Implementation of the guiding principles will be accomplished with the use of an analytical framework.

Impact and Evaluation

The analytical framework will involve varying levels of analysis depending on ~~the importance of the factor being evaluated as well as its~~a threat's ~~relative i~~importance to the conservation status of the species. For example, the Service anticipates a much higher level of analysis for the small number of threats identified as driving the species' status (e.g. those identified in the 2010 finding). Threats that have more limited impacts will still be addressed in the species report, but may not require in depth analysis.

Analytical Process

The Service anticipates deploying a number of analytical methods including:

- S~~s~~patially explicit models,
- E~~e~~xpert elicitations on specific subjects,
- I~~i~~nternal decision analysis frameworks as well as
- O~~o~~ther methods that may arise in the process.

The spatially explicit modelling will focus on current and future changes to threats and conservation actions, using the COT spatial geography and population data to project various outcomes, as measured by abundance and distribution. The Service anticipates that this will be the highest level of effort and will be used on those threats that have been identified as the most important drivers for the conservation of the species (long-term persistence). These include at a minimum; invasive species and fire, energy development and associated infrastructure (including oil, gas, and extractable minerals), and habitat conversion due to tilled agriculture. This will allow the Service to look at risk to the highest concentrations of birds in the most important landscapes and begin to put anticipated biological outcomes into the context of the policy framework relative to the definitions of threatened and endangered.

Results of Analyses

Outcome of these analyses will be cast in the form of abundance and distribution both now and into the future. 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 in to the future. We do not recommend that the metric take the form of number of birds.~~described above that the Service has determined to be the most important.~~

~~The Service anticipates deploying a number of analytical methods including spatially explicit models, expert elicitations on specific subjects, internal decision analysis frameworks as well as other methods that may arise in the process. The spatially explicit modelling will focus on current and future changes to threats and conservation actions, using the COT spatial geography and population data to project various outcomes, as measured by abundance and distribution. The Service anticipates that this will be the highest level of effort and will be used on those threats that have been identified as the most important drivers for the conservation of the species (long-term persistence). These include at a minimum; invasive species and fire, energy development and associated infrastructure (including oil,~~

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Comment [KNorman5]: Importance independent of the species' status? Or is this something that could be deleted?

Comment [KNorman6]: I believe we will be relying on more recent population data

Comment [KNorman7]: I believe we will be relying on more recent population data