# Response to Comments No Whisky Plantation Thinning

The proposed action for the No Whisky Plantation Thinning was made available for public comment, (36 CFR 215, 5/13/03). Letters and e-mails were received during the 30-day comment period, which ended on March 20, 2006.

The responsible official has considered comments received and has developed the No Whisky Plantation Thinning Environmental Assessment in response to those comments.

This appendix responds to the substantive comments. Many emails, form post cards and letters were received. Substantive comments are comments that are within the scope of the proposed action, are specific to the proposed action, have a direct relationship to the proposed action and include supporting reasons for the Responsible Official to consider (36 CFR 215.2).

The emails, form post cards and letters are in the analysis file; the following is a summary. The agency responses are in italics and highlighted. In the responses, section numbers refer to the No Whisky Plantation Thinning Environmental Assessment unless otherwise specified.

## **ONRC**

Our most significant concern with this project is that the prescriptions should be truly restorative of complex forest conditions in order to optimize habitat for spotted owls and their prey. Complexity in this case means both structurally complex and biodiverse. Since many spotted owl prey species are associated with abundant dead wood, the FS should conduct this project to mimic a natural disturbance as much as possible and retain significant quantities of standing dead trees and down wood. Diversity is addressed in s. 3.2.1 & 4.4. Dead wood is addressed in s. 4.5.10. All down wood and all non hazardous snags would be retained (3.6.2 and 3.6.3).

Red tree voles are rare on the Mt Hood NF, and provide valuable habitat for spotted owls. The FS should survey for RTVs and protect habitat where they are found. The units of the No Whisky Plantation Thinning are not habitat for the red tree vole and no surveys are required (s. 4.5.9). The FS should consider all the new information about spotted owls and barred owls and design this project to favor spotted owls as much as possible. This information has been considered (s. 4.5.5)

We appreciate that you are already incorporating elements of variable density thinning with skips and gaps. We would like to emphasize that the skips would be larger than the gaps and the gaps should generally be no larger than 1/2 acre. Long linear gaps created by skyline corridors are less than ideal, because they do not mimic natural patterns of disturbance and they may give competitive advantage to predator over prey. Landings are lousy gaps because they are near roads and too intensively disturbed. S. 3.6.2.

The FS should take steps to curtail off-road OHV use in the area. S. 3.6.6.6.

## Mildrexler

It is clear that the No Whisky planning area is under intense pressure from motorized abuse. Off-road vehicles have ripped up the forest in the No Whisky area. I strongly dislike seeing trails turned into giant muddy pits, ruined by motorized vehicles. Motorized use is a dominant use and needs strict control and penalties. One reason why the No Whisky Timber Sale must not move forward because the likelihood of creating new opportunities for this abuse is too great. Instead the Forest Service should be working with the public to increase law enforcement and shut down this abuse. *Design Criteria s. 3.6.6.6 was designed to prevent expansion of OHV use (s. 4.15)*.

Road density in this area all ready exceeds Forest Service guidelines. This has implictaions for many resources including wildlife and water quality. Many temporary and "closed" roads are still being used after the Forest Service has attempted to close them, causing further damage. Illegal usage of OHVs (off-highway vehicles) is rampant, even in closed and roadless areas, causing erosion, weeds, washouts, sediment deposition, noise and plant destruction. In 2002, a Bark field surveys showed 26 of supposedly closed roads failed to keep out motorized vehicles. Forest Plan standards and guidelines FW-208 through 210 regulate the density of roads open to motorized vehicle traffic. The La Dee Flat area is closed to OHV use by a legal closure. The OHV use you are describing is an unauthorized activity and is not assessed by FW-208 through 210. Various sections of the EA address the effects of this unauthorized use (s. 4.2, 4.5, 4.6 & 4.15).

The Forest Service is not in control of the situation. The No Whisky timber sale will have cumulative impacts that are excessive for sustaining wildlife in the area, and for maintaining water quality. What will be left of this ecosystem with motorized use running rampant and then commercial logging thrown on top? This is degrading the ecosytem beyond what is acceptable. Design Criteria s. 3.6.6.6 was designed to prevent the expansion of OHV use. Various sections of the EA address the effects of unauthorized OHV use (s. 4.2, 4.5, 4.6 & 4.15).

The Clackamas River provides habitat for threatened salmon, clean drinking water, and unsurpassed recreation. The extensive network of roads in the watershed are all ready degrading the tributaries of the Clackamas River. This is another reason that I think the No Whisky timber sale should be cancelled. *The effect of roads on these resources is assessed in the EA (s. 4.2 & 4.15).* 

I am totally opposed to logging in uninventoried roadless areas. The project area contains over 1000 acres of Roadless areas and these units must be immediately dropped. These roadless Areas are critical to Mt. Hood National Forest and provide valuable reserves for forest wildlife. I repeat, I want these roadless areas left alone. Thirty years in the future or more, I want to hike in these areas. I was born and raised in Oregon, and when the Forest Service logs these remnant wildlands, they sell off my cultural heritage. There is no excuse for this greedy giveaway of our National Forests. Stay out of roadless areas! *The thinning units do not overlap any inventoried roadless areas (s. 4.12) and the maps in section 3.2.5 show that this area of the forest is roaded.* 

I am not satisfied that this project will protect the older structures (big trees) in the planning area. The preliminary assessment does not recognize the ecological importance individual old growth

trees. Old growth individual trees support biodiversity that is rare in younger forests, and can serve as life boats for old growth dependent species. This project is not designed to protect these "lifeboats" and that needs to be fixed. Older structures, live and dead, should all be protected, while focusing on enhancing the diversity in the surrounding forest. *The project is a plantation thinning. There are no "old growth trees in the proposed thinning units (s. 2.1.1 & 4.5.3).* 

Despite the damage to the area due to motorized recreation, the No Whisky planning area is a diverse area. Biological legacies such as old snags, old growth individual trees, and a heterogenous spatial arrangement of trees are postive elements that this area has going for itself. It also supports sensitive species, such as Oregon spotted frog, Cope's giant salamander and peregrine falcon that will be adversely impacted by the project. *Diversity is addressed in s. 4.4.*Sensitive species are addressed in s. 4.5.9.

The diversity of the area needs to be maintained, roads closed, trash picked up, and motorzied damage repaired. Otherwise you are making a bad situation, worse. If this area is converted to a tree farm, how is it better than some ripped to shreds Weyerhauser land? The No Whisky project pushes this area on a downward spiral. I ask for the cancellation of No Whisky. Then when the other issues are under control, we can reevaluate the potential of this area to provide fiber to society. As it stands now, this project takes more than the area can give. *Design Criteria s.* 3.6.6.6 was designed to prevent the expansion of OHV use (s. 4.15).

## Stephens

I have spent many days in the area proposed for logging. Due to its close proximity, I have often hiked there. In past winters, I have cross country skied there and, dearest to my heart, I return there every fall for mushroom gathering. I have secret locations (I have shown to only a few friends) that are reliable for large numbers of golden chantrelles. In addition, certain areas there are excellent for finding large quantities of hedgehog mushrooms, as well as boletus mirabilis, cauliflowers and some winter chantrelles. The proposed logging will eliminate these prime mushrooming areas. Since no locations are described, only a generic response can be made. Most of the units have been thinned before and are still good areas to find mushrooms. While there may be some short-term effects to mushroom gathering in localized areas, the canopies of the thinned stands will quickly close to pre-thinning levels. There remain many thousands of acres available for mushroom harvesting that are not affected by the proposed thinning (s. 4.14).

# Burgstahler

This sale will drive out up to 1 dozen paranormal Bigfoot, by my estimation. The USFS knows that they are real, knows that they are there and knows that they will be driven out. Since they are both paranormal and supernatural, you do not know what you are messing with. They have powers well beyond your current comprehension. Where is the environmental impact report on them? See EA s. 4.5.9.2. The Decision Notice discloses that an Environmental Impact Statement is not warranted for this project.

# **Evans**

The primary problem that I observed was road sediment running off of the existing dirt roads and into streams. On the south edge of Unit #4 I saw very muddy water flowing off of the road and down into a stream that flows along the east edge of unit #4. I followed this small yearround stream to the North Fork and observed the sediment filled water draining into this river. The North Fork of the Clackamas River joins the Clackamas River, which supplies drinking water to Estacada and provides habitat for threatened salmon. Water quality and fish habitat are addressed in s. 4.2. While some erosion does occur at road/stream intersections, the proposed project does not propose the construction of any roads that cross streams (s. 4.2.3.1). The turbidity observed would continue with all alternatives including no action. I can imagine that if a very steep unit, such as #4 is logged there will be a significant increase in the run-off sediment that flows into the Clackamas River, polluting drinking water and damaging salmon habitat. I do not want to risk the quality of our regions drinking water or scarce salmon habitat to pursue logging which will damage the forest and ecosystem at taxpayers expense. Sediment from harvest activities is addressed in s. 4.2.3.2. Unit 4 would be skyline logged (s. 3.3.1) and the design criteria in s. 3.6 such as 1.1, 4, 5, 6, 7 and 10 would result in low levels of risk to water quality. As I followed the stream down the east side of unit #4, I measured the flagged riparian area buffers. For this particular stream the law stipulates that the buffers must be 150 Feet wide. I found all of the marked buffers less than that legal requirement. Please correct this oversight if logging does occur. There are no laws that require a 150 foot wide no-cut buffer. Riparian reserves are 180 feet wide in this area. Alternatives B and C would thin in riparian reserves to enhance riparian conditions. The no-cut buffers and other restrictions described in s. 3.6.5 would result in low levels of risk to water quality (4.2.3.2).

## Bark

- The No Whisky Timber Sale Does Not Meet the Stated Purpose and Need of the Project. S. 2.2.1, s, 3.8, s. 4.2.0.4, s. 4.3.0.1, s. 4.4.0.1s. 4.11.
- 2.1 Providing forest products should not be sole purpose for action and fails to account for other resource benefits. There are four purposes listed in s. 2.2.1. The Northwest Forest Plan Environmental Impact Statement has an in-depth analysis of the economic basis behind the goal of providing forest products (s. 4.11).
- 2.2 The No-Action Alternative will "Maintain health, vigor and growth that results in larger trees on 1,633 acres of matrix in the project area. S. 4.3.0.1, Thinning is needed in these plantations to maintain health, vigor and growth (s. 4.3.1, Appendix E p. 2).
- 2.3 The No-Action Alternative will "enhance diversity on 1,678 acres in the project area. S. 4.4.0.1, Variable density thinning as described in s. 3.2.1 would result in greater diversity than what exists now or would likely develop with no action (s. 4.4.3).
- 2.4 The No-Action Alternative will enhance riparian reserves on 45 acres in the project area. Riparian Reserve acres shall not be included in the calculations of the timber base. *S. 4.2.0.4*,

Variable density thinning in riparian reserves as described in s. 3.2.1 and s. 3.3.2 would result in the acceleration of the development of mature and late-successional stand conditions (s. 4.2.5). Timber removed from riparian reserves to achieve riparian objectives was not considered in the development of PSQ numbers, however it does provide benefits to local and regional economies (4.11).

- The Project Potentially Violates the National Environmental Policy Act, the National Forest Management Act, the Clean Water Act, National Historic Preservation Act, and the Endangered Species Act. *This project is in compliance with these laws (decision notice)*.
- 3.1 The No Whisky timber sale should avoid violating the National Environmental Policy Act and its implementing regulations. *This project is in compliance with this law (decision notice)*.
- 3.1.1 The No Whisky Timber Sale requires an Environmental Impact Statement; all of CEQ's criteria for significance are present. *The decision notice, backed up by analysis in the EA, found no significant impacts.*

The No Whisky Timber Sale Should Provide a Reasonable Range of Alternatives.

Potential alternatives to consider

alternative that does not include these stands. S. 3.7.4.

- 3.1.2.1.1 Thinning of previously unthinned stands.

  Bark believes that those units already thinned and with an RD of less than 55 do not meet any purpose and need except for producing timber. Bark encourages the consideration of an
- 3.1.2.1.2 No roadbuilding, riparian reserve logging, or expensive helicopter logging. Bark is concerned about the extreme increase in harvest costs associated with helicopter yarding. Bark encourages the consideration of an alternative that benefits from the decrease in ecological impact from road-building but is not encumbered by excessive helicopter costs. S. 3.7.5. Our analysis shows that helicopter is an expensive logging system. I choose to keep the helicopter options, in part to show the trade-offs between alternatives. The analysis indicates that the helicopter units are viable (s. 4.11).
- 3.1.2.1.3 A non-commercial, restoration alternative for the proposed project. Reasonable and practicable alternatives to the proposed action exist and have been identified in earlier comments by Bark and include a non-commercial restoration-only alternative including road removal and other noncommercial activities. *S. 3.7.1*.

One purpose and need of the proposed No Whisky timber sale is to develop more "mature and late-successional stand conditions." (This is actually only an objective in 45 acres of riparian reserve.) In all projects involving "forest health" goals, the Forest Service Manual explicitly requires consideration of alternatives without commercial logging. The Manual states, "where timber harvest is proposed primarily for the purpose of achieving forest stewardship purposes...a full range of alternatives, including practical and feasible non-harvest options, must be analyzed

in the environmental analysis process." The quote from this manual ends just prior to the following caveat: "It is not necessary to include harvest or non-harvest options that are not practical or feasible from a biological, social, or legal standpoint or those that do not meet Forest plan objectives, or standard and guideline requirements."

There is very little in this timber sale to suggest that it is truly a "restoration" project (*This is a plantation thinning project*). As such, the proposed project should not go forward.

3.1.3 The No Whisky Preliminary Assessment fails to analyze impacts and disclose them in such a way as to give the public a basis to provide sufficient feedback.

There was no evidence of any field markings whatsoever, suggesting that the PA was written without even a visit to the stands proposed for harvest. Such lack of field work has made it virtually impossible for Bark to understand the proposed action or provide the Forest Service with constructive feedback. Flagging of unit boundaries is not necessary prior to completion of the EA. Members of the interdisciplinary team use maps to find the units. Maps of the units were provided in the preliminary assessment.

The November 8, 2005, No Whisky scoping letter contained a purpose and need that read, "Maintain health, vigor, and growth that results in larger wind firm trees." In the PA, this statement no longer contains the term "wind firm," but there is no explanation. Instead, the Forest Service asserts, "These second-growth stands are stable and windfirm." (PA, p 41) Bark is concerned about windthrow exacerbated by overly aggressive thinning prescriptions. How was it determined between November 8, 2005, and February 17, 2006, that the 1,678 acres of No Whisky are "windfirm?" Silvicultural analysis determined that the stands were already windfirm (Appendix E). While thinning will help maintain this condition it was not described as a purpose and need in the preliminary assessment.

- 3.1.4 The Forest Service must provide a 30-day comment period upon release of an Environmental Assessment (EA). *The regulations concerning comment and appeal have been followed (Decision Notice).*
- 3.1.5 No Whisky will have cumulatively significant impacts on the environment. *The decision notice (backed up by analysis in the EA) found that there would be no significant cumulative impacts.*
- 3.1.5.1 Cumulative effects of OHVs not analyzed

The PA states that past Off Highway Vehicle (OHV) and off-road use of skidtrails and roads in the Ladee Flats area has resulted in ongoing erosion. It goes on further to suggest that new skid trails created by No Whisky may lead to increased OHV use in units adjacent to FS Rds 4610 and 4611. However, this statement contains no analysis of the expected impacts associated with this type of activity. In addition, it fails to address the very real impact of OHV abuse that is not contained to roads and skid trails, but occurs anywhere that terrain (most often tree density) does not restrict it. Finally, Mt. Hood National Forest has initiated an OHV planning process which specifically identifies the No Whisky project area as a potential off-road site. The PA summarily omits any reference to such a plan, despite the obvious potential impacts that could be incurred

through the permanent siting of an OHV playground in the project area. *Cumulative effects of OHV use is found in s. 4.2.11, 4.5, 4.6 and 4.15.* As for current use, recreational motorized vehicle activity is supposed to be off limits except on open roads and designated parking areas. With the large number of closed roads that are open within the management area, this requirement has been violated by the Forest. (LRMP, Four-280, B11-037) *The No Whisky area is not in the B11 land allocation therefore B11-037 does not apply (s. 2.2.3).* 

- Given that it is reasonably foreseeable that these matrix stands will be entered again to either thin or regenerate them, and that they have been logged in the past, NEPA requires the Forest Service to conduct a cumulative impacts analysis. It would be expected for this temporally cumulative impact to be addresses in full in an Environmental Assessment. Instead, the No Whisky PA does not even address expected future treatments, despite the scoping letter clearly suggesting that harvest will occur in the foreseeable future. All past, present and foreseeable actions have been included in the analysis (s. 4.1). Long-term thinning opportunities have been disclosed however there are no proposed actions with sufficient site specificity to allow for numerical analysis (s. 4.4.1). Future EAs would address this issue.
- 3.1.5.3 Cumulative, direct, and indirect impacts on forest fragmentation, biological corridors, and dispersal of late-successional species.

The PA fails to adequately assess the cumulative impacts of the present project and other proximate projects on forest fragmentation, loss of habitat connectivity, and dispersal of late-successional species. As documented in the North Fork Clackamas watershed analysis (WA p. 2-37), fragmentation is an ecological term that refers to the braking up of late-successional habitats. Since the No Whisky project does not propose treatments in late-successional forest there would be no affect to fragmentation of that habitat type (WA map 2-11). Similarly habitat connectivity is a concern for late-successional species. The watershed analysis identified an interim connectivity network to connect Late-successional Reserves. The proposed action is not in the connectivity network (WA map 3-3). Dispersal habitat for spotted owls is discussed in s. 4.5.3.

- 3.1.5.4 The PA does not analyze the impact of global climate change nor local warming trends. *This issue is outside the scope of project level planning.*
- 3.1.6 The Forest Service Improperly Relies on Mitigation Measures In Their NEPA Analysis for the No Whisky timber sale. *Best Management Practices (BMPs) and Design Criteria are found in s. 3.6. The decision notice found that there were no significant impacts that would require further mitigation (s. 3.3.5, s. 3.4.4, & s. 3.5.3).*
- 3.1.6.1 The scoping letter does not contain an adequate discussion of mitigation measures. *The purpose of a scoping letter is to request information from interested publics not to discuss potential mitigation.*

- 3.1.6.2 Mitigation measures do not obviate the need to prepare an EIS. *The EA contains no mitigation measures (s. 3.3.5, s. 3.4.4, & s. 3.5.3). An EIS was not prepared because no significant effects were found (decision notice).*
- 3.1.6.3 The PA fails to include a detailed monitoring and mitigation plan. *Monitoring is discussed in s. 3.6.10 and 3.6.6.6.*
- 4 No Whisky PA fails to Adequately Analyze the Impact to water quality and fisheries. S. 4.2 includes 15 pages of analysis of these resources. See also the fisheries biological assessment in Appendix C and other information on the Aquatic Conservation Strategy in Appendix E.
- 4.1 The PA Lacks Required Quantitative and Qualitative Data on Water. S. 4.2 includes 15 pages of analysis of these resources. See also the fisheries biological assessment in Appendix C and other information on the Aquatic Conservation Strategy in Appendix E.
- 4.2 Sedimentation Will Increase because of the No Whisky timber sale. *Sediment is discussed in s. 4.2.3.*
- 4.2.1 Direct impacts from sediment on the planning area. *Sediment is discussed in s. 4.2.3.*
- 4.2.2 Cumulative impacts from sediment on the planning area. Cumulative effects are discussed in s. 4.2.11. The decision notice found that the effects were not significant.
- 4.2.3 The PA failed to include adequate mitigation measures for aquatic systems. *In s. 3.6, BMPs and Design Criteria 1.1, 4, 5, 6, 7 and 10 combine to protect aquatic systems.*
- 4.2.4 The reliance on Best Management Practices (BMPs) is insufficient mitigation for sediment impacts to aquatic systems. *The Forest has monitored BMPs and assessed their effectiveness, (s. 3.6.10 & 4.2.13).*
- 4.2.5 The No Whisky timber sale needs to include a monitoring requirement or a mechanism to deal with water quality violations. s. 3.6.10 & 4.2.13
- 4.2.6 The No Whisky timber sale is flawed because it requires the construction of nearly 8000' of road. *The EA has three alternatives that do not include road construction (s. 3.1, s. 3.4 & s. 3.5).*
- 4.2.6.1 Road re/construction will contribute to sedimentation in the planning area. Most units can be logged from existing roads. For other areas the proposal is to build temporary roads that do not cross streams and are located on gently sloping land where the risk of sedimentation is low. Similarly, the old temporary roads that would be reopened do not cross streams and are located on gently sloping land where the risk of sedimentation is low. The roads would be obliterated and revegetated. The effects of roads are disclosed in the EA. (s. 4.2.3.1, 4.2.11 & 4.6.5).

- 4.2.6.2 Undemonstrated ability to close roads. The techniques described in the EA would result in effective closure of roads, (S. 3.3.3, s. 3.6.6.6, s. 3.6.7).
- 4.2.6.3 "Temporary" road construction and road reconstruction result in new system road and associated impacts. *The effects of temporary road construction and reconstruction have been disclosed in s. 4.2.3.1, 4.2.11 & 4.6.*

#### 4.2.6.4 Road density.

The Northwest Forest Plan requires the Forest Service to "reduce existing system and *nonsystem* road mileage." [emphasis added] *S&Gs*, C-7; B-19. The No Whisky project fails to comply with this mandate. *These standards apply to Key Watersheds. The No Whisky project is not in a Key Watershed (s. 4.2.1)*.

# 4.2.6.5 Illegal road network.

Historically uncontrolled OHV use on the No Whisky project area has created large and very destructive network of illegal roads. The Clackamas River Ranger District has demonstrated an inability to control illegal OHV use in this area. New road construction and road reconstruction will just exacerbate this issue. The PA failed to address this issue directly. *Design Criteria s.* 3.6.6.6 was designed to prevent the expansion of OHV use. Effects of OHV use is found in s. 4.2.11, 4.5, 4.6 and 4.15.

## 4.3 Riparian Reserve timber harvest.

Unaddressed damage from skidtrails within the Riparian Reserves violates the LRMP [Four-49, FW-024]. Rutting within skid trails should not exceed 12 inches in depth over more than 10% of a designated skidtrail system. There was no mention of monitoring for this Forest-wide guideline nor is there any mention of any BMP that specifically addresses this LRMP issue. *This standard applies to timber harvest operations, not rutting created afterward by unauthorized OHV use.* Further violations of the LRMP are found in the unaddressed issue of OHV use within Riparian Reserves, [Four-280, B11-037] states that recreational motorized vehicle activity shall not be permitted except on open roads and designated parking areas. *The project is not in the B11 land allocation (s. 2.2.3) therefore B11-037 is inapplicable.* 

The No Whisky PA violates NFP S&G B-14 by failing to accurately identify wetlands as demonstrated by the boundary marker directly above a wetlands dominated by sedges on the western boundary of unit 12a. *The wetland is outside of unit 12a and is adequately buffered (s. 3.6.5.5).* 

While road BMP 7.2 deals with landings in Riparian Reserves, it does not indicate if re-used existing landings within the Riparian Reserves will be obliterated after use. BMP 7.2 covers the creation of landings in riparian reserves and is a standard practice. It uses the word "if" because final landing locations are not determined until they are approved by agency sale administrators. At this time, there are no known existing landings in riparian reserves that would need to be reused for No Whisky (s. 3.2.5). Since one of the arguments for the heavier thin in the Riparian Reserve is to allow for single entry and thereby reduce the disturbance of the

Reserve there will be no future need for the newly created landing within the Reserve and it should be obliterated and replanted. While the PA does state that landings in units with detrimental soil conditions over the Forest Plan standards would be obliterated, no specific mention of landings within Riparian Reserves is made. *Obliteration is discussed in s. 3.6.6.5* and s. 3.6.6.6. Further, no indication of other damaging procedures (burning of slash, collection of firewood, etc.) will be allowed to occur within the Reserve landings. *These activities would be appropriate at most landings*.

The No Whisky project proposes a 30' or less no harvest buffer on intermittent streams. This is unacceptable and the lack of citations in support of this designation makes it arbitrary and capricious. *EA s. 3.6.5.2. The design criteria were developed with input from NOAA Fisheries to provide adequate protection to aquatic resources.* 

4.3.1 Undemonstrated need for riparian reserve harvest.

The No Whisky project proposes riparian reserve harvest, including yarding. The Northwest Forest Plan permits timber harvest in riparian reserves only when needed to meet ACS Objectives. *S&Gs*, C-32. However, since the USFS has not demonstrated whether the streams affected by this activity are meeting the ACS, or how logging in riparian areas will contribute to meeting the ACSOs, it is unproven whether or not this timber harvest is appropriate. *ACS objectives are evaluated in Appendix E and s. 4.2.12. The need for riparian reserve thinning is explained in s. 4.2.0.4, s. 4.2.5, s. 4.3.1, s. 4.3.2 and s. 4.3.3.* 

4.3.2 Commercial extraction from riparian reserves.

The NFP allows for timber harvest in riparian reserves only to meet the objectives of the ACS. S&Gs, C-32. However, the Forest Service is proposing riparian reserve harvest for commercial extraction. The scoping letter notes that the MHNF "proposes a commercial timber harvest." Bark does not understand the intent of the Forest Service. If logging within riparian reserves is for the purpose of increasing retained tree diameter and for stocking control, then this purpose is belied by the commercial value of the trees that are removed from the riparian area. If the purpose is to "cherry pick" large trees out of the riparian reserves, then this activity violates the NFP. There are no large trees in the riparian reserves proposed for thinning (s. 4.3.1). The value of the trees removed pays for the thinning. There is no other funding mechanism to pay for this thinning (s. 3.7.2).

- 4.4 Peak Flows May Increase because of the No Whisky timber sale. BLM and private lands should be considered in the analysis. *The analysis includes BLM and private lands (s. 4.2.11).*
- 4.5 Impacts on fish not adequately analyzed and ACS requirements not met. *Impacts to fish are in s. 4.2. The Fish Biological Assessment is in Appendix C. Appendix E contains documentation of watershed conditions and ACS objectives.*
- No Whisky PA Fails to adequately analyze the impact to wildlife. *Impacts to wildlife are* in s. 4.5. The Wildlife Biological Assessment is in Appendix B.

5.1 The Mt. Hood National Forest has failed to survey for sensitive and listed species and therefore lacks the necessary information on which to base further NEPA analysis for the No Whisky timber sale. Surveys were conducted where required. For many species, impacts can be assessed by examining effects to habitat (s. 4.5).

On various visits to proposed units 4, 12a, 21, and 34 Bark noted pileated woodpecker holes. The PA claims that there is no habitat. Many species of woodpecker forage in stands similar to the No Whisky units. Pileated woodpeckers rely on older forest structure but are wide ranging species that may forage outside mature forests. The effects to snags are addressed in s. 4.5.10, s. 4.5.11 & 4.5.12.

5.2 Threatened, Endangered, and Sensitive species. The near absence of any information from surveys or monitoring of listed species makes a reasonable analysis of how this project and others proposed will cumulatively affect these species is impossible. *Habitat for these species is addressed in s. 4.5. Population analysis is appropriate at a regional scale (s. 4.5.5).* 

Northern spotted owl.

- 5.2.1.1 Lack of current spotted owl population baseline for the Mt. Hood National Forest precludes implementation of the No Whisky timber sale. *The analysis of spotted owl habitat is found in s. 4.5.1 through s. 4.5.7. Population analysis is appropriate at a regional scale (s. 4.5.5).*
- 5.2.1.2 Direct and indirect impact to spotted owls precludes implementation of the No Whisky timber sale. Direct and indirect impacts are found in s. 4.5.3. The effects determination would be "May Affect, not Likely to Adversely Affect" because of alteration of dispersal habitat.
- 5.2.1.2.1 Programmatic consultation is unlawful absent site-specific consultation on project effects. The biological opinion is in the analysis file and contains project specific discussion of effects. The project specific effects of No Whisky are addressed on page 121 of the biological opinion and the acres of No Whisky are included throughout the document where data is summarized for the purpose of examining cumulative effects (s. 4.5).
- 5.2.1.2.2 Removal of dispersal habitat. *The project will have a short-term affect on dispersal habitat for approximately 10 years (s. 4.5.3).*
- 5.2.1.3 Project design failure.

The USFS failed to design No Whisky to reverse the downward spotted owl population trend. Bark questions the prudence of a timber sale that results in the potential incidental take of spotted owls (does the Forest Service know how many owls live in the project area?) as well as the degradation of the critical habitat. The project would not result in incidental take (s. 4.5.4) and is not in critical habitat (s. 4.5). The nearest know owl activity center is more than ½ mile from the No Whisky project.

- 5.2.1.4 Interspecies competition. Barred owls should be assessed. Barred owls are discussed on s. 4.5.6, in the Biological Evaluation in Appendix B, in the Biological Assessment and Biological Opinions in the analysis file.
- 5.3 Management Indicator Species.

The No Whisky PA reports that the winter range road densities that overlap the No Whisky project area are on target for compliance with the LRMP. It does not specify whether the reported road density includes closed system roads that are currently open or illegal OHV roads. The lack of such analysis is arbitrary and capricious, violating NFMA and NEPA requirements. Forest Plan standards and guidelines FW-208 through 210 regulate the density of roads open to motorized vehicle traffic. The La Dee Flat area is closed to OHV use by a legal closure. The OHV use you are describing is an unauthorized activity and is not assessed by FW-208 through 210. Various sections of the EA address the effects of this use (s. 4.2, 4.5, 4.6 & 4.15).

- 5.4 Migratory Birds. *Migratory birds are discussed in s. 4.5.15.*
- 5.5 Survey and Manage Species. Survey and manage species are discussed in s. 4.2.10, s. 4.5.9 & s. 4.8. The compliance documentation is in Appendix E.
- The No Whisky PA fails to adequately analyze the project's impact to soil resources. *Soil impacts are described in s. 4.6 and in the soils report in Appendix E.*
- 6.1 Mycorrhizae. *S. 4.6.5.*
- 6.2 Soil Compaction and Disturbance.

We expected a discussion of site-specific soil compaction and disturbance levels in the proposed units rather than the assertion that no further adverse soil conditions will result post project. With historic logging that has resulted in soil conditions that often exceed the 15% cumulative effects threshold for soil resources, serious examination of this issue is required. With over 65% of the No Whisky project violating the 15% level, a rigorous analysis was expected and not found. In addition to these disclosures, the PA failed to adequately discuss how soil disturbance will affect the area's ability to remain productive. Site specific effects are disclosed in s. 4.6 and the soils report in Appendix E. S. 4.6.8 addresses productivity.

Forest Service must drop units from harvest that exceed the LRMP standards; there is no legal authority for "exceptions" from LRMP standards when the majority of the project area violates the standards. *The decision notice includes a discussion of exceptions as described in the LRMP page Four-45*. In addition, mitigation measures designed to minimize detrimental soil conditions are essentially ineffective and inappropriate for forest conditions and soils. *Soils design criteria in s. 3.6 include 1.1, 4, 5, 6, 7 and 10. Monitoring has shown the effectiveness of these practices.* 

6.3 Coarse Woody Debris Retention.

The salvage logging history means that there is a significant lack of CWD in the planning area.

There seem to be no plans to remedy this situation, other than some attempts to avoid some concentrations of CWD. Bark recommends that the Forest Service consider replicated CWD in areas deficient of this material, such as by bundling small diameter trees together to form larger "logs." While not as beneficial as large down wood naturally occurring in late-successional stands, these structures can mimic some of the function provide by natural down wood. All efforts should be made to retain CWD where it is found in No Whisky units. *Effects are described in s. 4.5.10 through 4.5.12. If funds are available, some trees would be felled to add to the level of woody debris, (s. 3.6.3).* 

6.4 Snags. Will LRMP standards be met?

Effects to snags are described in s. 4.5.10 through 4.5.12. If funds are available, some trees would be treated to add to the level of snags, (s. 3.6.2). The decision notice describes an exception for LRMP standards for snags.

- 7. Noxious Weeds.
- S. 3.6.4 & s. 3.6.8 are practices that will minimize the risk of weeds being spread.
- 8. The PA Failed to State whether all Practicable Means to Avoid or Minimize Environmental Harm Have Been Adopted.

While logging techniques that cause the least amount of soil disturbance should be used, the character of the terrain is expected to lead the Clackamas River Ranger District to fail this test. Logging methods have been selected that are appropriate for each site based on slope, landform stability and previous logging methods S. 3.3.1, s. 3.4.1, s. 3.5.1, s. 3.6.6.

9. Scientific Controversy Surrounding Thinning to Increase Stand Diversity and Create Late-Successional Characteristics Compels the Preparation of an Environmental Impact Statement.

There is considerable scientific debate regarding broad scale application of thinning to "create" old growth habitat. The No Whisky project is not attempting to create old-growth habitat. In 45 acres of riparian reserves one of the objectives is to accelerate the development of mature and late-successional stand conditions (s. 2.2.1). The rest of the units (1633 acres) have no such objective. In riparian reserves thinning would develop increased capability of stands to produce the size and quantity of coarse woody debris that would eventually fall into streams to create physical complexity and stability of riparian reserves and associated streams (s. 4.2.5).

9.1 Understory Regeneration.

Excessive monospecific understory regeneration is an increasingly acknowledged problem of forest thinning in many plant associations. Under heavier thinnings, a common outcome is a dense second canopy layer of hemlock, which virtually eliminates shrub or forb layers in the forest. Under lighter thinnings, the canopy may re-close tightly and early enough, so that the developing hemlock understory, once established, fails to grow into a second canopy. Rather it persists for long periods as a low, dense shrub-like layer. *Nearby areas similar to the No Whisky units have been thinned over the past 20 years without excessive hemlock regeneration.* 

# 9.2 Thinning Regularity.

While the thin planned for most units at No Whisky will create skips and gaps, they differ little from traditional homogenizing silvicultural thins designed to promote uniformly large, merchantable trees. "Thinning from below" can be expected to narrow the range of tree sizes in these stands and will act directly against increasing structural diversity. *Variability would be introduced as described in s. 3.2.1. Diversity is addressed in s. 4.4.3. This project is not a traditional "thinning from below."* 

We cannot see how these traditional silvicultural thinning result serves to accelerate late-successional habitat conditions through silvicultural harvest. Late successional habitat is about more than just regularly spaced large trees, but the Forest Service has failed to take this into consideration. In 45 acres of riparian reserves one of the objectives is to accelerate the development of mature and late-successional stand conditions (s. 2.2.1). Thinning would develop increased capability of stands to produce the size and quantity of coarse woody debris that would eventually fall into streams to create physical complexity and stability of riparian reserves and associated streams (s. 4.2.5). The rest of the units (1633 acres) have no such objective.

10. The No Whisky timber sale is Inconsistent with Applicable Laws and is Arbitrary and Capricious in Violation of the Administrative Procedure Act. The decision to not consider a full range of alternatives in an EIS will be arbitrary and capricious. *The decision notice contains a finding that the project is consistent with relevant laws.* 

# Ferranti

#### Roads

- If a subwatershed exceeds the Mt. Hood National Forest Land Resource Management Plan's (LRMP) standards for road density no new roads should be constructed or reconstructed. There was no analysis provided of the road density in the various subwatersheds. (s. 4.5.13) Since the system roads don't take into account the rogue roads, the total road density in this area is even more extreme than is currently being avoided by the lack of reporting. Forest Plan standards and guidelines FW-208 through 210 regulate the density of roads open to motorized vehicle traffic. The La Dee Flat area is closed to OHV use by a legal closure. The rogue roads you are describing are created by unauthorized OHV use and this is not assessed by FW-208 through 210. Various sections of the EA address the effects of this unauthorized use (s. 4.2, 4.5, 4.6 & 4.15).
- The impacts of roads are not limited to travel and use issues. There is ample and copious documentation of the direct physical and ecological effects of road and road building. Examples include their effect on site productivity (Megahan 1988a, 1988b, Douglass and Swift 1977, Robinson and Fisher 1982, Swank and others 1982, Swift 1988), microclimate, hydrologic processes, habitat fragmentation/change (Baker and Knight 2000, Dawson 1991, van der Zande and others 1980), biological invasions (Greenberg and others 1997, Lonsdale and Lane 1994), biodiversity (Forman and Collinge 1996)etc.

The discussion of the impact of temporary roads omits all of these issues. The impacts of road construction and reconstruction are assessed in all applicable sections of the EA, such as s. 3.6.1.1, s. 3.6.1.2, s. 3.6.1.3, s. 3.6.4, s. 3.6.6., s. 3.6.7, s. 3.6.8, s. 4.2.0.1, s. 4.2.0.2, s. 4.2.3.1, s. 4.2.3.3, s. 4.2.6, s. 4.2.11, s. 4.2.12, s. 4.5.13, s. 4.6, s. 4.7.3, s. 4.9s. 4.12 & s. 4.15.

#### **NEPA Issue**

- Apparently casual use of "no-cut" and "no-harvest" as synonyms. While similar, they do have differences and it is not clear if there is any intent to differentiate their use. *They are synonymous in this EA*.
- "No-cut" and "no-harvest" being used interchangeably in discussions of protective buffers for the mollusk Lyogyrus.
- There are two different sets of previously entered units (p. 41 & 44) typo
- Large and medium sized snags are declared to not exist, then they are analyzed with .1/acre. *No page or section reference* 0.1 per acre is correct.
- Large and medium sized snags are declared to not exist, even though Forest Service flagging is immediately adjacent to them (e.g., on road in unit 17). *No page or section reference 0.1 per acre is correct.*
- Large and medium sized snags are declared to not exist, but BMPs and project guidelines are promoted as being able to protect them while the analysis shows their complete eradication. No page or section reference. Because snags may be found to be hazardous and felled the cumulative effects analysis used a worst case scenario that they would be felled even though experience shows that many will be retained (s. 4.5.11).
- Why doesn't the cumulative analysis of lost Northern Spotted Owl dispersal habitat include the effects of the previous recent thinning projects? *It does include them (s. 4.1.3).*
- The definition of the term "plantation" appears to have become more generalized since the Cloak project. Using "plantation" to mean any land that was logged and may have been replanted or not (which is the reasonable reading of the provided definition) is certainly too vague. If the stands are replanted, then they are plantation. It is disingenuous to the point of dishonest to call natural second growth a plantation because there is a plan to regenerate it in the future. It is also disingenuous to call land, which has an uncertain beginning plantation if it is not know how it started then say so. The No Whisky units are not natural second growth. They were clearcut and burned and reforested with a combination of planting and spreading of seed (s. 2.1.1).
- Section 4.1.5 notes that BLM and private lands will only be analyzed in general terms since there isn't enough site specificity to allow for quantitative analysis. Doesn't the Fish and Wildlife service need that specific information to perform their Endanger Species Analysis? If they have the information, it is not unreasonable to expect that it would be shared with the Forest Service (another Federal agency). If the Forest Service is able to gain access to this information, it is reasonable to expect its inclusion in the project analysis.

- 1. Doesn't the F&W have the site-specific information being referenced in 4.1.5?
- 2. If F&W has the information, why doesn't the Forest Service use it?

Only foreseeable future actions can be analyzed in numerical terms. Because there are no known site-specific proposed actions, the discussion is limited. Past BLM and private alterations of habitats has been included in cumulative effects analysis.

#### Wildlife

- The PA declares the No Whisky project area is not pileated woodpecker habitat. The fresh pileated woodpecker excavation on the on 4610-115 that people had to walk past to finish their flagging of units 12a and 13 (N45, 12.515; W122, 11.147). If these excavations can be found walking along the road, what does that say about the lack of need to consider this MIS species? Many species of woodpecker forage in stands similar to the No Whisky units. Pileated woodpeckers rely on older forest structure but are wide ranging species that may forage outside mature forests. The effects to snags are addressed in s. 4.5.10, s. 4.5.11 & 4.5.12.
- On p. 52 it is unclear if the required surveys were done. Were the required surveys done? *Surveys are not required for sensitive species*.

# Riparian

While I support the variable density thinning of Riparian Reserves to aid in the introduction of structural complexity the simplistic approach being promoted by the current plan is not appropriate. While the plan is to "enhance" the Reserves by logging, it is not enough to exclusively thin more heavily and call it good. Riparian Reserve enhancement demands a more thoughtful approach, otherwise all that that is being implemented is a heavy thin which does not treat the Riparian Reserves in a manner that promotes the Aquatic Conservation Strategy (ACS) found in the Northwest Forest Plan (NFP). Riparian reserves thinning prescriptions are not described as "heavy thinning" in the EA. The relative density goals would be 20-35 RD in riparian reserves (s. 3.3.2) compared with 25-35 RD in matrix (s. 3.2.1). In many areas the thinning level in riparian reserves would not look different to the casual observer compared to the adjacent matrix portion. Variable density thinning prescriptions would also be used in riparian reserves (s. 3.2.1). Silvicultural diagnosis is in Appendix E.

• While I appreciate the assertion that the heavy thinning that will occur within the Riparian Reserves will not be enough to influence the ARP ("riparian reserves would not really affect hydrology unless the canopy cover went below 30% to the levels modeled by regeneration harvest" – Jim Roden personal communication), I still think it needs to be done at least once amongst the many projects that are thinning within the Riparian Reserves in the Clackamas River Ranger District. Since single entry Riparian thinning will require a more intensive thin the Forest should do at least one ARP model of the Riparian Reserve (not subwatershed, Riparian Reserve exclusively) after the proposed thinning. This level of planning completeness is expected when pursuing a potentially risky approach to riparian restoration. The ARP model is not designed for that type of analysis. If the 45 acres of riparian reserve thinning spread over 6 subwatersheds were modeled differently in the ARP calculation, the rounding would eliminate any minute differences.

- Heavy Riparian Reserve logging has unknown consequences for how well the Riparian Reserves will continue to function as connectivity corridors. What are the references and citations for this approach? Self-referencing your planning document and your own silviculturalist report (see Appendix A, South Fork thin for example) employs irrelevant circular reasoning. The question specifically asks for support for the thinning in terms of how it affects the connectivity corridors and your silviculturalist is an inappropriate reference. For the No Whisky EA it would be appropriate to have your wildlife biologist provide references. The analysis models predicted tree growth in response to different levels of thinning and this is appropriately addressed by the team silviculturist. Since the objective is to create larger trees for the purpose of woody debris recruitment into streams, the team fisheries biologist used silvicultural information in his analysis (s. 4.2.5). Silvicultural diagnosis is in Appendix E.
- Significant Forest Service and scientific literature support a larger buffer for intermittent streams. Findings on microclimate, amphibian recovery, avian usage, biological diversity 'hot spots', and intermittent stream roles for fish-bearing perennial streams are documented in Highlights of Science, Contributions to Implementing the Northwest Forest Plan 1994-1998; PNW Science Findings Issue 53; The Effects of Buffer Strip Width on Air Temperature and Relative Humidity in a Stream Riparian Zone (Ledwith, 1996); Erman et al. 1977; Steinblums 1977; Rudolph and Dickson 1990; Chen 1991; Spackman and Hughes 1994; Pearson, Manuwal 2001; KD Brosofske, J Chen, RJ Naiman, JF Franklin , 1997; Cummins, Wilzbach 2004; EA s. 3.6.5.2. The design criteria for intermittent stream buffers were developed with input from NOAA Fisheries for similar projects, to provide adequate protection to aquatic resources.
- The concept that intermittent streams don't need as large a no-cut buffer as perennial streams is logically flawed. Air-borne dust, rain, and rain-on-snow events primary non-catastrophic mechanisms for sediment transport into local streams operate equally well for both perennial and intermittent streams. Simply put, intermittent streams (streams with enough water flow that they show either annual deposition or scour) are running when you get either rain or rain-on-snow and need the same level of protection as the perennial streams. Airborne dust from summer road travel deposits in intermittent streambeds and on the surrounding vegetation this dust will mobilize when it rains and the intermittent streams flows again. There is little difference in terms of sediment transport between perennial and intermittent streams and the use of the smaller -or zero-no-cut buffer appears illogical and poorly reasoned. Perennial streams get a wider buffer to provide shade. Intermittent streams do not have water during the time of year when stream temperature is an issue. Stream buffers were developed with input from NOAA Fisheries for similar projects to provide adequate protection to aquatic resources (s. 4.2.4).
- With the significant problem of OHV abuse within the LaDee flats area intermittent streams need at least a 50' no-cut buffer to protect them from OHV abuse. OHV abuse appears to target wet areas, and since intermittent streams are wet much of the year they are particularly at risk from this form of abuse. A 30' "or less" buffer is inadequate to protect these streams from this type of abuse. OHV use has not impacted streams in this

- area. With the measures described in s. 3.6.6.6, it is not likely that OHV use would occur near streams (s. 4.2.11).
- Patches of laminated root rot that occur in riparian areas should be left untouched since they naturally act to create canopy openings. Not only do they create these openings, the disease also acts to enhance deciduous growth (very important to creating more diversity within conifer forests) by targeting confers (deciduous maple and alder are immune). The argument that "totally avoiding" root rot patches is irrelevant. When working within the Riparian Reserves a greater level of planning is required, this higher level allows for a stand examination that could catch areas of infection; claiming that it can't be done because you can't catch <u>all</u> the areas is irrelevant. Totally avoiding root rot patches is not feasible because there are no clear lines delineating where the fungus is present and where it is absent in the forest. If the fungus has reduced stocking in a patch to a level less than the prescribed leave tree density then no additional thinning would occur.
- Not just root rot should be maintained within Riparian Reserves <a href="http://www.fs.fed.us/r10/spf/fhp/top20/HeartRot.pdf">http://www.fs.fed.us/r10/spf/fhp/top20/HeartRot.pdf</a> --"Heart rot fungi may also facilitate the change from the maturing even-aged stage (i.e., understory reinitiation, to use Oliver and Larson's (1990) terminology) that is in transition to the true old- growth stage. Mortality of dominant trees may be necessary for this transition or at least it speeds the rate of change." Patches identified with native tree disease in addition to laminated root rot that occur in riparian areas should be left untouched since they naturally act to create canopy openings and increase structural heterogeneity. Retention of native pathogens is particularly important in Riparian Reserves as the remaining trees will be more resistant to disease and the initiation of new decadent trees and snags will be delayed even though decadent trees and snags remain vital to the proper operation of the Riparian Reserve ecosystem. See above. Trees with evidence of wood decay would be selected as leave trees (s. 3.6.2).
- Landings are inappropriate in riparian reserves. While a properly designed landing may have low sedimentation risk and therefore satisfy NOAA Fisheries (see Appendix A, South Fork Thin), once again self-referencing the planning document and using anadromous fish to avoid seriously answering a question about Riparian Reserve actions is inappropriate. The concept of Riparian Reserve found in the NFP is more inclusive than protection exclusively for anadromous fish, consequently the NOAA-Fisheries support is good but insufficient. EA s. 3.6.7.2. The design criteria were developed with input from NOAA Fisheries for similar projects, to provide adequate protection to aquatic resources. This BMP covers the creation of landings in riparian reserves and is a standard practice. It uses the word "if" because final landing locations are not determined until they are approved by agency sale administrators. At this time, there are no known existing landings in riparian reserves that would need to be reused and there are no new landings anticipated in riparian reserves for No Whisky (s. 3.2.5). See unit specific maps in Appendix E.
- When landings must be created or re-used they need to be removed and the landing restored. Landings damage the soil and since the Riparian Reserve logging will be single entry there is no reason to re-use them. Consequently it is not unreasonable to expect that they will be removed. *Landing restoration is addressed by s. 3.6.6.5*.

- It is completely inappropriate to burn slash on landings located within Riparian Reserves due to the soil damage this would create. *See above*.
- USGS Biological Science Report USGS\BRD\BSR 2002-0006 "Managing for Biodiversity in Young Douglas-Fir Forests of Western Oregon" (MB 2002) clearly demonstrates the singular importance of hardwood trees for increasing biological diversity in young managed Douglas-fir forests. The PA currently only specifically protects hardwoods on stream banks. While hardwoods are found on stream banks and their protection is a good idea, it is insufficient within the Riparian Reserves. Within Riparian Reserves all hardwood trees should be given explicit protection. Hardwoods are minor species in this area and would not be removed s. 3.2.1.
- In order to increase species diversity found within the Riparian Reserves, all tree species other than Douglas-fir should be protected. While the PA discusses this on p. 44, it is clear that this protection does not include true firs (it is unclear if this discussion is exclusive to the Matrix). Within the Riparian Reserves true firs should be specifically protected along with all other native tree species other than Douglas-fir. *True firs are minor species in this area and would not be removed s. 3.2.1.*
- Riparian Reserves with detriment soils in excess of the Forest Plan standard of 15% should not be logged with any ground-based equipment. The soils analysis is by unit and did not split out the riparian portion. Generally the riparian reserve portion of each unit has much less detrimental soils that the rest of the unit because most roads, landings and skid trails are generally not located in riparian reserves.
- There needs to be documentation of the protection afforded wetlands and wet areas. Since previous recent Clackamas River Ranger District projects have claimed this protection but never documented it, it is time to produce the documentation. *The EA documents this. S. 3.6.2, s. 3.6.5.5.*
- There continues to be issues with even the 50' no-cut/no-harvest buffer (43' to wetlands demarked by skunk cabbage & salmonberry & running water on western border of unit 13). *The no-cut buffers are measured from the channel of a perennial stream.*
- There continues to be discoveries of unprotected wetlands (e.g., open pooling wetlands with running water with boundary marker 10' away [western edge of 12a] at N 45, 12.393; W 122, 11.447 or the sedge-filled wetland on the western edge of unit 12a with the boundary flagging directly above it). *See above*.
- While wetlands can be marked with flagging but that doesn't mean they are protected. Evidence of the lack of protection provided by blue flagging alone can be seen on the northwestern edge of Cloak 465. Even though the unit field marking clearly shows an indentation (protection of something along that edge of the unit), this flagging did not stop the harvester (? Tracked vehicle) from driving right through. Driving tracked vehicles through wetlands protected by nothing more than flagging doesn't actually provide protection. *Provisions of the timber sale contract protect wetlands that are outside of units (s. 4.2.13)*.
- OHV abuse needs to be aggressively targeted when it occurs within the Riparian Reserves. This is necessary to comply with the ACS and with NFP Standards and Guidelines B-19 and C-7. Restoration of damage caused by unauthorized OHV use is not part of the proposed action for this project.

#### Soil

• Forest plan standards on detrimental soil conditions were written with logging in mind. While it is understandable that exceptions to this standard would be expected (hence the use of should rather than shall), it is abusive to use this exception on 65% of any project, including this one. *Exceptions are documented in the decision notice*.

# Other

Logging on slopes greater than 30% can cause erosion and should not occur. Skyline logging systems with the erosion prevention measures listed in s. 3.6 would result in little or no erosion. No-cut buffers between skyline units and streams would trap any erosion before it has a chance to enter streams (s. 4.2.3.2).

Many form post cards, letters and emails were received that contain comments similar to those already addressed above.