Overall Assessment of Intellectual Merit: **Excellent**

Explanation to the applicant:
The applicant shows a very strong academic record that is likely to result in success in whatever field he decides to tackle. The research plan is well thought out, with strong hypotheses following a knowledge gap that the applicant cites. One concern is the applicant says restoration has been applied "ad hoc" without giving citations - which could offend some agencies or even researchers...the applicant might choose a more "diplomatic" argument in the future. The research seems reasonable for the applicant to achieve - and the letters support that the applicant can generate research ideas independently. This application could be strengthened with more evidence of broad communication of research results.

Overall Assessment of Broader Impacts: **Very Good**

Explanation to the applicant:
The applicant has selected a research trajectory that naturally has important implications for society and decision making. The applicant must work with ranchers and other stakeholders as part of the research. Can the applicant describe better how these "partnerships" will be developed and maintained? Additionally, the applicant provides a quick point about citizen science - can the applicant conceive of a way that citizen science can play a role in his graduate studies - and formally integrate that with his graduate studies?

Overall Assessment of Intellectual Merit: **Very Good**

Explanation to the applicant:
The applicant provides evidence that he has the necessary experience, background and training for graduate study and for the proposed research. The proposal reveals an individual with a strong work ethic and an inquisitive mind. The research proposal is nicely written. The background and context are well-presented, specific hypotheses are presented and a research plan articulated cogently. It could have been improved by more clearly linking hypotheses with specific aspects of the research plan, as well as by providing additional information concerning analyses.

Overall Assessment of Broader Impacts: **Good**

Explanation to the applicant:
The applicant's discussion of broader impacts at the end of the research plan notes that the results will be useful to land managers and that he will meet with various stakeholders to determine how the results can be applied. I would expect no less. But these alone do not fully address the criterion. The proposal would benefit, however, by including consideration and discussion of how the research results can be brought to the larger (non-land use) community so that they more fully understand how science can inform the decision-making process-- and by including a mechanism that will bring the community into the research process. Doing so will make the proposal more competitive.

Overall Assessment of Intellectual Merit: **Excellent**

Explanation to the applicant:
This is a very well-written and defined proposal. The applicant's academic achievements and scholarly products are also very strong. The applicant also has excellent prior research experience indicative of capacity for independent research. The letters of reference are consistently supportive and indicate a strong potential for PhD level graduate work.

Overall Assessment of Broader Impacts: **Very Good**

Explanation to the applicant:
The project has very good broader impacts potential. Current discussions and future plans to collaborate with stakeholders is a real strength, but a bit more detail regarding how broader audiences might be engaged would have been beneficial. However, the applicant's interests and future plans to engage in policy and community outreach are commendable.