

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.0 DESCRIPTION OF DRECP ALTERNATIVES

2.1 Introduction

The description of the Desert Renewable Energy Conservation Plan (DRECP) alternatives in the Executive Summary presents summary information regarding renewable energy development, transmission and conservation for each of the seven alternatives. This section first describes in greater detail elements common to all of the alternatives and then presents detailed data summaries and maps for each alternative. Each alternative is presented as the interagency description of the alternative, and includes the proposed land use plan amendment (LUPA) for each alternative. Natural Community Conservation Plan (NCCP)-specific and Habitat Conservation Plan (HCP)-specific components of each alternative are not presented in this document.

Also refer to the integrated, Development Focus Area (DFA), and Bureau of Land Management (BLM)-proposed LUPA maps for Alternatives 1–6 in Sections 2.3 through 2.8.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.2 Elements Common to All Alternatives Except No Action (Alternatives 1–6)

Certain features of the DRECP are common to all alternatives including proposed DFAs and alternative-specific conservation areas. These elements include the need for and framework of an implementation structure, cost and funding proposals, covered activities components, and monitoring and management as well as common conservation strategy elements. Features of these common elements are described below.

2.2.1 Implementation Structure

The Renewable Energy Action Team (REAT) agencies must select an implementation structure for the HCP/NCCP portions of the DRECP that is well suited to fulfill the responsibilities and perform the actions required to implement the DRECP successfully. The REAT agencies will propose a specific, detailed implementation structure in the draft DRECP and Joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS) that is distributed for public review in 2013. The detailed implementation structure will be identified based on lessons learned from other BLM land use plans, habitat conservation plans and natural community conservation plans, input from counties in the Plan Area, and input from stakeholders.

Some of the counties and stakeholders provided some initial input about the DRECP implementation structure in a California Energy Commission (CEC)-sponsored workshop (for meeting materials, see September 24, 2012 section at <http://drecp.org/meetings/>) addressing DRECP governance and finance issues. The REAT agencies have not yet determined an organizational structure for implementation of the DRECP. However, they have identified certain key criteria and have considered possible structures based on stakeholder input and other considerations. Important considerations include the size and complexity of the DRECP, the important role of federal and state lands, the large number of public agencies involved, and the agencies' experience with the implementation structures used for other HCPs and NCCPs.

Implementation Responsibilities

The implementation structure for the DRECP must take account of each of the various responsibilities that are integral to the successful implementation of an HCP, an NCCP, and a LUPA. The DRECP implementation structure must either assume or assign responsibility for each role and action required under the DRECP. For example, one or more participating agencies or entities must be assigned responsibility for monitoring and adaptive

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

management, and the process for adaptive management decision-making must be explained. Other key roles and responsibilities integral to DRECP implementation include:

- Ensuring coordination among participating agencies and entities and facilitating coordinated decision making;
- Program administration, including staffing, facilities, document management, etc.;
- Reporting;
- Securing and managing funding;
- Land acquisition;
- Land stewardship;
- Monitoring and adaptive management;
- Determining for each covered project how the DRECP's programmatic, plan-wide avoidance, minimization and mitigation measures should be applied and implemented;
- Compliance monitoring and enforcement;
- Effectiveness monitoring;
- Facilitating independent science input;
- Coordination with federal, state, and local agencies;
- Tribal coordination and outreach;
- Coordination and outreach with the Department of Defense (DOD) installations in the Plan Area;
- Coordination with land managers in the Plan Area;
- Stakeholder coordination; and
- Public outreach.

Responsibility for the implementation of these roles and actions may be divided among the participating agencies and entities or shared by more than one agency or entity, and coordination among the agencies and entities may be approached differently for the various roles and actions. However, the implementation structure will clarify these responsibilities, explain how the agencies and entities will be organized for implementation purposes, and ensure coordinated decision making.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Evaluation Criteria

The DRECP implementation structure must meet certain criteria to fulfill DRECP implementation responsibilities successfully. The REAT agencies will use these criteria, as well as other considerations, such as stakeholder input, to identify a proposed DRECP implementation structure in the draft DRECP.

Legal Authority

The implementation structure must have, or must include agencies that have, the legal authority to fulfill all responsibilities and implement all actions required by the DRECP. The authority required will vary depending on the responsibility or action, and the required authority need not reside in every participating agency or entity. It will be sufficient if the agency or specific entity that assumes the responsibility for implementation of an action has the legal authority to do so.

Capacity/Capability/Expertise

The structure must include the expertise and resources to implement the DRECP. Relevant expertise includes:

- Biology;
- Recreation;
- Land acquisition;
- Land stewardship/management;
- Financial management;
- Habitat restoration and enhancement;
- Monitoring at a regional scale;
- Adaptive management; and
- Renewable energy technology and siting.

Efficiency/cost-effectiveness

The implementation structure must be able to operate efficiently. Important considerations include:

- Startup costs (i.e., cost to create new entity and/or establish a new program);

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

- Overhead costs, including relative administrative costs associated with various types of public and private organizations; and
- Contracting—the speed and efficiency with which the structure is able to execute contracts with third-party contractors when necessary to implement required actions;

Ability to raise funds

The DRECP will be implemented partly using revenues from mitigation fees paid for covered projects. However, DRECP implementation will not be limited to mitigation actions and will include conservation actions that are not related to or dependent on the implementation of covered projects or their environmental impacts. The implementation structure must be able to obtain funding from sources other than mitigation fees. Possible funding sources for DRECP implementation include but are not limited to:

- State bond funds and grants;
- Federal grants; and
- Private donations.

Stability/Durability

The DRECP will be implemented over the course of 25 years or more. The DRECP implementation structure must be stable and durable. This criterion is especially relevant when considering the potential role of public and private entities, and the role of established entities and newly formed entities.

Flexibility

The DRECP must be able to adapt to new information and changing ecological conditions, as well as changes in the renewable energy market and renewable energy technology. The implementation structure must be flexible enough to adapt, and to ensure that the DRECP can adapt to these changing conditions. For the DRECP, this includes adaptive management of conservation areas and flexibility in the application of the DRECP's avoidance, minimization and mitigation measures and siting requirements to covered activities that adopt new technologies or practices.

Focus

The DRECP will be a large, complex, long-term plan and program. The implementation structure must be able to maintain focus on DRECP implementation over time, even though participating agencies and entities will likely have to balance competing obligations and

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

interests. For example, if a participating agency's primary focus is on matters unrelated to land management or natural resources conservation, its ability to remain focused on the implementation of DRECP conservation actions could be constrained.

Credibility

The implementation structure will represent the DRECP in outreach with the public and with stakeholders, as well as in coordination with local governments, Native American tribes, and DOD installations in the Plan Area. The structure will be developed taking into consideration the need to ensure credibility and inspire confidence from stakeholders.

Organizational forms used in other regional HCPs and NCCPs

The REAT agencies will consider various forms of organization for the DRECP implementation structure, including organizational forms used for LUPAs, BLM land use plans and other regional HCPs and NCCPs. Because important aspects of the DRECP distinguish it from other regional HCPs and NCCPs (see below), the implementation structure for the DRECP may not follow that of other HCPs and NCCPs. However, the implementation structures of other plans are instructive and provide useful points of reference.

New joint exercise of powers agency for non-federal land

The most common implementation structure for implementing regional HCPs and NCCPs in California is a joint exercise of powers agency created specifically to implement the HCP or NCCP. Joint exercise of powers agencies are commonly called "joint powers authorities" or "JPAs." A "JPA is a new government entity created by two or more existing public agencies. (See California Joint Exercise of Powers Act, Cal. Gov't Code, section 6500 et seq.). A JPA may exercise any powers common to its member agencies. Participating public agencies can include the state, counties, cities, special districts and other JPAs, as well as the federal government. It is important to note that, while California law allows federal government agencies to participate in a JPA, federal law might not. Whether a federal agency could participate in a JPA would depend on the agency's authority under federal law.

Examples of JPAs that implement regional HCPs and NCCPs in California include: the Coachella Valley Association of Governments and Coachella Valley Conservation Commission (for the Coachella Valley Multiple Species Habitat Conservation Plan); the Riverside County Habitat Conservation Agency (for the Stephens' Kangaroo Rat Habitat Conservation Plan; the Western Riverside County Regional Conservation Authority (for the Riverside County Multiple Species Habitat Conservation Plan); and the East Contra Costa County Habitat Conservancy (for the East Contra Costa County Habitat Conservation Plan).

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

New private, non-profit public benefit corporation

In some cases, new non-profit corporations are formed to support implementation of an HCP, NCCP, or LUPA. Examples include the Nature Reserve of Orange County and the Natomas Basin Conservancy.

Intergovernmental and interagency committees

Intergovernmental (i.e., among different levels of government, local, state and federal) and interagency (i.e., among state agencies or among federal agencies) committees are another organization form used to implement regional HCPs and NCCPs. Under this approach, specific implementation responsibilities are assigned to each participating entity. No new or separate legal entity is formed. Instead, each entity is responsible for implementing or supporting implementation of a specific part of the plan. Intergovernmental or interagency committees are used to coordinate implementation and facilitate coordinated decision-making. The committees do not have independent, discretionary legal authority. Instead, each participating agency relies on its existing statutory and legal authority to implement the plan. In addition to public agencies, stakeholders and non-governmental organizations often participate in these committees.

Examples of regional HCPs and NCCPs that rely on intergovernmental and interagency committees for implementation purposes are the Clark County Habitat Conservation Plan, the Lower Colorado River Multi-Species Conservation Plan and the San Diego Multi-Species Conservation Plan.

Special Considerations for the DRECP

Certain aspects of the DRECP that are unusual for an HCP/NCCP are relevant for purposes of the DRECP's implementation structure. The REAT agencies will take these special considerations into account when identifying or designing the structure.

- BLM and other federal agencies manage over half of the Plan Area, including most of the most important habitat areas. Management of federal lands, primarily the BLM administered lands, will be a central component of DRECP and its implementation.
- The DRECP is expected to include a LUPA, an HCP and an NCCP, each of which has a different geographic scope, as well as distinct statutory, regulatory and policy requirements. The LUPA applies to BLM administered lands only. The HCP will apply only to non-federal lands, and the NCCP will encompass the entire Plan Area. Any HCP and NCCP permittees associated with the DRECP will have implementation

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

responsibilities associated with the permits. DRECP implementation will require a somewhat different, though consistent, approach for each component.

- The DRECP spans portions of seven counties, and county participation will likely vary from county to county. Counties will play a key role in the DRECP implementation structure, but the implementation structure must be flexible enough to accommodate different forms of county participation based on the type and location of DRECP activities in each county, as well as county land use rules and policies.
- CEC jurisdiction is limited to certain types of projects; and California State Lands Commission (CSLC) jurisdiction is geographically limited. Because CEC and CSLC each have defined areas of jurisdiction, their participation in the implementation structure will be defined accordingly.
- The need for close and ongoing tribal consultation is a key component of DRECP implementation. The DRECP implementation structure must reflect that.
- The need for coordination with the DOD and with each military installation in the Plan Area is also key to the DRECP's successful implementation, and the DRECP implementation structure must reflect that.
- There are established interagency groups in the desert, including the Desert Managers' Group. These groups can provide an opportunity to coordinate with or be a part of DRECP implementation structure in terms of existing expertise and organizational capacity.

2.2.2 Common Conservation Strategy Elements

2.2.2.1 *Plan-wide Biological Goals and Objectives*

Appendix E provides the biological goals and objectives (BGOs) for landscape, natural communities, and species addressed in this document including dune processes, the dune community, desert tortoise, big horn sheep, Mohave ground squirrel and burrowing owl. The complete list of biological resource elements for which BGOs are developed and the process for developing the BGOs is described in Section 1.3. These BGOs are considered common to all DRECP alternatives for the purposes of this Description and Comparative Evaluation of Draft DRECP Alternatives. One of the purposes of this document is to provide information for the comparative evaluation of the alternatives; therefore, the Plan-wide BGOs are held constant and the analysis will show if and how the alternatives meet Plan-wide BGOs.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.2.2.2 Proposed Covered Species List

Covered Species are those species addressed in the DRECP for which conservation actions will be implemented and for which the participating entities will seek authorization for take under the Natural Community Conservation Planning Act (NCCPA) and Section 10 of the federal Endangered Species Act (ESA) for most species. At the species-level, the proposed Covered Species are the focus of the DRECP conservation strategy.

Table 2.2-1 identifies the 56 proposed Covered Species evaluated in the draft DRECP alternatives. Proposed Covered Species were selected through a review of their listing status, distribution in the Plan Area, presence of suitable habitat, and potential to be impacted by Covered Activities. The process for developing the list is described in Section 1.3.2 Conservation Planning Process. A summary of these species is provided in Section 3.1, Biological Resources. Detailed species profiles containing legal status, natural history, and population status and trends, as well as maps showing distribution of the species within the Plan Area, are found in the Baseline Biology Report (Dudek and ICF 2012, available online at <http://drecp.org/documents/#baseline>).

**Table 2.2-1
Proposed Covered Species List**

Taxa	Common Name	Scientific Name	Federal Status ¹	State Status ²
<i>Federally and State Endangered and Threatened Proposed Covered Species</i>				
Amphibian/ Reptile	Agassiz's desert tortoise	<i>Gopherus agassizii</i>	FT	ST
	arroyo toad	<i>Anaxyrus (Bufo) californicus</i>	FE	CSC
	barefoot gecko	<i>Coleonyx switaki</i>	BLM	ST
	Tehachapi slender salamander	<i>Batrachoseps stebbinsi</i>	BLM/FS	ST
Bird	Bell's vireo (Arizona and Least)	<i>Vireo bellii (arizonae and pusillus)</i>	Arizona: BLM; Least: FE/BCC	SE
	bald eagle	<i>Haliaeetus leucocephalus</i>	FD/BLM	SE/FP
	bank swallow	<i>Riparia riparia</i>	BLM	ST
	California black rail	<i>Laterallus jamaicensis coturniculus</i>	BCC/BLM	ST
	California condor	<i>Gymnogyps californianus</i>	FE	SE/FP
	elf owl	<i>Micrathene whitneyi</i>	BLM/BCC	SE
	Gila woodpecker	<i>Melanerpes uropygialis</i>	BLM/BCC	SE
	gilded flicker	<i>Colaptes chrysoides</i>	BLM/BCC	SE
	greater sandhill crane	<i>Grus canadensis tabida</i>	BLM/FS	ST/FP
	Swainson's hawk	<i>Buteo swainsoni</i>	BLM/FS	ST

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-1
Proposed Covered Species List**

Taxa	Common Name	Scientific Name	Federal Status ¹	State Status ²
	western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FC/FS/BCC/BLM	SE
	willow flycatcher (including southwestern)	<i>Empidonax traillii</i> (including <i>extimus</i>)	Southwestern: FE	SE
	Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	FE/BCC	ST/FP
Fish	desert pupfish	<i>Cyprinodon macularius</i>	FE	SE
	Mohave tui chub	<i>Gila bicolor mohavensis</i>	FE	SE/FP
	Owens pupfish	<i>Cyprinodon radiosus</i>	FE	SE/FP
	Owens tui chub	<i>Gila bicolor snyderi</i>	FE	SE
Mammal	Mohave ground squirrel	<i>Xerospermophilus mohavensis</i>	BLM	ST
	bighorn sheep (Peninsular Ranges distinct population segment (DPS) and Nelson's)	<i>Ovis canadensis nelsoni</i>	Peninsular: FE/BLM; Desert: BLM	Peninsular: ST/FP; Desert: None
Plant	Algodones Dunes sunflower	<i>Helianthus niveus</i> ssp. <i>tephrodes</i>	BLM	SE (CRPR 1B.2)
	Bakersfield cactus	<i>Opuntia basilaris</i> var. <i>treleasei</i>	FE	SE (CRPR 1B.1)
	Cushenbury buckwheat	<i>Eriogonum ovalifolium</i> var. <i>vineum</i>	FE	(CRPR 1B.1)
	Cushenbury milk-vetch	<i>Astragalus albens</i>	FE	(CRPR 1B.1)
	Cushenbury oxytheca	<i>Acanthoscyphus parishii</i> var. <i>goodmaniana</i>	FE	(CRPR 1B.1)
	Mojave tarplant	<i>Deinandra mohavensis</i>	BLM	SE (CRPR 1B.3)
	Owens Valley checkerbloom	<i>Sidalcea covillei</i>	BLM	SE (CRPR 1B.1)
	Parish's daisy	<i>Erigeron parishii</i>	FT	(CRPR 1B.1)
	Peirson's milk-vetch	<i>Astragalus magdalenae</i> var. <i>peirsonii</i>	FT	SE (CRPR 1B.2)
	triple-ribbed milk-vetch	<i>Astragalus tricarinatus</i>	FE	(CRPR 1B.2)
Non-Listed Proposed Covered Species				
Amphibian/ Reptile	coast horned lizard	<i>Phrynosoma blainvillii</i> (aka <i>P. coronatum blainvillii</i>)	BLM/FS/BCC	CSC

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-1
Proposed Covered Species List**

Taxa	Common Name	Scientific Name	Federal Status ¹	State Status ²
	flat-tailed horned lizard	<i>Phrynosoma mcallii</i>	BLM/FS	CSC
	Mojave fringe-toed lizard	<i>Uma scoparia</i>	BLM	CSC
Bird	American peregrine falcon	<i>Falco peregrinus anatum</i>	FD/BCC	SD/FP
	burrowing owl	<i>Athene cunicularia</i>	BLM	CSC
	golden eagle	<i>Aquila chrysaetos</i>	BLM	FP
	white-tailed kite	<i>Elanus leucurus</i>	-	FP
Mammal	California leaf-nosed bat	<i>Macrotus californicus</i>	BLM/FS	CSC
	hoary bat	<i>Lasiurus cinereus</i>	-	-
	pallid bat	<i>Antrozous pallidus</i>	BLM/FS	CSC
	Tehachapi pocket mouse	<i>Perognathus alticolus inexpectatus</i>	FS	CSC
	Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	BLM/FS	CSC
	western mastiff bat	<i>Eumops perotis</i>	BLM	CSC
	western red bat	<i>Lasiurus blossevillii</i>	FS	CSC
Plant	alkali mariposa-lily	<i>Calochortus striatus</i>	BLM	(CRPR 1B.2)
	Barstow woolly sunflower	<i>Eriophyllum mohavense</i>	BLM	(CRPR 1B.2)
	desert cymopterus	<i>Cymopterus deserticola</i>	BLM	(CRPR 1B.2)
	Little San Bernardino Mountains linanthus	<i>Linanthus maculatus</i>	BLM	(CRPR 1B.2)
	Mojave monkeyflower	<i>Mimulus mohavensis</i>	BLM	(CRPR 1B.2)
	Parish's alkali grass	<i>Puccinellia parishii</i>	BLM	(CRPR 1B.1)
	Parish's phacelia	<i>Phacelia parishii</i>	BLM	(CRPR 1B.1)
	Tracy's eriastrum	<i>Eriastrum tracyi</i>	BLM/FS	SR (CRPR 1B.2)
	white-margined beardtongue	<i>Penstemon albomarginatus</i>	BLM	(CRPR 1B.1)

Notes:

1. Federal Status

FE: Federally Endangered; FT: Federally Threatened; FC: Federal Candidate Species; FD: Federally delisted; FPD: Federal Proposed for Delisting; FPE Federally proposed for listing as Endangered; FPT Federally proposed for listing as Threatened; FS: Forest Service sensitive; BLM: Bureau Land Management sensitive; BCC: Bird of Conservation Concern

2. State Status

SE: State Endangered; ST: State Threatened; SCT: State candidate for listing as Threatened; SD: California delisted; SR: State Rare; CSC: California Species of Concern; CDF: California Department of Forestry and Fire Protection; FP: Fully Protected; CRPR: California Rare Plant Rank

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.2.2.3 *Alternative-Specific Conservation Area Reserve System and Conservation Actions*

Each DRECP alternative, with the exception of the No Action alternative, has an alternative-specific conservation area. These are presented below in the interagency descriptions of individual alternatives.

2.2.2.4 *Conservation and Management Actions Including Allowable Uses and Use Restrictions*

Each DRECP alternative, with the exception of the No Action alternative, has a set of draft conservation and management actions including definition of allowable uses and use restrictions on BLM lands. These draft Conservation and Management Actions were developed without regard to land ownership, and are intended only to illustrate the type and range of measures and actions under consideration for the DRECP. The final Conservation and Management Actions included in the DRECP will be tailored to reflect the different roles that public land and private land will play in the DRECP. Conservation and Management Actions on private lands will be developed in partnership with counties and cities with land use jurisdiction over such lands.

Allowable uses and use restrictions on BLM lands address biological and non-biological resources. Draft conservation and management actions are included in Appendix E for biological and non-biological elements. Three categories of conservation actions are identified: (1) landscape level, natural community level, and species level conservation actions; (2) BLM allowable uses and use restrictions; and (3) other conservation actions identified by the National Park Service (NPS). The State Lands Commission approved the use of state school lands for conservation through language in the Memorandum of Agreement (MOA) with BLM/Department of Interior (DOI) and the Memorandum of Understanding (MOU) with the REAT agencies, but the specific details for implementation will be determined by the State Lands Commission in response to specific conservation project proposals. The BLM allowable uses and use restrictions will be incorporated in the proposed BLM LUPA and would be effective upon BLM's issuance of a Record of Decision for the LUPA.

Biological resource conservation and management actions are included in this document for the following biological resource elements: landscape level—dune processes; natural community level: dunes community; and species level—bighorn sheep, burrowing owl, desert tortoise, and Mohave ground squirrel (see Appendix E). Not included are landscape, natural community and species-level conservation and management actions for the remaining biological resource elements addressed in the DRECP which include four

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

landscape level processes, 10 general natural community groups and 56 proposed Covered Species. Conservation and management actions for the full suite of biological resource elements will be included in the public review draft DRECP.

The primary biological resource conservation action used for the resource elements addressed in Appendix E is acquisition of private lands. A variety of other conservation action tools are available and are being considered as part of the package of conservation and management actions for the DRECP. These include grazing allotment retirement, fencing, signage, patrolling, public education and awareness, habitat restoration, revegetation and enhancement, road and trail restoration, invasive species control and other potential actions.

2.2.3 Monitoring and Adaptive Management

The purpose of the adaptive management and monitoring plan will be to establish a process and framework through which to monitor the implementation of the conservation actions of the DRECP and to adaptively manage the species, natural communities, and ecological processes to ensure the plan implementation achieves the biological goals and objectives. The adaptive management and monitoring plan will establish a strong institutional structure with the authority to implement and enforce the conservation actions. It will coordinate the development of a baseline database to provide the foundation against which future conditions can be measured. The adaptive management and monitoring plan also will provide the plan implementation context to support a feedback system that incorporates the results of previous studies into future management and monitoring actions. The Adaptive Management and Monitoring Plan will be developed consistent with the U.S. Fish and Wildlife Service (USFWS) HCP Handbook Addendum (i.e., 5-Point Policy) guidance on adaptive management and monitoring (65 FR 35242).

2.2.4 Covered Activities Component

Each DRECP alternative, with the exception of the No Action alternative, has a target of 20,323 megawatts (MWs). Technology mix and geographic distribution for these target MWs varies by alternative as presented in the Executive Summary.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Also common to each alternative are the components for renewable energy and transmission Covered Activities. These are summarized in Table 2.2-2.

**Table 2.2-2
Summary of Covered Activities Components**

	Trans-mission	Geo-thermal	Solar (PV)	Solar (CSP)	Wind
<i>Initial (Pre-Construction) Activities</i>					
Geotechnical borings	✓	✓	✓	✓	✓
Temporary access routes and staging areas for geotechnical borings	✓	✓	✓	✓	✓
Installation of temporary meteorological stations			✓	✓	✓
Site reconnaissance (including species-specific surveys)	✓	✓	✓	✓	✓
Test drilling for heat sources		✓			
Test trenching	✓	✓	✓?	✓	✓?
<i>Construction</i>					
Access roads/spur roads (permanent and temporary)	✓	✓	✓	✓	✓
Ancillary buildings	✓	✓	✓	✓	✓
Clearing, staging, parking, construction trailer, and equipment and material storage areas	✓	✓	✓	✓	✓
Evaporation ponds		✓		✓ ¹	
Fencing (temporary and permanent, for both wildlife and security)	✓	✓	✓	✓	✓
Temporary drainage and erosion control (e.g., diversion channels, retention/detention basins, silt fences, erosion fabrics)	✓	✓	✓	✓	✓
Permanent drainage: conveyance or semi-natural	✓	✓	✓	✓	✓
Flood control structures	✓	✓	✓	✓	✓
Generation facilities		✓	✓ ²	✓	✓
Ground-disturbance activities (including grading and clearing vegetation)	✓	✓	✓	✓	✓
Installation of utility services					
<ul style="list-style-type: none"> • Electric (distribution lines, facilities, and interconnects) 	✓	✓	✓	✓	✓

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-2
Summary of Covered Activities Components**

	Trans-mission	Geo-thermal	Solar (PV)	Solar (CSP)	Wind
• Natural gas / propane / hydrogen (distribution pipelines and interconnects or tanks/lines)		✓		✓ ⁴	
• Sewage facilities/pipelines		✓	✓?	✓	✓?
• Telecommunication (lines and facilities)	✓	✓	✓	✓	✓
• Trash collection and disposal	✓	✓	✓	✓	✓
• Water (wells or municipal water supply and pipelines)		✓	✓ ⁵	✓	?
Meteorological stations		✓	✓	✓	✓
Geothermal, solar, or wind energy collectors, ⁶ associated collector lines/pipelines ⁷ and control equipment/lines		✓	✓	✓	✓
Site preparation (e.g., excavation for foundations)	✓	✓	✓	✓	✓
Steam and wastewater lines		✓		✓	
Substations	✓				
Switchyards	✓				
Testing ⁸	✓	✓	✓	✓	✓
Transmission gen-ties		✓	✓	✓	✓
Transmission lines and facilities (New)	✓				
Transmission lines and facilities (Upgrades) ⁹	✓				
Transmission line-stringing activities	✓				
<i>Operations and Maintenance</i>					
Cleaning, maintenance, repair, and replacement of access roads and spur road, including trimming/removal of native vegetation growing in roadways	✓	✓	✓	✓	✓
Cleaning, maintenance, repair, and replacement of generation facilities		✓	✓	✓	✓
Cleaning, maintenance, repair, and replacement of met stations		✓	✓	✓	✓

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-2
Summary of Covered Activities Components**

	Trans-mission	Geo-thermal	Solar (PV)	Solar (CSP)	Wind
Cleaning, maintenance, repair, and replacement of geothermal/solar/wind collectors		✓	✓	✓	✓
Cleaning, maintenance, repair, and replacement of steam and wastewater lines		✓		✓	
Cleaning, maintenance, repair, and replacement of substations and switchyards, including replacing equipment	✓				
Cleaning/washing, maintenance, replacement, repair of transmission tower and distribution pole insulators	✓				
Cleaning, maintenance, repair, and replacement of lines/pipelines and facilities, including those used for utility services	✓	✓	✓	✓	✓
Cleaning, maintenance, repair, replacement, and repainting of buildings/structures (including towers/poles)	✓	✓	✓	✓	✓
Eliminating attractiveness of structures to wildlife (e.g., lighting controls)	✓	✓	✓	✓	✓
Fence repair and replacement	✓	✓	✓	✓	✓
Fire hazard/fuel management/clearing	✓	✓	✓	✓	✓
Integrated pest management, including trapping and regulated use of pesticides	✓	✓	✓	✓	✓
Gas/propane combustion (auxiliary heat/steam source)		✓		✓ ⁵	
Maintenance of drainage and flood control structures	✓	✓	✓	✓	✓
Monitoring	✓	✓	✓	✓	✓
Hazardous materials treatment and disposal	✓	✓	✓	✓	✓
Pumping of water wells (if water wells are used)		✓	✓ ⁶	✓	

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-2
Summary of Covered Activities Components**

	Trans-mission	Geo-thermal	Solar (PV)	Solar (CSP)	Wind
Road repair and replacement	✓	✓	✓	✓	✓
Dust suppression			✓	✓	
Noise management		✓	✓	✓	✓
Solid waste disposal	✓	✓	✓	✓	✓
Testing ⁹	✓	✓	✓	✓	✓
Vegetation management and weed/pest control	✓	✓	✓	✓	✓
Turbine operation					✓
<i>Decommissioning</i>					
Removal of buildings, equipment, and structures ¹⁰	✓	✓	✓	✓	✓
Removal of lines and pipelines	✓	✓	✓	✓	✓
Removal of energy collectors		✓	✓	✓	✓
Restoration ¹¹ and revegetation ¹²	✓	✓	✓	✓	✓
Monitoring	✓	✓	✓	✓	✓

Notes:

PV = photovoltaic; CSP = concentrating solar power

1. Not all CSP will utilize evaporation ponds; for example, dish and some tower applications do not
2. Includes DC conversion and other facilities
3. Includes common facilities for wind farms
4. Not all CSP will utilize natural gas, propane, or hydrogen
5. If panels are washed.
6. Including geothermal headers, dishes, heliostats, panels, troughs, and wind turbines (or blades)
7. Including electric, steam, thermal storage/transfer fluid
8. Includes mechanical and electrical testing, flood control testing, and, for steam applications, pressure testing
9. Includes reconductoring, rebuilding or inter-setting with additional structures, as well as new poles
10. Includes disposal of any solid wastes and hazardous materials
11. Includes topographical and hydrological features
12. Includes replanting and continued weed control if necessary

2.2.5 Projects Considered Pending Under DRECP

The DRECP will have to address pending projects—proposed renewable energy projects for which an application has already been submitted to one or more of the REAT agencies, but a project level decision would not be issued before the DRECP decisions. For example, right-of-way (ROW) applications have been submitted to BLM for some projects, and California Endangered Species Act (CESA) incidental take permit applications have been submitted to the California Department of Fish and Game (CDFG) for some projects, but

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

decisions regarding such applications might not be made until after the DRECP is approved. The DRECP will explain how such projects will be addressed, including whether such projects must adhere to the DRECP LUPA and whether they will be covered under the DRECP HCP/NCCP. The approach envisioned for such pending projects is explained in Appendix I.

Broadly speaking, the REAT agencies will address pending projects somewhat differently, depending on how far along they are in the application process and the environmental review process under National Environmental Policy Act (NEPA) or California Environmental Quality Act (CEQA). “Existing Projects,” as defined under the DRECP Planning Agreement, projects that have already been found to be consistent with the DRECP through the Interim Process, and projects that have a Draft EIS 60 days after the release of the Draft DRECP EIS/EIR, approximately fall 2013, will not be required to adhere to the DRECP LUPA and will not be covered by the HCP and NCCP. Other pending renewable energy projects will be reviewed for consistency with the DRECP and addressed accordingly, as further explained in Appendix I.

2.2.6 BLM Incentives for Projects in DFAs

The BLM is proposing a variety of activities or incentives to help steer future utility scale renewable energy development to the DFAs. These proposed incentives include those from BLM Solar PEIS for utility scale solar development in the Solar Energy Zones (SEZ), additional incentives and the inclusion of wind and geothermal utility scale development.

These activities include facilitating faster and easier permitting in the DFAs, improving and facilitating mitigation, facilitating permitting of needed transmission to the DFAs, encouraging utility scale development on suitable adjacent nonfederal lands, and providing economic incentives for development in the DFAs. As an additional mechanism to support the establishment of priority areas for utility scale solar, wind and geothermal energy development, consideration is being given through a rulemaking to establish a competitive process for offering public lands for solar and wind development within DFAs and designated leasing areas. In addition, the Secretary of the Interior is considering whether to withdraw the public lands encompassed by DFAs from potentially conflicting uses through the issuance of a Public Land Order.

The proposed incentives and their applicability to the different energy sources are contained in Table 2.2-3.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-3
DRECP Incentives for Renewable Energy Development within
Development Focus Areas on BLM Administered Land**

Development Focus Area Incentive	Solar	Wind	Geothermal
<i>Facilitate Streamlined Permitting</i>			
Commit to adhere internally to strict schedules (consistent with applicable laws) <ul style="list-style-type: none"> from Solar Programmatic Final EIS (PFEIS) SEZs 2–33 extended to DFAs for solar, wind and geothermal 	Yes	Yes	Yes
DOI will undertake interagency coordination to expedite service and provide priority processing to projects in DFAs <ul style="list-style-type: none"> from Solar PFEIS SEZs 2–33 extended to DFAs for solar, wind, and geothermal 	Yes	Yes	Yes
BLM will maintain Renewable Energy Coordination Office (RECOs) as long as needed to assist with efficient authorization of projects in DFAs <ul style="list-style-type: none"> from Solar PFEIS SEZs 2–33 extended to DFAs for solar, wind, and geothermal 	Yes	Yes	Yes
Through rulemaking, BLM may establish a competitive process for DFAs <ul style="list-style-type: none"> from Solar PFEIS SEZs 2–33 extended to DFAs for solar and wind 	Yes	Yes, with language to protect initial investment of testing	No; already established in federal regulations at 43 CFR 3203
Put DFA applications at the front of the process list; in front of all other applications. Rank applications according to risk and conflicts inside DFAs.	Yes	Yes	Yes
Prioritize processing of applications in DFAs. Have a single point of contact per project. Hold everyone accountable. <ul style="list-style-type: none"> From Solar PFEIS SEZ's 2-33 extended to DFAs for solar, wind and geothermal 	Yes	Yes	Yes
Have secretarial-level authorization of projects in DFAs, thereby avoiding potential administrative appeals.	Yes	Yes	Yes
Tier project-level NEPA analysis to the DRECP EIS for renewable energy projects in DFAs.	Yes	Yes	Yes
Coordinate with DOD on potential applications for solar power towers and wind	Yes	Yes	—

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-3
DRECP Incentives for Renewable Energy Development within
Development Focus Areas on BLM Administered Land**

Development Focus Area Incentive	Solar	Wind	Geothermal
in DFAs identified by DOD as high or moderate risk to testing and training before accepting applications.			
Integration with planned transmission corridor improvements developed by the Transmission Technical Group.	Yes	Yes	Yes
<i>Improve and Facilitate Mitigation</i>			
DFA mitigation plans will be in place at the time of the Record of Decisions (RODs), ESA and NCCP decisions in order to simplify the mitigation process and provide financial certainty.	Yes	Yes	Yes
Develop and utilize appropriate tools to efficiently implement mitigation (biological, recreation, visual, etc.) at the time of the ROD, ESA and NCCP decisions. Including developer and third party implementation, and use of mitigation deposit accounts, such as the REAT-National Fish and Wildlife Foundation (NFWF) Mitigation Account.	Yes	Yes	Yes
Utilize the Golden Eagle framework as a means to facilitate the potential for streamlining future Bald and Golden Eagle Protection Act (BGEPA) permitting in the DFAs.	Yes	Yes	Yes
Tier project-level ESA Section 7 consultations and section 10 HCPs, and NCCP permitting off the DRECP and its analyses.	Yes	Yes	Yes
<i>Facilitate Permitting of Needed Transmission</i>			
BLM will commit staff and prioritize projects that provide needed transmission to the DFAs. <ul style="list-style-type: none"> • From Solar PFEIS SEZs (Solar PFEIS 2–34) extended to DFAs 	Yes	Yes	Yes
Prioritize transmission associated with DFAs. Tier transmission NEPA and CEQA off DRECP documents to the greatest extent practicable.	Yes	Yes	Yes

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-3
DRECP Incentives for Renewable Energy Development within
Development Focus Areas on BLM Administered Land**

Development Focus Area Incentive	Solar	Wind	Geothermal
<i>Provide Economic Incentives</i>			
Lower cost recovery in DFAs because of upfront data collection and environmental review. <ul style="list-style-type: none"> From Solar PFEIS SEZs (Solar PFEIS 2–35) extended to DFAs 	Yes	Yes	No - Cost recovery does not apply to geothermal activities (Leasing, exploration and development).
Longer phase-in period for rental payments in DFAs. <ul style="list-style-type: none"> From Solar PFEIS SEZs (Solar PFEIS 2-35) extended to DFAs 	Yes	Yes, as permitted by BLM regulation and policy. Potentially need change to policy to fully utilize.	No – Geothermal Lease rental requirements are addressed in 43 CFR 3211.
Fixed MW capacity fee rental payment for the life of the project in DFAs. <ul style="list-style-type: none"> From Solar PFEIS SEZs (Solar PFEIS 2-35) extended to DFAs 	Yes	Yes, as permitted by BLM regulation and policy. Potentially need to change policy to fully utilize.	No - Lease Royalty rates for leases issued after August 8, 2005 were established in the 2005 Energy Policy Act, and are incorporated into federal regulations at 43 CFR 3211.17.
Limited base acreage rental payments in DFAs. <ul style="list-style-type: none"> From Solar PFEIS SEZs (Solar PFEIS 2-35) extended to DFAs 	Yes	Yes, as permitted by BLM regulation and policy. Potentially need to change policy to fully utilize.	No – Geothermal Lease rental requirements are addressed in 43 CFR 3211.
Restructure bonding requirements in DFAs (e.g., a fixed or standard bond per acre). <ul style="list-style-type: none"> From Solar PFEIS SEZs (Solar PFEIS 2-35) extended to DFAs. 	Yes	Yes, as permitted by BLM regulation and policy. Potentially need to change policy to fully utilize.	No – general geothermal bond requirements are addressed in 43 CFR Subpart 3214. Additional bond requirements

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-3
DRECP Incentives for Renewable Energy Development within
Development Focus Areas on BLM Administered Land**

Development Focus Area Incentive	Solar	Wind	Geothermal
			specific to exploration activities are addressed in subpart 3251.15; drilling operations, Section 3261.18; and utilization operations, Sections 3271.12 and 3273.19.
30-year fixed term lease with fixed rental fee in DFAs. <ul style="list-style-type: none"> From Solar PFEIS SEZs (Solar PFEIS 2-35) extended to DFAs. 	Yes	Yes, as permitted by BLM regulation and policy. Potentially need to change policy to fully utilize.	No – geothermal lease terms are addressed in 43 CFR 3207
Development in DFAs should result in less administrative oversight and less need for administrative costs and processing time. <ul style="list-style-type: none"> From Solar PFEIS SEZs (Solar PFEIS 2-35) extended to DFAs. 	Yes	Yes	Yes – within requirements in 43 CFR 3211.
<i>Withdrawal of Lands</i>			
Public lands in DFAs would be withdrawn, in accordance with regulation, subject to valid existing rights, from settlement, sale, location, or entry under the general land laws, as follows: <ul style="list-style-type: none"> New mining claims could not be filed, however valid mining claims take precedence over future renewable energy development Lands could not be sold, exchanged, or otherwise disposed of during the term of the withdrawal Withdrawn lands would remain open to mineral leasing, geothermal leasing, and mineral material laws 	Yes	Yes	Yes

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.2-3
DRECP Incentives for Renewable Energy Development within
Development Focus Areas on BLM Administered Land**

Development Focus Area Incentive	Solar	Wind	Geothermal
Lands would remain open to ROW authorizations and land leases or permits. <ul style="list-style-type: none"> • From Solar PFEIS SEZs (Solar PFEIS 2-36) extended to DFAs. 			
<i>Incentive for Multiple Technology</i>			
DFAs where solar, wind, and/or geothermal can operate in the same area at the same time will be identified to facilitate.	Yes	Yes	Yes
The mitigation/compensation requirements can be proportionally split between the two or three types of renewable energy projects sited on the same piece of ground and will not be additive.	Yes	Yes	Yes
Only one set of surveys and assessments for wildlife or plant species and cultural resources will be required on a dual or triple technology site.	Yes	Yes	Yes
Dual or triple technology projects can use a single NEPA document to analyze the project.	Yes	Yes	Yes

2.2.7 Durability of BLM Conservation Lands

The BLM and CDFG have entered into an MOU regarding the durability of biological conservation on BLM lands. See Appendix J. The BLM and CDFG developed this MOU for the purpose of memorializing and making specific their cooperation and coordination to protect and conserve fish, wildlife, plants and their habitat in the DRECP area. This MOU is a framework that describes general agency cooperation and coordination commitments. Consistent with the goals of this MOU, the BLM will work with CDFG to identify and evaluate tools and actions, consistent with BLM’s land use authority as defined by Federal law, regulations, and policy, to manage the lands identified by CDFG as part of a habitat reserve to meet NCCPA requirements. BLM may also agree to authorize mitigation on BLM Lands for impacts caused by development on privately owned land or state-owned land on BLM Lands.

Appendix J contains the fully executed MOU.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.2.8 Literature Cited

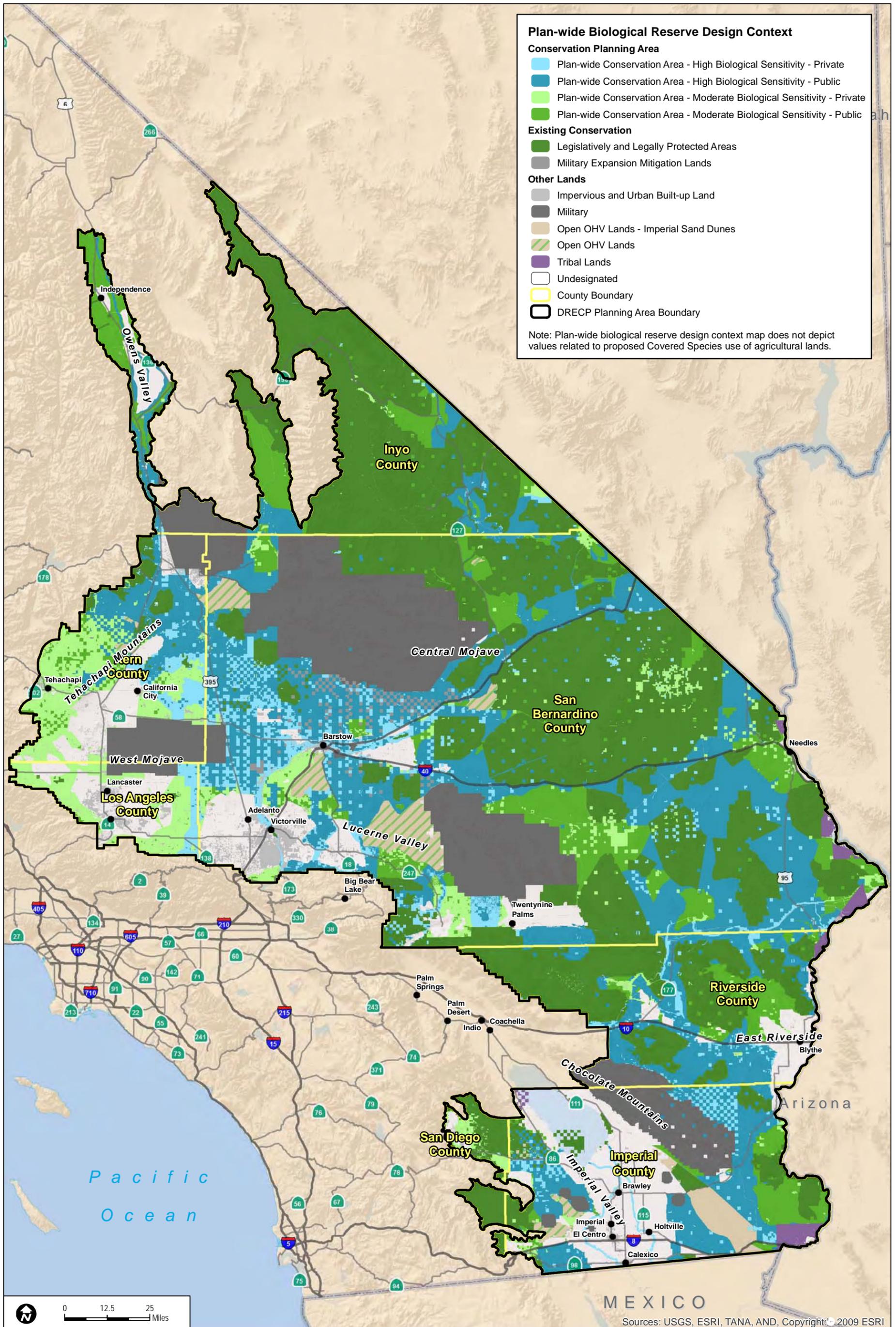
65 FR 35242. Notice of Final Policy: "Notice of Availability of a Final Addendum to the Handbook for Habitat Conservation Planning and Incidental Take Permitting Process." June 1, 2000.

Dudek and ICF. 2012. *Desert Renewable Energy Conservation Plan (DRECP): Baseline Biology Report*. Draft. Prepared by Dudek and ICF under contract to Aspen Environmental Group for California Energy Commission. March 2012.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

MEXICO
Sources: USGS, ESRI, TANA, AND, Copyright © 2009 ESRI

FIGURE 2.2-1
Plan-wide Biological Reserve Design Context Map

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.3 Interagency Description of Alternative 1

The following tables and figures present detailed information for Alternative 1. Refer to Appendix D for additional information, including specific descriptions, including allowable and non-allowable uses, and maps for LUPA Areas of Critical Environmental Concern (ACEC), National Landscape Conservation System (NLCS) lands, and Special Recreation Management Areas (SRMAs).

Figure 2.3-1 presents the integrated alternative showing the DFAs and the Alternative 1 conservation area including proposed LUPA designations and conservation planning areas. Table 2.3-4 provides acreages for the map categories shown on Figure 2.3-1. Table 2.3-6 presents an acreage summary for the Alternative 1 conservation area. Detailed breakouts for each biological resource element by ecoregion within the Alternative 1 conservation area are provided in Section 4.1 and Appendix B.

Figure 2.3-2 highlights the DFAs for Alternative 1 and Tables 2.3-1, 2.3-2, 2.3-3, and 2.3-5 show the distribution of Alternative 1 DFAs by land ownership class, by ecoregional subarea and by county.

Figure 2.3-3 shows the Alternative 1 BLM LUPA. Detailed LUPA maps and work sheets for Alternative 1 are included in Appendix D. A table summarizing LUPA acreages for each alternative is provided in the Executive Summary.

2.3.1 Solar PEIS Variance Land Screening

Keeping with the Disturbed Lands/Low Conflict theme of Alternative 1, screening criteria were applied to the Solar PEIS variance lands. The purpose of the screening criteria was to assess the location of Solar PEIS variance lands in Alternative 1 using more recent, specific, and refined data than was available for the Solar PEIS, and adding criteria consistent with this alternatives theme. If any of the Solar PEIS variance lands triggered any one of the screening criteria below, those lands were eliminated as variance lands from Alternative 1 and the proposed LUPA would change the existing variance land allocation. The variance lands that remain compliment the DFAs for this alternative and would follow the same requirements as per the Solar PEIS.

The screening criteria are broken into two groupings: 1) existing land and resource allocations or characteristics for which recent or refined mapping data was applied, and 2) new or modified land and resource allocations or characteristics recently categorized or specifically designed for Alternative 1. If discrepancies exist between the map and the screening criteria, the criteria control.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Group 1:

1. All designated and proposed critical habitat areas for species protected under the ESA of 1973 (as amended).
2. All areas where the BLM has made a commitment to state agency partners and other entities to manage sensitive species habitat, for example the Desert Tortoise Research Natural Area including the lands acquired by the Desert Tortoise Preserve Committee, Inc.
3. All desert tortoise translocation sites identified in applicable land use plans, project-level mitigation plans or Biological Opinions.
4. All wildlife migratory and movement corridors identified in applicable land use plans and recently mapped, through efforts such as South Coast Wildlands.
5. All Big Game Winter Ranges identified in applicable land use plans, such as mule deer area in the Bishop Resource Management Plan (RMP).
6. National Historic and Natural Landmarks identified in applicable land use plans and DRECP.
7. Lands within the boundaries of properties listed in the National Register of Historic Places (NRHP).
8. Segments of rivers determined to be eligible or suitable for Wild and Scenic River status identified in applicable land use plans, including associated 0.25 mile corridor.
9. Lands within a solar, wind or geothermal energy development ROW grant or application area found to be inappropriate for energy development through an environmental review process that occurred prior to finalization of the Draft DRECP EIS.
10. All lands within the proposed Mojave Trails National Monument.
11. All conservation lands acquired through donations or use of Land and Water Conservation Funds.
12. Wild Horse or Burro Herd Management Areas.

Group 2:

13. All ACECs, Research Natural Areas (RNA), and NLCS lands/units identified in DRECP Alternative 1.
14. All areas with BLM inventoried wilderness characteristics.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

15. Developed recreational facilities, special-use permit recreation sites, all SRMAs, and all Long Term Vehicle Areas (LTVA) identified in Alternative 1.
16. Developed recreational facilities, special-use permit recreation sites, all SRMAs, and all Long Term Vehicle Areas (LTVA) identified in Alternative 1.
17. Variance land parcels smaller than 280 acres and/or not capable of being combined with other BLM variance parcels or non-BLM lands in Alternative 1 Development Focus Areas to reach the 280-acre minimum size. (280 acres is the size of two small utility-scale solar projects [20 MW as per CEC] at approximately 7 acres per MW.)
18. Narrow stringers on cherry stems roads between areas conserved or specially managed.
19. Areas within 1 mile of National Scenic and Historic Trail Corridors.
20. Designated off-highway vehicle (OHV) open areas.
21. All dunes, sand sources and sand flow corridors.
22. All Microphyll woodlands, also known as semi-desert wash woodland/scrub.
23. Lands within 0.25 mile of any surface water source or riparian areas (e.g., seeps, springs, lakes, ponds, streams, rivers).

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.3-1
Alternative 1 Development Focus Area and Conservation Area Reserve System by Land Ownership Class (acres)**

Alternative 1	Land Ownership Class							
	Federal	State	Local	Municipal	Non-Profit	Private	Tribal Lands	Total
Development Focus Areas (DFAs)	99,374	7,586	195	49,329		963,608		1,120,092
BLM Solar PEIS Variance Lands	172,386	28	0	2		122	0	172,537
Conservation Area Reserve System	13,082,989	644,086	5,248	127,864	3,750	2,321,480	0	16,185,416
Existing Conservation								
Legislatively and Legally Protected Areas	7,124,201	334,185			3,522	2,492		7,464,400
Military Expansion Mitigation Lands	95,802							95,802
Proposed Conservation (DCLs on BLM Land)								
HBS-Public	3,608,718							3,608,718
MBS-Public	877,810							877,810
Undesignated	57,255							57,255
Impervious and Urban Built-up Land	24,684							24,684
Planned Conservation								
HBS-Public	569,201	168,560	975	36,463	188			775,386
MBS-Public	717,960	141,341	4,273	91,401	40			955,016
HBS-Private	4,467					1,050,349		1,054,816
MBS-Private	2,890					1,268,639		1,271,530
Other Lands	3,707,582	18,775	3,138	140,334	41	1,106,335	132,528	5,108,733
Impervious and Urban Built-up Land	19,379	324	2,867	3,045	41	315,176	3,968	344,801
Military	2,932,994					728		2,933,723
Open OHV Lands	352,773	2,570				22,784		378,128
Open OHV Lands - Imperial Sand Dunes	132,987	30				850		133,868
Tribal Lands	124						128,560	128,684
Undesignated	269,324	15,850	271	137,289		766,795		1,189,529
Total	17,062,330	670,474	8,581	317,529	3,791	4,391,545	132,528	22,586,778

Note: All acreages are estimates and subject to change

Local includes County, City, and Special District

DCLs: BLM Desert Conservation Lands designations; HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity;

HBS-Private and MBS-Private lands include acreage identified as Federal due to the coding of a portion of the Catellus lands transfers.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.3-2

Alternative 1 Development Focus Areas by County and Aggregated Land Ownership

DFA by County by Aggregated Ownership	Acres
Imperial County	449,553
Private	346,955
Public/Quasi-public/Other	102,598
Inyo County	21,772
Private	1,242
Public/Quasi-public/Other	20,530
Kern County	128,094
Private	124,066
Public/Quasi-public/Other	4,028
Los Angeles County	125,824
Private	125,497
Public/Quasi-public/Other	327
Riverside County	100,625
Private	81,538
Public/Quasi-public/Other	19,087
San Bernardino County	294,224
Private	284,310
Public/Quasi-public/Other	9,914
Total	1,120,092

Note: All acreages are estimates and subject to change

Table 2.3-3

Alternative 1 Development Focus Areas by Ecoregional Subarea

DFA by Ecoregional Subarea	Acres
Cadiz Valley and Chocolate Mountains	100,630
Imperial Borrego Valley	449,548
Mojave and Silurian Valley	44,208
Owens River Valley	21,772
Pinto Lucerne Valley and Eastern Slopes	100,520
Providence and Bullion Mountains	13,208
West Mojave and Eastern Slopes	390,206
Total	1,120,092

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.3-4
Integrated Alternative 1 (acres)**

Alternative 1 DFAs and Conservation Area Reserve System and Other Lands	BLM Land Use Plan Amendment						Total
	DCLs			Non-DCLs			
	Non-SRMA	SRMA	DCLs Subtotal	Non-SRMA	SRMA	Non-DCLs Subtotal	
Development Focus Areas (DFAs)	8,177	1,079	9,257	1,089,889	20,946	1,110,835	1,120,092
BLM Solar PEIS Variance Lands	26		26	172,511	0	172,511	172,537
Conservation Area Reserve System	4,406,725	2,305,292	6,712,017	8,495,018	978,381	9,473,399	16,185,416
Existing Conservation							
Legislatively and Legally Protected Areas	641,653	270,302	911,955	6,295,266	257,180	6,552,445	7,464,400
Military Expansion Mitigation Lands	74,701	15,364	90,066	3,989	1,748	5,736	95,802
Proposed Conservation							
HBS-Public	2,133,277	1,475,441	3,608,718				3,608,718
MBS-Public	653,467	224,343	877,810				877,810
Undesignated	36,439	20,817	57,255				57,255
Impervious and Urban Built-up Land	14,214	10,469	24,684				24,684
Planned Conservation							
HBS-Public	99,060	28,792	127,853	441,775	205,758	647,533	775,386
MBS-Public	42,936	16,733	59,669	577,537	317,810	895,347	955,016
HBS-Private	469,855	146,093	615,948	394,157	44,710	438,867	1,054,816
MBS-Private	241,121	96,939	338,060	782,294	151,176	933,470	1,271,530
Other Lands	157,860	20,823	178,683	4,299,508	630,543	4,930,050	5,108,733
Impervious and Urban Built-up Land	13,698	2,222	15,920	315,460	13,421	328,881	344,801
Military	45,839	215	46,054	2,871,246	16,422	2,887,669	2,933,723
Open OHV Lands	484	14,382	14,866	1,093	362,168	363,262	378,128
Open OHV Lands - Imperial Sand Dunes	106	1,361	1,467	298	132,103	132,401	133,868
Tribal Lands	68	0	68	126,145	2,471	128,616	128,684
Undesignated	97,665	2,643	100,307	985,265	103,957	1,089,222	1,189,529
Total	4,572,788	2,327,194	6,899,982	14,056,926	1,629,869	15,686,796	22,586,778

Note: All acreages are estimates and subject to change

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

DCLs: BLM Desert Conservation Lands designations (Area of Critical Environmental Concern, National Landscape Conservation System, Wildlife); SRMA: Special Recreation Management Area

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.3-5
Alternative 1 Technology Types within Development Focus Areas by County**

DFAs by Technology Type by County	Acres
Imperial County	449,553
Geothermal	100,024
Solar	143,153
Solar and Geothermal	201,350
Solar and Wind	151
Solar, Wind and Geothermal	4,875
Inyo County	21,772
Solar	21,772
Kern County	128,094
Solar	75,354
Solar and Wind	52,741
Los Angeles County	125,824
Solar	125,824
Riverside County	100,625
Solar	76,084
Solar and Wind	24,541
San Bernardino County	294,224
Geothermal	493
Solar	90,451
Solar and Wind	203,280
Total	1,120,092

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.3-6
Alternative 1 Conservation Area Reserve System Summary**

Alternative 1 Conservation Area Reserve System	Acres	% of the Plan-wide Reserve Context
<i>Existing Conservation</i>	7,560,202	100%
Legislatively and Legally Protected Areas	7,464,400	100%
Military Expansion Mitigation Lands	95,802	100%
<i>Proposed and Planned Conservation</i>	8,625,214	—
HBS-Public	4,384,104	97%
Proposed Conservation	3,608,718	—
Planned Conservation	775,368	—
MBS-Public	1,832,826	97%
Proposed Conservation	877,810	—
Planned Conservation	995,016	—
Planned Conservation - HBS-Private	1,054,816	98%
Planned Conservation - MBS-Private	1,271,530	100%
Proposed Conservation - Undesignated	57,255	—
Proposed Conservation - Impervious and Urban Built-up Land	24,684	—
Conservation Area Reserve System Total	16,185,416	99%

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

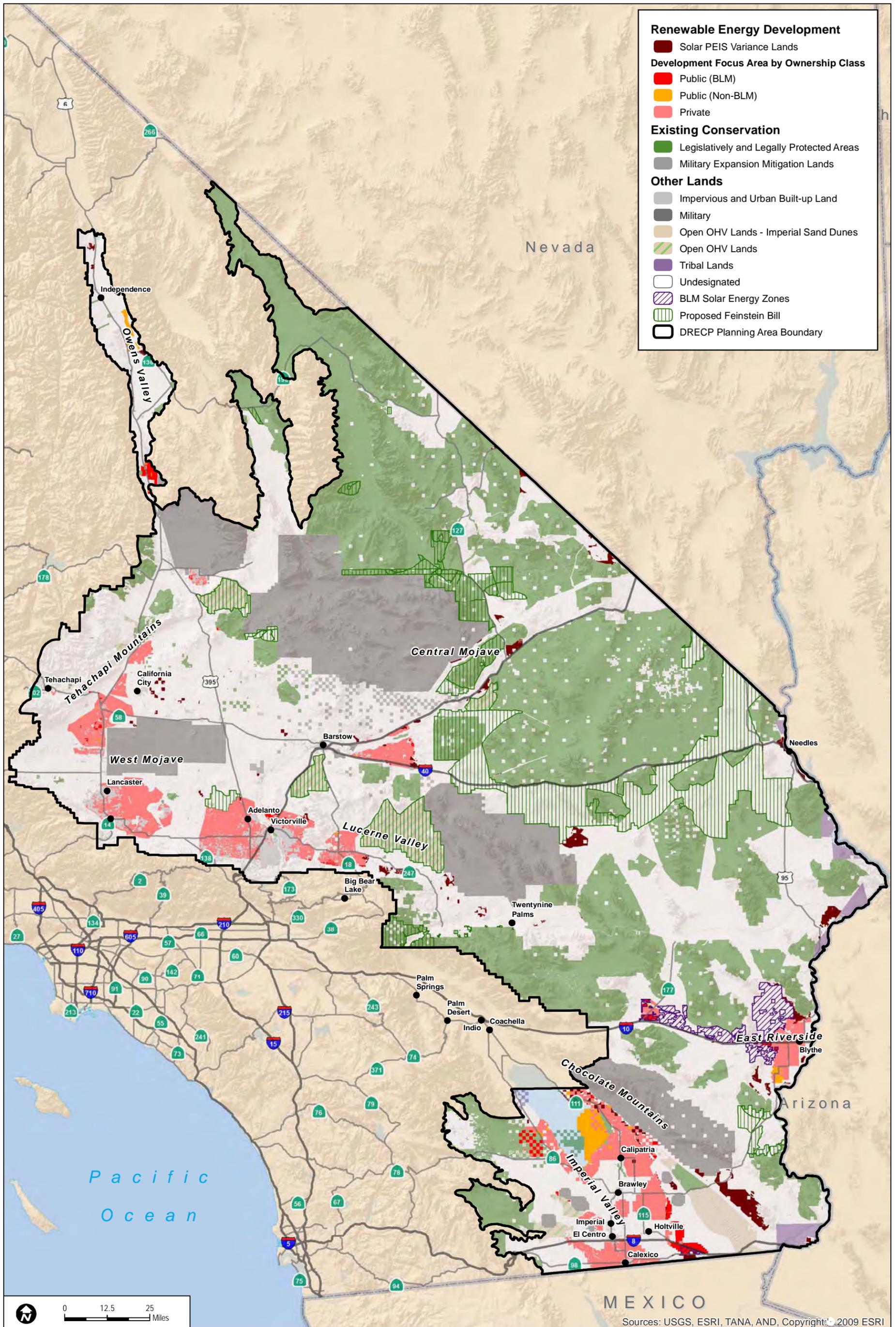


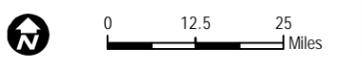
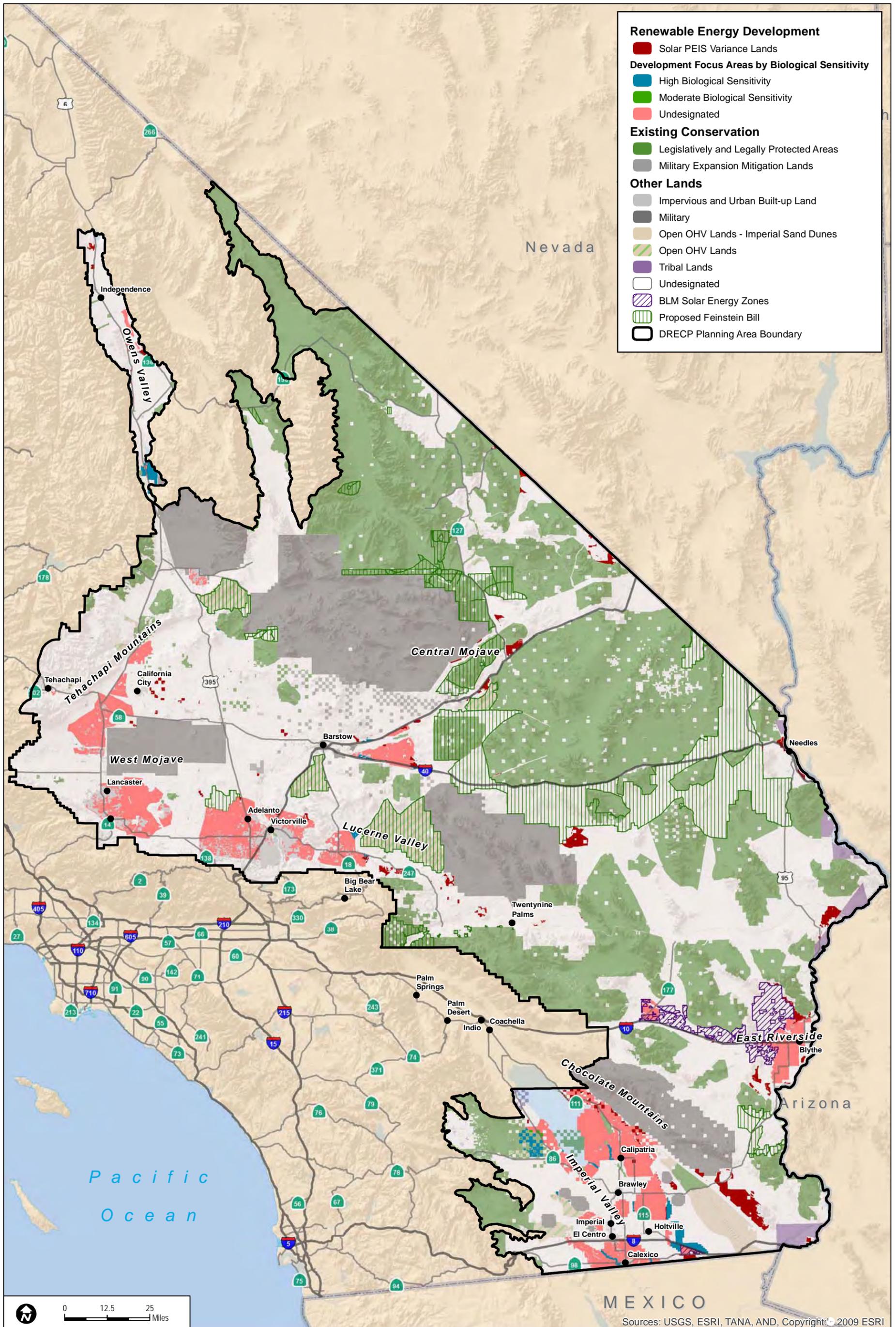
FIGURE 2.3-2

Alternative 1 - Disturbed Lands/Low Resource Conflict Alternative: Development Focus Areas by Ownership Class

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright: © 2009 ESRI

FIGURE 2.3-3

Alternative 1 - Disturbed Lands/Low Resource Conflict Alternative: Development Focus Areas by Biological Sensitivity

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

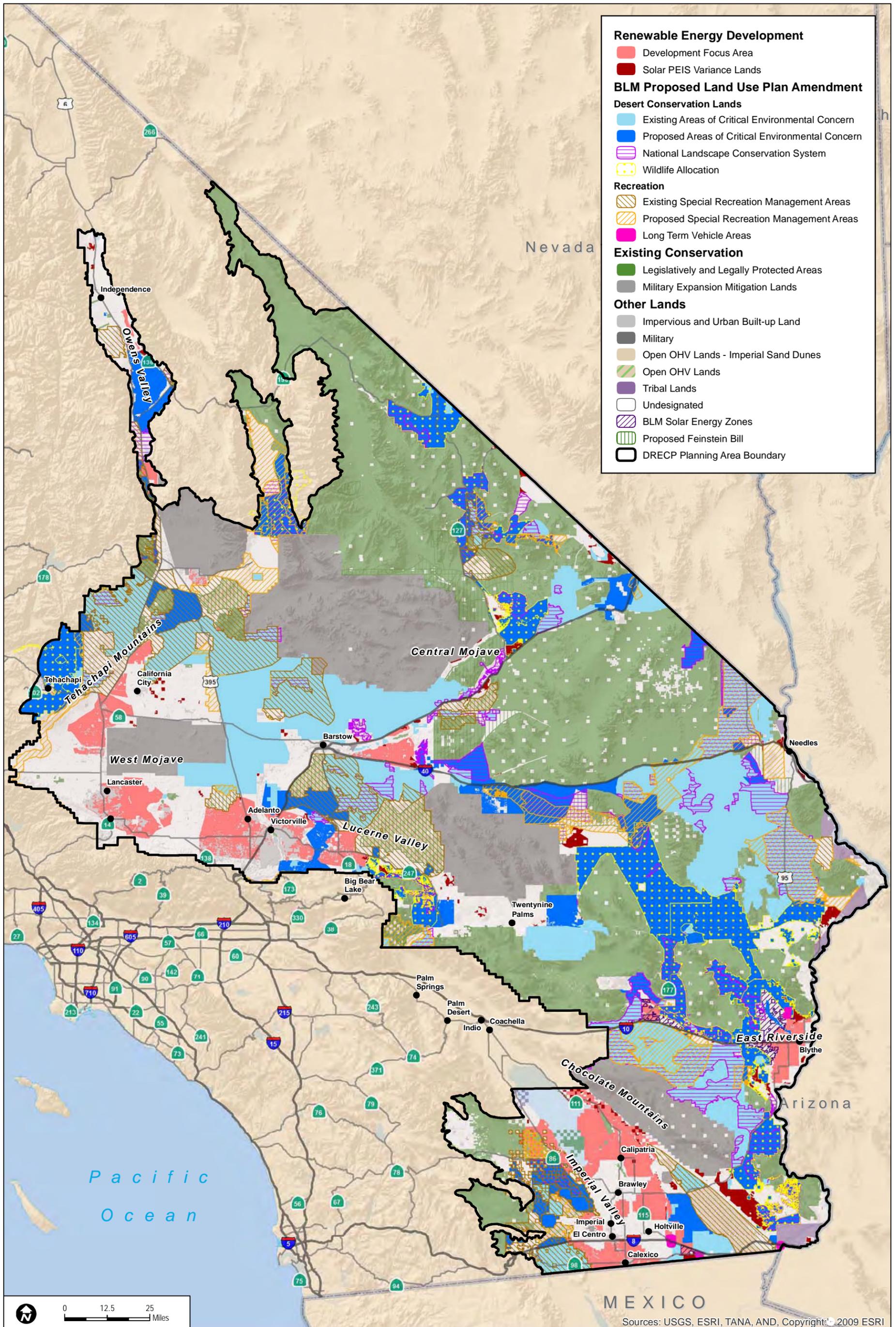


FIGURE 2.3-4

Alternative 1 - Disturbed Lands/Low Resource Conflict Alternative: BLM Proposed Land Use Plan Amendment

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.4 Interagency Description of Alternative 2

The following tables and figures present detailed information for Alternative 2. Refer to Appendix D for Alternative 2 specific descriptions, including allowable and non-allowable uses, and maps for LUPA ACECs, NLCS lands, and SRMAs.

Figure 2.4-1 presents the integrated alternative showing the DFAs and the Alternative 2 conservation area including proposed LUPA designations and conservation planning areas. Table 2.4-4 provides acreages for the map categories shown on Figure 2.4-1. Table 2.4-6 presents an acreage summary for the Alternative 2 conservation area. Detailed breakouts for each biological resource element by ecoregion within the Alternative 2 conservation area are provided in Section 4.1 and Appendix B.

Figure 2.4-2 highlights the DFAs for Alternative 2 and Tables 2.4-1, 2.4-2, 2.4-3, and 2.4-5 show the distribution of Alternative 2 DFAs by land ownership class, by ecoregional subarea and by county.

Figure 2.4-3 shows the Alternative 2 BLM LUPA. Detailed LUPA maps and work sheets for Alternative 2 are included in Appendix D. A table summarizing LUPA acreages for each alternative is provided in the Executive Summary.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.4-1
Alternative 2 Development Focus Area and Conservation Area Reserve System by Land Ownership Class (acres)

Alternative 2	Land Ownership Class							
	Federal	State	Local	Municipal	Non-Profit	Private	Tribal Lands	Total
Development Focus Areas (DFAs)	380,487	19,732	227	49,541		1,373,332		1,823,319
Conservation Area Reserve System	13,046,101	632,123	5,239	127,866	3,750	2,116,867	0	15,931,946
Existing Conservation								
Legislatively and Legally Protected Areas	7,127,746	334,210			3,522	2,493		7,467,971
Military Expansion Mitigation Lands	95,802							95,802
Proposed Conservation								
HBS-Public	3,721,915							3,721,915
MBS-Public	988,988							988,988
Undesignated	71,163							71,163
Impervious and Urban Built-up Land	28,735							28,735
Planned Conservation								
HBS-Public	473,371	168,214	970	36,464	188			679,208
MBS-Public	531,024	129,698	4,269	91,401	40			756,432
HBS-Private	4,467					1,026,456		1,030,922
MBS-Private	2,890					1,087,919		1,090,809
Other Lands	3,635,742	18,619	3,115	140,122	41	901,455	132,528	4,831,623
Impervious and Urban Built-up Land	17,466	327	2,867	3,045	41	315,179	3,968	342,894
Military	2,933,016					728		2,933,744
Open OHV Lands	352,769	2,570				22,782		378,121
Open OHV Lands - Imperial Sand Dunes	132,987	30				850		133,868
Tribal Lands	124						128,560	128,684
Undesignated	199,380	15,691	248	137,077		561,914		914,311
Total	17,062,330	670,474	8,581	317,529	3,791	4,391,654	132,528	22,586,888

Note: All acreages are estimates and subject to change

Local includes County, City, and Special District

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

HBS-Private and MBS-Private lands include acreage identified as Federal due to the coding of a portion of the Catellus lands transfers.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.4-2

Alternative 2 Development Focus Areas by County and Aggregated Land Ownership

DFA by County by Aggregated Ownership	Acres
Imperial County	482,224
Private	347,107
Public/Quasi-public/Other	135,116
Inyo County	56,232
Private	18,687
Public/Quasi-public/Other	37,545
Kern County	351,359
Private	324,927
Public/Quasi-public/Other	26,432
Los Angeles County	238,815
Private	238,079
Public/Quasi-public/Other	736
Riverside County	265,914
Private	90,474
Public/Quasi-public/Other	175,439
San Bernardino County	428,775
Private	354,058
Public/Quasi-public/Other	74,717
Total	1,823,319

Note: All acreages are estimates and subject to change

Table 2.4-3

Alternative 2 Development Focus Areas by Ecoregional Subarea

DFA by Ecoregional Subarea	Acres
Cadiz Valley and Chocolate Mountains	265,942
Imperial Borrego Valley	482,196
Kingston and Funeral Mountains	39,979
Mojave and Silurian Valley	73,149
Owens River Valley	21,783
Panamint Death Valley	6,055
Pinto Lucerne Valley and Eastern Slopes	143,057
Providence and Bullion Mountains	17,333
West Mojave and Eastern Slopes	773,826
Total	1,823,319

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.4-4
Integrated Alternative 2 (acres)**

Alternative 2 DFAs and Conservation Area Reserve System and Other Lands	BLM Land Use Plan Amendment						Total
	DCLs			Non-DCLs			
	Non-SRMA	SRMA	DCLs Subtotal	Non-SRMA	SRMA	Non-DCLs Subtotal	
Development Focus Areas (DFAs)	11,706	6,782	18,488	1,751,401	53,431	1,804,831	1,823,319
Conservation Area Reserve System	5,790,516	1,183,468	6,973,984	8,384,229	573,732	8,957,961	15,931,946
Existing Conservation							
Legislatively and Legally Protected Areas	788,441	143,742	932,183	6,347,031	188,757	6,535,788	7,467,971
Military Expansion Mitigation Lands	74,701	15,364	90,066	3,989	1,748	5,736	95,802
Proposed Conservation							
HBS-Public	2,927,352	794,563	3,721,915				3,721,915
MBS-Public	952,171	36,817	988,988				988,988
Undesignated	51,533	19,630	71,163				71,163
Impervious and Urban Built-up Land	24,225	4,510	28,735				28,735
Planned Conservation							
HBS-Public	122,355	5,190	127,545	441,326	110,336	551,662	679,208
MBS-Public	54,555	2,988	57,543	535,210	163,680	698,889	756,432
HBS-Private	504,673	107,069	611,743	394,988	24,192	419,180	1,030,922
MBS-Private	290,509	53,594	344,103	661,686	85,020	746,706	1,090,809
Other Lands	159,192	19,546	178,738	4,076,033	576,851	4,652,884	4,831,623
Impervious and Urban Built-up Land	15,728	1,276	17,004	319,690	6,199	325,890	342,894
Military	46,157	24	46,181	2,874,181	13,382	2,887,563	2,933,744
Open OHV Lands	515	14,356	14,871	3,952	359,298	363,250	378,121
Open OHV Lands - Imperial Sand Dunes	109	1,365	1,474	295	132,099	132,394	133,868
Tribal Lands	68		68	128,362	254	128,616	128,684
Undesignated	96,615	2,525	99,139	749,553	65,618	815,171	914,311
Total	5,961,414	1,209,796	7,171,211	14,211,663	1,204,014	15,415,677	22,586,888

Note: All acreages are estimates and subject to change

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

DCLs: BLM Desert Conservation Lands designations (Area of Critical Environmental Concern, National Landscape Conservation System, Wildlife); SRMA: Special Recreation Management Area

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.4-5
Alternative 2 Technology Types within Development Focus Areas by County**

DFA's by Technology Type by County	Acres
Imperial County	482,224
Geothermal	113,773
Solar	141,476
Solar and Geothermal	221,934
Solar and Wind	167
Solar, Wind and Geothermal	4,874
Inyo County	56,232
Geothermal	6,177
Solar	42,371
Solar and Geothermal	7,684
Kern County	351,359
Solar	159,596
Solar and Wind	191,764
Los Angeles County	238,815
Solar	238,815
Solar and Wind	0
Riverside County	265,914
Solar	117,992
Solar and Wind	147,922
San Bernardino County	428,775
Geothermal	493
Solar	184,012
Solar and Wind	244,270
Total	1,823,319

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.4-6
Alternative 2 Conservation Area Reserve System Summary**

Alternative 2 Conservation Area Reserve System	Acres	% of the Plan-wide Reserve Context
<i>Existing Conservation</i>	7,563,773	100%
Legislatively and Legally Protected Areas	7,467,971	100%
Military Expansion Mitigation Lands	95,802	100%
<i>Proposed and Planned Conservation</i>	8,368,173	—
HBS-Public	4,401,123	98%
Proposed Conservation	3,721,915	—
Planned Conservation	679,208	—
MBS-Public	1,745,420	92%
Proposed Conservation	988,988	—
Planned Conservation	756,432	—
Planned Conservation - HBS-Private	1,030,922	96%
Planned Conservation - MBS-Private	1,090,809	86%
Proposed Conservation - Undesignated	71,163	—
Proposed Conservation - Impervious and Urban Built-up Land	28,735	—
Conservation Area Reserve System Total	15,931,946	98%

Note: All acreages are estimates and subject to change

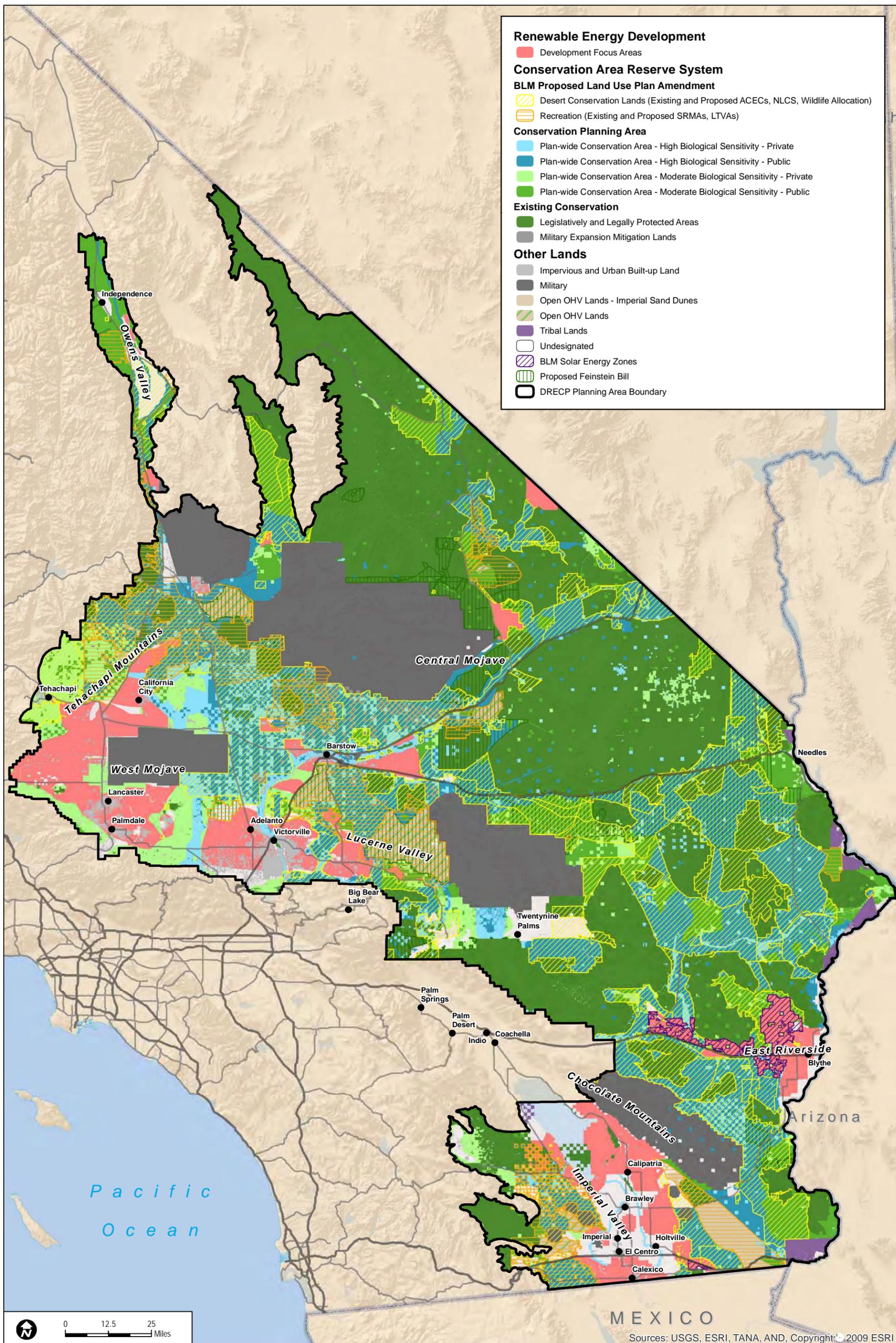


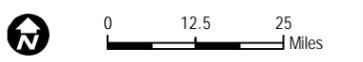
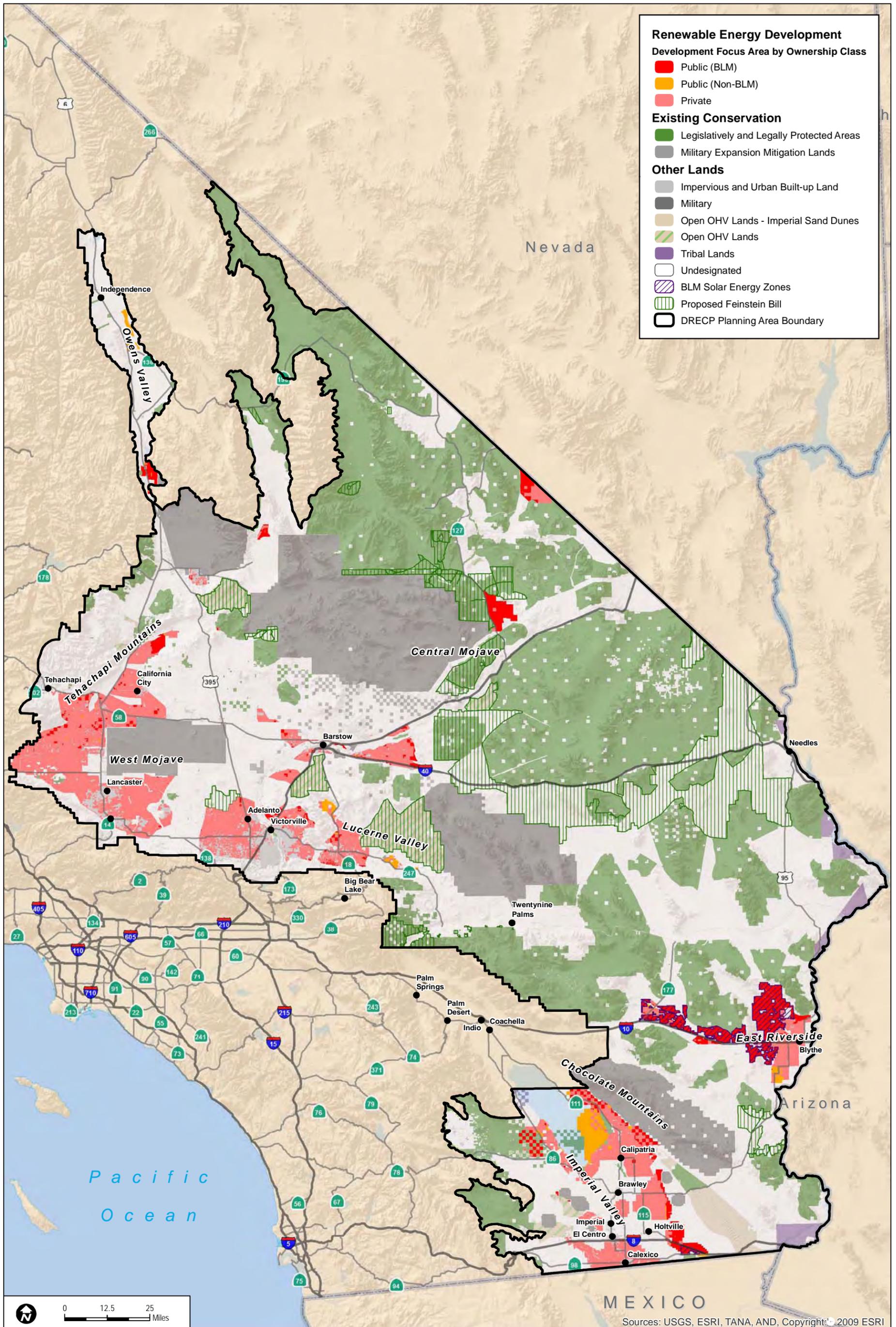
FIGURE 2.4-1

Alternative 2 - Geographically Balanced/Transmission Aligned Alternative B: Integrated

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright © 2009 ESRI

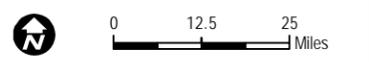
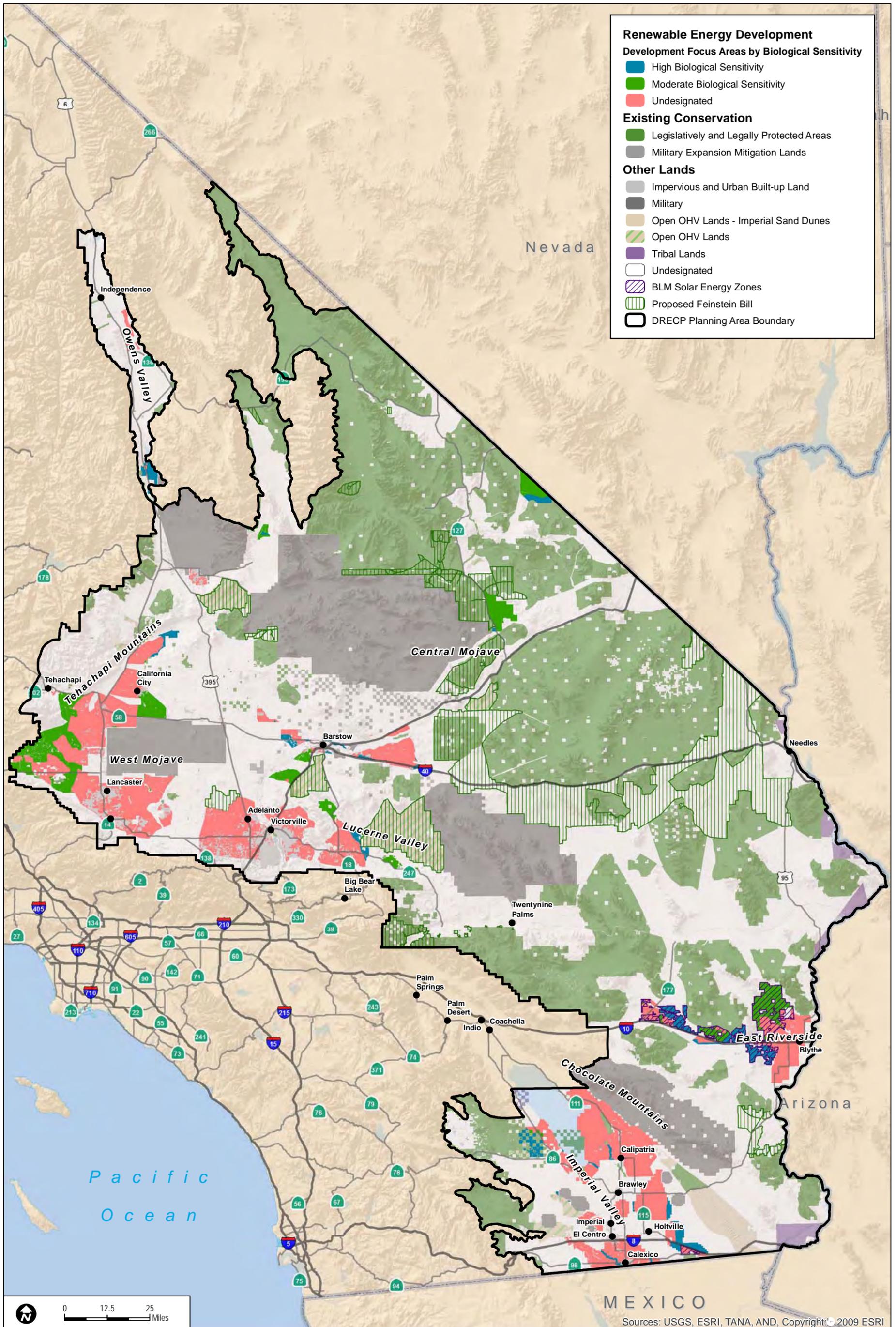
FIGURE 2.4-2
Alternative 2 - Geographically Balanced/Transmission Aligned Alternative B: Development Focus Areas by Ownership Class

Desert Renewable Energy Conservation Plan (DRECP)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright: © 2009 ESRI

FIGURE 2.4-3

Alternative 2 - Geographically Balanced/Transmission Aligned Alternative B: Development Focus Areas by Biological Sensitivity

Desert Renewable Energy Conservation Plan (DRECP)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.5 Interagency Description of Alternative 3

The following tables and figures present detailed information for Alternative 3. Refer to Appendix D for Alternative 3 specific descriptions, including allowable and non-allowable uses, and maps for LUPA ACECs, NLCS lands, and SRMAs.

Figure 2.5-1 presents the integrated alternative showing the DFAs and the Alternative 3 conservation area including proposed LUPA designations and conservation planning areas. Table 2.5-4 provides acreages for the map categories shown on Figure 2.5-1. Table 2.5-6 presents an acreage summary for the Alternative 3 conservation area. Detailed breakouts for each biological resource element by ecoregion within the Alternative 3 conservation area are provided in Section 4.1 and Appendix B.

Figure 2.5-2 highlights the DFAs for Alternative 3 and Tables 2.5-1, 2.5-2, 2.5-3, and 2.5-5 show the distribution of Alternative 3 DFAs by land ownership class, by ecoregional subarea and by county.

Figure 2.5-3 shows the Alternative 3 BLM LUPA. Detailed LUPA maps and work sheets for Alternative 3 are included in Appendix D. A table summarizing LUPA acreages for each alternative is provided in the Executive Summary.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.5-1
Alternative 3 Development Focus Area and Conservation Area Reserve System by Land Ownership Class (acres)**

Alternative 3	Land Ownership Class							
	Federal	State	Local	Municipal	Non-Profit	Private	Tribal Lands	Total
Development Focus Areas (DFAs)	344,457	22,918	178	40,663		1,260,577		1,668,793
Conservation Area Reserve System	13,064,761	628,426	5,235	128,011	3,750	2,067,871	0	15,898,053
Existing Conservation								
Legislatively and Legally Protected Areas	7,127,620	334,210			3,522	2,493		7,467,845
Military Expansion Mitigation Lands	95,802							95,802
Proposed Conservation								
HBS-Public	3,698,628							3,698,628
MBS-Public	894,275							894,275
Undesignated	69,985							69,985
Impervious and Urban Built-up Land	26,923							26,923
Planned Conservation								
HBS-Public	484,878	172,384	4,403	36,619	227			698,511
MBS-Public	659,292	121,832	831	91,393				873,348
HBS-Private	4,467					1,438,474		1,442,941
MBS-Private	2,890					626,903		629,794
Other Lands	3,653,113	19,130	3,169	148,854	41	1,063,208	132,528	5,020,042
Impervious and Urban Built-up Land	19,233	327	2,867	3,045	41	315,179	3,968	344,661
Military	2,933,019					728		2,933,747
Open OHV Lands	352,775	2,580				22,787		378,142
Open OHV Lands - Imperial Sand Dunes	132,987	30				850		133,868
Tribal Lands	124						128,560	128,684
Undesignated	214,975	16,193	302	145,808		723,663		1,100,941
Total	17,062,331	670,474	8,581	317,529	3,791	4,391,656	132,528	22,586,889

Note: All acreages are estimates and subject to change

Local includes County, City, and Special District

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

HBS-Private and MBS-Private lands include acreage identified as Federal due to the coding of a portion of the Catellus lands transfers.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.5-2

Alternative 3 Development Focus Areas by County and Aggregated Land Ownership

DFA by County by Aggregated Ownership	Acres
Imperial County	342,079
Private	211,921
Public/Quasi-public/Other	130,159
Inyo County	19,007
Private	2,779
Public/Quasi-public/Other	16,228
Kern County	489,235
Private	370,442
Public/Quasi-public/Other	118,794
Los Angeles County	222,727
Private	222,387
Public/Quasi-public/Other	340
Riverside County	127,526
Private	85,295
Public/Quasi-public/Other	42,231
San Bernardino County	468,219
Private	367,754
Public/Quasi-public/Other	100,465
Total	1,668,793

Note: All acreages are estimates and subject to change

Table 2.5-3

Alternative 3 Development Focus Areas by Eco-regional Subarea

DFA by Eco-regional Subarea	Acres
Cadiz Valley and Chocolate Mountains	127,554
Imperial Borrego Valley	342,052
Mojave and Silurian Valley	46,559
Owens River Valley	13,861
Panamint Death Valley	1
Pinto Lucerne Valley and Eastern Slopes	189,918
Providence and Bullion Mountains	14,636
West Mojave and Eastern Slopes	934,212
Total	1,668,793

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.5-4
Integrated Alternative 3 (acres)**

Alternative 3 DFAs and Conservation Area Reserve System and Other Lands	BLM Land Use Plan Amendment						Total
	DCLs			Non-DCLs			
	Non-SRMA	SRMA	DCLs Subtotal	Non-SRMA	SRMA	Non-DCLs Subtotal	
Development Focus Areas (DFAs)	25,711	75,504	101,215	1,439,474	128,104	1,567,578	1,668,793
Conservation Area Reserve System	4,643,406	2,139,164	6,782,570	8,191,421	924,063	9,115,483	15,898,053
Existing Conservation							
Legislatively and Legally Protected Areas	638,794	267,247	906,041	6,302,227	259,577	6,561,804	7,467,845
Military Expansion Mitigation Lands	74,701	15,364	90,066	3,989	1,748	5,736	95,802
Proposed Conservation							
HBS-Public	2,293,407	1,405,222	3,698,628				3,698,628
MBS-Public	723,857	170,419	894,275				894,275
Undesignated	54,050	15,934	69,985				69,985
Impervious and Urban Built-up Land	16,915	10,008	26,923				26,923
Planned Conservation							
HBS-Public	100,216	28,524	128,741	383,989	185,782	569,771	698,511
MBS-Public	41,859	8,229	50,088	496,848	326,413	823,261	873,348
HBS-Private	515,294	146,085	661,379	717,097	64,466	781,563	1,442,941
MBS-Private	184,313	72,132	256,445	287,271	86,078	373,349	629,794
Other Lands	155,422	20,670	176,092	4,243,704	600,246	4,843,950	5,020,042
Impervious and Urban Built-up Land	14,426	2,107	16,532	316,147	11,981	328,129	344,661
Military	45,850	208	46,059	2,871,260	16,429	2,887,689	2,933,747
Open OHV Lands	485	14,460	14,946	1,096	362,100	363,196	378,142
Open OHV Lands - Imperial Sand Dunes	108	1,363	1,472	295	132,101	132,396	133,868
Tribal Lands	68	0	68	126,145	2,471	128,616	128,684
Undesignated	94,485	2,531	97,016	928,761	75,164	1,003,924	1,100,941
Total	4,824,540	2,235,338	7,059,878	13,874,599	1,652,412	15,527,011	22,586,889

Note: All acreages are estimates and subject to change

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

DCLs: BLM Desert Conservation Lands designations (Area of Critical Environmental Concern, National Landscape Conservation System, Wildlife); SRMA: Special Recreation Management Area

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.5-5
Alternative 3 Technology Types within Development Focus Areas by County**

DFAs by Technology Type by County	Acres
Imperial County	342,079
Geothermal	336,506
Solar	5,555
Solar and Wind	19
Inyo County	19,007
Geothermal	13,861
Solar	5,146
Kern County	489,235
Solar	298,624
Solar and Wind	190,611
Los Angeles County	222,727
Solar	222,727
Riverside County	127,526
Solar	88,637
Solar and Wind	38,889
San Bernardino County	468,219
Geothermal	493
Solar	177,171
Solar and Wind	290,554
Total	1,668,793

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.5-6
Alternative 3 Conservation Area Reserve System Summary**

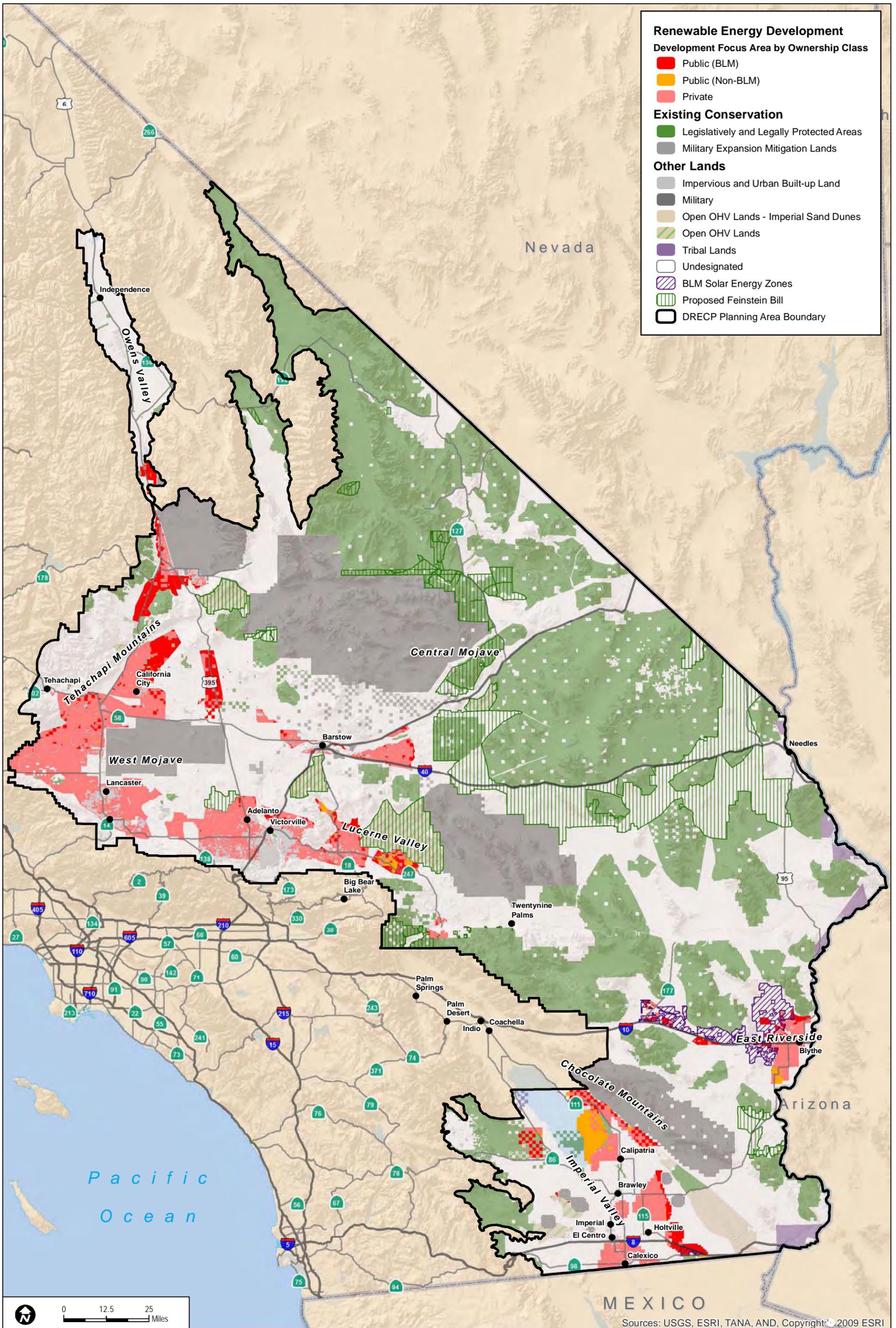
Alternative 3 Conservation Area Reserve System	Acres	% of the Plan-wide Reserve Context
<i>Existing Conservation</i>	7,563,647	100%
Legislatively and Legally Protected Areas	7,467,845	100%
Military Expansion Mitigation Lands	95,802	100%
<i>Proposed and Planned Conservation</i>	8,334,407	—
HBS-Public	4,397,140	97%
Proposed Conservation	3,698,628	—
Planned Conservation	698,511	—
MBS-Public	1,767,624	94%
Proposed Conservation	894,275	—
Planned Conservation	873,348	—
Planned Conservation - HBS-Private	1,442,941	135%
Planned Conservation - MBS-Private	629,794	50%
Proposed Conservation - Undesignated	69,985	—
Proposed Conservation - Impervious and Urban Built-up Land	26,923	—
Conservation Area Reserve System Total	15,898,053	97%

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

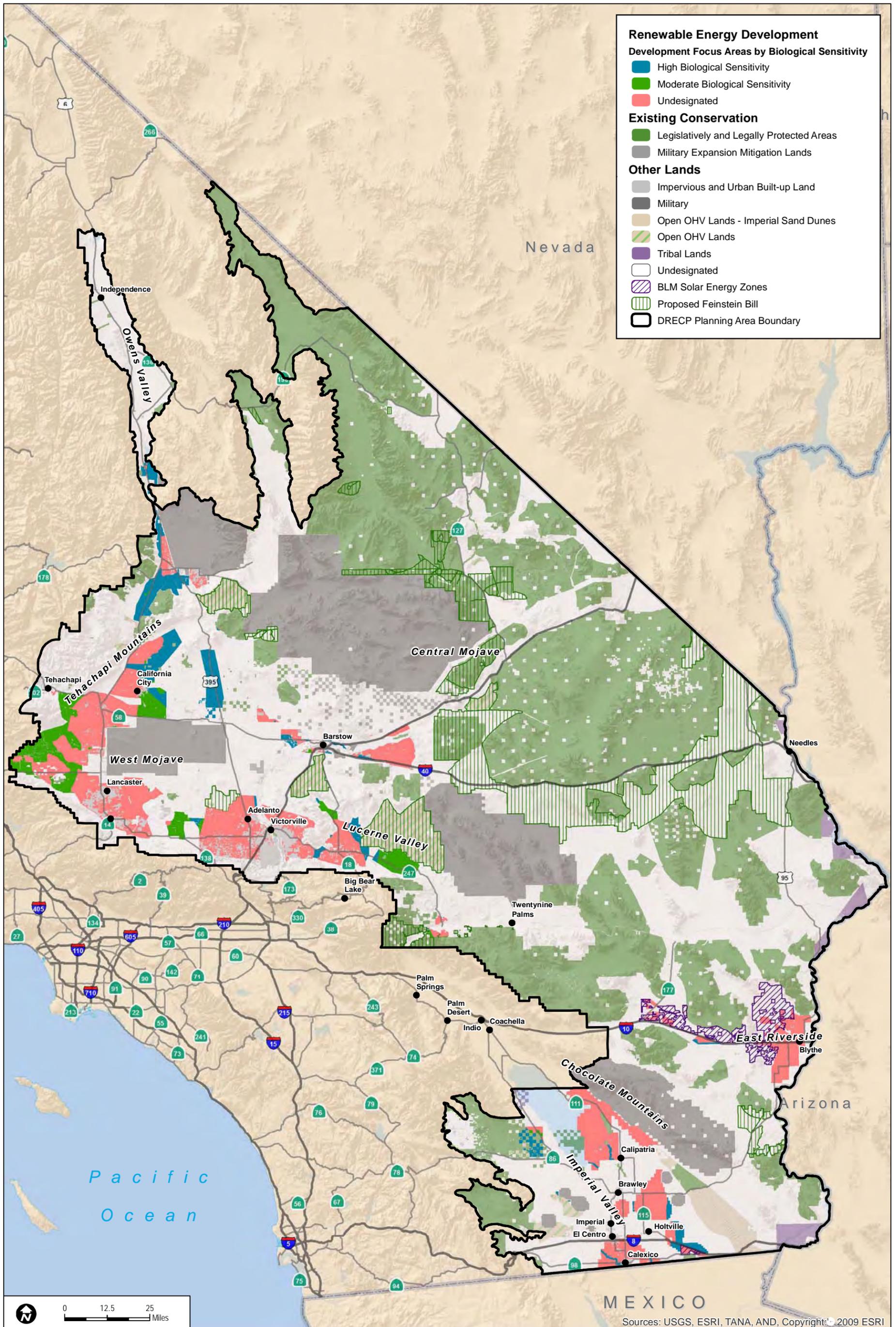
FIGURE 2.5-2

Alternative 3 - West Mojave Emphasis Alternative: Development Focus Areas by Ownership Class

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Renewable Energy Development

Development Focus Areas by Biological Sensitivity

- High Biological Sensitivity
- Moderate Biological Sensitivity
- Undesignated

Existing Conservation

- Legislatively and Legally Protected Areas
- Military Expansion Mitigation Lands

Other Lands

- Impervious and Urban Built-up Land
- Military
- Open OHV Lands - Imperial Sand Dunes
- Open OHV Lands
- Tribal Lands
- Undesignated
- BLM Solar Energy Zones
- Proposed Feinstein Bill
- DRECP Planning Area Boundary

0 12.5 25 Miles

Sources: USGS, ESRI, TANA, AND, Copyright © 2009 ESRI

Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

FIGURE 2.5-3

Alternative 3 - West Mojave Emphasis Alternative: Development Focus Areas by Biological Sensitivity

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

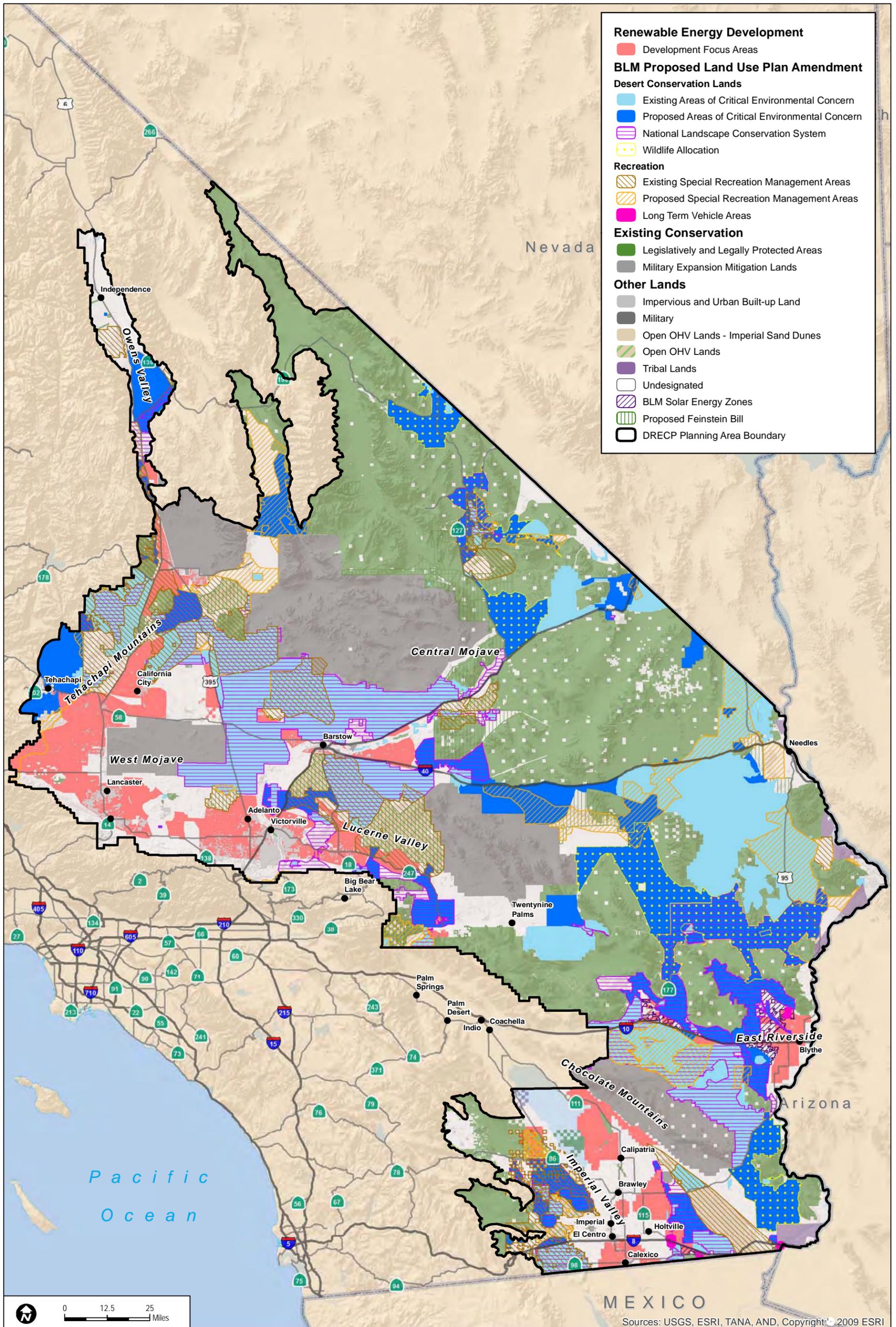


FIGURE 2.5-4

Alternative 3 - West Mojave Emphasis Alternative: BLM Proposed Land Use Plan Amendment

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.6 Interagency Description of Alternative 4

The following tables and figures present detailed information for Alternative 4. Refer to Appendix D for Alternative 4 specific descriptions, including allowable and non-allowable uses, and maps for LUPA ACECs, NLCS lands, and SRMAs.

Figure 2.6-1 presents the integrated alternative showing the DFAs and the Alternative 1 conservation area including proposed LUPA designations and conservation planning areas. Table 2.6-4 provides acreages for the map categories shown on Figure 2.6-1. Table 2.6-6 presents an acreage summary for the Alternative 4 conservation area. Detailed breakouts for each biological resource element by ecoregion within the Alternative 4 conservation area are provided in Section 4.1 and Appendix B.

Figure 2.6-2 highlights the DFAs for Alternative 4 and Tables 2.6-1, 2.6-2, 2.6-3, and 2.6-5 show the distribution of Alternative 4 DFAs by land ownership class, by ecoregional subarea and by county.

Figure 2.6-3 shows the Alternative 4 BLM LUPA. Detailed LUPA maps and work sheets for Alternative 4 are included in Appendix D. A table summarizing LUPA acreages for each alternative is provided in the Executive Summary.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.6-1

Alternative 4 Development Focus Area and Conservation Area Reserve System by Land Ownership Class (acres)

Alternative 4	Land Ownership Class							
	Federal	State	Local	Municipal	Non-Profit	Private	Tribal Lands	Total
Development Focus Areas (DFAs)	234,230	19,568	227	49,543		1,168,930		1,472,498
Reserve Design	13,190,241	632,240	5,239	127,866	3,750	2,258,626	0	16,217,961
Existing Conservation								
Legislatively and Legally Protected Areas	7,127,746	334,210			3,522	2,493		7,467,971
Military Expansion Mitigation Lands	95,802							95,802
Proposed Conservation								
HBS-Public	3,759,283							3,759,283
MBS-Public	1,062,518							1,062,518
Undesignated	71,481							71,481
Impervious and Urban Built-up Land	28,810							28,810
Planned Conservation								
HBS-Public	486,519	168,214	970	36,464	188			692,356
MBS-Public	550,725	129,816	4,269	91,401	40			776,251
HBS-Private	4,467					1,034,043		1,038,510
MBS-Private	2,890					1,222,090		1,224,980
Other Lands	3,637,860	18,666	3,115	140,120	41	964,099	132,528	4,896,428
Impervious and Urban Built-up Land	17,392	327	2,867	3,045	41	315,179	3,968	342,820
Military	2,933,019					728		2,933,747
Open OHV Lands	352,773	2,570				22,781		378,125
Open OHV Lands - Imperial Sand Dunes	132,985	30				850		133,865
Tribal Lands	124						128,560	128,684
Undesignated	201,568	15,738	248	137,074		624,559		979,187
Total	17,062,330	670,474	8,581	317,529	3,791	4,391,654	132,528	22,586,888

Note: All acreages are estimates and subject to change

Local includes County, City, and Special District

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

HBS-Private and MBS-Private lands include acreage identified as Federal due to the coding of a portion of the Catellus lands transfers.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.6-2

Alternative 4 Development Focus Areas by County and Aggregated Land Ownership

DFA by County by Aggregated Ownership	Acres
Imperial County	502,377
Private	348,945
Public/Quasi-public/Other	153,432
Inyo County	24,325
Private	2,666
Public/Quasi-public/Other	21,659
Kern County	232,863
Private	214,830
Public/Quasi-public/Other	18,032
Los Angeles County	177,603
Private	176,973
Public/Quasi-public/Other	630
Riverside County	135,044
Private	90,006
Public/Quasi-public/Other	45,038
San Bernardino County	400,287
Private	335,511
Public/Quasi-public/Other	64,776
Total	1,472,498

Note: All acreages are estimates and subject to change

Table 2.6-3

Alternative 4 Development Focus Areas by Ecoregional Subarea

DFA by Ecoregional Subarea	Acres
Cadiz Valley and Chocolate Mountains	135,072
Imperial Borrego Valley	502,350
Mojave and Silurian Valley	46,560
Owens River Valley	21,783
Panamint Death Valley	32,098
Pinto Lucerne Valley and Eastern Slopes	143,569
Providence and Bullion Mountains	17,333
West Mojave and Eastern Slopes	573,734
Total	1,472,498

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.6-4
Integrated Alternative 4 (acres)**

Alternative 4 DFAs and Conservation Area Reserve System and Other Lands	BLM Land Use Plan Amendment						Total
	DCLs			Non-DCLs			
	Non-SRMA	SRMA	DCLs Subtotal	Non-SRMA	SRMA	Non-DCLs Subtotal	
Development Focus Areas (DFAs)	9,266	7,141	16,407	1,369,412	86,679	1,456,091	1,472,498
Conservation Area Reserve System	4,694,499	2,400,378	7,094,877	8,287,337	835,748	9,123,085	16,217,961
Existing Conservation							
Legislatively and Legally Protected Areas	653,083	279,102	932,185	6,287,426	248,360	6,535,786	7,467,971
Military Expansion Mitigation Lands	74,701	15,364	90,066	3,989	1,748	5,736	95,802
Proposed Conservation							
HBS-Public	2,281,771	1,477,512	3,759,283				3,759,283
MBS-Public	754,692	307,825	1,062,518				1,062,518
Undesignated	53,589	17,892	71,481				71,481
Impervious and Urban Built-up Land	16,844	11,965	28,810				28,810
Planned Conservation							
HBS-Public	99,273	28,273	127,545	366,861	197,950	564,811	692,356
MBS-Public	42,808	14,754	57,562	507,019	211,670	718,689	776,251
HBS-Private	471,524	140,210	611,734	385,507	41,268	426,776	1,038,510
MBS-Private	246,213	107,480	353,693	736,535	134,752	871,287	1,224,980
Other Lands	157,714	21,182	178,896	4,125,635	591,898	4,717,532	4,896,428
Impervious and Urban Built-up Land	14,339	2,658	16,998	314,591	11,230	325,822	342,820
Military	45,850	331	46,181	2,871,260	16,306	2,887,566	2,933,747
Open OHV Lands	475	14,293	14,768	1,102	362,255	363,357	378,125
Open OHV Lands - Imperial Sand Dunes	109	1,365	1,474	295	132,097	132,391	133,865
Tribal Lands	68		68	128,306	310	128,616	128,684
Undesignated	96,872	2,534	99,407	810,081	69,700	879,781	979,187
Total	4,861,479	2,428,701	7,290,179	13,782,384	1,514,324	15,296,708	22,586,888

Note: All acreages are estimates and subject to change

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

DCLs: BLM Desert Conservation Lands designations (Area of Critical Environmental Concern, National Landscape Conservation System, Wildlife); SRMA: Special Recreation Management Area

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.6-5
Alternative 4 Technology Types within Development Focus Areas by County**

DFAs by Technology Type by County	Acres
Imperial County	502,377
Geothermal	109,392
Solar	153,318
Solar and Geothermal	226,317
Solar and Wind	8,012
Solar, Wind and Geothermal	5,338
Inyo County	24,325
Geothermal	6,177
Solar	10,464
Solar and Geothermal	7,684
Kern County	232,863
Solar	149,835
Solar and Wind	83,028
Los Angeles County	177,603
Solar	96,669
Solar and Wind	80,933
Riverside County	135,044
Solar	89,499
Solar and Wind	45,545
San Bernardino County	400,287
Geothermal	493
Solar	153,915
Solar and Wind	245,878
Total	1,472,498

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.6-6
Alternative 4 Conservation Area Reserve System Summary**

Alternative 4 Conservation Area Reserve System	Acres	% of the Plan-wide Reserve Context
<i>Existing Conservation</i>	7,563,773	100%
Legislatively and Legally Protected Areas	7,467,971	100%
Military Expansion Mitigation Lands	95,802	100%
<i>Proposed and Planned Conservation</i>	8,654,188	—
HBS-Public	4,451,640	99%
Proposed Conservation	3,759,283	—
Planned Conservation	692,356	—
MBS-Public	1,838,768	97%
Proposed Conservation	1,062,518	—
Planned Conservation	776,251	—
Planned Conservation - HBS-Private	1,038,510	97%
Planned Conservation - MBS-Private	1,224,980	96%
Proposed Conservation - Undesignated	71,481	—
Proposed Conservation - Impervious and Urban Built-up Land	28,810	—
Total	16,217,961	99%

Note: All acreages are estimates and subject to change

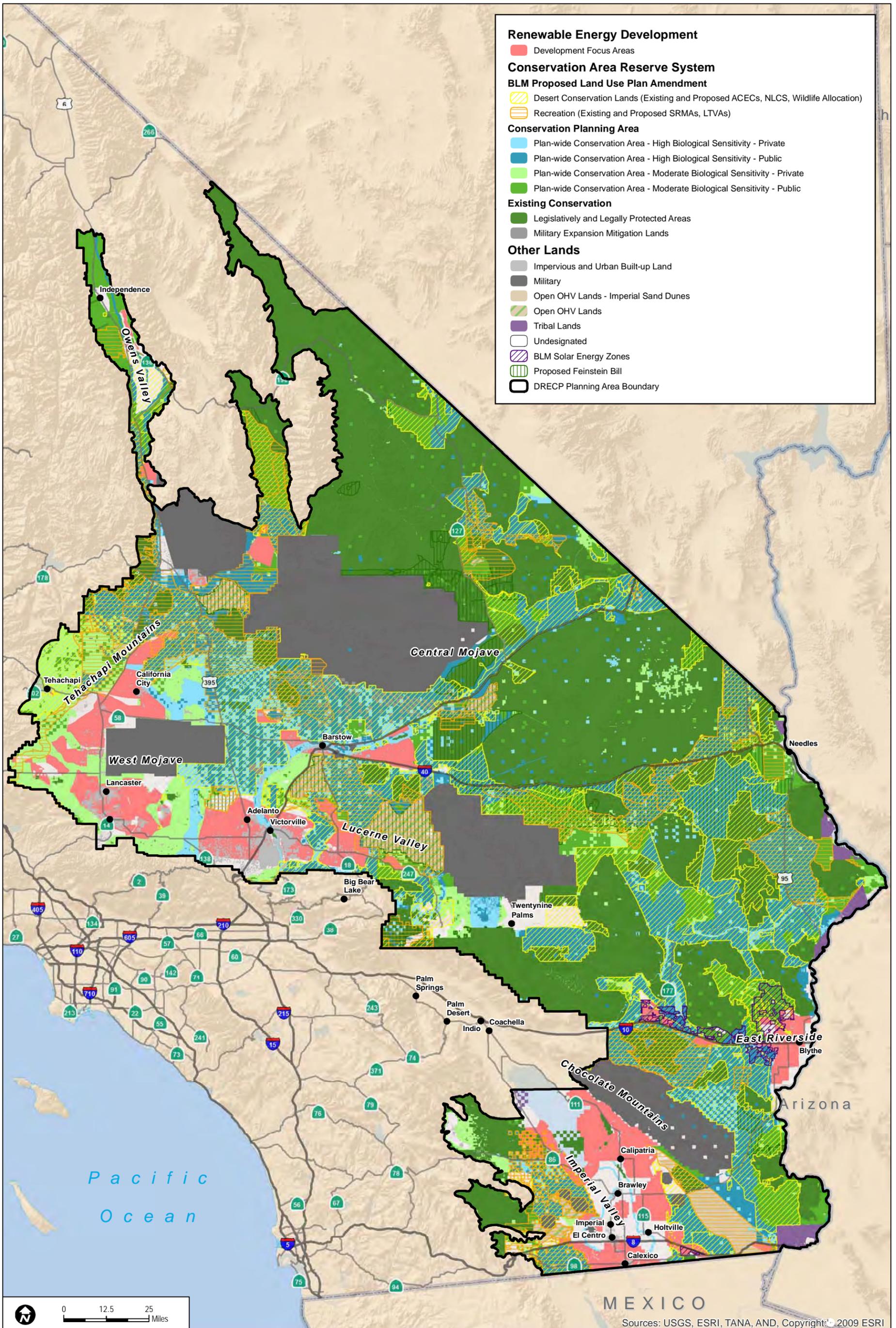


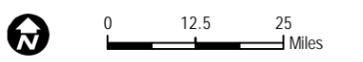
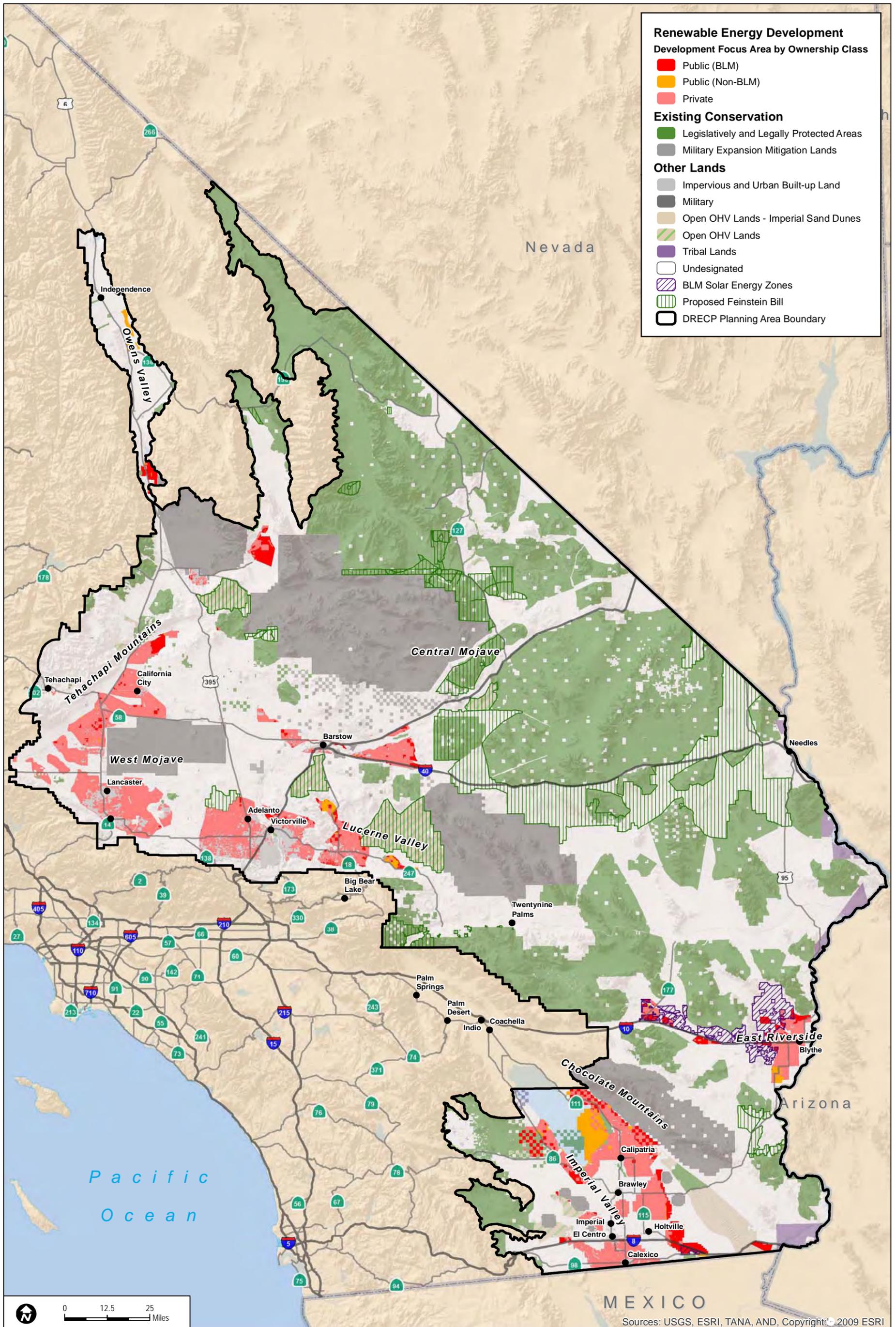
FIGURE 2.6-1

Alternative 4 - Geographically Balanced/Transmission Aligned Alternative A: Integrated

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

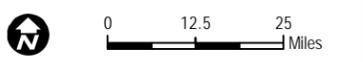
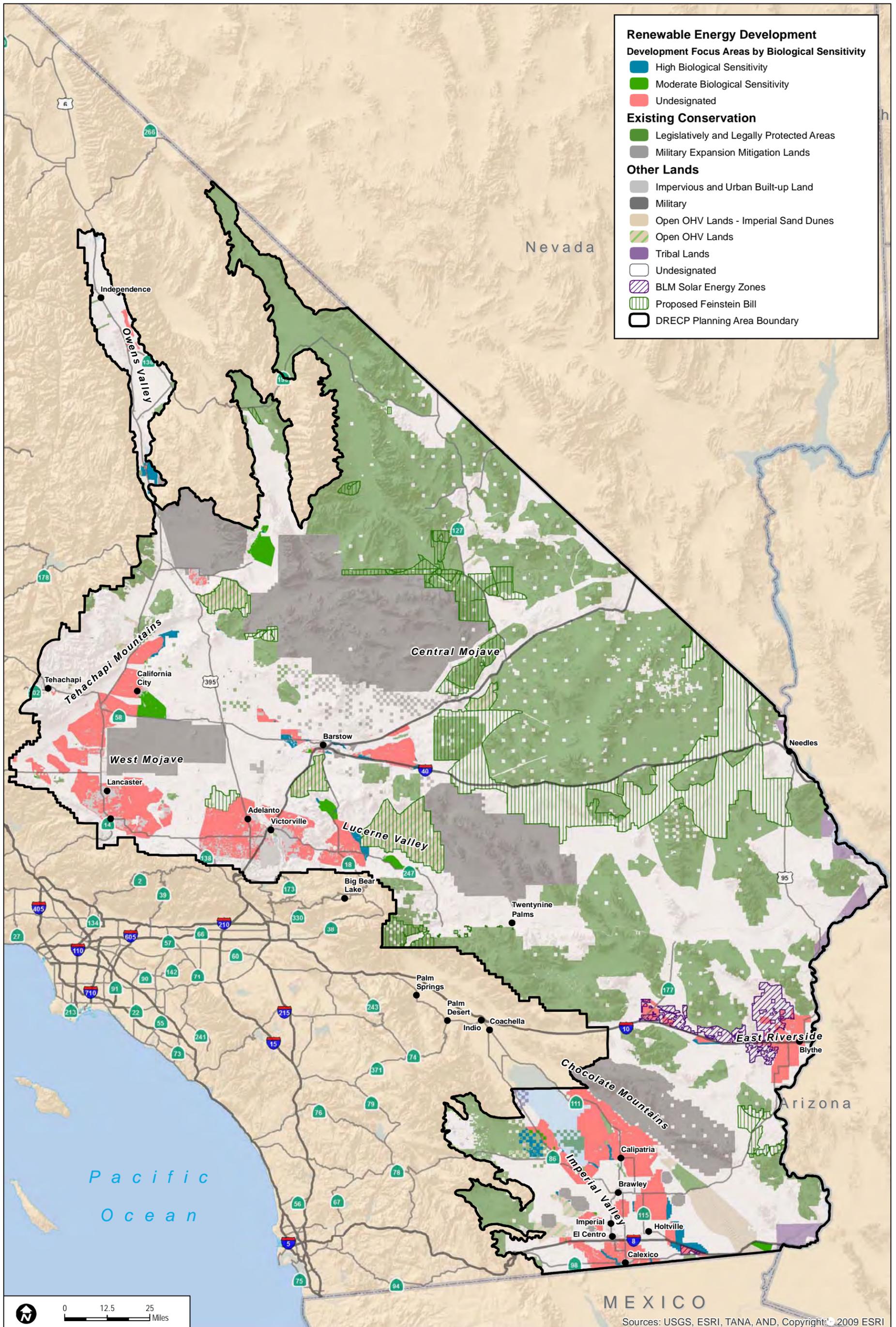
Sources: USGS, ESRI, TANA, AND, Copyright © 2009 ESRI

FIGURE 2.6-2
Alternative 4 - Geographically Balanced/Transmission Aligned Alternative A: Development Focus Areas by Ownership Class

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright: © 2009 ESRI

FIGURE 2.6-3

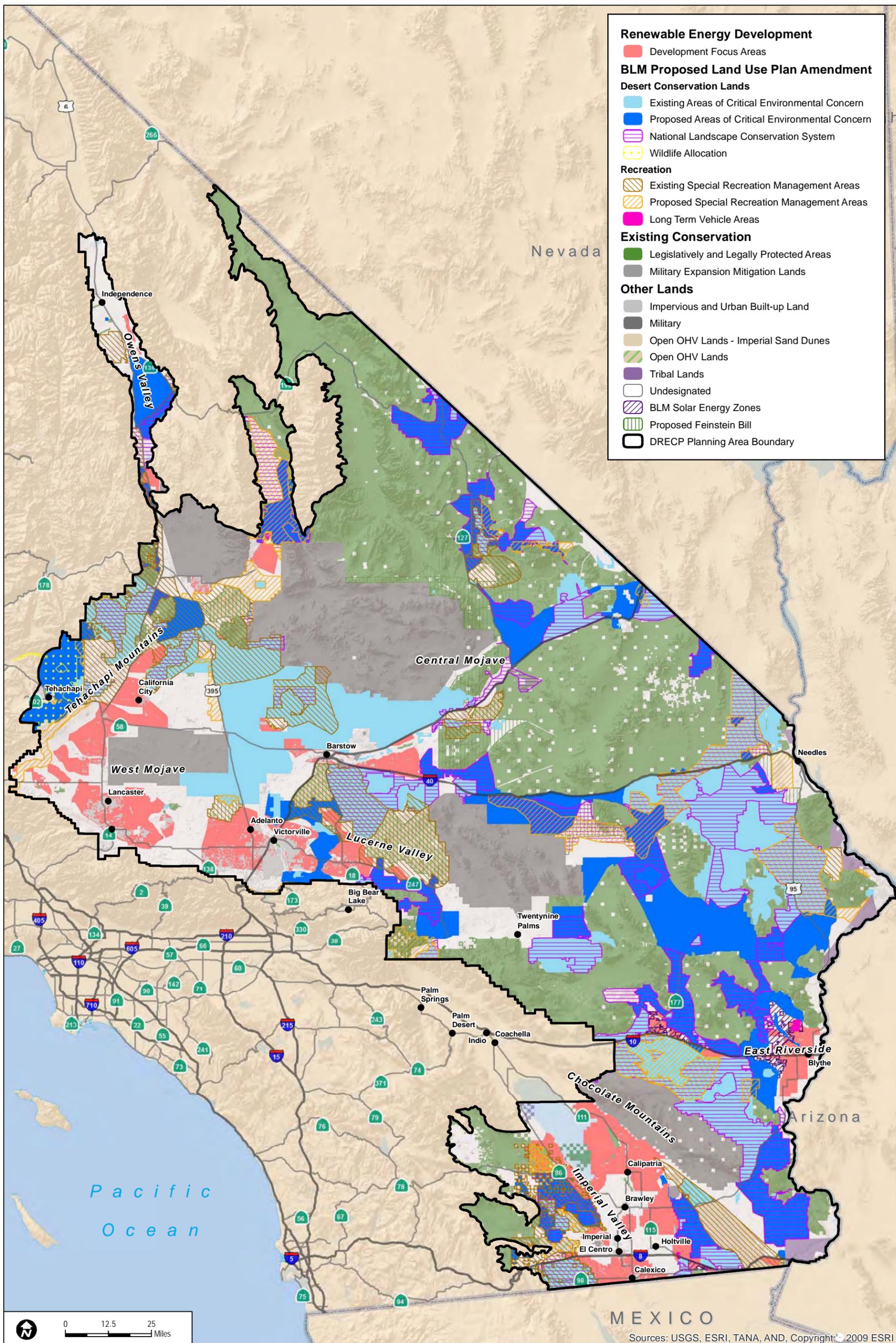
Alternative 4 - Geographically Balanced/Transmission Aligned Alternative A: Development Focus Areas by Biological Sensitivity

Desert Renewable Energy Conservation Plan (DRECP)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Renewable Energy Development

- Development Focus Areas

BLM Proposed Land Use Plan Amendment

Desert Conservation Lands

- Existing Areas of Critical Environmental Concern
- Proposed Areas of Critical Environmental Concern
- National Landscape Conservation System
- Wildlife Allocation

Recreation

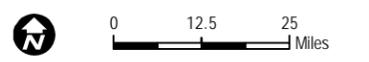
- Existing Special Recreation Management Areas
- Proposed Special Recreation Management Areas
- Long Term Vehicle Areas

Existing Conservation

- Legislatively and Legally Protected Areas
- Military Expansion Mitigation Lands

Other Lands

- Impervious and Urban Built-up Land
- Military
- Open OHV Lands - Imperial Sand Dunes
- Open OHV Lands
- Tribal Lands
- Undesignated
- BLM Solar Energy Zones
- Proposed Feinstein Bill
- DRECP Planning Area Boundary



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright © 2009 ESRI

FIGURE 2.6-4

Alternative 4 - Geographically Balanced/Transmission Aligned Alternative A: BLM Proposed Land Use Plan Amendment

Desert Renewable Energy Conservation Plan (DRECP)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.7 Interagency Description of Alternative 5

The following tables and figures present detailed information for Alternative 5. Refer to Appendix D for Alternative 5 specific descriptions, including allowable and non-allowable uses, and maps for LUPA ACECs, NLCS lands, and SRMAs.

Figure 2.7-1 presents the integrated alternative showing the DFAs and the Alternative 5 conservation area including proposed LUPA designations and conservation planning areas. Table 2.7-4 provides acreages for the map categories shown on Figure 2.7-1. Table 2.7-6 presents an acreage summary for the Alternative 5 conservation area. Detailed breakouts for each biological resource element by ecoregion within the Alternative 5 conservation area are provided in Section 4.1 and Appendix B.

Figure 2.7-2 highlights the DFAs for Alternative 5 and Tables 2.7-1, 2.7-2, 2.7-3, and 2.7-5 show the distribution of Alternative 5 DFAs by land ownership class, by ecoregional subarea and by county.

Figure 2.7-3 shows the Alternative 5 BLM LUPA. Detailed LUPA maps and work sheets for Alternative 5 are included in Appendix D. A table summarizing LUPA acreages for each alternative is provided in the Executive Summary.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.7-1
Alternative 5 Development Focus Area and Conservation Area Reserve System by Land Ownership Class (acres)**

Alternative 5	Land Ownership Class							
	Federal	State	Local	Municipal	Non-Profit	Private	Tribal Lands	Total
Development Focus Areas (DFAs)	646,275	22,271	357	54,042		1,571,411		2,294,356
Conservation Area Reserve System	12,888,811	629,905	5,176	127,219	3,750	2,134,241		15,789,102
Existing Conservation								
Legislatively and Legally Protected Areas	7,127,746	334,210			3,522	2,493		7,467,971
Military Expansion Mitigation Lands	95,802							95,802
Proposed Conservation								
HBS-Public	4,390,599							4,390,599
MBS-Public	863,525							863,525
Undesignated	129,217							129,217
Impervious and Urban Built-up Land	40,797							40,797
Planned Conservation								
HBS-Public	119,710	199,311	4,249	35,826	227			359,324
MBS-Public	114,058	96,383	927	91,393		790		303,551
HBS-Private	5,462					1,580,854		1,586,316
MBS-Private	1,896					550,104		551,999
Other Lands	3,527,245	18,298	3,048	136,268	41	686,003	132,528	4,503,432
Impervious and Urban Built-up Land	5,404	327	2,867	3,045	41	315,177	3,968	330,830
Military	2,933,018					728		2,933,746
Open OHV Lands	352,773	2,570				22,781		378,125
Open OHV Lands - Imperial Sand Dunes	132,984	30				850		133,865
Tribal Lands	124						128,560	128,684
Undesignated	102,942	15,370	181	133,222		346,466		598,182
Total	17,062,330	670,474	8,581	317,529	3,791	4,391,656	132,528	22,586,889

Note: All acreages are estimates and subject to change

Local includes County, City, and Special District

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

HBS-Private and MBS-Private lands include acreage identified as Federal due to the coding of a portion of the Catellus lands transfers.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.7-2

Alternative 5 Development Focus Areas by County and Aggregated Land Ownership

DFA by County by Aggregated Ownership	Acres
Imperial County	849,491
Private	574,390
Public/Quasi-public/Other	275,101
Inyo County	67,916
Private	20,455
Public/Quasi-public/Other	47,460
Kern County	371,858
Private	307,865
Public/Quasi-public/Other	63,993
Los Angeles County	199,152
Private	198,522
Public/Quasi-public/Other	630
Riverside County	265,914
Private	90,474
Public/Quasi-public/Other	175,439
San Bernardino County	540,025
Private	379,704
Public/Quasi-public/Other	160,321
Total	2,294,356

Note: All acreages are estimates and subject to change

Table 2.7-3

Alternative 5 Development Focus Areas by Ecoregional Subarea

DFA by Ecoregional Subarea	Acres
Cadiz Valley and Chocolate Mountains	270,317
Imperial Borrego Valley	845,089
Kingston and Funeral Mountains	39,979
Mojave and Silurian Valley	73,149
Owens River Valley	27,627
Panamint Death Valley	34,702
Pinto Lucerne Valley and Eastern Slopes	194,169
Providence and Bullion Mountains	48,419
West Mojave and Eastern Slopes	760,906
Total	2,294,356

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.7-4
Integrated Alternative 5 (acres)**

Alternative 5 DFAs and Conservation Area Reserve System and Other Lands	BLM Land Use Plan Amendment						Total
	DCLs			Non-DCLs			
	Non-SRMA	SRMA	DCLs Subtotal	Non-SRMA	SRMA	Non-DCLs Subtotal	
Development Focus Areas (DFAs)	12,649	40,707	53,356	2,136,952	104,048	2,241,000	2,294,356
Conservation Area Reserve System	4,877,655	2,651,151	7,528,805	7,746,354	513,942	8,260,296	15,789,102
Existing Conservation							
Legislatively and Legally Protected Areas	685,096	278,274	963,370	6,256,053	248,548	6,504,601	7,467,971
Military Expansion Mitigation Lands	74,701	15,365	90,066	3,989	1,747	5,736	95,802
Proposed Conservation							
HBS-Public	2,727,831	1,662,769	4,390,599				4,390,599
MBS-Public	475,096	388,429	863,525				863,525
Undesignated	95,604	33,613	129,217				129,217
Impervious and Urban Built-up Land	25,597	15,200	40,797				40,797
Planned Conservation							
HBS-Public	105,138	28,906	134,044	195,905	29,375	225,280	359,324
MBS-Public	24,367	8,098	32,465	215,956	55,130	271,086	303,551
HBS-Private	517,010	148,914	665,925	822,823	97,568	920,391	1,586,316
MBS-Private	147,214	71,583	218,797	251,629	81,573	333,202	551,999
Other Lands	143,860	74,046	217,906	3,776,983	508,542	4,285,525	4,503,432
Impervious and Urban Built-up Land	12,850	2,035	14,886	308,247	7,698	315,944	330,830
Military	46,135	357	46,492	2,870,974	16,280	2,887,254	2,933,746
Open OHV Lands	803	18,209	19,012	774	358,339	359,113	378,125
Open OHV Lands - Imperial Sand Dunes	111	50,917	51,028	293	82,544	82,837	133,865
Tribal Lands	101	1	102	128,273	309	128,582	128,684
Undesignated	83,861	2,526	86,387	468,423	43,372	511,795	598,182
Total	5,034,164	2,765,903	7,800,068	13,660,289	1,126,532	14,786,821	22,586,889

Note: All acreages are estimates and subject to change

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

DCLs: BLM Desert Conservation Lands designations (Area of Critical Environmental Concern, National Landscape Conservation System, Wildlife); SRMA: Special Recreation Management Area

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.7-5
Alternative 5 Technology Types within Development Focus Areas by County**

DFAs by Technology Type by County	Acres
Imperial County	849,491
Geothermal	109,378
Solar	371,710
Solar and Geothermal	226,317
Solar and Wind	116,358
Solar, Wind and Geothermal	5,340
Wind	20,388
Inyo County	67,916
Geothermal	6,177
Solar	31,530
Solar and Geothermal	7,684
Solar and Wind	22,524
Kern County	371,858
Solar	27,700
Solar and Wind	344,157
Los Angeles County	199,152
Solar	11,291
Solar and Wind	187,861
Riverside County	265,914
Solar	117,992
Solar and Wind	147,922
San Bernardino County	540,025
Geothermal	493
Solar	74,444
Solar and Wind	465,088
Total	2,294,356

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.7-6
Alternative 5 Conservation Area Reserve System Summary**

Alternative 5 Conservation Area Reserve System	Acres	% of the Plan-wide Reserve Context
<i>Existing Conservation</i>	7,563,773	100%
Legislatively and Legally Protected Areas	7,467,971	100%
Military Expansion Mitigation Lands	95,802	100%
<i>Proposed and Planned Conservation</i>	8,225,329	—
HBS-Public	4,749,924	105%
Proposed Conservation	4,390,599	—
Planned Conservation	359,324	—
MBS-Public	1,167,076	62%
Proposed Conservation	863,525	—
Planned Conservation	303,551	—
Planned Conservation - HBS-Private	1,586,316	148%
Planned Conservation - MBS-Private	551,999	43%
Proposed Conservation - Undesignated	129,217	—
Proposed Conservation - Impervious and Urban Built-up Land	40,797	—
Total	15,789,102	97%

Note: All acreages are estimates and subject to change

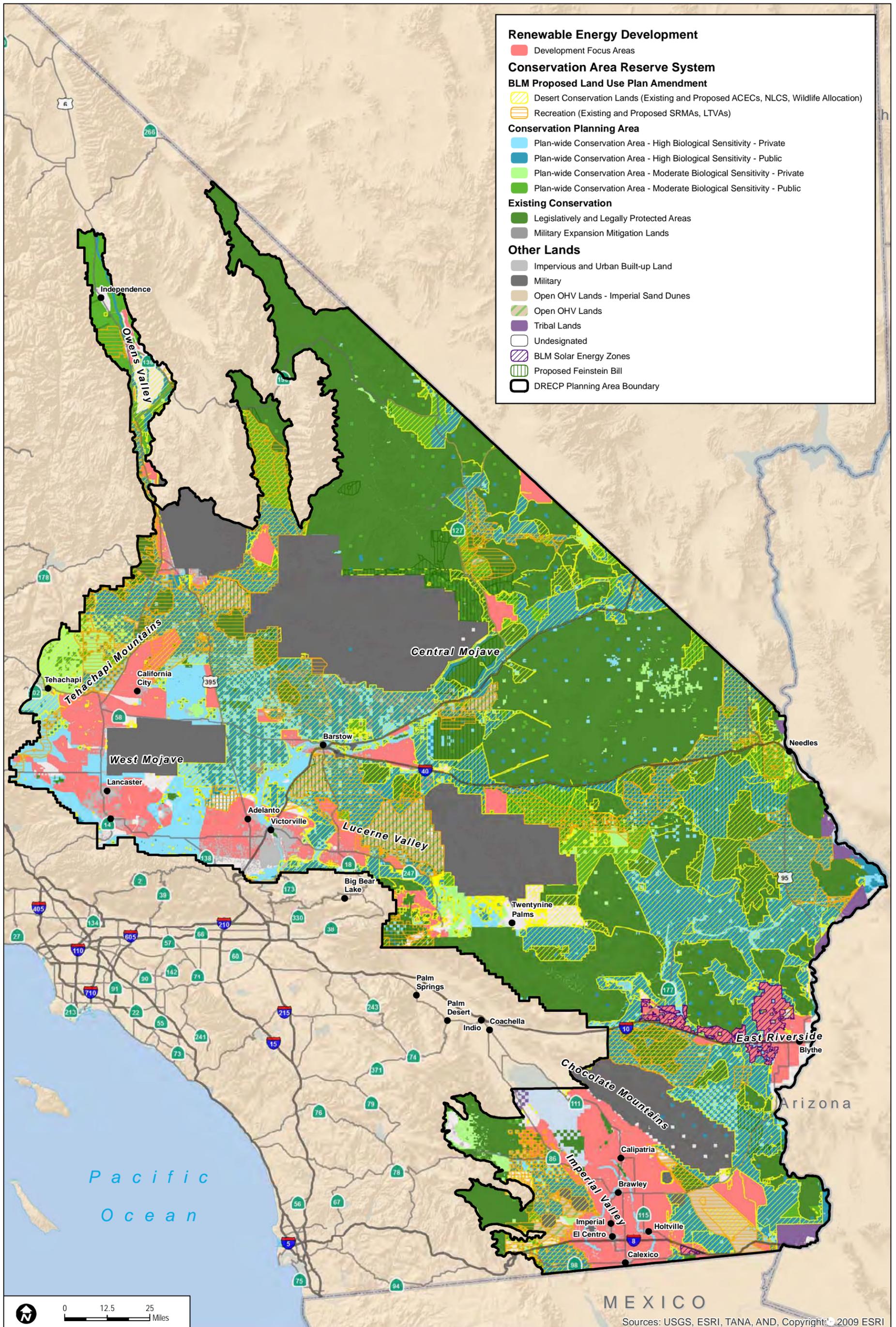


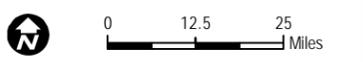
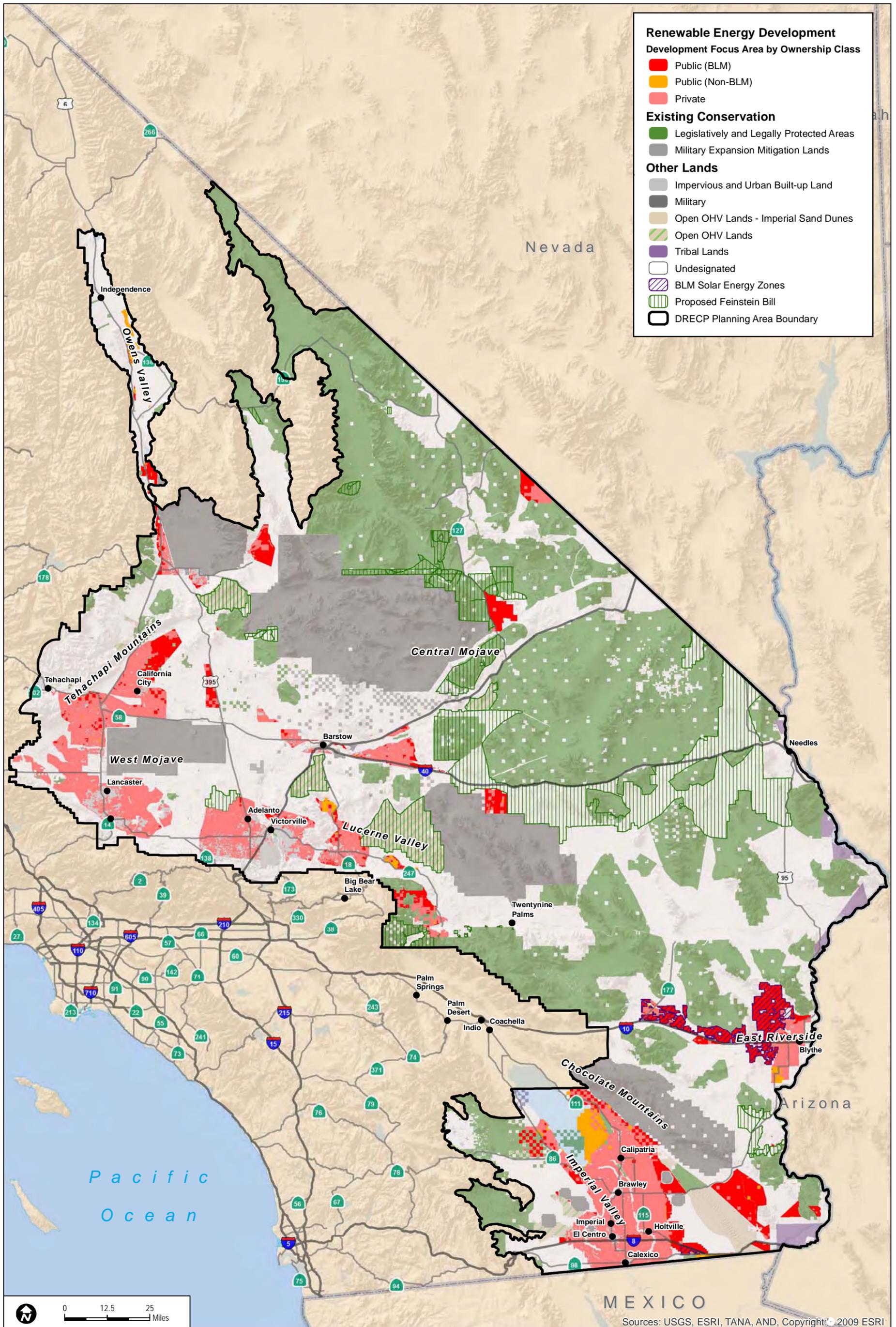
FIGURE 2.7-1

Alternative 5 - Increased Geographic and Technology Flexibility Alternative: Integrated

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

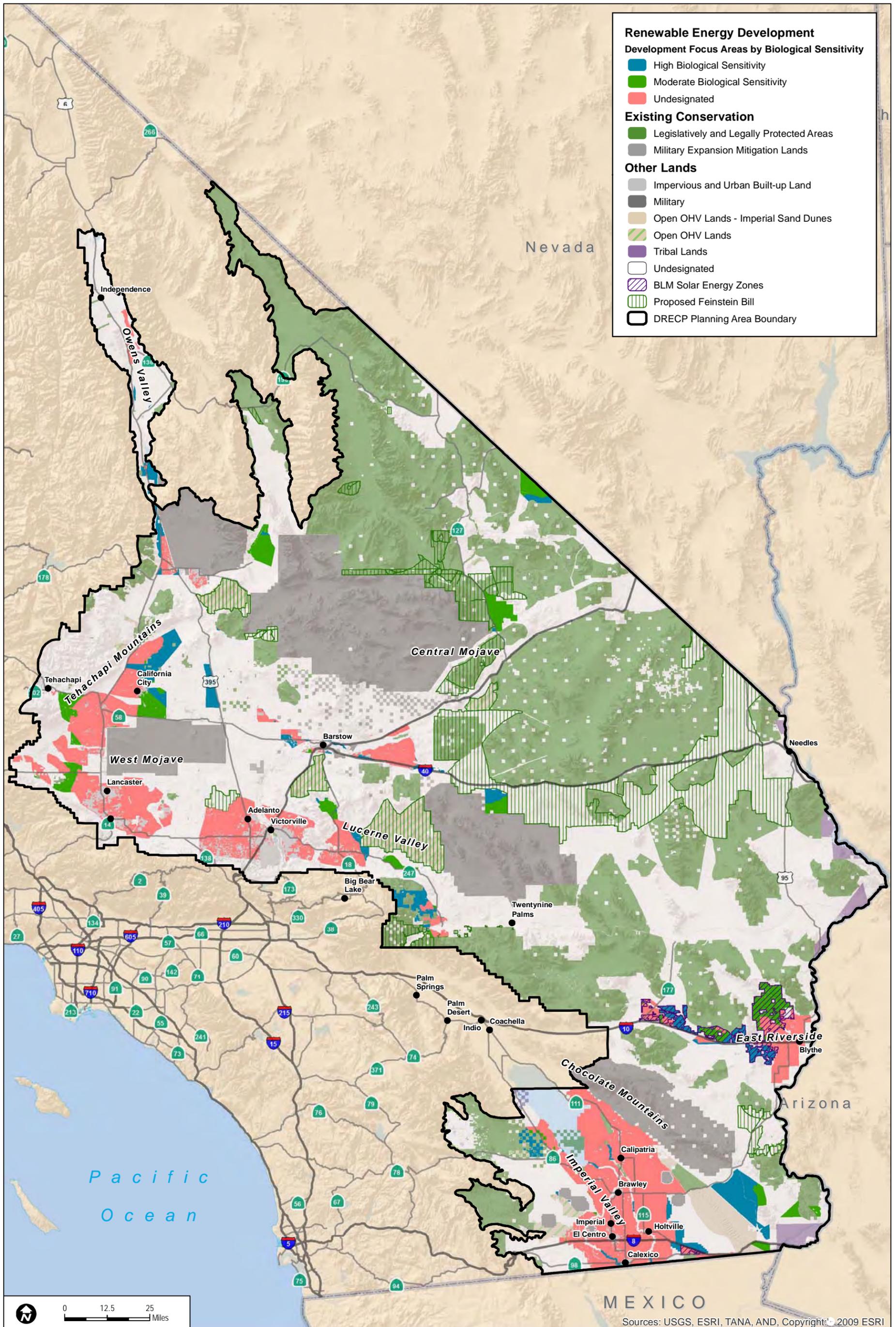
Sources: USGS, ESRI, TANA, AND, Copyright: © 2009 ESRI

FIGURE 2.7-2
Alternative 5 - Increased Geographic and Technology Flexibility Alternative: Development Focus Areas by Ownership Class

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

FIGURE 2.7-3

Alternative 5 - Increased Geographic and Technology Flexibility Alternative: Development Focus Areas by Biological Sensitivity

Desert Renewable Energy Conservation Plan (DRECP)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

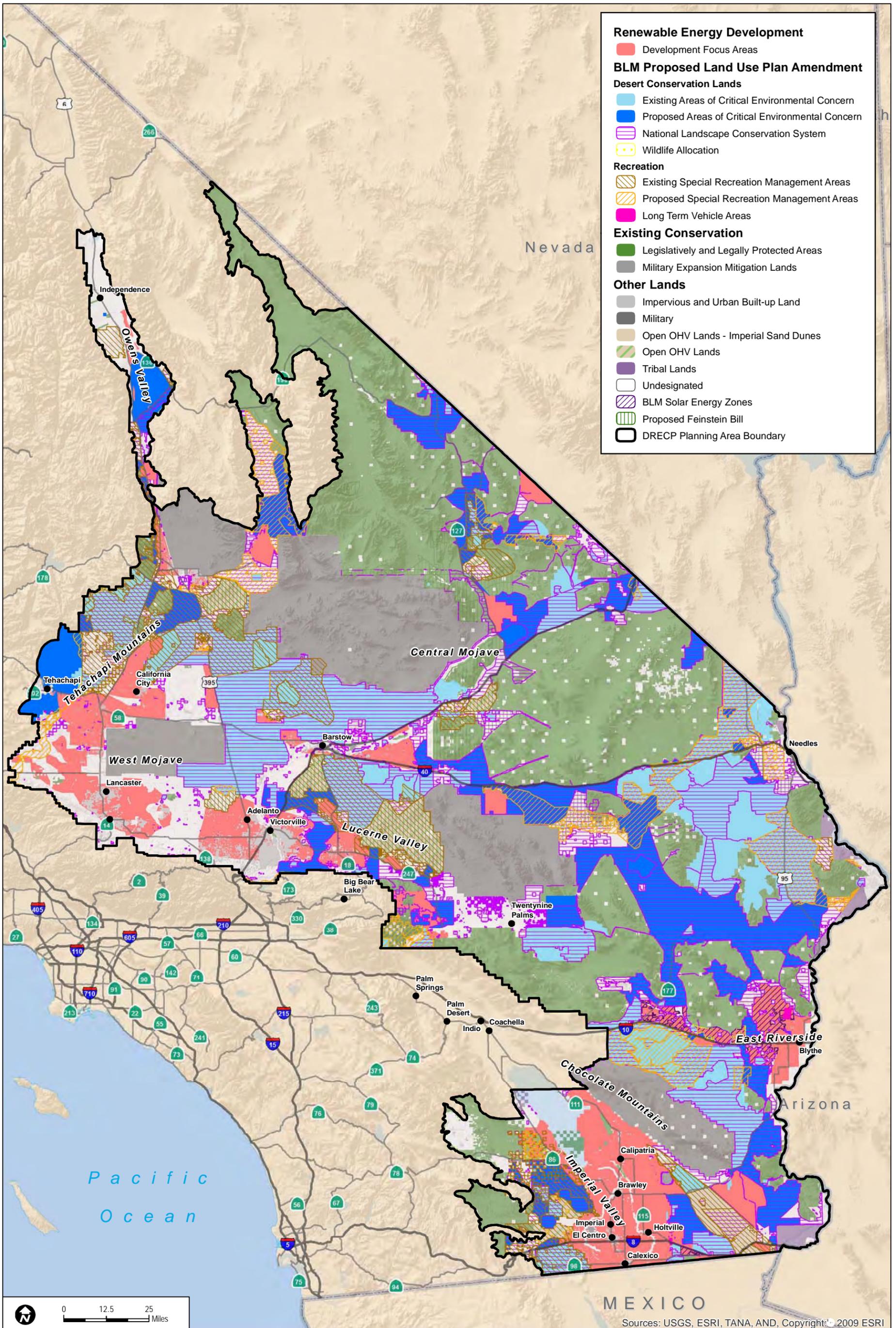


FIGURE 2.4-4

Alternative 5 - Increased Geographic and Technology Flexibility Alternative: BLM Proposed Land Use Plan Amendment

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.8 Interagency Description of Alternative 6

The following tables and figures present detailed information for Alternative 6. Refer to Appendix D for Alternative 6 specific descriptions, including allowable and non-allowable uses, and maps for LUPA ACECs, NLCS lands, and SRMAs.

Figure 2.8-1 presents the integrated alternative showing the DFAs and the Alternative 6 conservation area including proposed LUPA designations and conservation planning areas. Table 2.8-4 provides acreages for the map categories shown on Figure 2.8-1. Table 2.8-6 presents an acreage summary for the Alternative 6 conservation area. Detailed breakouts for each biological resource element by ecoregion within the Alternative 6 conservation area are provided in Section 4.1 and Appendix B.

Figure 2.8-2 highlights the DFAs for Alternative 6 and Tables 2.8-1, 2.8-2, 2.8-3, and 2.8-5 show the distribution of Alternative 6 DFAs by land ownership class, by ecoregional subarea and by county.

Figure 2.8-3 shows the Alternative 6 BLM LUPA. Detailed LUPA maps and work sheets for Alternative 6 are included in Appendix D. A table summarizing LUPA acreages for each alternative is provided in the Executive Summary.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.8-1
Alternative 6 Development Focus Area and Conservation Area Reserve System by Land Ownership Class (acres)

Alternative 6	Land Ownership Class							
	Federal	State	Local	Municipal	Non-Profit	Private	Tribal Lands	Total
Development Focus Areas (DFAs)	270,353	14,634	222	49,541		1,327,689		1,662,439
BLM Solar PEIS Variance Lands	604,574	37		2		450		605,062
Conservation Area Reserve System	12,579,999	637,187	5,244	127,864	3,750	2,163,254		15,517,297
Existing Conservation								
Legislatively and Legally Protected Areas	7,123,406	334,181			3,522	2,492		7,463,601
Military Expansion Mitigation Lands	95,802							95,802
Proposed Conservation								
HBS-Public	3,630,955							3,630,955
MBS-Public	658,351							658,351
Undesignated	48,175							48,175
Impervious and Urban Built-up Land	23,794							23,794
Planned Conservation								
HBS-Public	544,767	184,400	1,366	127,704	188			858,426
MBS-Public	447,391	118,606	3,878	160	40			570,073
HBS-Private	4,685					1,212,145		1,216,830
MBS-Private	2,672					948,617		951,289
Other Lands	3,607,405	18,616	3,115	140,122	41	900,261	132,528	4,802,089
Impervious and Urban Built-up Land	14,253	324	2,867	3,045	41	315,162	3,968	339,660
Military	2,932,955					728		2,933,684
Open OHV Lands	352,509	2,570				22,782		377,862
Open OHV Lands - Imperial Sand Dunes	132,987	30				850		133,868
Tribal Lands	124						128,560	128,684
Undesignated	174,578	15,691	248	137,076		560,738		888,332
Total	17,062,330	670,474	8,581	317,529	3,791	4,391,654	132,528	22,586,888

Note: All acreages are estimates and subject to change

Local includes County, City, and Special District

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

HBS-Private and MBS-Private lands include acreage identified as Federal due to the coding of a portion of the Catellus lands transfers.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Table 2.8-2

Alternative 6 Development Focus Areas by County and Aggregated Land Ownership

DFA by County by Aggregated Ownership	Acres
Imperial County	449,481
Private	346,972
Public	102,509
Inyo County	35,804
Private	11,971
Public	23,833
Kern County	317,398
Private	295,781
Public	21,617
Los Angeles County	238,471
Private	238,079
Public	392
Riverside County	256,671
Private	90,472
Public	166,199
San Bernardino County	364,615
Private	344,416
Public	20,199
Total	1,662,439

Note: All acreages are estimates and subject to change

Table 2.8-3

Alternative 6 Development Focus Areas by Ecoregional Subarea

DFA by Ecoregional Subarea	Acres
Cadiz Valley and Chocolate Mountains	256,698
Imperial Borrego Valley	449,454
Kingston and Funeral Mountains	9,812
Mojave and Silurian Valley	44,354
Owens River Valley	21,772
Panamint Death Valley	6,055
Pinto Lucerne Valley and Eastern Slopes	123,305
Providence and Bullion Mountains	13,208
West Mojave and Eastern Slopes	737,783
Total	1,662,439

Note: All acreages are estimates and subject to change

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.8-4
Integrated Alternative 6 (acres)**

Alternative 6 DFAs and Conservation Area Reserve System and Other Lands	BLM Land Use Plan Amendment						Total
	DCLs			Non-DCLs			
	Non-SRMA	SRMA	DCLs Subtotal	Non-SRMA	SRMA	Non-DCLs Subtotal	
Development Focus Areas (DFAs)	94,172	9,319	103,491	1,512,393	46,556	1,558,948	1,662,439
BLM Solar PEIS Variance Lands	281	0	281	603,991	790	604,781	605,062
Conservation Area Reserve System	4,267,888	2,193,770	6,461,657	8,068,095	987,544	9,055,639	15,517,297
Existing Conservation							
Legislatively and Legally Protected Areas	638,681	267,246	905,927	6,298,099	259,575	6,557,674	7,463,601
Military Expansion Mitigation Lands	74,701	15,364	90,066	3,989	1,748	5,736	95,802
Proposed Conservation							
HBS-Public	2,153,866	1,477,089	3,630,955				3,630,955
MBS-Public	510,707	147,643	658,351				658,351
Undesignated	32,556	15,619	48,175				48,175
Impervious and Urban Built-up Land	13,911	9,883	23,794				23,794
Planned Conservation							
HBS-Public	116,826	30,544	147,370	437,902	273,154	711,056	858,426
MBS-Public	24,560	6,044	30,605	260,943	278,525	539,469	570,073
HBS-Private	487,896	149,495	637,390	512,708	66,732	579,439	1,216,830
MBS-Private	214,182	74,842	289,024	554,455	107,810	662,265	951,289
Other Lands	152,822	20,683	173,506	4,022,683	605,901	4,628,583	4,802,089
Impervious and Urban Built-up Land	14,160	2,120	16,280	311,180	12,200	323,380	339,660
Military	45,842	208	46,050	2,871,205	16,429	2,887,634	2,933,684
Open OHV Lands	484	14,460	14,944	891	362,026	362,917	377,862
Open OHV Lands - Imperial Sand Dunes	108	1,363	1,472	295	132,101	132,396	133,868
Tribal Lands	68	0	68	126,145	2,471	128,616	128,684
Undesignated	92,161	2,531	94,692	712,966	80,674	793,640	888,332
Total	4,515,163	2,223,772	6,738,935	14,207,162	1,640,791	15,847,952	22,586,888

Note: All acreages are estimates and subject to change

HBS: High Biological Sensitivity; MBS: Moderate Biological Sensitivity

DCLs: BLM Desert Conservation Lands designations (Area of Critical Environmental Concern, National Landscape Conservation System, Wildlife); SRMA: Special Recreation Management Area

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.8-5
Alternative 6 Technology Types within Development Focus Areas by County**

DFAs by Technology Type by County	Acres
Imperial County	449,481
Geothermal	108,669
Solar	138,929
Solar and Geothermal	196,385
Solar and Wind	167
Solar, Wind and Geothermal	5,331
Inyo County	35,804
Geothermal	6,177
Solar	21,943
Solar and Geothermal	7,684
Kern County	317,398
Solar	127,598
Solar and Wind	189,801
Los Angeles County	238,471
Solar	238,471
Riverside County	256,671
Solar	113,376
Solar and Wind	143,295
San Bernardino County	364,615
Geothermal	493
Solar	138,284
Solar and Wind	225,837
Total	1,662,439

Note: All acreages are estimates and subject to change

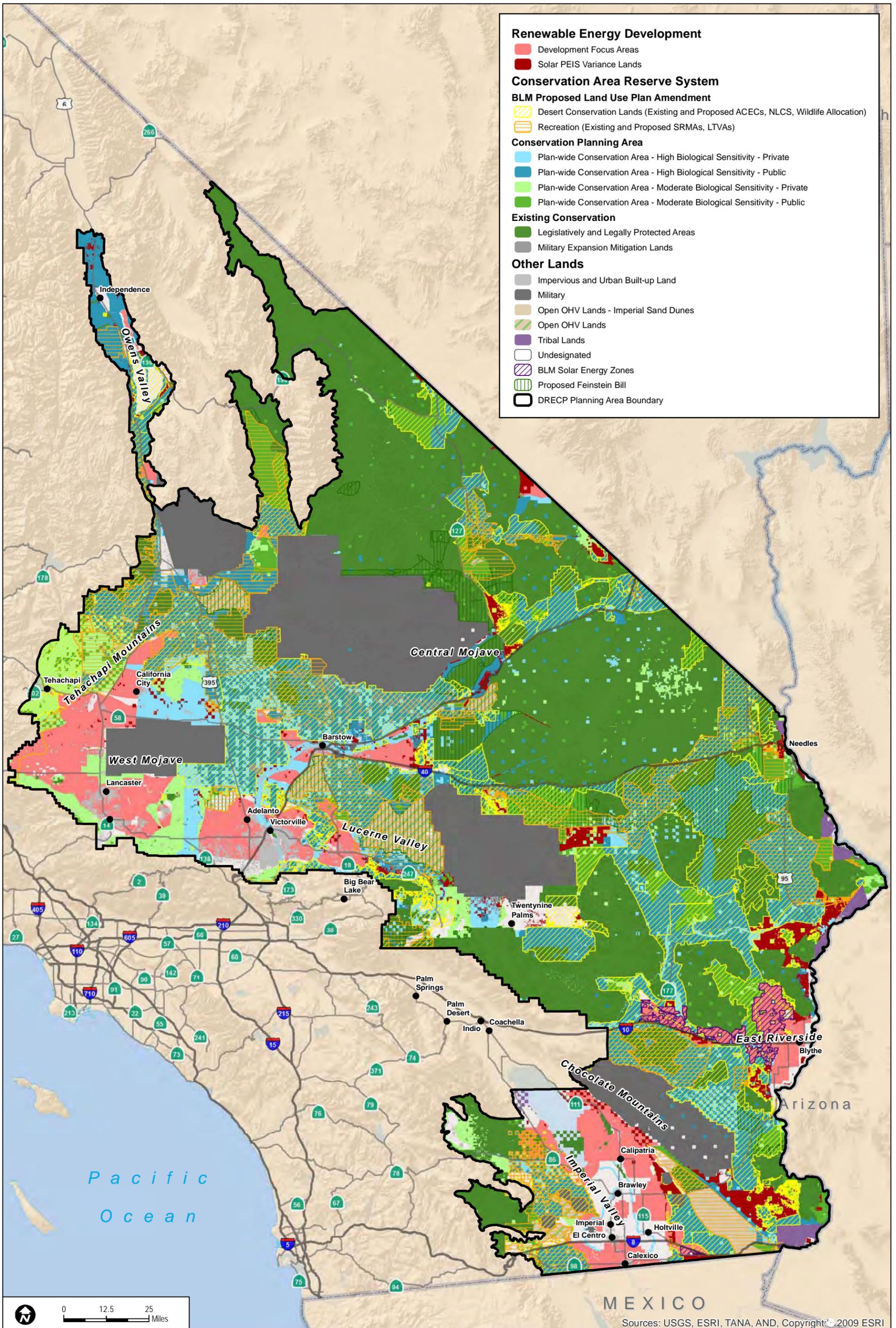
December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.8-6
Alternative 6 Conservation Area Reserve System Summary**

Alternative 6 Conservation Area Reserve System	Acres	% of the Plan-wide Reserve Context
<i>Existing Conservation</i>	7,559,403	100%
Legislatively and Legally Protected Areas	7,463,601	100%
Military Expansion Mitigation Lands	95,802	100%
<i>Proposed and Planned Conservation</i>	7,957,894	—
HBS-Public	4,489,381	99%
Proposed Conservation	3,630,955	—
Planned Conservation	858,426	—
MBS-Public	1,228,424	65%
Proposed Conservation	658,351	—
Planned Conservation	570,073	—
Planned Conservation - HBS-Private	1,216,830	113%
Planned Conservation - MBS-Private	951,289	75%
Proposed Conservation - Undesignated	48,175	—
Proposed Conservation - Impervious and Urban Built-up Land	23,794	—
Total	15,517,297	95%

Note: All acreages are estimates and subject to change



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright: © 2009 ESRI

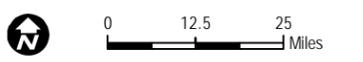
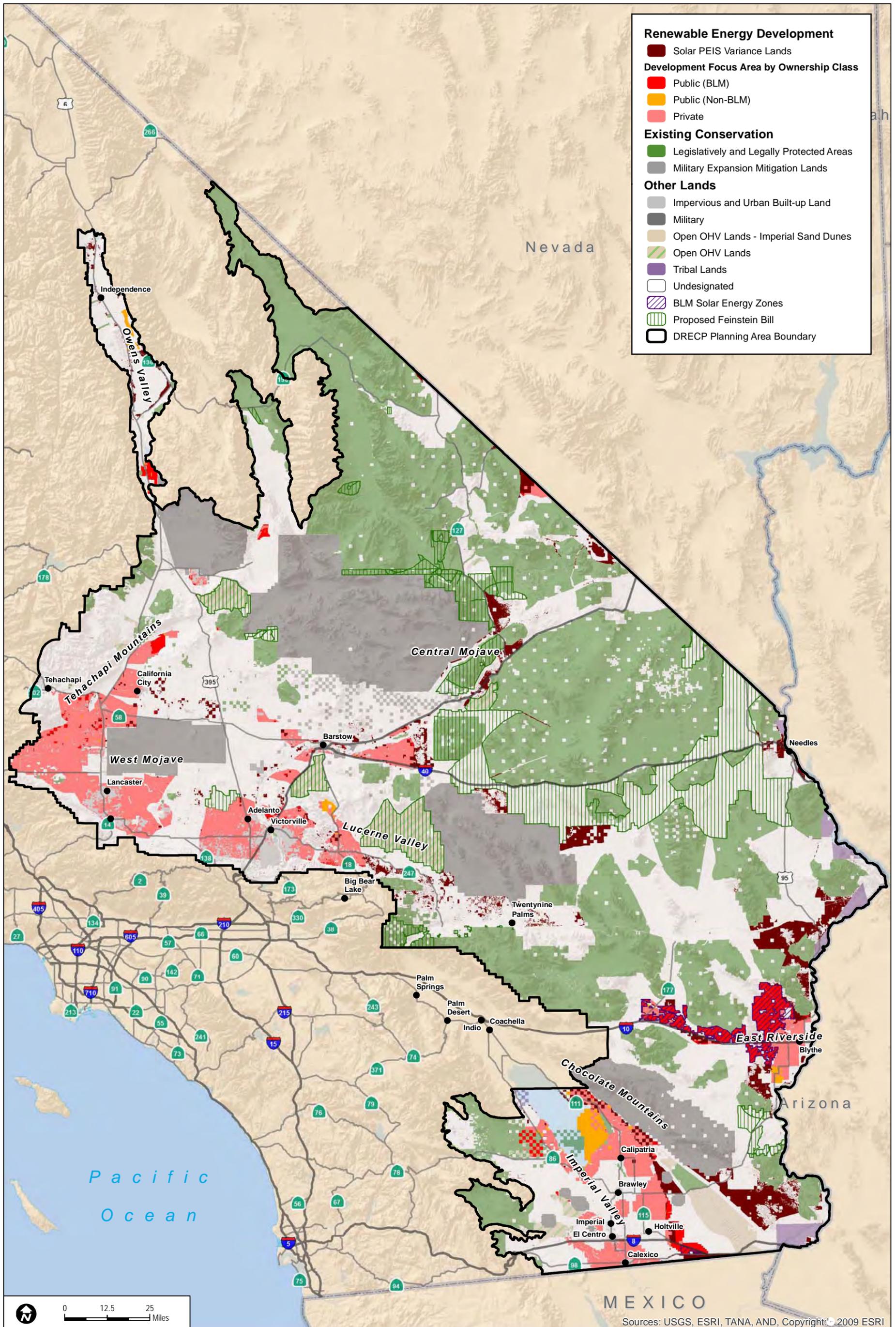
FIGURE 2.8-1

Alternative 6 - Geographically Balanced Alternative C with Variance Lands: Integrated

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright: © 2009 ESRI

FIGURE 2.8-2

Alternative 6 - Geographically Balanced Alternative C with Variance Land: Development Focus Areas by Ownership Class

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

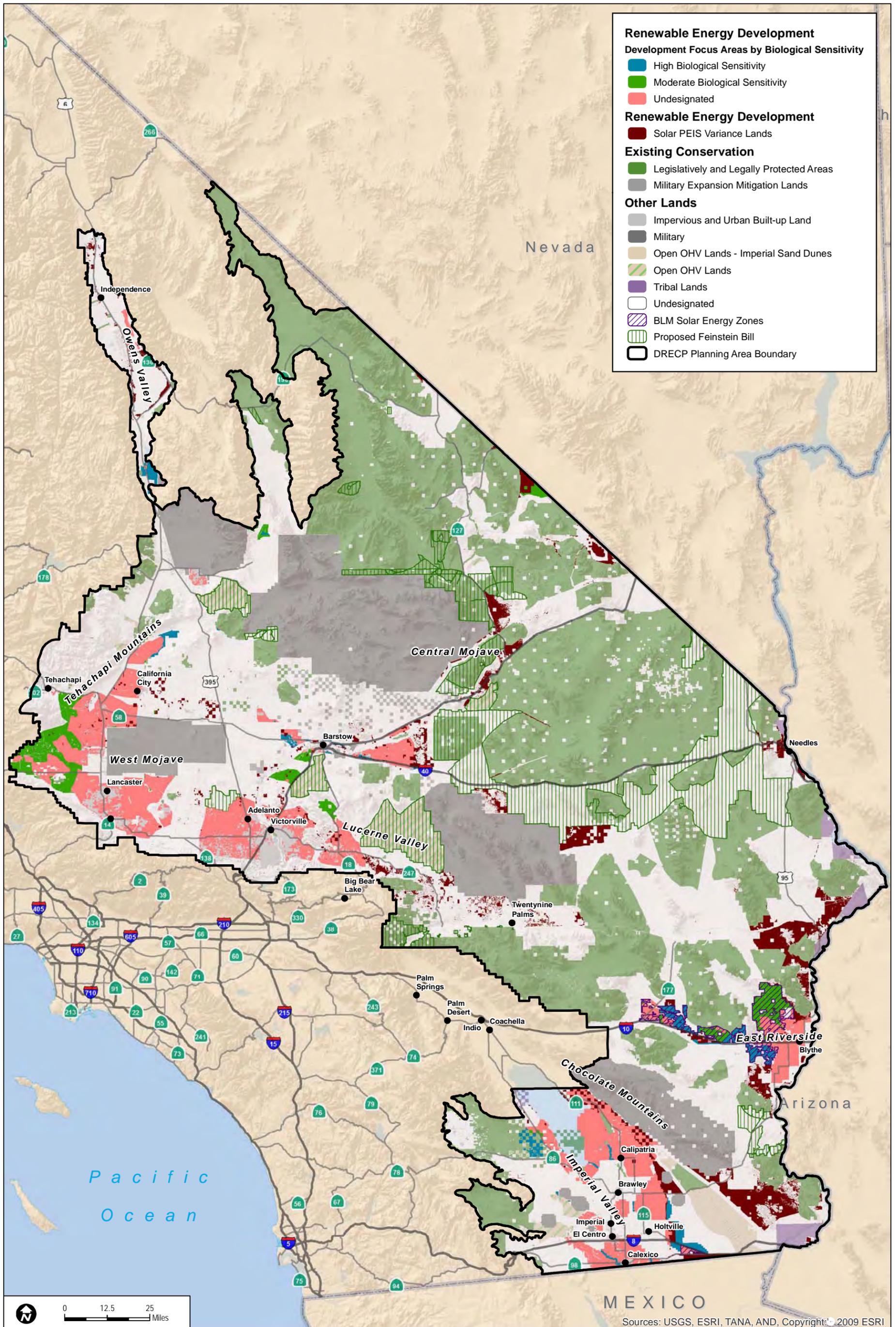


FIGURE 2.8-3

Alternative 6 - Geographically Balanced Alternative C with Variance Land: Development Focus Areas by Biological Sensitivity

Desert Renewable Energy Conservation Plan (DRECP)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

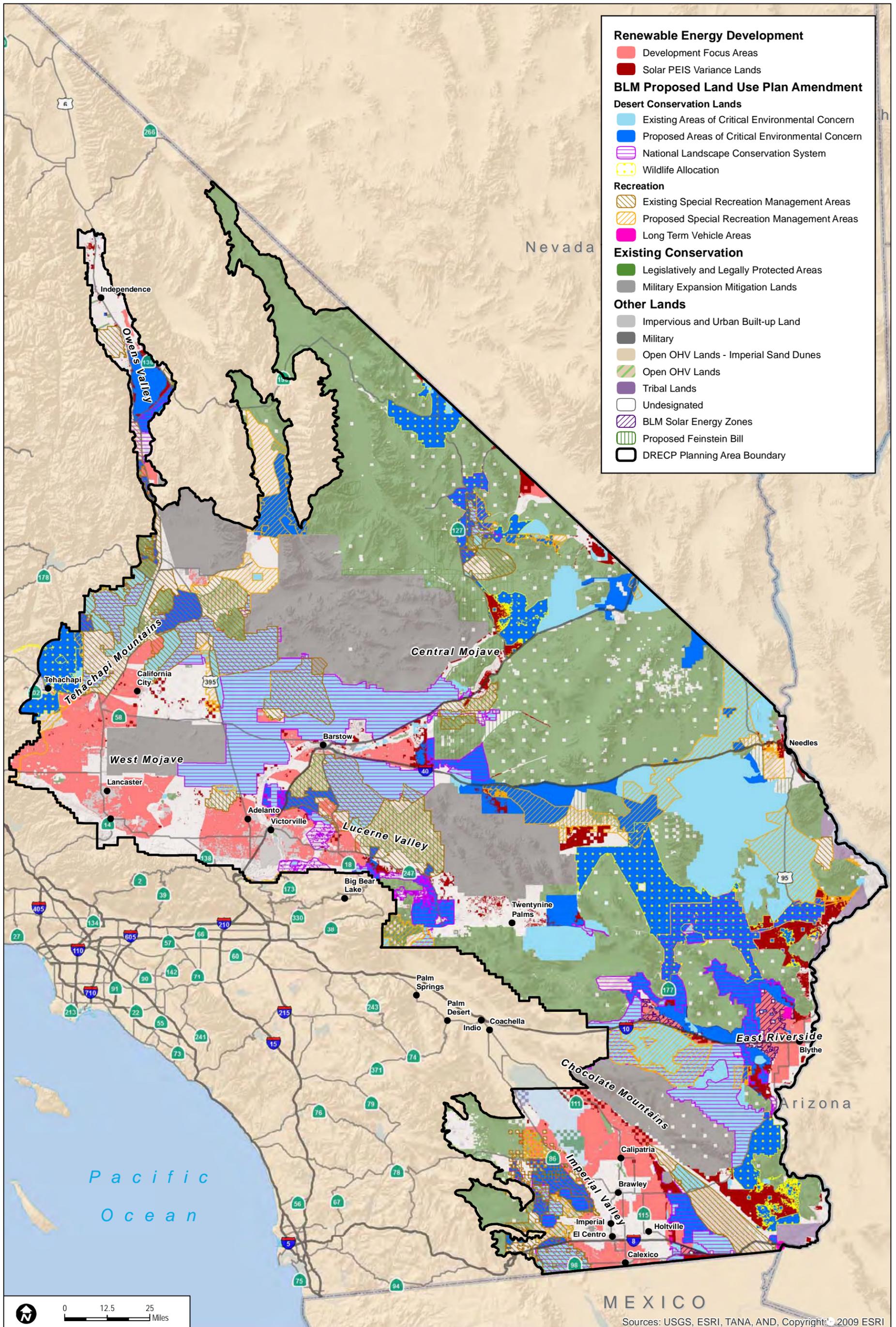


FIGURE 2.8-4

Alternative 6 - Geographically Balanced Alternative C with Variance Lands: BLM Proposed Land Use Plan Amendment

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.9 No Action Alternative

Figure 2.9-1 depicts the integrated map for the No Action Alternative. The no action alternative assumes that the 20,323 MW renewables energy target will be met by 2040. The estimated technology mix and consequent ground disturbance has not yet been determined.

No DFAs or LUPAs are part of the no action alternative. Instead, the no action alternative assumes that development will occur within the 10.3 million acres of the Plan Area that satisfy the minimum resource requirements needed for renewable energy facilities; this includes BLM solar PEIS variance lands. Conservation is assumed to occur in Legally and Legislatively Protected Area (LLPAs) and MEMLs and development is assumed to be excluded from these areas. Further, no solar development would occur within existing ACECs.

All existing permitting and regulatory approval processes would apply to renewable energy projects under this alternative.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.10 Alternatives Considered and Not Carried Forward for Detailed Analysis

Throughout the planning phase of the interagency DRECP, agencies and stakeholders have suggested and refined a number of reserve design and renewable energy development alternatives. Additionally, alternatives were identified during the public scoping process which occurred between July and September 2011. A Notice of Intent to prepare an Environmental Impact Statement under NEPA was published in the Federal Register on July 29, 2011, and a Notice of Preparation for an Environmental Impact Report under CEQA as published on the same date. The public comment period ended on September 12, 2011. The purpose of the public scoping period was to accept comments providing suggestions and information on the scope of issues and alternatives to be addressed in the EIS/EIR. The REAT agencies received 38 scoping letters and 41 specific comments addressed alternatives. The scoping comments are summarized in the DRECP Scoping Report.

The DRECP Scoping Report identified the following items regarding alternatives:

- EIR/EIS should describe development of each alternative, how it addresses the project objectives, implementation, and include a discussion of the different types of renewable energy technologies that may be utilized (Comment 1-2A)
- EIR/EIS should identify areas with potential use conflicts and specific recommendation for reducing conflict (Comment 1-3A)
- Alternative analysis under Section 404 permit varies from analysis under NEPA and must include on-site and off-site alternatives, which may include private land, BLM-administered land, and/or disturbed sites (Comment 1-20A)
- Preferred Alternatives (in draft and final form) should include detailed maps that indicate closures, restrictions, and conservation status of all areas in DRECP Planning Areas and disclosure of known and planned mitigation areas (Comment 11-4A)
- Proposed Action should continue to authorize, maintain, and enhance recreational use of land in DRECP Planning Area (Comment 14-3A)
- EIR/EIS should plan for a wide range of realistic desert renewable energy development scenarios through 2050 (Comment 18-5A)
- NOI does not include possible rang of alternatives. Suggests phasing of renewable energy development at different scales, different levels of development set by different levels of energy need, and a low impact alternative (comment 20-10A)
- Recommends modifications to alternatives in the NOP/NOI (Comment 21-2A)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

- Need an alternative that considers less use of energy (renewable or otherwise) within regional action area and an No Action (Comment 22-11A)
- Should be conservation-driven with various alternatives formulated around a range of conservation opportunities or alternatives (Comment 23-1A)
- Alternatives should consider opportunities for energy conservation, small-scale generation facilities near cities and towns in the CDCA including rooftop solar panels and distributed generation at the site of energy consumption (Comment 20-18PD; Comment 10-2A, 22-12A, 25-20A; Comment 31-1A; Comment 33-3A)
- Expand DRECP boundary to include greater portion of San Diego County (Comment 19-1A)
- DRECP Planning Area should include the western end of Antelope Valley in Los Angeles and Kern Counties (Comment 20-19A)
- Avoid areas that support high density of wintering or migratory birds, contain high raptor activity, or breeding, wintering of migrating populations of less abundant species, avoid take of eagles and areas that overlap with the California condor (Comment 1-26A; Comment 1-36BR; Comment 18-2A)
- Preserve as much Priority Wind Resource Areas as possible (Comment 18-1A)
- Consider potential conservation and development use of military lands, other federal lands, and state lands to expand development and conservation opportunities (Comment 24-3A)
- Exclude regional linkages identified for the Town of Apple Valley (Comment 27-1a)
- Site development on previously disturbed and private lands (Comment 1-6A and 25-11A; Comment 35-1A; Comment 36-4A)
- Opportunities to develop portions of Imperial Valley and Easter Riverside (Comment 23-5A)
- Avoid development at Ord Mountain Allotment (Comment 38-1A)

Some of the suggested alternatives in the DRECP Scoping Report and from other agency and stakeholder comments were generally incorporated in the Alternatives considered in Section 2.3 through 2.9 (including the No Action Alternative, and six other Alternatives). For example, an overlay of development areas on agency-identified low resource conflict areas has been incorporated in Alternative 1, the Disturbed Lands/Low Resource Conflict Alternative. An alternative based on consideration of existing, approved projects has been addressed by reducing the overall 2040 MW target by the MW associated with the operational projects; see Section 1.2.3.4 for the description of the energy acreage calculator and the accounting for operational projects or projects under construction. An alternative

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

that would site development within one mile of bulk transmission, existing or planned high-voltage lines and substations, is reflected, to the extent feasible, in Alternative 2, the Geographically Balanced/Transmission Aligned Alternative B, Alternative 4, the Geographically Balanced/Transmission Aligned Alternative A, and Alternative 6, the Geographically Balanced/Transmission Aligned Alternative C with Variance Lands.

Other alternatives suggested by public comments were not described in sufficient detail to be considered or were outside of the scope of the DRECP, which is to provide a streamlined permitting process for renewable energy projects, reduce permit processing times, and provide guidance to renewable energy Applicants on siting considerations and conservation strategies. Examples include an energy-efficiency only alternative, an alternative that would incorporate more of San Diego County in the DRECP planning area boundary, an alternative that would include renewable energy development on military lands, and an alternative that would avoid development at the BLM-Administered Ord Mountain Allotment for livestock grazing located approximately 9 miles southeast of Barstow, California between I-15 and SR247.

Some alternatives suggested by public comments were presented in detail and/or were the subject of considerable discussion. These alternatives are described below with the rationale for not carrying them forward for detailed analysis.

2.10.1 Context for Alternatives Considered but Not Carried Forward for Detailed Analysis

CEQA and NEPA define categories of alternatives that can be considered but not analyzed in detail. The appropriate sections of these laws are presented in Sections 2.10.1.1 and 2.10.1.2.

Alternatives evaluated in the Draft DRECP and Draft Joint EIR/EIS must meet the goals and objectives of the overall interagency DRECP. California's state-wide renewable energy policies and planning process as well as specific DRECP program goals set the context for development and analysis of alternative scenarios. Alternatives that are inconsistent with the state-wide and DRECP-specific policies, processes and goals, or that duplicate features already included in alternatives carried forward for detailed analysis in the DRECP, were considered by the REAT agencies but will not be analyzed in detail.

A summary of California's state-wide renewable energy policies and planning process as they relate to the DRECP is included in the April 25, 2012, Renewable Energy Context Material¹ from the Office of the Governor (California Office of the Governor 2012). DRECP

¹ Renewable Energy Context Material is available at: http://www.drecp.org/meetings/2012-04-25-26_meeting/presentations/04_Office_of_the_Governor_Paper.pdf

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

program goals are outlined in the DRECP Planning Agreement (DRECP 2010). The purpose and objectives of the state and federal agencies collaborating in the development of the DRECP are briefly explained in in Section 1, Introduction, Purpose, and Planning Process.

These draft DRECP alternatives were designed to meet the agencies' purpose and objectives for the DRECP.

2.10.2 Description and Rationale for Alternatives Considered but Not Carried Forward for Detailed Analysis

The following alternatives have been considered by the REAT agencies, but are not included in the draft alternatives in this document

- CEERT Proposed Solar Areas Alternative
- CalWEA Proposed Wind Areas Alternative
- BLM Lands Alternative
- Private Lands Alternative
- Sierra Club Alternative
- April 25, 2012, Development Scenario 6
- Southeast Emphasis Alternative
- Avian Avoidance Alternative
- Distributed Generation Alternative

The summaries below provide a brief description of each excluded alternative along with the rationale explaining why the alternative was not included. There are three general reasons why these alternatives included, although these general reasons may apply differently to each of the alternatives. The three general reasons are:

1. Key features of the suggested alternative were duplicated in the range of alternatives included in this document.
2. Development areas identified as part of the suggested alternative did not provide sufficient renewable energy development opportunity, flexibility and/or geographic balance to align with California's state-wide renewable energy policies and planning process.
3. Development areas identified as part of the suggested alternative would result in high conflicts with biological resource values that would not align with the agencies purpose and objectives for the DRECP.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2.10.2.1 CEERT Proposed Solar Areas Alternative

Alternative Description. In August 2011, the Center for Energy Efficiency and Renewable Technologies (CEERT) and the Large-Scale Solar Association (LSA) submitted maps that define over 2 million acres on which they encourage the development of solar energy (CEERT 2011a). These areas have the optimal characteristics required for large-scale solar project development: above average insolation, appropriate slope, and proximity to transmission. CEERT and LSA also noted that areas with many small, separately-owned parcels (“parcelization”) can inhibit the efficient development of larger solar energy generation. The majority of the areas identified are within the West Mojave highlands surrounding Edwards Air Force Base, in addition to areas identified in the Lucerne Valley, West Chocolate Mountains, Southern Imperial Valley, and eastern Riverside County. The areas suggested by CEERT and LSA are illustrated in Figure 2.10-1.

Consistency with Purpose and Objectives. The CEERT Proposed Solar Areas Alternative would meet some of the agencies’ purpose and objectives for the DRECP but it includes some locations avoided by the DFAs at the request of one or more of the REPG agencies. The alternative would meet the assumed energy target for all alternatives (20,000 to 22,000 MW). It would not incorporate non-solar renewable energy technologies and would not provide diversity in renewable energy generation and transmission. The alternative would partially comply with the biological and non-biological purpose and objectives for the DRECP. The CEERT development areas defined in this alternative that have not been incorporated into other retained alternatives have high biological resource conflicts and do not align with DRECP biological goals and objectives.

Rationale for Elimination. It was not feasible to present an alternative based exclusively on the CEERT/LSA identified solar areas. The alternatives included in this document incorporate between 504,000 and 1,138,000 acres of the 2 million acres of solar development areas proposed by CEERT. This means that between 45% and 55% of the DFAs in these draft alternatives are the same lands as those identified in the CEERT Proposed Solar Areas Alternative. Table 2.10-1 defines the acreage of the CEERT Alternative that was included in each of the retained alternatives.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

**Table 2.10-1
Acreage of CEERT Alternative Included in the Retained Alternatives**

Alternative	Acres Incorporated	Percent of DFAs per Alternative
Alternative 1 – Disturbed Lands/Low Resource Conflict Alternative	504,275	45
Alternative 2 – Geographically Balanced/Transmission Aligned Alternative B	919,549	54
Alternative 3 – West Mojave Emphasis Alternative	919,549	55
Alternative 4 – Geographically Balanced/Transmission Aligned Alternative A	687,217	46
Alternative 5 – Increased Geographic and Technology Flexibility Alternative	1,138,224	50
Alternative 6 – Geographically Balanced Alternative C with Variance Lands	887,476	53

Source: DRECP 2012a.

The remaining acres identified in the CEERT Proposed Solar Areas Alternative are not included due to the following resource conflicts:

- Sensitive biological resources such as the Mojave River corridor (Barstow), Significant Ecological Areas (Los Angeles County), BLM Flat-tailed Horned Lizard Management Areas (Yuha Basin), habitat linkage areas (West Mojave)
- Conflicts with DFA exclusions related to the CDCA boundary along the Colorado River (East Riverside)
- Overlap with the proposed Mojave Trails National Monument (east of Barstow)
- Conflicts with DFA exclusions related to existing development in portions of the Owens Valley/West Mojave, Barstow, and Imperial County
- Existing land allocations around Barstow
- Conflicts with DFA exclusions related to open OHV use areas designated on BLM lands (Imperial County and the West Mojave area)

Because the CEERT Proposed Solar Areas Alternative identified locations that conflicted with the DRECP goals and with the purpose and objectives of one or more of the DRECP agencies, the alternative was not included. However, as described above, some of the CEERT solar development areas are included in the draft DRECP Alternatives.

2.10.2.2 CalWEA Proposed Wind Areas Alternative

Alternative Description. The California Wind Energy Association (CalWEA) suggested consideration of an alternative for development of wind energy resources that recommended two phases for implementation of wind energy development under the

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

DRECP (CalWEA 2012a). Phase 1 would include three categories of land: Wind DFAs, Neutral Areas, and Reserve Design Areas, as described below:

- Wind DFAs include the highest quality wind resources within 10 miles of an existing transmission corridor that do not overlap with lands classified as having special environmental concern. Projects in Wind DFAs would receive permit streamlining benefits for ground-dwelling (non-flying) species.
- Neutral Areas include lower-quality, potentially commercially viable wind resources and high-quality biological resources within Areas of Critical Environmental Concern (ACECs) and Desert Wildlife Management Areas (DWMAs) within 10 miles of existing transmission corridors. These areas would be open to conservation efforts or wind development. Wind development may be subject to higher survey and mitigation requirements for ground-dwelling (non-flying) species.
- Reserve Design Areas would prohibit wind development unless specifically determined to be compatible with the biological goals and objectives of the area.

Phase 2 would begin no later than 2020 and would be subject to a mandated revisiting of the Phase 2 areas initiated no later than 2017. Portions of the Phase 2 area would be designated as Phase 2 wind DFAs or Neutral Areas based on additional environmental data, experience developing in Phase 1 areas, the state of renewable energy market competition, achievement of the state's clean energy goals, and other factors.

CalWEA stated that avian and bat species would be addressed as an overlay to each of the categories described above and that in all areas developers would follow state and federal avian and bat siting guidelines.

CalWEA recommended that the DRECP plan for the development of at least 25,000 MW of wind energy capacity. CalWEA assumed that more wind energy development would occur within the DRECP area than in the rest of the state. CalWEA calculated that 25,000 MW of wind development would require wind development leases on about 4% of the DRECP land area, and would impact less than 1% of the DRECP area in terms of land disturbance. The areas suggested by CalWEA are illustrated in Figure 2.10-1.

Consistency with Purpose Objectives. The CalWEA Proposed Wind Areas Alternative would meet some of the agencies' purpose and objectives for the DRECP but it includes some locations avoided by the DFAs at the request of one or more of the DRECP agencies. The alternative would meet the assumed target for all alternatives (20,000 to 22,000 MW). It would increase the development of wind generation above the amounts identified by the Energy Commission. This proposal would also provide less diversity in renewable energy generation. The alternative would partially comply with the biological and non-biological conservation guiding principles. The CalWEA development areas that are not incorporated

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

into the draft alternatives included in this document have high biological resource conflicts and do not align with DRECP biological goals and objectives.

Rationale for Elimination. It was not feasible to present an alternative based exclusively on the CalWEA identified wind areas. The alternatives included in this document incorporate development areas of between 284,000 to 1,306,000 acres of the 2.3 million acres of Wind DFAs proposed by CalWEA. As such, between 25% and 57% of the DFAs in the interagency DRECP are the same as those identified in the CalWEA Proposed Wind Areas Alternative. Table 2.10-2 defines the acreage of the CalWEA Alternative that was included in each retained alternative.

**Table 2.10-2
Acreage of CalWEA Alternative Included in the Retained Alternatives**

Alternative	Acres Incorporated	Percent of DFAs per Alternative
Alternative 1 – Disturbed Lands/Low Resource Conflict Alternative	284,065	25
Alternative 2 – Geographically Balanced/Transmission Aligned Alternative B	589,066	32
Alternative 3 – West Mojave Emphasis Alternative	519,386	31
Alternative 4 – Geographically Balanced/Transmission Aligned Alternative A	486,110	31
Alternative 5 – Increased Geographic and Technology Flexibility Alternative	1,306,385	57
Alternative 6 – Geographically Balanced Alternative C with Variance Lands	562,853	34

Source: DRECP 2012a.

The remaining acres identified in the CalWEA Proposed Wind Areas Alternative were eliminated from detailed analysis due to the following resource conflicts:

- Sensitive biological resources such as high concentration of nesting golden eagles (Barstow and the Cady and Bristol Mountains) and California condors
- Conflicts with the DFA 2-mile buffer applied to tribal lands (Imperial County Chocolate Mountains)
- Overlap with the proposed Mojave Trails National Monument (east of Barstow)
- Conflicts with DFA exclusions related to existing development in portions of Imperial County (Ocotillo Wind Project)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

- Conflicts with Department of Defense identified locations having a high likelihood of an unacceptable risk to national security² (portions of West Mojave, Owens Valley, Imperial County, and South Barstow)

Because the CalWEA Proposed Wind Areas Alternative identified locations that conflicted with the purpose and objectives for the DRECP, the complete alternative was not included. However, as explained above, up to 57% of the CalWEA proposed development areas with lower potential for resource conflicts are included in the draft DRECP alternatives.

2.10.2.3 BLM Lands Alternative

Alternative Description. The BLM Lands Alternative suggests that all renewable energy development streamlined by the DRECP should be located on BLM administered public lands. Approximately 10 million acres within the 22.6 million acre DRECP Plan Area are administered by the BLM under the California Desert Conservation Area Plan, and under the Bishop, Caliente/Bakersfield, and Eastern San Diego County Resource Management Plans. Legislatively and legally protected areas within the DRECP and on BLM administered land include about 2.8 million acres of BLM wilderness areas. Further detail regarding the BLM-administered lands is described in Section 3.7, BLM Land Designations, Classifications, Allocations, and Wilderness Inventory.

The BLM and the U.S. Department of Energy (DOE) published a Final Solar Programmatic EIS in July 2012, for which a Record of Decision was signed on October 12, 2012. The Solar Programmatic EIS included two Solar Energy Zones that fall within the DRECP planning area boundary and would be incorporated into this alternative. These Solar Energy Zones are the Imperial East zone (5,717 acres) and the Riverside East zone (147,910 acres). Some or all of the Solar Energy Zones were included in all the alternatives carried forward for detailed analysis; however, none of the alternatives would locate all the renewable energy streamlined by the DRECP on BLM-administered lands.

Consistency with Purpose and Objectives. The BLM Lands Alternative would be required to avoid legislatively and legally protected areas and other locations avoided by the DFAs at the request of one or more of the DRECP agencies. These protected areas include BLM Wilderness Areas (2.8 million acres), open OHV areas (512,000 acres), and lands within the

² The Department of Defense prepared background materials for the DRECP Meeting July 25 and 26, 2012 that included figures indicating areas where wind towers would conflict with the Navy and Air Force high risk of adverse impact zones such as restricted airspace, terrain flight areas, or the Marine Corps Air Ground Combat Center Twenty-Nine Palms Expansion and would result in an unacceptable risk to national security. The Department of Defense explained that this meant that if a DFA were established in such locations, the Department would closely scrutinize any projects and would potentially object to a project at those locations. The figures are available at: http://www.drecp.org/meetings/2012-07-25-26_workshop/background/Department_of_Defense_Materials/Dept_of_Defense_Conflict_Areas_07_24_2012.pdf

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

proposed Mojave Trails National Monument (940,000 acres). The alternative could potentially meet the assumed development target for all alternatives (20,000 to 22,000 MW). The alternative would be somewhat consistent with the DRECP’s biological goals and objectives. However, the alternative would not be consistent with BLM’s non-biological purpose and objectives for the DRECP on BLM lands, including those regarding Special Recreation Management Areas, general recreation, visual resources, cultural and historic resources including historic trails, herd management, and grazing allotments.

Rationale for Elimination. The draft alternatives included in this document incorporate DFAs that include between 82,000 to 621,400 acres of land of the 10 million acres administered by the BLM within the DRECP Plan Area. This means that between 7% and 27% of the DFAs in the draft DRECP alternatives are the same as those identified in the BLM Lands Alternative; moreover, each draft alternative included in this document assumes renewable energy development on lands administered by the BLM. Table 2.10-3 defines the acreage of the BLM Land Alternative that was included in each retained alternative.

**Table 2.10-3
Acreage of BLM Land Alternative Included in the Retained Alternatives**

Alternative	Acres Incorporated	Percent of Alternative DFAs
Alternative 1 – Disturbed Lands/Low Resource Conflict Alternative	81,991	7
Alternative 2 – Geographically Balanced/Transmission Aligned Alternative B	360,553	20
Alternative 3 – West Mojave Emphasis Alternative	324,535	19
Alternative 4 – Geographically Balanced/Transmission Aligned Alternative A	214,153	15
Alternative 5 – Increased Geographic and Technology Flexibility Alternative	621,432	27
Alternative 6 – Geographically Balanced Alternative C with Variance Lands	252,966	15

Source: DRECP 2012a.

Siting of all renewable energy within the DRECP area on BLM land only would not provide for balance or flexibility in siting renewable energy development on lands with less biological value, and in some instances it would not align with existing transmission corridors. The BLM-administered land occurs throughout the DRECP Plan Area, while transmission corridors generally parallel Interstate 15, Historic Route 66, Interstate 10, Interstate 8, Interstate 95, and the California state border.

The agencies purpose and objectives for the DRECP include identifying the most appropriate locations within the planning area for development of renewable energy projects while taking into account potential impacts to threatened and endangered species

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

and sensitive natural communities. Limiting covered renewable energy development to BLM land would not meet the purpose and objectives because much of the BLM land within the DRECP has a high biological sensitivity as shown in the Conservation Area Reserve System maps and would not utilize the best renewable energy resource areas for project development, some of which are located on private land. The alternative could result in more substantial conflicts with other resource values retained on BLM lands. In accordance with Section 103(c) of the Federal Land Policy and Management Act, public lands are to be managed for multiple use and sustained yield, including a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historical values.

2.10.2.4 Private Lands Alternative

Alternative Description. The Private Lands Alternative would assume that all renewable energy development streamlined by the DRECP will be sited on previously disturbed and private lands. This alternative was suggested in several scoping comments. Approximately 1.8 million acres within the DRECP area are classified as disturbed land and agricultural land types³ (DRECP 2012a). Imperial County has the largest percentage of disturbed and agricultural land (33%). The private/disturbed land is located in the following counties:

- Imperial County – 600,000 acres
- Los Angeles County – 340,000 acres
- Riverside County – 150,000 acres
- San Bernardino County – 450,000 acres
- Kern County – 245,000 acres

These acres of private/disturbed development land could be significantly reduced depending on whether they are active agriculture lands. Active agriculture lands are potentially unavailable for renewable energy development because of ongoing use and various state and local practices and policies regarding protection of agriculture lands.

Consistency with Purpose Objectives. The Private Lands Alternative would meet some of the agencies' purpose and objectives for the DRECP, but it includes some locations avoided by the DFAs at the request of one or more of the DRECP agencies. The alternative could

³ In order to map disturbed land and agricultural land types, the DRECP used the Farmland Mapping and Monitoring Program categories that include Farmland of Local Importance, Farmland of Statewide Importance, Prime Farmland, Unique Farmland, and disturbed. Additionally, a rural land cover type was developed for the DRECP based on a rural lands model that used road access data (DRECP 2011b)

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

potentially meet the assumed target for all alternatives (20,000 to 22,000 MW). The alternative would only partially comply with the biological conservation guiding principles because portions of the alternative could be located on lands identified as having a high biological sensitivity in the Plan-wide Conservation Area. The alternative would comply with the non-biological conservation guiding principles which are specific to BLM-administered land.

Rationale for Elimination. The alternatives included in this document incorporate high levels of private land, between 964,900 to 1,570,000 acres of private land of the 1.8 million acres of private land in the DRECP Planning Area boundary. Between 51% and 86% of the DFAs in the retained alternatives are the same lands as those identified in the Private Land Alternative and each alternative assumes that there will be some renewable energy development on private lands. Table 2.10-4 defines the acreage of the Private Lands Alternative that was included in each retained alternative.

**Table 2.10-4
Acreage of Private Land Alternative Included in the Retained Alternatives**

Alternative	Acres Incorporated	Percent of DFAs per Alternative
Alternative 1 – Disturbed Lands/Low Resource Conflict Alternative	963,608	86
Alternative 2 – Geographically Balanced/Transmission Aligned Alternative B	1,373,333	75
Alternative 3 – West Mojave Emphasis Alternative	1,260,577	76
Alternative 4 – Geographically Balanced/Transmission Aligned Alternative A	1,168,930	79
Alternative 5 – Increased Geographic and Technology Flexibility Alternative	1,571,411	68
Alternative 6 – Geographically Balanced Alternative C with Variance Lands	1,327,690	80

Source: DRECP 2012a.

Siting renewable energy only on private land would not provide balance or flexibility in siting renewable energy development because there is limited private land throughout the DRECP and the private land is not always located in the areas with the highest energy resource values. In some instances, development on private land would not align with existing transmission corridors. Meeting state-wide renewable energy goals within the DRECP planning area boundary exclusively on private lands would result in substantial conflicts with current and proposed land uses on private lands. Some counties expressed concern that development of renewable energy on private land could impact county land use programs and controls, and could result in effects on the local economy and on county resources and character (i.e., jobs, property tax revenue), lost recreation potential, and lost

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

historical resources (County of Riverside 2011; DRECP 2011a). Private lands that were not incorporated into the retained alternatives have high biological resource conflicts and do not align with DRECP program goals.

2.10.2.5 *Sierra Club Alternative*

Alternative Description. The February 10, 2012, Sierra Club comment letter provided an analysis of the California Energy Commission–DRECP energy forecast model, and requested that several inputs be adjusted or corrected, such as the electricity consumption needs for plug-in hybrids, the rate of energy efficiency deployment, land use per megawatt of solar power plants, and the amount of distributed generation and energy storage needed by 2050 (Sierra Club 2012a). The Sierra Club stated that the California Energy Commission–DRECP reference-case energy efficiency savings rate of 0.83% per year, while similar to historical average efficiency savings from 1990 to 2010 [0.81%], was too low and should be increased to conform to existing forecasts and state policy goals (Sierra Club 2012a).

The Sierra Club also recommended that the energy growth rate account for both uncommitted and committed⁴ efficiency savings. The Sierra Club recommended assuming a 1.15% energy efficiency savings per year (Sierra Club 2012a). The Sierra Club Alternative assumed successful implementation of energy efficiency measures, and therefore reduced need for siting and developing utility scale renewable energy development in the DRECP.

In response to the Sierra Club comments, the Energy Commission revised the 2040 Acreage Calculator Scenario by revising the forecasted annual growth in demand to include uncommitted energy efficiency (Energy Commission 2012a). The Sierra Club submitted a second comment letter July 11, 2012, noting that additional energy efficiency savings should be further incorporated into the calculator (Sierra Club 2012b).

Consistency with Purpose Objectives. The Sierra Club Alternative would revise the acreage calculator to include a higher energy efficiency savings, which would reduce the acres needed for renewable energy within the DRECP planning area. The Sierra Club Alternative does not address the geographic distribution of ,or flexibility for, renewable energy development, but it would potentially allow for avoidance of the locations not included in the DFAs at the request of one or more of the DRECP agencies. The alternative would not meet the assumed target for all alternatives (20,000 to 22,000 MW) because the Sierra Club Alternative contends that reduced energy development would be needed by

⁴ “Committed” savings are those that result from market forces and from policy initiatives that are fully authorized and for which a sufficient program design exists to allow accurate savings assessments. “Uncommitted” saving are the result of policy initiatives not considered committed.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2040, given the increase in energy efficiency. The alternative would potentially comply with the biological and non-biological conservation guiding principles.

Rationale for Elimination. The Sierra Club energy efficiency assumptions are higher than those assumed in the Energy Commission calculator and those documented between 1990-2010 which was 0.81% (Vidaver 2011). The energy efficiency originally assumed in the Energy Commission-DRECP scenario, 0.83% per year, is already above the historical average between 1990 and 2010. As noted in the Renewable Energy Context Material provided by the Office of the Governor [April 25, 2012], even with substantial energy efficiency measures California's electricity use could double by 2050 (California Office of Governor 2012). Because the efficiency goals stated in the Sierra Club Alternative are not likely to be attainable, the alternative may not meet the DRECP contribution to state-wide renewable energy goals.

The Sierra Club Alternative for energy efficiency deployment offers an expert opinion that disagrees in part with the expert opinion offered by the Energy Commission. The CEQA Guidelines (Section 15151) require that an EIR include a sufficient degree of analysis to provide decision makers with information which enables them to make a decision that takes account of environmental consequences. In this case, the alternatives are based on the Energy Commission calculator, which is based on documented efficiency assumptions.

2.10.2.6 April 25, 2012, Development Scenario 6

Alternative Description. The April 25–26, 2012, DRECP Stakeholder Committee Meeting discussed six renewable energy development scenarios, with potential DFAs ranging from “concentrated” development to “dispersed” development. Development Scenario 6 was the most dispersed development scenario and provided the most flexibility for renewable energy development and greatest potential to respond to market constraints (DRECP 2012b). Development Scenario 6 included all of the potential development within the DRECP October 2011 Preliminary Conservation Strategy Renewable Energy Study Areas and Solar Programmatic EIS Solar Energy Zones, in addition to other industry identified development areas (DRECP 2012b). This scenario exhibited the highest potential conflicts with biological and non-biological resources and uses within the DRECP Plan Area. It included 4.6 million acres of DFAs, of which 57% were private, 39% were Federal (BLM-administered), and 4% were other (municipal, district) (DRECP 2012). Development Scenario 6 is illustrated in Figure 2.10-2.

Consistency with Purpose and Objectives. The Development Scenario 6 Alternative does not meet the geographic context for alternatives because it includes locations avoided by the DFAs at the request of one or more REPG agencies. The alternative would meet the assumed generation target for all alternatives (20,000 to 22,000 MW). The alternative would not comply

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

with the biological and non-biological conservation guiding principles because it would locate renewable energy development on land within the DRECP that has high biological sensitivity as shown in the Plan-wide Biological Reserve Context maps. The areas that would be incorporated in this alternative but that are not within the retained alternatives have high biological resource conflicts and do not align with DRECP program goals.

Rationale for Elimination. The Development Scenario 6 would not concentrate renewable energy development in DFAs, so it would direct transmission to less environmentally constrained locations. It would result in high biological resource conflicts; about 62% of the scenario would overlap with areas of potential conflict (DRECP 2012b). Because the Development Scenario 6 Alternative identified locations that conflicted with the DRECP goals, the alternative was not carried forward. However, up to 2.2 million acres of the alternative development areas that have lower potential resource conflict are included in the DRECP alternatives.

2.10.2.7 Southeast Emphasis Alternative

Alternative Description. This alternative was defined as the “Southeast Emphasis Alternative – Alternative 4” in the July 25, 2012, Overview of DRECP Alternatives – Briefing Materials. This alternative would focus development in the southeast portion of the DRECP planning area, including eastern Riverside County and Imperial County. The alternative would include development both on public lands in the southeast portion of the Plan Area and on private lands in Imperial County. It would include 1.29 million acres of DFAs, with about 406,000 acres of land administered by the BLM (31% of the DFAs) and 820,000 acres of private lands (63% of the DFAs) (DRECP 2012a). It would include over 545,000 acres of agriculture lands and over 37,000 acres of dune communities (DRECP 2012a). The Southeast Emphasis Alternative would incorporate about 537,000 acres of the CEERT proposed solar areas and about 290,000 acres of the CalWEA identified wind areas (DRECP 2012a). The alternative is illustrated in Figure 2.10-3.

Consistency with Purpose and Objectives. The Southeast Emphasis Alternative would not meet the DRECP agencies purpose and objectives for the DRECP because it includes locations that should be avoided by for use as DFAs at the request of one or more of the DRECP agencies. The alternative could potentially meet the assumed target for all alternatives (20,000 to 22,000 MW). The alternative would partially comply with the biological and non-biological conservation guiding principles.

Rationale for Elimination. This alternative is eliminated for several reasons. The alternative would eliminate farming on productive agricultural lands, resulting in detrimental economic effects to the Imperial County area. The agriculture production in

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

2011 in the Imperial Valley generated an estimated \$1.175 billion in personal income with an estimated total economic impact of \$5.3 billion (Imperial County Farm Bureau 2012). In addition, there is a common misconception that the conversion of large agricultural parcels to other uses would allow reassignment of water allowances to other users by the agricultural land owners. In Imperial County, water rights are retained by the Imperial Irrigation District (IID) and allocated per IID rules, regulations and policies even if the land is not used for agriculture.

The conversion of large areas of agricultural land to generation facilities would constitute an environmental impact due to loss of protected farmlands (including loss of Williamson Act land and other protected or prime agricultural lands). Farmlands also provide important habitat for certain species, like the burrowing owl and the Salton Sea, farm fields, and IID canals provide habitat for birds. Over 70 percent of California's burrowing owls reside in Imperial County (Imperial County Farm Bureau 2012).

Another reason that this alternative has been eliminated is that the generation of the majority of the DRECP's renewable energy in Imperial County would create two additional problems:

1. The need for a substantial new transmission system that would likely be infeasible given the electrical isolation of the IID transmission system from areas with more load; and
2. The need for a large quantity of gas or geothermal power generation to balance the intermittent generation from renewable resources. Much of the balancing generation would have to be located within the IID service territory, where electricity demand is around 1000 MW.

2.10.2.8 Avian Avoidance Alternative

Alternative Description. A number of scoping comments requested consideration of an alternative that would avoid impacts to avian species. The comments requested an alternative that would revise the DRECP area to:

- Avoid the take of eagles
- Exclude areas that overlap with California condor use areas
- Exclude areas that support high densities of wintering or migratory birds, contain a high level of raptor activity, or contain breeding, wintering, or migrating populations of less abundant species

There are about 603,000 acres of modeled suitable foraging habitat for the California condor in the DRECP planning area boundary (Species Profiles 2012a). This habitat occurs

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

in the Sierra Nevada and Southern California Mountain and Valleys ecoregion sections and includes scrub, grassland, woodland, and wetland habitats. The DRECP planning area boundary has historical and current occurrence records of bald eagles and golden eagles; eagle habitat modeling acreages are not yet available (Species Profiles 2012b; Species Profiles 2012c). Suitable foraging habitat for condors and eagles ranges throughout the DRECP. Eagle and condor breeding habitat is concentrated along the Highway 395 corridor and along the Tehachapi Mountain Range (DRECP 2012c; DRECP 2012d; DRECP 2012e). Eagle breeding habitat is also modeled south of Barstow, east of Victorville, along the Colorado River, and surrounding the Salton Sea (DRECP 2012c; DRECP 2012d). The Avian Avoidance Alternative would avoid the modeled breeding habitat.

Consistency with Purpose and Objectives. The Avian Avoidance Alternative partially meets the geographic context for alternatives but it includes locations avoided by the DFAs at the request of one or more of the REPG agencies. The alternative would potentially meet the assumed target for all alternatives (20,324 MW), but would reduce the renewable energy technologies that could be implemented by prohibiting wind energy development in defined areas. It would reduce the ability to site developments in the best resource areas. This alternative would not provide diversity in renewable energy generation types and transmission because it would limit the locations where wind energy projects could be sited. The alternative would partially comply with the biological and non-biological conservation guiding principles.

Rationale for Exclusion. The Avian Avoidance Alternative would not concentrate renewable energy development in the defined DFAs. It would avoid raptor breeding habitat but would potentially result in high biological resource conflicts for other special status species by concentrating development in other areas with different mixes of resources. The DRECP alternatives retained for analysis avoid portions of raptor breeding and foraging habitat according to the accepted biological conservation guiding principles. For example, the DFAs incorporated in the alternatives included in this document avoid the high concentration of golden eagle nesting habitat near Barstow and the Cady and Bristol Mountains, and portions of the Tehachapi Mountains within the Condor Study Area were identified as having a potential high conflict with development. The Condor Study Area includes 37,000 acres of very high-value California condor habitat and areas of historically frequent condor foraging and roosting activity within the Tejon Ranch Habitat Conservation Plan to ensure the condor's ongoing recovery.

2.10.2.9 Distributed Generation Alternative

Alternative Description. Governor Jerry Brown's Clean Energy Jobs Plan identifies a goal of installing 20,000 MW of new renewable capacity by 2020, including 12,000 MW of local electricity generation from small generation sources (i.e., distributed generation; Energy

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

Commission 2011a). Distributed generation has a number of benefits, including local electricity reliability, elimination of some new transmission lines, and compatibility with urban areas. The state has developed programs to spur the growth of distributed generation, including net energy metering, a feed-in tariff, the California Solar Initiative, and a renewable auction mechanism⁵. California has more than 3,700 MW of distributed generation already operational and an additional 4,200 MW under construction or authorized (California Office of Governor 2012).

There is no single accepted definition of renewable distributed generation or of a Distributed Generation Alternative. The 2011 Integrated Energy Policy Report published by the Energy Commission provides this definition: “For the purposes of the 12,000 MW of renewable distributed generation by 2020 goal, distributed generation is defined as: (1) fuels and technologies accepted as renewable for purposes of the Renewables Portfolio Standard (RPS); (2) sized up to 20 MW; and (3) located within the low-voltage distribution grid or supplying power directly to a consumer” (Energy Commission 2012b). For purposes of this document, the alternatives included would include distributed generation projects sized up to 20 MW.

Consistency with Purpose and Objectives. The Distributed Generation Alternative would meet the geographic context for alternatives because it would not include the locations avoided by the DFAs at the request of one or more of the REPG agencies. The alternative would only partially meet the assumed target for all alternatives (20,000 to 22,000 MW) and would not provide diversity in renewable energy generation and transmission. The alternative would comply with the biological and non-biological conservation guiding principles.

Rationale for Exclusion. As noted in the Office of the Governor Renewable Energy Context Material, distributed generation will play an important role in achieving the state’s short- and long-term climate goals (California Office of Governor 2012). To underscore this point it should be noted that each alternative carried forward for consideration incorporated more than 1,700 MW of ground mounted utility distributed generation (1-20 MW). However, a Distributed Generation Alternative faces deployment challenges, including the following (California Office of Governor 2012):

- Unavailability of many California rooftops for solar energy due to building orientation, structural integrity, or other reasons
- The need for distribution system upgrades to integrate small scale power

⁵ The renewable auction mechanism streamlines the procurement process for developers, utilities, and regulators. It allows bidders (i.e., renewable developers or investors) to set their own price, provides a simple standard contract for each utility, and allows all projects to be submitted to the CPUC through an expedited regulatory review process.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

- An interconnection process historically designed for large, central power plants
- Difficulty for large rooftop projects to secure financing
- A patchwork of local permitting requirements

Based on electricity supply and demand forecast reports prepared by Energy Commission staff and the lack of financial incentives to develop numerous renewable distributed generation projects, distributed generation alone would not supply enough electricity to meet the state's mandated RPS program goals. Distributed Generation has been included as part of the energy mix in the alternatives retained for consideration.

Energy generation to meet the RPS program goals requires a mix of renewable sources. Various agency publications⁶ identify the need to increase renewable generating capacity from distributed generation and utility-scale sources; both are essential to successfully meeting RPS program goals. Therefore, a Distributed Generation Alternative relying on that scenario alone was not carried forward for detailed analysis in this document.

2.10.3 Literature Cited

California Office of Governor. 2012. California's Climate Goals, Large Scale Renewable Energy, and the DRECP. Dated April 25.

CalWEA (California Wind Energy Association). 2012a. Proposed DRECP Scenario for Wind Energy Resources. Submitted April 17.

Energy Commission (California Energy Commission). 2012a. Staff 2040 Acreage Calculator Scenario in Response to Comments from Sierra Club. Dated April 24.

Energy Commission. 2012b. 2011 Integrated Energy Policy Report, Lead Commissioner Final Report. Publication Number: CEC-150-2011-001-LCF. February 2012.

Energy Commission 2011a. Renewable Power in California: Status and Issues. Publication Number: CEC-150-2011-002-LCF-REV1. December 2011.

CEERT (Center for Energy Efficiency and Renewable Technologies). 2011a. Comments on the Preliminary Conservation Strategy for the Desert Renewable Energy Conservation Strategy. Dated December 1.

⁶ See for example, 2011 Integrated Energy Policy Report, CEC-100-2011-001-CMF. Renewable Power in California: Status and Issues, CEC-150-2011-002, or California's Clean Energy Future: Implementation Plan, September 2010.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

County of Riverside. 2011. Riverside County's Position on the Desert Renewable Energy Conservation Plan. Dated February 8.

DRECP (Desert Renewable Energy Conservation Plan). 2012a. Overview of DRECP Alternatives Briefing Materials: DRECP Stakeholders Committee Meeting. July 25, 2012.

DRECP. 2012b. Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios: DRECP Stakeholders Meeting April 25/26, 2012.

DRECP. 2012c. Preliminary Draft DRECP Species Statistical Model: Golden Eagle. March 2012.

DRECP. 2012d. Preliminary Draft DRECP Species Statistical Model: *Bald Eagle*. March 2012.

DRECP. 2012e. Preliminary Draft DRECP Species Statistical Model: California Condor. March 2012.

DRECP. 2011a. DRECP Memo regarding Riverside County's Position on the Desert Renewable Energy Conservation Plan. Dated March 17.

DRECP. 2011b. Appendix A-1 Metadata for the Preliminary Conservation Strategy Map. Dated October 26, 2011.

DRECP. 2010. Planning Agreement by and among California Department of Fish and Game, California Energy Commission, United States Bureau of Land Management, and United States Fish and Wildlife Service for the Desert Renewable Energy Conservation Plan. May.

Imperial County Farm Bureau. 2012. Imperial County Agriculture. <http://www.icfb.net/countyag.html>. Accessed December 2012.

Sierra Club. 2012a. Analysis of the CEC-DRECP Spreadsheet Model and Scenarios. February 10, 2012.

Sierra Club. 2012b. Sierra Club comments on acreage calculator. July 11 via email.

Species Profiles. 2012a. Birds: California Condor (*Gymnogyps californianus*). Draft March 2.

Species Profiles. 2012b. Birds: Bald Eagle (*Haliaeetus leucocephalus*). Draft March 2.

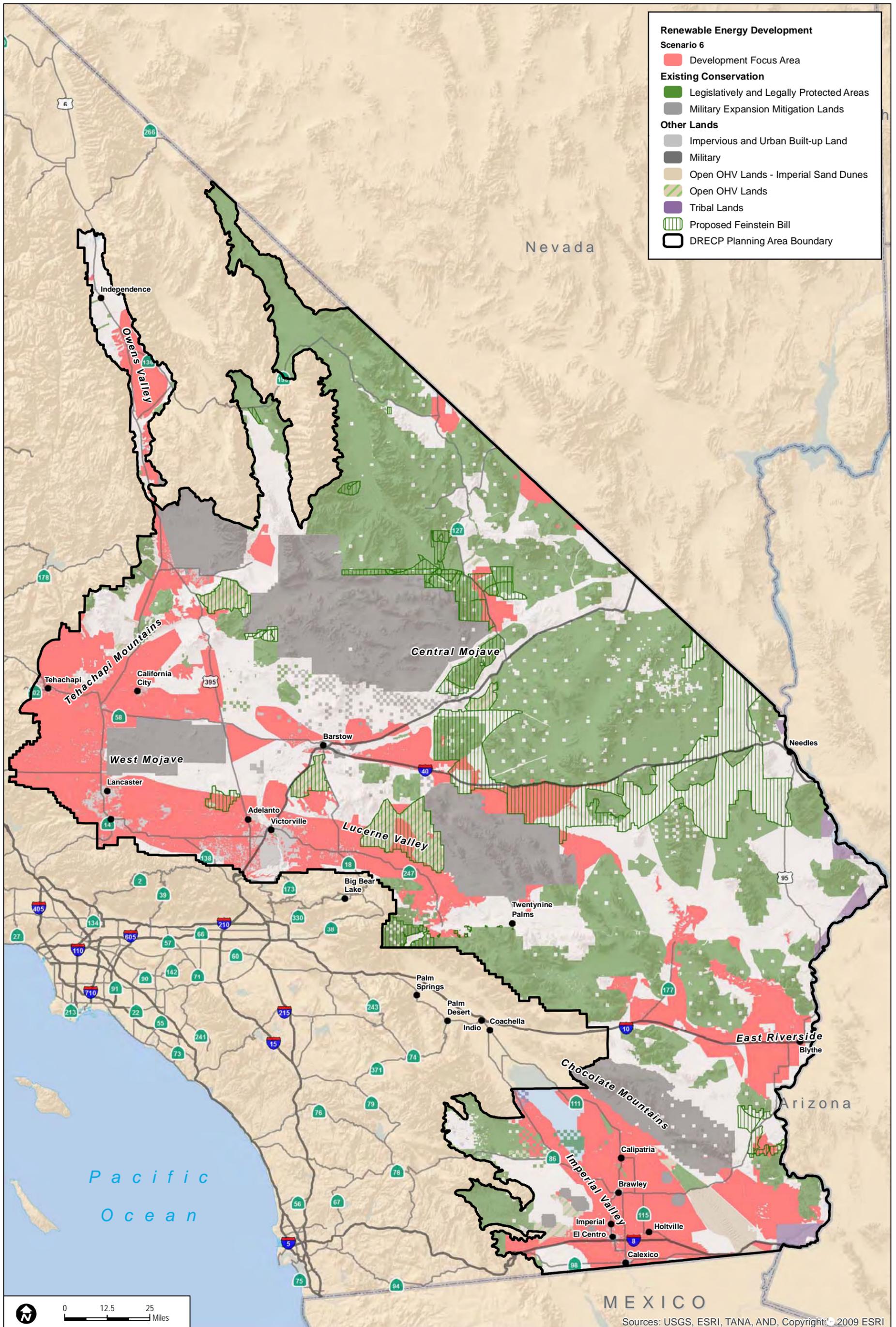
Species Profiles. 2012c. Birds: Golden Eagle (*Aquila chysaetos*). Draft March 2.

Vidaver, David. 2011. Renewable Portfolio Standard and Acreage Calculator. http://www.drecp.org/meetings/2011-12-05_meeting/presentations/D-Vidaver_Calculator_Description-2011-11-29.pdf. Accessed December 2012.

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK

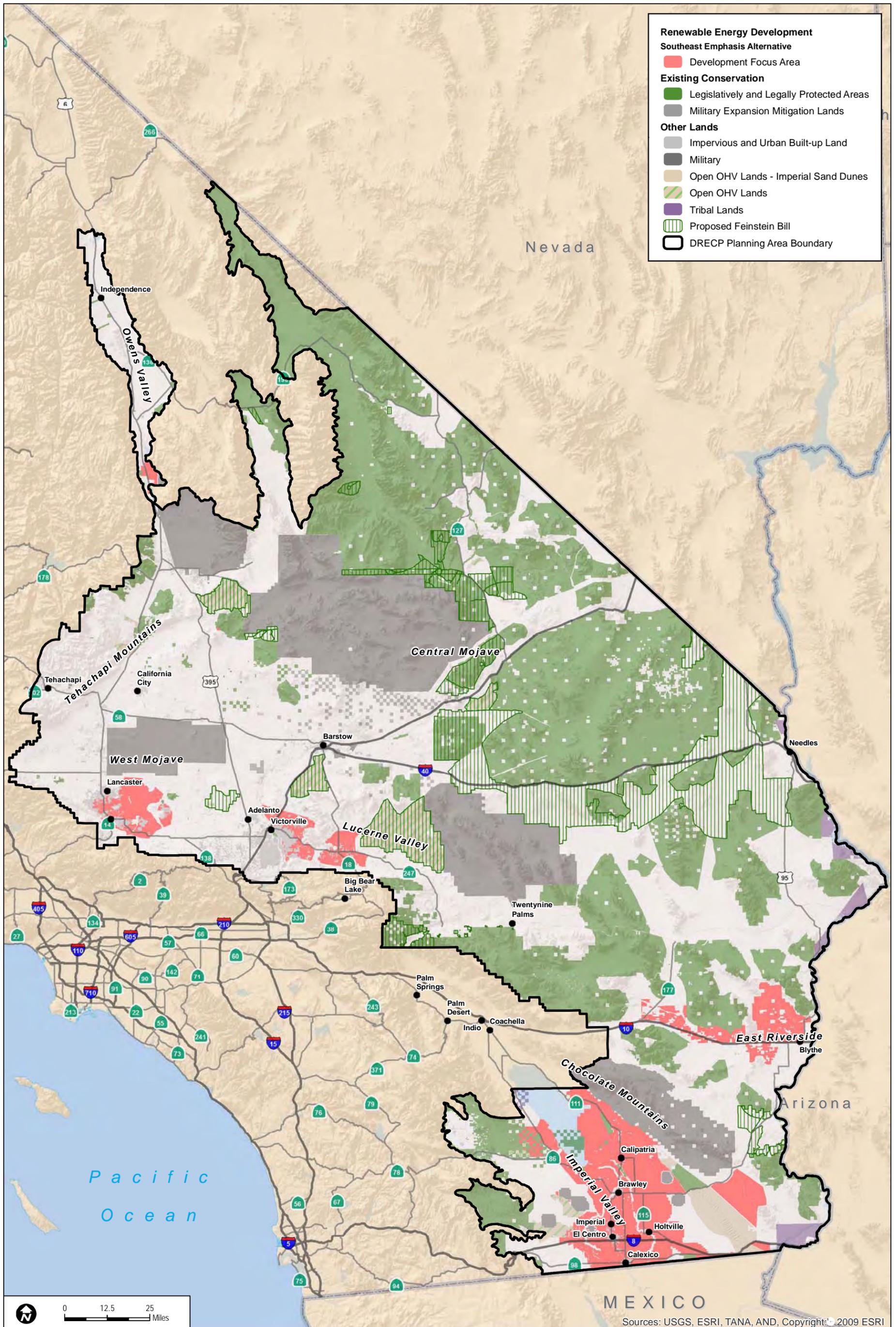


**FIGURE 2.10-2
Scenario 6**

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK



Sources: USGS (2001,2010); ESRI (2010); BLM (2012)

Sources: USGS, ESRI, TANA, AND, Copyright: © 2009 ESRI

FIGURE 2.10-3

Southeast Emphasis Alternative

December 17, 2012

Description and Comparative Evaluation of Draft DRECP Alternatives

INTENTIONALLY LEFT BLANK