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DRECP Framework Conservation Strategy Report

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EXECUTIVE SUMMARY

This Framework Conservation Strategy Report documents work products completed to date for the Desert Renewable Energy Conservation Plan (DRECP), with descriptions of key elements and next steps in the conservation planning process. This Executive Summary includes three sections: (A.) Overview of Framework Conservation Strategy Report, (B.) Overview of comments received on interim work products related to Framework Conservation Strategy Report, and (C.) Overview of relationship of Framework Conservation Strategy Report elements to Independent Science Advisors (ISA) recommendations.

This framework conservation strategy is a key milestone in the development of the DRECP because it:

- Documents baseline data that will be used for the Preliminary Conservation Strategy
- Establishes the framework for conservation planning principles and biological goals and objectives
- Establishes the format and framework for documentation and analysis of Covered Species and natural communities
- Establishes the framework for preliminary analysis of Covered Activities.

A. Overview of Framework Conservation Strategy Report

Each element of the Framework Conservation Strategy Report is summarized below:

Chapter I Introduction

The introduction provides background and overview information for the DRECP and summarizes program goals and regulatory context of the DRECP. The content and format of Chapter I is consistent with the DRECP Working Draft Outline reviewed by stakeholders in October 2010.

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Of note:

This section was posted to the California Energy Commission's (CEC's) DRECP website and made available for review by stakeholders on April 13, 2011.

Chapter II Environmental Setting

The environmental setting section includes a description of physical conditions and the ecological and biological setting within the Plan Area. Existing land use and ownership is described, including the classifications for protected areas within the Plan Area. Definitions developed to date for the DRECP are also included in this section. Species descriptions in this section are limited to the initial 14 species identified for consideration as Covered Species.

Reference is made in this section to the Non-Biological Issues Preliminary Description, included as Appendix B to the Framework Conservation Strategy Report.

Of note:

- This section contains the Initial Land Cover Map, including sources and methods, made available for review by the DRECP Resource Mapping Group in February 2011.
- This section contains the Land Use and Ownership Map, including sources and methods, made available for review by the DRECP Resource Mapping Group in February 2011.
- This section contains the Protected Areas Map, made available for review by the Covered Species Working Group (as part of the Preliminary Gap Analysis) on April 13, 2011.
- This section references the Non-Biological Issues Preliminary Description included as Appendix B to the Framework Conservation Strategy Report. The Non-Biological Issues Preliminary Description was posted to CEC's DRECP website and made available for review by stakeholders on April 20, 2011.
- A draft version of this section in its entirety was posted to CEC's DRECP website and made available for review by stakeholders on April 13, 2011.

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Chapter III Conservation Planning Process

The conservation planning process section describes elements of the conservation planning process completed to date. These include draft conservation areas design and assembly principles, a preliminary gap analysis, and a conservation actions summary matrix based on review of existing relevant conservation planning documents. The preliminary gap analysis includes two components: (1) description, classification, and mapping of protected lands; and (2) preliminary gap analyses based on the following datasets: initial land cover, desert tortoise suitable habitat (USGS 2009 model [Nussear et al.¹]); Mohave ground squirrel core habitat and other known populations; plant species occurrence points (for Barstow woolly sunflower, desert cymopterus, Mojave monkeyflower); California Essential Habitat Connectivity (CEHC) linkages. Additional analyses will be completed for Covered Species and other potential evaluation factors as the conservation planning process proceeds.

The conservation actions summary matrix is an element of the reserve design considerations portion of the DRECP Working Draft Outline. The summary matrix is completed for the initial 14 species identified for consideration as Covered Species and implements recommendations of the ISA to take advantage of the considerable conservation and recovery planning already available for the region.

Of note:

- This section contains the Preliminary Gap Analysis, including sources and methods, made available for review by the Covered Species Working Group and the Resource Mapping Group on April 13, 2011.
- This conservation areas design and assembly principles document included in this section was posted to CEC's DRECP website and made available for review by stakeholders on April 13, 2011. The document was provided to the Covered Species Working Group for review on March 24, 2011.
- The conservation actions summary matrix included in this section was posted to CEC's DRECP website and made available for review by stakeholders on April 13,

¹ Nussear, K., T. Esque, R. Inman, L. Gass, K. Thomas, C. Wallace, J. Blainey, D. Miller, and R. Webb, R. 2009. *Modeling habitat of the Desert Tortoise (Gopherus agassizii) in the Mojave and Parts of the Sonoran Deserts of California, Nevada, Utah, and Arizona*. U.S. Geological Survey Open-File Report 2009-1102.

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2011. The document was provided to the Covered Species Working Group for review on April 1, 2011.

Chapter IV Conservation Strategy (Framework Level)

This section includes preliminary biological goals and objectives for the initial 14 species considered for analysis as Covered Species, as well as preliminary landscape-level and natural community-level biological goals and objectives. This section documents the proposed structure and format for the biological goals and objectives with specific quantitative elements to be provided as the conservation planning process proceeds.

Of note:

A preliminary draft of the biological goals and objectives will be made available for review by the Covered Species Working Group on April 29, 2011.

Chapter V Interim Description of Covered Activities

This section includes an interim description of Covered Activities. The interim description includes two components—a list of draft principles for analysis of effects of the Covered Activities in the Preliminary Conservation Strategy and descriptions of the Covered Activities components assembled from information included in the Covered Activities Preliminary Description and provided by the Covered Activities Working Group.

Of note:

This section was made available for review by the Covered Activities Working Group on April 11, 2011.

Appendices

Two appendices are included in the Framework Conservation Strategy Report. They include elements of the DRECP Baseline Biology Report (Appendix A), described below, and the Non-Biological Issues Preliminary Description (Appendix B) referenced in the description of Chapter II.

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The following elements of the Baseline Biology Report are included in the Framework Conservation Strategy Report:

- Descriptions of the natural communities based on the Initial Land Cover map
- Descriptions of ecological processes, including environmental gradients, substrates, carbon and nutrient cycling, soil biota, and fire
- Species profiles for the 14 initial species considered for analysis as Covered Species
- Species occurrence database memorandum previously distributed to stakeholders in March 2011
- Species modeling background information.

B. Overview of Comments Received on Interim Work Products Related to Framework Conservation Strategy Report

Verbal comments have been received from several stakeholders on interim work products developed as part of the Framework Conservation Strategy Report. These verbal comments are memorialized below and will be combined with written comments understood to be in preparation and expected comments on the Framework Conservation Strategy Report.

It should be noted that the Framework Conservation Strategy Report, like earlier DRECP work products such as the Covered Species Preliminary Description and the Covered Activities Preliminary Description, is not considered to be a draft report that will be reviewed, revised, and ultimately produced as a final report. The Framework Conservation Strategy Report, like the forthcoming Preliminary Conservation Strategy Report, is considered a building block of the Administrative Draft DRECP, expected to be produced at the end of 2011. As such, comments received on these documents will be tracked and reflected in subsequent DRECP work products and in the Administrative Draft DRECP, as appropriate.

Conservation Area Design and Assembly Principles

- Consider including goal of conserving species across their range

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- Consider including goal of providing for boom/bust fluctuations in response to climatic conditions such as drought
- Consider including goal of conserving peripheral populations, populations at edge of range to maintain genetic diversity
- Consider including concepts related to recovery, net gain in populations sizes and habitat values for rare species
- Clarify no double counting or mitigation credit for already conserved public lands, these lands do not constitute mitigation but could direct funds or conservation actions to these lands to improve their status relative to conservation and management for the benefit of Covered Species
- Consider wording for principle regarding environmental gradients, existing wording does not necessarily address sand transport and ecological processes
- Provide clarification on how conservation area design and assembly principles will be linked to goals and objectives
- Clarify that conservation actions may take place on Covered Activities project sites that go beyond required project-specific mitigation
- Clarify concept that conservation is assured in perpetuity, not just for lease period (for a wind project for example).

Species Occurrence Database Memorandum

- Consider including data from project-specific biology reports (Calico site as an example)
- Consider including Northern and Eastern Colorado Desert data in primary species occurrence database rather than as additional available data
- Consider including Audubon Christmas bird count data as an additional data source.
- Consider Covered Species list recommendations provided by CalWEA.
- Consider CNPS plant list recommendations.
- Consider analyzing wide-ranging at risk species earlier rather than later in the planning process such as golden eagle, prairie falcon, Mojave fringe-toed lizard, desert bighorn, including intermountain linkages, and white-margined beardtongue.

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- Augment Mohave ground squirrel occurrence data with unpublished BLM site records reflecting live trapping beginning in about 1974 and extending through 1980.

Preliminary Gap Analysis

- Check Type 1 National Natural Areas (Afton, Amboy Crater, Amargosa), if Areas of Critical Environmental Concern, they should potentially be Type 2
- Check Wild and Scenic Rivers – Type 1 or 2
- Check Wilderness Study Areas – Type 1 or 2
- Consider protection status for Bureau of Land Management (BLM) lands re: mining leases (i.e., “removed from entry” status).

Interim Description of Covered Activities

- Implement recommendation of Covered Activities Working Group to remove biomass from the DRECP as a Covered Activity.
- Other specific comments on draft document:
 - *Section 2.0, Item 9.a - no renewable development within exclusion areas:* Exclusion areas must take into consideration the need for transmission lines and associated linear facilities (such as distribution and telecommunication lines) to cross larger landscape areas that may potentially include exclusion areas, since linear facilities by their nature are not confined to a specific locality or area; designated utility corridors for linear facilities should be considered as an option.
 - *Section 3.0, Table 1 - installation of utility services – sewage facilities/pipelines:* Box should be checked, manned substations may require sewage facilities.
 - *Section 3.0, Table 1 - installation of utility services – water wells (wells or municipal water supply & pipelines):* Box should be checked, manned substations may require a water source.
 - *Section 3.0, Table 1 - transmission lines and facilities (upgrades):* Description of transmission line upgrades (rebuilt) needs to include the demolition/removal of existing transmission lines to construct a new line.

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- *Section 3.0, Table 1 – operation and maintenance – pumping of water wells (if water wells are used):* Box should be checked, manned substations could potentially use wells as a water source.
- *Section 3.0, Table 1 – additional category suggestion:* Suggest adding helicopter work to the Covered Activities table due to the particular environmental concerns associated with these activities; for transmission facilities this would include construction and operations and maintenance activities; also, use of helicopters for transmission line construction may be required to avoid impacts associated with access roads or to avoid sensitive areas.
- *Section 3.1.1, - transmission lines, second sentence:* Note that in addition to access roads, transmission construction requires the use of areas outside the right-of-way for staging/storage/marshaling yards, work areas for conductor pulling, splicing and tensioning, and potentially for other project related activities.
- *Section 3.6, temporary and permanent appurtenant facilities – installation of utility services:* Suggest adding “electrical distribution line and facilities” to the listed utilities.
- *Section 4.1, initial preconstruction activities:* Suggest adding “surveys and staking of facility locations, access routes and work areas.”

C. Overview of Relationship of Framework Conservation Strategy Report Elements to ISA Recommendations

The DRECP ISA report contains several broad categories of issues and recommendations. These categories are:

- General assumptions and recommendations
- Data and analytical tools
- Siting and mitigation recommendations.

These recommendations are being considered and implemented throughout the DRECP planning process, including as part of the Framework Conservation Strategy Report. A summary of recommendations considered and implemented during preparation of the report is provided below. This does not represent the full list of recommendations but

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those that are applicable at this stage in the conservation planning process. Implementation of the recommendations will be continuous throughout the process.

Obtain additional independent scientific input and review of data, models, maps, and other analytical tools and products.

The Covered Species Preliminary Description was reviewed by the ISA chair. The process for science input includes obtaining scientific review by external experts on specific interim work products such as the species accounts, habitat distribution model parameters and models, description of ecological processes, conservation gap analysis, biological goals and objectives, and species-level conservation strategies. This is expected to occur as part of review of the Preliminary Conservation Strategy.

Invest in completing a seamless, up-to-date, high-resolution, hierarchical vegetation (or land cover) map.

Funding has been obtained for initial work on the recommended land cover map and it is underway. The Framework Conservation Strategy Report includes an Initial Land Cover Map referenced as a potential “interim” or “mid-level vegetation map” by the ISA “by compiling new and existing vegetation maps, reformatting to allow for standardized representation at a mid-level hierarchy (e.g., using vegetation alliances or alliance groups).” In addition, as suggested by the ISA, the Framework Conservation Strategy Report documents supplementary additional vegetation datasets that do not encompass the entire Plan Area but may be useful for subsequent conservation planning tasks.

Avoid using species observation locality data (e.g., from CNDDDB) as a primary foundation for siting developments or conservation actions, and do not assume that absence of species observations means absence of the species.

The species occurrence database memorandum is included in Appendix A to the Framework Conservation Strategy Report and the species accounts for the initial 14 species considered for analysis as Covered Species, also included in the appendix, provide a full description of the available data for those species, as well as data limitations. Approaches to species modeling have been presented to stakeholders and initial species modeling considerations are included in the Framework Conservation Strategy Report.

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Species observation locality data are not proposed to be used as a primary foundation for siting developments or conservation actions.

Make all analyses and decision-making processes as transparent and understandable as possible, and avoid maps that compile multiple data inputs into a single layer without adequate documentation and justification.

Data sources and methods for maps and analyses are fully described and analyzed in the Framework Conservation Strategy Report. Interim work products have been reviewed by stakeholders and stakeholders will also review the complete Framework Conservation Strategy Report, an important building block of the overall DRECP.

Match the scale and resolution of each analytical task to the scale and resolution of the issues being addressed.

Tasks completed to date, such as the initial land cover and the preliminary gap analyses have been appropriately completed at the broad, Plan Area-wide scale. The baseline data assembled as part of the Framework Conservation Strategy Report allows for matching scale of task to scale of data as the conservation planning process proceeds.

Implement and improve on conservation actions identified by existing conservation and recovery plans in the planning areaDRECP should use such existing conservation assessments and plans to advantage, supplementing and improving on them with peer review, as necessary, and with due consideration of other recommendations.

The conservation actions summary matrix, included in the Framework Conservation Strategy Report, reflects this recommendation for relevant natural communities and the initial 14 species considered for the Covered Species list.