

DOCKET

07-AFC-8

DATE FEB 09 2009

RECD. FEB 17 2009

February 9, 2009

Mr. John Kessler
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

**Subject: Wildlife Corridor Study for the Carrizo Energy Solar Farm Project,
Docket No. 07-AFC-8**

Dear Mr. Kessler:

In response to your request, Carrizo Energy, LLC (“Carrizo Energy”) is providing these comments and input regarding the Wildlife Corridor Study being conducted by South Coast Wildlands (“SC Wildlands”) under contract to the California Energy Commission (CEC).

BACKGROUND

Three solar power projects have been proposed in the Carrizo Plain in eastern San Luis Obispo County (“County”). The Carrizo Energy Solar Farm (CESF) is in the final stages of permitting with the CEC, and the projects proposed by Optisolar (the Topaz Solar Farm) and SunPower (the California Valley Solar Ranch) are in the beginning phases of the permitting process under the County Conditional Use Permit and CEQA process. Because the three projects are located near one another within the Carrizo Plain in the vicinity of the former ARCO photovoltaic (PV) site, it has been stated by California Department of Fish and Game (CDFG), United States Fish and Wildlife Service (FWS) and CEC Staff that the corridor study is to be used for additional cumulative impact analysis.

Our comments below are based on a review of several documents, and on information gained at an inter-agency meeting in Fresno on February 5, 2009. These include:

- Draft Habitat Connectivity Planning for Selected Focal Species in the Carrizo Plain. This is the proposal and scope of work by SC Wildlands to conduct the corridor study, which was distributed by the CEC Staff at the Preliminary Staff Assessment meeting in California Valley.
- The assumptions and input documents posted on the CEC website, which were available to Carrizo Energy on Thursday, January 29, 2009, including:
 1. Carrizo vegetation map legend and the vegetation map on Google Earth.
 2. Criteria Rankings.
 3. Google Earth Maps, which contained the following information:
 - Protected lands map
 - Carrizo roads map
 - Study Area Delineation map
 4. Other correspondence, schedules and documents from the CEC web site.
 5. Recovery Plan for Upland Species of the San Joaquin Valley, and other literature-related to San Joaquin kit fox.

The following were in attendance at the meeting on February 5, 2009:

- California Department of Fish and Game (CDFG), David Hacker and Julie Vance.
- U.S. Fish and Wildlife Service, Susan Jones.
- Carrizo Energy representatives, their counsel, and biological consultant (URS Corporation).
- CEC Staff, their counsel, and resources staff (listening only).

GENERAL COMMENTS

Carrizo Energy understands the intent by CEC Staff, FWS and CDFG is to use this modeling effort to analyze impacts and to judge the effectiveness of mitigation. While Carrizo Energy recognizes the potential value in a corridor study in the Carrizo Plain, we are concerned that this type of study will be less useful in resolving the specific issues associated with the three power projects identified in the study area. Carrizo Energy hopes that CEC will take into consideration the more detailed and site-specific information that has been gathered through the large amount of surveys that have been conducted by the three applicants to date to determine the impacts from each project individually and the three projects cumulatively. It is our hope and expectation that the corridor study will be taken as a regional analysis to augment the site-specific analysis that has been provided to CEC Staff thus far.

While the CESF permit process is being substantially delayed by this study, Carrizo Energy also recognizes and is concerned that moving too quickly through this type of study may produce biased or inaccurate results, and it should be noted that a corridor model in this topographically flat agricultural-dominated landscape has not been undertaken by SC Wildlands. The results of this type of expedited effort to the analysis of the specific projects at hand should be taken with caution. While Carrizo Energy would like the modeling process to move quickly, we also recognize that it is necessary to be especially critical of this first step that identifies the input data, as the inputs are a very important part of the modeling process.

It is also important to identify the potential for bias even though the study will be performed in GIS. Statistical errors, incorrectly utilized or biased data, errors in input assumptions, and other sources may lead to biased model results. It is our understanding that a very careful review of all inputs, analytical processes, and interpretations of results is intended and expected by SC Wildlands and CEC Staff. One method to evaluate these issues would be to perform a parameter sensitivity assessment to insure that the most critical input parameters are sufficiently accurate and unbiased.

SPECIFIC COMMENTS

Carrizo Energy's comments and requests for clarification are provided below and include comments on input assumptions, data sources, and details of the methodology.

1. Methodology – Derivation of Rankings

Habitat rankings for kit fox appear to be inconsistent. Agricultural types of habitat are identified as better habitat than grassland, which is incorrect. In a scale of landscape permeability ranked from “1” = best to “10” = worst, cropland and dryland crops were given a score of “1” while annual grasslands were given a score of “3”. Undefined agriculture was given a score of “9”.

- Please provide a description of how the landscape permeability ratings were derived.
- Please provide a description of those habitats that fall into the ‘undefined agriculture’ category.
- Please describe the controls or uncertainties that are associated with them.

The Cypher and Frost 1999 reference for kit fox habitat is not appropriate because it did not look at habitat preferences, permeability or movement. Please cite more relevant references, which would likely include Cypher *et al.*, 1998 and Warwick and Cypher 2008, among others. Schwartz *et al.*, 2005, Bjurlin 2003, Haight *et al.*, 2003, and Gerrard *et al.*, 2001 should also be consulted.

- Please have the study incorporate a input parameter sensitivity analysis or other appropriate mechanism to document the degree of variability that may be anticipated in its results.

2. Data Input and Mapping – Vegetation

There are several inconsistencies between the regional vegetation mapping done by the state (available with updates on the County of San Luis Obispo web site), and the vegetation mapping provided in the corridor study assumptions used by SC Wildlands. The vegetation on the CESF site and laydown area is incorrectly identified. We understand that the vegetation on the other solar project sites is also inconsistent with current conditions.

- Please identify the CESF site and laydown area as dryland croplands.
- Please document that the ARCO site (NW quarter-section of Section 29), which is directly adjacent to the CESF site is completely fenced with an eight-foot chain-link fence.
- Please confirm that the vegetation within the immediate vicinity of the 3 solar projects has been correctly identified to it’s current condition, so that the model uses correct input information.
- To confirm the above requests, Carrizo Energy would like to request that the following information be provided to the team for review:
 1. Either GIS shape files with attributes, or an improved color scheme and vegetation legend, so that distinctions can be made between vegetation types with similar or identical colors.
 2. An explanation of how the vegetation mapping update was performed, and who did that work (*i.e.*, SC Wildlands, the County of SLO, other agencies or consultants).
 3. An explanation of how seasonality was considered by which experts in distinguishing among the various agricultural vegetation units. Frequency of tilling is an important factor that should be accounted for in the vegetation mapping.

3. Data Input and Mapping – Value of Landscape Permeability Ratings

The vegetation map combines agriculture, cropland, and dryland farming into one category. These have different ranking values and it seems they should be mapped individually.

- Based on the observations of field biologists that have spent the last two years surveying the CESF site, Annual Grassland should receive a ranking of 1, and Dry Grain Crops of barley, wheat, and alfalfa should receive a ranking of 4.

4. Data Input and Mapping – Habitat Suitability and Resident Populations

Many San Joaquin kit fox points appear to be missing from the input database. The missing points are generally located around SR-58 on the east side of the Temblors and along Hwy 33 from the Monument north to Hwy 41. Also, the kit fox locations within and near the Carrizo Plain National Monument appear to be inconsistent with other data used, showing a non-random placement of point locations, in straight lines and centered in Sections of land.

- Please identify the sources of the data used for the kit fox points, and if possible, provide a distinction among sightings, observed den locations, observed natal dens, and any other relevant information. All databases should be used (*i.e.*, CNDDDB, FWS, USGS, BLM, TNC, etc.).

5. Data Input and Mapping – Roads

There are 4 roads in the study area in the vicinity of the CESF Project. Carrizo Energy would like to know how the road layer is used and how the roads are characterized and weighted in the model.

- Please provide background information on the interpretations or ratings for road density related to kit fox (no citations have been included to date).
- Please identify the approach to distinguish between widths and pavement types for different roads and how these data are related/weighed in the model with respect to “permeability” for kit fox passage and probability of road kills.

6. Modeling All Linkages within the Study Area

Although the focus of the modeling effort is to identify movement routes between Carrizo Plains National Monument and the Salinas Valley, linkages to subpopulations in Kern County also need to be recognized so that the overall viability of the meta-population is accurately characterized. Representations that some sub-populations may be potentially isolated needs to be verified.

We would like to thank you for the opportunity to review and comment on this very important 1st step of the modeling process. Carrizo Energy continues to have concerns regarding the process, and is still cautiously supportive of the planning effort. We will continue participation in the form of review and comments as the modeling process progresses, and we will continue to work cooperatively with CEC, CDFG, SunPower, and Optisolar to contribute our fair share towards appropriate mitigation to address cumulative effects.

Sincerely,



Patrick J. Mock, Ph.D.
URS Senior Biologist
for/Perry F. Fontana, Carrizo Energy, LLC

PJM:ml