

8. Conservation Mechanisms

For each PAC, we will identify the degree to which State and Federal plans, local conservation efforts, and voluntary conservation mechanisms have:

- a. *Removed or reduced each significant threat to the PAC with mechanisms put in place since 2010 - explain how we will analyze this:*

For each major threat, we will project into the future the degree to which we expect the threat to continue impacting sage-grouse PACs and populations either by:

- i. Peer-reviewed quantitative spatial models that incorporate stated assumptions, knowledge of existing threat reduction measures, a range of potential input values, and all best available science (likely approach for fire risk, invasive grass risk, conifer encroachment, energy development risk, conversion to tilled agriculture risk)
 - A. The exact metric has yet to be developed but examples might be percent of populations persisting over time or percent distribution or possibly some index of habitat fragmentation into the future.
 - ii. Using expert elicitation with outside parties to solicit input about the degree to which the threat will be relevant and impact sage-grouse into the future; or
 - iii. Using structured internal review and analysis to: present, evaluate, analyze, and discuss the best available information; consider risk, exposure to threats and likelihood of persistence; apply appropriate policies
- b. *Put in place plans since 2010 that are not yet implemented but that are certain to be implemented and certain to effectively remove or reduce threats in the future – explain how we will analyze this via PECE?*

9. We will then assess whether the species rangewide meets the definition of threatened or endangered.

We will then assess whether the species rangewide meets the definition of threatened or endangered. The various outcomes from our structured prediction processes, along with the qualitative evaluation of other threats and conservation actions, would be the basis of a structured workshop discussion to present, evaluate, analyze, and discuss the best available information; consider risk, exposure to threats and likelihood of persistence; apply appropriate policies regarding reasonableness and certainty, all leading to a discussion about the likelihood of the species persisting:

This evaluation is informed in large part by:

- a. Current status and trend of the species, and
- b. The degree to which we predict the PACs will persist, with the greatest weight in our evaluation being given to those areas with the highest densities of birds.