

Rancher Survey to Assess Potential Unintended Consequences of Proposed GUSG Listing Executive Summary and Preliminary Results

Abstract: The Gunnison Sage-grouse (GUSG) is an iconic species recently proposed for listing under the Endangered Species Act (ESA). In Colorado's Upper Gunnison River Basin, ranchers own the majority of water rights and productive river bottoms, and approximately 30% of the most important GUSG habitat. This project uses a mixed-methods survey with 41 ranching operations to document how ranchers plan to respond if the grouse is listed. Results suggest that the ranching population is concerned about the listing of the grouse, but cautiously optimistic about their ability to survive the listing. Ranchers are most concerned about the ability to manage public and private lands productively as well as their ability to continue grazing on public lands. Under a listing, there would be a 24% relative decrease in the number of participants willing to allow access to private lands for GUSG monitoring (25 to 19), a 50% relative decrease in the number of people adopting conservation easements (6 to 3) and a 8% relative decrease in use of NRCS conservation programs (24 to 22). Surveys also suggest that the listing may also result in increased sales of land and water, which could be detrimental for GUSG habitat. Ethnographic studies are critical for understanding the tradeoffs between livelihoods and conservation in an increasingly interconnected world.

Methods: I conducted in-person surveys including both open and closed questions with 41 ranching families in the Upper Gunnison River Basin. Closed question results were compiled and summarized and open ended data were transcribed and coded in a qualitative data analysis program. My sample represents about 60% of the active ranching operations in the Upper Gunnison River Basin and is representative of the general size and type of ranching operations. However, I chose participants based on their willingness to speak within the timeframe I was in Gunnison, so the results may be biased towards those who were more invested in this issue or willing to talk. When I cite a percentage in the text (below), I also include the number of participants (EX: 100%: 41).

Results & Discussion:

- **Opinions about GUSG.** The majority of ranchers felt it was important for GUSG to survive in the future (90%: 37), but only 24% [10] believed GUSG were at risk in the Upper Gunnison River Basin. Most participants did not want GUSG to be listed as endangered under the ESA (85%: 35).
- **Understanding of the listing.** Ranchers were divided about whether they understand how the listing would impact the wider Gunnison community, the ranching community, and their own ranch. The individuals most engaged in the issue were least sure about the impacts.
- **Impact on ranching.** Participants were nearly unanimous in agreeing that the listing will have a large impact on the ranching community (93%: 38). Despite this concern, many agreed that the agricultural community (56%: 23) and their own ranch (66%: 27) could survive the listing of the grouse.
- **Concerns about federal land leases.** When we compared the not listed to listed scenario, there was a 100% relative increase in the number of people who were concerned about their ability to manage grazing in a productive manner (10 no list, 20 list) and a 64% relative increase in concerns about their ability to renew leases (11 no list, 18 list). We defined "manage grazing in a productive manner" as ranchers' ability to both make a living and maintain the productivity of the land.
- **Impacts on GUSG.** When asked about intended consequences of the listing for the grouse, participants felt there would be little increase in grouse numbers (17% believe populations will increase [7]: 66% were unsure [27]: 17% participants believe populations will decrease [7]) and a potential decrease in the quality of GUSG habitat on private land (12% believe habitat will improve [5]: 41% are unsure [17]: 46% believe habitat will degrade [19]).
- **Responses to listing.** As described in the abstract, participants said they were less likely to participate in conservation practices after a listing than without a listing. There were also changes in the amount of people who said they would sell land or water. There was a 75% relative increase in percentage of participants who said they would plan to sell land in the next ten years (4 no list, 7 list) and a 24% relative decrease in percentage of participants who said they would buy land if the grouse was listed (25 no list to 19 list). If listing occurs, 10% (4) of respondents said they planned to sell water rights (0 if not listed), but only one of the respondents had located a potential buyer.