

II.7 ALTERNATIVE 4

Alternative 4 is one of five action alternatives considered and analyzed in the Desert Renewable Energy Conservation Plan (DRECP or Plan) and Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The description of Alternative 4 is first provided at an interagency level (Section II.7.1), which describes all Plan elements of the alternative. After the interagency description, the individual elements of the alternative are described, including the Bureau of Land Management (BLM) Land Use Plan Amendment (LUPA) elements of the DRECP (Section II.7.2), the Natural Community Conservation Plan (NCCP) elements of the DRECP (Section II.7.3), and the General Conservation Plan (GCP) elements of the DRECP (Section II.7.4).

II.7.1 Interagency Description of Alternative 4

The interagency description of Alternative 4 includes the following main sections: Overview of Alternative 4, Conservation Strategy, Monitoring and Adaptive Management Program, Description of the Covered Activities, and Plan Implementation. The description of Alternative 4 for the DRECP and EIR/EIS encompasses the overall conservation strategy and description of Covered Activities on federal and nonfederal lands (i.e., state, county, city, and privately owned lands) within the Plan Area.

II.7.1.1 Overview of Alternative 4

The following provides a Plan-wide overview of Alternative 4. Alternative 4 integrates the renewable energy and resource conservation with other existing uses in the Plan Area and includes BLM LUPA elements, NCCP elements, and GCP elements.

Under Alternative 4 for the DRECP, an interagency conservation strategy for the Plan Area would be established that includes a streamlined process for the permitting of renewable energy and transmission development on both federal and nonfederal lands and a BLM LUPA providing Conservation and Management Actions (CMAs) for resources throughout the Plan Area on BLM-administered lands. Like the Preferred Alternative, Alternative 4 would consist of Development Focus Areas (DFAs), Study Area Lands, and the DRECP Plan-Wide Reserve Design Envelope (including existing conservation areas, BLM LUPA conservation designations, and Conservation Planning Areas), Impervious and Urban Built-up Lands, Other Lands (including Military, Open Off-Highway Vehicle [OHV] Areas, Tribal Lands), and Undesignated Areas. These areas are defined in Section II.3.1, Interagency Description of the Preferred Alternative.

The BLM LUPA (Section II.7.2) provides the land use plan amendment description related to these components on BLM-administered lands, and it also describes the Special Recreation Management Areas (SRMAs) designations and other CMAs for resources on

BLM-administered lands. The NCCP (Section II.7.3) and GCP for nonfederal lands (Section II.7.4) describe how these Plan components would provide for incidental take authorization of Covered Species under Section 2835 of the state Natural Community Conservation Planning Act and Section 10 of the federal Endangered Species Act.

Alternatives under the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA), including Alternative 4, must consider potential impacts on all aspects of the human environment, both the natural environment and the built environment, including biological and nonbiological resources. Additionally, Appendix M contains all the required components of a GCP.

Figure II.7-1 provides the Plan-wide map for Alternative 4.

Table II.7-1 provides an overview summary for Alternative 4. In summary, Alternative 4 would include approximately 1,608,000 acres of DFAs. Study Area Lands include 588,000 acres of DRECP Variance Lands. The DRECP Plan-Wide Reserve Design Envelope would include 7,662,000 acres of existing conservation areas, 5,606,000 acres of BLM LUPA conservation designations, and 1,210,000 acres of Conservation Planning Areas. Of the over 19 million acres of the Plan Area outside of Military Lands, BLM Open OHV Areas, and Tribal Lands, there are approximately 13,565,000 acres of federally owned or administered lands and 5,420,000 of nonfederal lands. The BLM LUPA elements of Alternative 4 are described in Section II.7.2; the NCCP elements of Alternative 4 are described in Section II.7.3; and the GCP elements of Alternative 4 addressing nonfederal lands are described in Section II.7.4. Exhibit II.7-1 graphically displays the components of Alternative 4.

**Table II.7-1
Interagency DRECP Plan-Wide Alternative 4**

Alternative 4	Acreage
DFAs	1,608,000
Study Area Lands	588,000
DRECP Variance Lands	588,000
DRECP Plan-Wide Reserve Design Envelope	14,478,000
Existing conservation areas	7,662,000
BLM LUPA conservation designations	5,606,000
Conservation Planning Areas	1,210,000
Urban Areas, Other Lands, and Undesignated Areas	5,910,000
Impervious and Urban Built-up Land	525,000
Military Lands	3,019,000
Open OHV Areas	264,000
Imperial Sand Dunes, including the BLM Open OHV Area	132,000

**Table II.7-1
Interagency DRECP Plan-Wide Alternative 4**

Alternative 4	Acreage
Johnson Valley OHV Shared Use Area	56,000
Tribal Lands	129,000
Undesignated Areas	1786,000
Total	22,585,000

Notes: This Plan-wide alternative summary includes both federal lands and nonfederal lands. The summary specific to BLM-administered lands is provided in Section II.7.2, and the summary specific to nonfederal lands is provided in Section II.7.4. Overlaps of BLM LUPA conservation designations with existing conservation areas are reported in the existing conservation area acreages. The BLM LUPA conservation designation acreage reported includes both BLM-administered lands and non-BLM lands inholdings within the designation. The BLM LUPA would also designate approximately 2,489,000 acres of SRMAs in addition to the 193,000 acres of existing SRMAs, which are BLM designation overlays that overlap portions of the components provided in this table and described in Section II.7.2. Impervious and urban built-up lands occur within BLM LUPA conservation designations and DFAs where not explicitly included in the urban category reported here. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

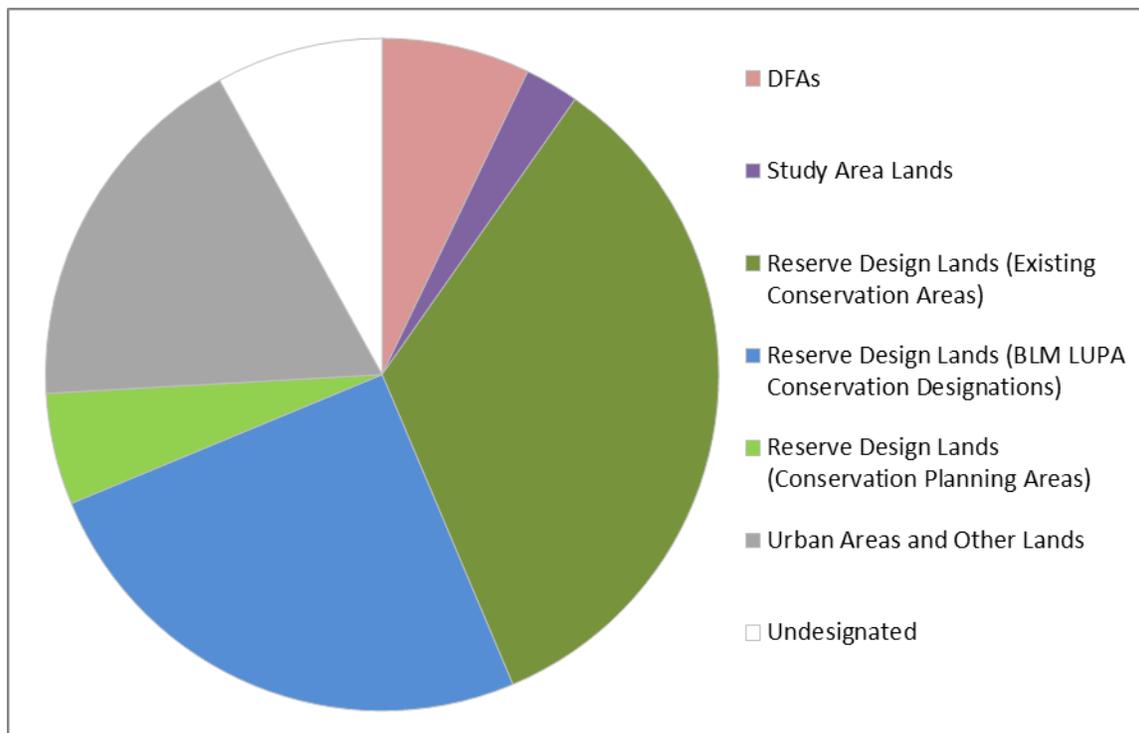


Exhibit II.7-1 Components of Alternative 4

II.7.1.2 Conservation Strategy

The Plan-wide conservation strategy for the DRECP was developed through the planning process described in Volume I, Chapter I.3. The process included: (1) establishing the conservation focus on biological, cultural, recreation, and visual resources; (2) gathering baseline information; (3) identifying Biological Goals and Objectives (BGOs) and goals and objectives for nonbiological resources on BLM-administered land; (4) developing a comprehensive reserve design; (4) developing biological CMAs and CMAs for nonbiological resources on BLM land; and (6) developing a Monitoring and Adaptive Management Program. The approach and structure of the conservation strategy for Alternative 4 is the same as the conservation strategy for the Preferred Alternative.

II.7.1.2.1 Overview of the Structure and Content of the Biological Conservation Strategy for Alternative 4

The approach and structure of the conservation strategy under Alternative 4 are the same as that for the Preferred Alternative as described in Section II.3.1.2.

II.7.1.2.2 DRECP Proposed Covered Species List

The proposed HCP and NCCP Covered Species list would be the same under Alternative 4 as it is under the Preferred Alternative. See Section II.3.1.2.2 for the proposed Covered Species list.

II.7.1.2.3 Plan-Wide Biological Goals and Objectives

The Plan-wide BGOs provide the broad guiding principles and define the desired outcome of the DRECP conservation strategy. The Plan-wide BGOs are described in Section I.3.4.3 and are provided in Appendix C at the landscape, natural community, and species levels. The Plan-wide BGOs are common to and apply to each of the DRECP alternatives. The Step-Down Biological Objectives describe the contribution of DRECP implementation towards achieving the Plan-wide BGOs.

II.7.1.2.4 DRECP Plan-Wide Reserve Design Envelope

The DRECP Plan-Wide Reserve Design Envelope for Alternative 4 was developed based on the reserve design process described in Section I.3.4.4. The reserve design is the mapped expression of Plan-wide BGOs. Additionally, an interagency Plan-Wide Conservation Priority Area has been identified. This area represents the highest priority area for the creation and long-term management of habitat reserves for the conservation of the 37 proposed Covered Species and representative examples of the natural communities and processes that support them in the Plan Area. The interagency Plan-Wide Conservation Priority Area was the basis for the NCCP Conceptual Plan-Wide Reserve Design of each alternative.

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Overall, the Plan-wide reserve design envelope for Alternative 4 would cover 76% of the Plan Area (excluding Military Lands, Tribal Lands, and BLM Open OHV Areas), which includes 7,662,000 acres of existing conservation areas, 5,606,000 acres of BLM LUPA conservation designations, and 1,210,000 acres of Conservation Planning Areas. Approximately 53% of the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 is made up of existing conservation areas (Legally and Legislatively Protected Areas [LLPAs] and Military Expansion Mitigation Lands [MEMLs]). Approximately 39% of the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 is made up of BLM LUPA conservation designations including combinations of Areas of Critical Environmental Concern (ACECs), National Landscape Conservation System (NLCS), and Wildlife Allocations, and approximately 8% of the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 is comprised of Conservation Planning Areas. Table II.7-2 shows the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by county. Table II.7-3 shows the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by ownership. Table II.7-4 shows the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by ecoregion subarea.

The interagency Plan-Wide Conservation Priority Area within the reserve design envelope covers approximately 2,053,000 acres. This includes 1,857,000 acres of BLM LUPA conservation designations (1,399,000 acres on BLM-administered lands and 459,000 acres of non-BLM inholdings) and 196,000 acres of Conservation Planning Areas.

The DRECP Plan-Wide Reserve Design Envelope for Alternative 4 is comprised of an interconnected network of federal and nonfederal (both public and private) lands that spans seven counties, multiple ownerships, and ten ecoregion subareas of the Mojave and Colorado/Sonoran deserts of California. Figure II.7-2 shows the DRECP Plan-Wide Reserve Design Envelope for Alternative 4, and Appendix G provides figures of the reserve design envelope for each ecoregion subarea in the Plan Area. Table II.7-2 shows the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by County. Table II.7-3 shows the DRECP Plan-Wide Reserve Design Envelope for under Alternative 4 by ownership. Table II.7-4 shows the DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by ecoregion subarea.

**Table II.7-2
DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by County**

County	Existing Conservation Areas (acres)	BLM LUPA Conservation Designations (acres)	Conservation Planning Areas (acres)	Total Acreage
Imperial County	274,000	587,000	147,000	1,008,000
Inyo County	1,921,000	594,000	135,000	2,650,000
Kern County	135,000	539,000	188,000	862,000
Los Angeles County	6,000	33,000	250,000	289,000

**Table II.7-2
DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by County**

County	Existing Conservation Areas (acres)	BLM LUPA Conservation Designations (acres)	Conservation Planning Areas (acres)	Total Acreage
Riverside County	982,000	503,000	57,000	1,542,000
San Bernardino County	4,145,000	3,350,000	427,000	7,922,000
San Diego County	199,000	0	6,000	205,000
Total	7,662,000	5,606,000	1,210,000	14,478,000

Note: Overlaps of BLM LUPA conservation designations with existing conservation areas are reported in the existing conservation area acreages. The BLM LUPA conservation designation acreage reported includes both BLM-administered lands and non-BLM lands inholdings within the designation. These include both existing and proposed conservation designations. The reserve design envelope also includes an interagency Plan-Wide Conservation Priority Area that covered 2,053,000 acres of BLM LUPA conservation designations and Conservation Planning Areas. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

**Table II.7-3
DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by Ownership Class**

Ownership Class	Existing Conservation Areas (acres)	BLM LUPA Conservation Designations (acres)	Conservation Planning Areas (acres)	Total Acreage
<i>Federal Lands</i>				
BLM-administered land	3,279,000	4,437,000	—	7,716,000
Other federal land	3,949,000	9,000	62,000	4,021,000
<i>Nonfederal Lands</i>				
Private land	31,000	942,000	859,000	1,832,000
State and local public land	403,000	217,000	289,000	909,000
Total	7,662,000	5,606,000	1,210,000	14,478,000

Notes: Overlaps of BLM LUPA conservation designations with existing conservation areas are reported in the existing conservation area acreages. The BLM LUPA conservation designation acreage reported includes both BLM-administered lands and non-BLM lands inholdings within the designation. These include both existing and proposed conservation designations. The reserve design envelope also includes an interagency Plan-Wide Conservation Priority Area that covered 2,053,000 acres of BLM LUPA conservation designations and Conservation Planning Areas. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

**Table II.7-4
DRECP Plan-Wide Reserve Design Envelope for Alternative 4 by Ecoregion Subarea**

Ecoregion Subarea	Existing Conservation Areas (acres)	BLM LUPA Conservation Designations (acres)	Conservation Planning Areas (acres)	Total Acreage
Cadiz Valley and Chocolate Mountains	842,000	1,167,000	74,000	2,082,000
Imperial Borrego Valley	355,000	352,000	143,000	849,000
Kingston and Funeral Mountains	1,767,000	474,000	83,000	2,324,000
Mojave and Silurian Valley	786,000	467,000	52,000	1,306,000
Owens River Valley	32,000	145,000	91,000	268,000
Panamint Death Valley	1,253,000	306,000	16,000	1,574,000
Pinto Lucerne Valley and Eastern Slopes	739,000	477,000	75,000	1,291,000
Piute Valley and Sacramento Mountains	423,000	440,000	29,000	892,000
Providence and Bullion Mountains	1,305,000	737,000	131,000	2,173,000
West Mojave and Eastern Slopes	162,000	1,042,000	516,000	1,720,000
Total	7,662,000	5,606,000	1,210,000	14,478,000

Notes: Overlaps of BLM LUPA conservation designations with existing conservation areas are reported in the existing conservation area acreages. The BLM LUPA conservation designation acreage reported includes both BLM-administered lands and non-BLM lands inholdings within the designation. These include both existing and proposed conservation designations. The reserve design envelope also includes an interagency Plan-Wide Conservation Priority Area that covered 2,053,000 acres of BLM LUPA conservation designations and Conservation Planning Areas. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

Existing Conservation

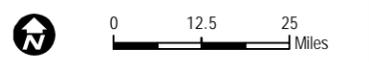
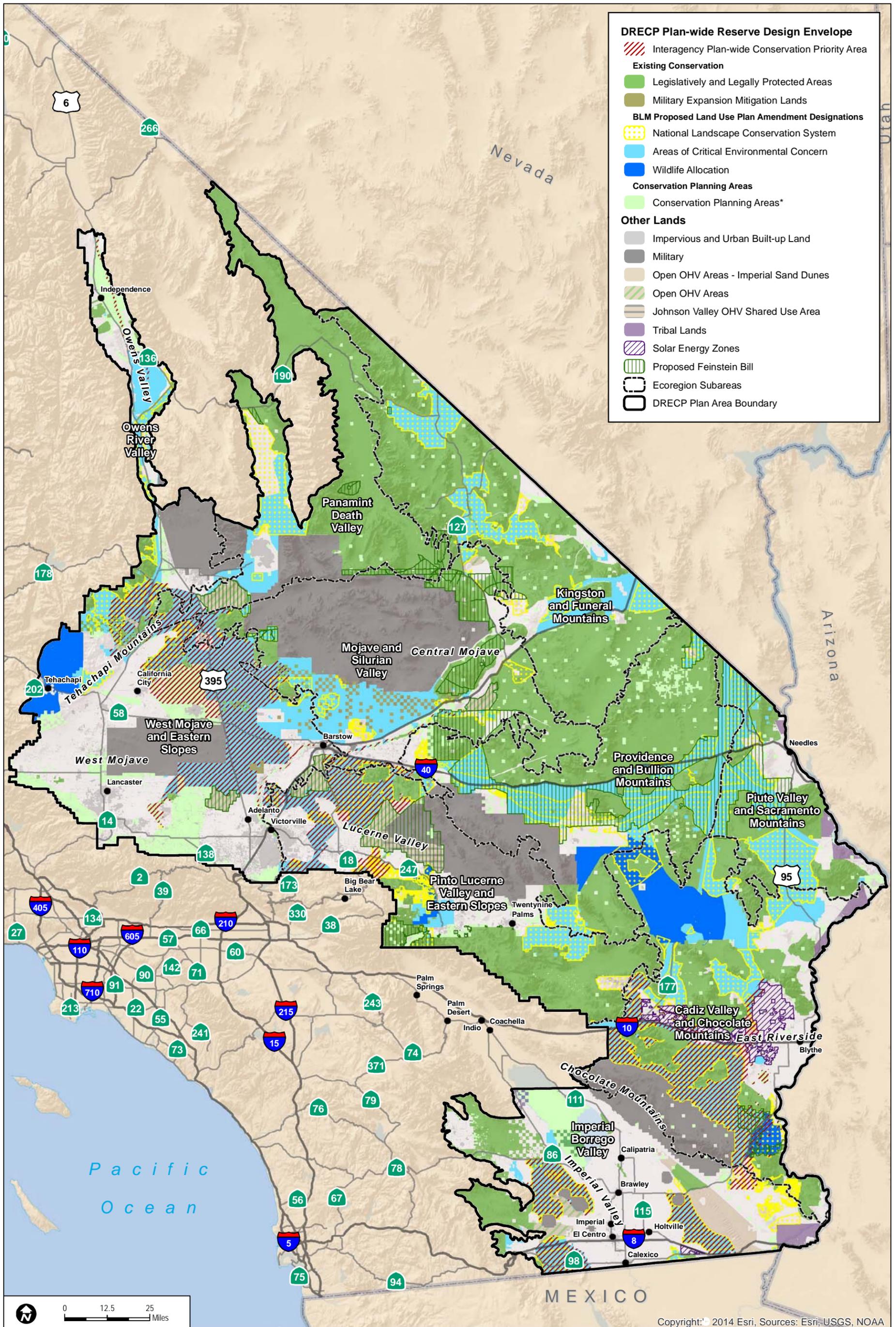
The Plan Area encompasses existing conservation areas that include LLPAs and MEMLs, which include among other designations Wilderness Areas, Wilderness Study Areas, National Parks, National Preserve, and California State Parks. LLPAs serve as the building blocks of the reserve design with existing boundaries and management regimes around which the BLM LUPA conservation designations and Conservation Planning Areas were designed. Existing conservation areas are the same for all alternatives. A full description of the existing conservation areas is provided in Section I.3.4.4 under the reserve design process. The existing conservation areas of the reserve design are shown on Figure II.7-2 and the ecoregion subarea maps of the reserve design in Appendix G.

BLM LUPA Conservation Designations

The BLM LUPA conservation designations are a critical component of the reserve design for the DRECP. These include existing and newly proposed NLCS designations, ACEC designations, and Wildlife Allocations. The land unit names included in BLM LUPA conservation designations in the reserve design by ecoregion subarea are provided in Section II.7.2 and Appendix L. The BLM LUPA conservation designations component of the reserve design is shown on Figure II.7-2 and the ecoregion subarea maps of the reserve design in Appendix G.

Conservation Planning Areas

Conservation Planning Areas are the portions of the reserve design located on private and non-BLM public lands that occur outside of existing conservation areas and BLM LUPA conservation designations. Reserve areas would be assembled by acquiring land or conservation easements from willing sellers within the Conservation Planning Areas to provide compensatory mitigation for Covered Activities. The Conservation Planning Areas component of the reserve design is shown on Figure II.7-2 and the ecoregion subarea maps of the reserve design in Appendix G.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

*The portion of the reserve design outside Existing Conservation Areas and BLM LUPA Conservation Designations on private and non-BLM public lands from which reserve areas will be assembled from willing sellers as compensation for Covered Activities.

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FIGURE II.7-2
Alternative 4 - Plan-wide Reserve Design Envelope

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II.7.1.2.5 Biological Conservation and Management Actions

The biological conservation and management actions under Alternative 4 would be the same as those for the Preferred Alternative described in Section II.3.1.2.5, except as described in the following discussion. The CMAs related to BLM LUPA conservation designations under Alternative 4 are described in Section II.7.2 and in the BLM unit-specific worksheets in Appendix L.

- **Exceptions to the Preferred Alternative CMAs.** The Plan-wide CMAs, landscape-level CMAs, Natural Communities and Covered Species CMAs in the DFAs, Natural Communities and Covered Species CMAs in the Reserve, and the Transmission-specific CMAs under the heading “Exceptions to the Preferred Alternative CMAs” will specify the CMA code (e.g., RIP-WET-1) that corresponds to the specific CMA listed in the biological CMAs for the Preferred Alternative that will not be implemented for Alternative 4.
- **Additional CMAs to the Preferred Alternative.** The Plan-wide CMAs, landscape-level CMAs, Natural Communities and Covered Species CMAs in the DFAs, Natural Communities and Covered Species CMAs in the Reserve, and the Transmission-specific CMAs will list the additional biological CMAs under the heading “Additional CMAs to the Preferred Alternative” that will be implemented specifically for Alternative 4 in addition to the CMAs described for the Preferred Alternative.

The following provides the biological CMAs for Alternative 4, including the CMAs listed in the Preferred Alternative that will not be implemented and any additional CMAs that will specifically be implemented for Alternative 4 in addition to the biological CMAs in the Preferred Alternative.

II.7.1.2.5.1 Avoidance and Minimization CMAs

Alternative 4 would implement avoidance and minimization CMAs including the Avoidance and Minimization CMAs in the Preferred Alternative with the exceptions and additions as described in Section II.7.1.2.5.2 through Section II.7.1.2.5.6.

II.7.1.2.5.2 Plan-Wide Avoidance and Minimization

Under Alternative 4, the Plan-Wide Avoidance and Minimization CMAs listed in the Preferred Alternative (Section II.3.1.2.5.2) will be implemented with no exceptions or additions.

II.7.1.2.5.3 Landscape-Level Avoidance and Minimization CMAs

Under Alternative 4, the Landscape-Level Avoidance and Minimization CMAs listed in the Preferred Alternative (Section II.3.1.2.5.3) will be implemented with no exceptions or additions.

II.7.1.2.5.4 Natural Communities and Covered Species Avoidance and Minimization CMAs in DFAs

Under Alternative 4 the Natural Communities and Covered Species Avoidance and Minimization CMAs listed in the Preferred Alternative (Section II.3.1.2.5.4) will be implemented with no exceptions or additions.

II.7.1.2.5.5 Natural Communities and Covered Species Avoidance and Minimization CMAs in the Reserve

Under Alternative 4, the Natural Communities and Covered Species Avoidance and Minimization CMAs in the Reserve listed in the Preferred Alternative (Section II.3.1.2.5.5) will be implemented with no exceptions or additions.

II.7.1.2.5.6 Transmission Avoidance and Minimization CMAs

Under Alternative 4, the Transmission Avoidance and Minimization CMAs listed in the Preferred Alternative (Section II.3.1.2.5.6) will be implemented with no exceptions or additions.

II.7.1.2.5.7 Compensation CMAs

Under Alternative 4, the Compensation CMAs listed in the Preferred Alternative (Section II.3.1.2.5.7) will be implemented with no exceptions or additions.

II.7.1.3 Monitoring and Adaptive Management Program

The Monitoring and Adaptive Management Program for Alternative 4 would be the same as is described under the Preferred Alternative (see Section II.3.1.2).

II.7.1.4 Overview Description of Covered Activities

This section provides a description of the distribution, magnitude, and scope of activities under the DRECP for Alternative 4 under the DRECP. It describes how Alternative 4 would meet the renewable energy goals outlined in Section I.3.5. Renewable energy development technologies addressed under the DRECP include solar thermal, photovoltaic (PV) solar, wind, geothermal, and transmission.

On nonfederal lands, renewable energy and transmission siting, construction, operation, and decommissioning activities and conservation activities would be considered Covered Activities for incidental take permits under Section 2835 of the state Natural Community Conservation Planning Act and Section 10 of the federal Endangered Species Act. On BLM-administered lands, the BLM LUPA addresses renewable energy and transmission siting, construction, operation, and decommissioning activities, conservation activities, and other land use management decisions. The following describes the renewable energy generation-, transmission-, and conservation-related activities that would occur on both federal and nonfederal lands. The specific land use management decisions addressed by the BLM LUPA are described in Section II.7.2.

The section includes a summary of DFA distribution, and an estimated acreage associated with each technology. The description is subdivided by technology: solar, wind, geothermal, and transmission. For brevity, the description of the activities associated with siting, constructing, operating, and decommissioning are not repeated in this section as the information is identical to that which is provided in Section II.3.1.4.

In Alternative 4, renewable energy-related activities covered by the Plan would be confined to the DFAs. If the activities are not located within a DFA, they would no longer be considered a Covered Activity and would not enjoy the benefits the Plan affords. Generation development is focused in the West Mojave and Eastern Slopes, Imperial Borrego Valley, and Cadiz Valley and Chocolate Mountains ecoregion subareas, and around Barstow, with smaller areas in the Owens River Valley ecoregion subarea. Figure II.7-3 shows the DFAs for Alternative 4, and Appendix G provides figures of the DFAs for each ecoregion subarea in the Plan Area.

Table II.7-5a provides a DFA acreage summary by ecoregion subarea and by ecoregion subunit (i.e., finer-grained geographic subdivisions within each ecoregion subarea). Figure II.7-3 shows the corresponding ecoregion subunits.

Table II.7-5a
Alternative 4 Development Focus Areas by Ecoregion Subarea and Subunit

Ecoregion Subarea	Ecoregion Subunit	DFA Acreage
Cadiz Valley and Chocolate Mountains	Cadiz - 1	—
	Cadiz - 2	258,000
	Cadiz - 3	500
Imperial Borrego Valley	Imperial - 1	218,000
	Imperial - 2	228,000
	Imperial - 3	—
Kingston and Funeral Mountains	Kingston - 1	10,000
Mojave and Silurian Valley	Mojave - 1	40,000
	Mojave - 2	500
Owens River Valley	Owens -1	22,000
Panamint Death Valley	Panamint - 1	6,000
Pinto Lucerne Valley and Eastern Slopes	Pinto - 1	117,000
	Pinto - 2	—
Piute Valley and Sacramento Mountains	Piute - 1	—
Providence and Bullion Mountains	Providence - 1	12,000
	Providence - 2	—
West Mojave and Eastern Slopes	West Mojave - 1	5,000
	West Mojave - 2	304,000
	West Mojave - 3	30
	West Mojave - 4	217,000
	West Mojave - 5	128,000

Table II.7-5a
Alternative 4 Development Focus Areas by Ecoregion Subarea and Subunit

Ecoregion Subarea	Ecoregion Subunit	DFA Acreage
	West Mojave - 6	43,000
	Total DFA Acreage	1,608,000

Note: The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table

The distribution of different generation technologies varies depending on underlying factors that affect each technology. The method used to estimate the distribution of generation impacts across the Plan Area simultaneously accounts for the area available to each technology, potential interactions between technologies, and variation in the relative development potential of different DFAs. A more detailed description of the methodology is discussed in Chapter I.3 with additional detail provided in Appendix F. In the following section each technology is discussed separately.

In Alternative 4, renewable energy-related activities covered by the DRECP are confined to the DFAs. Available DFAs are more extensive than other alternatives, but still are predominately found in the West Mojave, Imperial Valley, East Riverside, and around Barstow, with smaller areas in the Owens Valley and on the Nevada border.

The distribution of different generation technologies varies depending on underlying factors that affect each technology. The method used to estimate the distribution of generation impacts across the Plan Area simultaneously accounts for the area available to each technology, potential interactions between technologies, and variation in the relative development potential of different DFAs. A more detailed description of the methodology is discussed in Chapter I.3 with additional detail provided in Appendix F. In the following section each technology is discussed separately.

Table II.7-5b includes a summary of the DFAs by technology type by county. The technology type listed indicates what technologies are assumed feasible in the DFA. If multiple technologies are listed, that indicates that more than one renewable energy technology could be feasible in that DFA. DFAs suitable for solar only are the most common in most counties. DFAs suitable for solar by itself is the largest technology type category in Inyo and Los Angeles counties, but solar and wind together make up the largest technology type category in Kern, Riverside, and San Bernardino counties, and solar and geothermal together make up the largest technology type category in Imperial County. Geothermal is only proposed in Imperial, Inyo, and San Bernardino counties under Alternative 4. Table II.7-5c includes a summary of the DFAs by ownership. For Alternative 4, over 79% of the DFAs are on nonfederal lands and nearly 21% of the DFAs are on federal lands.

Table II.7-5b
Alternative 4 Development Focus Areas by Technology Type by County

Technology Type Category by County	DFA Acreage
Imperial County	447,000
Geothermal	113,000
Solar	132,000
Solar and geothermal	197,000
Solar and wind	70
Solar, wind, and geothermal	5,000
Wind and geothermal	40
Inyo County	35,000
Geothermal	8,000
Solar	22,000
Solar and geothermal	6,000
Kern County	308,000
Solar	122,000
Solar and wind	131,000
Wind	55,000
Los Angeles County	218,000
Solar	218,000
Riverside County	259,000
Solar	116,000
Solar and wind	139,000
Wind	4,000
San Bernardino County	342,000
Geothermal	500
Solar	129,000
Solar and wind	176,000
Wind	37,000
San Diego County	—
Total	1,608,000

Notes: See Chapter I.3 and Appendix F for detailed descriptions of the methodology used to identify the acreage amounts listed in this table. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

Table II.7-5c
Alternative 4 Development Focus Areas by Ownership Class

Ownership Class	Total Acreage
<i>Federal Lands</i>	
BLM-administered land	258,000
Other federal land	17,000
<i>Nonfederal Lands</i>	
Private land	1,272,000
State and local public land	61,000
Total	1,608,000

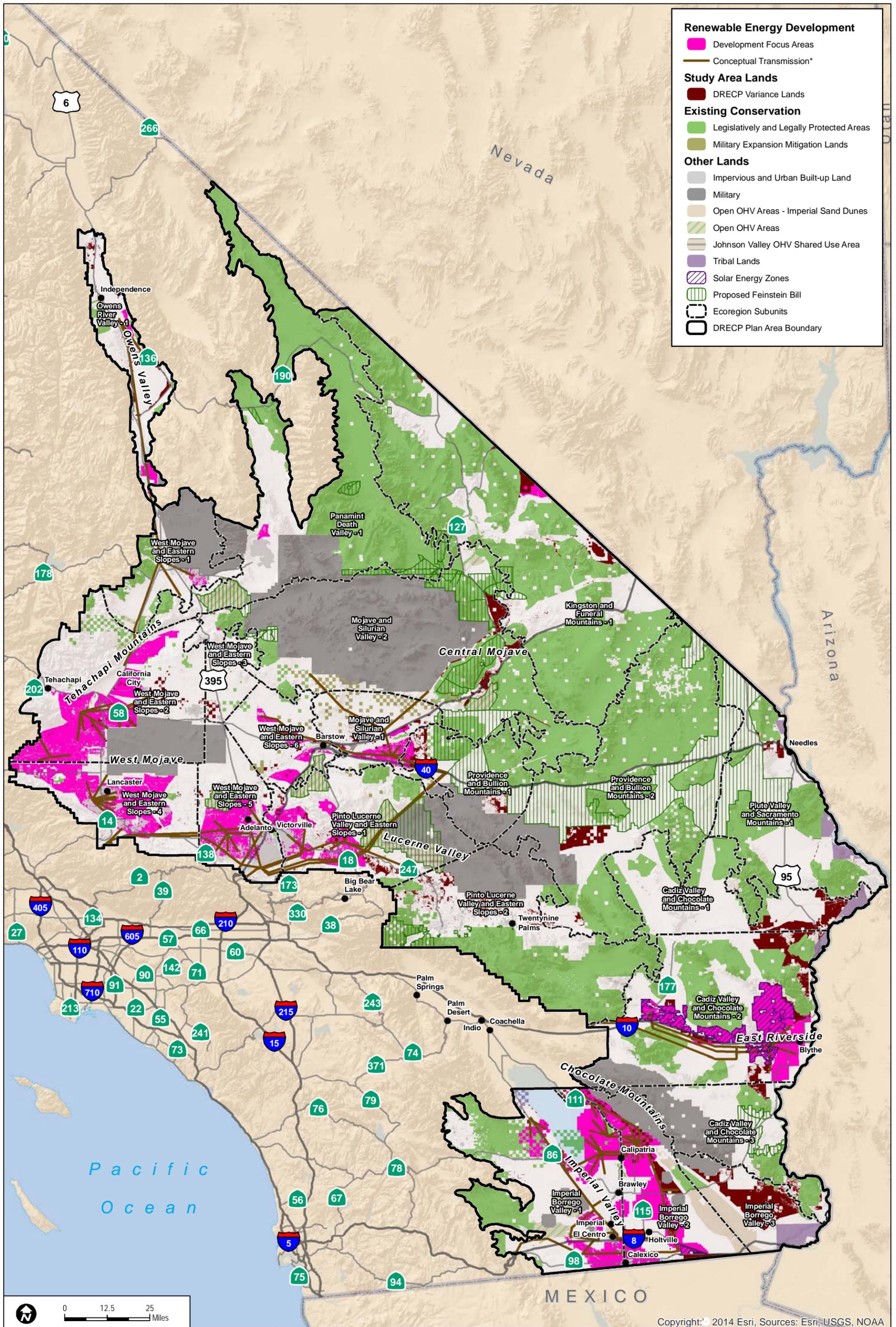
Notes: See Chapter I.3 and Appendix F for detailed descriptions of the methodology used to identify the acreage amounts listed in this table. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

The following sections contain a description of the distribution of the DFAs with an estimate of the total project area required for each technology and the associated area of permanent disturbance, a summary of which is provided in Table II.7-6. The estimated distribution of Covered Activities in the following sections aims to ensure that the DRECP evaluates a plausible magnitude of effects for each covered biological resource, such that the Plan would offer adequate minimization and mitigation for each covered technology.

Table II.7-6
Summary of Permanent Disturbance and Project Area
for All Renewable Generation Technologies under Alternative 4

	Estimated Permanent Disturbance (Acres)	Total Project Area (Acres)
Solar	108,000	108,000
Wind	7,000	124,000
Geothermal	17,000	17,000
Distributed generation	15,000	15,000
Total	147,000	264,000

Notes: See Chapter I.3 and Appendix F for detailed descriptions of the methodology used to identify the acreage amounts listed in this table. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

*Transmission lines shown are based on the DRECP Transmission Technical Group (TTG) Report, which provides a conceptual transmission plan for the DRECP alternatives and is not intended for siting or alignment purposes.

FIGURE II.7-3

Alternative 4 - Plan-wide DFAs

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II.7.1.4.1 Solar Energy Generation (Including Utility-Scale Distributed Generation)¹

This section provides an estimate of the size of impacts for Covered Activities associated with solar and utility-scale distributed generation projects that would be covered by the Plan under Alternative 4. Construction and operational activities are identical to those described in Section II.3.1.4.1 listed in Table II.3-21 (Preferred Alternative). Although the area available to solar generation would be more extensive in the DFAs than for other technologies, not all DFAs were considered suitable for solar development. Consequently, it was assumed that solar development would occur within the subset of DFAs identified Appendix G.

Solar projects can range from small-scale developments of a few megawatts (MWs) that occupy tens of acres up to 1,000 MW projects that occupy thousands of acres. Given the programmatic nature of the DRECP, extensive detailed analysis of effects that are project specific (i.e., geographically site-specific) is infeasible. Consequently, the magnitudes of impacts are described in terms of the acreage that would be affected by Covered Activities within different ecoregion subareas of the Plan Area. For the purpose of assessing the magnitude of impacts from ancillary facilities, construction impacts, and infrastructure, solar projects were assumed to be a mixture of 100 MW projects and 400 MW projects to represent the diversity of projects currently under review and construction. Similarly all ground-mounted distributed generation projects were assumed to be 20 MW projects.

When estimating the impacts of solar projects, it was assumed that the construction of projects would result in the loss of all habitat within the boundary of the project footprint. Two reasons are given for this: (1) Unlike other technologies, solar projects are generally fenced to exclude wildlife and result in modification to natural processes for the life of the project; and (2) although some vegetation may be preserved at some project locations, this is not universal and conditions of service often lead to the removal of vegetation to reduce fire risk. Further, the extensive removal, modification, and grading within the project boundary, even if vegetation is not completely removed, may lead to edge effects that effectively modify the remaining vegetation communities. The acreage requirements for roads, operation and maintenance facilities, and switchyards required for each facility are included in the overall estimated boundary of the solar project. Similarly, short-term land uses, such as construction and laydown yards, were assumed to be within the final boundary of the project, and therefore included within the boundary estimate. Table II.7-7 summarizes the land use for solar technologies, and provides the following information by ecoregion subarea for this alternative:

¹ For the purpose of analysis, all distributed generation was considered to be located in the same areas as utility-scale solar, therefore requiring the same ancillary facilities (i.e., Covered Activities) as utility-scale solar projects.

- Estimated Long-Term Ground Disturbance – Estimated total acreage affected by Covered Activities such as vegetation clearance, grading, and construction. This is effectively a summation of all potential solar generation facility footprints, including operations and maintenance building, switchyards, and road construction impacts. All ancillary facilities were assumed to be within the boundary of the Plan Area and result in total permanent disturbance to the entire project site. Due to the difficulty of restoration in a desert environment, all activities that result in vegetation removal or disturbance were considered permanent for the purpose of analysis.
- Total Project Area – An estimate of the total area occupied by a given project. For area-intensive technologies like solar generation, the total project area is identical to the total permanent ground-conversion impacts.

**Table II.7-7
Long-Term Disturbance and Project Area Acreages Associated with Solar and Ground-Mounted Distributed Generation by Ecoregion Subarea – Alternative 4**

Ecoregion Subarea	Long-Term Disturbance and Project Area (acres)		
	<i>Plan-Wide</i>	<i>LUPA</i>	<i>GCP</i>
Cadiz Valley and Chocolate Mountains	38,000	27,000	11,000
Imperial Borrego Valley	31,000	2,000	28,000
Kingston and Funeral Mountains	600	—	600
Mojave and Silurian Valley	3,000	—	3,000
Owens River Valley	2,000	800	900
Panamint Death Valley	800	700	200
Pinto Lucerne Valley and Eastern Slopes	6,000	200	6,000
Piute Valley and Sacramento Mountains	—	—	—
Providence and Bullion Mountains	1,000	200	900
West Mojave and Eastern Slopes	41,000	3,000	38,000
Total	123,000	33,000	89,000

Note: The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

II.7.1.4.2 Wind Energy Generation

This section provides an estimate of the size of land use for activities associated with wind projects that would be covered by the DRECP. Construction and operational activities are identical to those described in Section II.3.1.4.2 and listed in Table II.3-23 of the Preferred Alternative.

The area available to wind development was constrained by several factors, including areas where construction was considered infeasible, and areas where turbine construction has

been precluded by ordinance or general policy. Consequently, it was assumed that wind development would occur within the subset of DFAs identified in Appendix G.

Wind projects can range from small-scale developments of a few MWs that occupy tens of acres up to several hundred MW projects that occupy thousands acres. Given the programmatic nature of the DRECP, extensive detailed analysis of effects that are project specific (i.e., geographically site-specific) is infeasible. Consequently, the magnitudes of impacts are described in terms of the acreage that would be affected by Covered Activities within different ecoregion subareas of the Plan.

Wind projects result in a relatively diffuse impacts spread across a wide area. Turbines are widely spaced and connected by permanent access roads and transmission infrastructure, with a centralized maintenance facilities and switchyards. Unlike solar, not all the land within the boundary of a wind project was assumed to be permanently disturbed by project activities. Estimates of disturbed acreage were the sum of the estimated acreage required for turbine pads, roads, ancillary facilities, and supporting infrastructure. Short-term construction activities, such as laydown yards, were assumed to result in permanent disturbance within the project boundary, and were also included in the estimate of permanently disturbed acreage. In addition to estimates of ground disturbance, the area likely to be impacted by the operation of the turbine rotors (airspace) was also estimated. The turbines were grouped into conceptual projects of up to 200 MWs. Table II.7-8 provides the following information by ecoregion subarea:

- Total Project Area – An estimate of the total area occupied by a given project. For technologies where the impacts may be spread across a greater area (e.g., wind energy generation), the permanent impacts are distributed over a larger area.
- Estimated Long Term Ground Disturbance – Estimated total acreage affected by Covered Activities. This is effectively a summation of all potential wind generation facility footprints, including individual turbine pad, operations and maintenance building, switchyard, and road construction impacts. This estimate also includes the additional land use that would occur as a consequence of construction activities, including construction areas, laydown yards, and storage facilities. All activities that result in vegetation removal or disturbance were considered permanent for the purpose of analysis.
- Turbine Rotor Swept Area – An estimate of the total aerial acreage affected by the rotation of turbine blades while a wind facility is operating.

**Table II.7-8
Project Area, Long-Term Disturbance, and Rotor Swept Area Acreages
Associated with Wind Generation by Ecoregion Subarea – Alternative 4**

Ecoregion Subarea	Project Area			Long-Term Disturbance			Rotor Swept Area		
	Plan-Wide	LUPA	GCP	Plan-Wide	LUPA	GCP	Plan-Wide	LUPA	GCP
Cadiz Valley and Chocolate Mountains	47,000	41,000	6,000	3,000	2,000	300	1,000	1,000	200
Imperial Borrego Valley	1,000	—	1,000	100	—	100	—	—	—
Kingston and Funeral Mountains	—	—	—	—	—	—	—	—	—
Mojave and Silurian Valley	—	—	—	—	—	—	—	—	—
Owens River Valley	—	—	—	—	—	—	—	—	—
Panamint Death Valley	—	—	—	—	—	—	—	—	—
Pinto Lucerne Valley and Eastern Slopes	23,000	3,000	20,000	1,000	200	1,000	700	100	600
Piute Valley, Sacramento Mountains	—	—	—	—	—	—	—	—	—
Providence and Bullion Mountains	—	—	—	—	—	—	—	—	—
West Mojave and Eastern Slopes	54,000	3,000	51,000	3,000	200	3,000	2,000	100	2,000
Total	125,000	47,000	78,000	7,000	3,000	5,000	4,000	1,200	3,000

Note: The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

II.7.1.4.3 Geothermal Energy Generation

This section provides an estimate of the size of impacts for Covered Activities associated with geothermal projects that would be covered by the DRECP. Construction and operational activities are identical to those described in Section II.3.1.4.3 and listed in Table II.3-25 of the Preferred Alternative.

The area available to geothermal development was limited to areas in the Imperial Borrego Valley and part of the Owens River Valley ecoregion subareas, where geothermal resources are concentrated. Consequently, it was assumed that geothermal development would occur within the subset of DFAs identified in Appendix G.

Geothermal projects would be more limited in size (in the Plan Area) than other renewable energy projects. Recent projects vary from about 50 MW to 160 MW in size. For analysis within the DRECP, geothermal projects were assumed to be typically 50 MW in size. Given the programmatic nature of the DRECP, extensive detailed analysis of effects that are project specific (i.e., geographically site-specific) is infeasible. Consequently, the magnitudes of impacts are described in terms of the estimated acreage that would be affected by Covered Activities within different ecoregion subareas of the Plan.

Geothermal projects result in extensive impacts associated with the power block and ancillary facilities, with more dispersed impacts resulting from the well-fields. Well heads that inject and collect heat transfer fluids are widely spaced and connected by permanent access roads and pipelines to the centrally located power block and steam turbine facilities. All the land within the boundary of a geothermal project was assumed to be permanently disturbed by project activities. Estimates of disturbed acreage include the acreage required for well head pads, roads, ancillary facilities, and supporting infrastructure, and also includes the land fragmented by the roads, pipelines, and well pads in the well-field, which was assumed to retain no conservation value. Short-term construction activities, such as laydown yards, were assumed to result in permanent disturbance within the project boundary, and are also included in the estimate of permanently disturbed acreage. Table II.7-9 summarizes the land use for geothermal technologies, and provides the following information by ecoregion subarea:

- Estimated Long-Term Ground Disturbance – Estimated total acreage affected by Covered Activities such as vegetation clearance, grading, and construction. This is effectively a summation of all potential geothermal energy generation facility footprints, including operations and maintenance building, switchyard, and road construction impacts. This estimate also includes the additional land use that occurs as consequence of construction activities, and the fragmented land within the well-field. Due to the difficulty of restoration in an arid environment, all activities that result in vegetation removal or disturbance were considered permanent.

- Total Project Area – An estimate of the total area occupied by a given project. For technologies where the land use may be spread across a greater area (e.g., geothermal energy generation), the permanent land disturbance is distributed over a larger area.

**Table II.7-9
Long-Term Disturbance and Project Area Acreages Associated with Geothermal
Generation by Ecoregion Subarea – Alternative 4**

Ecoregion Subarea	Long-Term Disturbance and Project Area (acres)		
	<i>Plan-Wide</i>	<i>LUPA</i>	<i>GCP</i>
Cadiz Valley and Chocolate Mountains	—	—	—
Imperial Borrego Valley	16,000	4,000	11,000
Kingston and Funeral Mountains	—	—	—
Mojave and Silurian Valley	—	—	—
Owens River Valley	1,000	1,000	100
Panamint Death Valley	—	—	—
Pinto Lucerne Valley and Eastern Slopes	—	—	—
Piute Valley and Sacramento Mountains	—	—	—
Providence and Bullion Mountains	—	—	—
West Mojave and Eastern Slopes	—	—	—
Total	17,000	5,000	11,000

Note: The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

II.7.1.4.4 Transmission

The transmission Covered Activities components for Alternative 4 would be the same as those described for the Preferred Alternative in Section II.3.1.4.4.

The ecoregional distribution of major transmission, substation, and gen-tie land use described in Table II.7-10 provides an estimate of right-of-way (ROW) requirements in acres from which it was possible to estimate the relative land use requirements of transmission-related Covered Activities described in Section II.3.1.4.4.

- Estimated Long-Term Ground Disturbance – Estimated total acreage affected by Covered Activities such as vegetation clearance, grading, and construction. This is effectively a summation of transmission impacts. This estimate also includes impacts that occur as a consequence of construction activities, including construction areas, laydown yards, and storage facilities. Due to the difficulty of

restoration in a desert environment, all activities that result in vegetation removal or disturbance were considered permanent for the purpose of analysis.

**Table II.7-10
Right-of-Way Requirements for Transmission Associated with Renewable Energy
Development by Ecoregion Subarea – Alternative 4**

Ecoregion Subarea	Long-Term Disturbance and Project Area (acres)		
	<i>Plan-Wide</i>	<i>LUPA</i>	<i>GCP</i>
Cadiz Valley and Chocolate Mountains	18,000	12,000	7,000
Imperial Borrego Valley	6,000	1,000	5,000
Kingston and Funeral Mountains	—	—	—
Mojave and Silurian Valley	600	300	300
Owens River Valley	900	500	400
Panamint Death Valley	200	200	—
Pinto Lucerne Valley and Eastern Slopes	2,000	800	1,000
Piute Valley and Sacramento Mountains	—	—	—
Providence and Bullion Mountains	300	200	100
West Mojave and Eastern Slopes	1,000	200	1,000
Total	30,000	15,000	14,000

Notes: All transmission disturbance data reflect intermediate disturbance values used for comparative purposes in the analysis. Disturbance area estimates reflecting the most recent Transmission Technical Group Report are provided in Appendix K. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

II.7.1.4.4.1 Transmission Outside the Plan Area

Transmission outside the Plan Area is not a Covered Activity under the DRECP. The potential direct effects of potential future transmission outside the Planning Area associated with development of covered renewable energy projects and transmission facilities inside the Planning Area are, however, are described and analyzed in Volume IV of the DRECP for each environmental resource category. This section presents a description of the transmission facilities outside the Planning Area that are programmatically analyzed in Volume IV.

The assumptions used to calculate acreages of effects for transmission and substation facilities inside the Plan Area are the same as those used to calculate effects of transmission and substations outside the Plan Area, and are described in Section II.3.1.4.4. However, approval of the DRECP would not result in any approval of the potential future transmission lines outside the Plan Area that are discussed here. All future transmission lines outside the Plan Area would require new applications by the developer or utility,

compliance with CEQA and NEPA as appropriate, and approvals from the developer (if municipal utilities or irrigation districts) or from the California Public Utilities Commission (if investor-owned utilities) prior to construction.

Table II.7-11 provides the acreage of effects for transmission and substations outside of the planning boundary. For ease of analysis, the transmission lines and substations have been clustered into general geographic boundaries.

**Table II.7-11
Right-of-Way Requirements for Transmission Outside the DRECP Plan Area
Associated with the Renewable Energy Development – Alternative 4**

Geographic Area	Transmission	
	(Acres)	(Miles)
San Diego Area	2,000	94
Los Angeles Area	2,000	83
Central Valley	15,000	274
Rialto/Moreno Valley/Devers Area	12,000	484
Total Outside Plan Area	32,000	935

Source: Transmission Technical Group Report, provided as Appendix K.

The new transmission lines outside the Plan Area are presented in the following list.

- **San Diego Area:** One 500-kilovolt (kV) line from the Imperial Valley Substation to the existing Sycamore Substation (San Diego).
- **Los Angeles Area:**
 - One 500 kV line from the existing Vincent Substation (just inside the DRECP boundary) to the existing Lighthipe Substation.
 - One 500 kV from the existing Vincent Substation (just inside the DRECP boundary) to the existing Mesa Substation.
- **Central Valley:**
 - One 500 kV transmission line from the Whirlwind Substation (just inside the DRECP planning boundary) to the Pacific Gas and Electric (PG&E) Midway 500 kV Substation.
 - Two 500 kV lines from the PG&E Midway Substation to the Tesla/Tracy Substation.
- **Rialto/Moreno Valley/Devers Area:**
 - One 500 kV line from the Devers Substation to Vincent Substation.
 - One 500 kV lines from the Devers Substation to Rancho Vista Substation.

- Two 500 kV lines from Colorado River Substation to existing Valley Substation. About 103 miles of this line would be outside the DRECP boundary.
- Two 500 kV lines from Midway X (Imperial Valley) to the Devers Substation. About 200 miles of this corridor would be outside the DRECP boundary.

II.7.1.5 Plan Implementation

Plan implementation for Alternative 4 would be the same as that for the Preferred Alternative as described in Section II.3.1.5.

II.7.2 BLM LUPA Elements of Alternative 4

The BLM LUPA elements of Alternative 4 are the same elements as the Preferred Alternative (see Figure II.7-4).

As shown in Table II.7.12, approximately 9,834,000 acres within the Plan Area occur within the BLM LUPA on BLM-administered lands. Under Alternative 4, approximately 258,000 acres of DFAs occur on BLM-administered lands.

In this area, existing conservation on BLM lands totals 3,264,000 acres including 3,260,000 acres of LLPAs. All of the BLM LLPAs are Wilderness or Wilderness Study Area and are managed to meet the statute of the Wilderness Act of 1964 and to ensure these congressionally designated areas meet DRECP conservation goals.

As shown in Table II.7-12, of the 4,431,000 acres of BLM LUPA conservation designations, 1,518,000 acres (34%) would be designated as Existing or Proposed ACEC, 2,227,000 acres (53%) would be Existing or Proposed ACEC or Wildlife Allocation and National Conservation Lands, 294,000 acres (7%) would be National Conservation Lands only, and 274,000 acres (6%) would be Wildlife Allocation.

Table II.7-12
Interagency Alternative 4 within the BLM LUPA

Alternative Components	Acreage ¹
DFAs	258,000
Study Area Lands	579,000
DRECP Variance Lands	579,000
DRECP Plan-Wide Reserve Design Envelope	7,695,000
Existing conservation areas	3,260,000
BLM LUPA conservation designations	4,431,000
Urban Areas, Other Lands, and Undesignated Areas	1,302,000
Impervious and Urban Built-up Land	62,000

Table II.7-12
Interagency Alternative 4 within the BLM LUPA

Alternative Components	Acreage ¹
BLM Open OHV Areas	235,000
Imperial Sand Dunes, including the BLM Open OHV Area	127,000
Johnson Valley OHV Shared Use Area	54,000
Undesignated Areas	823,000
Total	9,834,000

Notes: BLM LUPA conservation designations include NLCS lands, ACECs, and Wildlife Allocations. Overlaps of BLM LUPA conservation designations with existing conservation areas are reported in the existing conservation area acreages. The BLM LUPA would also designate approximately 2,489,000 acres of SRMAs on BLM-administered lands in addition to the 193,000 acres of existing SRMAs on BLM-administered lands, which are BLM designation overlays that overlap portions of the components provided in this table. Impervious and urban built-up lands occur within BLM LUPA conservation designations and DFAs were not explicitly included in the urban category reported here. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

¹ Acreages reported are on BLM-administered lands only within the BLM LUPA area.

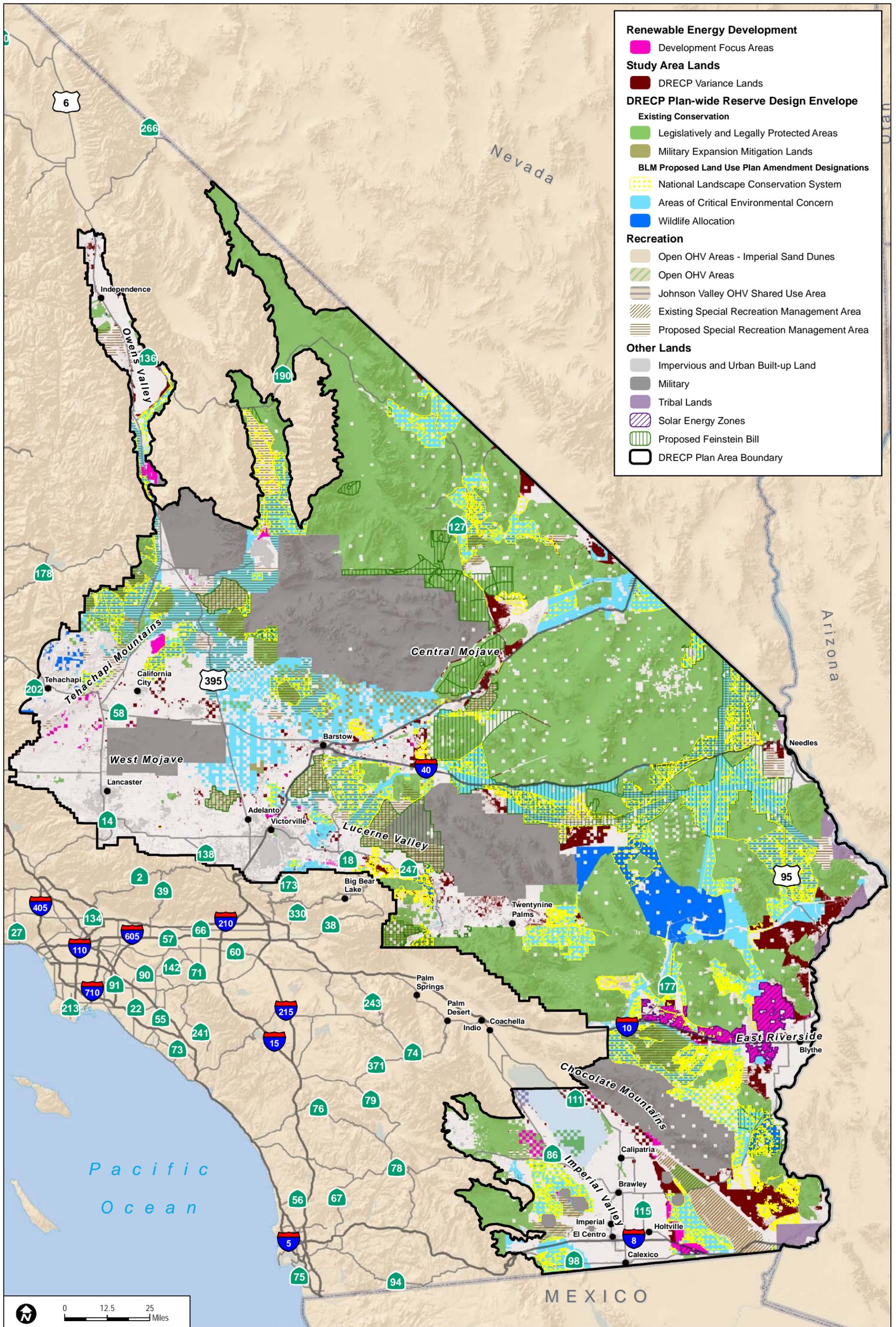
Table II.7-13
Alternative 4 BLM LUPA Conservation Designations within the BLM LUPA

BLM LUPA Conservation Designation	Acreage ^{1, 2}
NLCS	294,000
NLCS (and Existing ACEC)	1,282,000
NLCS (and Proposed ACEC)	945,000
NLCS (and Wildlife Allocation)	118,000
Existing ACEC	399,000
Proposed ACEC	1,119,000
Wildlife Allocation	274,000
Total	4,431,000

Notes:

¹ Acreages reported are on BLM-administered lands only within the BLM LUPA area.

² Approximately 821,000 acres of BLM LUPA conservation designations on BLM-administered lands occur within existing conservation areas. These overlapping acres are not reported in this table.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

*The portion of the reserve design outside Existing Conservation Areas and BLM LUPA Conservation Designations on private and non-BLM public lands from which reserve areas will be assembled from willing sellers as compensation for Covered Activities.

FIGURE II.7-4
Alternative 4 - BLM LUPA

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In addition to the proposed BLM LUPA conservation designations, this alternative includes proposed BLM LUPA SRMAs, as shown in Table II.7-14. Unlike the Preferred Alternative, Alternative 4 would not designate any Extensive Recreation Management Areas (ERMA).

Table II.7-14
Alternative 4 Special Recreation Management Areas and Extensive Recreation Management Areas Within the BLM LUPA

SRMA/ERMA	Total Acreage ¹
Existing SRMA	193,000
Proposed SRMA	2,489,000
Proposed ERMA	—
Total	2,682,000

Notes: The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

¹ Acreages reported are on BLM-administered lands only within the BLM LUPA area.

The proposed BLM LUPA would not modify existing energy corridors, including “corridors of concern” defined in the Section 368 Energy Corridors settlement agreement described in Section I.2.1.7.7.

II.7.2.1 BLM Renewable Energy Policies

The BLM Renewable Energy Policies would be the same as in the Preferred Alternative.

II.7.2.2 BLM Conservation Areas

II.7.2.2.1 National Conservation Lands

This alternative responds to the direction of the Solar Programmatic Environmental Impact Statement (PEIS). No National Conservation Lands would be included within existing transmission corridors or variance lands identified in the Solar PEIS Record of Decision. The use allocations of this alternative allow for a variety of uses as long as they can be managed to be compatible with protecting National Conservation Land values.

This alternative would designate 2,671,000 acres as components of the National Conservation Lands on BLM-administered lands, which includes 821,000 acres within existing conservation areas (LLPAs and MEMLs) and 1,850,000 acres as part of the BLM LUPA conservation designations.

II.7.2.2.1.1 Management of National Conservation Areas

1. Planning Area-Wide National Conservation Land Management Direction

Like the Preferred Alternative, the use allocations for the National Conservation Lands in the California Desert Conservation Area (CDCA) are the allowable uses that would apply to all National Conservation Lands within the CDCA. The following list provides the use allocations for the Preferred Alternative. For resources where there are no specific use allocations for National Conservation Lands, Plan-wide rules would apply unless otherwise specified in the Special Unit Management Plans (Appendix L).

- **Comprehensive Trails and Travel Management.** National Conservation Lands would be designated in accordance to the appropriate Trails and Travel Management Plan (TTMP)/Resource Management Plan (RMP), and future travel management planning will put the emphasis of travel allowed on designated routes that provide for enjoyment of values, or necessary administrative access to conserve, protect, and restore area values
- **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 Code of Federal Regulations (CFR) Part 800. Resolution of adverse effects will in part be addressed via compensatory mitigation that includes either protection of resources of importance to tribes or acquisition of comparable sites into public ownership similar to those that are going to be destroyed.
- Lands and Realty
 - Rights-of-Way
 - **Sites Authorizations.** National Conservation Lands would be avoidance areas. Authorization for site ROWs that would impact the values for which National Conservation Lands are designated must include mitigation/compensation resulting in a net-benefit to the National Conservation Land unit so that the restoration intent of National Conservation Land management is met. Site authorizations that protect or enhance conservation values, such as those granted as compensatory mitigation for Covered Activities within DFAs or for habitat restoration, would be allowed.
 - **Renewable Energy Generation.** National Conservation Lands would be exclusion areas for renewable energy ROWs.
 - **Linear ROWs.** National Conservation Lands would be avoidance areas for linear ROWs.

- **Land Tenure**
 - Exchange, purchase, or donation of lands would be permitted only to acquire non-BLM lands within the National Conservation Lands unit. Disposal of lands within National Conservation Land units would not be permitted.
 - National Conservation Lands inholdings would be a priority for acquisition from willing sellers. All inholdings would become part of the National Conservation Lands unit upon acquisition and be subject to associated management requirements.
- Minerals
 - Locatable Minerals
 - For the purposes of locatable minerals, National Conservation Lands would be 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.
 - The BLM would develop priority list of subareas for potential withdrawal.
 - Initiate segregation of one subregion annually and complete mineral withdrawal review process (within 2-year time frame for each subregion).
 - **Saleable Minerals.** National Conservation Lands would be available for saleable mineral development. Mitigation/compensation must result in net benefit to the National Conservation Lands unit.
 - **Leasable Minerals.** National Conservation Lands may be available for geothermal leasing; however, these lands may only be offered for lease with a special stipulation to protect the appropriate resources as defined in the 2008 PEIS for Geothermal Leasing in the Western United States (BLM and USFS 2008). Special stipulations which provide protections greater than the standard lease terms may include timing limitations, controlled surface use, or no surface occupancy lease stipulations. National Conservation Lands values must be protected or enhanced through mitigation/compensation.
 - **Recreation and Visitor Services.** Competitive and Commercial Special Recreation Permits would be permitted in National Conservation Lands.
 - **Water Resources.** Applications for water rights would be decided on a case-by-case basis to protect water dependent National Conservation Lands values.
 - **Disturbance Caps.**² Development in National Conservation Lands would be limited to 1% of total authorized disturbance.

² Disturbance caps only apply to lands not already included under ACECs or Wildlife Allocation disturbance caps, as described in the Special Unit Management Plans in Appendix L.

2. National Conservation Land Subareas — Description of Values to be Protected

The values protected in the National Conservation Lands are described below. This alternative excludes existing utility corridors from National Conservation Lands. The focus of the National Conservation Lands would be to include critical habitat and habitat connectivity.

3. Area-Specific National Conservation Land and Area of Critical Environmental Concern Management Prescriptions

Similar to the Preferred Alternative, there is overlap with the ACEC designations, and management for individual units is described in the Special Unit Management Plans (National Conservation Lands and ACEC) in Appendix L.

II.7.2.2.1.2 Subarea Descriptions

Basin and Range

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would include nearly all of the ecological values described for the Preferred Alternative.
- A north-south strip of habitat through the center of the Pacific migratory bird flyway would not be included in National Conservation Lands.
- The flora and fauna of Fish Lake Valley, including the Joshua trees at the northernmost extent of their range, and the black toad habitat in Deep Springs Valley would not be included.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would include most of the cultural values described for the Preferred Alternative.
- The resources in the northernmost portion of the Plan Area in Fish Lake, Deep Springs, and Eureka valleys; the Rose Spring Site Complex.
- The majority of the Fossil Falls Archaeological District would not be included.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 would compare to those in the Preferred Alternative in a manner consistent with the differences in ecological and cultural values as described above.

Acreage

This alternative would include approximately 330,000 acres of National Conservation Lands in the Basin and Range subarea.

Coachella Valley

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass nearly all of the ecological values described for the Preferred Alternative.
- Inclusion of the noncontiguous public lands parcels of the Willow Hole–Edom Hill Preserve adds mesquite hummocks, a fan palm oasis, Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*), Little San Bernardino Mountains linanthus (*Linanthus maculatus*), Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), burrowing owl (*Athene cunicularia*), Coachella giant sand treader cricket (*Macrobaenetes valgum*), least Bell's vireo (*Vireo belli pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), yellow-breasted chat (*Icteria virens*), yellow warbler (*Dendroica petechial*), and additional critical habitat for the Coachella Valley fringe-toed lizard (*Uma inornata*).
- National Conservation Lands in the transition zone between Mojave and Sonoran deserts, connecting the Mecca Hills and Orocopia Mountains Wilderness to the southern boundary of Joshua Tree National Park, would be included. These would be less extensive than in the Preferred Alternative.
- The Dos Palmas Preserve, with its riparian values, endangered desert pupfish (*Cyprinodon macularius*) and Yuma clapper rail (*Rallus longirostris yumanensis*), would not be included in National Conservation Lands.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands in this alternative would encompass most of the cultural values described for the Preferred Alternative, including numerous significant prehistoric sites, sacred sites and landscape features of importance to Cahuilla culture, and historic structures and other features from early European American settlement.
- The cultural resources of Dos Palmas Preserve, including ancient habitation sites on the shoreline of ancient Lake Cahuilla, are not included in National Conservation Lands under this alternative.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative in a manner corresponding with the differences in ecological and cultural values described above.

Acreage

This alternative would include approximately 55,000 acres of National Conservation Lands in the Coachella Valley subarea.

Colorado Desert

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 would compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass most of the ecological values described for the Preferred Alternative.
- BLM lands in the Eagle Mountains would be added as National Conservation Lands, encompassing areas of habitat connectivity between parts of Joshua Tree National Park on its east side. Part of the area of habitat connectivity linking Joshua Tree National Park and Palen McCoy Wilderness would also be added.
- National Conservation Lands do not encompass areas of habitat connectivity at the interface of the Mojave and Sonoran deserts through the Orocopia Mountains and Chuckwalla Mountains wildernesses on the south and Joshua Tree National Park to the north; between the Mule Mountains ACEC and the Palo Verde Mountains

Wilderness; between Indian Pass/Pichaco Peak and Little Pichaco Wildernesses; or between the Riverside Mountains, Big Maria Mountains and Rice Valley Wildernesses. Cadiz Valley, Chuckwalla ACEC Extension, Chuckwalla to Chemehuevi tortoise linkage, McCoy Valley, McCoy Wash, Mule-McCoy, Picacho, Palen Ford, and Turtle Mountains Corridor are not included as National Conservation Lands.

- National Conservation Lands would include less underground bat habitat in the southeast part of the subarea and none in the northeast.
- Less extensive areas of dune habitats at Palen Lake and Pinto Wash would be included.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 would compare to the Preferred Alternative as follows:

- National Conservation Lands would encompass most of the cultural values of the Preferred Alternative.
- A slightly less extensive area of scenic values in northern Palen Valley would be included.
- Alligator Rock and Indian Pass would be partially included.
- Mule Mountains would not be included. Camp Young and Iron Mountain World War II Desert Training Centers not would be included.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative in a manner corresponding with the differences in ecological values described above.

Acreage

This alternative would include approximately 580,000 acres of National Conservation Lands in the Colorado Desert subarea.

Kingston-Amargosa

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass nearly all of the ecological values described for the Preferred Alternative, including ecological values associated with the Amargosa River and Silurian Valley.

- Corridors important for maintaining genetic connectivity for desert tortoise and desert bighorn sheep would be less extensive in the Shadow Valley area.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands in this alternative would encompass most of the cultural values described for the Preferred Alternative.
- A less extensive area in the Silurian Valley would be included.
- All cultural sites at Shadow Valley would be excluded from National Conservation Lands. No areas associated with historic mining in either valley are included.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 relating to ecological and cultural values correspond with those values included under this alternative, as described above.

Acreage

This alternative would include approximately 348,000 acres of National Conservation Lands in the Kingston–Amargosa subarea.

Lake Cahuilla

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- Most of the ecological values described for the Preferred Alternative would be included in this alternative.
- Flat-tailed horned lizard (*Phrynosoma mcallii*) habitat would be included in the National Conservation Lands. The area included would be less extensive, particularly on the west side of the valley where Ocotillo ACEC and Lake Cahuilla ACEC Expansion would not be included. Lake Cahuilla shoreline lands would be less extensive than in the Preferred Alternative.
- National Conservation Lands would encompass areas of wildlife habitat connectivity. These areas would be less extensive around the Chocolate and Cargo

Muchacho mountains; and between Anza–Borrego Desert State Park and BLM conservation lands, where areas of scenic values would also be less extensive.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- Most of the cultural values described for the Preferred Alternative would be included in this alternative.
- National Conservation Lands would encompass a portion of Lake Cahuilla and its collection of important archaeological sites. The area included would be less extensive. One segment of Lake Cahuilla shoreline (Lake Cahuilla ACEC Expansion) on the west side of the valley would not be included, while segments on the east side would be less extensive.
- The National Conservation Lands in this alternative would not include the National Register-eligible Singer Geoglyphs, the historic Tumco area, or most of the Ocotillo area.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative in a manner corresponding with the differences in ecological and cultural values described above.

Acreage

This alternative would include approximately 259,000 acres of National Conservation Lands in the Lake Cahuilla subarea.

Mojave and Silurian Valley

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass the ecological values of Coolgardie Mesa and most of the north end of the Ord–Rodman ACEC as described for the Preferred Alternative. It would encompass the values of the Superior–Cronese ACEC as described, except that it would not include populations of Parish’s phacelia (*Phrynosoma mcallii*).

- National Conservation Lands would not encompass Mojave fringe-toed lizard (*Uma scoparia*) habitat; the riparian habitat of Salt Creek Hills; or populations of Parish's phacelia in the vicinity of Coyote Lake.
- Areas of habitat connectivity encompassed by National Conservation Lands are between Grass Valley and Golden Valley Wilderness areas and between Kingston Range Wilderness and Death Valley National Park, along with some of the habitat connectivity associated with the Silurian Valley. The Mojave National Preserve and Death Valley National Park would not be connected by BLM wildernesses and National Conservation Lands, and habitat linkages between Rodman Mountains Wilderness and the Cady Mountains Wilderness Study Area (outside the subarea) would not be encompassed by National Conservation Lands.
- The western portion of Afton Canyon, with its riparian woodlands, plant and bird communities would not be included in National Conservation Lands.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass the same areas associated with the Mojave Road as in the Preferred Alternative.
- A slightly greater area around Calico Early Man Site would be included.
- The area around Black Mountain Wilderness included in National Conservation Lands would be slightly less extensive than in the Preferred Alternative. Associated cultural values, including Inscription Canyon, are the same as described for the Preferred Alternative.
- National Conservation Lands would encompass about half of the area of Afton Canyon included in the Preferred Alternative, with cultural values included proportionally.
- Neither Silurian Valley nor the Silurian Valley corridor would be included as National Conservation Lands. No segments of the Old Spanish National Historic Trail,³ Tonopah and Tidewater Railroad, or Boulder Transmission Line would be included.

³ Although not included in the National Conservation Lands designated under Public Law 111-11, the Old Spanish Historic Trail remains a part of the NLCS as a National Historic Trail. Section II.7.2.2.2 discusses the National Historic Trail Management Corridor for this alternative.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- Scientific values associated with ecological and cultural values would differ in a manner corresponding with the differences in values described above.
- National Conservation Lands would include the paleontological values of Rainbow Basin, and not those of the Manix area.

Acreage

This alternative includes approximately 153,000 acres of National Conservation Lands in the Mojave and Silurian Valley subarea.

Pinto, Lucerne Valley, and Eastern Slopes

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Land would encompass most of the ecological values described for the Preferred Alternative.
- The Bendire's Thrasher and Mojave Fishhook Cactus ACECs are added to National Conservation Lands in this alternative.
- National Conservation Lands would include part of the Pipes Canyon Huge Joshua Trees Unusual Plant Assemblage; and Juniper Flats, with its Coast horned lizard (*Phrynosoma coronatum*) and gray vireo (*Vireo vicinior*) habitats.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Land would encompass most of the cultural values described for the Preferred Alternative.
- Cultural values associated with Juniper Flats would be represented on National Conservation Lands. These would be less extensive than in the Preferred Alternative.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 would compare to those in the Preferred Alternative in a manner corresponding with changes in ecological and cultural values represented on these lands, as described above.

Acreage

This alternative would include approximately 281,000 acres of National Conservation Lands in the Pinto, Lucerne Valley, and Eastern Slopes subarea.

Piute Valley and Sacramento Mountains

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass most of the ecological values described for the Preferred Alternative, including habitat for desert tortoise and other declining and sensitive animal and plant species.
- National Conservation Lands would include the following, with less extensive acreage: the values of Chemehuevi Valley, including Chemehuevi Wash and teddybear cholla (*Cylindropuntia bigelovii*) stands; Piute–Fenner and Chemehuevi ACECs; the values of the Sacramento Mountains, including bat colonies and teddybear cholla stands; rare plant populations; Homer Wash and other parts of Ward Valley.
- National Conservation Lands would include areas of habitat connectivity important to bighorn sheep between the Stepladder Mountains, Turtle Mountains and Whipple Mountains Wildernesses. Connections between other designated Wilderness Areas would not be included.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass most of the cultural values described for the Preferred Alternative.
- Segments of the Mojave Trail, Old Spanish National Historic Trail, East Mojave Heritage Trail, and historic Route 66, and some World War II Desert Training Center

sites, including part of Camp Ibis, would be included as National Conservation Lands. These would be slightly less extensive than in the Preferred Alternative.

- Some prominent cultural resources in the vicinity of Needles would not be included in National Conservation Lands.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative in a manner corresponding with the differences in ecological and cultural values described above.

Acreage

This alternative would include approximately 318,000 acres of National Conservation Lands in the Piute Valley and Sacramento Mountains subarea.

South Mojave–Amboy

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass most of the ecological values described for the Preferred Alternative.
- The Dale Lake habitat for Mojave fringed-toed lizard, and the area around Dale Lake connecting Cleghorn Lakes Wilderness, Sheephole Valley Wilderness and the Pinto Mountain ACEC, would be added to National Conservation Lands in this alternative.
- National Conservation Lands would encompass areas of desert tortoise and bighorn sheep habitat connectivity between the Kelso Dunes Wilderness and the Cady Mountains Wilderness Study Area. Areas of connectivity not included in this alternative are between the Ord–Rodman ACEC and the Chemehuevi ACEC; between the Marble Mountains and the Mojave National Preserve; between the Piute Mountains Wilderness and the Old Woman Mountains Wilderness; and between the latter two wildernesses and the Bigelow Cholla Garden Wilderness and Stepladder Mountains Wilderness in the adjacent subarea to the east.
- Part of the Pisgah area is included in National Conservation Lands. This area is less extensive than in the Preferred Alternative.

- Populations of rare plants would be included in National Conservation Lands. These areas would be less extensive for some plants, particularly white-margined beardtongue (*Penstemon albomarginatus*).
- Bonanza Spring would not be included in National Conservation Lands.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass most of the cultural values described for the Preferred Alternative.
- Part of the historic Route 66 corridor; historic Atchinson, Topeka and Santa Fe railroad; and proposed Mojave Trails National Monument would be included. The portions included would be less extensive than in the Preferred Alternative.
- The following would not be included in National Conservation Lands: Bonanza Spring, the Tonopah and Tidewater railroad grade, and lands adjacent to the Cady Mountains WSA.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative in a manner corresponding with the differences in ecological and cultural values described above.

Acreage

This alternative would include approximately 404,000 acres of National Conservation Lands in the South Mojave–Amboy subarea.

Western Desert and Eastern Slope

Ecological Values

Ecological values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would encompass ecological values described for the Preferred Alternative except as noted below.
- National Conservation Lands would include slightly less extensive areas of burrowing owl and Townsend’s big-eared bat (*Corynorhinus townsendii*) habitats.
- National Conservation Lands would encompass much less extensive areas of Tehachapi slender salamander (*Batrachoseps stebbinsi*) and rare plant habitat in the

Piute Mountains; and of the migratory bird flyway at the north end of the subarea along the eastern flank of the Sierra Nevada.

- National Conservation Lands would partially include, but would not link, the El Paso–Kiavah areas.

Cultural Values

Cultural values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative as follows:

- National Conservation Lands would include most of the cultural values described for the Preferred Alternative.
- National Conservation Lands would include the following, with less extensive areas than in the Preferred Alternative: the Last Chance Canyon National Register Archaeological District (a small portion would not be included); lands on the southwest side of the Black Mountain Wilderness; and some additional areas and others omitted, with less overall, in the Jawbone–Butterbredt area.
- National Conservation Lands would not encompass cultural resources between the Highway 395 corridor and the Eastern Sierra front relating to prehistoric trade and transportation routes and patterns of mobility.

Scientific Values

Scientific values of National Conservation Lands in Alternative 4 compare to those in the Preferred Alternative in a manner corresponding with the differences in ecological and cultural values described above.

Acreage

This alternative would include approximately 166,000 acres of National Conservation Lands in the Western Desert and Eastern Slope subarea.

II.7.2.2 National Trails

II.7.2.2.1 National Scenic and Historic Trails

Goals and Objectives

Goals and objectives for National Scenic and Historic Trails (NSHT) would be the same as the Preferred Alternative.

Conservation and Management Actions for the Pacific Crest National Scenic Trail, and the Juan Bautista de Anza and Old Spanish National Historic Trails Management Corridors

- **Management Corridor Width.** Establish a National Trail Management Corridor, width generally 1 mile from centerline of the trail.
- **Management of Trail Corridors.** Manage National Trails as components of the BLM's National Landscape Conservation System. Where National Trails overlap other National Conservation Lands, the more protective CMAs or land use allocations will apply. Within these areas, the BLM will support the nature and purposes of the designated National Trails.
- **Lands and Realty**
 - **Rights-of-Way**
 - **Site Authorizations.** NSHT Management Corridors would be avoidance areas. Sites ROWs would require mitigation/compensation resulting in net benefit to the NSHT.
 - **Linear ROWs.** NSHT Management Corridors would be avoidance areas except in designated transmission corridors. Exclude cultural landscapes, high potential historic sites, and high potential route segments identified along national historic trails management corridors from transmission except in approved transmission corridors. Where development affects NSHT management corridors, an analysis must be performed to ensure that the development does not substantially interfere with the nature and purposes of the trail, and that mitigation/compensation results in a net benefit to the trail
 - **Renewable Energy ROWs.** Exclude cultural landscapes, high potential historic sites, and high potential route segments identified along national historic trails management corridors from transmission except in approved DFAs. Where development affects national scenic and historic trail management corridors, an analysis must be performed to ensure that the development does not substantially interfere with the nature and purposes of the trail, and that mitigation/compensation results in a net benefit to the trail.
 - **Land Tenure.** Exchange, purchase, donation would be permitted to acquire lands within NSHT. Disposal would be permitted if it results in net benefit to trail values through acquisition or other compensation. Lands within the National Trails Management Corridors would be retained.⁴

⁴ See BLM Manual 6280, 4.2.E.5.i.e. The land use plan and associated NEPA analysis should consider the following management decisions for lands and realty decisions for National Trails: Retention of public lands within a National Trail Management Corridor in accordance with Section 203 of the Federal Land Management and Policy Act, as classified in accordance with 43 CFR 2420, and ensure public lands within the National Trail Management Corridor are not contained on Resource Management Plan disposal lists.

- Minerals
 - **Locatable Minerals.** For the purposes of locatable minerals, NSHT corridors would be 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.
 - **Saleable Minerals.** NSHT Management Corridors would be available for saleable mineral development
 - **Leasable Minerals.** NSHT Management Corridors may be available for geothermal leasing; however, these lands may only be offered for lease with a special stipulation to protect the appropriate resources as defined in the 2008 PEIS for Geothermal Leasing in the Western United States (BLM and USFS 2008). Special stipulations which provide protections greater than the standard lease terms may include timing limitations, controlled surface use, or no surface occupancy lease stipulations. National Conservation Lands values must be protected or enhanced through mitigation/compensation.
- **Recreation and Visitor Services.** Competitive and Commercial Special Recreation Permits would be permitted if they do not substantially interfere with the nature and purposes of the NSHTs.
- **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.

II.7.2.2.2 National Recreation Trails

Management for National Recreation Trails would be the same as under the Preferred Alternative.

II.7.2.2.3 Areas of Critical Environmental Concern

Alternative 4 would include 122 ACECs totaling approximately 4,555,000 acres (nonoverlapping ACEC acres) on BLM-administered lands (includes ACECs within Existing Protected Areas). Specific management and maps for ACECs under this alternative are included in the Special Unit Management Plans (National Conservation Lands and ACEC) in Appendix L.

II.7.2.2.4 Wildlife Allocations

This alternative would include 393,000 acres of Wildlife Allocations on BLM-administered lands (includes Wildlife Allocations within NLCS designations). Descriptions and maps are included in the Special Unit Management Plans (National Conservation Lands and ACEC) in Appendix L.

II.7.2.2.5 *Special Recreation Management Areas*

This alternative would include 28 SRMAs (2,682,000 acres on BLM-administered lands). Descriptions, maps, and management actions for each SRMA under this alternative are included in SRMA Management Plans in Appendix L.

II.7.2.2.6 *Lands Managed to Protect Wilderness Characteristics*

Under Alternative 4, none of the lands that were inventoried and found to have wilderness characteristics would be managed to protect these characteristics.

II.7.2.3 *BLM-Specific CMAs*

The following CMAs are different than the Preferred Alternative. For all other resources, see the Preferred Alternative, Section II.3.2.3.

II.7.2.3.1 *Lands and Realty*

Conservation and Management Actions for Lands and Realty would be the same as in the Preferred Alternative, except for Land Exchanges and Land Sales, as described below.

II.7.2.3.1.1 *CMAs for the Entire Planning Area*

- In nondesignated lands (i.e. lands not covered by the specific CMAs below), make lands available for disposal through exchange or land sale.

II.7.2.3.1.2 *CMAs in Development Focus Areas and DRECP Study Areas*

- Make lands within DFAs available for disposal by sale or exchange under Section 203(a)(1), 203(a)(3), 206 and 209 of the Federal Land Management and Policy Act.
- In DRECP Study Areas, make lands unavailable for exchange or disposal.

II.7.2.3.1.3 *CMAs in National Conservation Lands*

- Make available for exchange, purchase, or donation in accordance with the CMAs outlined for National Conservation Lands in Section II.7.2.2.1.1.
- Make unavailable for disposal.

II.7.2.3.1.4 *CMAs in Areas of Critical Environmental Concern*

- Acquire lands through exchange, purchase, or donation.
- Make lands unavailable for disposal.

II.7.2.3.1.5 CMAs in Wildlife Allocations

- Acquire lands through exchange, purchase, or donation.
- Make lands unavailable for disposal.

II.7.2.3.1.6 CMAs in Special Recreation Management Areas

- Acquire lands through exchange, purchase, or donation.
- Make lands unavailable for disposal.

II.7.2.3.2 *Soil, Water, and Water-Dependent Resources*

CMAs for soil, water, and water-dependent resources would be the same as in the preferred, except within DFAs, as described below.

II.7.2.3.2.1 CMAs in Development Focus Areas

- Limit disturbance of sensitive soil areas, so that no more than 20% of the sensitive soil areas within a proposed project footprint shall be disturbed for construction.
- Limit disturbance of sand dunes, so that no more than 5% of the sand dunes within a proposed project footprint shall be disturbed for construction.
- Limit disturbance of sand flow corridors, so that no more than 5% of the sand flow corridors within a proposed project footprint shall be disturbed for construction.
- Limit disturbance of desert pavement, so that no more than 5% of the desert pavement within a proposed project footprint shall be disturbed for construction.
- Avoid development in flood plain, unless such development can be mitigated.
 - Exceptions: Exceptions to any of these stipulations may be granted by the authorized officer if the operator submits a plan that demonstrates:
 - The impacts from the proposed action are temporary;
 - The impacts minimal or can be adequately mitigated; *and*
 - Critical resources, including threatened and endangered species, are fully protected.
 - Modifications: No modifications will be granted.
 - Waivers: No waivers will be granted.

II.7.2.3.3 *Visual Resources Management*

Figure II.7-5 shows Visual Resources Management Classes under this alternative. CMAs under this alternative would be the same as under the Preferred Alternative.

II.7.2.3.4 Wilderness Characteristics

- In addition to the CMAs listed in the Preferred Alternative, all lands identified for management to protect wilderness characteristics are closed to all mechanized and motorized transport.

II.7.2.4 CDCA Plan Amendments

II.7.2.4.1 Multiple-Use Classes

The amendments to the multiple-use classes would be the same as the Preferred Alternative.

II.7.2.4.2 Visual Resource Management Classes and National Conservation Lands Outside of the DRECP

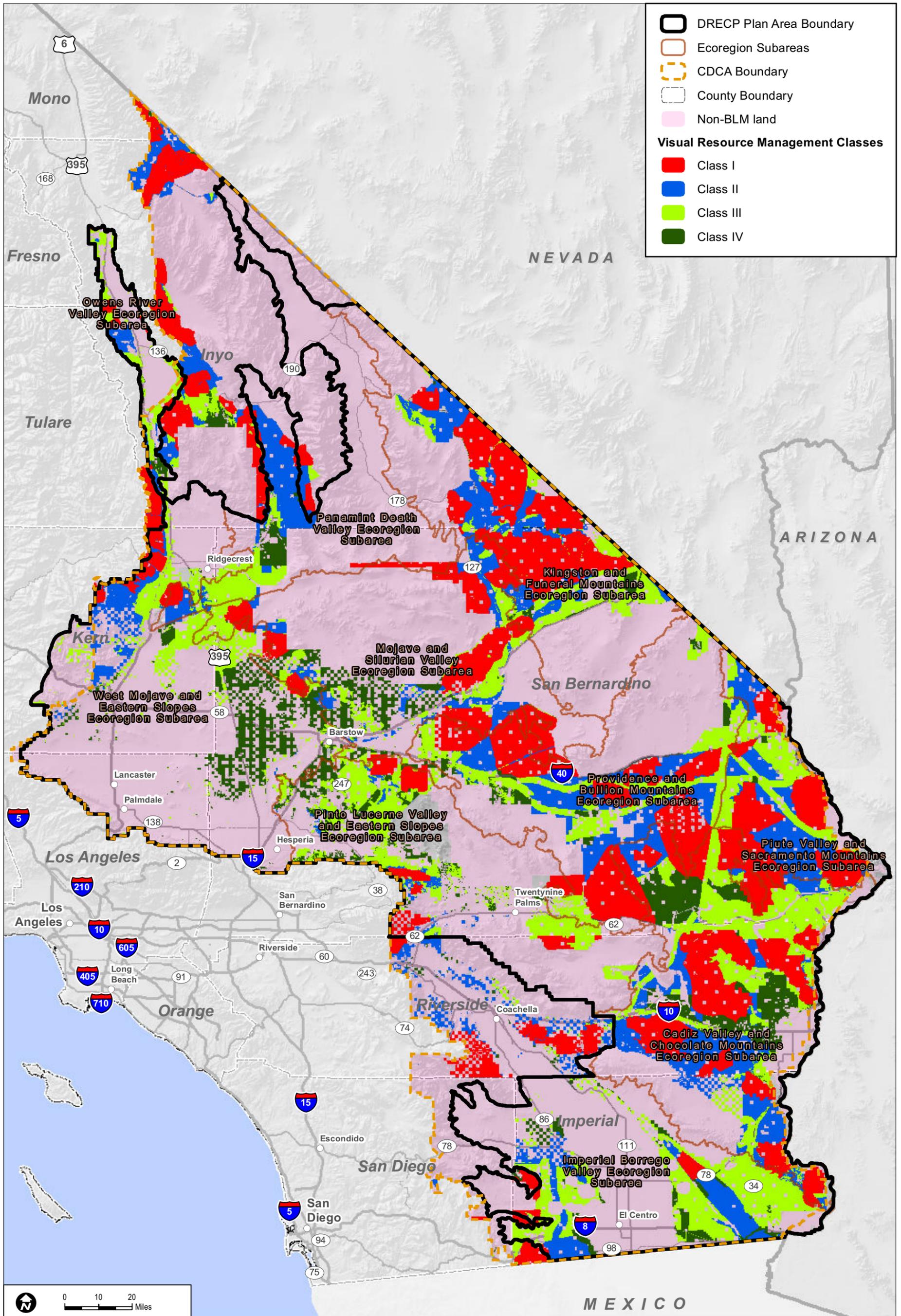
VRM Classes and National Conservation Land designations in the CDCA outside of the Planning Area are described in Section II.3.2.2.1 and Section II.3.2.3.12.

II.7.3 NCCP Elements of Alternative 4

The following provides an overview of the NCCP elements of Alternative 4. At the broadest level, the NCCP includes elements related to Covered Activities and conservation elements.

As described for the Preferred Alternative, each of the NCCP alternatives includes the full range of Covered Activities anticipated under the DRECP for each of the interagency Plan-wide alternatives. The Plan-wide description of Covered Activities serves as the description of Covered Activities for the NCCP alternatives.

The Natural Community Conservation Planning Act requires that NCCPs provide for the conservation and management of Covered Species and natural communities on a landscape or ecosystem level through the creation and long-term management of habitat reserves and the application of other equivalent conservation measures. To reflect the conservation that would occur under the NCCP, the NCCP elements of each alternative define the following means of providing conservation within the DRECP Plan-Wide Reserve Design Envelope: an NCCP Conceptual Plan-Wide Reserve Design, a DRECP NCCP Reserve Design, and other conservation actions.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

FIGURE II.7-5
Alternative 4 - BLM Visual Resource Management Classes

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Reserve design features and other conservation actions within the NCCP alternatives are consistent with and nested within the DRECP Plan-Wide Reserve Design Envelope in the interagency Plan-wide alternatives, but differ in terms of how reserve design features are grouped within the NCCP Conceptual Plan-Wide Reserve Design and the DRECP NCCP Reserve Design. Table II.7-15 summarizes the NCCP elements of Alternative 4. As shown in Table II.7-15, the DRECP NCCP Reserve Design covers approximately 400,000 acres of BLM and non-BLM lands. Figure II.7-6 depicts the NCCP for Alternative 4. Refer to Appendix N for a description of how the Plan-wide description of the alternative serves as the description of the NCCP for the DRECP.

**Table II.7-15
NCCP for Alternative 4**

NCCP Components	Acreage
DFAs	1,608,000
Study Area Lands	588,000
DRECP Variance Lands	588,000
DRECP Plan-Wide Reserve Design Envelope	14,478,000
Existing conservation areas	7,662,000
NCCP Conceptual Plan-Wide Reserve Design	2,053,000
Inside the DRECP NCCP Reserve Design	400,000
BLM LUPA conservation designations	291,000
Biological Conservation Priority Areas on non-BLM lands	109,000
Outside the DRECP NCCP Reserve Design	1,653,000
BLM LUPA conservation designations	1,108,000
Biological Conservation Priority Areas on non-BLM lands	545,000
BLM LUPA conservation designations outside the NCCP Conceptual Plan-Wide Reserve Design	3,038,000
Biological Conservation Planning Areas on non-BLM lands	1,725,000
Urban Areas, Other Lands, and Undesignated Areas	5,910,000
Plan Area Total	22,585,000

Note: The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table

II.7.4 GCP Elements of Alternative 4

As described in Section II.3.4 for the Preferred Alternative, the DRECP's GCP elements include a streamlined permitting process for renewable energy development by nonfederal project proponents in the Plan Area. This section is intended to provide the description of the GCP elements of the DRECP for Alternative 4.

II.7.4.1 Overview of the Nonfederal GCP Lands of Alternative 4

The GCP component of Alternative 4 includes all nonfederal lands within the DRECP DFAs and Conservation Planning Areas, as well as nonfederal inholdings within existing conservation areas and BLM-administered lands in the Plan Area; these lands comprise the GCP Permit Area in the Plan Area. The larger GCP Plan Area encompasses the GCP Permit Area as well as Priority Conservation Areas outside the GCP Permit Area where permittee non-acquisition mitigation measures may be implemented (i.e., BLM-administered lands corresponding to the DRECP NCCP Reserve Design). Nonfederal lands include privately owned lands and lands owned by state and local jurisdictions. The conservation strategy and Covered Activities under the GCP would be consistent with the DRECP. Table II.7-16 provides a summary of Alternative 4 within the GCP component of the DRECP; Figure II.7-7 depicts Alternative 4 within the GCP area.

As shown in Table II.7-16, the GCP portion of the Plan Area covers a total of 1,332,000 acres of DFAs on nonfederal lands (83% of the total DFAs in Alternative 4). The biological resources environmental setting/affected environment for the GCP portion of the Plan Area is described in Section Volume III, III.7.11. The impact analysis for Alternative 4 on nonfederal lands within the GCP area is provided in Volume IV, Section IV.7.3.6.4.

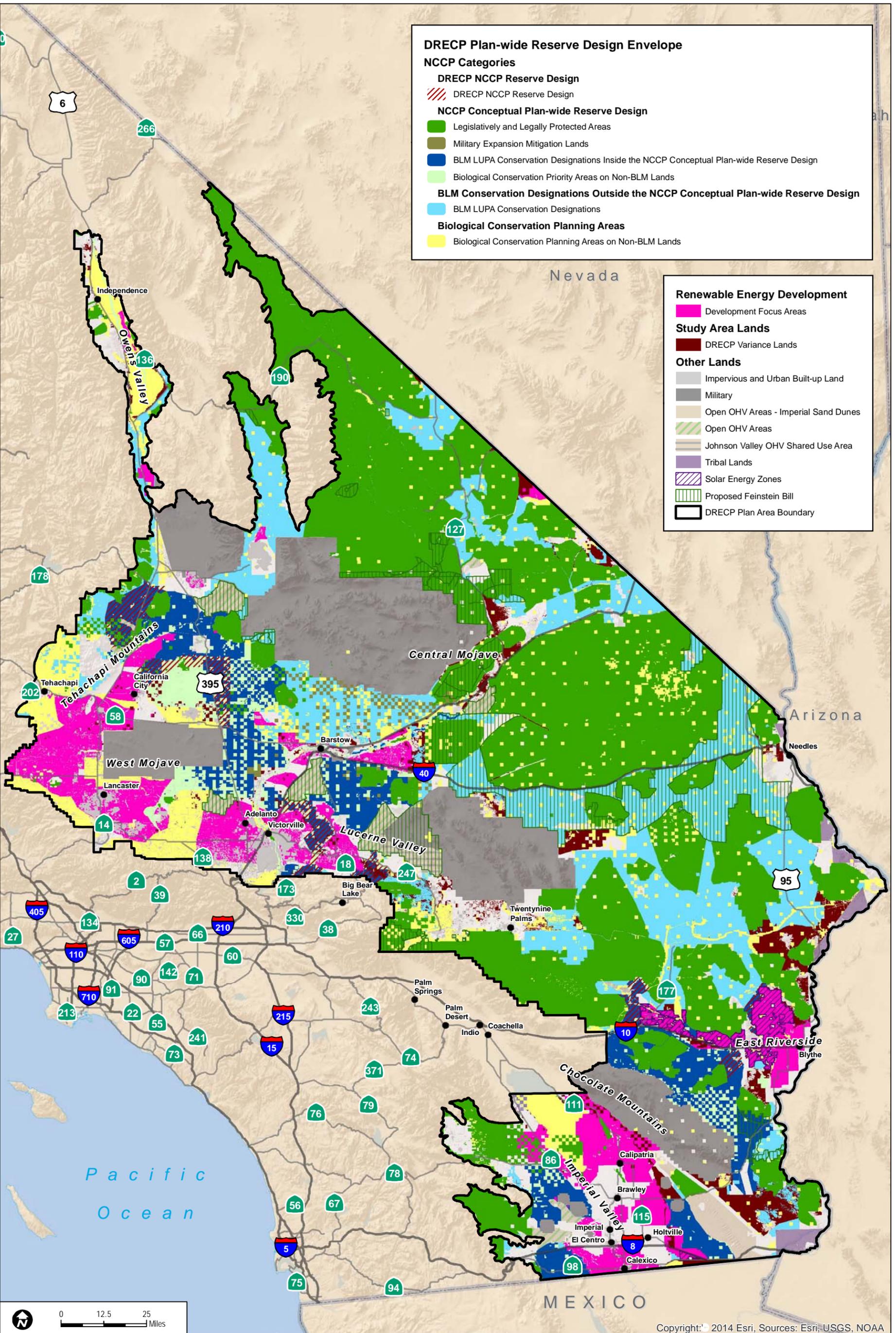
**Table II.7-16
Alternative 4 within the GCP**

Alternative Components	Acreage
DFAs (Nonfederal Lands Only)	1,332,000
Study Area Lands (Nonfederal Lands Only)	-
DRECP Plan-Wide Reserve Design Envelope (Nonfederal Lands Only)	2,742,000
Existing conservation areas	433,000
BLM LUPA conservation designations	1,160,000
Conservation Planning Areas	1,148,000

Notes: Urban areas, Other Lands, and Undesignated Areas also occur on nonfederal lands but are not reported here. The following general rounding rules were applied to acreage values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

II.7.4.2 Overview of the GCP Permitting Process

The GCP permitting process under Alternative 4 would be the same as is described for the Preferred Alternative in Section II.3.4.2 and in Appendix M.

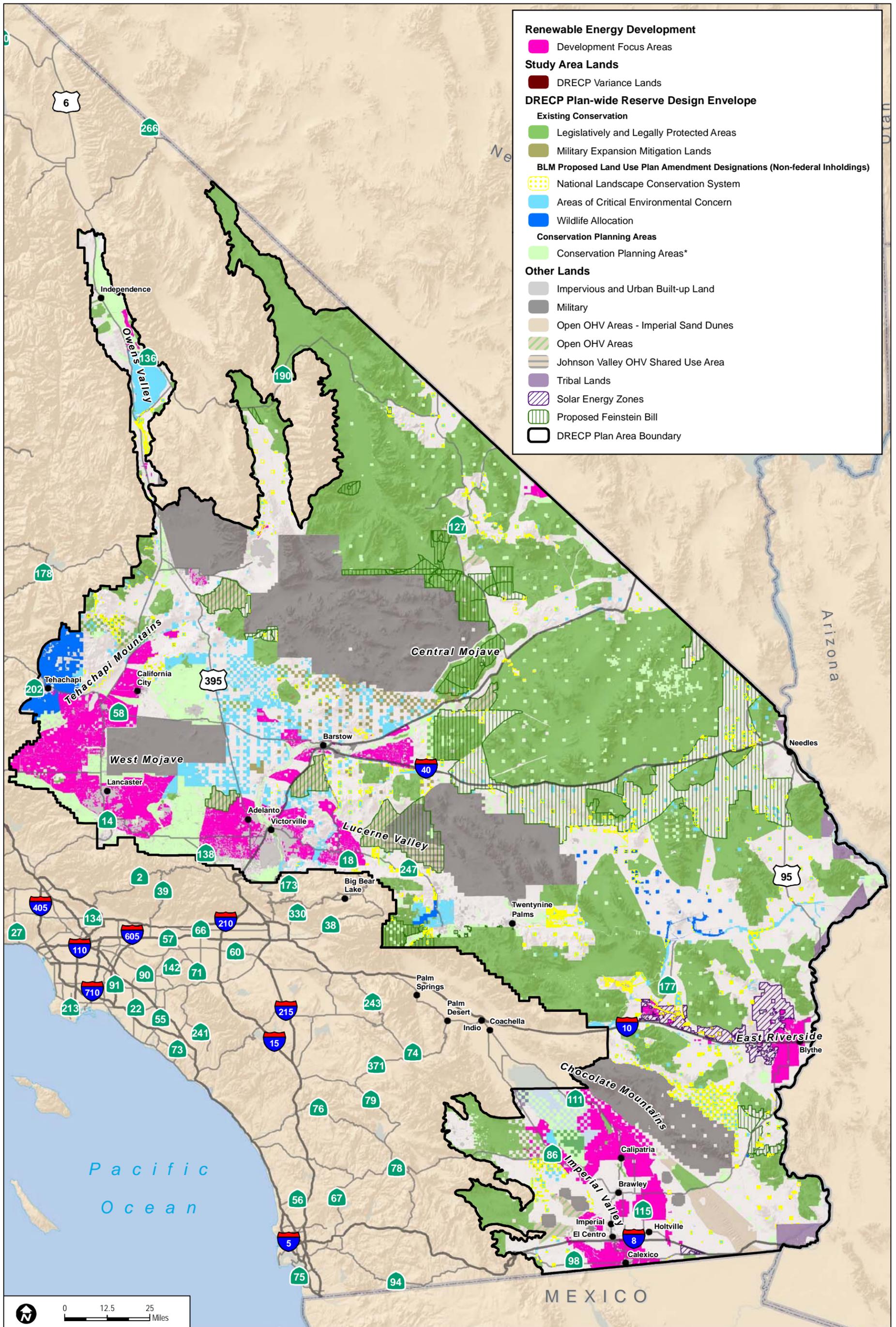


Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

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FIGURE II.7-6
Alternative 4 - Natural Community Conservation Plan

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Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

*The portion of the reserve design outside Existing Conservation Areas and BLM LUPA Conservation Designations on private and non-BLM public lands from which reserve areas will be assembled from willing sellers as compensation for Covered Activities.

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FIGURE II.7-7

Alternative 4 - General Conservation Plan

August 2014

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