

ANALYSIS OF DRECP ALTERNATIVES

LOCATIONS OF DEVELOPMENT FOCUS AREAS WITH RESPECT TO POTENTIAL IMPACTS TO MOHAVE GROUND SQUIRREL HABITAT

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ALTERNATIVE 1

Concerns:

- 1) Rose Valley is occupied MGS habitat with many occurrence records. It is included in the Coso Range-Olancha core area (Leitner 2008). I assume that potential RE development here is wind and a little geothermal. If the decision is made to permit wind development here it should be with the firm condition that a long-term study be required to determine impacts to MGS. Solar would be completely incompatible with conservation of the species.
- 2) The Ridgecrest area is the location of an extensive developed urban barrier to gene flow and dispersal between the northern MGS populations and those further south. RE development here would further exacerbate this problem. There are far less damaging alternatives that would provide equivalent acreage for RE development.

Opportunities:

- 1) Provide DFA west of SR 14 in Antelope Valley and toward Tehachapi (see Alt. 5).
- 2) Provide DFA around Harper Lake.
- 3) Provide DFA in the Hinkley area.

ALTERNATIVE 2

Concerns:

- 1) Rose Valley (see above)
- 2) Ridgecrest (see above)
- 3) North Searles Valley is occupied MGS habitat with many occurrence records. Recent trapping and trail camera surveys have shown that this area supports an abundant and widespread population.
- 4) Fremont Valley. There is disturbed acreage here that is appropriate for RE development to the east of Koehn Dry Lake as shown in Alt 1. Expansion of RE development eastward into natural habitat to the extent shown in Alt 2 is not appropriate as recent records show that this area supports an MGS population.
- 5) SE of California City. This area is occupied by MGS and forms an important connection between populations in the DTRNA and EAFB.

ALTERNATIVE 3

Concerns:

- 1) Rose Valley (see above)
- 2) Ridgecrest (see above)
- 3) SE of California City (see above)

Opportunities:

- 1) Provide DFA around Harper Lake.
- 2) Provide DFA in the Hinkley area.

ALTERNATIVE 4

Every proposed DFA in this alternative within the range of the MGS would have a deleterious effect on the species and its habitat. There is no way to conserve the species if this alternative is chosen. It also provides the lowest acreage for RE development of all the alternatives!!

Concerns:

- 1) Rose Valley (see above)
- 2) Ridgecrest (see above)
- 3) North Searles Valley (see above)
- 4) Fremont Valley (see above)
- 5) Little Dixie Wash and Inyokern area. This would obliterate the Little Dixie Wash core area and its connections to populations to the north and east. In the camera study this year, we have had MGS on almost every camera placed at stations in this area.
- 6) North of Kramer Junction along US 395. As demonstrated by the camera study in 2011, this area is occupied by MGS, supports a widespread population, and provides connectivity between the EAFB core area and populations further north. RE development here would provide an effective barrier to gene flow and dispersal and help to isolate the southernmost viable population on EAFB.
- 7) SE of Kramer Junction. RE development here would further isolate the EAFB population from those to the east. We have demonstrated a number of MGS occurrences to the east toward Hinkley in the 2012 camera study.

Opportunities:

- 1) West of SR 14 from Lancaster-Palmdale to Mojave is a large area available for RE development.
- 2) West of California City and in the disturbed portions of Fremont Valley as in Alt. 1.
- 3) Provide DFA around Harper Lake.
- 4) Provide DFA in the Hinkley area.

ALTERNATIVE 5

This alternative proposes some DFAs on BLM land and private lands that would make MGS conservation impossible.

Concerns:

- 1) Rose Valley (see above).
- 2) Ridgecrest (see above).
- 3) North Searles Valley (see above).
- 4) North of Kramer Junction along US 395 (see above).
- 5) Fremont Valley (see above).
- 6) SE of California City (see above).
- 7) Little Dixie Wash and Inyokern area. This alternative is even worse than Alt. 4 in respect to this region. The extension of RE development up US 395 north of Inyokern would cut off an existing slender connection to northern populations, while in combination with the Ridgecrest proposal and north Searles Valley would eliminate all but a few miles of N/S connectivity. The remaining connectivity is on China Lake NAWS, which is presumably not a party to DRECP!!

OPTIMUM ALTERNATIVE FOR MGS CONSERVATION

The best outcome for MGS conservation would also be one that would make available a large acreage for DFAs.

- 1) Put the emphasis on lands west of SR 14 from Lancaster-Palmdale to Mojave.
- 2) Utilize lands east of SR 14 in the vicinity of California City and western Fremont Valley as shown in Alt. 1.
- 3) Use lands at Harper Lake and Hinkley as in Alt. 2.

I would be happy to discuss these ideas further. I understand that MGS conservation is not the only or the most important factor influencing decisions concerning these alternatives. However, there is no reason that MGS conservation cannot be carried out effectively while providing large acreages for RE development in the west Mojave.