The potential effects of ecosystem management alternatives on terrestrial species viability in the Interior Columbia River Basin[tws]

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We assessed how current and proposed management alternatives for lands administered by the Forest Service and Bureau of Land Management within the Interior Columbia River Basin Ecosystem Management Project area would contribute to the long-term (100 years) viability of animal and plant species. We assessed seven alternatives that varied emphases to conserve, produce, or restore ecosystem attributes. Two alternatives would continue current plans with no modification or

with additional interim direction. Five new ecosystem management alternatives would vary the mix of emphases: updated plans with local input, active restoration, regional emphasis areas, adaptive management, and a large reserve system. We convened eight panels of scientists to judge the likelihood of viability outcomes under alternatives for 173 species of regional conservation concern. Viability outcomes represented 5 patterns of habitat distribution on federal lands: contiguous, gaps, patchy, isolated, and scarce. We used the distribution and weighted mean of likelihood scores to characterize effects, and the standard deviation of scores to estimate the uncertainty of effects. Currently, nearly twice the species have relatively unfavorable Outcomes 4 (isolated) and 5 (scarce) compared to the historical distribution. Continuing current management would result in more species in those outcomes and continue the decline of overall viability. Restoration, adaptive management, and reserve alternatives would reduce the number of species in unfavorable outcomes by about 30% and reverse the current decline in species viability. Historical levels of viability would not be reached, however. The majority of species would have no significant change (0.5 outcome units) in viability outcome.