

Appendix 1. Additional figures illustrating study area and results from index-based analyses evaluating sample and effect size variability.

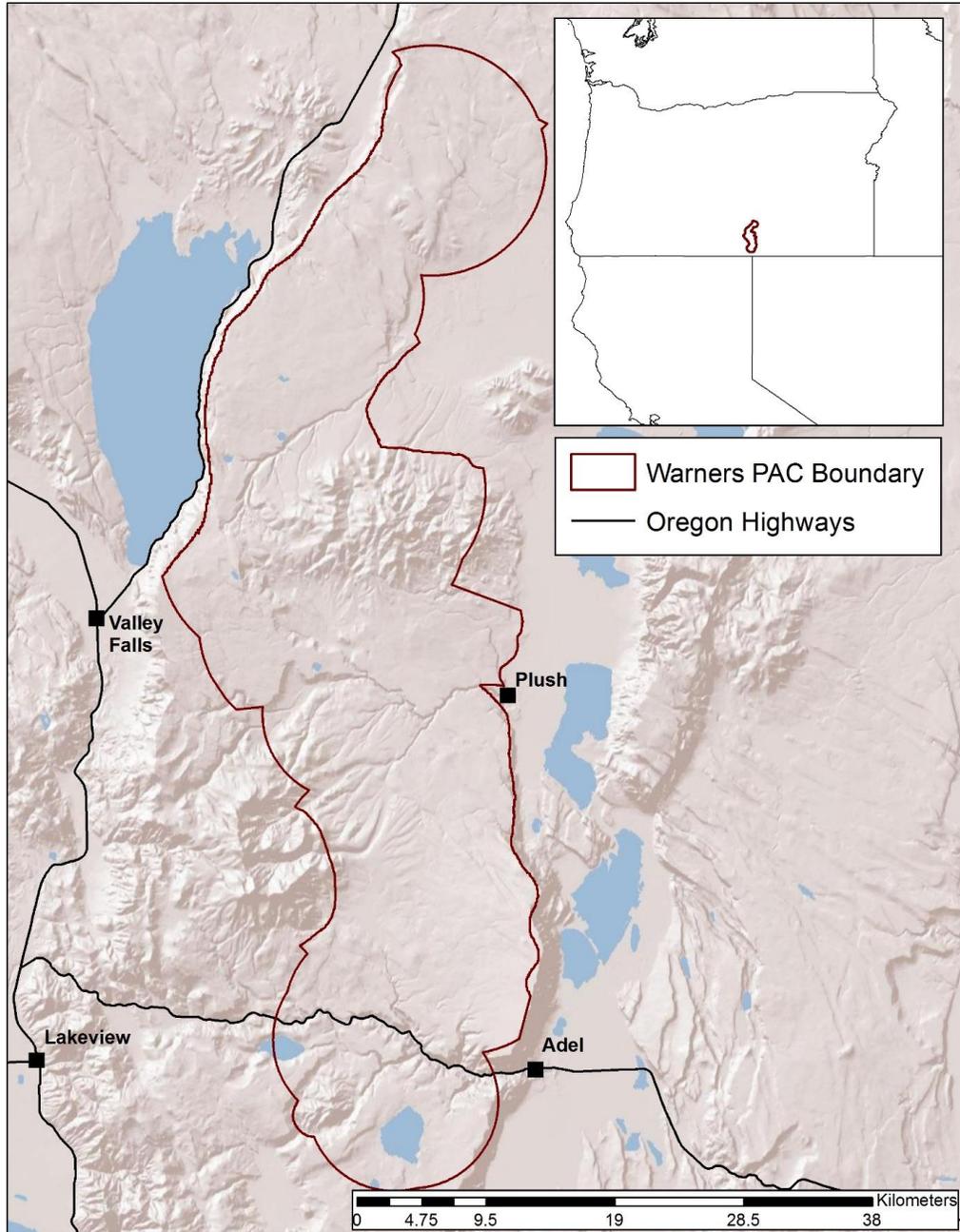


Figure A1.1 Map of study region, and delineation of the Warners Priority Area for Conservation (PAC) of greater sage-grouse in southern Oregon, USA.

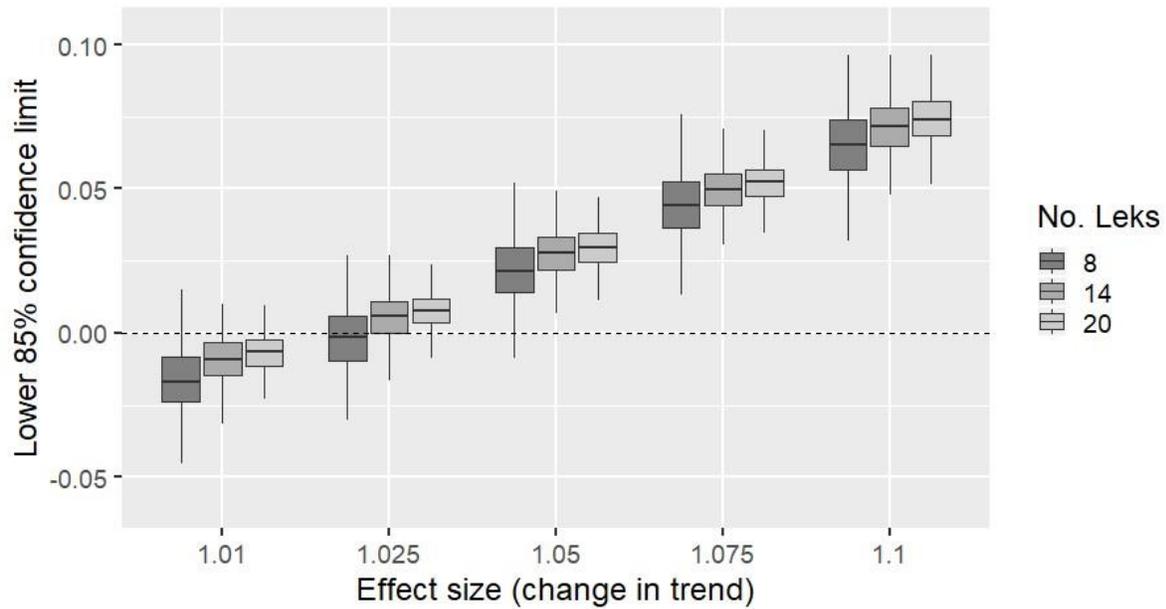


Figure A1.2. Range of lower 85% confidence limits for the year*treatment interaction term in Poisson regressions fit to simulated sage-grouse lek count indices based on the maximum value of three repeated counts at each lek during each year. Each box and whisker represents 400 iterations, which varied according to the specified mean effect size (positive increase in population growth for treatment leks relative to controls) and total number of leks in the sample (equal balance between treatment and control leks). The vertical dashed line indicates the point at which lower confidence limit falls below 0.0, suggesting no support for the effect. Therefore, box and whiskers entirely above the line indicated cases where >90% of iterations produced modeled slope coefficients with 85% confidence intervals that did not overlap 0.0. Each boxplot contains simulations where annual variation in the population growth rate varied from 0.05 to 0.20 (see manuscript Fig. 4).

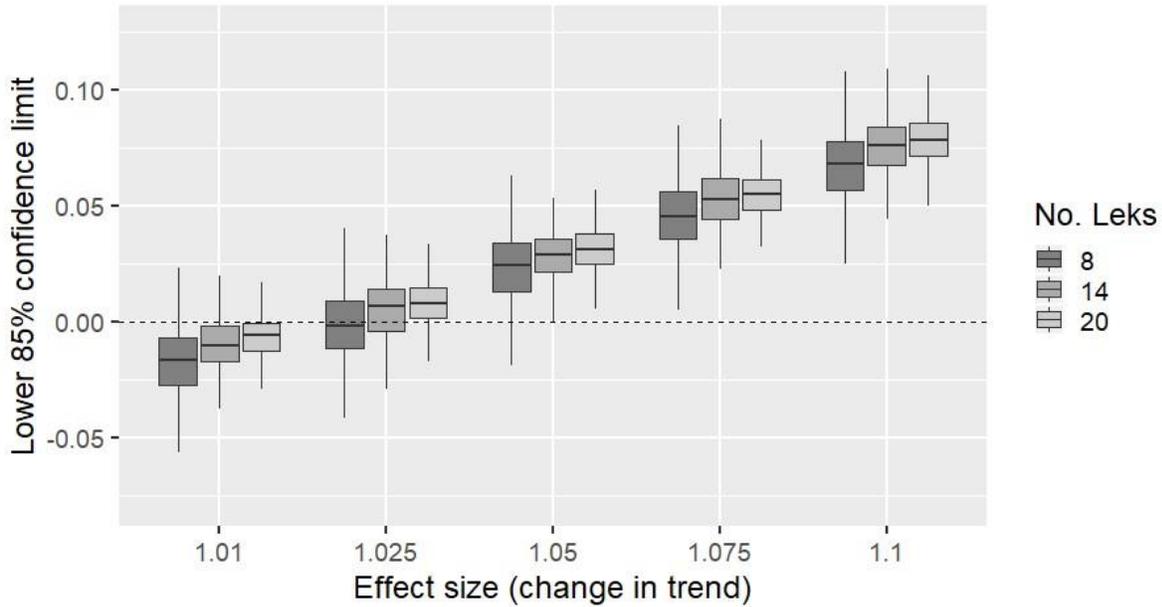


Figure A1.3. Range of lower 85% confidence limits for the year*treatment interaction term in Poisson regressions fit to simulated sage-grouse lek count indices based on a single randomly selected count at each lek during each year. Each box and whisker represents 400 iterations, which varied according to the specified mean effect size (positive increase in population growth for treatment leks relative to controls) and total number of leks in the sample (equal balance between treatment and control leks). The vertical dashed line indicates the point at which lower confidence limit falls below 0.0, suggesting no support for the effect. Therefore, box and whiskers entirely above the line indicated cases where >90% of iterations produced modeled slope coefficients with 85% confidence intervals that did not overlap 0.0. Each boxplot contains simulations where annual variation in the population growth rate varied from 0.05 to 0.20 (see manuscript Fig. 4).