



Memorandum

Date:	October 12, 2010
To:	David Harlow, Director Desert Renewable Energy Conservation Plan
From:	Ron Baxter and David Zippin
Subject:	Working Draft for Feedback Purposes: Land Use and Ownership Preliminary Description for the Desert Renewable Energy Conservation Plan

This memo presents our working draft of the Preliminary Description of Land Use and Ownership, an early foundational element for the Desert Renewable Energy Conservation Plan (DRECP). The purpose of this memo is to provide an overview of land use and ownership within the Planning Area. Included in this overview is an analysis of the protected lands and the relationships between state, federal, and local jurisdictions. The protected lands analysis provides a classification scheme that will aid the preserve design development in the framework conservation strategy. As part of the planning process the data sources used will be presented and updates will be solicited from local, state and federal agencies and stakeholders. When complete, this information will be incorporated into the Environmental Setting chapter of the DRECP (expected to be Chapter 2).

This memo is incomplete. The next draft will incorporate early feedback and will be presented in early November to the REAT agencies and the Stakeholder group.

1. Data Layers and Sources

This section presents the data sources we propose to use for the land use and ownership information in the DRECP.

1.1 Land Use

It is important to distinguish between two types of "land use": land use conditions and land use plans. Both types of land use are important for the DRECP. *Land use conditions* are defined as the conditions in the planning area existing at the time the Planning Agreement was signed (October 2009) or when best data are available. Our ability to document land use conditions in such a large area will vary depending on the data sources. For example, some maps of land cover or vegetation types may be based on aerial photography taken prior to October 2009. The DRECP will use the best and most recent available data to define land use conditions. The consultant team is working with staff from the California Department of Fish and Game (CDFG) to identify the best available data sets for land cover and vegetation in the planning area. As a starting point, the DRECP Science Advisors

described many of the existing vegetation maps and mapping efforts in the planning area in Appendix F of their August 2010 draft report.

Land use plans are defined as adopted maps or plans that describe the current and future land uses in a geographic area. Land use plans are important for the DRECP because they provide an indication of where urban and rural development occurs now and where it will occur in the future that may be incompatible with commercial-scale renewable energy development. Current and future land uses are also important for the design of the conservation strategy. We want to avoid conflicts between land acquisition for conservation purposes and plans for future land uses that could be incompatible with that conservation use. For example, future rural or urban development near reserves would degrade the biological functions of those reserves through the indirect effects of noise, light, and invasive species.

A variety of data sources are used to develop a comprehensive map of land use plans. A primary source is the land use plans of local jurisdictions. All California counties and cities are required to prepare General Plans that describe their current, planned, and allowable land uses. General Plans are typically updated every 15 years. Planning documents prepared by state and federal agencies and tribes also include current and planned land uses. These other documents include:

- State Park General Plans (Anza-Borrego State Park 2005; Ocotillo Wells State Vehicular Recreation Area 1982; Red Rock Canyon State Park 1981, revision in progress).
- Bureau of Land Management California Desert Conservation Area Plan (1980, as amended).
- National Park Service General Management Plans (Death Valley National Park 2002; Joshua Tree National Park 1995; Mojave National Preserve 2002).
- U.S. Department of Agriculture, Forest Service Land Management Plans (San Bernardino National Forest 2005).
- U.S. Fish and Wildlife Service Comprehensive Conservation Plans (Salton Sea National Wildlife Refuge, in process).
- Tribal land use plans, if available (Quechan, Colorado River, Chemehuevi, Fort Mojave, Morongo, Agua Caliente, Augustine, Cabazon, Torres-Martinez, Lone Pine, Fort Independence, others).
- Department of Defense Land Use Plans and Integrated Natural Resources Management Plans (INRMPs) (China Lake Naval Air Warfare Center Weapons Division, Fort Irwin Army National Training Center, Marine Corps Logistics Base Barstow, Edwards Air Force Base, Marine Corps Air Ground Combat Center Twentynine Palms, Chocolate Mountains Aerial Gunnery Range).

We are working with CDFG to gather these and other land use data relevant to the DRECP. Because of the large variety of land use designations used by all of these jurisdictions and agencies, it may be necessary to create a single and simplified set of land use categories for the DRECP as a prediction of future land uses. For example, the hundreds of separate land use designations used by counties and cities within the planning area could be simplified to the following categories:

- Urban (residential, commercial, industrial development)

- Rural residential (>1 dwelling unit per 2.5 acres¹)
- Agriculture
- Military uses
- Tribal lands
- Urban parks and open space
- Rural parks and open space

Table 1 lists the various geographic information systems (GIS) datasets available to the project team that will be used to show the existing land uses within the DRECP planning area.

Table 1. Land Use Plan Data Layers Available for the DRECP (Note: Data List is Incomplete)

Data Layer	File Name	Date	Source	Description
SCAG Existing Land Use 2005	Existing_LU_SCAG_2005	2005	Southern California Association of Governments (SCAG)	This dataset covers most of Orange County, Imperial County, San Bernardino, Riverside County and Los Angeles County. There are 105 different categories of land use, mostly relating to human development.
SCAG General Plan Land Use 2007	General_Plan_LC_SCAG_2007	2007	SCAG	This dataset covers most of Orange County, Imperial County, San Bernardino, Riverside County and Los Angeles County. It shows the general plan classification for these counties. Only the Land Use codes are included.
Kern County General Plan	General_Plan_LU_Kern_20100329	2010	County of Kern Planning Department	This is the general plan for Kern County, which guides the future development in the County.
Kern County Zoning	Zoning_Kern_20100329	2010	County of Kern Planning Department	Zoning within Kern County.
Los Angeles County Land Use	Land_Use_Plan_LA_County_20050619	2005	?	This dataset contains land use and named open space parks within Los Angeles County.
Riverside County Approved General Plan Land Use	General_Plan_LU_Riverside_2010	2009	RBF	This dataset shows the general plan for Riverside County and can be used to determine areas of future development. Only the Land Use codes were included.

¹ Based on minimum density in the San Bernardino County General Plan (2007), "Rural Living" land use designation.

Data Layer	File Name	Date	Source	Description
Riverside County Zoning	Zoning_Riverside_2010	2008	TLMA	Zoning within Riverside County.
Riverside County Open Space	Parks_Riverside_2010	2007	TLMAGe	Parks and Open Space within Riverside County.
Western Riverside County MSHCP land cover	Existing_LU_Riverside_MSHCP	?	?	Land use types from the Riverside MSHCP. No additional metadata was provided. Mostly focuses on human development.
San Diego County Existing Land Use	Existing_LU_SANDAG_2009	2009	San Diego Association of Governments	Focuses on human development and includes parks and preserves.
County of San Diego General Plan	General_Plan_LU_San_Diego_CO	2008	County of San Diego Planning and Land Use Department	This data shows the general plan for San Diego County and highlights areas that are planned to be developed in the future. Already developed areas are not included.
Official Zoning Layer for the County of San Diego	Zoning_San_Diego_CO_2008	2008	County of San Diego Zoning Ordinance	Zoning within San Diego County.

2. Land Ownership

[Note: This section will describe the general land ownership patterns in the planning area, including large areas of public open space or protected areas, by landowner type. We will also describe the extent and location of these lands.]

2.1 Tribal Lands

2.2 Federal Lands

2.2.1 National Park Service

2.2.2 U.S.D.A. Forest Service

2.2.3 U.S. Bureau of Land Management

2.2.4 U.S. Fish and Wildlife Service

2.2.5 Department of Defense

2.3 State Lands

2.3.1 California Department of Parks and Recreation

2.3.2 California Department of Fish and Game

2.3.3 State Lands Commission

2.4 Local Public Lands

2.4.1 City of Los Angeles

2.5 Private Lands

2.5.1 Conservation Easements

2.5.2 Other Private Conservation Areas & Reserves

3. DRECP Protected Area Categories

3.1 Protected Area Classification

The DRECP conservation strategy will be designed to complement and support the extensive network of conservation areas already in place in the planning area. Lands that have low or no conservation status would be eligible for acquisition, placement of a conservation easement, or change in land management classification to elevate their conservation status. Land ownership provides one indication of conservation areas in the planning area, but does not provide a complete picture. A simple and clear protected area classification is needed to define two important variables relevant to the conservation strategy, the level of protection and the focus of land management.

The value of protected open space areas for covered species and natural communities is greatest when land use protections are in place in perpetuity through an irrevocable instrument such as a conservation easement, deed restriction, or legal mandate. The value of open space for the Plan is similarly improved when natural resource management is the primary focus of the land. Sites that do not have land use protections in perpetuity but do have natural resource management as their primary management goal may still support the DRECP conservation strategy.

The following classification of open space was developed to account for differences in land use protections and resource management emphasis and to assist in the development of the Plan conservation strategy. Protected area categories have been evaluated and classified into three types based on the level of existing protection and the focus on the protection of ecological values. These categories are consistent with the categories of biodiversity management developed by the national Gap Analysis Program and widely used in other conservation planning processes (Scott et al. 1993; Groves 2003). Table 2 provides specific examples of areas representing each type, while Figure 1 shows a decision key to determine a property's type.

3.1.1 Type 1. Managed Conservation Lands Protected in Perpetuity

Type 1 protected areas are defined as lands which are currently protected for the conservation of their natural resources. Other uses may occur on these lands but the conservation of natural resources is the primary purpose of the land. Type 1 lands are protected from development by irrevocable instruments such as conservation easements or deed restrictions in perpetuity. Sites protected by state or federal laws that prohibit land uses that are incompatible with conservation also qualify for Type 1 protected area designation.

Type 1 protected areas include designated state or federal wilderness areas, National Parks and Monuments, public and private nature reserves with conservation easements, National Wildlife Refuges, private mitigation or conservation banks, and certain special designation conservation lands (e.g., Bureau of Land Management [BLM's] Desert Tortoise Natural Area). Type 1 protected areas can potentially serve as important "core areas" to help meet DRECP conservation goals.

3.1.2 Type 2. Managed Conservation or Open Space Lands Not Protected In Perpetuity

Type 2 lands are those that are currently being managed primarily for their conservation values or open space values, but whose underlying protections are not permanent. These lands can include State or Regional Parks, BLM Areas of Critical Environmental Concern (ACEC), and undeveloped portions of military facilities that are designated as conservation areas. Type 2 lands can potentially serve as important areas for wildlife movement corridors or buffers, as well as areas of significant habitat. Some Type 2 open space may be eligible for DRECP conservation areas because of the opportunity to either enhance management, protect areas in perpetuity, or both.

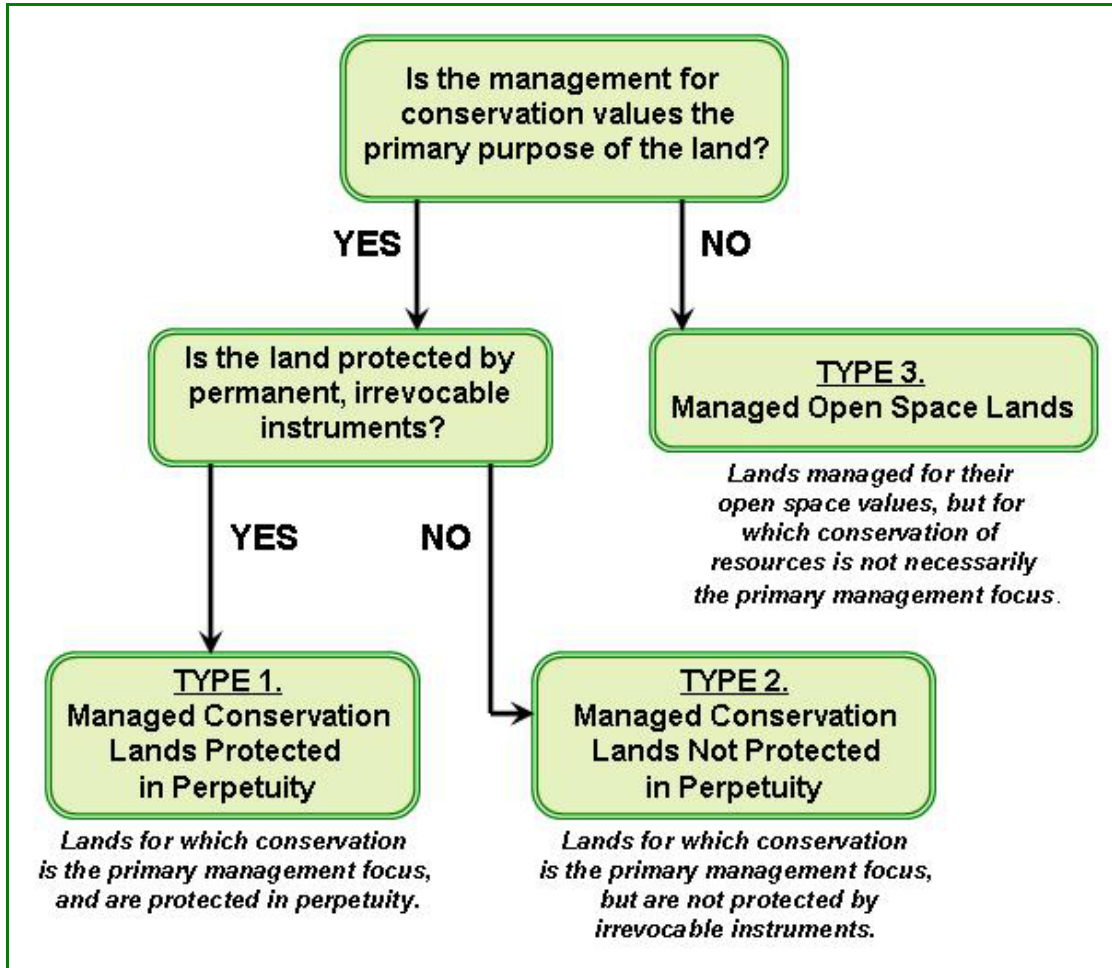
3.1.3 Type 3. Managed Open Space Lands

Type 3 protected areas are lands managed for their open space characteristics, but for which conservation is not necessarily the primary management focus. These areas represent the majority of public lands in the DRECP Planning Area. Such areas can be expected to remain reasonably intact for the foreseeable future, but could be subject to limited development. Type 3 areas include multiple use lands, often used for recreational purposes. The management goals for these lands can vary considerably. Examples of these lands include most of the National Forests, portions of State or Regional Parks, portions of military installations, and most BLM lands.

Table 2. Examples of Protected Area Classifications in the Planning Area Using the Proposed Classification System.

TYPE 1	TYPE 2	TYPE 3
<ul style="list-style-type: none"> • Death Valley National Park (Portions) • Mojave National Preserve • Old Woman Mountains Wilderness • Turtle Mountains Wilderness • Desert Tortoise Natural Area • Coachella Valley Multiple Species Conservation Plan reserves 	<ul style="list-style-type: none"> • Marine Corps Air Ground Combat Center, West and Sand Hill Desert Tortoise reserve • Red Rock Canyon State Park • Anza Borrego State Park • Bureau of Land Management Areas of Critical Environmental Concern (ACEC) • Death Valley National Park (Portions) 	<ul style="list-style-type: none"> • Most Bureau of Land Management desert lands • Cleveland and San Bernardino National Forests (excluding wilderness or Research Natural Areas) • Tribal Lands • Most military lands • Mitchell Caverns State Recreation Area

Figure 1. Decision Tree for Protected Area Classification



4. References

Groves, C. 2003. *Drafting a Conservation Blueprint: A Practitioner's Guide to Planning for Biodiversity*. Island Press, Washington, D.C.

Scott, J. M., F. Davis, B. Csuti, R. Noss, B. Butterfield, C. Groves, H. Anderson, S. Caicco, F. D'erchia, T. Edwards, J. Ulliman, and R.G. Wright. 1993. *Gap analysis: a geographic approach to protection of biological diversity*. Wildlife Monographs. 123.

[Land use document references to come]