

DOCKET

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Wildlife Biologist Roger Gambs Comments Regarding the Wildlife Corridor Modeling

MIGRATION vs. DISPERSAL - There appears to be a misunderstanding among some folks about these 2 phenomena. I would suggest that the definitions and concepts set forth by Stenseth, N. and W. Lidicker Jr. 1992. "Animal Dispersal: Small mammals as a model" Chapman & Hall publishers and Bennett, A. 1999. "Linkages in the Landscape: The Role of Corridors and Connectivity in Wildlife Conservation" IUCN - The World Conservation Union publisher might help clarify this issue.

MIGRATION - It may be that no one has seen Tule Elk and Pronghorn exhibiting dramatic migratory movements in the Carrizo Area yet; but both of these species DO MIGRATE SEASONALLY in other parts of their range. I think the important process is sufficient dispersal to prevent local extinctions and maintain genetic diversity.

CONNECTIVITY AND METAPOPOPULATIONS - I believe that the real key to and biological value of Corridors and Connectivity is having sufficient habitat to allow successful Metapopulation Transfer that will maintain a Genetically Effective Population Size and prevent Extinction of local populations of the focal metapopulations. This would ensure that sites with small sub-populations are periodically restocked and overall genetic diversity is maintained in a self-sustaining metapopulation. In addition to references provided in Responses to Comments from the workshop, Hanski, I. 1999. "Metapopulation Ecology" Oxford Univ. Press publisher provides useful evaluations of several different metapopulation models and attempts to bridge the space between theory and field studies.

FOCAL SPECIES - Unfortunately, only 3 focal mammal species with good movement capabilities were selected for baseline connectivity evaluation. I think a comprehensive connectivity plan should include other terrestrial species with more restricted movement capabilities such as Giant Kangaroo rats and a number of DFG "Special Animal" species likely to occur in the area. The San Joaquin Kit Fox is identified as an "umbrella species" which is fine, but the role of the Giant Kangaroo rat as a "Keystone Species" may actually have a lot to do with the behavioral ecology of the SJ Kit Fox.

"LIVE IN" CORRIDORS - Having corridors that possess "live in" qualities would promote actual biological connectivity more than corridors possessing only "move through" qualities. This is especially important because, as indicated, "output from the proposed models does not identify barriers, mortality risks, dispersal limitations, or other biologically significant processes that could prevent a species from successfully reaching a core area".

TEMPORAL PROPERTIES OF PATCHES AND CORE AREAS - Although patch size for Tule Elk, Pronghorn, and SJ Kit Fox are given spatial dimensions, there is no consideration of the period of time that the individuals would be sustained in a patch or core area. "Live-in" patches and

especially core areas should provide sufficient suitable habitat conditions for long-term occupancy; otherwise these pieces of landscape could act as population sinks.

Roger Gambs, PhD, Prof. Biology

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BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
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1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION
FOR THE *CARRIZO ENERGY*
SOLAR FARM PROJECT

Docket No. 07-AFC-8

PROOF OF SERVICE
(Revised 2/18/2009)

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ENERGY COMMISSION

INTERESTED AGENCIES

*indicates change

DECLARATION OF SERVICE

I, Michael Strobbridge, declare that on 3/29/09, I served and filed copies of the attached COMMENTS FROM ROGER GAMBS PhD. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[<http://www.energy.ca.gov/sitingcases/carrizo/index.html>]**. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

For service to all other parties:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (**preferred method**);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 07-AFC-8
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

Michael Strobbridge