October 30, 2002

Comments on Elliott State Forest

Habitat Conservation Plan
and
Forest Management Plan

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Dear Larry Sprouse:

Please consider these comments, submitted by Umpqua Watersheds on behalf conservation organizations listed the last page, when developing the Elliott State Forest Management Plan (FMP) and the Habitat Conservation Plan (HCP). Thank you for the September edition of the *Expectations* newsletter that explains eight of the Management Concepts (or "models") being considered. We are using this newsletter as a basis for these comments.

The current management for the Elliott is apparently described in Model #6,[1] which is a reserve based plan using age to define wildlife habitat. In this model, at least 24% of the Elliott is permanently reserved from logging, including a 100-foot no-cut buffer along fish bearing streams.

Out of eight models detailed in the newsletter, ODF states the three that will be pursued for the new FMP and HCP plans are model:

#3 Riparian Strategies (including 25% reserves),
#4 Structure Condition (including 15% reserves), and
#5 Conservation Areas (including 50% reserves).

The *Expectations* newsletter implies that these three alternatives would work together: "ODF Looks to Focus on Reserves, Structure and Riparian Areas",[2] giving top billing to Reserves. However, all three models contain their own (mutually exclusive) version of Reserves and Timber Management, having in common only the Riparian Strategy. It is unclear how the three models would work together. Also unclear is the status of the other 5 models (or alternatives) that were outlined. We assume that all eight models are considered by the ODF to be legally viable and we are being asked our opinion on which models we prefer. We prefer Model #8, "Grow Only", with "100% conservation area" reserves. This model should be more fully developed, and changed to allow for some recreation.

Concerning all alternatives, we encourage you to:

1) not substitute the tried and true age-old forest with a younger Structure Based Management forest,
2) put as much land as possible into reserves for threatened wildlife, at least as much as proposed in Model #5, 50%, or as much the Federal Northwest Foreste Plan, 80%.
3) develop an Environmental Impact Statement (EIS) for the evaluation of alternatives to the HCP, as required by NEPA[3].

Our comments below will focus more closely on these issues.

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[1] ***Expectations*** newsletter. September 2002. page 5.
[2] ***Expectations*** newsletter. September 2002. page 4.
[3] 40 CFR 1502.25 Environmental review and consultation requirements.

1. Structure Based Management is not a proven technique.

Structure Based Management has not been tested over the long term. Even so, the ODF seems to be moving all state owned land in the Coastal Mountain Range into this untested and unproven management technique. This is unwise, as the sacrifice is too great if you are wrong.

Species that depend on old forests have always thrived in age-old forests. These ecosystems are not only more complex than we think, they are likely more complex than we *can* think. It is presumptuous for ODF to believe they can do better than what has been the standard since creation. Trying to re-create age-like characteristics with Structure Based Management will never be as good as the real thing. ODF should just strive for old forests, not old-like forests.

So far, the state forests on Oregon's north coast have lost large numbers of owls, with low survival of young, in the SBM, even though this management yields a greater volume of timber. If the State considers moving the Elliott over to SBM also, there should be some clear explanations why the owl population has not faired well in other state forests, and what will be done differently in the Elliott.

For instance, the ODF should explain how a younger forest could provide the same number and same quality of natural snags, cavity nests that spotted owls are dependent on,[4] or the same thickness of bark that other species (like bats) are dependent on. A number of studies have found both size and density of snags as well as amount of down woody debris to be an important component of spotted owl habitat.[5] Natural snags cannot be replicated by created snags because the type and rate of rot creating softwood in created snags (such as girdled trees) is so different that some created snags could never provide wildlife habitat. The ODF should explain how a younger forest provides the same type of down wood, nurse logs, duff thickness, and uncompressed (or healed) soils that only age can provide. Before moving to SBM, ODF must guarantee that they can re-create God's old forest, with all the habitat structures that can come only with time.

Structure based management should never be used as an excuse to eventually log the entire forest. There are some species that need older forest that have a high level of site fidelity or otherwise take a long time to become established. Thus moving their habitats from place to place in short periods of time leaves them out in the cold.

Scientists from the federal government reinforces this in their Late -Successional Assessment of the federal lands surrounding the Elliott State Forest. They say "Late-successional forest species... require stands much older than 80-years of age to meet their life history requirements."[6] Take for instance the rare nitrogen fixing lichen, *Nephroma occultum*. This lichen grows almost exclusively in "pristine, old growth forest of

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[4] Northern Spotted Owl Research on ODF Lands in the Coast Range. July 18, 2000. page 24. "Number of snags and size of snags were larger in nest areas than in forage or low use areas at ESF..."

[5] Northern Spotted Owl Research on ODF Lands in Coast Range. July 18, 2000. page 31.

[6] South Coast-Northern Klamath Late-Successional Reserve Assessment. Prepared by the Coos Bay, Roseburg, and Medford Districts BLM and the Mapleton Ranger District of the Siuslaw National Forest. May 1998. page 40.

approximately 400 years of age."[7] This rare, yet ecologically important Lichen of our low elevation coastal old-growth forests cannot colonize in a good structured yet young forest. Age of the tree (producing bark thickness and bark roughness) is crucial to its continual survival. Since there are some very old trees in the Elliott (pre 1868 fire), there is the opportunity to recolonize this lichen as the younger forests grow older -- but not if there are no reserves to allow trees to get old again. (See reason 3 for more on reserves).

2. Structure based management could be biased toward timber.

If structure based management (SBM) will be the guiding principle on the Elliott, firm standards and guidelines must be in place to reduce the inherent lack of qualitative measurements in SBM. Age is an easily measurable variable. Habitat defined by structure alone, without the measurable variable of age, can be bent to meet a short-term goal.

The ODF wrote in support of SBM: "Some older stands on the Elliott State Forest lack the structural diversity embedded for owl or Murrelet habitat, while some younger stands do have the structural components need and are being used by owls and Murrelets."[8] We asked to see examples of these two types of stands. Larry Sprouse sent us one example area of each situation. I asked for two examples, but was told that one area each was all that was currently defined on the Elliott, though the final HCP will have the forest structures mapped.

The first area we looked at was the "Older, Poor Structure Stands Footlog Region". (See attachment 1 for pictures). Indeed, the trees in stands 29 and 31 were smaller than average for 126/130 year old stands. But nonetheless, we found some significant Marbled Murrelet habitat scattered throughout the stands, as well as structure that would support owls (See attachment 1 for pictures). Stand 31 in the "Older, Poor Structure Stands" was originally designated for clearcutting in the Fiscal Year '03 timber sale plan (Footlog Combo Sale), but recently dropped due to "Marbled Murrelet concerns".[9] Even though this unit remains uncut because of concerns for Marbled Murrelets, this area would be (and still could be) written off as "Older, Poor Structure Stands" for Marbled Murrelet habitat. With this the ONLY area example that ODF could give us of "Older, Poor Structure Stands" on the Elliott, how can we be confident in ODF's judgement of Poor Structure?

After touring the examples of "Older, Poor Structure Stands", we drove to the one area mapped as "Younger, Good Structured stands" that ODF said had the structural components needed for owls and murrelets. What we saw was a riparian area along Marlow Creek and its tributaries. Yes, the younger stands were more structurally diverse, as most stands are in riparian areas. But we thought it was an unfair comparison -- the higher elevation, dryer Footlog area and the lower elevation, wetter Marlow Creek.

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7 Northwest Forest Plan for Forest Service and BLM. Appendix J2, page 229.

8 ***Expectations*** newsletter. September 2002. page 7.

9 Coos District Fiscal Year 2003 Annual Operations Plan Summary (2nd version) 0715/02. Appendix A, page 7: "Footlog Ridge S.M. (Stand Management). This sale name used to be Footlog Combo. The regeneration harvest unit of this sale has been dropped due to murrelet considerations."

If the new proposals for the Elliott will be to save "Younger, Good Structured Stands", while clearcutting "Older, Poor Structure Stands", a better case must be made to show that the ODF is unbiased in their wildlife versus timber revenue considerations. The two examples given to us failed to do that. The Poor Structure had Marbled Murrelet concerns, and the Good Structure was better because it was lower and wetter (and is reserved as a RMA anyway). No other stands have been identified on the Elliott to show us as examples.

Other Oregon state forests are using structure based management with many problems. For instance, on the Tillamook, Clatsop, and Santiam State Forests, there are thousands of acres of misclassified stands. Many of these stands are clearcut because they are considered less complex than they really are. The Gnat Creek and Cougar Monster timber sales are only two examples of sales that clearcut or plan to clearcut the oldest and best stands in their respective basins. In many basins ODF has a strategy to clearcut the best and thin the rest. This type of silviculture prescription must not be moved to the Elliott.

Just this year the Clatsop State Forest accidentally used the wrong data to produce their stand structure maps in the draft Implementation Plans, resulting in 25% of the more complex forest being removed from the maps. This dramatic error not only emphasizes the need to protect older areas, it also casts doubt on the maps that were used to designate the Implementation Plan in the Clatsop State Forest. If the Elliott will move to SBM, ODF must develop a plan to prevent the same type of errors occurring here. Because of these past errors in favor of increased logging, the public must have input into what areas on the Elliott will be designated as Complex Forest Structure and what areas will be intensively managed.

Scientists have criticized the Structured Based Management of the North Coast State forests:

> "Practices such as retention harvests and long rotations clearly produce more complexly structured forests than intensive forest management. But are they alone sufficient to produce high quality habitat for all the many old-growth associates? The majority of biologists who reviewed the Tillamook plan were doubtful (Hayes 1998). We agree that the plan inadequately considers the regional and historical context of the planning area. Species whose populations or metapopulations operate on spatial scales larger than the limited planning area, or which require large blocks of late-seral forest, are unlikely to fare well under the ODF plan."[10]

The ODF should respect the conclusions of these scientists, and not make the same mistakes with the Elliott.

[10] ***Simplified Forest Management To Achieve Watershed And Forest Health: A Critique***. A report authored by the Scientific Panel on Ecosystem Based Forest Management: Jerry Franklin, David Perry, Reed Noss, David Montgomery, Christopher Frissell. 2001. page 33.

3. Reserves

The ODF has presented Structured Based Management as the option with the smallest number of Reserves that will be set aside for permanent wildlife habitat -- only 15% permanent reserves. This tiny amount even includes non-wildlife habitat land, such as scenic areas, and areas not capable of growing trees for commercial timber production.[11] It also includes Riparian Management Areas, which under the new plans, removes all no-cut buffers. The actual amount of reserves set aside as blocks of forest for wildlife habitat -- reserves that would never be logged, could be miniscule under model #4. The number of upland habitat reserves, not included in the Riparian Management Areas, could be even smaller (or perhaps non-existent).

Instead, we encourage the ODF to make permanent wildlife reserves on at least 80% of the Elliott State Forest. The scientists developing the federal Northwest Forest Plan set aside 80% of the forest in reserves (some that can be thinned). If the Elliott State Forest had a science based approach to protecting wildlife, the size of reserves should approach this percentage. Anything less should have an explained why this science based approach is not being applied to the Elliott. These areas do not necessarily have to exclude human use, such as non-motorized recreation. But they should exclude clearcutting, new road building and thinning for non-ecological purposes. The reserves should include the best habitat currently available for wildlife, along with connecting corridors.

Scientists have recognized that it is the interior forests in reserves that are most important to wildlife. Upland reserves should be in large enough blocks to avoid fragmentation. For nearby BLM reserves, BLM has stated: “The negative impacts to wildlife associated with forest fragmentation and edge effect, include... habitat losses, increased risk of predation and increased competition between interior and edge species.”[12] The analysis of the HCP for the Elliott must include a disclosure of how much interior forest habitat is reserved for wildlife species, habitat that is not degraded by fragmentation and edge-effect.

The ODF lists 5 purposes of reserves: to maintain unique habitats, biodiversity, ecosystem functions, a safety net, and reference areas.[13] If model 4 is used, it is unclear how only 15% long-term reserves, (and an unknown percent of that which is potential wildlife habitat) would fully meet all 5 of the purposes. Eighty percent of the Elliott would be needed for the stated purposes.

At the least, all the remaining old-growth forests and trees on the Elliott should be set aside, but so far they have not been reserved. “There is a small amount of older forest predating the 1868 fires that remains on the Elliott. Fifty-six percent of this older forest is reserved in HCAs or MMMAs.”[14] That means that **44% of the oldest forests on the Elliott are not reserved and is available for eventual clearcutting.** This is alarming. We would like to know where this “small amount” is, how many acres it is, and what

[11] ***Expectations*** newsletter. September 2002. page 6.
[12] South Coast-Northern Klamath Late-Successional Reserve Assessment. Prepared by the Coos Bay, Roseburg, and Medford Districts BLM and the Mapleton Ranger District of the Siuslaw National Forest. May 1998. page 41.
[13] ***Expectations*** newsletter. September 2002. page 8.
[14] Five Year Review for the Elliott Habitat Conservation Plan. ODF. 2/18/2002. page 19.

possible corridors can connect this habitat. The oldest, least disturbed forests and trees should ALL be included in reserves. The mantra of conservation biology is to first protect the best habitat. We cannot fathom that the Elliott should have any reason to log some of the oldest trees on the forest. Publicly owned "Old-Growth" is a very important issue. ODF should recognize this as one of the most important forest issues of the day and address it fully.

The ODF states that a Structure Condition Management Approach will retain the small number of "existing Habitat Conservation Areas"[15] as permanent reserves. But the 5-year evaluation of the HCP states that the existing Habitat Conservation Areas are inadequate and were not placed in the most productive owl NRF habitat or over spotted owl core areas.[16] The ODF must either heed the recommendation to improve the location and size of the Habitat Conservation Areas, or present sound scientific reasons why not.

Reserves on the Elliott should be designed to protect habitat for endangered, as well as rare but not officially endangered species. It is beneficial to ODF to help prevent more species from being listed as endangered. Science has concluded that time is of the essence for colonization of low mobility species, such as unique coastal mollusks. Some species are rare and will remain rare across time and space, but there must always be a certain amount of forest that has a long time period between disturbances to give these critters a fighting chance to colonize.

Scientists have criticized a low or no-reserve, structure based management plan now practiced in the Tillamook: "[T]he plan leaves no lands free from eventual regeneration harvest. From the standpoint of conservation biology, this is a significant weak point, especially in a region where ownership patterns provide no other options for reserves (Noss 1993). ODF acknowledges the Department has a role in regrowing habitat for old-growth associates such as spotted owls and marbled murrelets, but assumes a priori that this goal can be accomplished without reserves, an assumption with which most conservation biologists would disagree (e.g., Hayes 1998), and that is at best an untested hypothesis."[17]

In a strong criticism of the Tillamook Plan, scientists have told ODF that if the state were really "interested in assuring maintenance of biological diversity" the ODF

> "would incorporate a system of reserved areas. Some conservation biologists have characterized the decision to fully manage the landscape as a lost opportunity for restoring refugia in the heavily degraded northern Coast Range landscape. On the other hand, if the time ever comes when reserves are shown (by rigorous and widely accepted peer-reviewed science) to be unnecessary for conservation, a fully managed landscape might become a viable option for achieving the conservation

[15] ***Expectations*** newsletter. September 2002. page 5.
[16] Comprehensive 5-year Review of the HCP. 2/18/02. page 18.
[17] ***Simplified Forest Management To Achieve Watershed And Forest Health: A Critique***. A report authored by the Scientific Panel on Ecosystem Based Forest Management: Jerry Franklin, David Perry, Reed Noss, David Montgomery, Christopher Frissell. 2001. page 33.

and timber harvest goals for the Tillamook, rather than wishful thinking on the part of forest planners."[18]

This assessment is also true on the Elliott State Forest.

4. Declining Owls must be addressed in a new Owl plan.

The Elliott State Forest has documented a serious decline in Spotted Owls since its first Spotted Owl HCP was implemented in 1995. This decline must be fully disclosed and analyzed in the new HCP so corrective steps can be taken. The forest is out of compliance with the current HCP Incidental Take Permit (ITP), which requires the Elliott to support 26 owls over time.[19] In contrast, the 2/18/2002 5-year review states that there are currently only 7 pairs supported.[20]

Page IV-14 of the 1995 HCP states that in the 1993 surveys, there were 69 owls "on or near" the Elliott State Forest. Of these, 24 owl sites were "**on state land**".[21] That would be approximately 48 owls with nest sites ON the Elliott State Forest found in 1993. In 1998 that number dropped to only 7 owl sites "on state land". Though this cannot be compared with the 69 owls "on or near" state land, we can compare 24 owls sites ON state land in 1993 with only 7 sites left ON state land in 1998. That is almost a 50% decline of Owls ON state land, the Elliott. But the Incidental take permit only allows the "take" of 43 owls, leaving 26 owls to begin a recovery in 2055. It cannot be ignored that out of the 26 owls that must remain on the Elliott, only 7 pairs (about 14 owls, plus a few singles) remain.

ODF has claimed that it is legal to cause this decline in owls because the current HCP does not require that 26 owls be maintained throughout the 60 years. ODF claims there is not a violation of the ITP unless 26 owls do not appear at year 60.

We disagree. There is ample documentation that at least 26 owls must be supported over time on the Elliott. The current Forest Plan, the plan to implement the HCP, says **over the SHORT term, 19 to 23 pairs will be supported**. LONG term, 60 years, it says 12 pairs supported and 45 owls taken.[22] For redundancy, the EA for the HCP refers to the number of owls on the Elliott on page numbers III & IV-9 and 27. The number of owls to be preserved over time in the short term and long term is same as FMP. And again, the HCP says: "It is estimated that over 60 years, 43 spotted owls could be incidentally taken by modification of habitat." (S-7.) It is clear that the time period is "over 60 years", not over 5 years 43 owls can be "taken". This has even been exceeded. About 55 have been taken so far. Considering the clear information from the current HCP and FMP and the EA supporting the FMP, a number of owls must be supported on the Elliott throughout the 60 years, not just at year 60. The current situation is not in compliance with this clear

[18] ***Simplified Forest Management To Achieve Watershed And Forest Health: A Critique***. page 33.
[19] Elliott State Forest Habitat Conservation Plan. ODF Coos District. May 1995. IV-14. (26 owls are defined as 13 pairs in the HCP EA)
[20] Comprehensive 5-year Review of the HCP. 2/18/02. page 6. The 5-year review is required by the HCP on page IV-10.
[21] Elliott State Forest Habitat Conservation Plan. 1995. page II-6
[22] Elliott State Forest Management Plan. 1993. page VI-11.

mandate. This problem must be disclosed and analyzed for the new FMP and HCP so that whatever mistakes were made, they will not be repeated or exacerbated.

Adding to the problem of declining owls is that the current owls might not even have been born and bread successfully on the Elliott, but are only immigrants. The 5-year review states that: "...immigration into the area should contribute to population stability. However, the declining trends in density and adult survival over this five year period are cause for concern in this study area."[23] The new HCP must start from the original Owl numbers present on the forest as documented in the old HCP, and then calculate "take" based on the 1995 owl numbers. If the new HCP declines to do this, it should fully explain its reasons why the recent sudden decline in owls is not a "take".

If owl numbers are not what was expected in the current HCP, those assumptions must be re-examined. Between 1993 and 1998 the total number of NSO territories decreased by 48%, the number of pair sites decreased by 54%[24] and density of owls declined by 57%.[25] Research warns that on the Elliott "the declining adult survival rates are of concern, and these rates must stabilize over time for the population to be stationary... the declining trend in density and adult survival are cause for concern....[26] This problem must be fully addressed in the new FMP/HCP.

5. More problems with implementing the current HCP

Problems with implementing the current HCP should be explained and analyzed before improving it. For instance, the current plan allows regeneration harvest only in basins that have met the "Long Term Percentage in 80+ Age Classes".[27] But the Annual Monitoring Report for the Elliott State Forest HCP For year Six[28] documents that this has been violated. It reports[29] that 159 acres of Nesting, Roosting, Foraging (NRF) Habitat in basin 6, 41 acres in basin 8, and 38 acres in basin 17 have been clearcut since 1995, even though these three basins have not met their 80+ Age Classes goal. There is no reason offered why the requirement that "no NRF habitat will be harvested until the NRF habitat in the basin reaches the level shown in the table"[30] applies.

Added to this problem is seven more acres of clearcuts in basin 6 that just sold in 4200 Wedges sale. (See photo in attachment 1). The pre-operations report contains a letter from the USFW clearing the way for Marbled Murrelets (because there is no current MM HCP), but there is no explanation from anybody on why Owl NRF habitat is being clearcut (trees up to 53" DBH) in a long-rotation basin that has no documented NRF in-growth and is below NRF acre goals.

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[23] Comprehensive 5-year Review of the HCP. 2/18/02. page 7.
[24] Northern Spotted Owl Research on Oregon Department of Forestry Lands. July 18, 2000. Appendix A. page 25.
[25] NSO Research on Oregon Department of Forestry Lands. July 18, 2000. Appendix A. page 1.
[26] NSO Research on Oregon Department of Forestry Lands. July 18, 2000. Appendix A. page 26.
[27] Elliott State Forest Habitat Conservation Plan. 1995. page IV-8.
[28] Labeled 2001-2002, but scratched out and 2000-2001 written in.
[29] See Monitoring Report for year 6. Attachment A for Owl N.R.F. Habitat impacts since 1995.
[30] Elliott State Forest Habitat Conservation Plan. 1995. page IV-7.

6. Endangered Fish

Oregon Administrative Rules require the Elliott to be managing for other forest resources including restoring properly functioning aquatic habitats for salmonids and other native fish and aquatic life.[31] Currently there is no management plan on the Elliott for the restoration of endangered Coastal Coho, or even for the Umpqua Cutthroat Trout. Even though the Umpqua Cutthroat Trout is no longer on the federal endangered species list, NMFS considers it imperiled and threatened with extirpation from the Umpqua watershed. The new FMP/HCP must have stronger protections for endangered fish than the proposed and undefined "NW FMP riparian management strategies". Instead, protections appear to be weakened.

For instance, in the current Elliott plan, streams receive various widths of "no-cut" buffers, where commercial logging is not allowed. These buffers are part of the 24% permanent reserve system currently on the Elliott. But the new plan removes all no-cut protections, and replaces it with unclear, undefined allowances for various levels of logging in the buffers. It is an improvement that the buffers are being widened by using horizontal instead of slope distance, and it is an improvement that some trees will be left along intermittent streams. But the number of trees being left could be minuscule.

It is also problematic that the already small number of reserves being proposed in Model 4 includes these riparian reserves that allow logging. That changes the reserves to really no reserves at all. Another problem is that the ODF claims that fish bearing streams will receive a Riparian Management Area of one-site tree buffer, "160 feet". But one site-tree height in the Elliott is 220 feet, not 160 feet. At least it is 220 feet on the adjoining Coos-Bay BLM land. ODF should explain why the Elliott trees grow 40 feet shorter in 200 years than trees on the other side of a political (not ecological) boundary.

7. Landslides

The Elliott State Forest is the most landslide prone State Forest in Oregon, containing slopes in the "Tyee Core Area". Landslides out of clearcuts harm salmon by delivering an excess of fine sediments in relation to the large wood habitat. In spite of this, virtually every FY '03 timber sale on the Elliott clearcuts on high landslide risk soils, with no apologies to fish, and with the acknowledgement that clearcutting increases the rate of slides by over 50%.[32] It appears that the new FMP could even accelerate logging on high-landslide risk soils if it increases the annual target volume. The *Expectations* newsletter says the current policies addressing landslide risks will continue by "using geotechnical expertise to identify alternatives to minimize, mitigate or avoid risks to high landslide hazard locations."[33]

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[31] Guiding Principles for the Elliott State Forest Plan. 2/15/01. page 6.
[32] ODF Storm Impacts and Landslides of 1996: Final Report. Forest Practices Technical Report #4.
[33] ***Expectations*** newsletter. September 2002. page 8.

This type of "expertise" is not adequate and should not continue in the new plan. For example, in the recently sold Kelly Elk timber sale, the pre-operations report says: "Kelly Creek, a type F stream runs through the western edge... The sale areas are in a high [landslide] risk area.... Landslides are common in this portion of the forest. These events produce both negative and positive effects. Adult Salmon returns and habitat quality in the Elliott are among the highest in the State indicating the positive effects of landslides must be greater than the negative effects."

This type of cause and effect conclusion is unfounded and not based on any fisheries science. Landslides from clearcuts are not "positive" because they do not deliver the historical amount of large wood to streams. Leaving a tree here and there along intermittent streams will not significantly improve the situation. An example of a site level impact is a direct kill of fish from landslides, notwithstanding any future benefits. If there are any benefits from increasing landslides above the natural background level, there is still "take" by the slide when it happens. If there are any benefits from increasing landslides (if any wood did reach the stream), they are *after* the initial slide, and don't always accrue. Even the National Marine Fisheries Service (NMFS) says that "landslides can add significant amounts of fine sediment to streams and can result in increased direct mortality to salmon through burial of redds and eggs."[34] NMFS identifies the allowance of sales like Kelly Elk to be "a serious deficiency in the Rules".

Of the 5 sales that were originally cleared for the FY 2003 sale plan (Camp Creek, Footlog Combo, Fish Headwaters, Schumacher Ridge and Larson Headwaters), all five are within the unstable Tyee Core Area. All five have slopes in excess of 70%. All five have "high landslide hazard locations". All five have a "High Probability" that a slope failure will enter a channel, and four out of the five have a "High Probability" that a slope failure will "become a channelized debris flow".

If there were houses under these sales, the threat to human life would make these clearcuts illegal. The new HCP/FMP must look at the cumulative effects of these types of sales, year after year, on fish as well as people. The Camp Creek sale plan states that "landslides occurring in the headwalls would likely deliver to reaches of suspected fish-bearing streams below."[35] This is playing Russian roulette with fish habitat that is irresponsible to future generations.

The new HCP/FMP must consider if the Elliott State Forest is perhaps not the best choice of forests to do clearcut intensive forest management for the school trust fund since it is one of the most landslide prone forests managed by ODF. The Elliott State Forest had "regions that were observed to have the highest rates of landslides and debris torrents from the November 1996 storm."[36] Areas of the Elliott State Forest had the highest number of landslides of any of the 8 landslide study areas in the State of Oregon. Of 509 landslides studied, the Elliott had over 159 landslides that affected streams.[37] The

[34] National Marine Fisheries Service (NMFS). position paper on Oregon Forest Practices Act. May, 1996.
[35] Camp Creek FY 2004 Pre-Operations Report. page 3.
[36] ODF Storm Impacts and Landslides of 1996: Final Report. June 1999. page 15.
[37] ODF Storm Impacts report. page 49.

Scottsburg area of the Elliott State Forest had the second highest number of landslides that went into streams, 89.[38]

This includes Mill Creek, right where the FY '03 Camp Creek timber sale will be clearcut, where the sale plan documents "high risk" to a fish-bearing stream. The ODF landslide study documents that one of the largest slides in the Scottsburg study area is immediately adjacent to Area 1 in the proposed Camp Creek timber sale. Right across the road from where the high risk would likely deliver clearcut sediment into fish-bearing streams, a landslide has already occurred into Mill Creek. ODF's own study indicates that "for the most landslide prone landscapes", such as proposed in the 2003 timber harvest plans, "there is a 75 percent chance that recently clearcut areas will have greater landslide erosion or density as compared to mature forest stands after a very large storm."[39] The Scottsburg study area "has the greatest relative increase in landslide density in the 0 to 9-year age class" of any area studied. Additionally, "Scottsburg is also the only study area to have greater landslide densities in both the 10 to 30 and 31 to 100-year age classes, as compared to the 100-year plus age class."[40] To continue with clearcutting on these exact same high-risk slopes, even after the landslide study, is not in compliance with the requirements of the Endangered Species Act.

8. Small streams need more protection.

The current FMP/HCP leaves a zero-foot tree buffer next to small non-fish bearing streams. The revised strategies propose "a specific number of trees to be retained along intermittent, non-fish bearing streams in the upper stream reaches."[41] This is an improvement over the current practice of logging right over streams, but the details will show how much protection ODF is really giving small streams. How many trees will be left? Will it be enough to mitigate the delivery of sediment to streams from clearcut induced landslides? If the Elliott were to fully protect endangered salmon, the science driven Aquatic Conservation Strategy (ACS) of the federal Northwest Forest Plan would be adopted. If only a quarter of the buffers the ACS requires on small streams were adopted, that would be 55 feet.[42] That, or any thing less cannot be scientifically justified while logging on the highest landslide prone slopes in Oregon.

In fact, Riparian Strategy 1 of the current Elliott FMP should be adopted by the new plan, or at least considered. In 1993 the Elliott FMP promised that "Additional riparian protection may be needed if coho salmon or other fish stocks were listed as threatened or endangered. If listing does occur, the Department of Forestry will immediately implement any additional protection measures needed... and would include consideration of riparian strategy 1."[43] So far the ODF has failed to live up to its promise to consider riparian strategy 1 even though two species of salmonids on the Elliott were listed since

[38] ODF Storm Impacts report. page 81.
[39] ODF Storm Impacts report. page 64.
[40] ODF Storm Impacts report. page 72.
[41] ***Expectations*** newsletter. September 2002. page 7.
[42] One site tree height is required by the ACS for small streams on federal lands. In the Elliott, that would about 220 feet.
[43] Elliott State Forest Management Plan. 1993. page V-25.

1993 (and two delisted, and one relisted). Now is the time to either fulfill this promise, or explain to the public why not.

The new HCP addressing endangered fish must be adequately fixed by a plan that has strong independent scientific support. Speaking on the current plan, the NMFS states that, "Since there is no requirement to retain riparian trees along small Type N streams, the Rules are not likely to provide either streambank protection (reinforcement of banks by tree root systems) or sufficient long-term recruitment of LWD [large woody debris] to store fine sediment and prevent it from routing directly to downstream fish-bearing streams.... The lack of a long-term ability to recruit large wood in small non-fish-bearing streams places the important sediment storage function of these headwater channels at risk. The timing, rate, and amounts of sediment delivered to fish habitats are greatly influenced by LWD in small streams providing upstream sediment storage capacity."[44]

National Marine Fisheries Service (NMFS) recommended changes to Oregon's Forest Practices Act in February 1998 to protect Coho salmon, including buffers in the coast range of 150-200 feet on fish-use streams, 100-135 feet on perennial nonfish-use streams, and 50-100 feet on intermittent nonfish-use streams.[45] NMFS also recommended prohibiting logging on landslide-prone locations with a high or medium potential for delivery to streams. The Elliott Forest's new management plans should embrace these recommendations to fully protect endangered salmon.

9. Herbicides

It has been a common practice of the Oregon Department of Forestry to spray herbicides on every inch of ground that is logged. If the new FMP is to continue this practice, herbicide effects should be documented and effects analyzed. It is not good enough to simply spray Monsanto products according to Monsanto labels. These products have rarely had completed studies done on wildlife safety. (And those that have gone through complete independent review have been pulled from the market, such as 2, 4 D.)

Every Elliott State Forest clearcut is dependent on herbicide spraying for reforestation. ODF should reconsider their dependence on this unclean, expensive and unnecessary technique that could harm wildlife and salmon. The federal agencies gave up spraying a decade ago and are doing fine without it, even regeneration harvests on Coos-Bay BLM. The Elliott should recognize the many studies[46] that show how herbicides in the watershed harm salmon. The new FMP/HCP plans should adopt a new Integrated Pest Management philosophy.

[44] NMFS position paper on Oregon Forest Practices Act. May, 1996.
[45] NMFS. A Draft Proposal Concerning Oregon Forest Practices at 67 (Feb. 17, 1998).
[46] For instance, see "Diminishing Returns: Salmon Decline and Pesticides", Richard Ewing, 2/99. http://www.pond.net/~fish1ifr/salpest.pdf.

10. Goal 11: Considering other regional plans

The steering committee approved Goal 11:

> "The forest will be managed to meet state and federal Endangered Species Act while fulfilling the State Land Board's responsibilities under the Oregon Constitution and the Board of Forestry's statutory responsibilities. Management plans for threatened or endangered species will seek to complement or supplement habitat provided by other landowners."

This goal is one of the most important. If a species, such as the Coho Salmon or Northern Spotted Owl become extinct, future generations will lose a critical component of their legacy. It is especially important for the Elliott State Forest FMP/HCP to "complement or supplement habitat provided by other landowners".

Conservation plans surrounding the Elliott is the Millicoma HCP on Weyerhaeuser land and the Northwest Forest Plan on federal lands. These plans offer varying degrees of protection and restoration for endangered species. Millicoma Tree Farm HCP provides for dispersal habitat, but little, if any, long-term NRF habitat for Owls or Murrelets. Federal lands provide Late Successional Reserve (LSRs) for long-term Nesting/Roosting habitat. Unfortunately, the LSRs in the area are further apart and more checkerboard than optimum for a recovering species.

The Late Successional Reserve Assessment (LSRA) prepared by the federal government for reserves surrounding the Elliott State Forest says: "LSRs... were designed as a network of interconnected reserves... Two components necessary for a properly functioning LSR network include: self-sustaining population clusters of late-successional species; and adequate connection of late-successional habitat within and between LSRs to allow interaction among these population clusters..."[47] The LSRA warns that in the area of the Elliott State Forest: "There is a high risk of the coast Range Province becoming isolated due to the few weak and tenuous links to adjoining provinces."

The Elliott State Forest is identified as an important solution to this problem.

> "In General, the Millicoma HCP is designed to provide only dispersal habitat for the northern spotted owl.... In contrast, the Elliott State Forest will provide not only dispersal habitat for owls, but also suitable nesting habitat for owls and marbled murrelet. Individuals from the Elliott State Forest are expected to interact with individuals in the adjoining LSRs (265 [north of the Umpqua River] and 263 [south of Scottsburg and east of Millicoma tree farm]). The Elliott State Forest will also provide a system of reserves, long rotations, and structural components such as snag and down wood retention to help facilitate movement of low-mobility late-successional species across the landscape through time."[48]

The federal government has identified the Elliott State Forest as a crucial link for the continual viability of endangered species in this area where checkerboard federal

[47] South Coast-Northern Klamath Late-Successional Reserve Assessment. Prepared by Coos Bay, Roseburg, and Medford BLM and the Mapleton Ranger District of the Siuslaw National Forest. May 1998. page 43.
[48] South Coast-Northern Klamath Late-Successional Reserve Assessment. page 45.

ownership and large tracks of private land could otherwise cause problems for species dependent on old forests.

Other scientists have pointed out the crucial regional importance of the State Forests. "This historical perspective suggests that maintaining — indeed, re-growing and restoring - old growth should be a high priority for forest management on public lands, particularly where public and private lands are intermingled, such is the case in the Oregon Coast Range, where state forest lands exist primarily as islands within a landscape of industrial forests managed intensively for wood products on short rotations."[49] The Elliott State Forest plans must look beyond the boundaries of the planning area and consider historical and regional context. The plan must consider what is occurring on adjacent land as well as what might occur on those lands in the future. The plan must consider broad, regional strategies for conservation, and work to further those strategies.[50]

The Elliott State Forest must live up to its promises of a reserve based system because surrounding wildlife protection plans (such as the LSRAs) were developed with the assumptions that the Elliott would provide nesting habitat. The Steering Committee's determination in Goal 11 that "Management plans for threatened or endangered species will seek to complement or supplement habitat provided by other landowners" is an important goal to implement in the new proposed HCP and FMP. Owls and Salmon are indicator species of forest health. If they are not doing well, the Elliott's plans must make a correction toward better forest health.

11. Swiss Needle Cast

The new Forest Plan must take into account current information on Swiss Needle Cast disease. The current HCP evaluated the number of plantations that would develop into owl habitat within the next 60 years. The new HCP/FMP must change this projection in light of possible infestation with Swiss Needle Cast. This disease has taken a turn for the worse in the last few years. ODF says that "Reduction in tree growth caused by Swiss needle cast, especially if sustained, not only will reduce yields, but also will affect our ability to manipulate stands into desired structures and compositions. Presently, hundreds of thousands of acres of Douglas-fir in coastal northwest Oregon are growing well below rates expected for the site. If the poor growth continues, yield expectations and harvest levels will need adjustment."[51]

A threefold increase was noticed within 24 miles from the ocean between 1996 and 1997. Adjustments must be made for this in the new plan. The current plan calls for restocking most plantations with 85% Douglas fir even though Douglas fir plantations are most

[49] ***Simplified Forest Management To Achieve Watershed And Forest Health: A Critique***. A report authored by the Scientific Panel on Ecosystem Based Forest Management: Jerry Franklin, David Perry, Reed Noss, David Montgomery, Christopher Frissell. 2001. page 33.
[50] ***Simplified Forest Management To Achieve Watershed And Forest Health: A Critique***. page 37.
[51] http://www.odf.state.or.us/fa/fh/snc98/snctxt.htm

susceptible. The evaluations of individual timber sales must begin to evaluate "insect and disease problems" not only for the proposed sale, but also for surrounding plantations.

The Coos district wrote: "At the present, the greatest single factor of influence for changing silvicultural practices is the presence of Swiss needle cast on portions of the forest. Although we do not have the high infection levels as other coastal districts, we have seen a yearly increase in both the levels of infection and in the size of the area infected."[52] The Coos District also wrote: "During the last year concerns about forest health led to visits to verify the presence of Swiss needle cast on the South coast. Visits by the Service Forester and the Department's forest pathologist confirmed a moderate Swiss needle cast infestation in the area."[53] The infestation has increased significantly since the current FMP or HCP were analyzed. The new HCP/FMP must make evident what the "changing silvicultural practices" are.

12. Hardwoods

The old HCP and FMP did not consider the important role that hardwoods play in wildlife habitat, and instead lumped them under a "non-conifer" category. In fact, hardwoods have shown to play an important role in owl habitat,[54] not to mention a host of other species. Instead of labeling Myrtlewood, Oak, Alder, Maple and other hardwood forests what they are not (non-Conifer), the State should recognize them for what they are: Hardwood forests, and label them accordingly. After all, the Elliott State Forest is managed for more than just conifers.

Spotted owl prey, such as dusky-footed woodrats, white-footed mice, and chipmunks are more abundant at hardwood sites. In the Elliott, Spotted owls are found nesting in hardwood trees. The multiple limbs of alder, maple and myrtlewood are used frequently as roosts and perches. Until the Elliott returns enough habitat to multi-layered conifer old-growth, owls are more dependent on hardwood forest structure.[55]

13. Recreation

The new plans do not, as yet, adequately address the impacts of recreation. Recreation must be fully described and analyzed in the FMP, with Incidental Take caused by recreation defined in the HCP.

The current FMP describes recreation uses on the forest. (Incredibly, it never mentions ORV use or abuse). A survey shows that people enjoy the undeveloped, unregulated nature of the Forest. This special quality of the Elliott does not have to be sacrificed to manage and mitigate the impacts of recreation on resources. Management could include

[52] http://www.odf.state.or.us/coosbay/Annual%20Reports/Annual_rep2000/Annual_rpt_7.htm
[53] http://www.odf.state.or.us/coosbay/Annual%20Reports/Annual_rep2000/Annual_rpt_9.htm
[54] Northern Spotted Owl Research on ODF Lands in Coast Range. July 18, 2000. page 22. "Spotted owls at both sites were also located within 100m of conifer-hardwood habitat edges more often than expected."
[55] Northern Spotted Owl Research on ODF Lands in Coast Range. July 18, 2000. page 31.

educational signs, parking barriers in sensitive areas, limiting public access to all-weather roads, and addressing the garbage problem with proper enforcement.

Off Road Vehicles: The Forest Management Plan must define how much of the Elliott is open to Off Road Vehicles (or closed to ORVs). Impacts from this use to resources such as soils, as well as to endangered species, should be analyzed. For instance, if ORVs are allowed to run near owl nest sites during nesting season, this could constitute a take in the HCP, in addition to the "take" afforded to timber harvests. If the FMP allows ORVs to make new trails any place they want, or to travel over ungraveled roads or trails during the wet season, the HCP must analyze the level of take on Salmon. If the FMP does not allow ORVs in certain areas at certain times, but without any enforcement mechanism, the HCP should still analyze "take" for this recreation type. See attachment 1 for pictures of ORV damage to the Riparian Management Area of Millicoma River on road 8100. This issue must be addressed in the new FMP.

Camping: The ODF should describe management and mitigations for public camping in Riparian Management Areas. For instance, if camping is allowed near the banks of a fish bearing stream, the ODF should define how it will mitigate pollutants into the river or the protection of trees in the RMA from damage. Mitigation could include educational signs to protect trees, clearly defined camping areas, and pit toilets.

Hiking: The FMP should describe the hiking trails and opportunities for cross-country hiking in the Elliott.

Recreational Driving: The Elliott State Forest is in the middle of two popular recreation sites, and thus is used as a public, scenic byway between these two sites: The Coos-Bay BLM managed Dean Creek Elk Viewing Area, and the State Managed Golden and Silver Falls State Park. These two attractions, at opposite ends of the Elliott Forest, cause more use of the forest for recreational driving, especially since the Forest is generally snow-free and accessible year around. An especially enjoyable area is the old-growth forests along the Millicoma River on road 8000. This drive allows the public to view one of the very few remnants of coastal old-growth left in this part of Oregon. The Elliott State Forest should be proud of this beautiful area and encourage its use by the public, while protecting the resource with a good management plan.

14. Inconsistencies in public information

1) The *Expectations* newsletter, page 8, graphs expected volume from each of the Management Approaches. It includes expected volume from the "Owl HCP" model (aka Model #6, or the current Elliott plan practiced since October 2001 when the MM HCP ran out). The graph shows that in the first decade, ODF expects to harvest about 12 mmbf per year. But the Fiscal Year '03 Elliott harvest plan will log 26.73 mmbf.[56] If model 6 is the current plan, why doesn't it start at 26.73 mmbf instead of 12 mmbf?

[56] Fiscal Year 2003 Annual Operations Plan Summary, revised September 5, 2002.

2) The Decision Matrix on page four gives a score of 0 to 5 for rating Goals and Objectives. It is not clear why the SBM approach (Model #4) gets a high rating of 4 for *"Manage for biological diversity."* It gets the highest rating of all alternatives, even higher than the 100% reserve alternative. How could this be when the SBM alternatives has the lowest number of reserve acres and the second to the highest volume of trees cut? Perhaps ODF is falling into a common misconception that has been rebuked by scientists:

> "Some proponents of simplified forest stand structural models have warned that where all harvesting is curtailed, there will be a shortage of open habitat and therefore a reduction of biodiversity (e.g., Oliver 1992). Even if the argument that open habitat will be scarce is correct, the case can be made that the type of habitat that is really at risk in this region is unsalvaged, legacy-rich, early-successional habitat.... Another assumption implicit in simplified stand structural approaches (e.g., Oliver 1992), is that forests managed for commercial timber production can also provide the entire suite of habitats found in a natural successional sequence. We are aware of no evidence to support this assumption."[57]

We encourage the ODF to consider all of this publication by Franklin, Perry, Noss, Montgomery and Frissell. These authors critique Structured Based Management and find that it lacks the necessary tools to protect species at risk. The entire report can be found at: http://www.coastrange.org/publications.htm or directly downloaded from http://www.coastrange.org/documents/forestreport.pdf

3) In spite of the "Focus on Reserves" headline, Larry Sprouse told me that Model #4, SBM, has already been decided on by the steering committee. We were disappointed there was minimal public input solicited on this before the decision was made. The public was never asked the question, do you want SBM on the Elliott? There should have been public input in this important decision.

15. Within the law

Reserving, protecting and restoring large parts of the Elliott, as opposed to logging as much as possible, is compatible with the constitutional mandate to manage Common School Forest Lands "with the object of obtaining the greatest benefit for the people of this state, consistent with the conservation of this resource...". Reserving large portions of the Elliott is also in compliance with the Attorney General's interpretation that the Greatest Benefit requirement means the State must "maximize long-term revenue to the Common School Fund within the context of environmentally sound management".[58] Maximum revenue does NOT mean that trees are clearcut as young as possible. Computer modeling Elliott Forest revenues under various management alternatives must consider other indirect forms of revenue. Maximum revenue must include all economic values of the forest, including standing forests providing ecosystem services and non-timber related jobs. Maximum long-term revenue analysis must also include the options

[57] ***Simplified Forest Management To Achieve Watershed And Forest Health: A Critique***. A report authored by the Scientific Panel on Ecosystem Based Forest Management: Jerry Franklin, David Perry, Reed Noss, David Montgomery, Christopher Frissell. 2001. page 27.

[58] ***Expectations*** newsletter. page 3.

that future generations will have for maintaining or liquidating reserves. More directly, maximum long-term revenue analysis must consider if diameter growth on the stump is more valuable than interest from clearcutting profits in the bank.

Structure Based Management on the Elliott must not be a political decision to allow as much access as possible by the timber interests to the public resources, and using school children as a cover. The ODF should tell the public what percent of the School budget is met by logging in the Elliott, and how that percent would change with each Management Concept. This would be valuable information to know how to balance the needs of wildlife, future generations, and today's school children. We know from the September *Expectations* that the "annual revenue under the current management plan is about $16 million", but we don't know what average percentage of the school budget that is. Knowing this information would allow the public to decide if the educational experiences of Oregon's children should include examples of exemplary wildlife conservation, using the best available science for protecting and recovering at-risk species. There is no greater opportunity for this educational experience than on the Elliott State Forest.

Additionally, the Oregon Department of Forestry is required to participate in the development of an Environmental Impact Statement for USFW consultation purposes, as required by the National Environmental Policy Act (NEPA). EISs are required for all significant federal actions. Endangered species protection on the Elliott State Forest is a very significant federal action.[59]

In Conclusion

The revised Elliott Forest Management Plan is the basis for the State's revised and expanded Habitat Conservation Plan for addressing threatened and endangered species, as required by the federal Endangered Species Act. The Forest Management Plan should include habitat protection **and restoration** actions needed to enable the Elliott to make a significant contribution to the recovery of marbled murrelets, Northern spotted owl, salmonids, and other threatened and endangered species. The Habitat Conservation Plan should be developed with an Environmental Impact Statement analysis to fully address the very significant endangered species issues on the Elliott that we have outlined in our comments.

Because private industrial land does not adequately protect, much less recover, imperiled species, and because federal forestlands are not sufficient, both in terms of their geographic and ecological distribution, for the recovery of endangered species, it is crucial that the State do its part to protect and recover such species. State law also requires that the Elliott plans be consistent with the conservation of its resources.

In the case of species like marbled murrelet and spotted owl, this will require providing more habitat over time, not less. With regard to salmonids, the State should adopt the recommendations which have been provided over the last decade by the National Marine

[59] 40 CFR 1508.27(b)(9)

Fisheries Service and the State's own advisory panels, at a minimum. This would include a sufficient buffer on small non-fishbearing streams.

Failure to develop an FMP and HCP which adequately protects and recovers imperiled species means that the plans will simply have to be rewritten a third time. This would not be a cost-effective use of scarce State funding. The new Forest Management Plan should improve protection of all forest resources for future generations from harm from destructive recreation, such as irresponsible ORV use. A strong and healthy system of old forest reserves should be identified for endangered species that will work in concert with reserves outside of the Elliott State Forest. Integrated Pest Management should replace the automatic aerial spray program. Hardwoods should be allowed their place in the ecosystem. Clearcutting should be eliminated, not only to reduce landslides and hydrological impacts, but also to reduce the spread of Swiss Needle Cast.

In short, the new Forest Management Plan should be based on the abundance of new information and science which has been better defined since the old plan was written in 1993. Thank you for considering these comments. We look forward to continue working with you on these issues in the future.

Sincerely,

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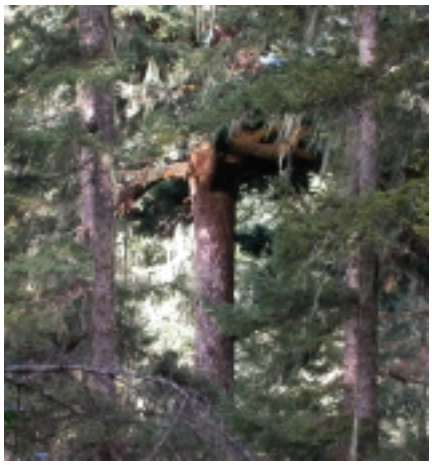
Attachment 1

to 10/31/02 Comments on new FMP/HCP for the Elliott State Forest



Left: Footlog Ridge sale, area 1, with MM habitat in "Older, Poor Structure Stands". Note large limbs in middle of picture.

Right: Footlog Ridge, area 2, defined as "Older, Poor Structure". (See reason 2.)

Right: Current management practices on the Elliott. Will projected regrowth be accurate in light of Swiss Needle Cast and other changing conditions? (See reason 11.)

Left: Clearcutting in the long-rotation basin #6. (See reason 5.)

Right: "4200 Wedges timber sale" soon to be clearcut in long-rotation basin #6. This is an apparent violation of the current owl HCP.

Left: ORV impacts in RMA along Millicoma River on road 8100. (See reason 13.)