Agenda Item No.:	2
Issue # and Title:	State Forests Work Plan 2, IBI 6 – Improve Northwest Forest Management Plan to achieve desired outcomes.
Presentation Title:	Species of Concern Evaluation
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SUMMARY

The purpose of this agenda item is to present the Department's findings from the species of concern (SOC) evaluation that staff were directed to conduct by the Board in April 2009. The evaluation couples a proposed alternative management approach – the "performance measure structure with best volume" model – with the SOC strategies, and compares results to the model scenario that characterizes current management – the 2001 Forest Management Plan with the draft habitat conservation plan strategies.

The findings suggest both models are likely to maintain and to some degree enhance habitat for fish and wildlife SOC and therefore meet the performance measure target. However, there is a greater probability current management will enhance some habitats, result in a greater quantity of complex forest habitats, and provide complex forest habitats sooner than the proposed alternative.

CONTEXT

Working collaboratively with Oregon Department of Fish and Wildlife (ODFW) fish and wildlife specialists, Department staff proposed 40 birds, mammals, amphibian, and fish species to be considered as SOC. The Department also proposed a set of draft strategies designed to maintain, enhance, and restore habitat for these species. These strategies were developed with input from ODFW. At the April 2009 Board of Forestry Meeting, the board directed staff to use the "performance measure" scenario (PM) and the draft SOC strategies to further analyze the potential influence on habitat for SOC. The specific objectives of this evaluation are to:

- Provide a qualitative evaluation of how the PM model, combined with proposed SOC strategies (PM+SOC) and designed to achieve PM targets for revenue and structure, is likely to maintain and enhance habitats for SOC. Compare PM+SOC model results to a model simulating current approaches under the FMP using original Implementation Plan landscape designs and long-term structure goals as well as SOC strategies described in the Draft Habitat Conservation Plan (Base model).

ANALYSIS

This analysis used growth and yield models to estimate stand structure over time and across the landscape. The value of these models is their ability to provide a relative measure of outcomes under different management scenarios over time and space as well

as volume projections needed to judge revenue. This analysis relies on several assumptions which are described in Attachment 1.

The analysis was structured around wildlife and fish habitat features termed "limiting factors". Staff identified published limiting factors for SOC, relationships between limiting factors and forestry, and surrogates for these relationships. The identified surrogates were extracted from the modeled outputs. Trends in modeled outputs were then evaluated to provide a qualitative estimate of the probability that the modeled scenario maintains or enhances habitat over time and space.

There were several habitat attributes not modeled, and for which modeled outputs were not available. Therefore, the final evaluation provides a limited perspective regarding the probability that the management scenarios will maintain or enhance habitat.

FINDINGS AND CONCLUSIONS

Overall, both models have a moderate to high probability to maintain and enhance habitat for SOC. There is some variability by individual habitat surrogates, individual species, and when evaluations are done at smaller watershed scales. For example, there are individual habitat "surrogates" for which the Base model has a low probability to enhance habitat and for which the PM+SOC model has a low probability to maintain or enhance.

For fish species, the Base model has a high probability to maintain and a moderate probability to enhance habitat. The PM+SOC model has a moderate probability to maintain and enhance habitat. For wildlife species, both models have a high probability to maintain and enhance habitat for most of the sixteen species evaluated. Differences between models exist for two species, American marten and red tree vole. Probability is lower (moderate) under the PM+SOC model for maintenance of habitat for American marten and for enhancement of habitat for red tree voles.

The Base model is likely to produce greater amounts of complex structure in a shorter time frame than the PM+SOC model. Lower probabilities for the PM+SOC model are due to more clear-cutting and having a greater percentage of the forest in a young forest structure.

Recognizing that variability exists, we conclude both models are likely to meet the PM target to maintain and enhance habitat for SOC.

RECOMMENDATION

No recommendation; information only. See Agenda Item 4.

NEXT STEPS

Staff work dependent on Board decision related to Agenda Item 4.

ATTACHMENTS

(1) Species of Concern Evaluation