
Elliott State Forest Management Plan Public Comments Reponses:December 2005

Topic *Disturbance*

Sub-topic Landslides

Scope **FMP**

Comment Number 100

To continue the forest management plan does not address the landslide potential which is significant in 11 of the 12 harvest units. To clearcut 653 acres, 400 of which is native forest and most of which have some high landslide potential is does not conform to good forest management practices. ODF should reconsider clearcutting areas with high landslide potential and instead thin or selectively log these areas to minimize the landslide potential which will be very high in these sites for at least 20 years after clearcut harvest. What would be the cost if these harvest units fail and landslides ensue. 1996 was a 30 year storm and caused thousands of landslides throughout Oregon it has been almost 10 years!

Response

Refer to 5.3.6.6, Strategy 6f, Manage Slope Stability: The objective in relation to landslides and slope stability management is to minimize the occurrence of management-induced slope failures and mitigate potential negative impacts on aquatic and riparian habitats. This will be accomplished through application of risk-based management principles and best management practices. Hazard assessment and risk-based management for in-unit slides, and ensuring that large wood is available in the track of potential debris slides and torrents, will promote properly functioning conditions for future aquatic habitat inputs. Monitoring and hazard assessment, combined with adaptive management, will provide assurance that this objective is realized.

In addition note that no applied research exists regarding the effect of alternative silvicultural practices on the occurrence of shallow-rapid landslides. Therefore the proposal to thin or selectively harvest high landslide hazard locations is of unknown efficacy.

Comment Number 123

The Elliott State Forest is the most landslide-prone state forest in Oregon, resulting in clearcuts delivering sediment to fish streams without the benefit of large wood. Since ODF determined that clearcutting increases landslides by at least 50%, the ODF should stop all clearcutting on high-risk slopes in the Elliott and on all state forest lands. Endangered salmon's habitat must be protected just as human habitation must be.

Response

Refer to 5.3.6.6, Strategy 6f, Manage Slope Stability: The objective in relation to landslides and slope stability management is to minimize the occurrence of management-induced slope failures and mitigate potential negative impacts on aquatic and riparian habitats. This will be accomplished through application of risk-based management principles and best management practices. Hazard assessment and risk-based management for in-unit slides, and ensuring that large wood is available in the track of potential debris slides and torrents, will promote properly functioning conditions for future aquatic habitat inputs. Monitoring and hazard assessment, combined with adaptive management, will provide assurance that this objective is realized.

In addition note that no applied research exists regarding the effect of alternative silvicultural practices on the occurrence of shallow-rapid landslides. Therefore the proposal to thin or selectively harvest high landslide hazard locations is of unknown efficacy.

Elliott State Forest Management Plan Public Comments Responses: December 2005

Comment Number 182

Soil instability: The Elliott has some of the most landslide-prone soils in the state of Oregon, especially in the Tye Core Area. There have been hundreds of management-induced landslides throughout the Elliott. The only mitigation to protect soils is that "geotechnical specialists will provide the initial slope stability hazard and risk assessment for commercial forest operations in the AOP." The IP claims the details are on pages 470 and 4-71 of the FMP. But the FMP only goes to page 4-46. The ODF claims "Improved management practices on steep land have reduced the frequency and size of landslides on the Elliott State Forest." However, no number or cite was given. How much have they been reduced?

Response

The "Management Strategies and Standards" for slope stability are discussed in 5.3.6.6.

The following is an excerpt from 4.4.5.4 Slope Stability:

Forest management's effect on the rate of occurrence of these landslides is often divided into two categories; road-related landslides and in-unit landslides (Prellwitz and Koler 1994). Road-related landslides are somewhat more predictable and manageable. There are commonly accepted best management practices that can be associated with costs and levels of risk for managing this type of landslide (Koler and Neal 1989). There is even a relatively accepted track record of geotechnical input and environmental protection (e.g., Reilly 1989). There is, of course, no absolute in this category of landslides; however, there is reasonable agreement and theoretical rationale for existing design mitigation.

The second category of in-unit landslides is much less predictable and manageable. There have been numerous studies using aerial photography that attempt to quantify the rate of increase for specific areas due to harvesting (specifically clearcut harvesting). See AEG Oregon Case Histories (Skaugset and Pyles) for a complete scientific review of the research. Best management practices are much more limited and uncertain for in-unit slides than for road-related slides. For in-unit slides, it is appropriate to apply risk-based management that matches best management practices with the values at risk, and accepts the uncertainties and nature of the science (Michael 1997).

From Robison (1999) page 85: "Even though the road associated landslides identified in this study appear to be much smaller than road associated landslides found in past studies, active road landslides are still four to five times the size of non-road associated landslides...Based on the low numbers of road-associated landslides surveyed in this study and on the smaller sizes of these landslides (as compared with previous studies), it appears that current road management practices are reducing both the size and number of road-associated landslides"

Elliott State Forest Management Plan Public Comments Reponses:December 2005

Sub-topic Wildfire

Scope FMP

Comment Number 43

Why don't you have a plan for a catastrophic stand replacement fire?

Response

The FMP addresses natural disturbances such as wildfire. One of the plan's strategies (Strategy 5.6 in Chapter 5) is to continue to protect the forest from wildfire through fire prevention and suppression activities. Fire suppression will occur throughout the forest, and the draft strategies specify that wildfire suppression and control are expected to occur both inside and outside of conservation areas. The FMP allows for quick salvage as a result of disturbance events.

Elliott State Forest Management Plan Public Comments Responses: December 2005

Comment Number 157

Salvage of Conservation Areas: The FMP should be more clear on what salvage will be allowed inside Conservation Areas and other permanent reserves in the event of a windstorm or wildland fire. It appears that the draft FMP allows areas of natural disturbance to be clearcut, even logging the green trees that survive the event, and that no reserve will be designated to take its place to provide replacement advanced structure habitat to wildlife.

Instead, the ODF should exclude salvage logging in reserves except for safety concerns. Dead trees, even 'pulses' of dead trees from natural events like wind or native diseases, should be allowed to remain to provide wildlife habitat in the wildlife reserves. Most dead trees in reserves, especially large dead trees, should not be salvaged.

One peer reviewer for the Elliott's FMP stated:

"Although post fire salvage logging in reserves may provide some economic return, there is no evidence that it is ecologically justified". Fires generally increase (Draft HCP page 10-2) landscape heterogeneity, not reduce it. Intensive salvage harvest will decrease habitat complexity and remove many structural elements that provide post fire habitat for terrestrial and aquatic biota, and that may reduce negative consequences of fire in streams.

Since the recovery of the 1868 fire, fire suppression has caused a decline of "early seral with snags" habitat in the south coast area. If the ODF wants to allow the full array of natural habitats to exist on the Elliott, some provision must be made for the very wildlife friendly "early seral with snag" habitat.

For burned plantations in reserves, the ODF should refrain from replanting with the same specifications as a commercial tree farm, and instead replant with more species and spacing diversity.

Response

Conservation areas are designed and designated for certain purposes. They are not permanent reserves in the sense that the commenter uses. In the event of a disturbance event such as wind or fire, ODF will evaluate how well the conservation area is functioning and what management measures, if any, need to be taken to return the conservation area's function in a timely manner. This includes salvage harvest.

Elliott State Forest Management Plan Public Comments Reponses:December 2005

Comment Number 160

It is also unreasonable and without merit to cut green trees that survived the natural disturbance event. The green trees are the legacy component that helps the early serial habitat recover with its full gene pool potential. The ODF cut 300 million board feet in response to the 1962 blowdown of the Columbus Day Storm, of which 200 mmbf was standing, green trees.

The FMP should recognize that this type of salvage is not supported by any science and must not be repeated.

The ODF should recognize that the forest successfully recovered after the fire of 1868 (started by a settler, not a natural fire) with no salvage logging at all. Salvage logging is not necessary for healthy forest recovery.

Response

This type of approach does not meet the constitutional mandate to maximize revenue to the Common School Fund. Salvage harvesting is a part of the management activities expected to occur on the forest under the proposed plan.