

Appendix B

Responses to Comments

Background

A Draft Environmental Impact Statement (EIS) was prepared by the Forest Service, and mailed for public comment in September and October 2007. The 45-day comment period ended November 19, 2007. Eighteen comment letters were received from the following individuals or organizations on the Iyouktug Timber Sales DEIS. A letter designator and comment number were assigned for tracking purposes.

This appendix displays the annotated comments followed by the Forest Service's response to those comments. In many of the responses to comments the reader is referred to specific locations in the Iyouktug DEIS and/or FEIS where a particular topic or analysis is displayed or discussed. These references are arranged with the chapter first, the referenced resource section second, followed by the specific section or sections within that resource section. This method was used because page numbers changed between the DEIS and FEIS, whereas the section headings generally did not change.

The complete citations for literature cited in this appendix is found in Chapter 4 of the FEIS.

List of those who commented on the Iyouktug DEIS and letter designator	
BC	Bob Christensen
BS	Barbara Sachau
DEC	Kevin Hanley Alaska Dept. Natural Resources (ADNR) Dept. Environmental Conservation (DEC)
EH	Ernestine Hanlon
EPA	Christine Reichgott United States Environmental Protection Agency (EPA)
ISES	Gregory P. Streveler Icy Strait Environmental Services
JB	Judy Brakel
JM	James Makcovjak

NMFS	James W. Balsiger National Marine Fisheries Service	
OHMP	Sheila A. Cameron (for Jackie Timothy) ADNR, Office of Habitat Mgmt. and Permitting (OHMP)	
OPMP	Erin Allee ADNR, Office of Project Management/Permitting (now the Division of Coastal & Ocean Management)	
PB	Paul Barnes	
SCS	Paul Olson Sitka Conservation Society	Larry Edwards Greenpeace
	Gabe Scott Cascadia Wildlands Project	Gregory Vickrey Tongass Conservation Society
	Bruce Baker Juneau Group of the Sierra Club	
SEACC	Erika Bjorum Southeast Alaska Conservation Council	
SL	Steve Lewis	
TU	Mark Kaelke Trout Unlimited	
USDI	Doug Mutter (for Pamela Bergmann) United States Department of the Interior	
WC	Wanda Culp	

Iyouktug Timber Project

Introduction

BC-1 I am a resident of Icy Strait who is interested in supporting the management of the Tongass National Forest to provide for multiple uses, including maintaining high levels of productivity for wildlife such as salmon, bear and deer, providing subsistence opportunities for rural communities, economic opportunities for rural communities (including reasonably scaled timber projects), recreation opportunities for residents and visitors and "ecosystem services" for healthy ecological systems.

In general I was very impressed with the Iyouktug draft EIS. Many important issues were addressed and potential impacts from proposed actions were described clearly, well illustrated and documented in appendices.

BC-2 My critique of this project derives largely from a difference in personal and professional opinion (from the Forest Supervisor at least) on how TLMP should be implemented. In short, projects like Iyouktug make it amply clear that in timber LUDs the USFS manages primarily for the harvest and production of timber. This "no-brainer" is not necessarily a problem on its own. The problem lies in that the timber LUDs were established long before biological values and "non-extractive" economic interests were of much concern. The timber LUDs were drawn around the most productive watersheds in the Tongass because timber took priority. This is a problem because in addition to being the big timber producing watersheds in the Tongass they are also the core zones of productivity for a great variety of wildlife species, many of which are important to other aspects of South-east economy. The disproportionate emphasis on timber productivity in the majority of the highly productive watersheds in the Tongass burdens the timber planning team with the challenge of/responsibility to see that management of these landscapes results in something considerably more than tree farms. The timber LUDs are in many cases the true "biological heart" of the forest, providing much higher productivity for salmon, bear, deer, eagles, etc. than the system of protected lands. This is especially true on NE Chichagof where there occurs no congressionally protected lands at all.

BC-3 Although today a great deal of effort is paid to conservation of other forest values within a timber project DEIS/EIS the tendency is to meet only the minimum requirements to adhere to the standards and guidelines. The scale of harvest v.s. the scale of conservation in highly productive sites is highly disproportionate to the social value derived from harvest activities. This is especially true for areas that have already been high-graded by past harvest efforts. In particular, the economics of these sales makes very little sense from a government fiscal responsibility perspective and marginal sense at best for providing rural economic stability.

BC-4 Although I will go to some length below to describe specific areas/units that concern me I want to make it clear that most of this concern is born by what I see as a fundamental flaw in the *scale of harvest* proposed in the preferred alternative. If the project were appropriately scaled to respond to past harvests in and around the project area I would feel very little need to voice the concerns I do below, even if the specifics of the particular unit had not changed. I understand and appreciate that impacts to wildlife productivity are an unavoidable consequence of human occupation and economy. Again, it is the scale of the proposed impacts that I take issue with. That is why I would like to go on record in support of a slightly modified version of Alternative 5 (move a portion of the North Iyouktug units to the Suintaheen 1663' knob) and a much greater emphasis on "integrated management", i.e. a balance of proposed impacts and mitigative actions like restoration.

Specific Issues

Partial-cutting

BC-5 Iyouktug is a fairly unique timber project in the Tongass. Many of the harvest units proposed in the preferred alternative are partial cut prescriptions. Using partial cut prescriptions in order to maintain some old growth character in harvest units may work very well in many locations in the Iyouktug project area but it seems to me that the idea is soured somewhat by the scale at which it is being applied in Alternative 3. Although the par-

Appendix B

Responses to Comments

BC-5
(cont.)

Partial cut approach makes it possible to provide a relatively large volume of timber while adhering to S&Gs for marten and goshawk, the downside results in greater impacts to habitat connectivity, especially for deer, and results in more roads necessary per board foot volume. Partial cutting at this scale is unprecedented on the Tongass and may have unforeseen consequences to habitat connectivity in what is an already highly fragmented landscape (naturally and from past harvest).

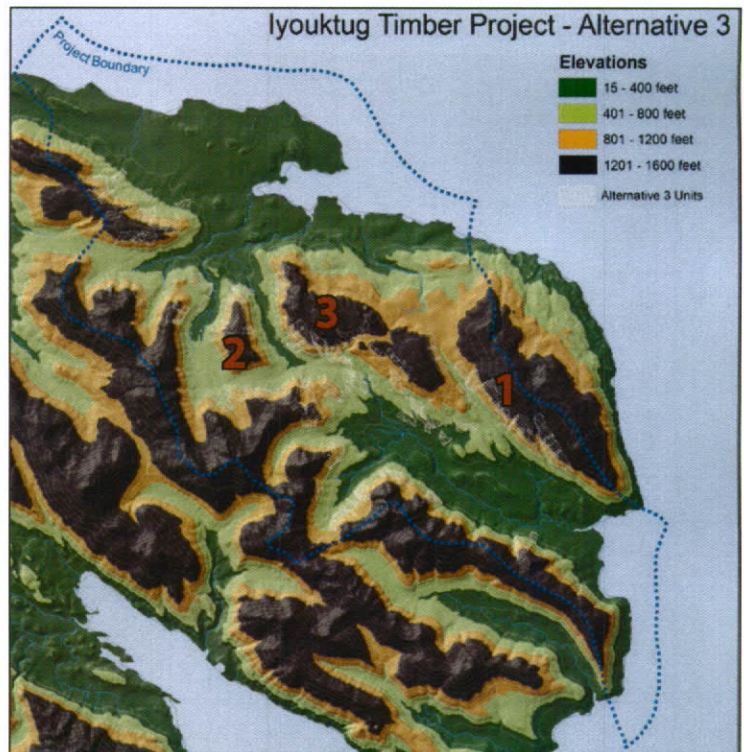
BC-6

It is also important to acknowledge that little is known about the wind-firmness of partial cut forests and what is known (see alternatives to clearcut study, FSL) does not bode well for trees left standing in sites exposed to seasonal wind storms.

BC-7

There are 3 areas within the project that I find particularly problematic for maintaining ecological integrity in a post Alternative 3 harvest scenario because of the extent of proposed partial harvesting (see figure right). These areas are:

1. North Fork Iyouktug,
2. the Suntaheen 1663' Knob, and
3. the Suntaheen 1600' Knob



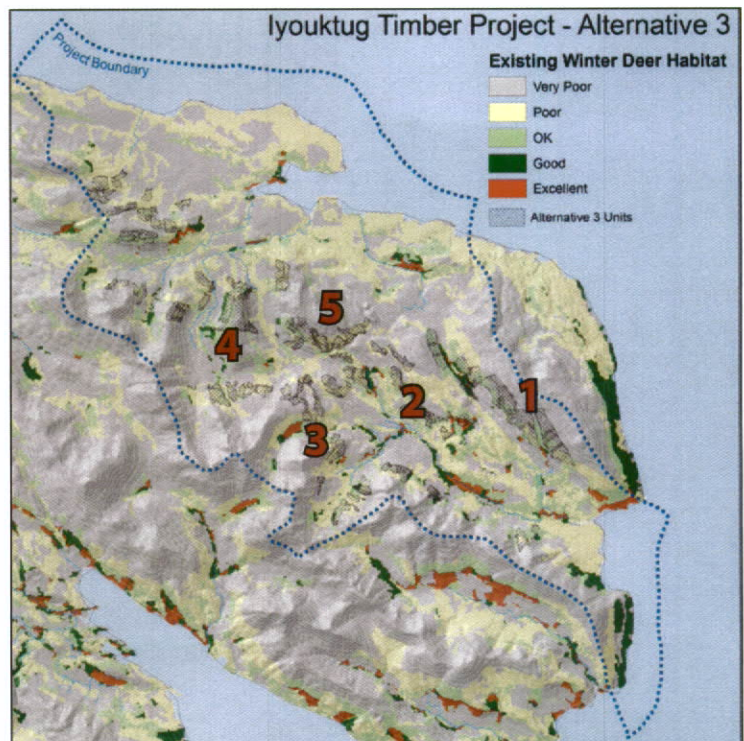
BC-8

Deer Winter Habitat and Connectivity

Over half of the prime deer winter habitat has been logged in the project area. The remaining patches of prime habitat are highly fragmented and often occur up-slope of difficult to traverse second growth stands. The reduction in availability and access to prime habitat has reduced the carrying capacity of this landscape and made it more susceptible to catastrophic die-offs due to high snow winters. What fragments of higher quality habitats remain should not be logged or further isolated by removal of travel corridors. It also seems reasonable that we should protect the best of the medium quality winter deer habitat and “thin for wildlife”, i.e. gap-thin what once was prime winter habitat in order to maintain and restore a suitably dense and resilient population for an important subsistence area.

BC-9

The units in the North Fork Iyouktug area (1) are particularly problematic for degradation of some of the last southwest facing moderate value winter habitat in the project area. Reduction in canopy closure will also degrade landscape and elevational winter connectivity in this area. Specific units of concern are: 114, 116, 117, 118,



Responses to Comments

BC-9 (cont.) 119, 120, 121, 122, 123, 124, 125, 184 and 185. An “integrated” approach to management for this area would balance some harvesting with the maintenance/restoration of landscape/elevational connectivity and gapped thinning of lower elevation second growth. Review of the resource specialist report suggests that some efforts were made to maintain connectivity, but there does not appear to be enough known about the importance of connectivity to ensure that the scale of conservation is balanced appropriately with the scale of harvest.

BC-10 Harvest of units 111, 103, 189, 191 and 193 would remove centrally located (2) patches of *prime* deer winter habitat or threaten remaining corridors to such from likely blow down (see more blow down threats below). Note that unit 103 is mapped as low quality deer winter habitat by the HSI model and yet it is prime deer winter habitat in terms of snow capture and winter foraging opportunities. This situation is not uncommon and should dictate that a ground-truth based approach should be systematically applied to the project area (i.e. use the FRESH model), especially in such a highly fragmented area where subsistence is needs are well documented.

BC-11 Harvest of units 163 and 165 (3) would greatly impact connectivity and increase risks of blow-down to the largest and highest scoring patch of deer winter habitat in the central-western portion of the project area.

BC-12 Harvest of a group of units in the northwest of the project area (914, 915, 923, 960, 954, 953) would log most of the Suntaheen 1663’ Knob-whose western slopes provide most of the higher quality deer winter habitat in the Suntaheen watershed (4).

BC-13 Harvest of a group of units in the northern portion of the project area (914, 915, 923, 960, 954, 953) would log most of the south facing slopes of a Suntaheen 1600’ Knob (5).

BC-14 It should also be noted that the large patches of moderate-good habitat that are mapped on the eastern sides of relevant OGR’s are unlikely to actually provide very high quality deer winter foraging opportunities. The current HSI model suggests these areas would be good for deer because they are low elevation POG with decent aspects. The model does not account for the wind-stressed nature of the forest types along the Chatham side slopes. These forest types tend to be closed canopy and nearly devoid of important winter foods like blueberry, cornus, coptis or rubus. Like the unit 103 example above, this is another

BC-15



Prime deer winter habitat in unit 103. USFS deer model shows this as low quality.



This is a picture of a patch of forest in an OGR south of False Bay. This large patch of POG is mapped by the USFS deer HSI model as having high quality deer habitat. Clearly this is not the case.

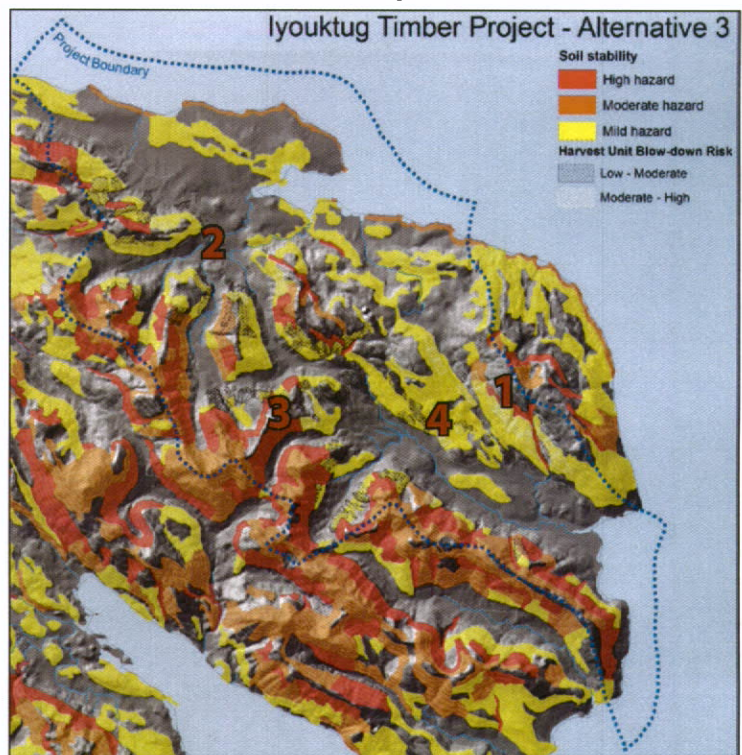
Appendix B

Responses to Comments

BC-15

case where a better approach to understanding the on the ground reality for deer winter range is important for good intentions to equal good management. I appreciate that quick cruises for deer habitat were done both in and out of proposed units and I am confident that the wildlife biologists used site specific information to improve this project wherever possible, however, unit by unit tweaks may not do enough for meeting project/landscape scale management goals for large mammals in a highly fragmented landscape. Furthermore, the data used to quantify impacts to carrying capacity and subsistence opportunity are not based on ground-truthed data nor do they provide anything but relative estimates for deer numbers. The USFS is long overdue for a new deer habitat model that can be used effectively and consistently at regional, landscape and project scales.

BC-16



Blow Down and Slope Stability

BC-17

Much of the Iyoutug project area occurs on moist soils.

BC-18

Forest types that occur on moist soils are susceptible to blow down when they are exposed to storm wind directions (Northerly and Southerly exposures). Although blow down can be used as a management tool for maintaining/increasing site productivity, it should be avoided when the unravelling of neighboring forests impact the accessibility of prime deer winter range or the overall quality of old growth retention.

BC-19

Again, the North Fork Iyoutug (1) units are particularly problematic in this regard: 119, 120, 121, 122, 123, 124, 125, 184 and 185. Blow down caused by the cutting of units 819, 820, 915 and 960 in the northwest of the project area (2) would also likely impact access to prime winter deer range. The same would hold true for the centrally located unit 103. On the southern side of the watershed, blow down from cutting units 151, 165, 909, and 983 would also impact deer habitat/connectivity (3). Unit 111 is prescribed to be a 50% basal area removal although it is highly susceptible to blow down ((4) mistake?).

BC-20

Where the USFS soils data shows moist soil types on steeper slopes the ground is considered moderately to highly unstable, or prone to land-slide hazards. Land slides should be avoided whenever risks are high. North Fork Iyoutug units stand out here as well.

BC-21

Timber harvest is proposed upon and up-to unstable sites in these locations:

- Units proposed on **highly unstable sites**: 125
- Units proposed on **moderately unstable sites**: 138, 143, 914, 948
- Units proposed on slopes **immediately below or next to highly unstable sites**: 125, 134, 138, 142, 151, 184, 185, 817, 903, 916, 917, 932, 937 and 976. These units should provide for slope stability buffers or be abandoned if buffers are not deemed to be sound.

BC-22

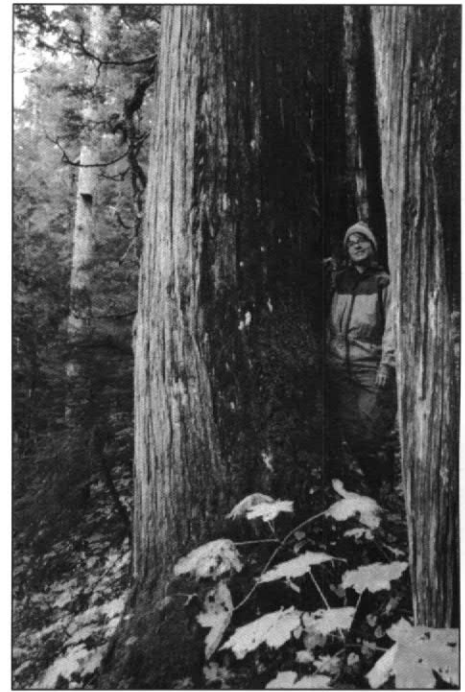
Yellow Cedar

Although yellow cedar accounts for a small percentage of the total volume available in the unit pool it is clearly a primary driver in the economic feasibility of this sale. This suggests that large areas of forest, largely hemlock forest, will be impacted in order to harvest a small, but highly valuable cedar component. Efforts made to maintain the cedar component in partial cut stands will take on the ground stewardship to insure that the general retention/regeneration goals outlined in the summary section are met. Several other important points

Responses to Comments

BC-23 about impacts to cedar trees and cedar habitat types are not addressed in this DEIS:

1. There is no mention of how the very slow growing nature of this species is being accounted for in long-term economic or ecological planning for this area.
2. The fact that cedar die-back is not occurring in the project area seems to be cited as justification for limiting concern with harvesting this species when it should be cited as justification for its conservation within the project area (why not protect it where it seems to be doing well and log it where it is dead?).
3. The fact that we know very little about the distribution of cedar across the broader NE Chichagof landscape and the relative proportions that would be harvested in Alternative 3 is not addressed.
4. The poor record of natural regeneration of this species is seemingly addressed by a single statement about how if necessary it will be replanted. This is far from a conservative approach given the challenges of funding the monitoring of such need and the implementation of mitigative action.
5. Mention is made in unit cards of individual tree buffers for very large, likely ancient, yellow cedars identified by the SCS ground-truthing project. While I applaud this effort I wonder how extensively this kind of surveying was done in the project area? I would like to see a dbh limit of 36" when harvesting cedar in this project area and a guideline for protecting high density groves (~50%).



Large yellow cedar found in unit 103.

BC-24

BC-25 *Cumulative Impacts*

I can find no significant contribution of accounting for cumulative impacts in the Iyouktug project. It is understandable that the USFS has not yet determined how to respond to the 9th circuit ruling on this matter at the project level but is that not a very important scale for action? Intensive harvesting by SEALASKA and Huna Totem in the game creek and spasski watersheds make it amply clear that the NE Chichagof landscape exemplifies the kind of area that the decision was meant to address.

BC-26 Overall impacts to winter deer habitat is an obvious resource to be considered with regard to cumulative impacts to the landscape and could be addressed somewhat with additions/changes to the OGR system. As an example, if the Whitestone SOGR were to be modified/added to such that it protected the old growth characteristics of the low elevation/south facing corridor between Whitestone Harbor and the Spasski valley (up Whitestone creek) the USFS may be able to buffer impacts to this critical watershed rather than broaden the footprint of its behavior as a population sink for old growth dependent species.

BC-27 *High Elevation Units*
Many of the units in this project occur at relatively high elevations (above 800'). As mentioned above with reference to slow growth rates in cedar, all tree species regenerate and mature slowly at high elevations. There is no mention of how longer-term impacts to old growth characteristics at high elevation sites are accounted for.

Thanks very much for providing me an opportunity to comment,
Bob Christensen
baidarkabob@gmail.com
PO Box 306
Gustavus, AK 99826

Responses to BC – Bob Christensen

BC-1 – Your position on the Forest Service mission and positive feedback on the EIS are noted and appreciated. Thank you for providing maps and unit-specific information.

BC-2 – The designation of lands for National Forests began with the Forest Reserve Act of 1891 and the lands targeted for these reserves were based on their timber production value rather than the other values associated with them today. The goals of the management of the National Forests have changed over time along with the public's values. This can be seen in LUD allocations of the 1979 Forest Plan, which was almost immediately amended by ANILCA (1980) which designated many timber production areas as Wilderness, such as Admiralty Island, Petersburg Creek-Duncan Saltchuck and Tebenkof Bay. The LUDs of the 1979 Forest Plan were further amended by the Tongass Timber Reform Act (1990) which added more Wilderness Areas and Legislated LUD II lands which are to be managed in perpetuity in a roadless state. A portion of NE Chichagof is allocated to the LUD II designation.

During the environmental analysis which resulted in the 1997 Forest Plan., the land use allocation was once again scrutinized. Many of the timber production LUDs were assigned to areas where there had already been timber harvest, in part to respond to the scoping comments to not develop roadless areas and in part to use the existing infrastructure. However, many other areas (2.7 million acres) were changed from timber production LUDs (LUD III and IV in the 1979 Forest Plan) to LUDs with other resource objectives, such as old-growth habitat of wildlife, semi-remote and remote recreation, and special interest areas designed to protect zoological, botanical, scenic, geological or cultural values. Approximately 25% of the NE Chichagof area was allocated to Old-growth reserves at that time which resulted in the modification of the Eight-Fathom EIS decision.

Prior to the development of a proposed action for the Iyouktug project an interagency review of the old-growth habitat reserves by biologists from the State of Alaska, US Fish and Wildlife Service and the Forest Service was begun in the Iyouktug area. This interagency review was also one of the major focuses of the 2008 Forest Plan Amendment. The intent behind this review was to ensure that the best areas were chosen for inclusion in the Conservation Strategy. Other LUD allocations were also considered for the Iyouktug project area at this time in the Forest planning process.

During the analysis for the FP amendment the LUD allocations were again analyzed and several adjustments were made to the 1997 Forest Plan LUDs based on public comment. Please refer to the 2008 Forest Plan Amendment ROD (USDA Forest Service 2008).

We understand that you do not agree with our timber LUD locations. Designating LUD areas is outside the scope of this analysis, and is part of the Forest Planning process. LUDS were created considering all resources, not focused only on timber. Management within timber LUDS includes multiple use management. Please see the information on LUDs in the DEIS and FEIS, Chapter 1, Relationship to the Forest Plan.

BC-3 – The Forest Plan Standards and Guidelines are science-based and were determined to meet the goals and objectives of the Forest Plan for all resources, including timber. To increase the standards and guidelines for other forest values may affect the timber economics and/or outputs. Therefore Alternative 2 was designed to meet the Forest Plan direction; Alternatives 3,

4, and 5 provide different levels of other resource protection above the Forest Plan standards in many areas within the proposed project area. These increased protection measures also show to some degree the cost of these protection measures.

Appendix A of the Iyouktug FEIS explains the obligation to help stabilize the timber industry part of the communities of Southeast Alaska. Part of the purpose and need for this project (Chapter 1) is to provide a long-term stable supply of timber for local and regional sawmills and timber operators from suitable timber lands. Changing economic factors and rapid market fluctuations make it difficult to predict absolute economic values over the next five to 10 years. The economics of these proposed sales are discussed in the DEIS and FEIS in Chapter 3, Issue #3, Timber Economics, Timber Financial Efficiency Analysis section and provides a relative comparison among alternatives based on current market conditions. This section of the FEIS has been updated to provide additional information.

BC-4 – Alternatives were designed by the IDT to provide a reasonable range of management options. Alternative 4, for example, does not harvest timber in the North Fork of Iyouktug Creek. Alternative A was a smaller-scale alternative using only existing roads. It was eliminated because it did not meet the needs of this project. The scale of harvest varies by alternative and a wide range of alternatives are developed in Chapter 2 of the DEIS and FEIS. Chapter 3, Environment and Effects, provide information concerning the existing environment of the Iyouktug project area, and potential environmental consequences of the proposed action and alternatives to it. Please also see responses to BC-7, 9, 10, 12, 13, and 14 where we discuss your concerns with specific units. Several alternatives were considered that would be similar to your proposal of a modified Alternative 5; Alternative D considered ground-based harvest only, with no harvest in roadless (including no harvest in the “North Iyouktug” area), Alternative F looked at small sales only, and Alternative J considered restoration projects in the Iyouktug area. Alternatives D, F, and J were eliminated from detailed study for the reasons described in Chapter 2 of the DEIS and FEIS, Alternatives Considered but Eliminated from Detailed Study section. The decision maker can consider modifications to alternatives similar to what you have suggested in the Record of Decision (ROD).

BC-5 – The scale of the Iyouktug proposed harvest is not unusual when compared to other current timber sale proposals across the Tongass National Forest such as Navy and Logjam. For example, the Woodpecker Timber Sale proposed to partial harvest 1,140 acres in the preferred alternative and 1,850 acres in one of the other alternatives. Looking at larger project areas allows a landscape approach to management and is more cost-efficient for NEPA analysis. These larger areas also potentially provide more timber than a smaller area which can allow for a longer implementation period that provides a more reliable timber supply. Regardless, the scale of the proposed Iyouktug harvest was considered and the DEIS and FEIS, state that some partial harvest, in combination with other harvest, would result in a reduction in connectivity (Chapter 3 (and the Wildlife and Subsistence Resource Report), Habitat Connectivity and Old Growth section, Environmental Consequences on Connectivity section). However, this document also describes how partial harvest will maintain some level of connectivity especially as compared to clear cut harvest. Information was added to this resource report to clarify this.

In addition, the DEIS and FEIS, Chapter 2, identify a range of alternatives with varying degrees of impact. Alternative 1 maintains the existing condition, with all of the travel corridors remaining intact. Alternative 3 was developed to minimize impacts to deer habitat and connectivity. Although corridors are reduced in width in all of the action alternatives, landscape

level connectivity is maintained as required in the Forest Plan (USDA 1997a). Forest Plan Standards and Guidelines do not require any specific number, width or distribution for corridor

BC-6 – Monitoring results from the Alternatives to Clearcutting Study, five years post-harvest in wind prone areas reveal approximately 5 percent loss of basal area with the 25 percent single tree selection prescription and 6.4 to 8.5 percent basal area loss with 25 percent selection in clumps (McClellan, 2007). Based on these results, minor (5-8%) amounts of windthrow can be expected to occur following harvest within proposed single tree selection units with moderate to high wind risk ratings.

Regarding windfirmness of partial cut forests, proposed prescriptions are consistent with Harris (1989) and McClellan (2007). The FEIS Chapter 3, Silviculture and Vegetation, Direct and Indirect Effects on Windthrow Risk were updated to clarify how wind risk was considered in the analysis.

Wind disturbance and windthrow risk were analyzed and taken into account with selection of the proposed units, units design and harvest prescriptions. Please see FEIS, Chapter 2, Activities and Design Elements Common to All Action Alternatives, Windthrow.

Measures to minimize the probability of windthrow in partial harvest units have been considered and where risk indicates a need, addressed on individual unit basis in Unit Cards and prescriptions. Please see the FEIS, Chapter 3, Timber and Vegetation Section, Single Tree Selection and direct and indirect effects on windthrow risk.

BC-7 – Thank you for providing maps and unit-specific information. The areas identified were all considered in the wildlife and the silviculture vegetation analysis. The DEIS and FEIS specifically address connectivity in the North Fork of Iyouktug Creek (Chapter 3, Habitat Connectivity and Old Growth section). The DEIS and FEIS Chapter 3, Silviculture and Vegetation section and Unit Cards describe silvicultural prescriptions. Please see response to BC-9 through 20 for more specific information.

BC-8 – The DEIS and FEIS address the reduction in prime habitat for deer (Chapter 3 and the Wildlife and Subsistence Resource Report), Management Indicator Species and Other Wildlife, Environmental Consequences for Deer, Affected Environment for Deer. Approximately 47 percent (not over 50 percent) of the prime deer habitat has been harvested. The Direct and Indirect effects on Sitka Black-tailed Deer section supports your comments that the carrying capacity of the habitat has been reduced and was updated to addresses the effects of high snow winters that may result in catastrophic die-offs of deer.

The DEIS and FEIS state that the action alternatives would reduce habitat connectivity (Chapter 3 and the Wildlife and Subsistence Resource Report), Habitat Connectivity and Old Growth, Environmental Consequences on Connectivity section. Although there are no standards and guidelines addressing the fragmentation of habitat in the Timber Management LUD, connectivity was used as a critical habitat element to address fragmentation. Please see response to BC-5 for additional information on connectivity.

The medium quality habitat for deer is displayed in the DEIS and FEIS, Figure 3-6. Although medium quality habitat for deer was not specifically addressed, the deer analysis considered more than just high value habitat (reference the DEIS and FEIS, Chapter 3, Management Indicator Species and Other Wildlife, Environmental Consequences for Deer section).

Almost 700 acres of young growth, 20-23 years old, is currently planned for thinning in the Iyouktug area (VCUs 2080 and 2090). Thinning can include gaps and corridors, and are applied based on site-specific objectives and needs. Although future thinning was considered in the DEIS cumulative effects analysis, the FEIS has been updated to provide more specific information. Please see Chapter 3, Silviculture and Vegetation, Cumulative Effects on Vegetation.

BC-9 – Thank you for referencing specific units in your comments. Please see response to BC-5 and BC-8 for additional information on connectivity. The DEIS and FEIS disclose a reduction in connectivity, and specifically addressed the North Fork of Iyouktug Creek (Chapter 3 (and the Wildlife and Subsistence Resource Report), Habitat Connectivity and Old Growth section). Although this section does not specifically mention all of the units identified in your comments, all units were reviewed for this analysis (reference the Unit Cards in Appendix B of the DEIS). These analyses, in addition to additional analysis in the DEIS and FEIS, take into consideration the value of south facing slopes (Units 119, 122, 123, 124, 125, 184 and 185) and the reduction in canopy in the North Fork of Iyouktug Creek (Chapter 3 (and the Wildlife and Subsistence Resource Report), Management Indicator Species and Other Wildlife, Environmental Consequences for Deer, Direct and Indirect effects on Sitka Black-tailed Deer section). Because Units 114, 116, 117 and 118 are on northeast facing slopes and occur mostly above 800 feet in elevation, these units have lower value as deer winter habitat. Also, not all of these units are proposed in any one of the action alternatives.

Your recommendation pertaining to the units in the North Fork of Iyouktug Creek was considered. Alternatives were designed with an “integrated” approach to management. All resources were considered when reviewing the units and an interdisciplinary balanced approach was used in developing alternatives. Although units in the North Fork of Iyouktug would have some impact to deer habitat and connectivity, they would also have a lower risk to other resources (e.g. karst). In addition, these are wind generated stands and other commenter’s recommended that we harvest in this wind prone area rather than wind protected areas where gap-phase (old-growth forest) processes dominate.

Please see response to BC-8 for information on thinning.

BC-10 – The DEIS and FEIS address the reduction in prime habitat for deer in Chapter 3 (and the Wildlife and Subsistence Resource Report), Management Indicator Species and Other Wildlife, Environmental Consequences for Deer, Direct and Indirect effects on Sitka Black-tailed Deer section (also see response to BC-8). Although this section does not specifically mention all of the units identified in your comments, all units were reviewed during this analysis (reference the Unit Cards in Appendix B of the DEIS). A map of prime deer habitat was added to the Wildlife and Subsistence Resource Report. Although Units 191 and 193 contain high value habitat, they do not include prime habitat as defined in the DEIS and FEIS. The Wildlife and Subsistence Resource Report specifically addresses Units 189 and 193 as including high use by deer in the Management Indicator Species and Other Wildlife, Sitka black-tailed Deer section, Deer Summer Habitat portion. Please see responses to BC-5, BC-8, BC-9, BC-11, and BC-19 for more information on corridors and connectivity.

The DEIS and FEIS considered the impacts of blow down (referred to as windthrow) on connectivity and deer habitat (Chapter 3 (and the Wildlife and Subsistence Resource Report), Habitat Connectivity and Old Growth, Environmental Consequences on Connectivity section,

and Management Indicator Species and Other Wildlife, Environmental Consequences for Deer, Direct and Indirect effects on Sitka Black-tailed Deer section). Although windthrow was considered in the effects analysis, the Wildlife and Subsistence Resource Report did not make this clear and the Analysis Methods, Effects Analysis section was updated to reflect this analysis. In addition, some of the Unit Cards in Appendix B of the DEIS mention specific management recommendations for wildlife retention to address concerns with windthrow.

BC-11 – Thank you for the information and photos regarding Unit 103. The analysis supports your statement that Unit 103 is not displayed as high quality habitat in the interagency deer model. The deer model was used in the DEIS and FEIS to compare the percent change in habitat capability between alternatives (Chapter 3 (and the Wildlife and Subsistence Resource Report), Management Indicator Species (MIS) and Other Wildlife and Subsistence, Black-tailed Deer section). The model was designed as a tool to assess habitat capability across a large scale to provide a measure to estimate and compare the relative effects of alternatives on deer winter habitat. Because the model was not designed to identify the exact location of quality deer habitat, results may not display Unit 103 as high quality deer habitat. In addition, the model uses GIS data to assess habitat quality. The GIS data has some limitations and lacks the refinement for specific unit analyses. The quality deer habitat that you identified in Unit 103 may have been too small to be defined as quality habitat in GIS.

The model was not the only means used to assess effects of alternatives on deer habitat. Field observations from wildlife biologists and other professionals were utilized to document deer use and movement patterns, research papers were consulted and incorporated, consultation and personal communications were held with ADFG and FWS personnel, ADFG data was studied and incorporated, in addition to public scoping comments and local knowledge. All of the following data were used to assess the effects to deer and deer habitat: habitat capability (derived from the deer model), high value deer habitat (derived from the deer model), prime habitat (derived from GIS data), quick cruise plots (field data) and observed use (field data). Unit 103 was identified to contain quality habitat for deer including prime habitat.

A new food-based model, which shows more promise for use at a local scale, is being developed by Pacific Northwest Research Station, University of Alaska, and other scientists. This model, which is referred to as the Forage Resource Evaluation System for Habitat – Deer (FRESHDEER) is still in the development stage. The current interagency deer model is used as one method to estimate effects.

BC-12 – Please see responses to BC-5, BC-8 and BC-9 for information on connectivity. Although this section does not specifically mention the units identified in your comments, all units were reviewed in relation to deer winter habitat during this analysis (reference the Unit Cards in Appendix B of the DEIS). Because a range of alternatives with a varying degrees of impact were developed (refer to the DEIS and FEIS, Chapter 2), Units 163 and 165 are only proposed for harvest in Alternative 2. Please see response to BC-6 and BC-10 for information on the windthrow analysis.

BC-13 - The DEIS and FEIS address the reduction in habitat for deer in Chapter 3 (and the Wildlife and Subsistence Resource Report), Management Indicator Species and Other Wildlife, Environmental Consequences for Deer, Direct and Indirect effects on Sitka Black-tailed Deer section. Although the units identified in your comments (Units 914, 915, 923, 960, 953 and 954) may not have been specifically mentioned, they were considered in addressing the effects to deer

habitat (refer to Unit Cards in Appendix B of the DEIS). The lower elevations of Units 923, 953, 954 and 960 had a higher model HSI value. Because most of Units 914, 915 and 960 occur above 800 feet in elevation, are prescribed for only 25 percent single tree selection, and have a lower HSI value, the analysis assumed that they would have less impact to deer winter habitat.

Although these units are not considered as high quality deer winter habitat, they were recognized as providing quality summer habitat for deer (reference Figure 24 in the Wildlife and Subsistence Resource Report).

Also, not all of these units are proposed for harvest in one alternative. The DEIS and FEIS, Chapter 2, identify a range of alternatives with varying degrees of impact.

BC-14 – Because you are referencing the Suntaheen 1600 foot knob, we assumed that you were referring to Units 909, 910, 916, 917, 919, and 983 and not Units 914, 915, 923, 953, 954 and 960 located on the Suntaheen 1663 foot knob. The interagency deer model, high value habitat and prime habitat analysis addressed in the DEIS and FEIS takes into consideration the value of south facing slopes in Chapter 3 (and the Wildlife and Subsistence Resource Report), Management Indicator Species and Other Wildlife, Environmental Consequences for Deer section. Although not all of the units identified in your comments were specifically mentioned in the analysis, they were considered in addressing the effects to deer habitat (refer to Unit Cards in Appendix B of the DEIS). Because Units 909, 916, 917 and 983 occur above 800 feet in elevation and Units 909, 919 and 983 are prescribed for only 25 percent single tree selection; the analysis determined that there would be minor impact to deer winter habitat.

Also, not all of these units are proposed for harvest in one alternative. The DEIS and FEIS, Chapter 2, identify a range of alternatives with varying degrees of impact.

BC-15 - The DEIS and FEIS, Chapter 3 (and the Wildlife and Subsistence Resource Report), Habitat Connectivity and Old Growth section and the Iyouktug Interagency Old Growth Reserve (OGR) Review address the quality of the habitat in the OGR. The interagency team considered the interagency deer model, field data, and personal knowledge when developing the proposed location for the small OGRs (see response to BC-11 for information considered in addition to the deer model). Figures 21 and 22 were added into the Wildlife and Subsistence Resource Report, and display that the small and large OGRs contain high value deer habitat and prime habitat. Figure 23 displays that six of the highest score quick cruise plots (80-99) were within the proposed small OGR. Figure 25 displays that high deer use was observed in the proposed small OGRs. Although the small OGRs may not contain the highest quality POG forest within the analysis area, these areas were considered important to maintain connectivity between the large and small OGRs and north of the analysis area.

Please see response to BC-10 for information on the windthrow analysis.

BC-16 – We appreciate your support of the quick cruise surveys. As for your concerns with the project meeting project/landscape scale management goals, the analysis and project adhere to the management goals and objectives of the Forest Plan. Please see response to BC-9 for information on the interdisciplinary balanced approach used to develop the alternatives.

Please see response to BC-11 for information on the data used to quantify impacts to carrying capacity (the deer model) and other data used to assess connectivity, deer habitat and deer availability for subsistence uses.

BC-17 – In soils terminology, the term “moist soil” refers to soil moisture available at different negative atmospheric pressures (in other words, soil moisture available to plants). In soils terminology, most if not all, soils on the Iyouktug Project Area would be classified as moist year-round. We believe you are referring to natural soil drainage class. Natural soil drainage is the ability of a soil to process water in its natural setting. About 49% of the Iyouktug project area is considered wetland which is hydric or very poorly or poorly drained soils. The balance is a range of somewhat poorly drained to well-drained soils. These soils support a range of forest types and productivity classes.

Additional information about windthrow risk assessment as it relates to soils has been added to the Silviculture Resource Report.

BC-18 – Harvest prescriptions, buffers and best management practices are based on the professional experiences of the specialists on the Interdisciplinary Team and prescribed to minimize future wind damage. This experience is based on training, research, practical work and observations from within the project area over time. Please also see response BC-6.

The prescriptions and wind risk in the DEIS were reviewed for the units referenced in your comments. The FEIS and unit cards have been updated to reflect the changes in prescription to be responsive to windthrow concerns.

BC-19 - The units proposed for harvest in the North Fork of Iyouktug Creek were addressed in BC-7 and BC-9 and the effects of windthrow were addressed in BC-10. Although the units identified in your comments may not have been specifically mentioned, the DEIS and FEIS, Chapter 3, Habitat Connectivity and Old Growth, Environmental Consequences on Connectivity section, and Management Indicator Species and Other Wildlife, Environmental Consequences for Deer, Direct and Indirect effects on Sitka Black-tailed Deer section, considered the impacts of windthrow on connectivity and deer habitat (reference the Unit Cards in Appendix B of the DEIS). This analysis was updated to clarify that windthrow was considered.

Although Units 819, 820 and 915 do not include prime winter habitat as defined in the analysis, the analysis supports your comments that these units may provide other deer habitat or may provide connectivity to prime habitat. Unit 819 was specifically addressed as including heavily used trails in the analysis. Units 909, 915, 960 and 983 are prescribed for only 25 percent single tree selection; the analysis determined that there would be minor impact to connectivity.

Not all of these units are proposed for harvest in one alternative. The DEIS and FEIS, Chapter 2, identify a range of alternatives with a varying degrees of impact.

BC-20 - Unit 111 has a wind risk rating of high. The prescription in the DEIS calls for up to 50 percent basal area removal (ST50). Given the wind risk, the prescription has been changed to ST25. Although 108 was not mentioned in your comment the same change was made for Unit 108.

BC-21 – The USFS Soil data hazard rating, MM-Haz, is calculated by slope stability, soil drainage and landform. MM-Haz is a general rating applied to a relatively large soil map unit polygon (Soil Resource Report). Soil maps and associated hazard ratings are one of the tools soil scientists use to focus field investigations. The Forest Plan Standards and Guidelines use mass movement hazard ratings and slope as a criterion for tentatively suitable lands. Slopes over 72 percent gradient and/or very high mass movement probability ratings do not meet tentatively

suitable criteria. Landslide prone terrain within the Iyouktug proposed harvest areas has been identified and either avoided or mitigated based on Forest Plan direction.

Field surveys were conducted to identify slopes over 72% and other unstable areas. Field investigations include an assessment of slope stability (landslide risk). Within the Iyouktug proposed harvest areas 304 acres of landslide prone terrain was deleted from harvest consideration (DEIS, FEIS Direct and Indirect Effects on Soil, Harvest on Slopes Over 72 Percent). Field investigations are used to identify potentially unstable sites within harvest units. Field investigations occurred in all of the units mentioned in comment BC-21. Based on field investigations Units 125, 138, 143, 184, 185, 817, 903, 914, 916 and, 917 were modified to avoid landslide prone terrain (DEIS, Appendix B). Please refer to the Unit cards in the DEIS for site specific stability discussions for all units in the project area.

When designing leave areas for slope stability concerns windfirmness of the leave area is considered.

BC-22 – For economic reasons we would harvest higher value trees including yellow-cedar as described in the DEIS and FEIS, Chapter 3, Timber Economics, Silvicultural Prescriptions. Higher value however, is a relative term, and does not necessarily equate to the largest trees or the trees with the highest value for wildlife. All species would be harvested. Please see Chapter 3, Timber Economics, Table 3TE-4.

A relatively small percentage of the Iyouktug unit pool contains cedar and a smaller percentage is proposed for harvest. The FEIS, Chapter 3, Silviculture and Vegetation, Direct and Indirect Effects to Species Composition and Long-term Productivity, has been updated to clarify information regarding retention of trees under the single tree selection prescription and the number of units containing cedar that are proposed for harvest.

The following sections in the DEIS, FEIS, and Iyouktug project record provide additional information and analysis pertaining to yellow-cedar:

- Chapter 2, Alternatives considered but eliminated from detailed study, Alternative L – Avoid harvesting units with cedar Characteristics;
- Chapter 2, Activities and design Elements common to all action alternatives - Cedar component
- DEIS, Appendix B, project design, general mitigation measures and unit layout instructions – silvicultural prescription guidelines for all STS units.
- DEIS Appendix B, unit cards.
- Individual unit prescriptions in the project record.

BC-23 – Yellow-cedar is generally characterized as a slow-growing long-lived species. Rotation length has been extended beyond the more typical 85-100 years to account for slower growth rates of yellow-cedar and other species on the North Tongass. Additional information has been added to the Silviculture Resource Report and summarized in the FEIS under Chapter 3, Silviculture and Vegetation section. Please see the Forest Vegetation and the Direct and Indirect Effects to Species Composition and long-term productivity.

Harvest of some yellow-cedar is considered appropriate and allowed within Forest Plan development LUDs. The Iyouktug project area is judged to be suitable for long-term yellow-

cedar survival and regeneration. The amount and distribution of yellow-cedar was analyzed and taken into account during selection and design of the proposed units, and when developing harvest prescriptions. Silvicultural prescriptions were designed for long-term maintenance of yellow-cedar within the project area.

Our knowledge of yellow-cedar distribution is based on extensive project level stand exam inventory and other broader forest level inventory data. The Silviculture Resource Report and FEIS have been updated to clarify this information. Please see the FEIS, Chapter 3, Affected Environment for Forest Vegetation, Species Composition.

Based on post-harvest natural regeneration surveys conducted within VCU's 2080 and 2090 (in previously clearcut stands containing yellow-cedar prior to harvest), the percent composition of yellow-cedar regeneration averages approximately 3.6 percent (pers. com. Budke 2007). This is slightly greater than the 3.4 percent yellow-cedar composition within the project area unit pool. Yellow-cedar is also frequently observed while conducting precommercial thinning inspections in 20-30 year old young-growth stands on the Sitka and Hoonah Ranger Districts. These are stands that would be expected to contain yellow-cedar based on presence of cedar in adjacent or nearby old-growth. Particular attention is given to yellow-cedar during thinning inspections, since all thinning contracts on the Hoonah Ranger District specify that it is not to be cut. Consequently, based on these data and field observations yellow-cedar regeneration is expected to occur naturally within proposed units and at rates similar to pre-harvest levels. Yellow-cedar regeneration will be monitored three years following harvest as well as when assessing thinning needs. Please see FEIS Chapter 3, Direct and indirect Effects on Species composition and Long-term Productivity.

In addition to stand exam data, IDT field visits by other resource specialists and field crews provided valuable site-specific information on resource conditions including the presence of large yellow-cedar trees or yellow-cedar groves that did not fall within stand exam plots. This information has been included in the unit prescriptions. Since we do not know the location or number of all large yellow-cedar trees within the proposed units, the single tree selection silvicultural prescriptions are designed to account for this and require retention of yellow-cedar trees in multiple diameter classes including large trees over 30 inches DBH. In consideration of your recommendations we feel this is adequate to provide for long-term representation of yellow-cedar, including large trees over 36 inches, within proposed units. Please see the FEIS, Chapter 3, Affected Environment for Forest Vegetation, Species Composition. General marking guidelines for use during layout are included in individual unit prescriptions. Please also see BC-22.

BC-24 - The unit cards and prescriptions identify that we intend to retain some large trees. However, we do not intend to provide buffers around large (ancient) trees. Please see response to BC-23

BC-25 – The 2008 Forest Plan Amendment analysis responded to cumulative effects including activities on non-forest lands in response to the 9th Circuit Court ruling. For the Iyouktug project, the IDT defined cumulative effects analysis areas by resource in the specialist reports; cumulative effect areas were chosen at an appropriate scale by resource to analyze the impacts of the proposals. The IDT is aware of the approximately 3,520 acres of past harvest in Spasski Watershed (see Figure 2-1, 3-2, and 3-6) and past harvest in other areas; these watersheds are outside of those cumulative effects areas, but were included in the Forest Plan Amendment

analysis (USDA Forest Service 2008b). More information on cumulative effects is in Chapter 3 cumulative effects sections in the DEIS and FEIS and in the Specialist Reports in the project record.

BC-26 – Thank you for your suggestion on the placement of the OGRs. The location of deer winter habitat as well as connectivity were considered during the review of the OGRs (please see response to BC-15). During this review, numerous options for the placement of the small OGRs were discussed and considered. The Interagency Team recommended the proposed location for the OGRs to maintain quality habitat and overall landscape connectivity. The Forest Plan Amendment (USDA Forest Service 2008b) reviewed OGRs Tongass-wide and adopted the interagency recommendations for the Iyouktug Project Area.

Changes to the unit pool will aid in maintaining connectivity along Whitestone Creek (Forest Road 8531); Unit 901 was dropped, Unit 903 is an up to 40 percent individual tree selection and Unit 904 is not included in all the action alternatives.

BC-27 – Please see response to BC-23 regarding slower growth rates, regeneration and rotation lengths. This response applies to higher elevation units as well.

Begin Transmission ##
USDA Forest Service - National Web Site Email Response Form.
=====

Posted on Sunday, December 30, 2007 at 9:48 Hours (Server time).

From: barbara sachau
Email: jeanpublic@yahoo.com

Telephone Number: 973 377 9433

Street Address:
15 elm st florham park nj 07932

BS-1

Message Subject: iyouktug timber destruction at tongass

Message Contents:

i oppose this timber cutting at hoonah range docket 2007 0406. it is destructive when you cut trees. you create huge water damage, you create erosion, you create heat islands, you harm immeasurably all of the birds and wildlife that need those forests. this destruction by local profiteers is an insult to all of america which has paid taxes for eons to protect that land. it is time to stop being so environmentally destructive.our children deserve better than they are getting from the highly anti environmental bush administration, which has shown absolutely no concern for all of our environments at every turn.

Response to BS – Barbara Sachau

BS-1 – We appreciate and share your concern for natural resources. As described in the Alternative Development Process section of Chapter 2 of the DEIS and FEIS, the IDT developed the Proposed Action and alternatives to be sensitive to resources and related concerns. Forgoing harvest completely on Forest Service System land, however, is outside the scope of this analysis as described in Chapter 1, Issues, Other Issues and Concerns.



"Hanley, Kevin J (DEC)"
 <kevin.hanley@alaska.gov>

To: comments-alaska-tongass-hoonah@fs.fed.us
 cc:
 Subject: Iyouktug

11/15/2007 02:22 PM

The Department of Environmental Conservation (DEC) has reviewed the Draft Environmental Impact Statement for the proposed Iyouktug Timber Sale on Chichagof Island. This sale proposes to harvest 16.8 to 59.8 MMBF of timber from 883 to 4,185 acres, and to construct up to 3.8 miles of new system roads and 13.4 miles of temporary roads, and to reconstruct up to 7.0 miles of existing roads, depending on alternative. The existing East Port Frederick log transfer facility (LTF) would be used under each of the action alternatives.

The DEIS identified Alternative 3 as the Forest Service's preferred alternative for this project. This alternative proposes to harvest approximately 43.4 MMBF of timber from an estimated 3,332 acres, and would involve the construction of 2.4 miles of new system roads, 3.9 miles of new temporary roads, and the reconstruction of 6.3 miles of existing roads. We offer the following comments for your consideration in the on-going planning for this timber sale.

DEC-1 We were pleased to see the high percentages of partial cut harvest prescriptions, particularly those of the preferred alternative. These prescriptions will better ensure that slope stability and hydrologic processes will be maintained during and after project completion. We do, however, have concerns regarding the use of the East Port Frederick LTF which, as the DEIS (page 3-167) indicates, is under an approved remediation plan for delisting as an impaired waterbody. This waterbody was included on the Clean Water Act Section 303(d) list for non-attainment of the residues standard for bark and wood debris. The listing was based on dive survey data that documented continuous bark coverage at 2.9 acres in March 2000, 4.8 acres in April 2001, 3.5 acres of bottom coverage in December 2002, and 2.1 acres in March 2004.

DEC-2 Sealaska Timber Corporation (STC) developed and submitted a remediation plan which DEC approved on March 14, 2005. The Department agreed to use the 2005 season dive survey data (2.8 acres continuous bottom coverage) as the basis of remediation plan monitoring. The approved remediation plan's institutional control required that STC modify the low angle slide to a drive down ramp to eliminate bundle velocity and minimize bark loss. This was completed in May of 2005. In addition, it requires that the continuous bark cover pile be reduced to 1.0 acre by 2010. It also calls for an annual bark dive survey in years that there is transfer activity and a bi-annual dive schedule when the facility is inactive. If the facility ceases operations prior to 2010, the bi-annual schedule will go into effect.

If future dive surveys document that the expected downward trend in the areal extent of continuous bark coverage is not realized, the plan contains a volume transfer cap table that will set annual limits on the maximum volume that can be transferred beginning the next operating season.

Since May 2005, all volume has been transferred utilizing the drive down ramp. The most recent dive survey submitted to DEC and EPA shows that the expected downward trend is being realized (albeit somewhat slowly), with a continuous bark coverage of 2.73 acres. The volume to be transferred from the Iyouktug Timber Sale could be significant (up to 60 MMBF) and could increase the amount of bark deposition at the site, which would be contrary to the objective of the remediation plan.

DEC-2
(cont.) | Consequently, since barging is identified as an option in the DEIS, it should be used in lieu of conventional inwater log transfer to ensure that bark coverage does not increase above current levels and that it continues to decline.

We appreciate the opportunity to comment.

Responses to DEC-- Kevin Hanley, Department of Environmental Conservation (DEC)

DEC-1 - Thank you for providing a review of the DEIS. Partial harvest was proposed to address multiple resource concerns and processes.

DEC-2 – The Forest Service is aware of the listing of the waterbody as impaired and of the LTF remediation plan (DEIS and FEIS, Chapter 3, Potential Adverse Effects on Marine EFH). The Forest Service will abide by all stipulations in Huna Totem’s permit for operating the Marine Access Facility (MAF), and will be in compliance with Huna Totem’s approved remediation plan. Barging logs is an option that may be considered to help prevent further bark accumulation on the subtidal substrate. Please also see the letter from and response to NMFS.