

Large Mammal Advisory Committee

Approved Project

QUARTERLY PROGRESS REPORT
Fourth Quarter 2015

Project Name: *Effects of livestock grazing and large scale renewable energy developments on tule elk in eastern San Luis Obispo and Kern Counties*

Quarter: Fourth Quarter 2015

Work Performed:

Twenty of the 22 surviving collared elk were alive and moving throughout the fourth quarter of 2015. All of the animals appear to be healthy and no mortalities occurred. However, the collars for two adult bull elk went off the air in August. They have not been detected via satellite or VHF. Another collar on a bull elk appears to be in process of failing with only a faint signal being detected on the VHF portion of the collar. To date, there have not been any movements detected between the three subherds.

The goals of the study were to determine how the installation of the solar plants and changes to livestock grazing practices would affect elk habitat use patterns. Data gathered during this study will be compared to similar data collected from elk collared prior to these landscape level changes. Tule elk subherds and their associated land use variables are listed below:

<u>Subherd</u>	<u>Land Use Change</u>
American	Livestock grazing practices
California Valley	Solar plant construction, livestock grazing practices
Carneros Rocks	Solar plant construction, livestock grazing practices

Initial analyses of data from the American subherd indicated that elk were selecting lands which had not been grazed by livestock over the past year (Figure 1). Further changes in livestock grazing are anticipated in 2016 as more private lands are removed from the Conservation Reserve Program.

Work Anticipated for Next Quarter:

Remote monitoring of elk locations will continue in the first quarter of 2016. Project staff will retrieve the collar and try to determine cause of death if a mortality occurs

Project Contacts and Collaborators:

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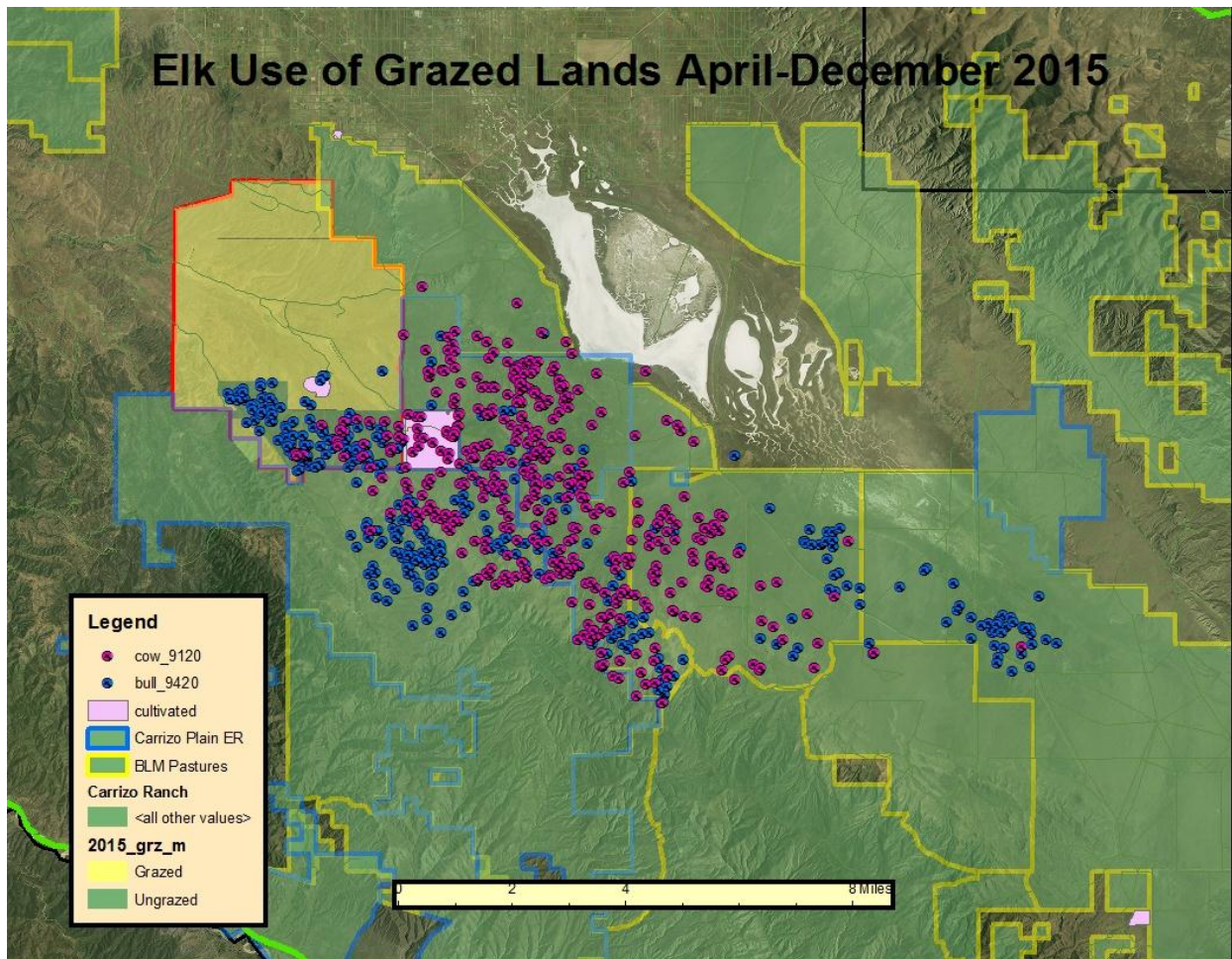


Figure 1. Telemetry locations a male and female elk in relation to current livestock grazing regimes.