

Question 5

1. What is the likelihood that the use of silvicultural manipulation will encourage the development of forest stands described in Chapter 4?

Reviewer	Comments
Bisson	I am not qualified to answer this question scientifically.
Emmingham	There is little doubt that a wide variety of stand structures can be developed with the use of density management techniques developed and tested in the Pacific Northwest. Experiments (LOGS, Blackrock, COPE, etc) have demonstrated that forest structure can be manipulated greatly with density management. COPE studies on the Tillamook State Forest have documented some of the wildlife habitat relationships.
Forsman	Page 5-8. You Say that “Regeneration harvest will occur in all stand structures in areas outside reserves where it...” I think you mean that “Clear-cutting and replanting will be the primary management method in forests outside reserves where it
Gresswell	I do not feel technically qualified to evaluate this question in detail; however, I think that it is naive to believe that a specific outcome can be predicted. Incorporating adaptive management into the plan should increase the likelihood of success.
Irwin	While I personally believe that there is high likelihood, based upon observations of similarities among stand structures in some managed and unmanaged forests, it might help if more documentation could be provided because I suspect that some readers will have doubts because of lack of demonstrations. Therefore, the Plan should make it an explicit goal to develop such demonstrations as part of the adaptive management process. Additional graphics depicting stand condition changes and timeframe will help that, as well.
Ohmann	There have been many research studies conducted on effects of silvicultural treatments on forest composition, structure, growth, etc. I don't feel comfortable answering this question in any specific terms without reviewing this literature. But I did have a general concern about the assumption that 'continued density management through thinning' will result in non-complex stands developing into complex stands more quickly than in the absence of management. While thinning clearly will increase the growth rates of residual live trees, thus developing larger trees sooner, it also can remove understory trees that potentially would contribute to a multi-

	<p>layer canopy, as well as defective or less vigorous trees that are potential sources of snags and down wood. Furthermore, thinning operations traditionally have been conducted with the objective of 'timber stand improvement,' which often involves killing or removal of hardwoods.</p>
Oliver	<p style="text-align: center;">Silvicultural Pathways</p> <p>Fundamental to all management will be to know what silvicultural pathways are possible—and which ones are. The following are specific comments on places where you have begun discussing silvicultural pathways:</p> <p>Pg. 4-20. 2nd para. Actually, with some species, quite significant layering can have occurred. Especially Alder over cedar & hemlock. And, to some extent, D-fir over redcedar.</p> <p>Pg. 4-16: If the stand is extremely uniform in species, age, and spacing, it can also lead to physical and physiological weakening that results in insect attacks, wind or snow breakage, sometimes followed by fire.</p> <p>Pg. 4-15: 5th para. "In nearly all cases, a similar ecosystem eventually develops on the site." (This sentence is a bit confusing unless explained. Suggest delete.)</p> <p>Pg. 4-21. 2nd para. Several things: Leave some "wiggle" room here. May not want all characteristics in all stands. Do you know (what silvicultural pathways) you'll use to grow these? I suggest begin with mixed species stands...</p> <p>Pg. 4-33: Last line on page. Hopefully, there will be some suggestions of silvicultural pathways to achieve these structures—as well as suggestions of how to maintain them in some balance them across the landscape. These two issues are not a straightforward as they first appear—although they are do-able, and have been done.</p> <p>Pg. 5-16: Several things. Clumping retained trees is good idea. Even 3 tpa will reduce growth. May not want to leave in all areas. Also, need to consider liability of leaving.</p> <p>Pg. 5-18: Sus. For. Eco. Mgmt. Strategy 4e. These can be done more rapidly and effectively through beginning with mixed species stands than by trying to create a new age cohort in an existing stand and trying to grow a younger canopy layer upwards.</p> <p>Pg. 4-12: first para. Next to last sentence. In a CONSISTENTLY shorter time frame...</p>

