
17	Staging Areas	As practical, staging and parking areas shall be located within the Project site to minimize habitat disturbance in areas adjacent to the site. The project will comply with LUPA-BIO-13.	C, O, D
18	Construction Activities	Before beginning construction, delineate the boundaries of areas to be disturbed including roads, borings, soil testing sites, and pull and tensioning areas prior to any ground disturbance, and confine disturbances, project vehicles, and equipment to the delineated project areas. The project will comply with LUPA-BIO-13.	C, D
19	Construction	To the extent practicable, work personnel shall stay within the ROW and/or easements. The project will comply with LUPA-BIO-13.	C, O, D
20	Fugitive Dust	If the application of water is needed to abate dust in construction areas and on dirt roads, use the least amount needed to meet safety and air quality standards and prevent the formation of puddles, which could attract wildlife to construction sites. The project will comply with LUPA-BIO-6.	C, D
21	Traffic	Existing access roads, utility corridors, and other infrastructure shall be used to the maximum extent feasible. The project will comply with LUPA-BIO-13.	C, O, D
22	Noise	Noise reduction devices (e.g., mufflers) shall be employed to minimize the impacts on wildlife and special status species populations. Operators shall ensure that all equipment is adequately muffled and maintained in order to minimize disturbance to wildlife. The project will comply with LUPA-BIO-12.	C, O, D
23	Power lines	Place low and medium voltage connecting power lines underground whenever possible. In certain circumstances, burial of the lines may be prohibitively expensive (for example in shallow bedrock areas) or may cause unacceptable impacts to wetland habitats and dependent species. Overhead lines may be acceptable: ▪ if sited away from high bird crossing locations, such as between roosting and feeding areas or between lakes, rivers, and nesting areas; and/or	S, C

No.	Topic	Description of Measures	Phase*
		▪ when the structures parallel tree lines or are otherwise screened so that collision risk is reduced. The project will comply with LUPA-BIO-16 and LUPA-TRANS-BIO-1.	
24	Habitat	To reduce the extent of habitat disturbance during construction and operation, existing access roads, utility corridors, and other infrastructure shall be used to the maximum extent feasible and foot and vehicle traffic through undisturbed areas shall be minimized. The project will comply with LUPA-BIO-13.	C, O, D
26	Habitat	Areas left in a natural condition during construction (e.g., wildlife crossings) shall be maintained in as natural a condition as possible within safety and operational constraints. The project will comply with LUPA-BIO-13.	C, O, D
27	Habitat	All pits and trenched shall contain wildlife escape ramps. All uncovered pipes shall be capped and/or covered at the end of each workday to prevent animals from entering the pipes. If a special status species is discovered inside a component, that component must not be moved or, if necessary, moved only to remove the animal from the path of activity, until the animal has escaped. The project will comply with LUPA-BIO-14.	C, O, D
28	Birds	The Project should establish buffer zones and protection, mitigation, and monitoring plans for active nests detected during surveys. The project will comply with LUPA-BIO-IFS-2.	C, D
29	Special status species	In consultation with permitting agencies, avoid special status species or unique plant assemblages when installing and maintaining transmission line towers/ poles, access roads, pulling sites, and storage and parking areas adjacent to linear facilities. The project will comply with LUPA-BIO-13.	S, C, O
30	General Wildlife protection	Implement general standards practices to protect federal and state special-status species. The project will comply with LUPA-BIO-14.	
31	General Wildlife protection	Prior to any ground-disturbing activity, seasonally appropriate surveys shall be conducted by qualified biologists to ensure that important or sensitive species or habitats are not present in or near project areas. Habitats or locations to be avoided (with appropriately sized buffers) shall be clearly marked. The project will comply with LUPA-BIO-1.	C, O, D
32	Vegetation	Project-specific vegetation management plans shall investigate possibilities of revegetating parts of the Project Area. The project will comply with LUPA-BIO-7.	S, C, D
33	Noxious Weeds	The establishment and spread of invasive species and noxious weeds within the Project Area and loop-in transmission lines shall be prevented. The areas shall be monitored regularly, and invasive species should be eradicated immediately. The project will comply with LUPA-BIO-10.	C, O, D
34	Herbicide Use	Only herbicides with low toxicity to wildlife and nontarget native plant species shall be used, as determined in consultation with the BLM, BOR, CEC, and USFWS. The typical herbicide application rate shall be used rather than the maximum application rate, where effective. All herbicides shall be applied in a manner consistent with their label requirements and in accordance with guidance provided in the Final PEIS on vegetation treatments using herbicides (BLM 2007c). The project will comply with LUPA-BIO-11.	C, O, D

No.	Topic	Description of Measures	Phase*
35	Waste	Construction debris, especially treated wood, shall not be stored or disposed of in areas where it could come in contact with aquatic habitats. The project will comply with LUPA-BIO-9.	C, O, D
36	Reclamation	Access roads shall be reclaimed when they are no longer needed. The project will comply with LUPA-BIO-7.	C, O, D
37	Reclamation	All holes and ruts created by removal of structures and access roads shall be filled or graded. The project will comply with LUPA-BIO-7.	D
38	Reclamation	While structures are being dismantled, care shall be taken to avoid leaving debris on the ground in areas in which wildlife regularly move. The project will comply with LUPA-BIO-13.	D
39	Reclamation	The facility fence shall remain in place for several years to help reclamation (e.g., would preclude large mammals and vehicles from disturbing revegetation efforts). The project will comply with LUPA-BIO-7.	D
Hazardous Materials			
40	Training	Ensure that on-site workers are fully trained to properly handle and are informed about each of the hazardous materials to be used on-site. The project will comply with LUPA-BIO-17.	C, O, D
41	Hazardous Materials	Pollution prevention opportunities shall be identified and implemented, including material substitution of less hazardous alternatives, recycling, and waste minimization. The project will comply with LUPA-BIO-9.	C, O, D
42	Hazardous Materials	Written procedures for the storage, use, inspection, and transportation of each type of hazardous material and waste management areas present shall be provided, including all vehicle and equipment fuels; identified deficiencies and their resolution shall be documented. Authorized users for each type of hazardous material shall be identified. The project will comply with LUPA-BIO-9.	C, O, D
43	Hazardous Materials	Hazardous materials and waste storage areas or facilities shall be formally designated and access restricted to authorized personnel. The project will comply with LUPA-BIO-9.	S, C, O, D
44	Hazardous Materials	Hazardous materials and waste storage areas must be consistent with accepted industry practices as well as applicable federal, state, and local regulations and that include, at a minimum, containers constructed of compatible materials, properly labeled, and in good condition; secondary containment features for liquid hazardous materials and wastes; physical separation of incompatible chemicals; and fire-fighting capabilities when warranted. The project will comply with LUPA-BIO-9.	C, O, D
45	Hazardous Materials	Procedures shall be established for fuel storage and dispensing, including shutting off vehicle (equipment) engines; using only authorized hoses, pumps, and other equipment in good working order; maintaining appropriate fire and spill response materials at equipment-fueling stations; providing emergency shutoffs for fuel pumps; ensuring that fueling stations are paved; ensuring that both aboveground fuel tanks and fueling areas have adequate secondary containment; prohibiting smoking, welding, or open flames in fuel storage and dispensing areas; equipping the area with fire suppression devices, as appropriate; conducting routine inspections of fuel storage and dispensing areas; requiring prompt recovery and remediation of all spills, and providing for the prompt removal of all fuel and fuel tanks used to support construction vehicles and equipment at the completion	S, C, O, D

No.	Topic	Description of Measures	Phase*
		of facility construction and decommissioning phases. The project will comply with LUPA-BIO-9.	
46	Hazardous Materials	Good waste management practices shall be adopted for handling, storing, and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater discharges; waste management includes the following: spill prevention and control, construction debris and litter management, concrete waste management, and liquid waste management. The project will comply with LUPA-BIO-9.	C, O, D
47	Hazardous materials storage	Limit the amounts of hazardous materials present on the site to quantities minimally necessary to support continued construction and operations. Excess hazardous materials shall receive prompt disposition. The project will comply with LUPA-BIO-9.	C, O, D
48	Spills	Berms and other controls shall be used at facilities to prevent off-site migration of any leaked or spilled HTF, TES fluids, or any other chemicals stored or used at the site. The project will comply with LUPA-BIO-9.	C, O, D
49	Spills	Remediate hazardous product leaks and chemical releases that constitute a Recognized Environmental Condition before completing decommissioning.	D
50	Transporting hazardous materials	Dedicated areas with secondary containment shall be established for off-loading hazardous materials transport vehicles. The project will comply with LUPA-BIO-9.	C, O, D
51	Refueling	Refueling of equipment and vehicles should occur in designated areas with proper secondary containment. The project will comply with LUPA-BIO-9.	S, C, O, D
52	Vehicles	All vehicles and equipment shall be in proper working condition to ensure that there is no potential for leaks of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The project will comply with LUPA-BIO-9.	C, O, D
53	Waste removal	Schedules shall be established for the regular removal of wastes (including sanitary wastewater generated in temporary, portable sanitary facilities) for delivery by licensed haulers to appropriate off-site treatment or disposal facilities. The project will comply with LUPA-BIO-9.	C, O, D
54	Decommissioning	During facility decommissioning, the following shall occur: emergency response capabilities shall be maintained, and emergency response planning shall be extended to any temporary material and equipment storage areas that may have been established; temporary waste storage areas shall be properly designated, designed, and equipped; hazardous materials removed from systems shall be properly containerized and characterized, and recycling options shall be identified and pursued; off- site transportation of recovered hazardous materials and wastes resulting from decommissioning activities shall be conducted by authorized carriers; all hazardous materials and waste shall be removed from on-site storage and management areas (including surface impoundments), and the areas shall be surveyed for contamination and remediated as necessary. The project will comply with LUPA-BIO-9.	D

No.	Topic	Description of Measures	Phase*
Health and Safety			
55	Traffic	Operators shall consult with local planning authorities regarding increased traffic during the construction phase, including an assessment of the number of vehicles per day, their size, and type. Specific issues of concern (e.g., location of school bus routes and stops) shall be identified and addressed in the traffic management plan.	O
56	Firearms	Prohibit workers or visitors, with the exception of law enforcement personnel, from bringing firearms or weapons to the project site. The project will comply with PDF-BIO-3.	C, O, D
57	Wastewater	Any wastewater generated in association with temporary, portable sanitary facilities shall be periodically removed by a licensed hauler and introduced into an existing municipal sewage treatment facility. Portable sanitary facilities provided for construction crews shall be adequate to support expected on-site personnel. The project will comply with LUPA-SW-30.	C, O, D
Lands and Realty			
58	Overhead Lines	All electrical collector lines shall be buried in a manner that minimizes additional surface disturbance (e.g., along roads or other paths of surface disturbance). Overhead lines may be used in cases where burial of lines would result in further habitat disturbance. The project will comply with LUPA-BIO-16.	S
59	Monitoring	Site monitoring protocols defined in the POD shall be implemented. These will incorporate monitoring program observations and additional mitigation measures into standard operating procedures and BMPs to minimize future environmental impacts. The project will comply with LUPA-BIO-13.	S, C
60	Monitoring	All control and mitigation measures established for the project in the POD and the resource-specific management plans that are part of the POD shall be maintained and implemented throughout the construction phase, as appropriate. The project will comply with LUPA-BIO-13.	S, C
61	Signing	No signs of advertising devices shall be placed on the premises or on adjacent public lands, except those posted by or at the direction of the BLM and BOR. The project will comply with LUPA-REC-6.	C, D
62	Decommissioning	All management plans, BMPs, and stipulations developed for the construction phase shall be applied to similar activities during the decommissioning phase. The project will comply with LUPA-BIO-6.	D
Native American Concerns			
63	Training	Prior to construction, training, presented by a qualified cultural resources specialist, shall be provided to personnel whose activities or responsibilities could affect resources of significance to Native Americans during construction. When there is a reasonable expectation of encountering unidentified cultural resources during construction, monitoring of construction shall be considered to minimize impacts on resources of significance to Tribes to the extent possible. The project will comply with LUPA-BIO-5.	S, C, O, D
64	Mitigation	All mitigation measures listed in cultural resources would also apply to historic properties of concern to Native Americans. The project will comply with LUPA-CUL-4.	S, C, O, D

No.	Topic	Description of Measures	Phase*
Noise – Vibration			
65	Construction	Siting of stationary construction equipment (e.g., compressors and generators) shall be far from nearby residences and other sensitive receptors. The project will comply with LUPA-BIO-12.	C, O, D
66	Equipment	If noise from a transformer becomes an issue, a new transformer with reduced flux density could be installed. Alternatively, barrier walls, partial enclosures, or full enclosures could be adopted to shield or contain the transformer noise, depending on the degree of noise control needed. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	O
67	Equipment	Permanent sound-generating facilities (e.g., compressors, pumps) shall be sited away from residences and other sensitive receptors. In areas of known conflicts, consideration shall be given to the installation of acoustic screening. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	O
68	Equipment	Where feasible, low-noise systems (e.g., for ventilation systems, pumps, generators, compressors, and fans) shall be incorporated and equipment selected that has no prominent discrete tones. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
69	Equipment	All equipment shall be maintained in good working order in accordance with manufacturers' specifications. For example, suitable mufflers and/or air-inlet silencers shall be installed on all internal combustion engines (ICEs) and certain compressor components. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
70	Equipment	All equipment shall have sound-control devices no less effective than those provided on the original equipment. All construction equipment used shall be adequately muffled and maintained. Properly maintain mufflers, brakes, and loose items on construction and operation related vehicles to minimize noise and ensure safe operations. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
71	Equipment	Install mufflers on diesel and gas-driven engine air coolers and exhaust stacks. Equip emergency pressure relief valves and steam blow-down lines with silencers to limit noise levels. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
72	Helicopter	Helicopter flights at low altitude (under 1,500 ft. [457 m]) near noise-sensitive receptors shall be minimized except at locations where only helicopter activities can perform the task. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
73	Vehicles	Construction and decommissioning activities and construction traffic shall be scheduled to minimize disruption to nearby residents and existing operations surrounding the project areas.	C, O, D
74	Vehicles	All vehicles traveling within and around the project area shall be operated in accordance with posted speed limits to reduce vehicular noise levels. The project will comply with PDF-AQ-BIO-1.	C, O, D
75	Safety	Warning signs shall be posted in high-noise areas, and a hearing protection program shall be implemented for work areas with noise in excess of 85 dBA. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
76	Monitoring/ Mitigation	A noise complaint process and hotline for the surrounding communities shall be implemented, including documentation, investigation, evaluation, and resolution of all legitimate project-related noise	C, O, D

No.	Topic	Description of Measures	Phase*
		complaints. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	
77	Monitoring/ Mitigation	Noise control measures (e.g., erection of temporary wooden noise barriers) shall be implemented if noisy activities would be expected near sensitive receptors. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
78	Monitoring/ Mitigation	If noisy activities, such as blasting or pile driving, are required during the construction or decommissioning period, nearby residents shall be notified in advance. The project will comply with the Health, Safety, and Noise Plan (POD Appendix K).	C, O, D
Soils			
79	Construction	Construction shall be conducted in stages to limit the areas of exposed soil at any given time. The project will comply with LUPA-BIO-9.	C, O, D
80	Construction	Ground-disturbing activities shall be minimized, especially during the rainy season. The project will comply with LUPA-BIO-9.	C, O, D
81	Construction	Foundations and trenches shall be backfilled with originally excavated material as much as possible. Excess excavation materials shall be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities. The project will comply with LUPA-BIO-7.	C, O, D
82	Construction	Water or other stabilizing agents shall be used to wet roads in active construction areas and laydown areas to minimize the windblown erosion of soil. The project will comply with LUPA-BIO-9.	C, O, D
83	Disturbance area	The footprint of disturbed areas, including the number and size/length of roads, fences, borrow areas, and laydown and staging areas, shall be minimized. The project will comply with LUPA-BIO-9.	S, C, O, D
84	Disturbance area	Electrical lines from solar collectors shall be buried along existing features (e.g., roads or other paths of disturbance) to minimize the overall area of surface disturbance whenever possible. The project will comply with LUPA-BIO-16.	C, O, D
85	Disturbance area	Temporary stabilization of disturbed areas that are not actively under construction shall occur. The project will comply with LUPA-BIO-9.	C, O, D
86	Disturbance area	Permanent stabilization of disturbed areas shall occur during final grading and landscaping of the site. The project will comply with LUPA-BIO-9.	C, O, D
87	Drainages	Drainage crossings shall be stabilized as quickly as possible, and channel erosion shall be prevented from runoff caused by the project. The project will comply with LUPA-BIO-9.	C, O, D
88	Stockpiles	Originally excavated materials shall be stockpiled and used for backfill. The project will comply with LUPA-BIO-7.	C, O, D
89	Fill	Borrow materials shall be obtained only from authorized and permitted sites; existing sites shall be used in preference to new sites. The project will comply with LUPA-BIO-7.	C, O, D
90	Erosion control	Potential soil erosion shall be controlled at culvert outlets with appropriate structures. The project will comply with LUPA-BIO-9.	C, O, D
91	Erosion control	Catch basins, roadway ditches, and culverts shall be cleaned and maintained regularly. The project will comply with LUPA-BIO-9.	C, O, D
92	Erosion control	Sediment-laden waters from disturbed, active areas within the project site shall be retained through the use of barriers and sedimentation	C, O, D

No.	Topic	Description of Measures	Phase*
		devices (e.g., berms, straw bales, sandbags, jute netting, or silt fences). The project will comply with LUPA-BIO-9.	
93	Erosion control	Routine site inspections shall be conducted to assess the effectiveness and maintenance requirements for erosion and sediment control systems. The project will comply with LUPA-BIO-9.	C, O, D
94	Operation	All appropriate mitigation measures developed for the construction phase shall be applied to similar activities during the operations phase. The project will comply with LUPA-BIO-5.	O
95	Revegetation	Project areas are to be replanted with vegetation at spaced intervals to the extent possible to break up areas of exposed soil and reduce soil loss by wind erosion. The project will comply with LUPA-BIO-9.	C, O, D
96	Reclamation	All areas of disturbed soil shall be reclaimed using weed-free native grasses, forbs, and shrubs. Reclamation activities shall be undertaken as early as possible on disturbed areas. The project will comply with LUPA-BIO-9.	C, O, D
97	Reclamation	All mitigation measures developed for the construction phase shall be applied to similar activities during the decommissioning/reclamation phase. The project will comply with LUPA-BIO-5.	D
Transportation			
98	Transportation Plan	The project shall be planned to utilize existing roads and utility corridors to the maximum extent feasible and to minimize the number and length/size of new roads, lay-down areas, and borrow areas. The project will comply with LUPA-BIO-13.	S
99	Design	Access roads and on-site roads shall be surfaced with aggregate materials, wherever appropriate. The project will comply with PDF-AQ-1.	S, C, O, D
100	Design	Roads shall be designed so that changes to surface water runoff are avoided and erosion is not initiated. The project will comply with LUPA-BIO-9.	
101	Vehicle permits and coordination	Obtain vehicle oversize and overweight permits, as appropriate. Coordinate with appropriate agencies for any route closures and obtain permits as required. Notify local emergency personnel (i.e., fire departments, police departments, ambulance, and paramedic services) at least 1 week prior to lane or road closures. The notice shall include location(s), date(s), time(s), and duration of closure(s) and a contact number for Project personnel.	C, O, D
102	Traffic	Traffic shall be restricted to the roads developed for the project. Use of other unimproved roads shall be restricted to emergency situations. The project will comply with LUPA-BIO-13.	C, O, D
103	Traffic	Signs shall be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. The project will comply with PDF-AQ-1.	C, O, D
104	Monitoring	Ongoing ground transportation planning shall be conducted to evaluate road use, minimize traffic volume, and ensure that roads are maintained adequately to minimize associated impacts.	O
Visual Resources			
105	Construction	All stakes and flagging will be removed from the construction area and disposed of in an approved facility. The project will comply with PDF-BIO-5.	C, O, D

No.	Topic	Description of Measures	Phase*
106	Surface disturbance	Existing rocks, vegetation, and drainage patterns shall be preserved to the maximum extent possible. The project will comply with LUPA-BIO-13.	C, O, D
107	Surface disturbance	Brush-beating or mowing, or using protective surface matting rather than vegetation removal shall be done where feasible. The project will comply with LUPA-BIO-13.	C, O, D
108	Surface disturbance	Visual impacts shall be reduced during construction by clearly delineating construction boundaries and minimizing areas of surface disturbance; preserving vegetation to the greatest extent possible; stripping, salvaging, and replacing topsoil; contoured grading; controlling erosion; using dust suppression techniques; and restoring exposed soils to their original contour and vegetation. The project will comply with LUPA-BIO-13.	C, O, D
109	Surface treatments	Gravel and other surface treatments shall be removed or buried. The project will comply with LUPA-BIO-7.	C, O, D
110	Lighting	Minimize the need for and amount of lighting on ancillary structures. Design and commit to install permanent exterior lighting such that: ▪ light fixtures do not cause spill light beyond the project site; b) lighting fixtures are fully shielded, do not cause reflected glare, and use low temperature bulbs; ▪ direct lighting does not illuminate the nighttime sky; ▪ illumination of the project and its immediate vicinity is minimized by including use of motion detectors or other lighting controls to turn lights off except when needed for security and safety; ▪ lighting complies with local policies and ordinances; and use lighting that meets International Dark Sky Association standards, when feasible. The project will comply with LUPA-VPL-VRM-3.	S, C, O, D
111	Color	Materials, coatings, or paints having little or no reflectivity shall be used whenever possible. The project will comply with LUPA-VPL-VRM-3.	S, O
112	Color	Grouped structures shall all be painted the same color to reduce visual complexity and color contrast. The project will comply with LUPA-VPL-VRM-3.	C, O
113	Color	Culvert ends shall be painted or coated to reduce color contrasts with existing landscape. The project will comply with LUPA-VPL-VRM-3.	C, O, D
114	Color	No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate surveyor construction activity limits. The project will comply with PDF-BIO-3.	C, O, D
115	Color	Reduce graveled surfaces visual color contrast with approved color treatment practices. The project will comply with LUPA-VPL-VRM-3.	S, C, O, D
116	Transmission	All electrical collector lines shall be buried where possible. All electrical collector lines shall be buried in a manner that minimizes additional surface disturbance (e.g., along roads or other paths of surface disturbance). The project will comply with LUPA-BIO-16.	S, C
Reclamation and Restoration			
117	Waste removal	Establish a regular litter pick-up procedure within and around the perimeter of the project site. The project will comply with PDF-BIO-5	C, O, D

No.	Topic	Description of Measures	Phase*
118	Waste removal	"Good housekeeping" procedures shall be developed to ensure that the site is kept clean of debris, garbage, fugitive trash or waste, and graffiti; to prohibit scrap heaps and dumps; and to minimize storage yards. The project will comply with PDF-BIO-5.	C, O, D
119	Maintenance	Maintenance activities shall include dust abatement (in arid environments) and noxious weed control. The project will comply with PDF-AQ-1.	O
120	Maintenance	Road maintenance activities shall avoid blading existing forbs and grasses in ditches and adjacent to roads. The project will comply with LUPA-BIO-13.	O
121	Revegetation	A combination of seeding, planting of nursery stock, and transplanting of local vegetation within the proposed disturbance areas. Where feasible, native vegetation shall be used for revegetating, establishing a composition consistent with the form, line, color, and texture of the surrounding undisturbed landscape. The project will comply with LUPA-BIO-7.	C, O, D
122	Mitigation	The full range of visual best management practices shall be considered, and plans shall incorporate all pertinent BMPs. Visual resource monitoring and compliance strategies shall be included as a part of the project mitigation plans to cover the construction, operation and decommissioning phases. The project will comply with LUPA-VPL-VRM-3.	C, O, D
123	Reclamation	All areas of disturbed soil shall be reclaimed by using weed-free native grasses, forbs, and shrubs representative of the surrounding and intact native vegetation composition and/or use non-native species, if necessary to ensure successful revegetation. The project will comply with LUPA-BIO-7.	C, O, D
124	Reclamation	Rock and brush debris shall be restored whenever possible to approximate pre-existing visual conditions. The project will comply with LUPA-BIO-7.	C, O, D
Water Resources			
125	Water supply	Use the minimum volume of water necessary for panel washing. Collecting and recycling the wash water is encouraged. The project will comply with LUPA-SW-18.	O
126	Water supply	Water use shall be minimized by implementing conservation practices. The project will comply with LUPA-SW-18.	C, O, D
127	Water quality	Avoid or minimize and mitigate the degradation of water quality that could result from construction activities. Water quality in areas adjacent to or downstream of development areas shall be monitored during the life of the project to ensure that water quality is protected. The project will comply with LUPA-BIO-9.	C, O, D
128	Stormwater	Construction activities shall avoid land disturbance in ephemeral washes and dry lakebeds; any unavoidable disturbance would be minimized. Stormwater facilities would be designed to route flow around the facility and maintain pre-project hydrographs. The project will comply with LUPA-SW-22.	C, O, D

No.	Topic	Description of Measures	Phase*
129	Stormwater	Special construction techniques shall be used, where applicable, in areas of erodible soil, alluvial fans, and stream channel/wash crossings. The project will comply with LUPA-SW-22.	C, O, D
130	Reclamation	All management plans, mitigation measures, and stipulations developed for the construction phase shall be applied to similar activities during the decommissioning/reclamation phase. The project will comply with LUPA-BIO-5.	D
Wildfire			
131	Safety	The effectiveness of developing and adhering to a hazardous materials and waste management plan and a fire safety plan, requiring a facility design to include isolation valves to limit HTF releases (where applicable), and providing worker training shall be considered in reducing fire risks. The project will comply with PDF-HAZ-2.	S

*S = Siting, C = Construction, O = Operations, D = Decommissioning

3. PROJECT DESIGN FEATURES

Table 2 provides Project Design Features that would be incorporated into the Perkins Renewable Energy Project during all phases of the Project.

Table 1. Project Design Features

PDF No.	Description of Measure	Phase*
Air Quality/ Greenhouse Gas Emissions		
PDF AQ-1	**Fugitive Dust Control Plan**. The Project owner, its contractor, or its subcontractor shall prepare and implement a Fugitive Dust Control Plan to address fugitive dust emissions during Project construction, operation, maintenance, and decommissioning. The plan shall include measures to minimize fugitive dust emissions from the commencement of construction activities through operations, maintenance, and decommissioning. During construction, the Project owner, its contractor, and subcontractors shall take every reasonable precaution to prevent all airborne fugitive dust plumes from leaving the Project site, to prevent visible particulate matter from being deposited upon public roadways. The following measures shall be included within the plan: ▪ During construction, all unpaved roads, disturbed areas (e.g., areas of scraping, excavation, backfilling, grading, and compacting), and loose materials generated during construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent or watered two times daily or as frequently as necessary to minimize fugitive dust generation. Non-water-based soil stabilizers shall be as efficient as or more efficient for fugitive dust control than ARB-approved soil stabilizers and shall not increase any other environmental impacts, including loss of vegetation, adverse odors, or emissions of ozone precursor reactive organic gases (ROG) or volatile organic compounds (VOC). The proposed soil stabilizing products shall be listed in the Plan and are subject to review and approval BLM, BOR, CEC, and CDFW. Any soil stabilizers proposed shall be consistent with those recommended in the Stormwater Pollution Prevention Plan (SWPPP) and	C, O, D

PDF No.	Description of Measure	Phase*
	shall also be approved for use by the project's Restoration Specialist to ensure that the products would not impede restoration goals. ▪ The main access roads through the site shall be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to commencing construction. Delivery, laydown, and staging areas for construction or operations and maintenance supplies shall be paved or stabilized prior to taking initial deliveries. ▪ Grading and earthwork activities, including vegetation removal, cut and fill movement, and soil compacting, shall be phased across the site to minimize the amount of exposed or disturbed area on any single day. ▪ No vehicle shall exceed 15 miles per hour on unpaved areas within the site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions or conflict with other permit conditions. ▪ Visible speed limit signs shall be posted at the construction site entrances. ▪ All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways. ▪ All unpaved exits from the construction site shall be graveled or treated to prevent track-out onto public roadways. No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. All track out from an active operation shall be removed immediately if it extends over 25 feet or if under 25 feet, at the end of each workday. ▪ All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris. ▪ At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads to access the construction site or staging areas shall be swept as needed when dirt or runoff resulting from the construction activities is visible on the paved public roadway.	
PDF AQ-2	**Control On-Site Off-Road Equipment Emissions.** The Project owner, its contractor, or its subcontractor, when entering into construction contracts or when procuring off-road equipment or vehicles for on-site construction or O&M activities, shall ensure that only new model year equipment or vehicles are obtained. The following measures shall be included with contract or procurement specifications: ▪ All construction diesel engines not registered under California Air Resources Board's Statewide Portable Equipment Registration Program, with a rating of 50 hp or higher shall meet the Tier 4 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort demonstrates that such engine is not available for a particular item of equipment. In the event that a Tier 4 engine is not available for any off-road equipment larger than 50 hp, a Tier 3 engine shall be used or that equipment shall be equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 3 levels unless certified by the engine manufacturers that the use of such devices is not practical for specific engine types. ▪ The contractor shall provide equipment logs demonstrating Tier level compliance for all off-road diesel equipment and registration of portable diesel equipment.	C, O, D

PDF No.	Description of Measure	Phase*
	■ All diesel-fueled engines used in the construction of the facility shall have clearly visible tags showing that the engine meets the standards of this measure. ■ All equipment and trucks used in the construction or O&M of the facility shall be properly maintained and the engines tuned to the engine manufacturer's specifications. ■ All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.	
Biological Resources		
PDF BIO-1	**Biological Monitoring.** Monitoring to ensure conformance with conditions of approval, including effective protection and avoidance of biological resources, shall be implemented by the Applicant as follows: **Biological Monitoring Team.** During construction and decommissioning, the Applicant shall employ a biological monitoring team to oversee Project activities. Any activity that may impact vegetation, wildlife, and sensitive resources shall be monitored to ensure compliance with all mitigation measures for biological resources. The biological monitoring team shall consist of: ■ Lead Biologist: The Applicant shall assign a Lead Biologist, approved by BLM, BOR, CEC, CDFW, and USFWS as the primary point of contact for the federal, state, and resource agencies regarding biological resources mitigation and compliance. ■ Biological Monitor: Biological monitors shall be overseen by the Lead Biologist and shall perform any required surveys, ground disturbance and construction monitoring, wildlife monitoring, inspections, marking sensitive resource buffers, and revegetation monitoring during Project activities. Biological monitors shall include trained flat-tailed horned lizard and nest monitors (PDF BIO-5). The Applicant shall provide the resumes of the proposed Biological Monitoring Team to the BLM, BOR, CEC, CDFW, and USFWS for approval prior to onset of ground-disturbing activities. The Biological Monitoring Team shall have demonstrated expertise with the biological resources within the Project region. The Biological Monitoring Team shall have authority to halt any activities in any area if it is determined that the activity, if continued, would cause an unauthorized adverse impact to biological resources. The duties of the Biological Monitoring Team shall vary during the construction, O&M, and decommissioning phases, based on the biological monitoring tasks needed for compliance during each phase. During O&M, an Applicant staff member serving as a compliance manager may perform the duties of the Lead Biologist to ensure compliance with biological mitigation measures, such as performing inspections for entrapped wildlife and fence condition, reporting dead or injured wildlife, and avoiding nesting birds. In general, the duties of the Lead Biologist shall include, but shall not be limited to: ■ Regular, direct communication with representatives of the federal, state, and resource agencies, as appropriate. The Lead Biologist, or during O&M, the Applicant's compliance manager, shall immediately notify the federal, state, and applicable resource agencies in writing of dead or injured special-status species, or of any non-compliance with biological mitigation measures or permit conditions. ■ Train and supervise Biological Monitors, including flat-tailed horned lizard monitors, nest monitors, and construction monitors.	C, O, D

PDF No.	Description of Measure	Phase*
	■ Conduct or oversee Worker Environmental Awareness Program (WEAP) training. ■ During construction and decommissioning, clearly mark and inspect sensitive biological resource areas in compliance with regulatory terms and conditions. ■ Oversee wildlife clearance surveys, ground disturbance and grading, and biological monitoring. Ensure that all biological monitoring is completed properly and on schedule. ■ Conduct or oversee bi-weekly compliance inspections during ground-disturbing activities and communicate any remedial actions needed (i.e., trash, fence, weed maintenance; wildlife mortality) to maintain compliance with mitigation measures. **Reporting.** The Lead Biologist, or during O&M, the Applicant's compliance manager, shall report regularly to the BLM, BOR, CEC, CDFW, and USFWS to document the status of compliance with biological mitigation measures. **During construction and decommissioning:** ■ Provide weekly verbal or written updates to the BLM, BOR, CEC, CDFW, and USFWS. ■ Prepare and submit monthly and annual compliance reports to include a summary of Project activities that occurred, biological resources surveys and monitoring that were performed, any sensitive or noteworthy species observed, weed infestations removed, and non-compliance issues and remedial actions that were implemented. **During O&M:** ■ Conduct quarterly compliance inspections and reporting, to be submitted to the BLM, BOR, CEC, CDFW, and USFWS to document the condition of fencing, wildlife mortality, and any biological resource issues of note.	
PDF BIO-2	**Worker Environmental Awareness Training**. The Lead Biologist shall prepare and implement a Worker Environmental Awareness Program (WEAP). The Applicant shall be responsible for ensuring that all workers at the site receive WEAP training prior to beginning work on the Project and throughout construction and operations. The WEAP shall be available in English and Spanish. The Applicant shall submit the WEAP to the lead agency and resource agencies for approval prior to implementation. The WEAP will: ■ Be developed by or in consultation with the Lead Biologist and consist of an on-site or training center presentation with supporting written material and electronic media, including photographs of protected species, available to all participants. ■ Provide an explanation of the function of flagging that designates authorized work areas; specify the prohibition of soil disturbance or vehicle travel outside designated areas. ■ Discuss general safety protocols such as vehicle speed limits, hazardous substance spill prevention and containment measures, and fire prevention and protection measures. ■ Review mitigation and biological permit requirements. ■ Explain the sensitivity of the vegetation and habitat within and adjacent to work areas, and proper identification of these resources. ■ Discuss the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act and the consequences of non-compliance with these acts. ■ Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas and explain the reasons for protecting these resources.	C, O, D

PDF No.	Description of Measure	Phase*
	▪ Inform participants that no snakes, other reptiles, birds, bats, or any other wildlife shall be harmed or harassed. ▪ Place special emphasis on species that may occur on the Project site and/or loop-in transmission lines, including special-status plants, flat-tailed horned lizard, Colorado desert fringe-toed lizard, desert kit fox, and western burrowing owl. ▪ Specify guidelines for avoiding rattlesnakes and reporting rattlesnake observations to ensure worker safety and avoid killing or injuring rattlesnakes. Rattlesnakes should be safely removed from the work area using appropriate snake handling equipment, including a secure storage container for transport, or by calling local animal control. ▪ Describe workers' responsibilities for avoiding the introduction of invasive weeds onto the Project site and surrounding areas, describe the Integrated Weed Management Plan. ▪ Provide contact information for the Lead Biologist and instructions for notification of any vehicle-wildlife collisions or dead or injured wildlife species encountered during Project-related activities. ▪ Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.	
PDF BIO-3	**Minimization of Vegetation and Habitat Impacts.** Prior to construction activities, O&M, or decommissioning, authorized work areas shall be clearly delineated by the contractor. These areas shall include, but not be limited to, staging areas, access roads, and sites for temporary placement of construction materials and spoils. Delineation may be implemented with "fencing" or staking to clearly identify the limits of work and will be verified by the Lead Biologist. No paint or permanent discoloring agents shall be applied to rocks or vegetation (to indicate surveyor construction activity limits or for any other purpose). Fencing/staking shall remain in place for the duration of construction. Spoils shall be stockpiled in disturbed areas. All disturbances, vehicles, and equipment shall be confined to the fenced/flagged areas. Construction activities shall minimize soil and vegetation disturbance to minimize impacts to soil and root systems. Upon completion of construction activities in any given area, all unused materials, equipment, staking and flagging, and refuse shall be removed and properly disposed of, including wrapping material, cables, cords, wire, boxes, rope, broken equipment parts, twine, strapping, buckets, and metal or plastic containers. Any unused or leftover hazardous products shall be properly disposed of off-site. Hazardous materials shall be handled, and spills or leaks shall be promptly corrected and cleaned up according to applicable requirements. Vehicles shall be properly maintained to prevent spills or leaks. Hazardous materials, including motor oil, fuel, antifreeze, hydraulic fluid, grease, shall not be allowed to enter drainage channels. **Low-Impact Site Preparation.** Native vegetation shall be allowed to recover from rootstocks and seed bank wherever facilities do not require permanent vegetation removal (e.g., access roads, foundations, paved areas, or fire clearance requirements) within the perimeter fenceline of the solar facilities and under solar arrays. Vegetation height and density shall be managed as needed for O&M and fire safety, but vegetation management shall otherwise focus on maintaining habitat and soil conditions.	C, O, D
PDF BIO-4	**Integrated Weed Management Plan.** The Applicant shall prepare and implement an Integrated Weed Management Plan (IWMP) to minimize or prevent invasive weeds from infesting the site or spreading into surrounding habitat. The IWMP must comply with existing BLM plans and permits including	C, O, D

PDF No.	Description of Measure	Phase*
	the Vegetation Treatments Using Herbicides (2007) and Vegetation Treatment Using Aminopyralid, Fluroxypyr, and Rimsulfuron (2016b) including requiring a Pesticide Use Permit approved by the BLM and BOR. The IWMP shall identify weed species occurring or potentially occurring in the Project area, means to prevent their introduction or spread (e.g., vehicle cleaning and inspections), monitoring methods to identify infestations, and timely implementation of manual or chemical (as appropriate) suppression and containment measures to control or eradicate invasive weeds. The IWMP shall identify herbicides that may be used for control or eradication, and avoid herbicide use in or around any environmentally sensitive areas. The IWMP shall also include a reporting schedule, to be implemented by the Lead Biologist.	
PDF BIO-5	**Wildlife Protection.** The Applicant shall undertake the following measures during construction and O&M to avoid or minimize impacts to wildlife. Implementation of all measures shall be subject to review and approval by BLM, BOR, CEC, CDFW, and USFWS. ▪ Wildlife avoidance. Project activities shall minimize interference with wildlife (including ground-dwelling species, birds, bats) by allowing animals to escape from a work site prior to disturbance; conducting pre-construction surveys and exclusion measures for certain species as specified in other measures; checking existing structures (homes, trailers, etc.) for animals such as bats, barn owls, skunks, or snakes that may be present, and safely excluding them prior to removing the structures. ▪ Minimize traffic impacts. The Applicant shall specify and enforce maximum vehicle speed limits as specified in the Traffic Control Plan, to minimize risk of wildlife collisions and fugitive dust. ▪ Minimize lighting impacts. Night lighting, when in use, shall be designed, installed, and maintained to prevent side casting of light towards surrounding fish or wildlife habitat. ▪ Avoid use of toxic substances. Soil bonding and weighting agents used for dust suppression on unpaved surfaces shall be non-toxic to wildlife and plants. ▪ Minimize noise and vibration impacts. The Applicant shall conform to noise requirements specified in the noise analysis of the NEPA and CEQA reviews to minimize noise to off-site habitat. ▪ Water. Potable and non-potable water sources such as tanks, ponds, and pipes shall be covered or otherwise secured to prevent animals (including birds) from entering. Prevention methods may include storing water within closed tanks or covering open tanks with 2-centimeter netting. Dust abatement shall use the minimum amount of water on dirt roads and construction areas to meet safety and air quality standards. Water sources (e.g., hydrants, tanks, etc.) shall be checked periodically by biological monitors to ensure they do not create puddles. ▪ Trash. All trash and food-related waste shall be contained in vehicles or covered trash containers inaccessible to ravens, coyotes, or other wildlife and removed from the site regularly. ▪ Workers. Workers shall not feed wildlife or bring pets to the Project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons. ▪ Wildlife netting or exclusion fencing. The Applicant may install temporary or permanent netting or fencing around equipment, work areas, or Project facilities to prevent wildlife exposure to hazards such as toxic materials or vehicle strikes or prevent birds from nesting on equipment or facilities. Bird deterrent netting shall be maintained free of holes and shall be deployed and	C, O, D

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	secured on the equipment in a manner that, insofar as possible, prevents wildlife from becoming trapped inside the netted area or within the excess netting. The biological monitor shall inspect netting (if installed) twice daily, at the beginning and close of each workday. The biological monitor will inspect exclusion fence (if installed) weekly. Wildlife entrapment. Project-related excavations and water tanks shall be secured or covered to prevent wildlife entry, entrapment, and drowning. Holes and trenches shall be backfilled, securely covered, or fenced. Open water tanks shall be covered or shall have other means of exit provided to prevent wildlife from drowning. Excavations that cannot be fully secured shall incorporate wildlife ramp or other means to allow trapped animals to escape. At the end of each workday, a biological monitor shall ensure that excavations and water tanks have been secured or provided with appropriate means for wildlife escape. ▪ All pipes or other construction materials or supplies shall be covered or capped in storage or laydown areas. Netting shall be installed over porta-potty vents. No pipes or tubing shall be left open either temporarily or permanently, except during use or installation. Any construction pipe, culvert, or other hollow materials shall be inspected for wildlife before it is moved, buried, or capped. ▪ Dead or injured wildlife shall be reported to USFWS (for federally listed species and migratory birds) and CDFW (for all wildlife) and/or the local animal control agency, as appropriate, by the Lead Biologist (or the Applicant's compliance manager during O&M). A biological monitor shall safely move the carcass out of the road or work area if needed and dispose of the animal as directed by the agency. If an animal is entrapped, a biological monitor shall free the animal if feasible, work with construction crews to free it in compliance with safety requirements, or work with animal control or CDFW to resolve the situation. ▪ Pest control. No anticoagulant rodenticides, such as Warfarin and related compounds (indandiones and hydroxycoumarins), may be used within the Project site, on off-site Project facilities and activities, or in support of any other Project activities.	
PDF BIO-6	**Bird and Bat Conservation Strategy (BBCS).** The Applicant will implement the final BBCS, developed in accordance with guidelines recommended by the USFWS, to avoid or minimize take of migratory birds that may nest on the site or may be vulnerable to collision with Project components. It describes the proposed Project components, summarizes baseline data regarding birds and bats in the Project vicinity; assesses potential risks to those species that could result from Project construction, operation, and decommissioning; and describes conservation measures to be implemented in order to minimize those risks. Over the course of construction and O&M, fatality thresholds and future conservation measures may be subject to revision in coordination with USFWS and CDFW as new information is obtained. The BBCS outlines an adaptive management process to address such revisions to monitoring. Construction. As an Appendix to the BBCS, the Applicant will prepare and implement a Nesting Bird Management Plan (NBMP), to include nest surveys, avoidance, and protection. The Project will either avoid vegetation clearing during the nesting season or conduct pre-construction nest surveys of potential habitat and implement no-disturbance buffer areas around active nests. Pre-construction surveys for active nests will be conducted by one or more biological monitors at the direction of the Lead Biologist. The biologists' qualifications will be subject to review and approval by USFWS, CDFW, BLM,	C, O, D

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	BOR, and CEC. Nest surveys will be conducted for all Project activities throughout the nesting season, identified here as beginning January 1 for raptors and hummingbirds and February 1 for other species, and continuing through August 15. Nest surveys will be completed at each work site no more than 7 days prior to initiation of site preparation or construction activities. Nest surveys will cover all work sites, including the solar facility and loop-in transmission lines, and surrounding buffer areas of 1,200 feet for raptors and 250 feet for other species. If adjacent properties are not accessible to the biological monitors, the off-site nest surveys may be conducted with binoculars. At each active nest, the biological monitor will establish and mark a buffer area surrounding the nest where construction activities that could disrupt nesting behavior will be excluded. The BBCS may identify species-specific buffer distances or variable distances, depending on activity levels (e.g., driving past the nest to access work sites may be less disruptive than foundation construction). Alternately, buffer distances will be 1,200 feet for raptor nests and 250 feet for other species. The extent of nest protection will be based on proposed construction activities, species, human activities already underway when the nest is initiated (e.g., a house finch nest built in the eaves of an occupied structure would warrant less avoidance or protection than a loggerhead shrike nest build in native shrubland), topography, vegetation cover, and other factors. The avoidance and protection measures will remain in effect until the nest is no longer active. If for any reason a bird nest must be removed during the nesting season, the Applicant or its agent will notify the CDFW and USFWS and retain written documentation of the correspondence. Nests will be removed only if they are inactive, or if an active nest presents a hazard. **Operation and Maintenance**. The BBCS specifies monitoring and conservation measures to be implemented by the Applicant to document bird mortality or injury that may result from the operation of the Project, such as downed exhausted birds on the site that are unable to take flight or collision with Project components including loop-in transmission and gen-tie line collisions. The BBCS includes conservation measures and an adaptive management framework to be implemented through design and operations to minimize bird and bat fatalities at the solar facilities and loop-in transmission and gen-tie lines. Provisions for a potential O&M monitoring and reporting program for bird and bat fatalities are included, based on monitoring at other active projects in the vicinity.	
PDF BIO-7	**Loop-In Transmission and Gen-tie lines.** Loop-in transmission and gen-tie line support structures and other facility structures shall be designed in compliance with current standards and practices to discourage their use by raptors for perching or nesting (e.g., by use of anti-perching devices).. Mechanisms to visually warn birds (permanent markers or bird flight diverters) shall be placed on loop-in transmission and gen-tie lines at regular intervals to prevent birds from colliding with the lines (APLIC, 2006, 2012). To the extent practicable, the use of guy wires shall be avoided because they pose a collision hazard for birds and bats. Necessary guy wires shall be clearly marked with bird flight diverters to reduce the probability of collision. Shield wires shall be marked with devices that have been scientifically tested and found to significantly reduce the potential for bird collisions. Loop-in transmission and gen-tie lines shall maintain sufficient distance between all conductors and grounded components to prevent potential for electrocution of the largest birds that may occur in the area (e.g., golden eagle and turkey vulture). They shall utilize non-specular conductors and non-reflective coatings on insulators.	C, O, D

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PDF BIO-8	**Streambed and Watershed Protection.** Prior to construction activities in jurisdictional waters of the State, the Applicant will obtain a Lake and Streambed Alteration Agreement (LSAA) from the CDFW. A Stormwater Pollution Prevention Plan (SWPPP) or SWPPP-equivalent document may also be required and shall be prepared by a qualified engineer or qualified individual, and shall be implemented before and during construction. The SWPPP shall include BMPs for stormwater runoff quality control measures, management for concrete waste, stormwater detention, watering for dust control, and construction of perimeter sediment controls, as needed. The Applicant will implement BMPs identified below to minimize adverse impacts to streambeds and watersheds. ▪ Vehicles and equipment will not be operated in ponded or flowing water except as specified by resource agencies. ▪ The Applicant will minimize road building, construction activities, and vegetation clearing within ephemeral drainages. ▪ The Applicant will prevent water containing mud, silt, or other pollutants from grading or other activities from entering ephemeral drainages or being placed in locations that may be subjected to high storm flows. ▪ Spoil sites will not be located within 30 feet from the boundaries of drainages or in locations that may be subjected to high storm flows, where spoils might be washed back into drainages. ▪ Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, unapproved herbicides, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from Project-related activities, will be prevented from contaminating the soil and/or entering ephemeral drainages. The Applicant shall ensure that safety precautions specified by this measure, as well as all other safety requirements of other measures and permit conditions are followed during all phases of the Project. ▪ When operations are completed, any excess materials or debris will be removed from the work area. No rubbish will be deposited within 150 feet of the high-water mark of any drainage during construction, operation, and decommissioning the Project. ▪ No equipment maintenance will occur within 150 feet of any qualifying jurisdictional waterway (waterway to be avoided during construction). No petroleum products or other pollutants from the equipment will be allowed to enter these areas or enter any off-site state jurisdictional waters under any flow. ▪ With the exception of the drainage control system installed for the Project, the installation of bridges, culverts, or other structures will be such that water flow (velocity and low flow channel width) is not impaired. Bottoms of temporary culverts will be placed at or below stream channel grade. ▪ No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or other organic or earthen material from any construction or associated activity of whatever nature will be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, off-site state jurisdictional waters. ▪ Stationary equipment such as motors, pumps, generators, and welders located within or adjacent to a drainage will be positioned over drip pans. Stationary heavy equipment will have suitable containment to handle a catastrophic spill/leak. Clean up equipment such as brooms, absorbent pads, and skimmers will be on site prior to the start of construction. ▪ The cleanup of all spills will begin immediately. BLM, BOR, CEC, and CDFW will be notified immediately by the Applicant of any spills and will be	C, O, D

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	consulted regarding clean-up procedures if these spills occurred in a qualifying jurisdictional waterway.	
Cultural Resources		
PDF CUL-1	**Retain a Qualified Archaeologist.** Prior to the start of construction, a Project Cultural Resources Specialist (CRS) whose training and background conforms to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, Part 61, shall be retained to supervise monitoring of construction excavations and to prepare a Cultural Resources Monitoring and Treatment Plan for the Project. The CRS's qualifications shall be appropriate to the needs of the Project, specifically an archaeologist with demonstrated prior experience in the Southern California desert and previous experience working with Southern California Tribal Nations.	C, O, D
PDF CUL-2	**Develop and Implement Cultural Resources Environmental Awareness Training.** Prior to issuance of a Notice to Proceed by the BLM, BOR, and CEC, and for the duration of ground disturbance, the Applicant shall provide Worker Environmental Awareness Program (WEAP) training to all workers prior to or on their first day of employment at the Project site. The training shall be prepared by the Cultural Resources Specialist (CRS), may be conducted by any member of the archaeological team, and may be presented in the form of an annotated and narrated digital slide show. Tribal representatives will be given the opportunity to participate in the WEAP training. The CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance is completed or suspended but must be resumed if ground disturbance resumes. Training shall include the following: ▪ A discussion of applicable laws and penalties under the law ▪ Samples or visuals of artifacts that might be found in the Project vicinity. ▪ A brief review of the cultural sensitivity of the Project and the surrounding area ▪ A discussion of what such artifacts may look like when partially buried, or wholly buried and then freshly exposed. ▪ A discussion of what prehistoric and historical archaeological deposits look like at the surface and when exposed during construction, and the range of variation in the appearance of such deposits. ▪ Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the CRS or supervisory cultural resource field staff, and that redirection of work would be determined by the construction supervisor and the CRS. ▪ Instruction that only the CRS, alternate CRS, and supervisory cultural resource field staff have the authority to halt ground disturbance in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS. ▪ Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the CRS or supervisory cultural resource field staff, and that redirection of work would be determined by the construction supervisor and the CRS. ▪ An informational brochure that identifies reporting procedures in the event of a discovery. ▪ An acknowledgment form signed by each worker indicating that they have received the training. ▪ A sticker that shall be placed on hard hats indicating that WEAP training has been completed.	C, O, D

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	This is a mandatory training, and all construction personnel must attend prior to beginning work on the Project site. A copy of the sign-in sheet shall be kept ensuring compliance with this measure. No ground disturbance shall occur prior to implementation of the WEAP training unless such activities are specifically approved by the BLM, BOR, and CEC.	
PDF CUL-3	**Cultural Resources Monitoring and Discovery Plan.** Prior to the start of construction, the Cultural Resources Specialist (CRS) shall develop a Cultural Resources Monitoring and Discovery Plan (CRMDP) that addresses the details of all activities and provides procedures that must be followed to reduce the potential impacts to undiscovered buried archaeological resources associated with the Project. The CRMDP shall describe a program for avoiding and monitoring undiscovered National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) eligible cultural resources that can be avoided during Project construction. The CRMDP shall also include maps and narrative discussion of areas considered to be of high sensitivity for discovery of buried archaeological resources, if any. The CRMDP shall detail provisions for monitoring construction activities in these high-sensitivity areas. It shall also detail the methods, consultation procedures, and timelines for addressing all post-review discoveries. The CRMDP shall identify person(s) expected to perform any monitoring tasks, their responsibilities, and the reporting relationships between Project construction management and the mitigation and monitoring team. It shall also specify monitoring reporting and what forms/documentation needs to be completed daily during monitoring. The CRS shall manage all monitoring, mitigation, curation, and reporting activities under the CRMDP. The Applicant shall ensure that the CRS makes recommendations regarding the eligibility for listing in the NRHP and CRHR of any cultural resources that are newly discovered or that may be affected in an unanticipated manner. The CRMTP shall address the authority to halt ground disturbance during construction. If a cultural resource over 45 years of age is found, or impacts to such a resource can be anticipated, ground disturbance shall be halted or redirected in the immediate vicinity of the discovery sufficient to ensure that the resource is protected from further impacts. Monitoring and reporting shall continue during the Project's ground-disturbing activities elsewhere. Additional procedures regarding halting ground disturbance to address a post-review discovery or unanticipated effects shall be described in the CRMDP. The CRMDP shall include, but not be limited to, the following elements, and shall be consistent with all other mitigation measures contained in this document: ▪ Preparation and implementation of a data recovery plan to be used to guide the data recovery and disposition of any Tribal Cultural Resource (as defined under the California Environmental Quality Act) that may be encountered during construction and that cannot be avoided. The data recovery plan shall include, minimally, a regional cultural setting, appropriate regional research questions, field and laboratory methods for the data recovery effort, and analysis and reporting requirements. The data recovery plan shall include treatment measures that focus on recovering information related to tribal values as they are conveyed through archaeological data. The treatment measures shall be developed through consultation among traditionally culturally affiliated tribes and the BLM, BOR, and CEC. Treatment measures may include detailed resource documentation, preparation of interpretative	C, O, D

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	or educational materials, reburial of artifacts that convey tribal values, or other measures identified in coordination with the tribes and the landowner. Following implementation of data recovery and other treatment protocols, a report documenting the methods and results of the data recovery and treatment program shall be prepared by a Secretary of the Interior-qualified archaeologist and shall be submitted to the BLM, BOR, and CEC for review and approval.	
PDF CUL-4	**Archaeological Monitoring.** A qualified lead archaeological monitor approved by the CEC shall be present for initial grading activities in undisturbed soil. If additional archaeological monitors are needed, they do not need to have the same qualifications, but may work under the supervision of the lead archaeological monitor; in such cases the lead archaeological monitor must be on site. Daily monitoring forms will be completed by the archaeological monitor(s) and the CRS will be responsible for retaining and/or editing them. The lead archaeological monitor will have the authority to increase or decrease the monitoring effort should the monitoring results indicate that a change is warranted.	C, O, D
PDF CUL-5	**Native American Monitor.** Prior to the CEC's issuance of Notice to Proceed, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) for at least one Native American Monitor. The Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the Project site including clearing, grubbing, tree removals, grading and trenching.	C, O, D
PDF CUL-6	**Unanticipated Discovery**. In the event that previously unknown cultural resources (sites, features, or artifacts) are exposed during grading or other construction activities, all construction work occurring within 50 feet of the find shall immediately stop until a qualified archaeologist can evaluate the significance of the find and determine whether or not additional study is warranted, consistent with the rules and stipulations detailed in the Cultural Resources Monitoring and Discovery Plan. Depending upon the significance of the find, the archaeologist may record the find and allow work to continue. If the discovery proves significant under the California Environmental Quality Act, specific resource documentation or recovery shall be implemented, including preparation of an archaeological treatment plan, testing, or data recovery. During the assessment and recovery time, construction work may proceed in other areas.	C, O, D
PDF CUL-7	**Treatment of Human Remains**. In accordance with state law (California Health and Safety Code Section 7050.5; California Public Resources Code, Section 5097.98), if human remains are found, all ground-disturbing activities shall halt within 165 feet (50 meters) of the discovery. The County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie potential remains shall occur until the County Coroner has determined whether the remains are subject to their authority. The County Coroner must make this determination within 2 working days of notification of the discovery (pursuant to California Health and Safety Code Section 7050.5[b]). If the County Coroner determines that the remains do not require an assessment of cause of death and that the remains are or are believed to be Native American, the Coroner must notify the Native American Heritage Commission by telephone within 24 hours, which must in turn immediately notify those persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD shall complete its inspection and make recommendations within 48 hours of being granted access to the site. The MLD may recommend means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods.	C, O, D

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PDF CUL-8	**Monitoring Report.** Within 6 months of finishing construction of the Project, a Cultural Resources Monitoring Report shall be prepared and provided to the BLM, BOR, and CEC. The report shall include evidence of the cultural sensitivity WEAP training required for the construction staff prior to commencing work on site. This Report will also include evidence that cultural resources have been treated in accordance with procedures stipulated in the Cultural Resources Monitoring and Discovery Plan.	C, O, D
Hazards and Hazardous Materials		
PDF HAZ-1	**Worker Environmental Awareness Program.** The WEAP prepared for the Project shall include a personal protective equipment (PPE) program, an Emergency Action Plan (EAP), and an Injury and Illness Prevention Program (IIPP) to address health and safety issues associated with normal and unusual (emergency) conditions. It will be reviewed and approved by BLM, BOR, and CEC prior to construction. Construction-related safety programs and procedures shall include a respiratory protection program, among other things. Construction Plan documents shall relate at least to the following: ▪ Environmental health and safety training (including, but not limited, to training on the hazards of Valley Fever, including the symptoms, proper work procedures, how to use PPE, and informing supervisor of suspected symptoms of work-related Valley Fever) ▪ Site security measures ▪ Site first aid training ▪ Site fire protection and extinguisher maintenance, guidance, and documentation ▪ Furnishing and servicing of sanitary facilities records ▪ Trash collection and disposal ▪ Disposal of hazardous materials and waste guidance in accordance with local, state, and federal regulations	C, O, D
PDF HAZ-2	**Hazardous Materials Management and Oil Spill Response Plan.** Prior to construction, the applicant shall submit a Hazardous Materials Management and Oil Spill Response Plan to BLM, BOR, and CEC. The Plan will provide guidance to construction, operations, contractors, and field personnel on measures to minimize effects during construction and operations and decommissioning activities associated with the project. This plan will identify the expected waste and describe the hazardous waste management procedures to be used to maximize diversion and reduce the quantity of waste requiring disposal. The Plan will include: Hazardous material management; waste disposal facilities; vehicle and equipment inspections, fueling, and maintenance; employee spill prevention and response training; and spill response procedures including notifications and reporting,	C, O, D
Hydrology and Water Quality		
PDF HWQ-1	**Drainage Erosion and Sedimentation Control Plan (DESCP).** At least 60 days prior to site mobilization, the Applicant shall submit to the SWRCB, the BLM, BOR, and CEC for review and approval a DESCP for managing stormwater during Project construction and operations. The DESCP can be included in the Stormwater Pollution Prevention Plan (SWPPP), if one is required, and must ensure proper protection of water quality and soil resources, address disturbed soil stabilization treatments in the Project area for both road and non-road surfaces, and identify all methods used for temporary and final stabilization of inactive areas. The plan must also cover all linear Project features such as the proposed loop-in transmission and gen-tie lines and any other Project component subject to disturbance. The DESCP shall contain, at a minimum, the elements presented below that outline site management activities	C, O, D

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	and erosion and sediment-control Best Management Practices (BMPs) to be implemented during site mobilization, excavation, construction, and post-construction (operating) activities. ■ Vicinity Map. A map(s), at a minimum scale 1 inch to 500 feet, shall be provided indicating the location of all Project elements with depictions of all significant geographic features including swales, storm drains, drainage concentration points and sensitive areas. ■ Site Delineation. All areas subject to soil disturbance (including mowing, grubbing, grading, excavation or any other soil disturbing activity) for the Project shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures and drainage facilities. ■ Clearing and Grading Plans. The DESCP shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections, or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and proposed topography shall be illustrated by tying in proposed contours with existing topography. ■ Clearing and Grading Narrative. The DESCP shall include a table with the estimated quantities of material excavated or filled for the site and all Project elements, whether such excavation or fill is temporary or permanent, and the amount of such material to be imported or exported. All areas subject to soil disturbance shall be included in the table. ■ Erosion Control. The plan shall address treatments to be used on exposed soil during construction and operation including specifically identifying all chemical-based dust palliatives, soil bonding, and weighting agents appropriate for use that would not cause adverse effects to vegetation. BMPs shall include measures designed to provide temporary stabilization of inactive disturbed areas will be applied as soon as possible consistent with SWRCB Construction General Permit requirements. The timing of suppressant or binder application will occur as soon as possible and consistent with dust and stormwater permit requirements. Any soil stabilizers proposed shall be approved for use by the Project's Restoration Specialist to ensure that the products shall not impede restoration goals. ■ Best Management Practices Plan. The DESCP shall identify on the topographic site map(s) the location of the site specific BMPs to be employed during each phase of construction (initial grading, Project element excavation and construction, and final grading/ stabilization). BMPs shall include measures designed to control dust, stabilize construction access roads and entrances, and control stormwater runoff and sediment transport. ■ Best Management Practices Narrative. The DESCP shall show the location, timing, and maintenance schedule of all erosion- and sediment-control BMPs to be used prior to initial grading, during excavations and construction, final grading/stabilization, and operation. Separate BMP implementation schedules shall be provided for each Project element for each phase of construction. The maintenance schedule shall include post-construction maintenance of structural-control BMPs, or a statement provided about when such information would be available. ■ The DESCP shall be prepared, stamped, and sealed by a professional engineer or Qualified SWPPP Developer. The DESCP shall include copies of recommendations, conditions, and provisions from the SWRCB, BLM, BOR, and CEC.	

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	▪ The DESCP may be part of the SWPPP and shall be kept onsite, kept updated, and readily available on request. The DESCP and SWPPP must demonstrate compliance with other water quality permits (WDR and LSAA), which may have restrictions on types of erosion or sedimentation control materials used. SWPPP inspection reporting will be consistent with the requirements of the SWRCB Construction General Permit.	
PDF HWQ-2	**Groundwater Monitoring, Reporting, and Mitigation Plan (GMRMP).** Before the Project uses groundwater pumped from any Applicant owned and/or operated well (on site or off site) that extracts water from the Imperial Valley Groundwater Basin (IVGB), the Applicant shall retain a qualified hydrogeologist to develop a GMRMP, in coordination with Imperial County, and BLM, to ensure that groundwater wells surrounding Project supply well(s) are not adversely affected by Project activities. The Applicant shall submit the GMRMP to Imperial County, and BLM for review and approval. The Applicant shall implement the approved GMRMP throughout any Project phase that pumps groundwater for consumptive use. The GMRMP shall provide a detailed methodology for monitoring site groundwater levels and comparisons for levels within the IVGB including identification of the closest private wells to the Project's well(s). Groundwater level data from wells at adjacent and nearby lands and other Projects on BLM- and BOR-administered public lands shall be provided by the BLM and BOR for review and comparison. Monitoring shall be performed during preconstruction, construction, and operation of the Project, to establish pre-construction and Project-related groundwater level and water quality trends that can be quantitatively compared against observed and simulated trends near the Project's pumping well(s) and near potentially impacted existing wells. The GMRMP shall include a schedule for submittal of quarterly data reports by the Applicant to the GMRMP designated agencies for the duration of the construction period. These quarterly data reports shall be prepared and submitted for review and shall include water level monitoring data and effect on the nearest off-site private wells.	C, O, D
Paleontological Resources		
PDF PR-1	**Paleontological Resource Monitoring and Mitigation Plan (PRMP).** Prior to the start of any Project-related construction activities, the Applicant shall retain a qualified paleontologist (Project Paleontologist) to prepare and implement a project-specific PRMP to be approved by BLM and CEC. The Project Paleontologist shall hold a BLM-issued Paleontological Resource Use Permit and be responsible for implementing all the paleontological conditions of approval and for using qualified paleontologists to assist in work and field monitoring. At a minimum, information to be contained in the PRMP, in addition to other information required under industry standard, Society of Vertebrate Paleontology standards, and BLM paleontology program policy and standards, is as follows: ▪ Identification (name) and qualifications of the Project Paleontologist and qualified paleontological monitors to be employed for grading operations monitoring. ▪ Identification of personnel with authority and responsibility to temporarily halt or divert grading equipment to allow for recovery of large specimens. ▪ Description of the project site and planned earthwork and excavation. ▪ A site-specific plan and map prepared by the Project Paleontologist which identifies construction impact areas with sediments of High (PFYC 4) and Moderate (PFYC 3a) sensitivity for encountering significant paleontological	C, O, D

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	resources and the approximate depths at which those resources are likely to be encountered for each Project component. ▪ The PRMP shall require the qualified paleontological monitor(s) to monitor all construction-related earth-moving activities in sediments determined to have a High (PFYC 4) sensitivity. ▪ The PRMP shall define monitoring procedures and methodology and shall specify that sediments of Moderate (PFYC 3a) or undetermined sensitivity shall be monitored on a part-time basis (as determined by the Project Paleontologist). Sediments with very low or low potential will not require paleontological monitoring (PFYC 1 and 2). ▪ The PRMP shall detail methods of recovery, preparation, and analysis of specimens, the final curation location of specimens at the repository identified in the BLM-issued Paleontological Resource Use Permit, data analysis, and reporting. Where possible, recovery is preferred over avoidance in order to mitigate the potential for looting of paleontological resources. ▪ The PRMP shall specify that all paleontological work undertaken by the Applicant on public lands administered by BLM and BOR shall be carried out by qualified, permitted paleontologists with the appropriate current BLM Paleontological Resources Use Permit. ▪ Identification of personnel with authority and responsibility to temporarily halt or divert ground-disturbance activities to allow for recovery of large specimens. The PRMP shall be submitted BLM, BOR, and CEC for review and approval 60 days prior to start of Project construction. The PRMP must be approved by BLM, BOR, and CEC prior to the Notice To Proceed.	
PDF PR-2	**Worker Environmental Awareness Program (WEAP).** Prior to the start of Project-related construction activities, a paleontological component to the WEAP shall be developed by the Project Paleontologist. The WEAP shall address the potential to encounter paleontological resources in the field, the sensitivity and importance of these resources, and the legal obligations to preserve and protect such resources. The training program shall also include the set of reporting procedures that workers are to follow if paleontological resources are encountered during Project activities. The WEAP may be combined with other environmental training programs for the Project. All field personnel will receive WEAP training on paleontological resources prior to Project-related construction activities.	C, O, D
PDF PR-3	**Paleontological Monitoring and Fossil Recovery.** The PRMP shall identify monitoring frequency and intensity of all areas of the Project site, particularly in areas underlain by geologic units assigned paleontological sensitivity of High (PFYC 4) or Moderate (PFYC 3a). Monitoring will entail the visual inspection of excavated or graded areas and trench sidewalls. If the Project Paleontologist determines full-time monitoring is no longer warranted, based on the geologic conditions at depth, he or she may recommend to the BLM, BOR, and CEC that monitoring be reduced or cease entirely. In the event that a paleontological resource is discovered, the paleontological monitor will have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and, if appropriate, collected. If the resource is determined to be of scientific significance, the Project Paleontologist shall complete the following: ▪ Salvage of Fossils. If fossils are discovered, all work in the immediate vicinity shall be halted to allow the paleontological monitor, and/or Project Paleontologist to evaluate the discovery and determine if the fossil may be considered significant. If the fossils are determined to be potentially	C, O, D

PDF No.	Description of Measure	Phase*
	significant, the Project Paleontologist (or paleontological monitor) will recover them following standard field procedures for collecting paleontological as outlined in the PRMP prepared for the Project. The Project Paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the potentially significant fossil(s) can be removed in a safe and timely manner. ▪ Fossil Preparation and Curation. The museum that has agreed to accept fossils that may be discovered during Project-related excavations will be identified on the Pale-ontological Resources Use Permit held by the Project Paleontologist and in the PRMP. Upon completion of Project ground-disturbing activities, all significant fossils collected shall be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil materials and stabilizing or repairing specimens. During preparation and inventory, the fossils specimens shall be identified to the lowest taxonomic level practical prior to curation at an accredited museum. The fossil specimens must be delivered to the BLM-approved repository (identified on the permit and in the PRMP) and receipt(s) of collections submitted to the BLM, BOR, and CEC no later than 60 days after all ground-disturbing activities are completed.	
PDF PR-4	**Paleontological Resources Monitoring Report.** The Applicant shall ensure preparation of a paleontological resource mitigation and monitoring report by the Project Paleontologist following completion of ground-disturbing activities. The contents of the report shall include, but not be limited to, a description and inventory list of recovered fossil materials (if any); a map showing the location of paleontological resources found in the field; determinations of scientific significance; proof of accession of fossil materials into the pre-approved museum or other repository; and a statement by the Project Paleontologist that Project impacts to paleontological resources have been mitigated. The report shall be certified by the professionally qualified Project Paleontologist responsible for the content of the report and submitted to the BLM, BOR, and CEC. In addition, all appropriate fossil location information shall be submitted to the Western Information Center, , at a minimum, for incorporation into their Regional Locality Inventories.	C, O, D
Wildfire		
PDF FIRE-1	The Fire Management and Prevention Plan prepared by the Project owner to ensure the safety of workers and the public during construction, operation and maintenance, and decommissioning for the Project shall include, but not be limited to, the following elements: ▪ Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, and hot work restrictions. ▪ Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days. ▪ All internal combustion engines used at the Project site shall be equipped with spark arrestors. Spark arrestors shall be in good working order. ▪ Once new access roads have been cut and initial fencing completed, light trucks and cars shall be used only on roads where the roadway is cleared of vegetation. Mufflers on all cars and light trucks shall be maintained in good working order. ▪ Fire rules shall be posted on the Project bulletin board at the contractor's field office and areas visible to employees.	C, O, D

PDF No.	Description of Measure	Phase*
	■ Equipment parking areas and small stationary engine sites shall be cleared of all flammable materials. ■ Smoking shall be prohibited in all vegetated areas and within 50 feet of combustible materials storage, and shall be limited to paved areas or areas cleared of all vegetation. ■ Each construction site (if construction occurs simultaneously at various locations) shall be equipped with fire extinguishers and fire-fighting equipment sufficient to extinguish small fires. ■ The Project owner shall coordinate with the BLM, BOR, and CalFire to create a training com-ponent for emergency first responders to prepare for specialized emergency incidents that may occur at the Project site, including incidents such as fire or explosion at or with the BESS. ■ The plan shall include information about the type of BESS technology on site, potential hazards, and procedures for disconnecting or shutting down the BESS in case of fire or to reduce the chance of fire. ■ All construction workers, plant personnel, and maintenance workers visiting the plant and/or transmission lines to perform maintenance activities shall receive training on fire prevention procedures, the proper use of firefighting equipment, and procedures to be followed in the event of a fire. Training records shall be maintained and be available for review by the BLM, BOR and CalFire. Fire prevention procedures shall be included in the Project's Worker Environmental Awareness Program. ■ Vegetation near all solar panel arrays, ancillary equipment, and access roads shall be controlled through periodic cutting and spraying of weeds, in accordance with the Weed Management Plan. ■ The BLM, BOR, and CalFire shall be consulted during plan preparation and fire safety measures recommended by these agencies included in the plan. ■ The plan shall list fire prevention procedures and specific emergency response and evacuation measures that shall be required to be followed during emergency situations. ■ All on-site employees shall participate in annual fire prevention and response training exercises with the BLM, BOR, and CalFire. ■ The plan shall list all applicable wildland fire management plans and policies established by state and local agencies and demonstrate how the Project will comply with these requirements. ■ The Project owner shall designate an emergency services coordinator from among the full-time on-site employees who shall perform routine patrols of the site during the fire season equipped with a portable fire extinguisher and communications equipment. The Project owner shall notify the BLM, BOR, and CalFire of the name and contact information of the current emergency services coordinator in the event of any change. ■ Remote monitoring of all major electrical equipment (transformers and inverters) will screen for unusual operating conditions. Higher than nominal temperatures, for example, can be compared with other operational factors to indicate the potential for overheating which under certain conditions could precipitate a fire. Units could then be shut down or generation curtailed remotely until corrective actions are taken. ■ Fires ignited on site shall be immediately reported to BLM, BOR, and CalFire. ■ The engineering, procurement, and construction contract(s) for the Project shall provide reference to or clearly state the requirements of this mitigation measure.	

PDF No.	Description of Measure	Phase*
	■ The Project owner must provide the Fire Management and Prevention Plan to the BLM and BOR for review and approval and to CalFire for review and comment before construction.	

*S = Siting, C = Construction, O = Operations, D = Decommissioning

Appendix D.2 DRECP Conservation and Management Actions

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. • 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. 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		Biological resources surveys have been conducted. Surveys were conducted consistent with BLM and CDFW protocols, as described in the Biological Resources Technical Report; therefore, the Project complies with the CMA.
	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		The Project will comply with this CMA, as defined in the applicable biological resource protection plans, subject to review and approval by BLM and the resource agencies.
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: • 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). • The edge of the mapped riparian vegetation or the Federal Emergency Management Agency (FEMA) 100-year floodplain, whichever is greater, for the Mojave River. • The edge of the vegetation extent for specified Focus and BLM sensitive plant species. • The edge of suitable habitat or active nest substrates for the appropriate Focus and BLM Special Status Species.	Yes		Resource setbacks are addressed in each of the individual CMAs. Based on those discussions, the Project will comply with this CMA.
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. Species-specific seasonal restriction dates are described in the applicable CMAs.	Yes		Seasonal restrictions and requirements are specified in the species-specific CMAs and will be further specified in the required biological resource protection plans, subject to review and approval by the BLM and resource agencies. The Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		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.			
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: • Site-specific biological and nonbiological 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 LUPA CMA requirements intended to protect site-specific biological and nonbiological resources. • 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. • 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 nonbiological resources.	Yes		The Project will comply with this CMA. A Worker Environmental Awareness Program (WEAP) will be prepared, reviewed and approved by the BLM and resource protection agencies, and all crew members working on site shall receive WEAP training prior to be allowed to work on site.
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: • 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 • 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, 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. 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		The Raven Management Plan (see POD Appendix W) details methods to be implemented subsidizing predator standards in accordance with LUPA-BIO-6 and also meeting requirements established by the USFWS and CDFW. The Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• In addition to implementing the measures above on activity sites, each activity will provide compensatory mitigation that contributes to LUPA-wide raven management.			
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: • Implement site-specific habitat restoration actions for the areas affected including specifying and using: o The appropriate seed (e.g., certified weed- free, native, and locally and genetically appropriate seed) o 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) o Equipment o Timing (e.g., appropriate season, sufficient rainfall) o Location o Success criteria o Monitoring measures o Contingency measures, relevant for restoration, which includes seeding that follows BLM policy when on BLM administered lands. • 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. • 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.	Yes		A Revegetation and Integrated Weed Management Plan will be prepared and implemented for the Project, subject to the review and approval by the BLM and resource agencies. The Project will comply with this CMA.
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: • Specifying and implementing the methods, timing (e.g., criteria for triggering closure and decommissioning actions), and criteria for success (including quantifiable and measureable criteria). • 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. • 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. • 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.	Yes		A Decommissioning and Revegetation Plan will be prepared and implemented for the Project, subject to BLM and resource agency review and approval. The Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
Water and Wetland Dependent Species Resources	**LUPA-BIO-9**	Implement the following general LUPA CMA for water and wetland dependent resources • 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: o 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. o 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. o Maintenance and operations vehicles will carry the appropriate equipment and materials to isolate, clean up, and repair any hazardous material leaks, spills, or releases. • 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: o Identify site-specific surface water runoff patterns and implement measures to prevent excessive and unnatural soil deposition and erosion. o Implement measures to maintain natural drainages and to maintain hydrologic function in the event drainages are disturbed. o 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. o Stabilize disturbed areas following grading in the manner appropriate to the soil type so that wind or water erosion is minimized. o Minimize irrigation runoff by using low or no irrigation native vegetation landscaping for landscaped retention basins. o Conduct regular inspections and maintenance of long-term erosion control measures to ensure long-term effectiveness. o 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. o 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).	Yes		Project site areas with wetland vegetation will be avoided and appropriate buffers implemented as required by applicable CMAs. Best Management Practices will be identified in biological resource, hazardous material management plans, and state approved SWPPP and implemented during construction, operation, and decommissioning. The Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• Ramps that allow the egress of wildlife from ponds or other water management infrastructure will be installed.			
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: • 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.	Yes		The Revegetation and Integrated Weed Management Plan will be implemented during project construction and restoration. The Project will comply with this CMA.
Nuisance Animals and Invasive Species	**LUPA-BIO-11**	Implement the following CMAs 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. • 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. • Minimize herbicide, pesticide, and insecticide treatment in areas that have a high risk for groundwater contamination. • 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. • 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.	Yes		BMPs to control nuisance animals and invasive species will be identified in the Revegetation and Integrated Weed Management Plan, Pesticide Use Proposal, and other biological resource plans, all subject to BLM and resource agency review and approval. The Project will comply with this CMA.
Noise	**LUPA-BIO-12**	For activities that may impact Focus or BLM Special Status Species**,** implement the following LUPA 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.	Yes		Construction vehicles will be fitted with appropriate mufflers to minimize noise, and construction activities will occur in accordance with the County Noise Ordinance. No sensitive receptors are located within or adjacent to the Project site. The Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		• 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. • Use noise controls on standard construction equipment including mufflers to reduce noise			
General Siting and Design	**LUPA-BIO-13**	Implement the following CMA for project siting and design • 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). • 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: o 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) . o Within a 3-mile-wide linkage across Interstate 10 to connect the Chuckwalla and Palen mountains. o Within a 1.5-mile-wide linkage across Interstate 10 to connect the Chuckwalla Mountains to the Chuckwalla Valley east of Desert Center. o 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) . • 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. • 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. • 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. • 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. • 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		See LUPA-BIO-9. The Project will comply with this CMA. Project not located on federal lands with this designation. Project not located on federal lands with this designation. Project not located on federal lands with this designation. Project not located on federal lands with this designation. Project disturbance areas will be flagged prior to construction. Long-term night lighting would be minimized to the maximum extent feasible as identified in the Night Lighting Plan subject to BLM review and approval. Long-term night lighting would be minimized to the maximum extent feasible as identified in the Wildlife Protection Plan subject to BLM and resource agency review and approval. The Project will use existing roads and shared infrastructure where feasible. The Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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			The Project roadways would not cross any designated linkages.
		• 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.			Project roadways will not be paved.
		• Use nontoxic road sealants and soil stabilizing agents.			BLM approved soil stabilizers will be used on Project roadways.
Biology: General Standard Practices	**LUPA-BIO-14**	Implement the following general standard practices to protect Focus and BLM Special Status Species: • 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. • 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. • 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. • Minimize natural vegetation removal through implementation of crush and drive or cut or mow vegetation rather than removing entirely.	Yes		See LUPA-BIO-9. The Project will comply with this CMA.
	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		Mowing and grubbing will be utilized to minimize soil disturbance through grading. Soil stabilizers will be used to minimize dust and soil erosion. The Project will comply with this CMA.
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. Activity-specific measures to avoid and minimize impacts may include, but are not limted to: • 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.	Yes		The Nesting Bird Management Plan and Bird and Bat Conservation Plan will be prepared and implemented during Project construction and operation, respectively, both subject to BLM and resource agency approval. The Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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. • 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. • 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. • When fencing is necessary, use bird and bat compatible design standards. • 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). • Implementing a robust monitoring program to regularly check for wildlife carcasses, document the cause of mortality, and promptly remove the carcasses. • Incorporating a bird and bat use and mortality monitoring program during operations using current protocols and best procedures available at time of monitoring			
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: • Incorporating a bird and bat use and mortality monitoring program during operations using current protocols and best procedures available at time of monitoring. • Activity-specific operational avoidance and minimization actions that reduce the level of mortality on the populations of bird and bat species, such as: ○ Use techniques that minimize attraction of birds to hazardous situations that are mistaken to be or simulate natural habitats (e.g., bodies of water). ○ 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). ○ Evaluation and installation of the best available bird and bat detection and deterrent technologies available at the time of construction. Known important Focus and BLM Special Status bird areas are: • 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) • Antelope Valley (as shown in the Audubon Important Bird Areas in Appendix D) • Lower Colorado River Valley (as shown in the Audubon Important Bird Areas in Appendix D) • The Salton Sea and bordering areas including agricultural land of the Imperial Valley (as shown in the Audubon Important Bird Areas in Appendix D)	Yes		See LUPA-BIO-16. The Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• Documented avian movement corridors along the north slope of the San Gabriel and San Bernardino mountain ranges • 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 The following provides the DRECP vegetation type, and Focus and BLM Special Status Species biological CMAs to be implemented throughout the LUPA Decision Area. **Riparian and Wetland Vegetation Types and Associated Species (RIPWET)** <u>Riparian Vegetation Types</u> • Madrean Warm Semi-Desert Wash Woodland/Scrub • Mojavean Semi-Desert Wash Scrub • Sonoran-Coloradan Semi-Desert Wash Woodland/Scrub • Southwestern North American Riparian Evergreen and Deciduous Woodland • Southwestern North American Riparian/Wash Scrub <u>Wetland Vegetation Types</u> • Arid west freshwater emergent marsh • Californian Warm Temperate Marsh/Seep • North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat • Southwestern North American Salt Basin and High Marsh <u>Riparian and Wetland Bird Focus Species</u> • Willow Flycatcher • Southwestern Willow Flycatcher • Least Bell's Vireo • Western Yellow-billed Cuckoo • Yuma Clapper Rail • California Black Rail • Tricolored Blackbird <u>Fish Focus Species</u> • Desert pupfish • Mohave Tui Chub • Owens Tui Chub • Owens Pupfish			Wetland vegeation areas will be avoided and CMA required buffer implemented. No fish species occur on the Project site.
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. 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. • 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.	Yes		The riparian vegetation type on the Project site is Sonoran-Coloradan Semi-Desert Wash Woodland (mapped as desert dry wash woodland). It will be avoided and the CMA-required buffer implemented. Hydrologic function will be maintained. The Project will comply with this CMA.
	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	None of these vegetation types are present on the East Mesa site.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
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. • 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.	Yes		See LUPA-BIO-16. The Project will comply with this CMA.
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). • 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	There are no fish species in the Project area or within 0.25 miles.	
	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	There are no fish species in the Project area.	
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	The Project does not include Tehachapi slender salamander or their habitat.	
	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	The Project does not include Tehachapi slender salamander or their habitat.	
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: • Whether the proposed activity(s) occur within a sand dune or an Aeolian sand transport corridor • If the activity(s) is subject to dune/Aeolian sand transport corridor CMAs • If the activity(s) needs to be reconfigured to satisfy applicable avoidance requirements	No	While dunes exist east of the Project site, sands within and adjacent to the project site are stabilized and/or subject to anthropogenic and biological barriers that prevent migration of sand into/out of the project site. Therefore, this CMA does not apply. The Algodones Dunes start 15 miles east of the Project site and have active aeolian sand migration and deposition (Muhs et.al. 2003) sourced from active sands located to the north and east. The Project site is outside of the active sand migration and deposition zone to the north, and contains only stabilized aeolian sand deposits. Further, both on site vegetation and Interstate 8, which creates the northern boundary of the Project site, stabilizes and prevents any active sand migration/deposition into/out of the Project site. Finally, none of the plants characteristic of aeolian sands were found within the Project site during biological surveys.	

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	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: • 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 • Avoid a reduction in sand-bearing sediments within the Aeolian system • Minimize mortality to DUNE associated Focus and BLM Special Status Species	No	See LUPA-BIO-DUNE-1.	
	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	See LUPA-BIO-DUNE-1.	
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	Site is outside geographic range for MFTL.	
	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	Site is outside geographic range for MFTL.	
		The following CMAs will be implemented for bat Focus and BLM Special Status Species, including but not limited to those listed below: • California Leaf-nosed Bat • Pallid Bat • Townsend's Big-eared Bat			
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.	Yes		No active special status bats or their roosts have been identified within the survey area; however, suitable roosting habitat is found on the Project site for the western yellow bat within the desert dry wash woodland which is being avoided by the Project, including a 200 foot buffer. No caves or mining sites occur on or near the site. The Project will comply with this CMA.
	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). The following CMAs will be implemented for all plant Focus and BLM Special Status Species, including but not limited to those listed below • Alkali mariposa-lily • Bakersfield cactus • Barstow woolly sunflower • Desert cymopterus • Little San Bernardino Mountains linanthus • Mojave monkeyflower • Mojave tarplant • Owens Valley checkerbloom • Parish's daisy • Triple-ribbed milk-vetch	No	There are no mines on or within 500 feet of the Project site, as dictated in CMA LUPA-BIO-BAT-1.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
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 have been completed. The methodologies and results are included in the Biological Resources Technical Report. The Project will comply with this CMA.
	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	No Focus or BLM Special Status Plant Species were observed, as is documented in the Biological Resources Technical Report.	
	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. • 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	None of the plant species identified in Table 23 have potential to occur on the Project site or in the vicinity. The Project will not affect suitable habitat for any of these species.	
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.	Yes		Protocol surveys have been performed, which mapped one of these features as observed within the survey area: desert dry wash microphyll woodland. No creosote rings, Joshua tree woodland, Saguaro cactus, or crucifixion thorn stands with greater than 100 individuals were found. The survey results and mapping are included in the Biological Resources Technical Report. The Project will comply with this CMA.
	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	Surveys have been performed for the Project and no yucca were observed within the site.	
	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.	No	No creosote bush rings larger than 5 meters in diameter were observed during the biological resources surveys.	
	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	Surveys have been performed for the Project and no saguaro cactus were observed onsite.	
	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	Surveys have been performed for the East Mesa Project and no Joshua tree woodlands were observed onsite.	
	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).	Yes		The riparian vegetation type on the site is the Sonoran-Coloradan Semi-Desert Wash Woodland (mapped as desert dry wash woodland). Desert dry wash woodland will be avoided with a 200-foot buffer. The Project will comply with this CMA.
	LUPA-BIO-SVF-7	Crucifixion thorn stands: (*Castela emoryi* Shrubland Special Stands) Crucifixion thorn stands with greater than 100 individuals will be avoided.	No	Surveys have been performed for the Project site and no crucifixion thorn stands were observed onsite.	
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	Surveys have been performed for the Project and no cactus, yucca, or other succulents were found on the Project site.	
	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		The Applicant will allow appropriate levels of wood on the ground taking into consideration solar facility safety requirements. The Project will comply with this CMA.
	LUPA-BIO-VEG-3	Allow for the collection of plant material consistent with the maintenance of natural ecosystem processes.	Yes		Prior to project fencing, plant material could be collected as necessary. The Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	The Project is not within the Bishop Field Office area.	
	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	No BLM sensitive plants have been identified on the site. Data collected during field surveys has been mapped in the Biological Resources Technical Report and no cactus, yucca, and succulent species were observed.	
	LUPA-BIO-VEG-6	BLM may consider disposal of succulents through public sale, as per current up-to-date state and national policy.	No	The CMA refers to a BLM discretionary action outside of the Project.	
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	The Project does not include activities within desert tortoise linkages identified in Appendix D.	
	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. 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. 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	The Project does not include activities within desert tortoise conservation areas or linkages identified in Appendix D.	
	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	The Project is located outside of the range of desert tortoise.	
	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. • 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	The Project is located outside of the range of desert tortoise.	

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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. • 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. • 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. • 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. • 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. • 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. • 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.			
	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. 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. 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	The Project is located outside of the range of desert tortoise.	
	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	The Project is located outside of the range of desert tortoise.	
	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	The Project is located outside of the range of desert tortoise.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	The Project is located outside of the range of desert tortoise.	
	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	The Project is located outside of the range of desert tortoise.	
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		The Project will prepare a Flat-Tailed Horn Lizard Management Plan as part of Project mitigation. The Project will comply with this CMA.
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	Surveys have been performed for the Project site and no Bendire's thraser were observed onsite.	
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		Burrowing owls were observed during the Project surveys. With implementation of mitigation measures to be developed during the NEPA process and the Project Wildlife Protection and Translocation Plan (POD Appendix U), the Project will comply with this CMA.
	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		See LUPA-BIO-IFS-12. The Project will comply with this CMA.
	LUPA-BIO-IFS-14	Activity-specific active translocation of burrowing owls may be considered, in coordination with CDFW.	Yes		See LUPA-BIO-IFS-12. The Project will comply with this CMA.
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	The Project is not located within California condor range or habitat.	
	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	The Project is not located within California condor range or habitat.	
	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	The Project is not located within California condor range or habitat.	
	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	The Project is not located within California condor range or habitat.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	The Project is not located within California condor range or habitat.	
	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	The Project is not located within California condor range or habitat.	
	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	The Project is not located within California condor range or habitat.	
	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	The Project is not located within California condor range or habitat.	
	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	The Project is not located within California condor range or habitat.	
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	The Project is located more than 5 miles from suitable golden eagle nesting habitat.	
	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	The Project is located more than 5 miles from suitable golden eagle nesting habitat.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	The Project is located more than 5 miles from suitable golden eagle nesting habitat.	
	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	The Project is located more than 5 miles from suitable golden eagle nesting habitat.	
	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	The Project is located more than 5 miles from suitable golden eagle nesting habitat.	
	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	The Project is not located in a designated recreational area; therefore, no recreational conflicts exist and no public notification would be required.	
	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	The Project is located more than 1 mile from suitable golden eagle nesting habitat; therefore, no ongoing take is 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	The Project is not likely to impact golden eagles. Avian Power Line Interaction Committee (APLIC) guidelines will be followed to avoid bird electrocutions along the gen-tie line.	
Swainson's Hawk	**LUPA-BIO-IFS-32**	Avoid use of rodenticides and insecticides within five miles of active Swainson's hawk nest.	No	The Project is located outside of the geographic range (except during migration) of Swainson's hawks.	
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.	No	No designated water sources for desert bighorn sheep are located within the Project site.	
	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	No designated water sources for desert bighorn sheep are located within the 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	The Project is located outside of the range of the Mohave ground squirrel.	
	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	The Project is located outside of the range of the Mohave ground squirrel.	
	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	The Project is located outside of the range of the Mohave ground squirrel.	
	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	The Project is located outside of the range of the Mohave ground squirrel.	
	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.	No	The Project is located outside of the range of the Mohave ground squirrel.	

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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.			
	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	The Project is located outside of the range of the Mohave ground squirrel.	
	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	The Project is located outside of the range of the Mohave ground squirrel.	
	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	The Project is located outside of the range of the Mohave ground squirrel.	
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. 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.	Yes		Appropriate biological resources compensation will be provided as identified through the NEPA process. The Project will comply with this CMA.
		Refer to CMA **LUPA-COMP-1** and **2** for the timing requirements for initiation or completion of compensation.			
	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.	Yes		The Project will prepare and implement an agency-approved Bird and Bat Conservation Strategy that will consider the actions addressed here (see POD Appendix X). Implementation of the Project-specific Bird and Bat Conservation Strategy will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		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.			
	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	The Project is located more than 1 mile from suitable golden eagle nesting habitat.	
	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	The Project is located more than 1 mile from suitable golden eagle nesting habitat.	
Air Resources	**LUPA-AIR-1**	All activities must meet the following requirements: • Applicable National Ambient Air Quality Standards (Section 109) • State Implementation Plans (Section 110) • Control of Pollution from Federal Facilities (Section 118) including non-point source • Prevention of Significant Deterioration, including visibility impacts to mandatory Federal Class I Areas (Section 160 et seq.) • Conformity Analyses and Determinations (Section 176[c]) • Apply best management practices on a case by case basis • Applicable local Air Quality Management Jurisdictions (e.g., 403 SCAQMD)	Yes		The Project will comply with all federal, state, and local laws and regulations, and mitigation measures developed during the NEPA process regarding air quality. The Project will comply with the CMA.
	LUPA-AIR-2	Because project authorizations are a federal undertaking, air quality standards for fugitive dust may not exceed local standards and requirements.	Yes		With implementation of mitigation measures to be developed during the NEPA process, the Project will comply with this CMA.
	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.	Yes		With implementation of mitigation measures to be developed during the NEPA process and laid out in the Fugitive Dust Control Plan (POD Appendix J), and as modeled in the Air Quality Emissions Report (POD Appendix J), the Project will comply with this CMA.
	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		With implementation of mitigation measures to be developed during the NEPA process and laid out in the Fugitive Dust Control Plan (POD Appendix J), and as modeled in the Air Quality Emissions Report (POD Appendix J), the Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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.			
	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. ***II.4.2.1.3 Comprehensive Trails and Travel Management*** **Components of a Designated Travel Network** 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: • 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. • 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. • 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. Designated Roads, Primitive Roads, and Trails are categorized as follows: • Tier 1: Roads and Primitive Roads with high values for commercial, recreational, casual uses, and/or to provide access to other recreation activities. • Tier 2: Roads and Primitive Roads with high values for recreation and other motorized access (i.e., important through routes). • Tier 3: Primitive Roads and Trails with high value for motorized and non-motorized recreational pursuits (i.e., spur routes). **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. 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: • 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. • 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: ○ Types or modes of travel, such as foot, equestrian, bicycle, and motorized	Yes		With implementation of mitigation measures to be developed during the NEPA process and the Fugitive Dust Control Plan (POD Appendix J), the Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		○ Existing roads and trails ○ 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 ○ BLM administrative use only ○ Other types of limitations • 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** 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. 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: • Maintaining or improving access to BLM recreational destinations and activities • Helping meet the increasing demand for pleasure driving in back country environments. • Facilitating effective partnerships at the local, state, and national levels • Contributing to local and regional economies through increased tourism • Increasing public awareness of the availability of outstanding recreation attractions on public lands • Enhancing the visitors' recreation experience and communicate the multiple-use management message through an effective wayside interpretive program • Increasing the visibility of BLM as a major supplier of outdoor recreation opportunities • Managing the increased use created through the program to minimize impacts to the environment • Contributing to the National Scenic Byways Program in a way that is uniquely suited to national public lands managed by BLM 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. Due to their remoteness, byway travelers should always inquire locally as to byway access and road conditions. • 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. • 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.			

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		• 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. • 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.			
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	The Project is not located within a SRMAs, ERMAs, OHV Open Areas, and Level 1, 2, and 3 Recreation Facilities, nor does it provide access.	
	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.	No	The Project would not impact access to recreational areas.	
	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	There are no significant linear features that are within 0.5 miles of the Project.	
	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	There are no Tier 1 or Tier 2 roads/primitive roads, Back Country Byways, or significant linear features that would be affected by the Project.	
	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	The Project would not conflict with OHV management.	
	LUPA-CTTM-6	Manage Back Country Byways as a component of BLM Recreation and Travel and Transportation Management program**.**	No	There are no Back Country Byways that would be affected by the Project area.	
	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	There are no Recreation Facilities within, or near, the Project.	
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	This is a Plan-wide BLM task. Record keeping and tracking are agency functions, therefore, this CMA does not pertain to this specific project.	
	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.	No	This is a Plan-wide BLM task. BLM determines priority geographic areas for inventory outside of the compliance review process for individual projects.	
	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		The intent of this CMA is accomplished through compliance with NEPA, EX13175, EX13007 and all other applicable laws, regula-tions, and policies. The Project will comply with this CMA.
	LUPA-CUL-4	Design activities to minimize impacts on cultural resources including places of traditional cultural and religious importance to federally recognized Tribes.	Yes		The intent of this CMA is accomplished through compliance with NEPA, National Historic Preser¬vation Act (NHPA), EX13175, EX13007 and all other applicable laws, regulations, and policies. The Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	This is a Plan-wide BLM task. The Project does not include any recreational uses.	
	LUPA-CUL-6	Develop partnerships to assist in the training of groups and individuals to participate in site stewardship programs.	No	This is a Plan-wide BLM task. The Project would not result in group or individual use of any sites.	
	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.).	Yes		The analysis of the VRM Classes will consider all applicable resources in the analysis. The Project will comply with this CMA.
	LUPA-CUL-8	Conduct regular contact and consultation with federally recognized Tribes and individuals, consistent with statute, regulation and policy.	Yes		This is an agency requirement so would be fulfilled by BLM through compliance with NEPA, Section 106 of the NHPA, EX13175, and all other applicable laws, regula¬tions, and policies. The Project will comply with this CMA.
	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		This is accomplished through NEPA, EX13175 and EX13007 and all other applicable laws, regulations, and policies. The Project will comply with this CMA.
	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	During Project surveys no desert fan palm oasis vegetation type/communities were observed.	
	LUPA-CUL-11	Promote and protect desert microphyll woodland vegetation type/communities to ensure Native American cultural values are maintained.	Yes		The Project will avoid microphyll woodland and establish the CMA required buffer. The Project will comply with this CMA.
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	The Project is not located on acquired lands.	
	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.	Yes		The Project would not acquire lands except as mitigation. Mitigation lands would need to conform to the resource needs and then could consider other priorities. Mitigation lands would need to be approved by the BLM. The Project would comply with this CMA.
	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	The Project is located in a DFA.	
	LUPA-LANDS-4	Nonfederal lands within the boundaries of BLM LUPA land use allocations are not affected by the LUPA.	No	The Project is on federal land, designated as a DFA.	
	LUPA-LANDS-5	The MUCs used to determine land tenure in the CDCA Plan will be replaced by areas listed in the CMAs below.	Yes		The Project is located in a DFA and will comply with this CMA.
	LUPA-LANDS-6	Any activities on Catellus Agreement lands will be consistent with deed restrictions	No	The Project is not located on Catellus Agreement lands.	
	LUPA-LANDS-7	Any activities on Catellus Agreement lands will be subject to the approval of the California State Director.	No	The Project is not located on Catellus Agreement lands.	
	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.	Yes		The Project is located in a DFA and the 500 kV loop-in transmission lines would traverse a designated federal utility corridor. The Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
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** 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**	No	Subject land use does not occur on Project site.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		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.			

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		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. 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.			

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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	Subject 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	Subject 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	Subject 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	Subject 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	Subject land use does not occur on Project site.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	Project site not located in subject areas.	
	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	Project site not located in subject areas.	
	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	Project site not located in subject areas.	
Minerals	**LUPA-MIN-1**	High Potential Mineral Areas (identified in CA GEM data) • 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. • If an activity is proposed in a High Potential Mineral Area, analyze and consider the mineral resource value in the NEPA analysis.	No	The Project is not located in an area identified as a High Potential Mineral Area.	
	LUPA-MIN-2	Existing Mineral/Energy Operations 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	The Project is not located in an area with existing minerals or energy operations.	
	LUPA-MIN-3	Existing High Priority Mineral/Energy Operations Exclusion Areas • 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. • High priority operation exclusions are referenced by name with their respective footprint (acreage) below. o MolyCorp REE (General Legal Description: 35º 26'N; 115º 29'W)—10,490.9 surface acres o Briggs Au, Etna (General Legal Description: 35º 56'N; 117º 11'W)—3,216.9 surface acres o Cadiz Evaporites (General Legal Description: 34º 17'N; 115º 23'W)—2,591.5 surface acres o Searles Dry Lake (Evaporate) Operation (General Legal Description: 35º 43'N; 117º 19'W)—72,000 surface acres	No	The Project is not located in an existing high priority mineral area.	

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		○ Bristol Dry Lake (Evaporate) Operation (General Legal Description: 34º 29'N; 115º 43'W)—3,500 surface acres ○ Mesquite Gold Mine (General Legal Description: 33º 04'N; 114º 59'W)—4,500 surface acres ○ Hector Mine (Hectorite Clay) (General Legal Description: 34º 45'N; 116º 25'W)—1,500 surface acres ○ Castle Mountain/Viceroy Mine (Gold) (General Legal Description: 35º 17'N; 115º 3'W)—5,000 surface acres			
	LUPA-MIN-4	Access to Existing Operations • Established designated, approved, or authorized access routes to the aforementioned existing authorized operations and areas will be designated as allowable uses. • 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	The Project is not in an area where there are identified mineral resources.	
	LUPA-MIN-5	Areas Located Outside Identified Mineral Areas • 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	The Project is not in an area where there are identified mineral resources.	
	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	The Project is not in an area where there are existing mineral operations or identified mineral resources.	
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	The Project is not near the NRTs.	
	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	The Project is not near the NRTs.	
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		The required PFYC has been submitted to BLM as part of the NEPA evaluation for paleontological resources. The Project will comply with this CMA.
	LUPA-PALEO-2	Incorporate all guidance provided by the Paleontological Resources Protection Act.	Yes		In coordination with BLM as part of the NEPA process for paleontological resources, the Project will comply with this CMA.
	LUPA-PALEO-3	Ensure proper data recovery of significant paleontological resources where adverse impacts cannot be avoided or otherwise mitigated.	Yes		In coordination with BLM as part of the NEPA process for paleontological resources, the Project will comply with this CMA.
	LUPA-PALEO-4	Paleontological surveys and construction monitors are required for ground disturbing activities that require an EIS.	Yes		In coordination with BLM as part of the NEPA process for paleontological resources, the Project will comply with this CMA.
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	The Project site does not contain, nor is it located adjacent to recreational or visitor services.	
	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	The Project site does not contain, nor is it located adjacent to recreational or visitor services.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	The Project site does not contain, nor is it located adjacent to recreational or visitor services.	
	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	The Project site does not contain, nor is it located within one mile of Level 1 or Level 2 recreational or visitor services.	
	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	The Project site does not contain, nor is it located within one mile of Level 3 recreational or visitor services.	
	LUPA-REC-6	Limit signage to that necessary for recreation facility/area identification, interpretation, education and safety/regulatory enforcement.	No	The Project site does not contain, nor is it located adjacent to recreational or visitor services.	
	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	The Project would not include any vehicular stopping, parking, or camping areas. The Project site is located within a DFA.	
	LUPA-REC-8	Provide on-going maintenance of recreation and conservation facilities, interpretive and regulatory signs, roads, and trails.	No	The Project will not be located within or near recreation and conservation facilities.	
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		With implementation of mitigation measures to be developed during the NEPA process, the Project will comply with the CMA.
	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.	Yes		With implementation of mitigation measures to be developed during the NEPA process, the Project will comply with the CMA.
	LUPA-SW-3	Where a seeming conflict between CMAs within or between resources arises, the CMA(s) resulting in the most resource protection apply.	No	No conflicts between CMAs have been identified for the Project.	
	LUPA-SW-4	Nothing in the "Exceptions" below applies to or takes precedence over any of the CMAs for biological resources.	No	The Project would comply with the CMAs for biological resources.	
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: • 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		The CMA does not require actions but allows for some flexibility on how to comply with other CMAs.
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		The Applicant will ensure that its third-party contractor adheres to LUPA-SW-6 and the specifics in Hazardous Materials Management and Oil Spill Response Plan (POD Appendix O). The Project will comply with this CMA.
	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.	Yes		A Health, Safety, and Noise Plan, which addresses emergency response is included in POD Appendix K. The Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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	The Project will take the erosion potential into consideration during engineering to avoid areas of high erodibility or to minimize water and air erosion through the use of BMPs. No site-specific plan is required.	
	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	Surveys have been performed and no desert pavement areas were observed in the Project area.	
	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	Surveys have been performed and no sensitive soil areas were observed in the Project area.	
	LUPA-SW-11	Where possible, side casting shall be avoided where road construction requires cut-and-fill procedures.	Yes		The Project will avoid side casting where road construction requires cut-and-fill procedures. The Project will comply with this CMA.
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	The Project would not place structures on a playa or a Wild and Scenic River corridor.	
	LUPA-SW-13	BLM will manage all riparian areas to be maintained at, or brought to, proper functioning condition.	No	The CMA is specific to BLM actions.	
	LUPA-SW-14	All relevant requirements of Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands) will be complied with.	No	The Project would not be located in a FEMA or Department of Housing and Urban Development (HUD) mapped floodplain, and project construction is not proposed in wetlands.	
	LUPA-SW-15	Surface water diversion for beneficial use will not occur absent a state water right.	No	The Project would not include surface water diversion for beneficial uses.	
	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		FEMA flood insurance rate maps have not been prepared for the Project site or surrounding lands and the site does not lie within a federally mapped floodplain. The Project will comply with this CMA.
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.	Yes		A Water Supply Assessment will be prepared (to be included as POD Appendix G). Groundwater Monitoring and Reporting and any potential impacts will be addressed with implementation of mitigation measures to be developed during the NEPA process. The Project will comply with this CMA.
	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.	Yes		The Project will follow all plan and permit stipulations regarding water use. The Project will comply with this CMA.
	LUPA-SW-19	Water flow meters shall be installed on all extraction wells permitted by BLM.	Yes		If a water well is drilled at the Project site, a water meter will be installed. The Project will comply with this CMA

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	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		The Project would comply with BMPs and allow sheet flow through the sites. No unavoidable residual impacts to surface waters are anticipated that would result in a net loss of function and value. The Project will comply with this CMA.
	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.	Yes		The Project would substantially maintain the existing hydrology of the area; minimal additional impermeable surfaces are proposed. The Project will comply with this CMA.
	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		With implementation of mitigation measures to be developed during the NEPA process, the Project will comply with the CMA.
	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, • All relevant groundwater basins or sub-basins and their relationships. • 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. • All surface water basin(s) related to water runoff, delivery, and supply, if different from the groundwater basin(s). • All sites of surface outflow (springs or seeps) contained within the basin(s), including historic sites. • All other surface water bodies in the basins(s), including rivers, streams, ephemeral washes/drainages, lakes, wetlands, playas, and floodplains. • The water requirements of the proposed project and the source(s) of that water. • An analysis demonstrating that water of sufficient quantity and quality is available from identified source(s) for the life of the project. • 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. • 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. 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: $P - R - E - T - G = \Delta S$	Yes		A Water Supply Assessment is being prepared for the Project as part of the NEPA process. The Project will comply with this CMA.

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
		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 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 The Water Supply Assessment shall also address: • 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 • Potential to cause subsidence and loss of aquifer storage capacity due to groundwater pumping • Potential to cause injury to other water rights, water uses, and land owners • Changes in water quality and quantity that affect other beneficial uses • 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 • 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 • 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			

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	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.	Yes		A Water Supply Assessment will be included in POD Appendix G. Groundwater Monitoring and Reporting will be included in the mitigation measures developed during the NEPA process. The Project will comply with this CMA.
	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.	Yes		Use of water will be considered during the NEPA process and if deemed appropriate, trigger points may be required. The Project will comply with this CMA if required after additional study.
	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.	Yes		A Water Supply Assessment will be included in POD Appendix G. Groundwater Monitoring and Reporting and any potential impacts will be addressed with implementation of mitigation measures to be developed during the NEPA process. The Project will comply with this CMA.
	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.	Yes		A Water Supply Assessment will be included in POD Appendix G. Groundwater Monitoring and Reporting and any potential impacts will be addressed with implementation of mitigation measures to be developed during the NEPA process. The Project will comply with this CMA.

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	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.	Yes		IP Perkins, LLC expects to source water from a combination of onsite groundwater well(s) and alternative offsite sources. The Project will comply with this CMA.
	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.	Yes		The Project may obtain water outside of the Project site DFA and will implement appropriate groundwater pumping mitigation. The Project will comply with this CMA.
	LUPA-SW-30	Activities shall comply with local requirements for any long term or short term domestic water use and wastewater treatment.	Yes		The Project will comply with this CMA by adhering to any applicable local requirements regarding domestic water use and wastewater treatment.
	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.	Yes		Should a well be drilled on the Project site, the Project will comply with this CMA and its stated specification.
	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.	Yes		IP Perkins, LLC expects to source water from a combination of onsite groundwater well(s) and alternative offsite sources. The Project will comply with this CMA.
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	The Project is not located within 25 miles of Devil's Hole.	
	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	The Project is not located in the Calvada Springs/Couth Pahrump Valley area.	

LUPA Wide Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	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: • Potential impacts on the water balances of groundwater basins within these parks and preserves • 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 • Any project-related modifications to surface water resources, both temporary and permanent • Analysis of any potential impacts on perennial streams, intermittent streams, and ephemeral drainages that could negatively impact natural riparian buffers • 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 stormwater diverted around or through the project site is returned to natural drainage systems downslope of the project • Any potential indirect project-related causes of hydrologic changes that could exacerbate flooding, erosion, scouring, or sedimentation in stream channels • Alternatives and mitigation measures proposed to reduce or eliminate such impacts	No	The Project is not located in the vicinity of Death Valley National Park, Joshua Tree National Park, or Mojave National Preserve.	
Visual Resources Management	LUPA-VRM-1	Manage Visual Resources in accordance with the VRM classes shown on Figure 9.	Yes		Under the DRECP LUPA, the DFA where the Project is located is classified as VRI Class IV. The Project will comply with this CMA.
	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.	Yes		Under the DRECP LUPA, the DFA where the Project is located is classified as VRI Class IV. The NEPA analysis will consider the visual contrast rating process. The Project will comply with this CMA.
	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	Yes		Under the DRECP LUPA, the DFA where the Project is located is classified as VRI Class IV. The Project will implement BMPs as necessary to comply with this CMA.
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	There are no lands with wilderness characteristics on or adjacent to the Project site.	
	LUPA-WC-2	Employ avoidance measures as described under DFAs and approved transmission corridors.	No	There are no lands with wilderness characteristics on or adjacent to the Project site.	

LUPA Wide					
Category	**CMA #**	**CMA Text**	**Applicability**	**Explanation: Why CMA is not applicable**	**Comments**
	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: • 2:1 ratio for impacts from any activities that impact those wilderness characteristics, except in DFAs and transmission corridors • 1:1 ratio for impact from any activities that impact the wilderness characteristics in DFAs and transmission corridors 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	There are no lands with wilderness characteristics on or adjacent to the Project site.	
	LUPA-WC-4	For areas identified to be managed to protect wilderness characteristics, identified in Figure 7, the following CMAs are required: • Include a no surface occupancy stipulation for any leasable minerals with no exceptions, waivers, or modifications. • Exclude these areas from land use authorizations, including transmission. • Close areas to construction of new roads and routes. Vehicles will continue to be permitted on existing designated routes. • Close areas to mineral material sales. • Prohibit commercial or personal-use permits for extraction of materials (e. g. no wood-cutting permits). • Manage the area as VRM II. • 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. • Make lands unavailable for disposal from federal ownership.	No	There are no lands with wilderness characteristics on or adjacent to the Project site.	
	LUPA-WC-5	Manage the following Wilderness Inventory Units to protect wilderness characteristics: • 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	There are no lands with wilderness characteristics on or adjacent to the Project site.	

Transmission

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Biological Resources	**LUPA-TRANS-BIO-1**	Where feasible and appropriate for resource protection, site transmission activities along roads or other previously disturbed areas to minimize new surface disturbance, reduce perching opportunities for the Common Raven, and minimize collision risks for birds and bats.	Yes		The Project 500 kV loop-in transmission line corridor has been sited to minimize biological impacts. Once surveys of the transmission corridor have been completed, the two transmission line alignments within the corridor will be sited in such a manner to further minimize biological impacts. The Project will comply with this CMA.
	LUPA-TRANS-BIO-2	Flight diverters will be installed on all transmission activities spanning or within 1,000 feet of stream and wash channels, canals, ponds, and any other natural or artificial body of water. The type of flight diverter selected will be subject to approval by BLM, in coordination with USFWS and CDFW as appropriate, and will be based on the best available scientific and commercial data regarding the prevention of bird collisions with transmission and guy wires.	Yes		Flight diverters will be installed on the Project gen-tie and 500 kV loop-in transmisison lines, including the All-American Canal crossing. The Project will comply with this CMA.
	LUPA-TRANS-BIO-3	When siting transmission activities, the alignment should avoid, to the maximum extent practicable, being located across canyons or on ridgelines. Site and design sufficient distance between transmission lines to prevent electrocution of condors.	No	The Project gen-tie and 500 kV loop-in transmision lines would not cross canyons or ridgelines.	
	LUPA-TRANS-BIO-4	Siting of transmission activities will be prioritized within designated utility corridors, where possible, and designed to avoid, where possible, and otherwise minimize and offset impacts to sand transport processes in Aeolian corridors, rare vegetation alliances and Focus and BLM Special Status Species. Transmission substations will be sited to avoid Aeolian corridors, rare vegetation alliances, and sand-dependent Focus and BLM Special Status Species habitats.	Yes		The Project 500 kV loop-in transmission lines will traverse the designated federal utility corridor. Also see CMA LUPA-TRANS-BIO-1. The Project will comply with this CMA.
Cultural Resources & Tribal Interests	**LUPA-TRANS-CUL-1**	For transmission (and renewable energy) activities, require the applicant to pay all appropriate costs associated with the following processes, through the appropriate BLM funding mechanism: • All appropriate costs associated with the BLM's analysis of the DRECP geodatabase and other sources for cultural resources sensitivity. • All appropriate costs associated with preliminary sensitivity analysis. • 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. • All appropriate costs associated with updating the DRECP cultural resources geodatabase with project specific results.	Yes		The existing cost-recovery agreements meet the requirements of this CMA.
	LUPA-TRANS-CUL-2	Consistent and in compliance with the NHPA Programmatic Agreement, signed February 5, 2016, or the most up to date signed version – for transmission (and renewable energy) activities, a compensatory mitigation fee will be required within the LUPA Decision Area to address cumulative and some indirect adverse effects to historic properties. The mitigation fee will be calculated in a manner that is commensurate to the size and regional impacts of the project. Refer to the NHPA Programmatic Agreement for details regarding the mitigation fee.	Yes		This will be accomplished through mitigation measures developed through the Section 106 or NEPA process at that time. The Project will comply with this CMA.
	LUPA-TRANS-CUL-3	For transmission (and renewable energy) activities, the management fee rate will be determined through the NHPA programmatic Section 106 consultation process that will be completed as part of the DRECP land use plan amendment.	Yes		This will be accomplished through mitigation measures developed through the Section 106 or NEPA process at that time. The Project will comply with this CMA.

Transmission

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	LUPA-TRANS-CUL-4	For transmission (and renewable energy) activities, 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.	Yes		This CMA is an action to be taken by the BLM.
	LUPA-TRANS-CUL-5	For transmission (and renewable energy) activities, 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.	Yes		A BLM Class III archaeological survey will be completed for the Project, including the gen-tie and 500 kV loop-in transmission lines and access routes prior to the NEPA review, which exceeds the requirements of this CMA. The Project will comply with this CMA.
	LUPA-TRANS-CUL-6	For transmission (and renewable energy) activities, 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.	Yes		Mitigation measures will require reducing impacts of the Project to cultural resources to the extent feasible. The Project will comply with this CMA.
	LUPA-TRANS-CUL-7	For transmission (and renewable energy) activities, 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.	Yes		NHPA Section 106 compliance will be completed consistent with the DRECP PA. Section 106 compliance will be completed prior to the issuance of a Decision Record for the Project. The Project will comply with this CMA.
Wilderness Characteristics	**LUPA-TRANS-WC-1**	Allow transmission activities in areas inventoried and identified as lands with wilderness characteristics.	No	The Project would not be located on lands identified as having wilderness characteristics.	
	LUPA-TRANS-WC-2	For inventoried lands found to have wilderness characteristics impacted by transmission activities, compensatory mitigation is required at a 1:1 ratio if wilderness characteristics are directly impacted. This may be accomplished through acquisition and donation, from 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	The Project would not be located on lands identified as having wilderness characteristics.	

Compensation

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	LUPA-COMP-1	For third party actions, compensation activities must be initiated or completed within 12 months from the time the resource impact occurs (e.g. ground disturbance, habitat removal, route obliteration, etc. for construction activities; wildlife mortality, visual impacts, etc. due to operations). • BLM will determine, in the environmental analysis, the activity/project-level timing of the compensation (i.e. initiated, completed or a combination) based on the specific resources being impacted, and scope and content of the activity. • A 6 month extension may be authorized, subject to approval by the authorizing officer, dependent on the resources impacted and compensation due diligence of the project developer.	Yes		The Project will comply with this CMA.
	LUPA-COMP-2	For BLM initiated activities, compensation activities will be initiated or completed within 12 months from the time the resource impact occurs (e.g. ground disturbance, habitat removal, route obliteration, etc. for construction activities; wildlife mortality, visual impacts, etc. due to operations), subject to federal budget appropriations. • BLM will determine, in the environmental analysis, the activity/project-level timing of its compensation (i.e. initiated, completed or a combination) based on the specific resources being impacted, and scope and content of its activity. o The estimated costs and 12 month timing of required compensation will be built into the activity/project design and environmental analysis.	No	The Project is not a BLM-initiated project.	

Ecological and Cultural Conservation

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Dune Vegetation Types, Aeolian Processes and Associated Species: North American Warm Desert Dune & Sand Flats	**CONS-BIO-DUNE-1**	All long-term structures will be setback 0.25 mile from Aeolian corridors and Mojave fringe-toed lizard suitable habitat.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
	CONS-BIO-DUNE-2	All activities will be sited and/or configured to maintain the spatial extent, habitat quality, and ecological function of Aeolian transport corridors unless related to maintenance of existing (at the time of the DRECP LUPA ROD) facilities/activities. • Roads will not be paved, unless paving is needed to meet another resource objective and Aeolian processes can be preserved. • Newly constructed roads and/or routes may be considered if they benefit minimization measures for natural, cultural and ecological resources of concern.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
Plant Focus & BLM Special Status Species	**CONS-BIO-PLANT-1**	Occurrences of plant Focus and BLM Special Status Species, including in designated transmission corridors, will be avoided, to the maximum extent practicable (see "unavoidable impacts to resources" in the Glossary of Terms).	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
Individual Focus Species: Desert Tortoise	**CONS-BIO-IFS-1**	All activities, except transmission, that will result in the long-term removal of habitat supporting an adult desert tortoise density (i.e., individuals 160mm or more) of more than 5 per square mile or more than 35 individuals total are prohibited. The number of desert tortoises on an activity site will be based on estimates derived from the protocol surveys described previously using the USFWS's pre-activity survey protocol.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
	CONS-BIO-IFS-2	All activities, except transmission, in desert tortoise TCAs or linkages, as identified in Appendix D, that will result in long-term removal of habitat supporting more than 5 adult individuals are prohibited. The number of desert tortoises on-site is based on estimates derived from the protocol surveys described previously using the USFWS's pre-activity survey protocol.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
	CONS-BIO-IFS-3	Ground disturbance caps as per **Table 20** are reflected in the individual ACEC Special Unit Management Plans and maps in Appendix B**.** Refer to the California Desert National Conservation Lands, Section II.2.1, and ACECs, Section II.2.2, for a description of how the BLM Conservation Lands Ground Disturbance Cap will be applied, including measured, activity approval and the disturbance mitigation strategy. The same implementation methodology is repeated in CMAs NLCS-DIST-2 and ACEC-DIST-2. **Table 20** provides the specific desert tortoise conservation area and linkage ground disturbance caps in the BLM LUPA conservation designations.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
Individual Focus Species: Gila Woodpecker	**CONS-BIO-IFS-4**	All activities will be avoided in the vicinity of Corn Springs and Milpitas Wash, except as administratively necessary or necessary to support existing facilities, as determined by BLM, in order to protect previously occupied and future restored suitable nesting habitat for the Gila woodpecker.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
Individual Focus Species: Golden Eagle	**CONS-BIO-IFS-5**	The cumulative loss of foraging habitat within a 4 mile radius around active or alternative golden eagle nests will be limited to less than 10% in BLM LUPA	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project;
Individual Focus Species: Desert Bighorn Sheep	**CONS-BIO-IFS-6**	BLM designated routes and trails will be appropriately seasonally signed to limit use to the routes and trails, if necessary to reduce impacts from recreational use to lambing and rearing.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.

Ecological and Cultural Conservation

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	CONS-BIO-IFS-7	For non-BLM Lessee's, domestic livestock will not be allowed to be trailed (transported on foot [herded]) through known or likely to be occupied bighorn sheep habitat, to minimize exposure and disease transmission to bighorn sheep. Vehicular movement of livestock will be allowable. Livestock will not be allowed to exit the vehicle transport, except in emergencies, while on BLM- administered land. For BLM Lessee's, consistent with existing (at time of DRECP LUPA ROD) leases and allotment plans, domestic livestock will be controlled and moved to minimize exposure and disease transmission to bighorn sheep, using techniques including but not limited to fencing with adequate buffers, vehicle transport, and timing. Vehicular movement of livestock will be allowable. Livestock will remain in the vehicle transport, except in emergencies, while on BLM-administered land, unless at the destination. For BLM grazing Lessee's, trailing of domestic sheep between discontiguous allotments, may be permittable if done in a manner, including timing, which prevents interaction with bighorn sheep and avoids disease transmission from domestic sheep to bighorn sheep. At the time of grazing allotment lease and/or allotment plan renewal, a measure to eliminate trailing within allotments (movement of domestic livestock on foot or herding) through known or likely to be occupied bighorn sheep habitat will be considered and analyzed using the best available science on domestic livestock disease transmission to bighorn sheep.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
	CONS-BIO-IFS-8	To reduce the impact on bighorn sheep from domestic livestock in grazing allotments, BLM will: • Accept voluntarily retirement of allotments • Accept donation of allotments as one component of mitigation • Require specific terms and conditions in renewed grazing permits, as needed • Consider converting domestic sheep allotments to cattle allotments • Consistent with existing or renewed grazing allotment plans, remove or alter livestock fencing to enhance bighorn sheep movements.	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
Individual Focus Species: Mohave Ground Squirrel	**CONS-BIO-IFS-9**	Long-term vegetation removal within key population centers and linkages from activities, requiring an EA or EIS, that may impact the Mohave ground squirrel is prohibited, unless the activity is compatible with Mohave ground squirrel conservation and management. Compatible land uses are those described in the BLM LUPA for ACECs where Mohave ground squirrel occur.	No	Project not within the range or habitat of this species.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
	CONS-BIO-IFS-10	To the maximum extent practicable (see Glossary of Terms) and/or as allowed under existing permits, establish and maintain fencing to exclude cattle, horses, sheep, and other potential grazers from areas that are protected and managed for Mohave ground squirrel and from vegetation stands that are important foraging habitat, including winterfat and spiny hopsage.	No	Project not within the range or habitat of this species.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.
Comprehensive Trails & Travel Management	**CONS-CTTM-1**	Refer to the individual California Desert National Conservation Lands and ACEC Special Unit Management Plans in Appendix A and B, respectively, for specific objectives, management actions and allowable uses. Manage roads/trails consistent with California Desert National Conservation Lands/ACEC goals and objectives and as designated in Trails and Travel Management Plans (TTMPs) or Resource Management Plans (RMPs).	No	Project is not located in or near the area specified in the CMA.	There are no Ecological and Cultural conservation areas within the East Mesa Project; none of these CMAs apply.

Ecological and Cultural Conservation

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Recreation & Visitor Services	**CONS-REC-1**	In California Desert National Conservation Lands and ACECs that overlap with SRMAs and ERMAs, manage in accordance with the Special Unit Management Plans for the SRMA/ERMA and the applicable ecological and cultural conservation unit. If there is a conflict between the California Desert National Conservation Lands or ACEC management and the SRMA/ERMA management, the BLM will apply the most protective management (i.e., management that best supports natural and cultural resource conservation and limits impacts to the values for which the conservation unit was designated).	No	Project is not located in or near the area specified in the CMA.	
	CONS-REC-2	Maintain targeted recreation activities, experiences and benefits as consistent with the protection of the values for which the ecological and cultural conservation unit was designated. 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	Project is not located in or near the area specified in the CMA.	
	CONS-REC-3	Design public access features (access roads, roadside stops, trailheads, interpretive sites, etc.) to support or enhance conservation values for California Desert National Conservation Land units and ACECs.	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 is not located in or near California Desert National Conservation Lands.	
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	Project is not located in or near California Desert National Conservation Lands.	
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	Project is not located in or near California Desert National Conservation Lands.	
	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: • 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	Project is not located in or near California Desert National Conservation Lands.	

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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. • 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. **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.			

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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. **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: • Authorized/approved ground disturbing activities – built and not yet built • 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) • 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: o Activity-specific environmental analysis, such as NEPA or ESA Section 7 Biological Assessment o Known and documented patterns of ground disturbance o 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 • Any unauthorized disturbance that can be seen at a 1:10,000 scale using the best available aerial imagery • Ground disturbance from wildfire, animals, or other disturbances that can be seen at a 1:10,000 scale using the best available aerial imagery • Historic Route 66 maintenance - potential ground disturbance estimates: – 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: ▪ South Amboy-Mojave California Desert National Conservation Lands 221 acres ▪ Bristol Mountains ACEC 92 acres ▪ Chemehuevi ACEC 43 acres ▪ Pisgah ACEC 86 acres o The estimated ground disturbance acreage includes disturbance associated with potential access to the locations if no current access exists.			

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Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		○ 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. **Exceptions to the disturbance calculation:** • 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. • 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. • 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. • Actions that are entirely within the footprint of an existing authorized/approved site of ground disturbance that is within the calculation above. • 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). **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). 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.			

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Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		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 disturbance mitigation required:** If the calculated ground disturbance for the unit(s) is under the cap: • No disturbance mitigation required; use activity design features to minimize new ground disturbance and help stay below cap. **Disturbance mitigation required:** If the calculated ground disturbance is at or above the unit(s) cap, disturbance mitigation is required: • Use activity design features to minimize new ground disturbance to the extent practicable. • 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. • 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. • 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. • 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. • 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. **Exceptions to the disturbance mitigation requirement:** • Any portion of the proposed activity that is located on land previously disturbed by an existing, valid authorized/approved action. • 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). • Land use authorization assignments and renewals with no change in use. • BLM authorized/approved activities that are designed and implemented to reduce existing ground disturbance, such as ecological, cultural, or habitat restoration or enhancement activities. • Non-discretionary actions, where BLM has no authority to require compensatory mitigation. **Types and forms of disturbance mitigation:**			

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• Restoration of previously disturbed BLM lands within the boundary of the specific California Desert National Conservation Lands and/or ACEC unit(s) being impacted. • Acquisition of undisturbed lands within the boundary of the specific California Desert National Conservation Lands and/or ACEC unit being impacted. • 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. **Ground Disturbance Recovery** 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: • 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). • Ground disturbance can no longer be seen at the 1:10,000 scale using the best available aerial imagery. 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.			
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	Project is not located in or near California Desert National Conservation Lands.	
	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	Project is not located in or near California Desert National Conservation Lands.	
	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	Project is not located in or near California Desert National Conservation Lands.	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	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 located in or near California Desert National Conservation Lands.	
	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 California Desert National Conservation Lands.	
Minerals	**NLCS-MIN-1**	**High Potential Mineral Areas** • 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. • 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): ○ Identify, analyze, and consider the resources and values for which that parcel of public land is administered for conservation purposes. ○ 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. ○ 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. • 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	Project is not located in or near California Desert National Conservation Lands.	
	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	Project is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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	Project is not located in or near California Desert National Conservation Lands.	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	NLCS-MIN-5	Geothermal and other leasing must protect groundwater quality and quantity.	No	Project is not located in or near California Desert National Conservation Lands.	
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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	

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Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	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 is not located in or near California Desert National Conservation Lands.	
	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.	No	Project is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	
	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 is not located in or near California Desert National Conservation Lands.	

California Desert NCL

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
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 California Desert National Conservation Lands.	
	NLCS-SW-1	Apply for water rights on a case by case basis to protect water dependent California Desert National Conservation Land values.	No	Project is not located in or near California Desert National Conservation Lands.	

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.	No	The Project is not located in an ACEC.	
	ACEC-CUL-2	Update records for existing cultural resources within ACECs, prioritizing ACECs where the relevant and important criteria include cultural resources.	No	The Project is not located in an ACEC.	
	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.	No	The Project is not located in an ACEC.	
	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.	No	The Project is not located in an ACEC.	
	ACEC-CUL-5	Identify, develop or incorporate standard protection measures and best management practices to address threats.	No	The Project is not located in an ACEC.	
	ACEC-CUL-6	Where specific threats are identified, implement protection measures consistent with agency NHPA Section 106 responsibilities.	No	The Project is not located in an ACEC.	
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**.	No	The Project is not located in an ACEC.	
	ACEC-DIST-2	Specifically, the ground disturbance caps would be implemented as a limitation and objective using the following process: • 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. • 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	The Project is not located in an ACEC.	

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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. **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. **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. **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: • Authorized/approved ground disturbing activities – built and not yet built • 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) • 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: ○ Activity-specific environmental analysis, such as NEPA or ESA Section 7 Biological Assessment			

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		○ Known and documented patterns of ground disturbance ○ 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 • Any unauthorized disturbance that can be seen at a 1:10,000 scale using the best available aerial imagery • Ground disturbance from wildfire, animals, or other disturbances that can be seen at a 1:10,000 scale using the best available aerial imagery • Historic Route 66 maintenance - potential ground disturbance estimates: – 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: ▪ South Amboy-Mojave California Desert National Conservation Lands 221 acres ▪ Bristol Mountains ACEC 92 acres ▪ Chemehuevi ACEC 43 acres ▪ Pisgah ACEC 86 acres ○ The estimated ground disturbance acreage includes disturbance associated with potential access to the locations if no current access exists. ○ 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. **Exceptions to the disturbance calculation:** • 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. • 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. • 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. • Actions that are entirely within the footprint of an existing authorized/approved site of ground disturbance that is within the calculation above.			

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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). **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). 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. **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 disturbance mitigation required:** If the calculated ground disturbance for the unit(s) is under the cap: • No disturbance mitigation required; use activity design features to minimize new ground disturbance and help stay below cap. **Disturbance mitigation required:** If the calculated ground disturbance is at or above the unit(s) cap, disturbance mitigation is required: • Use activity design features to minimize new ground disturbance to the extent practicable. • 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. • 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. • 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. • 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.			

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• 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. **Exceptions to the disturbance mitigation requirement:** • Any portion of the proposed activity that is located on land previously disturbed by an existing, valid authorized/approved action. • 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). • Land use authorization assignments and renewals with no change in use. • BLM authorized/approved activities that are designed and implemented to reduce existing ground disturbance, such as ecological, cultural, or habitat restoration or enhancement activities. • Non-discretionary actions, where BLM has no authority to require compensatory mitigation. **Types and forms of disturbance mitigation:** • Restoration of previously disturbed BLM lands within the boundary of the specific ACEC unit(s) being impacted. • Acquisition of undisturbed lands within the boundary of the specific ACEC unit being impacted. • 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. **Ground Disturbance Recovery** 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: • 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). • Ground disturbance can no longer be seen at the 1:10,000 scale using the best available aerial imagery. 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.			

ACECs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
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	The Project is not located in an ACEC.	
	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	The Project is not located in an ACEC.	
Minerals	**ACEC-MIN-1**	**High Potential Mineral Areas** • 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	The Project is not located in an ACEC.	
	ACEC-VRM-1	Manage Manzanar ACEC to conform to VRM Class II standards.	No	The Project is not located in an ACEC.	

Wildlife Allocation

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Lands & Realty	**WILD-LANDS-1**	Renewable energy activities and related ancillary facilities are not allowed.	No	The Project is not located in a Wildlife Allocation.	
	WILD-LANDS-2	Applications for use authorizations that provide a benefit to the management area or serve public interests may be allowed, unless prohibited by statute.	No	The Project is not located in a Wildlife Allocation.	
	WILD-LANDS-3	Use authorization applications, excluding renewable energy projects and related ancillary facilities, will be evaluated in accordance with whether they are compatible with and not contrary to the wildlife values or the protection and enhancement of wildlife and plant habitat for that Allocation.	No	The Project is not located in a Wildlife Allocation.	
	WILD-LANDS-4	All lands within Wildlife Allocations are identified for retention. If the BLM determines that disposal through exchange would result in a net benefit to the values of the Wildlife Allocation, it may consider that exchange through a land use plan amendment.	No	The Project is not located in a Wildlife Allocation.	

SRMAs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Biological Resources-Vegetation	**SRMA-VEG-1**	Vegetative Use Authorizations: Commercial collection of seed is an allowable use in designated OHV Open Areas. CMAs within SRMAs apply to this kind of activity	No	The Project is not located in a SRMA.	
Comprehensive Trails and Travel Management	**SRMA-CTTM-1**	Refer to the individual SRMA Special Unit Management Plans (Appendix C) for SRMA/Recreation Management Zone specific objectives, management actions, and allowable uses. Protect SRMAs for their unique/special recreation values. Manage roads/primitive roads/trails consistent with SRMA objectives and as designated in Transportation and Travel Management Plan/RMPs.	No	The Project is not located in a SRMA.	
Lands and Realty	**SRMA-LANDS-1**	Renewable energy development is not an allowable use in SRMAs due to the incompatibility with the values of the SRMA. Two exceptions to this management action are: • Geothermal development is an allowable use if a geothermal-only DFA overlays the SRMA designation and complies with a "no surface occupancy" restriction; with exception of the Ocotillo Wells SRMA (refer to the technology specifics for the DFA and the Special Unit Management Plan in Appendix C) • If DRECP variance land designation overlays the SRMA, renewable energy may be allowed on a case-by-case basis if the proposed project is found to be compatible with recreation values and the Special Unit Management Plan (Appendix C) specific to the SRMA. Re-powering of an existing wind facility is allowed if the re-power project remains within the existing approved ROW and reduces environmental and recreation impacts.	No	The Project is not located in a SRMA.	
	SRMA-LANDS-2	Acquired land within the SRMAs will be managed according to the goals and objectives of the SRMA, and activities on these lands will be consistent with the CMAs for SRMAs.	No	The Project is not located in a SRMA.	
	SRMA-LANDS-3	Lands within SRMAs are available for disposal. However, disposal actions are only available to parties that will manage the land in accordance with the recreational values identified in the Special Unit Management Plan (Appendix C) for the SRMA.	No	The Project is not located in a SRMA.	
Recreation & Visitor Services	**SRMA-REC-1**	Manage SRMAs for their targeted recreation activities, experiences and benefits. 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	The Project is not located in a SRMA.	
	SRMA-REC-2	In SRMAs that overlap with California Desert National Conservation Lands and ACECs, manage in accordance with the Special Unit Management Plans for the SRMA/ERMA and the applicable ecological and cultural conservation unit (Appendices A, B, and C). If there is a conflict between the California Desert National Conservation Lands or ACEC management and the SRMA/ERMA management, the BLM will apply the most protective management (i.e., management that best supports natural and cultural resource conservation and limits impacts to the values for which the conservation unit was designated).	No	The Project is not located in a SRMA.	
	SRMA-REC-3	SRMA objectives and desired recreation setting characteristics described in the Special Unit Management Plans (Appendix C) may be refined and/or zoned in activity-level planning, based on visitor-use surveys and other monitoring.	No	The Project is not located in a SRMA.	
Visual Resources Management	**SRMA-VRM-1**	Manage the Alabama Hills SRMA to conform to VRM Class II standards.	No	The Project is not located in a SRMA.	

ERMAs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
General	**ERMA-LUPA-1**	Renewable energy activities and related ancillary facilities are not allowed where an ERMA overlaps with California Desert National Conservation Lands, ACEC, or Wildlife Allocation, or is not allowed in a specific ERMA as described in the Special Unit Management Plan (see Appendix C).	No	The Project is not located in an Extensive Recreation Management Area.	
	ERMA-LUPA-2	In areas where renewable energy activities and related ancillary facilities are an allowable use, the CMAs related to renewable energy activities and related ancillary facilities for General Public Lands apply (refer to Section II.4.2.10), including but not limited to: • Renewable energy activities and related ancillary facilities 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. • Renewable energy activities and related ancillary facilities 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. • Renewable energy activities and related ancillary facilities 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	The Project is not located in an Extensive Recreation Management Area.	
Recreation and Visitor Services	**ERMA-REC-1**	When considering land use authorizations within ERMAs, retain to the extent practicable recreation activities and associated qualities and conditions within these areas.	No	The Project is not located in an Extensive Recreation Management Area.	

DFAs and VPLs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Biological Resources: North American Warm Desert Dune and Sand Flats	**DFA-VPL-BIO-DUNE-1**	Activities in DFAs and VPLs, including transmission substations, will be sited to avoid dune vegetation (i.e., North American Warm Desert Dune and Sand Flats). Unavoidable impacts (see "unavoidable impacts to resources" in the Glossary of Terms) to dune vegetation will be limited to transmission projects, except transmission substations, and access roads that will be sited to minimize unavoidable impacts. • For unavoidable impacts (see "unavoidable impacts to resources" in the Glossary of Terms) to dune vegetation, the following will be required: o Access roads will be unpaved. o Access roads will be designed and constructed to be at grade with the ground surface to avoid inhibiting sand transportation.	No	Dune vegetation (i.e., North American Warm Desert Dune and Sand Flats) was not observed on the Project site during surveys.	If dune vegetation is observed during preconstruction surveys, the Project will comply with this CMA.
	DFA-VPL-BIO-DUNE-2	Within Aeolian corridors that transport sand to dune formations and vegetation types downwind inside and outside of the DFAs, all activities will be designed and operated to facilitate the flow of sand across activity sites, and avoid the trapping or diverting of sand from the Aeolian corridor. Buildings and structures within the site will take into account the direction of sand flow and, to the extent feasible, build and align structures to allow sand to flow through the site unimpeded. Fences will be designed to allow sand to flow through and not be trapped.	No	While dunes exist east of the Project site, sands within and adjacent to the project site are stabilized and/or subject to anthropogenic and biological barriers that prevent migration of sand into/out of the project site. Therefore, this CMA does not apply. The Algodones Dunes start 15 miles east of the Project site and have active aeolian sand migration and deposition (Muhs et.al. 2003) sourced from active sands located to the north and east. The Project site is outside of the active sand migration and deposition zone to the north, and contains only stabilized aeolian sand deposits. Further, both on site vegetation and Interstate 8, which creates the northern boundary of the Project site, stabilizes and prevents any active sand migration/deposition into/out of the Project site. Finally, none of the plants characteristic of aeolian sands were found within the Project site during biological surveys.	
Individual Focus Species (IFS): Desert Tortoise	**DFA-VPL-BIO-IFS-1**	To the maximum extent practicable (see Glossary of Terms), activities will be sited in previously disturbed areas, areas of low quality habitat, and areas with low habitat intactness in desert tortoise linkages and the Ord-Rodman TCA, identified in Appendix D.	No	Project is not located in or near the area specified in the CMA. No linkages or Ord-Rodman TCAs are present.	
Mohave Ground Squirrel	**DFA-VPL-BIO-IFS-2**	Within the Mohave ground squirrel range configure solar panel and wind turbine arrays to allow areas of native vegetation that will facilitate Mohave ground squirrel movement through the project site. This may include raised and/or rotating solar panels or open space between rows of panels or turbines. Fences surrounding sites should be permeable for Mohave ground squirrels.	No	The Project is located outside of the range of the Mohave ground squirrel.	
Bats	**DFA-VPL-BIO-BAT-1**	Wind projects will not be sited within 0.5 mile of any occupied or presumed occupied maternity roost.	No	The Project is not a wind project.	
Fire Prevention/Protection	**DFA-VPL-BIO-FIRE-1**	Implement the following standard practice for fire prevention/protection: • Implement site-specific fire prevention/protection actions particular to the construction and operation of renewable energy and transmission project that include procedures for reducing fires while minimizing the necessary amount of vegetation clearing, fuel modification, and other construction-related activities. At a minimum these actions will include designating site fire coordinators, providing adequate fire suppression equipment (including in vehicles), and establishing emergency response information relevant to the construction site.	Yes		With implementation of mitigation measures to be developed during the NEPA process and the Fire Management and Prevention Plan (POD Appendix N), the Project will comply with this CMA.
Biological Compensation	**DFA-VPL-BIO-COMP-1**	Impacts to biological resources from all activities in DFAs and VPLs will be compensated using the same ratios and strategies as LUPA-BIO-COMP-1 through 4, with the exception identified below in DFA-VPL-BIO-COMP-2.	Yes		The Project will comply with the standard ratio for new impacts to native habitat and will comply with the designated critical habitat ratio where appropriate. The Project will comply with this CMA.

DFAs and VPLs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	DFA-VPL-BIO-COMP-2	Exception to the biological resources standard compensation ratio of 1:1 - desert tortoise intact linkage habitat compensation ratio of 2:1 applies to the identified modeled intact linkage habitat (Appendix D) in two linkages—Ord-Rodman critical habitat unit to Joshua Tree National Park, and Fremont-Kramer critical habitat unit to the Ord-Rodman critical habitat unit, as identified in Appendix D. Maintenance and enhancement of the function of these two linkages is essential to the function of the Ord-Rodman critical habitat unit.	No	The Project is not within the desert tortoise linkages noted in the CMA.	
Comprehensive Trails and Travel Management	DFA-VPL-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	The Project site does not contain Tier 1, Tier 2, Tier 3 roads/primative roads/trails, backcountry byways, or other significant linear features.	
	DFA-VPL-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	The Project site does not contain Tier 1, Tier 2, Tier 3 roads/primative roads/trails, backcountry byways, or other significant linear features.	
Cultural Resources and Tribal Interests		BLM developed and maintains a geodatabase for Cultural Resources and Cultural Resources investigations in a GIS. The geodatabase is regularly updated with newly recorded and re-recorded resource and investigation data. However, while the geodatabase includes location information (feature classes or shapefiles), the associated information about each resource or investigation (attribute data) is limited or inconsistent. As it exists now, the geodatabase cannot be used for predictive analyses like those recommended in *A Strategy for Improving Mitigation Policies and Practices of the Department of the Interior* (DOI 2014). However, with some updates, the geodatabase will be a powerful tool for identifying potential conservation priorities as well as development opportunities. Many of the CMAs below are intended to facilitate the update of BLM's geodatabase, and require its use when the updates are complete. The following CMAs are for renewable energy and transmission land use authorizations only, in DFAs and VPLs. All other activities in DFAs and VPs are subject to the NHPA Section 106 process.			
	DFA-VPL-CUL-1	For renewable energy activities and transmission, require the applicant to pay all appropriate costs associated with the following processes, through the appropriate BLM funding mechanism: • All appropriate costs associated with the BLM's analysis of the DRECP geodatabase and other sources for cultural resources sensitivity. • All appropriate costs associated with preliminary sensitivity analysis. • 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. • All appropriate costs associated with updating the DRECP cultural resources geodatabase with project specific results.	Yes		The existing cost-recovery agreements meet this CMA.
	DFA-VPL-CUL-2	Consistent and in compliance with the NHPA Programmatic Agreement, signed February 5, 2016, or the most up to date signed version -for renewable energy activities and transmission, a compensatory mitigation fee will be required within the LUPA Decision Area to address cumulative and some indirect adverse effects to historic properties. The mitigation fee will be calculated in a manner that is commensurate to the size and regional impacts of the project. Refer to the Programmatic Agreement for details regarding the mitigation fee.	Yes		This may be accomplished through mitigation measures developed through the Section 106 or NEPA process. The Project will comply with this CMA.
	DFA-VPL-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 land use plan amendment.	Yes		This may be accomplished through mitigation measures developed through the Section 106 or NEPA process. The Project will comply with this CMA.

DFAs and VPLs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	DFA-VPL-CUL-4	For renewable energy activities and transmission, 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.	Yes		The CMA is an action to be taken by the BLM.
	DFA-VPL-CUL-5	For renewable energy activities and transmission, 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.	Yes		A BLM Class III archaeological survey will be completed for the Perkins Renewable Energy Project prior to the NEPA review, which exceeds the requirements of this CMA. The Project will comply with this CMA.
	DFA-VPL-CUL-6	For renewable energy activities and transmission, 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.	Yes		Mitigation measures will require reducing impacts of the Perkins Renewable Energy Project to cultural resources to the extent feasible. The Project will comply with this CMA.
	DFA-VPL-CUL-7	For renewable energy activities and transmission, 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.	Yes		NHPA Section 106 will be completed for the Project consistent with the DRECP PA Section 106 compliance will be completed prior to the issuance of a Decision Record for the Project. Mitigation measures will require reducing impacts of the Perkins Renewable Energy Project to cultural resources to the extent feasible. The Project will comply with this CMA.
Livestock Grazing	**DFA-VPL-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 may include the costs for NEPA, clearances, and materials.	No	There are no active livestock grazing allotments on the Project site.	
	DFA-VPL-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	Project is not a wind energy project, nor within a California condor use area.	
	DFA-VPL-LIVE-3	Include no surface occupancy stipulation on geothermal leases in active grazing allotments.	No	The Project is not located on geothermal leases, nor do grazing allotments apply to the Project site.	
Vegetation	**DFA-VPL-VEG-1**	Vegetative Use Authorizations: Commercial collection of seed in DFAs and VPLs is an allowable use. CMA's within these areas apply to this kind of activity.	No	The Project does not entail commercial collection of seed.	Seed collection may occur prior to the start of construction for future restoration activities.
Visual Resources Management	**DFA-VPL-VRM-1**	Encourage development in a planned fashion within DFAs (e.g., similar to the planned unit development concept used for urban design—i.e., in-fill vs. scattered development, use of common road networks, Generator Tie Lines etc., use of similar support facility designs materials and colors etc.) to avoid industrial sprawl.	No	The Project site is an isolated DFA surrounded by ACECs and BOR lands; therefore, no industrial sprawl will occur.	
	DFA-VPL-VRM-2	Development in DFAs and VPLs are 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).	Yes		The Project will prepare and implement a Surface Treatment Plan, containing best available BMPs, to comply with this CMA.
	DFA-VPL-VRM-3	**Required Visual Resource BMPs.** All development within the DFAs and VPLs 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: • Transmission:	Yes		The Project will implement BMPs, as necessary, to comply with this CMA. Also, see CMA DFA-VPL-VRM-2.

DFAs and VPLs

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		○ 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. ○ Lattice towers and conductors will have non-specular qualities. ○ 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. • 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: ○ Concentrated solar thermal parabolic trough panel backs ○ Solar power tower heliostats ○ Solar power towers ○ Cooling towers ○ Power blocks • Wind – Color treat all facilities Shadow Gray with the exception of the wind turbine and towers 200 vertical feet or more. • Night Sky – BMPs to minimize impacts to night sky including light shielding will be employed			

Development Focus Areas

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Renewable Energy	**DFA-RE-1**	In order to use the DRECP's BLM LUPA streamlined process for renewable energy in DFAs and transmission, project proponents must first consult with appropriate representatives of the Department of Defense to ensure the proposed renewable energy and/or transmission activity will not cause an unacceptable risk to national security. Refer to additional detail in LUPA Section IV.4 and Appendix E. Specifically, the following process will be implemented: • For renewable energy and transmission activities proposed in red areas (see Appendix E), the DRECP BLM LUPA streamlined process will not be available unless a letter is obtained from the Department of Defense Siting Clearinghouse stating that military impacts have been mitigated. • For renewable energy and transmission activities proposed in orange or yellow areas (see Appendix E), the DRECP BLM LUPA streamlined process will be not be available until Department of Defense representatives at the regional level have been consulted and have been provided a minimum of 30 days to assess potential mission impacts. If the regional representatives conclude within the 30 day period that there is a significant possibility that a proposed activity presents an unacceptable risk to national security, the BLM will not streamline the proposed activity process and will require additional environmental analysis regarding Department of Defense impacts, unless a letter is obtained from the Department of Defense Siting Clearinghouse stating that military impacts have been mitigated.	Yes		The LUPA Appendix E states that solar PV present little to no conflict to military operations. The Project will comply with this CMA.
Biological Resources	**DFA-BIO-IFS-1**	Conduct the following surveys as applicable in the DFAs as shown in **Table 21**.	Yes		Biological surveys have been conducted on the Project site and the results documented in the Biological Resources Technical Report. The Project will comply with this CMA.
	DFA-BIO-IFS-2	Implement the following setbacks shown below in **Table 22** as applicable in the DFAs.	Yes		The Project will comply, as applicable, with the setbacks listed in this CMA (see also mitigation measures developed during the NEPA process).
Desert Tortoise	**DFA-BIO-IFS-3**	Protocol surveys, as described in **DFA-BIO-IFS-1** and shown in **Table 21**, are required for development in the desert tortoise survey areas (see Appendix D). Based on the results of the protocol surveys the identified desert tortoises will be translocated, or the activity will be redesigned/relocated as described below: • If protocol surveys identify 35 or fewer desert tortoises in potential impact areas on an activity site, the USFWS and CDFW (for third party activities) will be contacted and provided with the protocol survey results and information necessary for the translocation of identified desert tortoises. Pre-construction and construction, and other activities will not begin until the clearance surveys for the site have been completed and the desert tortoises have been translocated. Translocation will be conducted in coordination with the USFWS and CDFW, as appropriate, per the protocols in the Desert Tortoise Field Manual (USFWS 2009) and the most up-to-date USFWS protocol.	No	The Project is located outside of the range of desert tortoise.	

Development Focus Areas

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		• If protocol surveys identify an adult desert tortoise density (i.e., individuals 160 millimeters or more) of more than 5 per square mile or more than 35 individuals total on a project site, the project will be required to be redesigned, re-sited, or relocated to avoid and minimize the impacts of the activity on desert tortoise.			
Mohave Ground Squirrel	**DFA-BIO-IFS-4**	The DFA in the "North of Edwards" Mohave ground squirrel key population center is closed to renewable energy applications and any activity that is likely to result in the mortality (killing) of a Mohave ground squirrel until Kern and San Bernardino counties complete county General Plan amendments/updates that include renewable energy development and Mohave ground squirrel conservation on nonfederal land in the West Mojave ecoregion and the CDFW releases a final Mohave Ground Squirrel Conservation Strategy, or for a period of 5 years after the signing of the DRECP LUPA ROD, whichever comes first. If Kern and San Bernardino counties and CDFW do not complete their respective plans within the 5-year period, prior to opening the DFA to renewable energy applications and other impacting activities, BLM will assess new Mohave ground squirrel information, in coordination with the CDFW, to determine if modifications to the DFA or CMAs are warranted based on new Mohave ground squirrel information.	No	The Project is located outside of the Mohave ground squirrel range.	
	DFA-BIO-IFS-5	Once the planning criteria in CMA **DFA-BIO-IFS-4**, are met, the DFA in the "North of Edwards" Mohave ground squirrel key population center will be reevaluated. If Kern and San Bernardino counties receive Mohave ground squirrel take authorizations from the CDFW through completed Natural Community Conservation Plans or county-wide conservation strategies that address Mohave ground squirrel conservation at a landscape level and include renewable energy development areas on nonfederal land in the West Mojave ecoregion, the "North of Edwards" key population center DFA will be eliminated and the management changed to General Public Lands, as part of adaptive management.	No	The Project is located outside of the Mohave ground squirrel range.	
Plants	**DFA-BIO-PLANT-1**	Impact to suitable habitat (see Glossary of Terms) for the following plant Focus Species within the DRECP Plan Area will be capped (see "DFA Suitable Habitat Impacts Cap" in the Glossary of Terms) in the DFAs as described below and in **Table 23**. The suitable habitat impact cap for these plant species is to be measured in DFAs as a group, not individually.	No	The Project is not located within the range or habitat of the subject focused species.	
		Triple-ribbed milk-vetch is an avoidance species in DFAs, therefore none of its suitable habitat is to be impacted.	No	The Project is not located within the range or habitat of of the triple-ribbed milk-vetch.	
Recreation	**DFA-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	The Project site does not contain nor is it located adjacent to recreational or visitor services.	
	DFA-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	The Project site is not located within one-half mile of a Level 3 Recreation facility.	
	DFA-REC-3	SRMAs are exclusion areas for renewable energy development due to the incompatibility with the values of SRMAs. Two exceptions to this management action are:	No	The Project would not develop renewable energy in a SRMA.	

Development Focus Areas

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		1. geothermal development is an allowable use in the few instances in Imperial County where a geothermal-only DFA overlays the SRMA designation and the lease includes a "no surface occupancy" stipulation, with exception of three specific parcels in the Ocotillo Wells SRMA (the Special Unit Management Plan in Appendix C) 2. the VPL at Antimony Flat in Kern County overlaying the SRMA, renewable energy may be allowed on a case-by-case basis if the proposed project is found to be compatible with the specific SRMA values.			
	DFA-REC-4	When considering large-scale development in DFAs, retain to the extent possible existing, approved recreation activities.	No	The Project site does not contain nor is it located adjacent to recreational or visitor services.	
	DFA-REC-5	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	The Project site does not contain nor is it located adjacent to recreational or visitor services.	
	DFA-REC-6	Where activities in DFAs 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	The Project site does not contain nor is it located adjacent to recreational or visitor services.	
	DFA-REC-7	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 BLM.	No	The Project would not overlap with designated recreational vehicle routes.	
	DFA-REC-8	Impacts from activities in a DFA to 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	Special Recreation Permit activities do not apply to the Project site.	
	DFA-REC-9	If residual impacts to SRMAs occur from activity impacts in a DFA, commensurate mitigation through relocation or replacement of facilities or compensation (in the form of a recreation operations and enhancement fund) will be required.	No	The Project would not develop renewable energy in a SRMA; therefore, no residual impacts will occur.	
	DFA-REC-10	Within ERMAs, impacts from development projects that do not enhance conservation or recreation goals will require commensurate mitigation through relocation or replacement of facilities.	No	The Project would not occur within an ERMA.	
Lands and Realty	**DFA-LANDS-1**	Lands within DFAs are available for disposal.	No	The Project is not proposing lands for disposal.	
	DFA-LANDS-2	Development of acquired lands within DFAs is allowed, at the discretion of the BLM California State Director, unless development is incompatible with the purposes of the acquisition and any applicable deed restrictions.	No	The Project would not occur on acquired lands.	
	DFA-LANDS-3	Lands proposed for exchange in DFAs will be segregated from the public land laws for 5 years, but wind, solar, geothermal and transmission applications and their associated facilities are allowed.	No	Project is not associated with a land exchange.	

Development Focus Areas

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	DFA-LANDS-4	Review withdrawn lands in DFAs upon receipt of a ROW application and if appropriate modify to allow for issuance of ROW grants.	No	The Project would not occur on withdrawn lands and designated utility corridors crossing the site will be available for future ROW grants.	
	DFA-LANDS-5	Cost recovery funding used to process a ROW application may be used to adjudicate and remedy any conflicting land withdrawals, if necessary.	No	No conflicting land withdrawals are anticipated.	
	DFA-LANDS-6	Make public lands in DFAs available for selection by the CSLC in lieu of base lands within DFAs. Base lands are School Lands the State of California was entitled to but did not receive title to due to prior existing encumbrances.	No	The Project site does not include any CSCL lands; therefore, no exchange will be required.	
	DFA-LANDS-7	Transmission facilities are an allowable use and will not require a plan amendment within DFAs.	Yes		The 500 kV loop-in transmission lines would originate within DFA lands and terminate within BOR lands. No plan amendment required.
Visual Resources Management	**DFA-VRM-1**	Manage all DFAs as VRM Class IV to allow for industrial scale development. Employ best management practices to reduce visual contrast of facilities.	Yes		The Project will implement BMPs, as necessary, to comply with this CMA. Also, see CMA DFA-VPL-VRM-2.
	DFA-VRM-2	Regional mitigation for visual impacts is required in DFAs . Mitigation is be based on the VRI class and the underlying visual values (scenic quality, sensitivity, and distance zone) for the activity area as it stands at the time the ROD is signed for the DRECP LUPA. Compensatory mitigation may take the form of reclamation of other BLM lands to maintain (neutral) or enhance (beneficial) visual values on VRI Class II and III lands. Other considerations may include acquisition of conservation easements to protect and sustain visual quality within the viewshed of BLM lands. The following mitigation ratios will be applied in DFAs: • VRI Class II 1:1 ratio • VRI Class III ½ (0.5) : 1 ratio • VRI Class IV, no mitigation required Additional mitigation will be required where activities affect viewsheds of specially designated areas (e.g., National Scenic and Historic Trails).	Yes		The Project is located on land with VRI Class IV. The Project will comply with this CMA.
Wild Horses and Burros	**DFA-WHB-1**	Incorporate all guidance provided by the Wild Free-Roaming Horses and Burros Act of 1971, its amendments, associated regulations, and any pertinent court rulings into the project/activity proposal, as appropriate.	No	There are no wild horses or burros on the Project site.	
	DFA-WHB-2	Development that would reduce burros' access to forage, water, shelter, or space or impede their wild, free-roaming behavior in Herd Management Area is not allowed	No	There are no wild horses or burros on the Project site.	
	DFA-WHB-3	Mitigation can only occur on lands that the animals were found at the passage of the Wild Free-Roaming Horses and Burros Act of 1971. Expansion of the boundaries of a Herd Management Area back into the Herd Areas would require a land use plan amendment, the cost of which would be incurred by the applicant proposing to develop in the Herd Management Area, if part of the proposed mitigation package.	No	There are no wild horses or burros on the Project site.	
Wilderness Characteristics	**DFA-WC-1**	Renewable energy activities are allowed in DFAs that have been inventoried and identified as lands with wilderness characteristics.	No	There are no lands with wilderness characteristics within the Project site.	

Development Focus Areas

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
	DFA-WC-2	For inventoried lands found to have wilderness characteristics in DFAs, compensatory mitigation is required at a 1:1 ratio if wilderness characteristics are directly impacted. This may be accomplished through acquisition and donation, from 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	There are no lands with wilderness characteristics within the Project site.	

Variance Process Lands

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
Renewable Energy	**LUVPL-BIO-RE-1**	All renewable energy activities, during the planning phase, must establish baseline conditions for Focus and BLM Special Status bird and bat species using protocols and methodologies approved by BLM in coordination with USFWS, and CDFW as appropriate.	No	The Project is not located on Variance Process Lands.	
	VPL-BIO-RE-2	As part of a renewable energy activity proposal that may affect bird and bat Focus and BLM Special Status Species, a proven (e.g., peer reviewed) technology solution to bird and bat Focus and BLM Special Status Species injury and mortality must be incorporated into the activity design and operation as a mandatory element.	No	The Project is not located on Variance Process Lands.	
	VPL-BIO-RE-3	As part of a renewable energy activity proposal that may conflict with Department of Defense operations, a proven (e.g., peer reviewed) technology solution to Department of Defense conflicts must be incorporated as a mandatory element.	No	The Project is not located on Variance Process Lands.	
	VPL-BIO-RE-4	Each utility-scale renewable energy activity must result in a no net increase in ground disturbance within the specific ROW grant area.	No	The Project is not located on Variance Process Lands.	
	VPL-BIO-RE-5	The VPL at Antimony Flat in Kern County will remain as a VPL or be removed based on consistency with the Kern County General Plan Update. If removed, renewable energy activities would no longer be an allowable use in the SRMA.	No	The Project is not located on Variance Process Lands.	
Lands & Realty	**VPL-LANDS-1**	Lands within VPLs are available for disposal.	No	The Project is not located on Variance Process Lands.	
Recreation & Visitor Services	**VPL-REC-1**	The VPL at Antimony Flat in Kern County will remain as a VPL or be removed based on consistency with the Kern County General Plan Update. If removed, renewable energy activities would no longer be an allowable use in the SRMA.	No	The Project is not located on Variance Process Lands.	
Visual Resources Management	**VPL-VRM-1**	Manage all Variance Process Lands as VRM Class III.	No	The Project is not located on Variance Process Lands.	
	VPL-VRM-2	Regional mitigation is required for visual impacts in VPLs. 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. Compensatory mitigation may take the form of reclamation of other BLM lands to maintain (neutral) or enhance (beneficial) visual values on VRI Class II and III lands. Other considerations may include acquisition of conservation easements to protect and sustain visual quality within the viewshed of BLM lands. The following mitigation ratios will be applied in VPLs: • VRI Class II 2:1 ratio • VRI Class III 1:1 ratio • VRI Class IV no mitigation required Additional mitigation will be required where activities affect viewsheds of specially designated areas (e.g., National Scenic and Historic Trails).	No	The Project is not located on Variance Process Lands.	

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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
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	The Project is not located on General Public Lands.	
	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. 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	The Project is not located on General Public Lands.	
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: • All appropriate costs associated with the BLM's analysis of the DRECP geodatabase and other sources for cultural resources sensitivity. • All appropriate costs associated with preliminary sensitivity analysis. • 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. All appropriate costs associated with updating the DRECP cultural resources geodatabase with project specific results.	No	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	

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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
Lands and Realty	GPL-LANDS-1	Lands within GPL are unavailable for disposal.	No	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	GPL-LIVE-3	A no surface occupancy stipulation will be included on geothermal leases in active grazing allotments.	No	The Project is not located on General Public Lands.	
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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	

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. **GPL Recreation Mitigation Measures** 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	The Project is not located on General Public Lands.	
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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
	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	The Project is not located on General Public Lands.	
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	The Project is not located on General Public Lands.	
	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: • Transmission:	No	The Project is not located on General Public Lands.	

General Public Lands

Category	CMA #	CMA Text	Applicability	Explanation: Why CMA is not applicable	Comments
		○ 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. ○ Lattice towers and conductors will have non-specular qualities. ○ 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. • 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: ○ Concentrated solar thermal parabolic trough panel backs ○ Solar power tower heliostats ○ Solar power towers ○ Cooling towers ○ Power blocks • Wind – Color treat all facilities Shadow Gray with the exception of the wind turbine and towers 200 vertical feet or more. Night Sky – BMPs to minimize impacts to night sky including light shielding will be employed.			
	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: • VRI Class II 2:1 ratio • VRI Class III 1:1 ratio • VRI Class IV no mitigation required Additional mitigation will be required where projects affect viewsheds of specially designated areas (e.g., National Scenic and Historic Trails).	No	The Project is not located on General Public Lands.	

Appendix E Other Requirements

Appendix E.1 Agencies and Agency Contact Information

E.1 Agencies and Agency Contact Information

Applicable agency contact information is provided in Table 1.

Table 1 Agency Contact

Organization	Last Name	First Name	Email
BLM – Assistant District Manager, California Desert District Office	Anderson	Brandon	bganderson@blm.gov
BLM – Program Manager CA State Office - Lands, Planning & Recreation Branch	Robledo	Nancy	lrobledo@blm.gov
BLM – Field Manager, El Centro Field Office	Lohr	Matthew	mlohr@blm.gov
BLM – Deputy Field Manager, El Centro Field Office	Sahagun	Carrie	csahagun@blm.gov
BLM – Realty Specialist, El Centro Field Office	Riddell	Tristan	triddell@blm.gov
BLM Archaeologist, California State Office	Fries	Eric	efries@blm.gov
BLM – Archaeologist, California Desert District Office	Garcia-Herbst	Arleen E	agarciaherbst@blm.gov
BLM – Natural Resource Specialist, El Centro Field Office	Ramirez	Ismael N	iramirez@blm.gov
BLM – Project Manager, California Desert District Office	Toedtli	Matthew R	mtoedtli@blm.gov
BLM – Planning and Environmental Coordinator, El Centro Field Office	Rodriguez	Christian	crodriguez@blm.gov
BLM – Biologist, California Desert District Office	Massar	Mark	mmassar@blm.gov
California Department of Fish and Wildlife	Ellsworth	Alisa	alisa.ellsworth@wildlife.ca.gov
California Department of Fish and Wildlife	Rodriguez	Magdalena	magdalena.rodriguez@wildlife.ca.gov

California Department of Fish and Wildlife - Biologist	Rosales	Ashley	ashley.rosales@wildlife.ca.gov
California Department of Toxic Substances Control	Lorentzen	Wayne	wayne.lorentzen@dtsc.ca.gov
California State Water Resources Control Board	Crader	Phillip	phillip.crader@waterboards.ca.gov
California State Water Resources Control Board	Raub	Logan	logan.raub@waterboards.ca.gov
Imperial County	Blondell	Curtis	curtisblondell@co.imperial.ca.us
Imperial County	Soucier	Monica	monicasoucier@co.imperial.ca.us
Imperial County	Lopez-Solis	Rosa	rosalopez@co.imperial.ca.us
Imperial County	Minnick	Jim	jimminnick@co.imperial.ca.us
Imperial County	Abraham	Michael	michaelabraham@co.imperial.ca.us
Imperial County - Planning & Development Services	Jimenez	Evelia	ejimenez@co.imperial.ca.us
Imperial County - Planning & Development Services	Quero	Gerardo	gerardoquero@co.imperial.ca.us
Imperial County - Planning & Development Services	Valenzuela	Luis	luisvalenzuela@co.imperial.ca.us
Imperial County - Planning & Development Services	Yee	Rocio	rocioyee@co.imperial.ca.us
Imperial Irrigation District	Gamboa-Arce	Justina	jgamboaarce@iid.com
Deputy Director, Military Aviation and Installation Assurance Siting Clearinghouse Office of the Assistant Secretary of Defense (Energy, Installations and Environment)	Beard	Robbin	robbin.e.beard.civ@mail.mil
U.S. Bureau of Reclamation	Belous	Alexander G	abelous@usbr.gov
U.S. Bureau of Reclamation	DeSantiago	Julian A	jdesantiago@usbr.gov
U.S. Bureau of Reclamation	Fulsome	Owen R	fulsome@usbr.gov
U.S. Bureau of Reclamation	Gallardo	Erik J	gallardo@usbr.gov
U.S. Bureau of Reclamation	Lopez	Arturo	arturolopez@usbr.gov
U.S. Bureau of Reclamation	Pinnell	Anna M	apinnell@usbr.gov
U.S. Bureau of Reclamation	Rodriguez	Francisco (Frank)	frankrodriguez@usbr.gov

U.S. Bureau of Reclamation	Wallis	Christopher (Chris)	cwallis@usbr.gov
U.S. Bureau of Reclamation	Zaragoza	Vicente A	vzaragoza@usbr.gov
U.S. EPA, Region IX, Environmental Review Branch	Plenys	Thomas	plenys.thomas@epa.gov
U.S. Fish and Wildlife Service - Biologist	Ronan	Noelle A	noelle_ronan@fws.gov
U.S. Fish and Wildlife Service - Biologist	Sanzenbacher	Peter M	peter_sanzenbacher@fws.gov
U.S. Fish and Wildlife Service - Biologist	James	Vincent	vincent_james@fws.gov
U.S. Fish and Wildlife Service - Biologist	Kowalski	Kent	kent_kowalski@fws.gov

Appendix E.2 List of Permits

E.2 List of Permits

Table 2 lists the required permits and approvals that have been identified for the Project. The California Energy Commission (CEC) will serve as the California Environmental Quality Act (CEQA) lead agency for the Project. Other federal and state agencies with permitting authority are listed in Table 2. Local permitting is subsumed by the CEC under AB 205. A list of permits that would otherwise be required from local agencies, if not for AB 205, are listed in Table 3.

Table 2 Other Permits and Approvals for the Perkins Renewable Energy Project

Agency	Permit	Applicability
Federal		
BLM	Grant of Right-of-Way	For solar and storage facility construction and operation on BLM-administered land. For BAAH switchyard and 500 kV loop-in transmission lines construction and operation on BLM-administered land.
BOR	Grant of Right-of-Way	For construction and operation of solar facility on BOR administered land. [(a)] For construction and operation of 500 kV loop-in transmission lines on BOR-administered land and crossing of the All-American Canal.
U.S. Fish & Wildlife Service	Consultation form	For compliance with Section 7 of the federal Endangered Species Act under the DRECP B.O.
State Approvals		
California Energy Commission	California Environmental Quality Act (CEQA) Lead Agency and Opt-In Certification	The CEC has been authorized under Assembly Bill (AB) 205 to provide site certification and to prepare and certify CEQA documents for eligible non-fossil-fueled power plants and related facilities. Under AB 205, CEC's authority is in lieu of and supersedes approvals that would otherwise be issued by all state and local agencies (except for those specifically carved out as having independent jurisdiction) including, but not limited to, the California Department of Fish and Wildlife, Imperial County, and the Imperial County Air Pollution Control District. See section below for a list of permits that would be required for the Project but for AB 205 and for which the CEC subsumes permitting authority.
California Public Utilities Commission (CPUC)	General Order 131D Compliance, if required	500 kV loop-in transmission lines compliance with CPUC regulations for utility-constructed infrastructure, if required.
Colorado River Basin Regional Water Quality Control Board	Waste Discharge Requirements (WDRs)	Regarding the treatment, storage, processing, or disposal of waste per Title 27, CCR, section 20005 et seq.

Environmental Protection Agency (EPA); California State Water Resources Control Board (SWRCB)	NPDES Statewide General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities	Under the Porter-Cologne Water Quality Control Act ("Porter-Cologne"), the SWRCB via the RWQCBs administers California's stormwater permitting program; construction projects disturbing more than one acre of land require coverage under the General Permit for stormwater with a site-specific Stormwater Pollution Prevention Plan (SWPPP) and BMPs to manage runoff.
California Department of Transportation (Caltrans)	Encroachment Permit	For 500 kV loop-in transmission line crossing of Highway 98.
	Transportation Permit for Oversized Loads	Obtain when necessary, 2-hour processing time (single trip) to 2 weeks (annual trip).
	Transportation Permit	Obtain when necessary, applications can be processed in a single working day
State Historic Preservation Officer	Consultation	Required under Section 106 to be completed by the BLM for NEPA purposes.

[a] BLM and BOR have a memorandum of understanding that allows for the BLM to issue grants of right-of-way on behalf of the BOR under certain circumstances. Either the BOR or the BLM may issue the grant of right-of-way for construction and operation of the solar facility on BOR-administered lands.

Table 3 State and Local Approvals That Would be Required But For CEC Opt-In Certification Authority under AB 205

Agency	Permit	Applicability
California Department of Fish and Wildlife (CDFW)	Lake and Streambed Alteration Agreement	For compliance with Fish and Game Code 1602 for impacts to perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CEC subsumes this authority under AB 205.
Imperial County	Amendment to Renewable Energy Overlay Zone	To allow renewable energy development per Imperial County General Plan and zoning code
	Conditional Use Permit	For construction and operation of solar and storage facility on private lands including any zoning changes. For construction and operation of up to four groundwater wells.
Imperial County Public Health Department Division of Environmental Health	Septic System Permit	For construction and operation of a septic system.
Imperial County Air Pollution Control District (APCD) [(a)]	Indirect Source Review	An Indirect Source Review (District Rule 9510) is required to to determine potential mitigation, if any, for oxides of nitrogen (NOx) and particulate matter less than or equal to 10 microns in diameter (PM_{10}) emissions.

Imperial County APCD	Dust Control Plan	A dust control plan is required to be prepared and submitted for approval under ICAPCD rule 801 prior to initiation of ground disturbing activities associated with construction. Dust control requirements of ICAPCD Rules 800 and 805 also apply.
Imperial County APCD	Authority to Construct and Permit to Operate	Facility backup generator permits for Project operations, if required.
Imperial County CUPA	Hazardous Materials Business Plan, if needed	Submittal at least 30 days prior to operation if needed based on amount of hazardous materials used; submitted through California Environmental Reporting System (CERS).
Imperial County	Spill Prevention, Control, and Countermeasure (SPCC Plan)	Submittal at least 30 days prior to operation; submitted through CERS.

Note:

[a] CEQA Air Quality Handbook. Imperial County Air Pollution Control District's (ICAPCD) California Environmental Quality Act (CEQA) Air Quality Handbook provides guidance to lead agencies, planning consultants, ICAPCD staff, and project proponents in assessing the potential air quality impacts from residential and commercial developments.

Appendix E.3 Public Resources Code Section 21183 and 211836

Public Resources Code Section 21183 and 21183.6

Compliance with Public Resources Code Section 21183 and 21183.6

The following demonstrates the ways in which the Applicant would comply with and how the Perkins Renewable Energy Project (Project) meets the requirements of California Public Resources Code (PCR) Sections 21183 and 21183.6. In addition to the information below, Appendix E.4 provides information on the required certifications to comply with Public Resources Code Section 25545.3.3 and 25545.3.5.

Table 4 Compliance with Public Resources Code Section 21183 and 21183.6

Criteria Category	PRC §§21183 and 21183.6	Meets Criteria (Yes/No)	Applicant Response
PRC 21183(a)(1)	The Governor may certify a leadership project for streamlining before a lead agency certifies a final environmental impact report for a project under this chapter if all the following conditions are met: (a) (1) Except as provided in paragraph (2), the project will result in a minimum investment of one hundred million dollars ($100,000,000) in California upon completion of construction.	Yes	The Project would have a minimum estimated investment of approximately $296 million ($296,000,000) in California upon completion of construction. See **Net Economic Benefit** below for additional information.
PRC § 21183(a)(2)	(2) Paragraph (1) does not apply to a leadership project described in paragraph (4) of subdivision (b) of Section 21180.	Not Applicable (N/A)	Not applicable, as the Project is not a housing development project.
PRC § 21183(b)	(b) The project creates high-wage, highly skilled jobs that pay prevailing wages and living wages, provides construction jobs and permanent jobs for Californians, helps reduce unemployment, and promotes apprenticeship training. For purposes of this subdivision, a project is deemed to create jobs that pay prevailing wages, create highly skilled jobs, and promote apprenticeship training if the applicant demonstrates to the satisfaction of the Governor that the project will comply with Section 21183.5.	Yes	The Applicant would comply with the prevailing wage and workforce requirements set forth in Assembly Bill 205, including that (1) all construction workers employed on the Project would be paid at least the general prevailing rate of per diem wages or apprenticeship wages, as applicable, in accordance with PRC Section 25545.3.3, and (2) a skilled and trained workforce would be used to perform all construction work on the Project, in accordance with PRC Section 25545.3.5. See Appendix E.4 for additional information.

APPENDIX E

Criteria Category	PRC §§21183 and 21183.6	Meets Criteria (Yes/No)	Applicant Response
PRC § 21183(c)(1)	(c) (1) For a project described in paragraph (1), (2), or (3) of subdivision (b) of Section 21180, the project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation. For purposes of this paragraph, a project is deemed to meet the requirements of this paragraph if the applicant demonstrates to the satisfaction of the Governor that the project will comply with Section 21183.6.	Yes	The Project is a renewable energy generation project, as defined in paragraph (2) of subdivision (b) of Section 21180.
PRC § 21183(c)(2)	(2) For a project described in paragraph (4) of subdivision (b) of Section 21180, the project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation.	N/A	Not applicable, as the Project is not a housing development project.
PRC § 21183(d)	(d) The applicant demonstrates compliance with the requirements of Chapter 12.8 (commencing with Section 42649) and Chapter 12.9 (commencing with Section 42649.8) of Part 3 of Division 30, as applicable.	Yes	The stated regulations refer to commercial waste recycling (Chapter 12.8) and recycling of organic waste (Chapter 12.9). The Applicant would ensure that recycling of commercial and organic waste are stipulations in the construction contractor's contract. Additionally, solid waste generated by the Project would be collected and disposed of by a collection firm in conformance with the California Integrated Waste Management Act of 1989. Applicable laws and regulations related to waste handling are detailed in Section 4.14, Waste Management of the Application package.
PRC § 21183(e)	(e) The applicant has entered into a binding and enforceable agreement that all mitigation measures required under this division to certify the project under this chapter shall be conditions of approval of the project, and those conditions will be fully enforceable by the lead agency or another agency designated by the lead agency. In the case of environmental mitigation measures,	Yes	The Applicant agrees that it would abide by and implement all mitigation measures required under CEQA and that agrees that all mitigation measures shall be binding and enforceable conditions of approval and that in the case of environmental mitigation measures, that those measures will be monitored and enforced by the CEC for the life of the obligation.

Criteria Category	PRC §§21183 and 21183.6	Meets Criteria (Yes/No)	Applicant Response
	the applicant agrees, as an ongoing obligation, that those measures will be monitored and enforced by the lead agency for the life of the obligation.		
PRC § 21183(f)	(f) The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency's action on a certified project under this division, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the California Rules of Court adopted by the Judicial Council under Section 21185.	Yes	The Applicant agrees to the provisions in Section 21183 paragraph (f).
PRC § 21183(g)	(g) The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with review and consideration of the project under this division, in a form and manner specified by the lead agency for the project.	Yes	The Applicant agrees to the provisions in Section 21183 paragraph (g).
PRC § 21183(h)	(h) For a project for which environmental review has commenced, the applicant demonstrates that the record of proceedings is being prepared in accordance with Section 21186.	Yes	The CEC docket will serve as the record of proceeding for the Project in compliance with Section 21186. The Applicant understands that the CEC will certify it in compliance with Section 21186 if there is litigation.
PRC § 21183.6(a)(1)	(a) The quantification and mitigation of the impacts of a project described in paragraph (1), (2), or (3) of subdivision (b) of Section 21180 from the emissions of greenhouse gases shall be as follows: (1) The environmental baseline for greenhouse gas emissions shall be established based upon the physical environmental conditions in the vicinity of the project site at the time the application is submitted in a manner consistent with Section 15125 of Title 14 of the California Code of Regulations as those	Yes	The greenhouse gas emissions baseline is described in Section 4.1, Air Quality and Air Quality Analysis Technical Report (Appendix H).

Criteria Category	PRC §§21183 and 21183.6	Meets Criteria (Yes/No)	Applicant Response
	regulations existed on January 1, 2021.		
PRC § 21183.6(a)(2)	(2) The mitigation of the impacts resulting from the emissions of greenhouse gases shall be achieved in accordance with the following priority: (A) Direct emissions reductions from the project that also reduce emissions of criteria air pollutants or toxic air contaminants through implementation of project features, project design, or other measures, including, but not limited to, energy efficiency, installation of renewable energy electricity generation, and reductions in vehicle miles traveled. (B) If all of the project impacts cannot be feasibly and fully mitigated by direct emissions reductions as described in subparagraph (A), the remaining unmitigated impacts shall be mitigated by direct emissions reductions that also reduce emissions of criteria air pollutants or toxic air contaminants within the same air pollution control district or air quality management district in which the project is located. (C) If all of the project impacts cannot be feasibly and fully mitigated by direct emissions reductions as described in subparagraph (A) or (B), the remaining unmitigated impacts shall be mitigated through the use of offsets that originate within the same air pollution control district or air quality management district in which the project is located. The offsets shall be undertaken in a manner consistent with Division 25.5 (commencing with Section 38500) of the Health and Safety Code, including, but not limited to, the requirement that the offsets be real, permanent, quantifiable, verifiable,	Yes	As described in the Air Quality Analysis Technical Report (Appendix H), the Project would not result in any net additional emissions of greenhouse gases. A net greenhouse gas reduction would occur as a result of implementing the Project. Therefore, no mitigation would be required, and the Project would comply with PRC § 21183.6(a)(2).

Criteria Category	PRC §§21183 and 21183.6	Meets Criteria (Yes/No)	Applicant Response
	and enforceable, and shall be undertaken from sources in the community in which the project is located or in adjacent communities. (D) If all of the project impacts cannot be feasibly and fully mitigated by the measures described in subparagraph (A), (B), or (C), the remaining unmitigated impacts shall be mitigated through the use of offsets that originate from sources that provide a specific, quantifiable, and direct environmental and public health benefit to the region in which the project is located.		
PRC § 21183.6(b)	(b) It is the intent of the Legislature, in enacting this section, to maximize the environmental and public health benefits from measures to mitigate the project impacts resulting from the emissions of greenhouse gases to those people that are impacted most by the project.	Yes	As described in the Air Quality Analysis Technical Report (Appendix H), the Project would not result in any net additional emissions of greenhouse gases. A net greenhouse gas reduction would occur as a result of implementing the Project. Therefore, no mitigation would be required, and the Project would comply with PRC § 21183.6(b).

Net Economic Benefit

Imperial County Net Economic Benefit

The Perkins Renewable Energy Project is expected to have a total investment to Imperial County of approximately $1.3 billion. This encompasses a total construction investment of over $296 million, including $216 million direct investment in Imperial County upon the completion of construction, and a total operational investment of $1 billion. The Project is expected to have a total annual investment of $20.9 million, including $13.6 million direct investment, in Imperial County during operation and maintenance.

This investment calculation is based on the economic benefits that would accrue to Imperial County as the result of constructing and operating the Project, including the approximate expected labor income, expenditures, industry growth, tax revenue, and an estimate of indirect and induced investment from the IMPLAN model.

While IP Perkins is purchasing America-made equipment where possible (including modules, battery energy storage system, transformers, and balance of system) it may not all be made or

produced locally or in California. For this reason, the specialty equipment cost is listed separately and is excluded from the calculation of Imperial County investment.

This investment is set to have a significant positive impact on the region's economy, creating new opportunities for growth and development both in the Project community and throughout Imperial County. The infusion of this capital will not only drive local job creation and provide significant funds directly to local and county government but will also stimulate the local economy indirectly through the economic activity of laborers and the growth of nearby businesses.

The investment that will result from completion of the Perkins Renewable Energy Project are shown below in Table 4. Please note that these investment amounts are approximate and based on best estimates as of the date of this application - actual investment values may vary slightly.

Table 5 Approximate Project Investment in Imperial County

Investment category	Investment upon completion of construction
Labor	$91.7M
Intermediate expenditure[(a)]	$136.3M
Other Property Income[(b)]	$57.7M
Taxes on production	$11.1M
Total investment	$296.8M

Note:

Totals may not add due to rounding.

[a] Intermediate expenditures refers to repeating everyday materials required to make a final product (e.g. steel that is used for new buildings).

[b] Other Property Income is all money collected by an industry that is not paid into the operations of the company (e.g. profits, payments for rents, or interest income).

Appendix E.4 PRC Section 25545.3.3 and 25545.3.5 Required Certifications

February 5, 2024

Ann Crisp
Senior Environmental Planner
Siting, Transmission & Environmental Protection Division California Energy Commission
715 P Street
Sacramento, CA 95814

Re: Perkins Renewable Energy Project Application

In connection with the opt-in application for the Perkins Renewable Energy Project in Imperial County, California, "IP Perkins, LLC, IP Perkins BAAH, LLC and any related affiliates (collectively, "Applicant")" certify that they will comply with the prevailing wage and workforce requirements set forth in Assembly Bill 205 (“AB 205”), including that (1) all construction workers employed on the project will be paid at least the general prevailing rate of per diem wages or apprenticeship wages, as applicable, in accordance with Public Resources code section 25545.3.3, and (2) a skilled and trained workforce will be used to perform all construction work on the project, in accordance with Public Resources code section 25545.3.5.

Specifically, the Applicant certifies as follows:

1. Prevailing Wages:
    a. The prevailing wage requirement of AB 205 will be included in all contracts for the performance of all construction work.
    b. All contractors and subcontractors will be required to pay to all construction workers employed in the construction of the project at least the general prevailing rate of per diem wages or the applicable apprentice prevailing rate, as applicable.
    c. All contractors and subcontractors performing construction work on the project will be required to employ apprentices at no less than the ratio required in Section 1777.5 of the Labor Code.
    d. All contractors and subcontractors performing construction work will maintain and verify payroll records pursuant to Section 1776 of the Labor Code, make those records available for inspection and copying as provided therein, and furnish those payroll records to the Labor Commissioner pursuant to Section 1771.4 of the Labor Code.
    e. The obligation of the contractors and subcontractors to pay prevailing wages and employ apprentices may be enforced by the Labor Commissioner through the issuance of a civil wage and penalty assessment pursuant to Section 1741 of the Labor Code, which may be reviewed pursuant to Section 1742 of the Labor Code, within 18 months after the completion of the project, or by an underpaid worker through an administrative complaint or civil action, or by a joint labor-management committee though a civil action under Section 1771.2 of the Labor Code. If a civil wage and penalty assessment is issued, the contractor, subcontractor, and surety on a bond or bonds issued to secure the payment of wages covered by the assessment will be liable for liquidated damages pursuant to Section 1742.1 of the Labor Code.

f. Alternatively, all contractors and subcontractors performing construction work on the project may be subject to a project labor agreement, which would include the following. If the project is subject to such a project labor agreement, then sections 1.d and 1.e, above, do not apply:
    i. Provisions requiring payment of prevailing wages to all construction workers employed in the construction of the project and for enforcement of that obligation through an arbitration procedure.
    ii. Targeted hiring provisions, including a targeted hiring plan, on a craft-by-craft basis to address job access for local, disadvantaged, or underrepresented workers, as defined by a relevant local agency.
    iii. Apprenticeship utilization provisions that commit all parties to increasing the share of work performed by state-registered apprentices above the state- mandated minimum ratio required in Section 1777.5 of the Labor Code.
    iv. Apprenticeship utilization provisions that commit all parties to hiring and retaining a certain percentage of state-registered apprentices that have completed the Multi-Craft Core pre-apprenticeship training curriculum referenced in subdivision (t) of Section 14005 of the Unemployment Insurance Code.

2. Skilled and Trained Workforce:
    a. All contracts for the performance of work will require that every contractor and subcontractor at every tier will individually use a skilled and trained workforce to construct the project.
    b. Every contractor and subcontractor will be required to use a skilled and trained workforce to construct the project.
    c. Contractors and subcontractors that fail to use a skilled and trained workforce will be subject to the penalties provided in Section 2603 of the Public Contract Code. Penalties for a contractor's or subcontractor's failure to comply with the requirement to use a skilled and trained workforce may be assessed by the Labor Commissioner within 18 months of completion of the project using the same procedures for issuance of civil wage and penalty assessments pursuant to Section 2603 of the Public Contract Code. Penalties shall be paid to the State Public Works Enforcement Fund.
    d. The Applicant will retain records, including copies of monthly reports, that demonstrate compliance with Chapter 2.9 (commencing with Section 2600) of Part 1 of Division 2 of the Public Contract Code while the project or contract is being performed and for three years after completion of the project or contract. The Applicant will submit these records immediately upon request of the commission. When submitted to the commission, these records shall be a public record under the California Public Records Act (Chapter 3.5, commencing with Section 6250 of Division 7 of Title 1 of the Government Code) and shall be open to public inspection.
    e. Alternatively, all contractors and subcontractors performing work on the project may be subject to a project labor agreement, which would include the following. If the project is subject to such a project labor agreement, then sections 2.c and 2.d, above, do not apply:

i. Provisions requiring compliance with the skilled and trained workforce requirement and for enforcement of that obligation through an arbitration procedure.
ii. Targeted hiring provisions, including a targeted hiring plan, on a craft-by-craft basis to address job access for local, disadvantaged, or underrepresented workers, as defined by a local agency.
iii. Apprenticeship utilization provisions that commit all parties to increasing the share of work performed by state-registered apprentices above the state- mandated minimum ratio required in Section 1777.5 of the Labor Code.
iv. Apprenticeship utilization provisions that commit all parties to hiring and retaining a certain percentage of state-registered apprentices that have completed the Multi-Craft Core pre-apprenticeship training curriculum referenced in subdivision (t) of Section 14005 of the Unemployment Insurance Code.

The Applicant looks forward to working with the CEC regarding the Perkins Renewable Energy Project.

Sincerely,

Name: Simon Ross
Title: Chief Commercial Officer of Intersect Power, LLC (the indirect parent of IP Perkins, LLC and IP Perkins BAAH, LLC)