Question 9

1. In your opinion, how are the concepts and strategies likely to affect key species of concern, particularly northern spotted owls, marbled murrelets, and coho? Do you see any differences in short- vs. long-term effects? Please describe any adverse affects you may identify and associated opportunities to mitigate those adverse impacts. If feasible, also discuss opportunities to modify the management strategies to prevent or minimize the identified negative affects.

Reviewer	Comments
Bisson	The issue of aquatic "connectivity" deserves additional treatment. Beyond fixing impassable culverts, what does this really mean? Will there be a deliberate effort to cluster reserves and complex stands in such a way that fishes have "core strongholds" that anchor recovery? The threshold concept (here applied to owls and murrelets) may not easily apply to fishes. If there is indeed an effort to reduce the extent and intensity of forest pathogen impacts, what will this mean for fish habitat? On one hand, more trees may be able to reach large size, but on the other hand there will be less tree mortality, possibly leading to reduced LWD recruitment. These kinds of factors make it difficult to answer the question. To my knowledge, there is no optimum level of dissolved nutrients or composition of riparian vegetation that will maximize salmonid productivity, or if there is, that level isn't known.
Forsman	Page 5-4. My opinion of the "take" restrictions that are currently being applied to northern spotted owls is that they are largely a prescription for extinction. Therefore, I do not view a commitment to avoid "take" as helping very much to maintain a healthy population of owls. I have a similar view of most HCP's that have been implemented. Page 5-7. While I would like to think that you can just manage forests so that "they will come", I question whether this alone is going to maintain all types of native wildlife. Some types of animals, like tree voles, tend to occur in local clusters, and you will need to pay attention to where those clusters occur if you want to manage those species in a meaningful way. I know your plan does include protection of existing owl sites, but have you considered protecting known clusters of active tree vole nests?
Gresswell	I do not feel that I am qualified to address the influence of the plan on spotted owls and marbled murrelets, but strategies identified in the plan should have positive effects of aquatic species. For streams, the focus should be on wood and sediment. Recent studies underscore the importance of the periodic

	transport of these materials from small, often ephemeral, channels into fish-bearing portions of the system (Reeves et al. 1995; May and Gresswell 2003a). In small headwater channels, wood may originate a substantial distance from the channel, and therefore, maintaining an adequate supply is important (May and Gresswell 2003b). The plan addresses these issues and the results should be positive. Other recent research has documented the negative consequences of barriers to fish passage on genetic structure in headwater populations of coastal cutthroat trout, even on short time-scales (Wofford 2004). These results strongly imply a small effective population size combined with a total lack of connection with other portions of the stream network; if a catastrophic flood or drought event caused extirpation in the tributary, there would be no opportunity for natural recolonization. Efforts to maintain and restore fish passage where roads cross fish-bearing streams will positively influence the persistence of fishes throughout the management area and should be a top priority of watershed restoration.
Irwin	I am not qualified to discuss coho. It appears that both murrelet nests and spotted owl activity areas have been identified, and those sites will be emphasized which seems reasonable in the short run. It would have helped my understanding if the available models from CLAMS would have been used to project future habitat conditions, via forest-growth simulations. I also believe that a clearer picture would arise if objectives for owls and murrelets on adjacent federal lands can be incorporated in the assessment.
Ohmann	I claim lack of expertise to answer this question.