

Dual discounting in renewable resource planning under risk

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Renewable resource planning and management projects, in most cases, entail evaluating economic and ecological criteria in the long term. For such projects, ecological criteria need to be discounted at a smaller rate than that for economic criteria, based on the concept of strong sustainability and that the growth rate of ecosystem services is lower than the economic growth rate. With a case study of managing public forestlands in the US Pacific Northwestern region for both timber return and habitat conservation for the northern spotted owl (*Strix occidentalis caurina*), we illustrate the impacts that the dual-discounting scheme has on the trade-off between conflicting management objectives, the temporal development of the portion of the forestlands suitable for owl habitats, as well as its steady-state expected value and standard deviation.