Appendix D

Agency Responses to Public Comments on the Central Kupreanof Timber Harvest Draft Environmental Impact Statement

Response to Comments on Draft EIS

Introduction

Appendix D is the Forest Service response to comments received for the Central Kupreanof Timber Harvest Draft Environmental Impact Statement (Draft EIS).

Regulatory Guidance on Use of Public Comment

Response to comments should be the underlying purpose behind the structure of any comment analysis process. CEQ regulations provide clear guidance on both the intent of soliciting public comment and how comment should be used. These regulations require agencies to "assess and consider comments both individually and collectively" (40 CFR 1503.4).

Analysis and Incorporation of Public Comment

Agencies, organizations, and individuals submitted written comments on the Central Kupreanof Timber Harvest Draft EIS; the interdisciplinary team (IDT) thoroughly read and objectively analyzed all the comment letters received. Letters from individuals and organization were considered both individually and collectively, as many of the letters had the same or similar concerns. The comments were annotated and sorted by topic. In order to avoid repetition and extensive cross-referencing, and to provide a more comprehensive response, we have categorize concerns by topic and offered a consolidated response to the concerns. Comments fell into two broad categories:

Those within the scope of the project:

Most comments within the scope of this project have been incorporated into the Final EIS or analysis for the Final EIS to the extent practicable. Some comments ask for clarification or additional information in the Final EIS. Other comments requested certain information be considered, requested modification to any alternative, or suggested a new alternative altogether.

Those outside the scope of the project:

Many comments are addressed through Forest Plan or other direction. Some comments disagreed with the Forest Plan and other regulations decided at a different level, which makes them beyond the project area or speculation that does not involve reasonably foreseeable future projects are also beyond the scope of this document.

Letters received during the 45-day comment period from Federal and State agencies, organizations, and individuals are published in this appendix. The tables below offer a reference to pages where individual annotated letters can be found as well as cross-reference responses.

Table D-1 Individuals, Organizations and Agencies Submitting Comments on the Central Kupreanof Timber Harvest Project

Commenter	Response Abbreviation	Page
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David Beebe	**Beebe**	84
US Department of the Interior	**USDI**	88
Environmental Protection Agency	**EPA**	91
Greenpeace/Cascadia Wildlands Project/Juneau Group of the Sierra Club/Natural Resources Defense Council/Eric Lee/Becky Knight/Dave Beebe	**GP**	96
National Oceanic and Atmospheric Administration	**NOAA**	113
Organized Village of Kake	**OVK**	116
Southeast Alaska Environmental Conservation Council/Sitka Conservation Council	**SCS**	118
State of Alaska Department of Natural Resources	**State**	162
Trout Unlimited	**TU**	173
The Wilderness Society	**WS**	176
Rebecca Knight	**BK**	182
David Randrup	**DR**	183

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	Windthrow	State W-1	39
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	Economics	State EC-1, GP II-1, SCS III-4	50
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	Deer	BK-2	60
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	Goshawks	USDI-1, USDI-2, State WC-6, OVK-3, SCS VI-14, SCS VI-15	65
	Marten	State WC-7, OVK-1, OVK-3, SCS VI-6, SCS VI-7, SCS VI-8, EPA-4	65
	Wolf/Road Densities	State WS-6, GP V-12, OVK-2, SCS VI-9, State WC-4, GP V-10, GP V-4, SCS V-1	66
	Black Bear	OVK-4, SCS VI-4, SCS VI-5	68
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		SCS VI-24	71
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		DR-2	72
		State WC-1, SCS VI-16	72
		State WC-5, GP V-17, OVK-3, SCS VI-17, SCS VI-18,	73
	Productive Old-Growth (POG)	GP V-2, GP V-6, GP V-7, SCS VI-2, SCS VI-3, SCS VI-5a	73
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Appendix D

Aquatics

Roads/Fish Crossings

State HC-1, State HC-3, State HC-7, NOAA-4, USDI-6

The State raised the concern that the proposed culvert sizes indicated on the road cards will not pass fish, that stream data is generic for stream/channel type, and that there is a lack of field verified data. The State also recommends that all bridges, specifically on Road 45897, provide for fish passage on all Class I and II crossings.

Response:

Proposed road-stream crossings on road 45897 were not field verified prior to the DEIS. However, any additional streams mapped during layout would be assessed for fish habitat, and fish passage would be applied to structure design (BMP 14.17). All crossings on fish-bearing streams will receive Title 16 consultation prior to implementation to ensure structures are adequate, and BMPs will be applied to all crossings as appropriate. A slope stability investigation will be completed by a soil specialist prior to implementation in areas where the proposed road crosses side slopes greater than 67%. The on-site investigation will follow Forest Plan protocols. Additional information has been added to the FEIS road cards. ADFG will review the fish stream crossings for Title 16 MOU concurrence.

State HC-4

Crossing information pertaining to reconstructed roads should be disclosed.

Response:

All crossings on fish-bearing streams will receive Title 16 consultation prior to implementation to ensure structures are adequate, and BMPs will be applied to all crossings as appropriate.

State HC-5

More information is needed to determine if stream crossing structures are designed and constructed in accordance with FRPA standards as well as the soil/water conservation handbook.

Response:

Additional road-stream crossing information has been added to the FEIS Road Cards.

All crossings on fish-bearing streams will receive Title 16 consultation prior to implementation to ensure structures are adequate, and BMPs will be applied to all crossings as appropriate.

State HC-12, TU-5

The DEIS doesn't recognize the cumulative impacts to fish habitat from past road construction, or the cumulative impact of the proposed 60 miles of road and 256 stream crossings.

Response:

The DEIS (pg. 3-107) acknowledges the past activities influencing watershed fisheries and hydrology including miles of NFS and temporary roads as measured through road densities and percent of basin in roads, stream crossings as measured through crossing densities and potential effect to hydrologic function, and the number of crossings impeding fish passage (red fish culverts). We appreciate stakeholder concern about the loss of fish habitat upstream of culverts restricting fish passage and acknowledge the need for a more detailed analysis. In response, an additional analysis of the culverts that do not meet fish passage has been included in the FEIS. This analysis includes an estimate of the amount of fish habitat impacted by the red fish crossings. Field surveys were used where available otherwise the amount of habitat was estimated using GIS layers and aerial photography.

See also NOAA-2 in the Roads and Fish Crossings section of this Appendix.

NOAA-2

The 61 culverts not meeting fish passage should be described in further detail along with the corresponding habitat impacted. Culverts should be repaired as part of timber sale to meet Forest Standards and to provide consistency with the Clean Water Act.

Response:

The Tongass National Forest is also concerned about the loss of fish habitat upstream of culverts restricting fish passage and has corrected more than 250 red crossings throughout the Forest during the last several years. Many of these have been on the Petersburg Ranger District. It may not be advisable or feasible to replace all existing red culverts with fish passage designed crossings. Many of the crossings have very limited amounts of fish habitat upstream and it may be more advantageous to mitigate the effects through the Clean Water Act 404 permit process. An interagency group has made progress on a model that would help make management recommendations for red culverts which reduce or restrict fish passage. The model was tested in 2006 and the preliminary findings are available. The model requires refinement and additional data needs to be collected before it can be

used for all culverts on the forest. The removal or replacement of red culverts to improve fish passage has been done and will continue to be done when funding opportunities are available. Fish passage on many of these culverts may be corrected through the proposed road closures identified in the Petersburg Access Travel Management Environmental Assessment, planned in 2009. Culverts on roads not associated with the proposed timber harvest or future thinning activities may use stewardship contracts for removal. The removal of four red crossings described in Chapter 3 of the FEIS is associated with the closure of 1.7 miles of road used for the timber sale. Correcting passage on these culverts would create a reduction in the cumulative impacts to fish passage.

See also HC-12, TU-5 in the Roads and Fish Crossings section of this Appendix.

State HC-13

The State would like clarification pertaining to the 19 possible culverts to be fixed with this project and the indirect effect of closure of 2.0 miles of road.

Response:

Fish passage at up to nineteen red crossings may be corrected as part of the stewardship opportunities identified through the RAP process, and depending on ATM review and decisions in 2009. The removal of four red crossings described in Chapter 3 of the FEIS is associated with the closure of 1.69 miles of road used for the timber sale. The FEIS clarifies the distinction between culverts prioritized for closure through ATM recommendations and those related to closure of timber haul roads in the FEIS.

GP XIII-3, GP XIII-2

Clarification requested as to the relation of the numbers in Table 3-24 of the DEIS in correlation to road density.

Response:

As described in the DEIS (3-99) the density values in Table 3-24 are used to help quantify the risk of flow-related impacts to aquatic systems, and these densities are low in all project-area watersheds. The Cederholm value of 2.5% of basin area in roads was used in their study as a threshold to determine which basins were more likely to have accumulations of fine sediment in streambeds. In this analysis the value was used as a relative comparison to the basins within the Central Kupreanof project area, for which all values are below 1%. This is a conservative comparison since roads built in this project area use higher quality rock blasted or drilled from nearby quarries, as opposed to native material containing finer particles typically used for

road construction elsewhere. In response to your comment and those of other stakeholders regarding disclosing fish passage problems where they occur, additional red pipe analysis has been added to the FEIS. This analysis includes an estimate of the amount of fish habitat impacted by the culverts. Field surveys were used where available otherwise the amount of habitat was estimated using GIS layers and aerial photography.

See also responses to State HC-12; TU-5 and NOAA-2 in the Roads and Fish Crossings section of this Appendix.

GP XIII-4

Analysis should consider impacts of the delay in needed repairs due to building new roads.

Response:

Maintenance and reconditioning of existing National Forest System (NFS) roads is an ongoing process that occurs on a periodic basis. The maintenance and reconditioning of NFS roads in the Project Area may be in the process of implementation, before, during and after the project planning process through separate service contracts to reduce the backlog of deferred maintenance. Reconditioning roads may be done to comply with best management practices, maintain the existing infrastructure for the proposed timber sale, future harvest entries, and other National Forest management activities.

See response to NOAA-2; HC-12 for further discussion related to red fish culverts in the Roads and Fish Crossings section of this appendix.

GP XIII-6

Road closure is speculative and won't mitigate road impacts to fish.

Response:

The protections in the Forest Plan provided through Riparian Standards and Guidelines and Soil and Water Conservation Handbook guidance (BMPs) are described in the Unit and Road Cards in the DEIS, Volume B, Appendix B (B-4, B-236) and in Appendix B of the FEIS . BMPs related to stream protection categories and riparian buffers provided through the Tongass Timber Reform Act (TTRA) are monitored annually and reported in the Tongass National Forest Monitoring and Evaluation Reports, with results indicating a high degree of implementation compliance. The DEIS (3-108 through 3-112) explains the expected effects of road storage, as does the Aquatic Resource Report (p17-19; p22-23). These include lower maintenance needs, decreased potential for sediment delivery to streams from the failure of drainage structures, a lower amount of potential groundwater interception by road cuts, lower number of miles in the stream network

through removal of those portions associated with ditches, improving natural drainage patterns, reducing the risk of culvert plugging and stream diversion, and lowering the risk of road failures at stream crossings. While the effects were discussed, road storage was never analyzed or intended as a mitigation measure.

See Response to Greenpeace XIII-3 in the Road and Fish Crossing section of this Appendix for discussion of the red culvert analysis included in the FEIS.

GP XIII-9

Discuss the road storage strategy versus just maintaining roads on stream crossings. Assuming a road will have to be rebuilt at some point, is pulling structures creating more or less impact on fish?

Response:

All options to remove or retain culverts will be analyzed under the RAP process and the District ATM scheduled for completion in 2009, and discussed in the DEIS (pg. 3-50). Additionally, a road rehabilitation plan for the Hamilton watershed will be integrated into the ATM regarding specific recommendations for road closures. We recognize pulling all culverts may not be the most appropriate action in all cases. Decisions regarding closure methods are determined primarily by known resource concerns and future road management objectives for a particular road. Impacts to fish habitat related to stream crossings are discussed in the DEIS (pg. 3-100). Forest roads must be constructed and maintained in accordance with BMPs to ensure flow and circulation patterns and chemical and biological characteristics of the waters are not impaired, as per the Clean Water Act (404)(f)(1)(E).

Road Cards

State HC-7, USDI-6

Road 45897- There was a question concerning the no Class II fish call and a question regarding culvert design.

Response:

Information for the first major stream crossing labeled as Class III was field verified. The transition from Class I to Class III was due to a fish barrier. Class II field verification has been added, and structure designs have been corrected in the FEIS Road Card for Road 45897.

State HC-8, USDI-6

Road 45808- Fish passage with proposed gradient would be difficult.

Response:

The FEIS Road Card for Road 45808 has been corrected.

State HC-10

Road 45887- Concerned about temporary road fish crossings.

Response:

The DEIS (3-105) indicates that bridges will be installed at all crossings on streams with fish habitat on proposed temporary roads, and would be removed as part of the road's decommissioning following the completion of harvest activities.

State HC-9

Commenter suggests relocating road to avoid stream crossing.

Response:

The road is located on fairly flat ground which slopes down hill at approximately 5% grade through timber. Will add comment to road card and review during implementation.

State HC-11

Road 45892 crosses an alluvial fan (commenter suggests moving road location to the apex of fan), and has numerous Class III crossings proposed.

Response:

Options to locate road at apex of alluvial fan will be explored during implementation. All applicable Forest Plan Standards and Guidelines, Forest Service Manual and Handbooks and (BMPs) will be incorporated during design, construction and maintenance of roads. Best Management Practices (BMPs) are used to assure soil and water resources are considered in transportation planning activities. Any side slopes of greater than 67% would be mitigated by full bench construction and slope stabilization, if necessary.

State HC-6

Explain why road 6326 doesn't show up on the USFS GIS roads layer but appears to already have been built according to aerial photos.

Response:

Road 6326 was a part of the North Irish Timber Sale NEPA document. The 0.5 portion proposed for new NFS construction in Central Kupreanof was authorized and built as a temporary road in the North Irish Timber Sale, and therefore does not show up on the USFS GIS roads layer. The adjacent unit was not harvested in North Irish and the section of temporary road was coded as decommissioned. The new construction proposed in the Central Kupreanof Timber Sale document will address the RCS concerns noted in your comments.

State RC-4

The road cards for 6327 and 45891 do not indicate that bridges will be used for crossing the large v-notches along these roads as required by AFRPA Best Management Practices.

Response:

The potential need for a 60-foot bridge is noted on 6327, but not on 45891. The road Card for 45891 has been corrected to read a 20-foot deep V- notch is crossed at 10+50 feet; a 40 foot bridge may be required. All applicable Forest Plan Standards and Guidelines, Forest Service Manual and Handbooks and (BMPs) will be incorporated during design, construction and maintenance of roads.

SCS V-5

Drop road 45803 and 45808 due to various habitat impacts.

Response:

Existing Road 45803 (with minimal reconstruction) accesses unit 273 in Alternatives 2 and 4. This road is extended in Alternative 3, accessing several units. Existing Road 45808 is currently partially open and used in all action alternatives to access timber. Alternatives 2 and 3 propose reconstruction of the last part of this road to access timber. Where these roads already exist, they provide infrastructure to the proposed activities and access timber without the cost of new construction.
See also responses to SCS IV-1, SCS IV-2, and SCS IV-3 in the Inventoried Roadless Areas section of this Appendix.

Temporary Roads

GP XIII-8

Explain stream crossings in Alternative 3 over Class I and II streams.

Response:

The requirement in the DEIS to use log stringer bridges to cross Class I and II streams does not require any specific engineering design that would in and of itself make a road become specified (NFS) road. It is appropriate to require such crossings on temporary roads to implement BMPs.

Watersheds/ Water Quality

State HC-2, NOAA-3, SCS VIII-7, USDI-4

Commenter is concerned about rafting logs at the Hamilton Bay LTF as there has been a history of impaired waters.

Response:

Stakeholder concern for the potential degradation of water quality due

to bark accumulation from rafting logs is acknowledged and appreciated. The Hamilton Bay LTF is permitted under the EPA General Permit AK-G70-0019 to raft or barge logs. It is important to retain the option to raft logs in order to provide flexibility to Timber Operators regarding cost and equipment needs. Provisions within the Timber Sale contract are used to minimize the potential for bark accumulation. Provisions summarized in T-845 for LTF Operations, Maintenance, and Monitoring account for maintaining the area of the LTF free of solid wastes, including wood and bark, to be removed and disposed of at a permitted location. In response to comments received, an additional analysis comparing historic timber volume to proposed volume by alternative was conducted. Results present a wide range of potential scenarios for bark accumulation, with values primarily based on the volume of timber through the LTF in a given year, and the assumptions of the comparison. In the absence of a known decay / flushing rate of bark at the site, conclusions are not rigorous and should be considered "best guesses". Results indicate the loss rate of bark through decay / flushing exceeds the accumulation rate up to approximately 12MBF a year through the LTF, beyond which accumulation will occur. The site, therefore, may be sensitive to multiple years of rafting large volumes of timber. Dive surveys have been requested at the end of each season and at the end of the timber sale in the past, but may be requested for shorter intervals according to site conditions. Bark accumulation will be monitored and if the accumulation exceeds EPA standards, appropriate action will be taken.

EPA-1

Explain how CWA (Clean Water Act) antidegradation regulations are being met.

Response:

The State of Alaska's antidegradation policy states that (1) existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected; and (2) if the quality of a water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality must be maintained and protected (ADEC 2008). We expect the application of BMPs to ensure that existing water quality and uses will be maintained and protected.

TU-3

Trout Unlimited would like a watershed analysis conducted prior to management activities.

Response:

Thank you for your concern. Guidance concerning circumstances requiring a formal watershed analysis are described in Appendix C

beginning C-1 of the Forest Plan. Circumstances include adjustments to Forest-wide Riparian Standards and Guidelines, before authorizing management in a public water system source watershed, and any other time a line officer determines a watershed analysis is necessary to make an informed decision. These circumstances do not apply to the Central Kupreanof watersheds. Watersheds within the project area were analyzed in some detail in the FEIS and Aquatics Resource Report. Watersheds were quantified in terms of location, climate, geology, hydrology, stream density, road density, harvest history, landslide inventory, and disturbance regimes including erosion and mass movement hazard. District-wide road condition surveys were used in conjunction with GIS to determine number of existing stream crossings as well as streams requiring additional information or field verification. Field surveys were conducted to verify fish presence or absence, fish species, stream class and channel type, and to map streams in the proposed harvest units and surrounding areas within project area watersheds using Global Positioning System (GPS). This information was combined with available water quality and fish distribution data for an overall watershed characterization. The line officer has determined that this level of analysis is sufficient to characterize conditions and analyze the effects of the proposed action on aquatic resources within the project area.

OVK-5

OVK is concerned about the cumulative effects of sediment delivery to salmon steams, and how this may ultimately affect the overall harvest of salmon by OVK members, fisherman and black bears.

Response:

The Cumulative Watershed Effects section in Chapter 3 describes the past, present, and activities in the foreseeable future that can impact aquatic resources within project area watersheds. The protections in the Forest Plan provided through Riparian Standards and Guidelines and Soil and Water Conservation Handbook guidance (BMPs) are described in the Unit and Road Cards in the DEIS, Volume B, Appendix B (B-4, B-236) and Appendix B of the FEIS. BMPs related to stream protection categories and riparian buffers provided through the Tongass Timber Reform Act (TTRA) are monitored annually in the Tongass National Forest Monitoring and Evaluation Reports, with results indicating a high degree of implementation compliance. The potential for sediment delivery to streams resulting from timber harvest decreases with the passage of time and subsequent vegetation regrowth. Hydrologic recovery following harvest due to regrowth of vegetation in harvested areas is expected to require between 10 and 30 years (DEIS p. 3-97). The watersheds affected by the proposed project have low levels of cumulative harvest and continue to produce clean

water and support anadromous and resident fish populations (DEIS, Tables 3-22, 3-27). These watersheds are expected to continue to support these beneficial uses into the future, regardless of which alternative is selected.

TU-1, WS-3, SCS VIII-4

Both ADF&G and The Nature Conservancy/Audubon Society have watershed ranking systems that rate the Irish/Keku Lakes system (VCU429), the upper Castle River area (VCU 436), and Duncan Bay (438) as high value watersheds that should be removed from this project.

Response:

Thank you for your comment and concern for these watersheds. We recognize many of our stakeholders have developed other systems for rating the health/value of watersheds across the Tongass National Forest, and that several watersheds including Castle River, Hamilton River, Irish/Keku Creek, and West Duncan Canal were determined to be high-value watersheds under these rating systems.

The Tongass National Forest is working cooperatively with many stakeholders to use these systems in combination with our own Watershed Restoration Plans for determining restoration needs throughout the Forest.

The 2008 Forest Plan directs the multiple-use of our forest resources through Land Use Designations applied to VCUs across the Forest. Approximately 60% of each of the above watersheds were designated in the Forest Plan for Timber Production, and were analyzed for this project according to Forest Plan direction. Harvest levels in these watersheds are currently low and will continue to have cumulative harvest levels below 6 percent for all alternatives (DEIS, Table 3-30).

TU-4

Protection of upper portions of watersheds is important to preserving fish habitat throughout the entire stream system.

Response:

Headwater streams are protected according to standards established in the Forest Plan Riparian Buffer Standards and Guidelines (Appendix B), the Aquatic Habitat Management Handbook (FSH 2090.21_30), and the application of appropriate BMPs. The DEIS (Appendix B-3) summarizes the application of Riparian Management Areas (RMAs) and BMPs. See also the DEIS (3-125) for a discussion of wind disturbance regarding the concern expressed in the 1997 document referenced in your comments. Preliminary results from recent monitoring efforts indicate a high degree of success Forest-wide

regarding the effectiveness of windfirm buffers. Results from annual Tongass Monitoring and Evaluation Reports (USDA Forest Service, 2007) indicate a very high level of compliance with BMP implementation for fish habitat, and soil and water resources. Three case study watersheds have been established to determine the effectiveness of BMPs for providing protection for these resources. Provisional results from this study have been added the FEIS planning file (Thompson and Tucker, 2007).

DR-4

Commenter is concerned about the impacts of road building to Castle River and its tributaries, as well as to other fish bearing streams within the project area.

Response:

We discuss the potential for sediment delivery to streams and the associated impacts in the DEIS p.3-104 and the Aquatic Resource Report beginning on page 16. We rely on the BMPs in the Soil and Water Conservation Handbook (FSH 2509.22) and described in Unit and Road Cards in the DEIS Appendix B for maintaining EPA water quality standards for designated beneficial uses. The Forest Plan Monitoring and Evaluation Plan emphasizes monitoring to ensure BMPs are implemented as planned. The Forest Service's implementation and monitoring of BMPs satisfies the requirements of the Alaska Non-point Source Pollution Control Strategy and is approved by the U.S. EPA, thereby ensuring that USFS activities are consistent with the Clean Water Act. The 2007 Tongass National Forest Monitoring and Evaluation Report (http://www.fs.fed.us/r10/tongass/projects/tlmp/2007_monitoring_report) indicates that soil and water BMPs were implemented and monitored 218 times, with two departures from full implementation noted and corrected through mitigation. In response to stakeholder concerns about water quality the Forest Service is conducting a study in which continuous water quality monitoring instruments were installed in three case-study watersheds to determine if BMPs are effective in meeting water quality standards. Provisional results from this study are available and has been added the FEIS planning file. Headwater streams are protected according to standards established in the Forest Plan Riparian Buffer Standards and Guidelines (Appendix B), the Aquatic Habitat Management Handbook (FSH 2090.21_30), and the application of appropriate BMPs. The application of Riparian Management Areas (RMA) to Class III and IV headwater streams, as well as Class I and II fish streams lower in the watershed, ensures a riparian buffer designed to minimize the risk of increased sediment delivery. Windfirm buffers are applied in addition to the RMA in those areas more prone to windthrow.

Beebe-2

Address the effects of rafting logs at Hamilton Bay, and how bark accumulations may affect commercial fishing in the bay.

Response:

Your concern for the potential impacts of rafting logs at the Hamilton LTF, as well as your observations of conditions in the bay is appreciated. We acknowledge that log rafts associated with the Hamilton LTF could displace and interfere with commercial fishing activities. A description of the potential adverse effects on Marine EFH due to LTF activities can be found in the DEIS (p.3-120). An Environmental Risk assessment from Alaska Department of Natural Resources Division of Mining, Land, and Water under ADL 107727 for the Hamilton Bay LTF was conducted as part of the proposed LTF project, and found no significant environmental risk associated with the project. Additionally, the LTF was reviewed for Alaska Coastal Marine Program consistency two times and was found consistent with ACMP. The Hamilton Bay LTF is permitted under the EPA General Permit AK-G70-0019 to raft and barge logs, and the Forest Service will retain the flexibility to raft logs if needed. Provisions within the Timber Sale contract are used to minimize the potential for bark accumulation. Provisions summarized in T-845 for LTF Operations, Maintenance, and Monitoring account for maintaining the area of the LTF free of solid wastes, including wood and bark, to be removed and disposed of at a permitted location. Dive surveys have been requested at the end of each season and at the end of the timber sale in the past, but may be requested for shorter intervals according to site conditions. Bark accumulation will be monitored and if the accumulation exceeds EPA standards, appropriate action will be taken.

GP XIII-1

Please consider impacts of the proposed action on both increased peak flows and decreased low flows as a result of the implementation of proposed activities.

Response:

The potential for increased peak flows are discussed in the DEIS (3-105). Some of these effects including bed surface fining, smoothing of stream channels, and filling of pools were discussed in the Aquatics Resource Report (p16). A discussion of low flow was added to the FEIS and Aquatics Resource Report.

GP XIII-5

Discuss the impact of introducing fine sediment in stream channels on salmon habitat, and explain why this delivery would not degrade water quality enough to fully maintain the designated beneficial use, specifically fish habitat.

Response:

We discuss the potential for sediment delivery to streams and the associated impacts in the DEIS p.3-104 and the Aquatic Resource Report beginning page 16. We rely on the BMPs in the Soil and Water Conservation Handbook (FSH 2509.22) and described in Unit and Road Cards in the DEIS Appendix B for maintaining EPA water quality standards for designated beneficial uses. The Forest Plan Monitoring and Evaluation Plan emphasizes monitoring to ensure BMPs are implemented as planned. The Forest Service's implementation and monitoring of BMPs satisfies the requirements of the Alaska Non-point Source Pollution Control Strategy and is approved by the U.S. EPA, thereby ensuring that USFS activities are consistent with the Clean Water Act. The 2007 Tongass National Forest Monitoring and Evaluation Report (http://www.fs.fed.us/r10/tongass/projects/tlmp/2007_monitoring_report) indicates that soil and water BMPs were implemented and monitored 218 times, with two departures from full implementation noted and corrected through mitigation. In response to stakeholder concerns about water quality the Forest Service is conducting a study in which continuous water quality monitoring instruments were installed in three case-study watersheds to determine if BMPs are effective in meeting water quality standards. Provisional results from this study are currently available and have been added to the planning file.

GP XIII-7, SCS VIII-2

Defend the use of a watershed scale analysis, and evaluate past harvests at the scale of riparian forests.

Response:

Thank you for your comment to reconsider the scale used in the analysis. The scale used for determining effects to hydrology and fisheries resources and the rationale is described in the DEIS p.3-107. This scale (6th level HUC) is recognized by the US Geological Survey and is the commonly accepted scale for these project level analyses. Past riparian harvest has been quantified by watershed and added to the Aquatics Resource Report. Ensuring USFS activities are consistent with EPA water quality standards for beneficial uses is ensured through BMPs described in the Unit and Road Cards. Maintenance of beneficial uses occurs on a site-by-site basis regarding road building

activities. The 2007 Tongass National Forest Monitoring and Evaluation Report (USDA Forest Service, 2007) indicates that soil and water BMPs were implemented and monitored 218 times, with two departures from full implementation noted and corrected through mitigation. In response to stakeholder concerns about water quality the Forest Service is conducting a study in which continuous water quality monitoring instruments were installed in three case-study watersheds to determine if BMPs are effective in meeting water quality standards for turbidity and temperature. Provisional results from this study are available and have been added to the planning file.

SCS VIII-6

Discuss stream temperature considerations in detail and the cumulative effects of climate change and land management in relation to fisheries.

Response:

All significant stream channels (Class I-III) within proposed units in this project will receive buffers as per the Stream Channel Protection Measures outlined in Appendix B of the DEIS. Class IV streams will be protected following Best Management Practices also outlined in Appendix B of the EIS. Long-term effects of timber harvesting and road building on summer low flows are not well studied. In response to your concerns about temperature exceedance on Hamilton Creek, this is a large, low gradient stream. The entire length of this stream has been reconnoitered in early Spring as well as late summer. The stream is of sufficient width that the (intact) riparian canopy cannot effectively shade large portions of its length. The exceedance of temperature standards referred to in the DEIS page 3-97 is therefore assumed to be a normal response to ambient conditions for this stream. Recent data from three case-study watersheds on Prince of Wales Island indicate temperature limits are exceeded even in unmanaged watersheds under conditions of higher than normal air temperature. Recent correspondence with USGS personnel indicated the 20 C temperature standard is exceeded in most years on approximately half of non-glacial streams in southeast Alaska for which water temperature records have been collected (Solin pers. comm., 2009) Additional information regarding preliminary results from the USFS study have been added to the planning record.

EPA-8

Develop monitoring plans that include instream measures of water quality.

Response:

The Forest Plan Monitoring and Evaluation Plan emphasizes monitoring to ensure BMPs are implemented as planned. Monitoring,

including instream measures of water quality and aquatic habitat occurs at the Forest scale and is reported in the annual Forest Plan Monitoring and Evaluation Reports. The Forest Service's implementation and monitoring of BMPs satisfies the requirements of the Alaska Non-point Source Pollution Control Strategy and is approved by the U.S. EPA, thereby ensuring that USFS activities are consistent with the Clean Water Act. The 2007 Tongass National Forest Monitoring and Evaluation Report (USDA Forest Service, 2007) indicates that soil and water BMPs were implemented and monitored 218 times, with two departures from full implementation noted and corrected through mitigation. A study is currently underway and is in the calibration period in which continuous water quality monitoring instruments were installed in three case-study watersheds to determine if BMPs are effective in meeting water quality standards. Provisional results from this study are available and will be added to the planning file (Thompson and Tucker, 2007).

Habitat

State HC-14, SCS VIII-3

Commenter is concerned that field crews are not capturing the upper extent of fish habitat. Please provide a summary of field methods used to determine fish presence and habitat extent.

Response:

Employees are trained to determine stream class by using both fish presence and stream channel characteristics. Relative changes in stream gradient, flow, pool quality and frequency and barriers to upstream movement are used to determine extent of fish habitat upstream of the last fish detection. A more detailed explanation of field methods can be found in the Aquatics resource report under "Watershed characterization and field data collection" in the planning record. Petersburg Ranger District began additional quality control measures in 2008 which included revisiting approximately 30% of the proposed units assessed by seasonal technicians during the summer. The work continued into late November. We welcome ADF&G participation in determining the extent of fish habitat either in the initial data gathering phase or as part of our quality control effort in the late summer/fall.

SCS VIII-5

Commenter is concerned about the impacts of increased road building, access and timber harvest on the fall/winter runs of Steelhead in the Castle and Hamilton watersheds. ADF&G considers these runs to be unique features to these watersheds that require extra protection.

Response:

The Riparian, Soil and Water, and Timber Standards and Guidelines in

the Forest Plan (Appendix B) provide guidance regarding protection of fisheries habitat and project planning. Additional guidance is provided in the Aquatic Habitat Management Handbook (FSH 2090.21_30), and the application of appropriate BMPs related to timber harvest and road building. Annual Tongass monitoring reports have found a high level of compliance with BMPs (see responses to TU-4 and EPA-8 for more detail and links to reports). Concern for these populations is acknowledged and seems to be related to two primary factors based on stakeholder comments: proper identification of fish habitat during field reconnaissance and increased access to these populations via the road system. Regarding proper identification of habitat, see response to State HC-14 and SCS VIII-3 for a discussion of field methods. In response to concerns about fall use of streams by steelhead or other resident populations, we established a quality control effort to revisit a portion of the streams identified in the summer season to verify fish habitat calls and ensure proper BMP protection for fish streams (see State HC-14 response). ADF&G hunting and fishing regulations limit the taking of steelhead and coho populations and would be applicable in these locations.

NOAA-1

NMFS stated that they concur with the USFS call that timber harvest may adversely affect EFH.

Response:

The NMFS concurrence with the Forest Service Essential Fish Habitat determination is noted.

Climate Change

General

EPA-7, SCS X-2, SCS XI-2, SCS XI-3, SCS XI-4

Include the effects of climate change in the analysis for this EIS.

Response:

The effects of climate change on the natural resources of the Tongass are highly uncertain, especially over the long run, and likely to be small, especially over the next ten to 15 years. There is a risk that climate change may result in increased blowdown, increased tree mortality from insects and disease, increased fire frequency and severity, adverse effects on air quality, changes to vegetation, streams, fish and wildlife habitat, and subsistence and recreation uses of the National Forest. The 2008 Forest Plan FEIS contains considerable information on potential climate change effects on resources such as

yellow cedar (FEIS 3-19), hydrology (FEIS 3-50), fisheries (FEIS 3-92), plants (FEIS 3-116), forest health (FEIS 3-125). The various resources analyses have been pulled together in the document "Climate Change Related Information from the 2008 Forest Plan ROD, Forest Plan and FEIS," incorporated here by reference. This document has been placed in the project record. Summary information will be added under climate change in the Central Kupreanof Final EIS in Chapter 3 under "Other Resources: Climate Change".

Carbon Sequestration

BK-4, SCS XI-1

Commenter suggested that the Tongass be managed for/reserved for carbon sequestration.

Response:

The proposed action is consistent with current Forest Plan standards and guidelines for their respective Land Use Designations. The Forest Plan addresses carbon sequestration (p.3-17 to 3-20).

Invasive Species

General

EPA-5

Please include in the FEIS a discussion pertaining to noxious weed monitoring, and control in the project area.

Response:

An invasive plant risk assessment for the Central Kupreanof project was completed and included in the project record in compliance with FSM 2080 R!0 TNF Supplement 2000-2007-1 and Executive Order 13112. This risk assessment clarifies the management concerns, objectives and mitigation measures proposed to address invasive plant species for the Central Kupreanof project. This assessment and discussion about invasive plant species is provided on pages 3-60 to 3-65 of the DEIS.

Minerals

General

DR-12

Please clarify if there are mining claims in LUDs 4350, 4360, and 4380.

Response:

Currently, there are no valid mining claims located within the project area. The last known mineral exploration activity that occurred in the project area was core drilling operation near Taylor Creek in 2000 (see Special Uses, Lands and Minerals Resource Report in the project record.) VCU 435 is not within the project area boundary.

NEPA Responses

General

GP I-1

There is little evidence to support the claim that there has been consultation with State and Federal Agencies, and the Organized Village of Kake, during the planning process.

Response:

In Chapter 1 of the DEIS (pp. 13-15), there is a summary of public involvement and consultation activities conducted so far for this project. It includes two public mailings, open houses held in both Petersburg and Kake, and publication of the Notice of Intent. The section also summarizes the other federal and state agencies that have been consulted on this project and through release of the DEIS. Finally, consultation with federally recognized tribal governments and corporations has also been summarized including a visit with OVK in May of 2008.

The Central Kupreanof project record also documents the particulars of the public involvement and consultation activities summarized above. It provides documentation that public mailings went to federal and state agencies as well as tribal governments and corporation as well as the team's response to public comments. Consultation letters were sent to tribal governments and corporations as well. Forest Service archeologists met with OVK staff to discuss Central Kupreanof heritage resources. Wildlife biologists met with ADF&G wildlife biologist to discuss OGRs and the Central Kupreanof project.

An interagency trip was proposed in 2006. The record provides copies of the letters sent out and documentation of agency contact. However, due to lack of response and interest, as well as scheduling conflicts, the trip was canceled with a standing invitation to those agencies to contact the team leader to schedule trips to the project area. No one contacted the team leader with interest in scheduling a trip.

The interdisciplinary team continues to meet with state and federal agencies as well as consultation with tribal governments and corporations in response to DEIS comments and ANILCA subsistence concerns and hearings.

GP III-1, GP III-2; SCS I-1, GP IV-1, GP IV-2, SCS II-1, SCS II-2, SCS II-3, SCS II-4 GP V-3, SCS VI-11, GP V-1

Explain why a larger range of alternatives were not considered in this document, as well as why such a large range of volume was included within the considered alternatives.

Response:

The interdisciplinary team was encouraged to create a range of alternatives that responded to the Significant Issues, and that had measurable differences between them based on the units of measures used by the Significant Issues; rather than relying, on changing volume amounts to create that range. However, as the alternatives responded to different Issues, volume was affected. History of alternative development shows this project in response to Issues did consider a range of volume from approximately 16.8 mmbf to 70 mmbf (while the position statement also looked at the larger woodpile of the project area).

Chapter 1, “Other Issues and Concerns” explains how individual resources were considered in identifying Significant Issues and the rationale for eliminating them as driving an alternative. Chapter 2 (pages 9-11) in the DEIS summarizes the alternatives considered but eliminated from detailed study. We realize it was not a complete summary and additional summary from the Central Kupreanof Issue Development and Alternative Review document located in the project record has been added in the FEIS. It outlines the range of alternatives developed and considered in finalizing the alternatives to bring forward for detailed study.

Project history shows that multiple roadless alternatives, wildlife and deer habitat/subsistence driven alternatives, and timber economic alternatives were developed. These alternatives are documented in the project record.

Other resources were considered for Significant Issues and to see if they would drive an alternative. This information is in the issue

development and alternative review document and has been added to the FEIS. Fisheries, hydrology, watersheds, recreation, wildlife, high-grading cedar, plants, micro-sale opportunities, socioeconomics and subsistence were all considered and eliminated from driving an alternative (see FEIS chapter 2). Additional information has been added to micro-sales and small sale concerns and is included below. By design, the developed alternatives also respond to concerns about other resources that ultimately did not drive an alternative, such as harvest in the Castle River watershed (Alternative 4 in the DEIS stays out of this watershed). Consideration for wildlife habitat was part of the design for the proposed action.

The DEIS explains specifically how deer habitat/subsistence alternatives were considered and how ultimately, because the proposed action incorporated additional consideration of habitat and landscape connectivity (responded to concerns), deer habitat was eliminated from further consideration as a Significant Issue. The history section of the Issue Development and Alternative Review document (doc.# 403 in the project record) also records how the team dealt with deer habitat as an issue. It states: “An alternative was looked at that responded to deer habitat concerns but eliminated from further study because the project area occurs over a large area and the estimated effects were already considered low. Also, the Forest Plan addresses wildlife through the Conservation Strategy, standards and guidelines (such as the legacy standard), LUDs, the matrix, and OGRs. The Forest Plan predicts reduction in habitat and this project is line with those predictions. The Forest Plan predicts that less than 39% of the POG, on all land ownerships and in the biogeographic province, will be harvested after 100 years of implementing the plan. Currently we are well below this prediction with only 28% of POG being harvested on all land ownerships. However, elements of design from this eliminated alternative were incorporated into the Proposed Action. Specifically, units were ranked for highest habitat value. Those with highest value were recommended for avoidance of harvest or partial retention. Also, in areas of concentrated past and proposed timber harvest, units were avoided or prescribed with partial retention” (p.8).

An alternative designed to supply on small mills would not meet the need to provide an economics reliable supply of timber to a forest products industry which includes processing facilities and timber sale purchasers of varying size and capacity. Such an alternative would not meet the need to provide an adequate supply for the larger mills of Southeast Alaska industry. Each action alternative in the Central Kupreanof project includes many harvest units suitable for small timber sale offerings.

The timber volume in any action alternatives could be separated administratively into timber sales of varying size and complexity.

Please see the “Opportunities for Small Sales” section in Chapter 3 (p. 3-17).

The Tongass micro-sale program is based on purchaser requests for timber rather than the Forest Service identifying and offering timber for sale. A micro-sale is a timber sale that may consist of dead or down timber or small amounts of green timber, which has been proposed by a prospective purchaser. Please see “Opportunities for Microsales” in chapter 3 (p.3-18). On page 1-3 of the DEIS, decisions to be made include a microsale program along specified existing NFS roads. This option has been analyzed in each of the resource sections and would support the needs of Kake. The Record of Decision will include whether or not to implement this program along the Kake road system.

Finally, the proposed action through alternative development and response to public concerns underwent minor revision as documented in the Issue Development and Alternative Review document. NEPA allows for the modification of the proposed action throughout project development; no substantial changes were made and no changes to the purpose and need of the project or project area. The first public mailing (2006) indicated this project could propose a range of timber harvest levels of up to 80 mmbf. The estimated volume in the NOI was from a Summary and not the stated purpose and need in the Federal Register. The overall purpose and need has not changed nor has the area analyzed for the Central Kupreanof project changed since scoping began. The volume is an estimate that will continue to be refined as the analysis progresses. Volume is an important measure used to estimate activities needed and effects caused by those activities, and it us used consistently among all alternative throughout the analysis process, The precise volume to be sold is not calculated until after the decision is made, units are laid-out on the ground and more precise measurement are made, and the appraisal process is followed. This is the Forest Service timber sale preparation process found in the Forest Service Manual 2400 and Forest Service Handbook 2409.18.

The proposed action does not represent a maximum or upper limit for harvest. One of the identified Significant Issues is timber supply and economics. In response to this Issue, Alternative 3 was developed. By increasing the available volume and hence the unit pool selection, Alternative 3 offers a greater flexibility to respond to changing markets and sale packaging. Alternative 3 may be offered as one sale package or several of varying size. Alternative 3 is within the scope of the purpose and need.

SCS I-2

Commenter feels that the Purpose and Need of this document does not take into account the needs of small, local mills within Southeast Alaska. Specifically, the purpose and need is intended to provide "shelf" volume, and is designed only to accommodate large timber sales.

Response:

The DEIS states the purpose and need in Chapter 1 on page 2. The second bullet states one of the purposes of this project is "to seek to provide a timber supply sufficient to meet the annual market demand for Tongass timber and the market demand for the planning cycle." Appendix A in the DEIS and FEIS explains how the Forest Service develops forecasts about future timber market demand, market demand for the planning cycle (Appendix A pages 7-10) and annual market demand (Appendix A pages 10-12). This project contributes to the short-term and long-term goals for the Tongass timber sale programs. It also considers both local needs as well as regional (Southeast) needs in the opportunity to design both small sales and medium to larger sales from the action alternatives.

SCS I-3, GP V-14

Unit cards do not provide adequate information.

Response:

The main purpose of the unit cards is to identify site-specific concerns with unique responses. These cards are used in implementation, as the selected alternative (if an action alternative) is "laid out" on the ground. It alerts implementation specialists of the unique design features of a unit. For example specifying stream/channel types and corresponding buffers, or that a nest is in the unit. Unit cards are not intended to summarize field notes. Information from field surveys is included in the project record and used during the analysis of each resource (wildlife, soils, streams, roads, plants, etc).

SCS I-4

Commenter feels that an inadequate amount of information has been provided in the DEIS and Project Record.

Response:

40 CDFR 1502.15 directs "The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate

with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement."

The DEIS discloses the information used to make a reasoned choice between alternatives including the potential effects of each alternative in accordance with 40 CFR 1500-1508. Each analysis section defines the analysis boundary and rationale, analysis method, unit of measure, affected environment and environmental consequences (including direct, indirect and cumulative effects) of the proposed activities. Supporting information for the analysis and the rationale of methods (data, field notes, and references) are included in the project record. The FEIS will include the wildlife biological evaluation as an appendix.

All analysis and supporting documents can be found in the project record. Tiering to the analysis done for the Forest Plan or referencing to the project record documents supports this analysis. Elements incorporated into the Central Kupreanof address 40 CFR 1500.4 (b) – Prepare analytic rather than encyclopedic EISs; 40 CFR 1500.4 (c) – discussing only briefly issues other than significant ones; 40 CFR 1500.4 (f) – Emphasizing the portions that are useful to the decision maker and reducing background material; 40 CFR 1500.4 (g) – deemphasize insignificant issues; 40 CFR 1502.2(b) – Impacts shall be discussed in proportion to their significance, brief discussions of other than significant issues. The "Significant Issues" section of Chapter 1 (DEIS p. 15-17) identifies the decision maker's significant issues.

The project record is available in electronic format with a hyperlinked index to the actual documents. The project record follows a schema, dividing information by category (project management, public involvement, etc) and resource. Each category/resource section is further divided out into reports, correspondence, references and data. The index also provides a general description of each document as well as authors and dates for easy reference.

BK-5

Commenter expressed the preference that the Forest Service choose the No Action Alternative for this project.

Response:

We have noted your preference for selection of the No Action alternative and have clarified language in Chapter 1 under the "No Timber Harvest" consideration.

Inventoried Roadless Areas

General

SCS IV-2

Fish and wildlife values should be reviewed as part of the roadless analysis.

Response:

Approximately 81% of the project area is in roadless areas. Specific resource information about the project area and thus the roadless areas are in the specific resource section. For instance aquatic values are disclosed in Hydrology/Fisheries section. Wildlife values are analyzed in the wildlife section. The DEIS references these sections on page 3-23. Because of the high percentage of roadless area in the project area, it was decided not to duplicate this information.

Cutting units were not used as a level of analysis. Resources and values were analyzed at scales appropriate to each resource and defined in each resource section.

The Roadless analysis highlights special features of the roadless areas according to the 2003 Tongass Land Management Plan Revision SEIS (Central Kupreanof DEIS p. 3-25 to 3-27) and which were reviewed for this project. It includes analysis of whether the unique attributes would be affected by the proposed activities as well as potential changes to the biological value of old-growth forest and scenic conditions (p.3-28 to 3-33). No alternative would alter any special feature or attraction of any roadless area within the project area.

SCS IV-3, GP XIV-1

Concerns were expressed whether it was legal to build roads and harvest in Inventoried Roadless Areas under the temporary exemption from the 2001 Roadless Rule. Due to the legal conflicts associated with the Roadless Rule the commenter feels that no entries should occur until the Rule is finalized.

Response:

The DEIS (p. 3-24) provides an explanation of the regulatory framework guiding roadless.

On May 28, 2009 the USDA Secretary reserved decision-making authority over construction and reconstruction of roads and the cutting, sale or removal of timber in Inventoried Roadless Areas.

The Secretary's Memorandum 1042-154 is intended to ensure the careful consideration of activities in Inventoried Roadless Areas while

long term roadless policy is developed. The effects on the Roadless Areas are described in the Final EIS.

SCS IV-1

The DEIS should analyze economic costs and benefits specific to the Roadless Area as timber harvested from Roadless Areas greatly increase logging costs.

Response:

As stated, when timber is harvested in roadless areas, generally more roads need to be built adding to the costs of the timber sale. However, this is true whenever new roads are needed, even in roaded areas, and the development of infrastructure reduces costs for future timber sales. In Chapter 2 of the DEIS, Table 2-1 compares the effects of the Alternatives. Under Issue 1 for Timber Supply and Sale Economics, it shows that the alternative with the most proposed road miles has the lowest indicated bid value economics associated with it. It contrasts against Alternative 4 which minimized new road construction and specifically does not build any new road in roadless. The table shows how the alternatives affect roadless areas as well and that can be compared to the economics for each alternative.

WS-4, WS-5

Explain how VCUs were rated and then subsequently included in the various Phases for the Tongass Timber Sale Program Adaptive Management Strategy.

Response:

Commenter noted that VCU 4360 Upper Castle River had no acreage as shown in Planning Record #1637 (VCU Attributes + Summary Development of Phases), allocated to Phase 1 document and believes was erroneously allocated to Phase 1. It should be noted that this spreadsheet was just a tool to help allocated various VCU's to the different Phases. The published Map with the Record of Decision for the 2008 Forest Plan Amendment is the final word on whether an area is within each Phase. Subsequent analysis was conducted on the coverage developed and used for the map. Values for that analysis to determine such things as ASQ were developed from that coverage not the spreadsheet the commenter references. Tweaking of VCU's was done after the spreadsheet was originally developed and may or may not have been updated in the matrix. The Forest was aware of rankings and in the case of VCU 4360, it should be noted that this VCU was split in the Map for the Record of Decision base on yarding capabilities. See also figure 1. Timber Sale Program Adaptive Management Strategy page 65 of the Record of Decision. Even within Phase 1 there are Moderate Value Roadless areas that are included.

Silviculture

Alaska yellow-cedar

SCS X-1

Address "high-grading" of cedar within the Project Area.

Response:

All alternatives are consistent with current Forest Plan standards and guidelines for their respective Land Use Designations. Currently there is no direction to modify harvest activities based on Alaska yellow-cedar decline. Previously harvested units in the area have Alaska yellow-cedar regeneration in them and it is favored during precommercial thinning operations to further increase it viability.

Alaska yellow-cedar comprises 18 percent of the volume of all the stands surveyed in the project area, 15 percent of the volume proposed for harvest in Alternative 2 is Alaska yellow-cedar, 14 percent of the volume proposed for harvest in Alternative 3 is Alaska yellow-cedar, and 13 percent of the volume proposed for harvest in Alternative 4 is Alaska yellow-cedar.

SCS III-2

Explain how harvest in the project area will effect cedar composition and may aid in yellow-cedar decline.

Response:

The Central Kupreanof Timber Harvest project area encompasses 152,517 acres and of these acres 143,329 acres are forested. Of the forested acres 4,233 are in existing young growth and the project area has been determined to contain 31,622 acres that are currently suitable and available for timber harvest. Alaska yellow-cedar and Western redcedar occurs in the areas suitable and available for timber harvest and also occurs on both unsuitable and non-productive forested lands, lands where large commercial timber sales cannot be planned. Alaska yellow-cedar regeneration is being found in newly regenerated units within the project area and is favored during precommercial thinning operations to increase the amount of cedar within a stand.

A sufficient amount of cedar volume currently exists along the road system and could be made available through a small sale or a microsale. Additional opportunities to make cedar available for local small industry would be created through new road construction

as these new roads would access stands having cedar that are not proposed for harvest with this project.

All alternatives are consistent with current Forest Plan standards and guidelines for their respective Land Use Designations. Currently there is no direction to modify harvest activities based on Alaska Yellow-cedar decline which is naturally occurring on approximately 22,000 acres (Forest Health Protection Report 2008) of the project area.

Table 3-4 of the DEIS displays the amount of timber volume harvested by species by alternative. Stand Examinations show that 68 percent of the volume for the project unit pool is Western hemlock, 14 percent is Sitka spruce, 18 percent is Alaska Yellow-cedar, and less than .1 percent is Western redcedar. Details are available for individual units and are currently stored in the Natural Resource Information System.

Also, please see SCS II-5 in the Timber Economics section under Small Sales and Microsales in this appendix.

SCS X-2

Address the cumulative effects of climate change in relation to timber harvest.

Response:

The current research indicates that there is a cascade of factors responsible for Alaska Yellow-cedar decline. Soil drainage is the most important factor to consider. The association of Alaska yellow-cedar decline with set soils has been well documented. Alaska yellow-cedar trees growing on poorly drained soils have shallow root systems that are predisposed to freezing. Poor soil drainage forces the majority of fine roots of these trees to be shallow (Hennon et al 2007). Open canopy conditions increase exposure but do not alone result in Alaska yellow-cedar decline. The decline does not appear to occur on better drained sites nor does it seem to appear in younger healthy trees, even on wet soils.

The majority of areas proposed for harvest are better drained sites where Alaska yellow-cedar decline is not as likely to occur. Within a few years following harvest activities, tree regeneration will occupy the openings created. This cover will provide an insulating effect not found within the open canopied old-growth cedar stands where decline is prominent. For these reasons, the openings created by harvest would not predispose residual Alaska yellow-cedar to decline.

SCS X-3

Redcedar

Address the harvest of redcedar within the project area as well as the effect of harvesting redcedar in the northern end of its range.

Response:

Minor amounts of western redcedar are scattered across the project area and some incidental trees will be harvested along with the rest of the stand. Some of the previously harvested units in the area have western redcedar in the regeneration and it is favored during precommercial thinning operations to further increase its viability. The North Hamilton River Redcedar Area, approximately 80 acres in size is within the project area boundary in the northwestern section and is not part of the volume being considered for harvest. This area is identified as being unique because of the high proportion of redcedar it contains and the young growth stand adjacent to this area also has a high proportion of redcedar. Also see response to SCS X-2 under Alaska yellow-cedar for information on areas unavailable for timber harvest within the project area.

SCS X-4

Clearcutting

Provide the rationale for even-aged management prescriptions within the project area.

Response:

In the 2008 Tongass land and Resource Management Plan under the Standards and Guidelines for Timber pp. 4-71 through 4-72, it is stated under I. Regeneration Methods that:

> A. Regeneration methods refer to the manner in which a new stand is created. There are three categories of regeneration systems: even-aged, two-aged, and uneven-aged silvicultural systems. Even-aged systems include clearcutting, seed tree, and shelterwood. Two0aged systems include clearcutting with reserves, seed tree with reserves, and shelterwood with reserves. Uneven-aged systems include single-tree selection, group selection, and group selection with reserves.
>
> I. Consider silvicultural systems other than clearcutting to meet other resource objectives at the project level. As part of the project NEPA process, analyze current scientific information related to the applicability of alternative timber harvest methods.
>
> II. Even-Aged Systems
>
> A. Apply even-aged silvicultural methods in such a way that isolated stands of timber will not be created. Avoid locating harvest units where future harvest activities will destroy

regeneration under earlier regeneration harvest activities.

B. Clearcutting is an even-aged regeneration method. There are a number of supportive reasons for the use of this method in Alaska's western hemlock-Sitka spruce forests. These include excellent regeneration of desired species, effective dwarf mistletoe control, viable harvest economics, and compatibility with standard logging systems.

Forest Service Manual (FSM) 2470-R-10-2400-2005-1 further clarifies limitations on clearcutting and states it may be used to minimize the occurrence of diseases (dwarf mistletoe), windthrow, logging damage, and to provide for the establishment and growth of desired trees. As stated in the DEIS, (p.3-29) clearcutting is used so that residual trees are not damaged by conventional logging systems. Even-aged management has not been prescribed where it conflicts with other resources.

EPA-10

Utilize methods other than even-aged management when possible, and especially within scenic viewsheds and sensitive watersheds.

Response:

All the proposed units meet or exceed the Forest Plan standards and guidelines with the prescribed silvicultural systems and are consistent their respective Land Use Designations (LUD). See also Scenery section in Chapter 3.

Windthrow

State W-1

Address the concern pertaining to the lack of additional protection measures along the edges of units and stream buffers to provide protection from windthrow.

Response:

As stated in the document field surveys found very little evidence of windthrow along existing unit boundaries and stream buffers. Surveys in proposed units also found only minor amounts of windthrow. The project area is predominately located inland and has low topographic relief, which are both factors in lessening the effects of wind on leave trees. As a result of these surveys and the contributing risk factors the risk of windthrow in the study area is considered low and additional windthrow protection measures are not recommended. Stands located to the south of the project area along the southern coast of Kupreanof Island would have a higher wind risk rating as stated in the Kupreanof Island Analysis. The Threemile Timber Sale FEIS that you refer to is on a separate island, along the coast, with greater topographic relief, and does show signs of windthrow along older unit boundaries and

would also have a higher risk of windthrow along stand boundaries and stream buffers.

Phase One/Suitability

WS-2

Commenter questions the suitability of lands within the Project Area for timber management activities.

Response:

Timber Suitability Analysis was an issue brought up by the Wilderness Society during their appeal of the 2008 Forest Plan Amendment. Original issue was that the Tongass revised Forest Plan (Plan Amendment) failed to adequately conduct the analysis of timber suitability in violation of the NFMA. Appendix A of the Forest Plan describes the process followed to identify the lands on the Tongass NF that are suitable for timber production. Land classification for the project area is discussed in the Timber and Vegetation section of Chapter 3 of this FEIS.

Large Tree/Old-Growth Highgrading

SCS X-5

Address the concern that old-growth is being "high-graded."

Response:

The Forest Plan discusses large tree productive old-growth in the Biodiversity section beginning on page 3-127 (Forest Plan FEIS). Particularly it discusses the existing condition of the Kupreanof/Mitkof Island biogeographic province on pages 3-159 to 3-160. Currently 65% of the original large tree POG remains (see also Table 3.9-7). With full implementation of Alternative 6, the Plan predicts that 51% of large tree POG will remain with 30% protected with old-growth reserves. Please also see discussion on coarse canopy (which equates to large tree old-growth) in the wildlife responses. Refer to 3-149 in this FEIS for a discussion on single tree selection.

Unit Suggestions

General

AFA-8

Drop units 222, 223, 224, 267, 268, 269, 274, 275, 276, 277, 279, 280 and 281.

Response:

The Forest Service has the opportunity to include, or not include, units

that have been cleared through the NEPA process during sale preparation and packaging. If these units are cleared, and at the time of sale preparation market conditions do not allow for a positive sale that includes these units, the Forest Service has the flexibility at that time to defer these units. Part of our purpose with this project is seeking to provide a timber supply sufficient to meet the annual market demand for Tongass National Forest timber and the market demand for the planning cycle. One way to do this is to have a large unit pool to allow us flexibility when offering sales. Some of the units will have higher economic value than others but will remain in the pool to maximize our ability to offer sales in differing economic climates.

At this stage of the project it would be difficult and cost prohibitive to add new units to the project. In the future we would be interested in hearing your ideas earlier in the planning process during scoping. We are currently doing this with the State of Alaska DNR on future projects. Thank you for your interest.

AFA-9

Enlarge units 241, 243, 246, 248, 265, 270 and 272.

Response:

Although areas adjacent to units 241, 243, 246, 248 and 270 are forested, the timber outside of the planned units is of relatively low volume per acre and low economic value. Minor adjustments will be made to the unit boundaries at the time of implementation if determined to be appropriate.

AFA-10

Drop helicopter portion and expand cable logging portion of units 261, 262, and 266.

Response:

On-site soil stability investigations determined these portions of units 261 and 262 require helicopter yarding due to soils, steepness and terrain. Unit 262 has no planned road access to allow for cable yarding. Unit 266 has no areas designated for helicopter yarding.

AFA-11

Place a unit between unit 274 and 275.

Response:

Because of recently harvested managed stand exists between units 274 and 275 adding an additional unit in this location would exceed opening size limitations set by the National Forest Management Act (NFMA) regulations and Forest Plan (4-72) standards.

Socioeconomics

General

Beebe-3, SCS III-7

The DEIS needs to analyze further the impacts of this project to tourism and recreation.

Response:

The Forest Plan analyzed recreation and tourism economics at the regional level since it is often difficult to pinpoint at the project level. For example, it would be a guess at best estimating how much of the gasoline sold in Kake is used for recreating in the project area, since there are other NFS lands and non-NFS lands on the Kake road system.

The Central Kupreanof project proposes 3 acres of harvest in the Rocky Pass Inventoried Roadless Area which is in the vicinity of Rocky Pass and Big John Bay. Less than 1% (0.05%) of the roadless area would be affected. No timber harvest is allowed in the immediate vicinity of Big John Bay and Rocky Pass because they are in non-development LUDs of Semi-remote Recreation and Remote Recreation. No effects would be apparent in the foreground of these areas and the middleground and background effects described in the Scenery section of the DEIS are within the standards and guidelines allowed in the Forest Plan.

No outfitters and guides currently use the project area so there are no direct economic effects to them. Some timber harvest would be noticeable from a distance from recreation areas like Rocky Pass as described in the Scenery section.

SCS III-5

Commenter is requesting a more detailed social and economic analysis for this project.

Response:

The Forest Service Manual [FSM 1970.6] states, in part, that "the responsible line officer determines the scope, appropriate level, and complexity of economic and social analysis needed." The Central Kupreanof project is a timber sale project, and was proposed to respond to the goals and objectives identified by the Forest Plan for the timber resource and to help move the project area toward the desired condition identified in the Forest Plan for the lands within the Timber Production and Modified Landscape LUDs.

The Forest Service is not required to quantify the non-market benefits and costs associated with every timber sale. However, the Forest service is required to "ensure that unquantified environmental amenities and values [are] given appropriate consideration in decision-making along with economic and technical considerations" [42 USC 4332(2)(B)]. The Central Kupreanof Timber Sale EIS discusses the potential effects of the project on the non-market values, such as subsistence, wildlife, recreation, fisheries, water quality, soils, and wetlands as well as the impacts to the inventoried roadless areas. The analysis of the project's potential effects on these non-market values is reasonable and consistent with Forest Service Manual and Handbook guidance regarding social and economic analyses.

SCS III-6

Acknowledge the economic effects of this project on other economic sectors, not just on the timber economy.

Response:

The fact that such benefits and activities as commercial fishing, tourism, mining, recreation, and subsistence are not assigned monetary values and quantified in the economic efficiency analysis does not lessen their importance in the overall decision-making process. Decision makers routinely choose alternatives that do not maximize present net value. The Forest Service Manual states that decision makers must "(c)onsider economic efficiency, along with other factors (emphasis added), in making decisions and in implementing and reviewing projects, programs, and budgets" (FSM 1970.3(3)).

A large portion of the EIS is spent evaluating potential effects that cannot be reasonably assigned a monetary value at this time. The type of benefits identified on this subject may be generally classified as ecosystem services. Ecosystem services are those services and benefits provided by healthy ecosystems. Definitions of ecosystem services can be broad and include both use and non-use values. A number of different definitions have been identified, including a typology developed by the Millennium Ecosystem Assessment (2005), which is featured on the Forest Service's Ecosystem Services website. The Assessment identifies four general categories of ecosystem services: provisioning, regulating, cultural, and supporting. Interest in ecosystem services has increased in recent years, and economists have made useful progress in developing and improving methods and techniques that can be used to value non-market ecosystem services.

Recognizing the potential utility of the ecosystem services concept, the Forest Service recently proposed that ecosystem services be used as a framework for describing and evaluating the many benefits associated with NFS lands and established an Ecosystem Services web site

(http://www.fs.fed.us/ecosystemservices/) that provides detailed information and resources, identifies And discusses Forest service efforts in this area, and issues a regular Ecosystem Services newsletter. In addition, the Forest Service's Pacific Northwest Research Station (PNW) recently issued a technical report that attempts to define an economics research program to describe ecosystem services (Kline 2006). Kline (2006, pg. 7) identifies several key challenges or steps that re involved in applying the ecosystem services concept. These include defining a typology of ecosystem services or, in other words, defining what to measure and how to measure it. An important aspect of this measure involves, in Kline's (2006, pg. 10) words: "translating ecosystem complexity into manageable sets of well-defined ecosystem metrics." The next challenge is to determine how these metrics are affected by specific Forest policy and management actions and then identifying these effects in terms of measurable units or outputs that can be assigned monetary values in a way that will allow meaningful comparison between alternatives. The third challenge is to measure the value of these units or outputs in monetary terms that accurately reflect the societal values of these services.

As Kline (2006, pg. 15) notes, "total ecosystem values provide little guidance to policy or management decisions unless these decisions can be expressed as marginal or incremental changes in ecosystem services." Evaluating the impacts of the alternatives on, for example deer, would require estimating the actual number (or at least a reasonable range) of deer that would be affected, negatively or positively, by the alternatives. This type of analysis would also be required for salmon, marine mammals, moose, berries, and so on. The ecological impact assessments presented in this EIS follow standard scientific approaches to these types of analysis and typically assess impacts in terms of probability and risk, not in numbers of affected deer or salmon, etc. The difficulties associated with identifying production relationships and the corresponding units of measurements is, as noted earlier, generally considered one of the main challenges currently facing ecosystem services analysis. Kline (2006, pg. 11) notes that, in general, "ecologists have not been forthcoming with the types of ecosystem output measures economists typically desire or expect for formal economic analysis" and because "ecology is not particularly well suited to prediction, production relationships may be highly or purely uncertain."

Soils

General

Beebe-4

Commenter is concerned about the ecological implications of removing precommercial thinning debris from units.

Response:

Where vegetation management is proposed on the Central Kupreanof project area the soils are relatively rich in organic matter and carbon. Soils at risk of losing productivity through biomass removal are those that have not accumulated very much organic matter. On the Tongass these soils include the young soils (entisols and inceptisols in recently deglaciated areas like the Yakutat Forelands and near the glaciers of the Juneau Icefields).

NOAA-5, EPA-9

Address the effects of management activities in areas with a mass movement index of high hazard.

Response:

All slopes within the project area that exceed 72% have been investigated in the field as directed in the Forest Plan. Slopes that were determined to be unstable were mitigated by either removal from the unit or the logging systems were modified to minimize soil disturbance to an acceptable level.

Timber Economics, Demand and Financial Efficiency

Supply and Demand

AFA-1

Alternative 4 needs to be reworked to become a viable timber sale, and the helicopter portion of Alternative 3 should be dropped as there is too little volume to justify mobilizing operations.

Response:

The Forest service has the opportunity to include or not include units

that have been cleared through the NEPA process during sale preparation and packaging. If these units are cleared, and at the time of sale preparation market conditions do not allow for a positive sale that includes these units, the Forest Service has the flexibility to defer these units.

AFA-3

Commenter believes that the discussion of forest products employments does not adequately describe the "massive decline" in industry employment.

Response:

The discussion of forest products industry employment on page 3-11 of the DEIS is intended to provide an overview of recent trends. It is not intended to illustrate the full extent of the reduction in wood products employment that has occurred since it peaked in 1990. The Purpose and Need for the Central Kupreanof EIS tier to the Tongass Land and Resource Management Plan FEIS (January 2008) which provides a more detailed discussion of the wood products industry including employment data from 1986 to 2006 (Figure 3.22-6).

AFA-4

Address the statements made in Appendix A-15 concerning Pool 3 volume under contract. Commenter feels that the goals presented in this section are too low and will not achieve the goal of establishing a viable timber economy.

Response:

This is project-level analysis and just one part of the total Tongass timber program; the timber economic and supply issue tiers to the Forest Plan analysis. The "pools of timber" or pipeline volume described on page A-13 of the DEIS is intended to help achieve an even flow of timber sale offerings to meet market demand. The goal for volume under contract is based on derived annual demand which is used to set short-term goals as described on A-9. More detailed information regarding timber sale planning and market demand is in the Forest Plan Amendment FEIS and ROD, and in Brackley and Haynes (2008).

Please refer to the response to comment AFA-5 in this section for more information regarding the need for an integrated forest products industry.

AFA-5

Address the goal, as stated by the Secretary of Agriculture, of restoring a fully integrated manufacturing industry on the Tongass.

Response:

This was not included in Appendix A but was addressed in the Forest Plan Record of Decision (p. 17) which states- "Need for an Integrated Forest Products Industry in Southeast Alaska. Beyond the question of what the market demand for timber is likely to be over the next 10 to 15 years, I also considered what supply would be needed to provide an opportunity to reestablish an integrated forest products industry in Southeast Alaska. ... [Therefore] I selected Alternative 6, which has an ASQ substantially above recent harvest levels, in part to provide such opportunities—and to ensure they are not foreclosed."

As for your comments about the Secretary of Agriculture, this is a reference to a September 2008 memorandum to the Chief of the Forest Service from the Under Secretary, Natural Resources and Environment, which provided guidance concerning implementation of the Forest Plan.

Direction: The Under Secretary's direction on this topic reads as follows:

> I am also directing the Forest to develop a work plan and proposed budget necessary to offer four ten-year timber sales, each with an average volume of 15-20 MMBF per year. These longer sales, each are the best way to provide sufficient assurances to support the necessary investment in new and upgraded manufacturing facilities.

Response to the Direction: A work plan and proposed budget necessary to offer four ten-year timber sales, each with an average volume of 15-20 million board feet (MMBF) per year is planned. Four sales are located on the Forest and have been identified. The Forest has contacted the Tongass Futures Roundtable and the State of Alaska, and invited both parties to participate in this effort. The Tongass will work directly with the Framework Committee of the Roundtable and directly with the State's Division of Forestry to determine where these projects would most appropriately serve their intended purpose. Under the MOU with the State and with the TNC (part of Roundtalbe), they have been actively involved in developing Project Plans.

In a reply to that memorandum sent in January 2009, the Regional Forester informed the Chief that to respond to Part 4 of the Under Secretary's guidance, titled: A Fully Integrated Forest Products

Industry (Ten-Year Contracts), the following has been accomplished: Locations were identified where each of the four ten-year timber sales could be developed, preparation of position statements for the two highest-priority ten-year sales has begun, and the development of a proposed budget for work related to the ten-year sales has been started. These locations are: Wrangell Island; the Thorne Bay to Control Lake area on Prince of Wales Island; Northwest Revilla Island, and Zarembo Island.

.

DR-13

Clarify whether the current timber demand is above or below the levels of 5 and 10 years ago.

Response:

Forest Plan Amendment FEIS Volume 1, pp. 3-504 - 3-510 discusses market demand for Tongass timber. As displayed on page 3-506 of the Forest Plan Amendment, existing market demand is higher than 5 and 10 years ago but currently lower than 15 years ago.

AFA-7

Commenter believes that the Forest Service is severely underestimating the demand for timber on the Tongass, and questions the methods the Forest Service uses to come to these conclusions.

Response:

Please see the 2008 Tongass Land and Resource Management Plan Record of Decision, page 30, which discusses “Morse methodology”. This methodology is the means by which the Forest Service seeks to meet demand. The Morse methodology’s establishes a system that seeks to build and maintain sufficient volume of timber under contract.

BK-1, BK-3, GPII-1, SCSX-6, WS-1

The purpose of the Central Kupreanof project, as disclosed by the district ranger in a radio story but not in the DEIS, is to put timber "on the shelf," not to meet a real need in the foreseeable future. There is no immediate demand for this sale and it is in conflict with the Tongass Timber Reform Act (TTRA). There needs to be an updated and accurate timber demand analysis.

Response:

The Tongass Timber Reform Act (TTRA), Section 101 is briefly discussed in the Central Kupreanof Appendix A. This Act provides direction to seek to provide a supply of timber both to meet the annual market demand and to meet the annual market demand for each planning cycle. The planning cycle market demand is a forecast of the

long-term demand for timber from the Tongass derived from trends in international demand for end products manufactured from such timber. Based on these long-term projections, the Forest Service also estimates annual market demand in order to determine how much timber volume needs to be analyzed through the NEPA process to enable the outyear offerings. In order to do the necessary fieldwork and analysis to meet the requirements of NEPA, these projects need to begin years in advance before the sale is proposed to be offered. Otherwise, a situation like current one develops. Currently, very few options for timber sales to offer occur on the Tongass. Many of the previous decisions were withdrawn with the Settlement Agreement (need ##) that involved the Forest Plan Amendment. This has limited the sale volume available to certain areas of the Tongass which may not be the most economical to offer at this time.

Also, looking at only supplying the current need eliminates the possibility of any future expansion for the timber industry. If the timber industry is to reach the goal of a fully integrated industry, then a steady, reliable supply of timber volume needs to exist. Interest has been expressed in the future young-growth timber harvest. However, in order to do this requires a steady supply of timber to allow operators to make the investment of equipment and to keep trained employees gainfully employed until enough young-growth reaches true economic value. Interest has been expressed for additional factors of the wood products industry to supply fuel for heating community buildings and homes. This sector of the industry also needs to be able to rely on a steady workforce with knowledge of Southeast Alaska conditions.

The community of Kake has been recently suffered economic set-backs as various economic sectors are no longer present. Central Kupreanof Timber Harvest project will provide opportunities for small sales and microsales but will give the flexibility for a larger timber sale and provides possible stewardship opportunities for the community of Kake. If there is truly not a need for a larger sale and only smaller sales are sold, then the environmental effects will be less than indicated in the EIS but no negative environmental effect is caused by proposing larger sales.

Brackley and Haynes (2008) state that several short and long-term changes point to an increase in demand for wood products from all sources, including Alaska. An example of a short term change is where softwood lumber production in Canada has slowed. Examples of long term changes is the interest in renewable energy applications, a projected steady increase in US population, and concurrent increasing demand for softwood products. They state that the probability of a future decrease in demand for lumber from all Pacific Rim markets is virtually zero. In fact, they argue that projected consumption in domestic markets alone will increase substantially.

This project tiers to information regarding timber sale planning and market demand in the Tongass Land and Resource Management Plan FEIS (January 2008), pages 3-504 through 3-511, Tables 3.22-6, 3.22-7, 3.22-8, and in Brackley and Haynes (2008).

Please refer to responses for DR-13 and AFA- 7 in this section.

Economics

State EC-1, GPII-1, SCS III-4

Commenter does not agree with using the Wrangell mill as an appraisal point.

Response:

An appraisal point is the most advantageous location where raw materials or products can be sold (FSH 2409.18, 45.11). The Wrangell mill was used as the appraisal point for the Central Kupreanof EIS since the annual market demand for 2007, 2008 and 2009 included the Wrangell sawmill. Silver Bay Logging, Inc., owner of the sawmill, was logging and processing logs at the mill in those years, although has not utilized any Forest Service wood in 2008 or 2009. Instead they purchased sales from State of Alaska Mental Health Land that was extremely close to the mill. However, the mill capacity still remains at 65,000 MBF and could successfully mill a sale the size of the Central Kupreanof alternatives. In order to compare alternatives, the sale is considered as one sale although the volume may be sold in either one sale or multiple sales. The appraisal done prior to offering the sale for bid may be to the Wrangell mill or another mill depending on the size of the sale and whether the mill in Wrangell is operating. Since one of the values of the financial efficiency analysis is the relative ranking of alternatives, if another appraisal point is chosen, such as Klawock or Ketchikan, then all alternatives would decrease in value based on barging costs per MBF and show the same relative ranking.

Although there are several sales available in the vicinity of the Wrangell mill, they do not currently represent the amount of timber volume necessary for a purchaser to make the investment in equipment and to obtain financial backing. Alcan is logging on Skipping Cow and began after the roads finished construction this season.

Logging costs and road costs are updated with information collected annually from operating mills across the Tongass. This information is used to update the RV appraisal program and the NEAT-R program.

SCS III-1

Commenter requested an accurate assessment of the number of jobs and the amount of revenue that the project will generate

Response:

Approval of export or interstate shipping is only granted after the sale is awarded. No timber volume is 'pre-authorized' for export or interstate shipping. If a purchaser wants to export timber overseas or ship out of Alaska; they are required to apply for a permit from the Regional Forester. Because of these uncertainties of what may be exported in the future what the operator would want to export, an accurate estimate of jobs in not available at this time. Therefore, the sawmilling jobs are displayed as a range of possibilities with the actual number of jobs supported probably somewhere within this range. However, the jobs per MBF used for this estimate is based on an average from operators and may vary depending on who buys the sales.

Timber sales are sold to purchasers with differing business goals under changing market scenarios. Historically, the percentage of the volume harvested on the Tongass that has been shipped out of state has fluctuated widely. Given those variables, it is not possible to precisely predict what will be manufactured locally; hence, a range of employment and income figures is considered the most reasonable approach to display potential effects on jobs and income.

The limited interstate shipment policy described in the Draft EIS (P. 3-19) allows shipment of small-diameter, low-grade, unprocessed western hemlock and Sitka spruce logs to the lower 48 states (Bschor 2007) and no more than 50 percent of the total sale volume can either be exported or shipped to the lower 48 states. These requests must be approved by the Regional Forester and have been granted in the past on a case-by-case basis.

On August 8, 2008, the Regional Forester issued a time-limited authorization to export western hemlock and Sitka spruce which only applied to timber sales under contract as of June 30, 2008 and was not an addendum to the limited export policy. No more than 50 percent of the total sale volume may be exported or shipped to the lower 48 states. This authorization was put in place to offset the dramatic increase in costs, coupled with a decline in orders and selling values experienced by Alaska's timber industry at that time. It is difficult to determine whether these conditions will exist when timber from the Central Kupreanof project is offered for sale. This project may be implemented over a period of several years; during which time fuel costs, market scenarios and logging costs are subject to considerable change.

The economic analysis for the Central Kupreanof project does not include adjustments to selling values based on this time-limited authorization.

The amount of export is reported on this public website: http://www.fs.fed.us/r10/ro/policy-reports/for_mgmt/

The actual appraised sale value will be determined at the time of sale based on a statistically accurate cruise and the appraisal bulletin costs and revenues at that time. Many of the factors that will determine the exact amount of revenue will be dependent on the purchaser's efficiency and business expertise and therefore not available at this time.

AFA-6, State EC-2

Explain why an economic sale is not possible based on the analysis of the Forest Plan LSTA.

Response:

The Logging System and Transportation Analysis (LSTA) for the Central Kupreanof Project Area has been refined and updated through extensive field surveys including the collection of stand exam data within the harvest units and preliminary verification of logging systems and road locations. This process allows more in-depth and site-specific analysis of this area than was done for the Forest Plan. NEAT_R analysis for all action alternatives shows deficit indicated bid rates. Values and costs derived from NEAT_R are based on information collected in past years and represent a snapshot in time. Changes in regional and global timber markets and other factors such as fuel costs can dramatically affect stumpage values and logging costs at the time of implementation and harvest.

The alternatives are designed to be one sale or split into more sales. Alternatives include enough volume to be flexible in the future should market conditions improve. Chapter 3 of the DEIS acknowledges the opportunities for small sales, microsales, and project opportunities within the three action alternatives.

The values produced using the NEPA Economic Analysis Tool are meant to provide the Responsible Official with a relative ranking of economic value and not an absolute economic value. In the DEIS, the Central Kupreanof project was analyzed using the Residual Value Appraisal (RV) version of NEAT, which is the current Forest Service Handbook direction. Current market conditions and timber sale costs have influenced the economic viability of this project.

State EC-3

The state offered to modify alternative 3 to provide a more economic alternative.

Response:

The Forest Service continues to work with the State in developing economically and technically viable timber sales. The Forest Service acknowledges that there are various subsets of units and multiple sale packaging scenarios associated with each alternative that address economics. The Forest Service has the opportunity to include or not include units that have been cleared through the NEPA process during sale preparation and packaging.

If these units are cleared, and at the time of sale preparation market conditions do not allow for a positive sale that includes these units, the Forest Service has the flexibility at that time to defer these units.

Please see response to comments AFA-8 in the Unit Suggestions section of this Appendix. See also response to EC-2 in this section.

Small Sales and Microsales

Beebe-1, SCS II-5

Discuss what the local demand is for timber from this sale area. Commenter's feel there is not demand for much timber, and only alternatives to offer small sales alternative should have been analyzed.

Response:

Since 2007, five residents of Kake have expressed interest in purchasing small sales and microsales from the Central Kupreanof Project Area. The 6367 Timber Sale, located in close proximity to the Central Kupreanof project area, was offered and sold to a resident of Kake in 2008. A second small sale, as well as a microsale along the Kake road system, is scheduled to be advertised in 2009. More information regarding small sales and microsales has been added to the FEIS**.**

All action alternatives provide small sale and microsale opportunities. These opportunities include offering a subset of units from the larger unit-pool or by providing microsales through salvaging dead or down trees along said roads. Microsales were analyzed by each resource for each action alternative (see DEIS Ch. 3). The DEIS (Ch. 3 p.17) discusses opportunities for small sales.

As documented in Appendix C (Catalog of Events) of the DEIS, examples of projects where a subset of units were offered as small sales include; Bohemia Mountain Timber Sale EIS (1991 and FSEIS 1995), and the South Lindenberg EIS (1996).

Financial Efficiency Analysis

SCS III-3, GP XVI-1

The Timber Financial Efficiency Analysis needs to discuss all costs including pre-roading, and administrative costs.

Response:

NEPA requires the disclosure of effects on the human environment and not the administrative costs of managing timber sale projects. Administrative costs play no part in the economic justification of the project. They are administrative costs, not economic benefits of the project. Plus these costs are appropriated by Congress and although tied to certain line budget items, do not mandate that a profit is made by the Forest Service in using this money for a specific program. The Forest Service is not mandated to make money by offering timber for sale. The Timber program is not unusual in costing more to operate than the government receives in revenues from the program. Many programs on the Tongass NF generated no revenue, including the subsistence, heritage, inventory and monitoring, land management planning, geology, fish and wildlife management, most trail improvements and fire protection programs.

NEAT-R calculates the costs of analysis, sale preparation and sale administration based on previous multiple year estimates. These estimated costs used to be reported annually in the Timber Sale Program Information Reporting System (TSPIRS). This program was developed in response to Congressional direction contained in the Conference Committee Report on the 1985 Interior Appropriations Bill. The impetus for this direction was concern over "below-cost" sales, and the desire to have better information for the benefits and costs of selling national forest timber. The system was "pilot-tested" in Fiscal Year (FY) 1987 and 1988, and was officially implemented in FY 1989. This system is no longer used since the Forest Service has changed over the years to a more ecosystem management style from the more timber focused management style of the 1980s. For example, the information collected during the field inventory on one timber sale project is used in many ways that benefit us in National Forest management and sometimes research. Due to the structure of the budget allocation, it is not possible to divide these costs out because the costs and the benefits are not directly traceable. However, these numbers continue to be used for budget allocation requests to Congress. The information from NEAT-R is located in the project record.

Pre-roading is a process whereby roads are constructed into a NEPA cleared project area prior to and separate from a timber sale or other resource activity. The intent of pre-roading is to develop or expand the transportation network without requiring one resource to carry the entire burden of road construction costs. Pre-roading is an

administrative decision that requires funding from Congress and is subject to the same environmental laws and regulations (NEPA, NFMA, etc.) as other federal actions. At this time there are no foreseeable plans for road construction in the project area other than those disclosed in the FEIS and there are no Congressional appropriations slated for the Central Kupreanof Timber Harvest Project.

Transportation and Access Management

State RC-1

Provide information detailing the Forest Service definition of the word "storage" in comparison to the State's definition of storage or closed.

Response:

There were comments regarding the Forest Service's use of the word storage and the State's definition of storage or closed. Part of this confusion may have come from the erroneous definition of Road Storage in Chapter 4 in the DEIS. This definition has been corrected. When road closure is discussed, it is referring to the definition of Maintenance Level 1, which fits the Alaska Forest Resources and Practices Act definition of "inactive." Roads closed, in storage or maintenance level 1 are left in a self-maintaining state and basic custodial maintenance is assigned.

State RC-2, SCS V-2

Address concerns regarding the construction, use, maintenance, and decommissioning of temporary roads.

Response:

Concerns were expressed about the construction, use, maintenance, and decommissioning of temporary roads. Temporary roads do not access future timber lands and do not have resource concerns that require engineering controls in construction (log stringer bridges do not require engineering controls). Temporary roads are displayed on the unit cards along with site specific narrative information.

Action on the ground for decommissioning ranges from blocking the entrance and removing drainage structures to obliterating the road, returning the natural contours, and replanting vegetation. (All bridges

and structures will be removed.) The end result is the stabilization and restoration of unneeded roads to a more natural state (36 CFR 212.1).

State RC-3

Slopes greater than 67%, not 72%, should require full bench construction.

Response:

Chapter 3 page 52 does contain an error and the second bullet of the third paragraph should read "Side slopes of greater than 67% would be mitigated by full bench construction and slope stabilization if necessary." This has been corrected in the Final EIS. All applicable Forest Plan Standards and Guidelines, Forest Service Manual and Handbook direction (including Best Management Practices) will be incorporated during design, construction and maintenance of roads.

GP XV-1, GP XV-2, SCS V-3

Address the RAP and ATM process as related to this DEIS.

Response:

The RAP recommendations were incorporated into the road management objectives for roads associated with this project. A complete copy of the recommended RMOs for the Kake road system and addendum to the Kake RAP is located in the project record. This RAP will be used in the District ATM process. Decisions from the Central Kupreanof project will be incorporated by the ATM NEPA document and analyzed cumulatively with road management objectives and strategies across the District. The desired condition for the forest transportation system is guided in part by 36 CFR 212.5-Road Management. Part b provides guidance for determining the minimum road system needed. Recommendations for roads not used with this timber sale proposal will be carried forward and analyzed in the District's Access Travel Management NEPA document.

SCS V-4, SCS VIII-1, GP XV-3, GP XV-5, GP XV-7

Concerns were expressed concerning funding for new roads, completing backlogged maintenance, addressing red fish crossings and closing roads.

Response:

The costs associated with closing existing roads and additional maintenance will be addressed in the Petersburg District Access Travel Management (ATM) NEPA document rather than the Central Kupreanof Timber Harvest. The ATM document will look at maintenance costs across the District in terms of projected budgets,

resource issues and potential road closure decisions. Logging costs include cost for road maintenance during the life of the sale and the work is performed by the Purchaser. Timber sales are not required to bear the costs of culvert repair or replacement. Limited funds are allocated by Congress for this purpose and will be appropriated according to priorities across the Forest.

To address the backlog of maintenance for the Tongass, the demand for roads has primarily been a function of demand for access to timber resources. The amount and level of maintenance and repairs is dependent upon traffic management objectives and maintenance criteria. Maintenance of existing NFS roads is an ongoing process that occurs on a periodic basis. These tasks are performed to keep the roads in the safe and useful condition for which they were designed.

All of the Central Kupreanof Timber Harvest roads are constructed and maintained for silvicultural activities and will apply the practices described in BMP 12.5. Therefore they meet the criteria for silvicultural exemption from permitting under the Clean Water Act Section 404. All work will also be in compliance with the Tongass Forest Plan Transportation standards and guidelines (starting page 4-80).

The Tongass National Forest is also concerned about the loss of fish habitat upstream of culverts restricting fish passage and has corrected more than 250 red crossings throughout the Forest during the last several years. Many of these have been on the Petersburg Ranger District. It may not be advisable or feasible to replace all existing red culverts with fish passage designed crossings. Many of the crossings have very limited amounts of fish habitat upstream and it may be more advantageous to mitigate the effects through the Clean Water Act 404 permit process. An interagency group has made progress on a model that would help make management recommendations for red culverts which reduce or restrict fish passage. The model was tested in 2006 and the preliminary findings are available. The model requires refinement and additional data needs to be collected before it can be used for all culverts on the forest. The removal or replacement of red culverts to improve fish passage has been done and will continue to be done when funding opportunities are available. Fish passage at up to nineteen red crossings may be corrected with the implementation of any of the action alternatives as part of the stewardship opportunities identified through the RAPS process, and depending on ATM review and decisions in 2009. The removal of 4 red crossings is associated with the closure of 1.69 miles of road used for the timber sale (in any action alternative).

GP XV-4

Build no new roads within Roadless Areas.

Response:

Alternative 4 builds no new roads in any inventoried roadless area as well as avoids harvest within their boundaries. The Tongass is currently exempt from the prohibition of timber harvest and building roads in inventoried roadless areas. While these activities would reduce roadless acres within the project area, the roadless values would remain unchanged or be minimally influenced by the proposed activities in all action alternatives.

The effects of alternatives on roadless acres and values are disclosed on pages 3-23 to 3-35 of the DEIS.

GP XV-6

Road Condition Surveys should be completed on all roads, and why do some roads not have complete road condition information.

Response:

Page 3-42 of the DEIS states that Forest Service personnel have conducted road condition surveys on many of the existing roads in the project area. This information can be found in the project record.

Surveys for new road construction were completed during two field seasons for this project and incorporated into the resource report and new NFS road designs.

Prior to implementation of the project, all existing and new roads will have ground surveys completed and incorporated into the final designs. All applicable Forest Plan Standards and Guidelines, Forest Service manual and handbooks (including BMPs) will be incorporated during design, construction and maintenance of roads.

GP XV-8

This analysis should consider delays for litigation when discussing the benefits of closing roads, and needs to consider whether there will be funding to close roads in 5-10 years after the timber sale.

Response:

While litigation is a possibility, it is not considered a foreseeable action as it may or may not occur for a given project. Decisions from the Central Kupreanof project will be incorporated by the ATM NEPA document and analyzed cumulatively, including the decision to close any new road within 5-10 years after timber sale activities. The annual review of the Motor Vehicle Use Map and road management objectives will keep closure decisions active. The RMOs for the

proposed new NFS and reconstructed roads note closure is desired within five to ten years of the timber sale.

The ATM will address funding and implementation of existing road closures. We have several levels of closure and will still do annual maintenance as needed.

EPA-3

Please include a discussion in the FEIS of the shift from National PDES to Alaska Pollutant Discharge Elimination system (APDES) Program and how this may affect your current LTF permits.

Response:

On October 31, 2008, the State of Alaska, Department of Environmental Conservation assumed authority over the Alaska Pollutant Discharge Elimination System (APDES). The general permit became effective on December 1, 2008. The Tongass NF submitted a request in the form of an adoption letter on February 10, 2009, to ADEC to adopt the previously filed Notification, AK-G70-0019, Hamilton Bay. This facility was previously authorized and operating under an administratively extended NPDES permit. Since the LTF operations have not materially changed since submission of the Notification it is anticipated that the permit will be adopted.

Wildlife

Biological Studies

DR-9

Analyze the effects of road construction upon predation levels to deer and moose.

Response:

Open road and total road densities for the project area are provided on page 3-72 of the DEIS. It is recognized that increased road building may provide additional access for hunters/trappers and therefore with easier access, may create additional pressure in new areas. Cumulative total road densities for the project area, Kupreanof Island, and for Kupreanof/Mitkof Biogeographic Province by alternative have been included in the FEIS (see also response to “Wolves/Road Densities” in this appendix). The Subsistence section in Chapter 3 disclosed the effects of the project on access to wildlife resources and potential changes in competition.

DR-10

Provide an analysis of the deer, moose, bear and wolf populations within the Project Area.

Response:

The analysis found in the FEIS and the wildlife specialist report considers effects to all Management Indicator Species (MIS). The analysis used POG as the avenue to assess impacts of each action alternative on habitat for each MIS. The Forest Service has worked with ADF&G on various analyses, including deer pellet counts and harvest records. Field crews spent two years with up to 15 people per crew working on the proposed units looking for presence and absence of vegetation as it relates to wildlife species in the project area. ADF&G Quick Cruise Plots were conducted. These provided rated scores based on the quality of habitat. ADF&G does not anticipate changes to harvest limits of game species at this time.

Bald Eagles

USDI-5

The potential effects to bald eagles need to be analyzed in the FEIS.

Response:

Bald eagles are protected by the "Bald and Golden Eagle Protection Act" and known nesting sites are cataloged by the USFW Service. Bald eagles usually nest close to salt water for predator/prey reasons. This catalog has been reviewed for this analysis and most known nests occur within the 1000' beach buffer. Further analysis indicates that the closest known nest to a project road or unit is approximately 2,100 feet from the LTF. This nest has been there for many years. Minimal disturbance is expected because of the distance from the known nest site to the LTF road. The project is an "interior" timber proposal; therefore no habitat will be lost for bald eagles.
No surveys are required by the Forest Plan; however, any new sites found during document preparation or sale implementation will be protected by the Bald and Golden Eagle Protection Act.

Deer

BK-2

Address the lack of high quality deer habitat within the Project Area.

Response:

The DEIS acknowledges (3-72) that "The habitat in the project area is not capable of supporting large numbers of deer because this area on Kupreanof Island lacks large contiguous stands on high volume timber

with high quality browse that deer rely on to provide cover and forage."

Proposed units were evaluated by conducting Alaska Department of Fish and Game (ADF&G) Quick Cruise plots within the project area, which evaluated the quality of available winter habitat within the project and depicts the relative quality of the winter deer habitat. These plots rated the quality of winter habitat from 0 to 100, 0 being the poorest and 100 being the best. The results indicated scores range from the low 30's to the low 70's within the project area. The importance of the higher value habitat was considered in the final design of the proposed action. Units with the relative highest deer habitat within the proposed units were removed from the alternative and the second highest units were recommended for partial harvest (see Central Kupreanof Timber Sale Issue Development and Alternative Review in project record). On page 3-67 of the DEIS, the methods section discussed use of deer quick cruise plots and how the results were analyzed. Again, habitat with the highest total scores was evaluated to make sure connectivity exists on the landscape. The methods discussion in the FEIS will be expanded to include more of this information.

The majority of coarse canopy and consequently high volume strata within the project area is protected in old-growth reserves.

GP V-11, State WC-8

The analysis of POG was not sufficient to back up judgments that were made regarding deer habitat; analysis should include deer habitat capability.

Response:

See the discussion under "POG Analysis" in this response to comments. The methods section in the FEIS was expanded to include the rationale as to why POG was chosen as a unit of measure for this project area.

GP V-13

Explain how partial-cut prescriptions protect deer winter habitat.

Response:

Historic partial harvest treatments (50 percent retention) on the Tongass National Forest studied by Deal (2001) show that these treatments could provide deer food and habitat better than clearcut treatments. The light (1-25 percent basal area) and medium (26-50 percent basal area) cutting intensity plots did not differ significantly in community structure from the uncut plots. Partial harvest stands do not show the dramatic rise and fall of blueberry abundance in stands 20 to

80 years after clearcutting. Deal also noted that the decrease in blueberry abundance following partial harvest was small when compared to that of clearcutting. Community plant structures in the forest of Southeast Alaska appear to be resilient to moderate ranges of partial cutting (up to 50 percent basal area removal). Overall, partial cutting maintained diverse and abundant plant understories comparable to the plant communities typically found in old-growth stands (Deal 2001). Alternative 2 incorporates partial harvest with 50-60 percent retention in several units. These units would retain structure of the existing tree stand and help maintain wildlife values including potential travel corridors.

Within the next 50 years, it is predicted that the deer habitat values in these stands would return to what they are presently (Deal and Tappeiner 2000, Deal 2001).

SCS VI-10

Commenter does not think the deer model should be used. There is not an adequate discussion of deer habitat carrying capability, and the cumulative effects analysis needs to explain the lack of habitat in partial harvest units, winter related deer mortality, and climate change.

Response:

According to Hanley and Friberg (2009), all SDM categories are not equal. They found that grouping the seven SD classes into three supra-classes made sense statistically for the winter seasons. They placed SD4H in the small tree category because it produces the highest amount of deer forage during winter months (if it is available). The second category they called medium tree, which is composed of SD4S, SD4N, SD5H, SD5S and SD5N. Finally the large tree group, which comprised SD67, produced the lowest amount of winter forage for deer. These three supra-classes make up POG and this analysis shows that the best winter habitat is comprised of small and medium tree categories and the lumping of all POG into suitable habitat is consistent with the best science available to predict alternative effects on deer winter habitat. While looking at the currently available studies on deer in Southeast Alaska, one thing becomes evident; the categories that make the up medium tree class provides good deer winter habitat and grouping the POG together creates a conservative approach to deer habitat during the winter (Schoen and Kirchhoff 1990, Doer et al. 2005, Farmer et al. 2006 and Schoen and Kirchhoff 2007 found in the Nature Conservancy Publication 2007). This analysis tiers to the Forest Plan Standards and Guidelines that require the consideration of Sitka black-tailed deer habitat needs as part of project analysis. As

such, the reduction of POG habitat was used to analyze effects of all action alternatives.

The Subsistence section in Chapter 3 of the DEIS talks about the effects of harsh winters on deer mortality (3-89 and 90) which has been expanded in the FEIS. Brainard (2007) provided a summary of transect efforts and snow conditions. During the spring of 2007, the Wrangell and Petersburg Ranger Districts conducted deer mortality transects over much of Game Management Unit 3. Transects were conducted on Zarembo, Woronkofski, Etolin ands Wrangell Islands on the Wrangell Ranger Districts; and Kuiu, Kupreanof, Mitkof and the Mainland on the Petersburg Ranger District. On Wrangell, the mortality averaged 0.8 deer/mi of transect. On Petersburg, the mortality averaged 0.4 deer/mi of transect.

During the winter of 1971-1972, over 221 inches of snow was recorded in Petersburg, Alaska. The majority of snow fell during the months of December (51.3 inches), January (48.9 inches) and February (54.3 inches) with an additional 35 inches in March. While talking to colleagues who were working in the Petersburg area at that time, the snow covered almost all of the browse species that deer need to sustain them. It remained this way until late May, early June (Gerdes, Pers. Com. 2007).

During the most recent winter, (2006-2007) we again had record snowfall (225 inches) in the area surrounding Petersburg. This snowfall occurred in a different manner. The high snow months occurred in November (62.7 inches), and again in March (87.8 inches). During the months of December (25.3), January (24.1 inches) and February (23.9 inches) snow levels were much lighter. Even with the high snowfall in March, the blueberry bushes were still not covered with snow and the snow melted around the tree bases. Deer tracks are evident and quite numerous in the snow as high as 500 feet in elevation. It appears the predicted high deer mortality due to the extreme snowfall conditions during this past winter did not occur. The Deer Mortality reporting data sheets for all transects are included in the planning record (Brainard, 2007).

The effects of climate change are beyond the scope of a project analysis. Effects of climate change on wildlife resources were addressed in the Forest Plan. Changes due to climate change are difficult to predict. Species will respond to changing climates individually; some species and some individuals will be more sensitive and vulnerable than others (Millar et al. 2006). The degree of change is uncertain.

Please, also see response to comments in the Climate Change section of this Appendix.

DR-3

Harvest of timber and construction of roads decreases the value of the deer habitat in the Project Area.

Response:

On page 3-72 in the DEIS, the wildlife habitat analysis states that the project area is not capable of supporting large numbers of deer because this area lacks large contiguous stands of higher volume timber with high quality browse that deer rely on to provide cover and forage. The methods discussion in the FEIS has been expanded to include the rationale for using POG for the unit of measure. This discussion includes a better look at the existing condition of the project area. There is limited coarse canopy and high volume strata within the project area and particularly within proposed harvest units. The majority of coarse canopy and high volume strata is protected in old-growth reserves.

Proposed units were evaluated by conducting ADF&G Quick Cruise plots within the project area, which evaluated the quality of available winter habitat within the project and depicts the relative quality of the winter deer habitat. These plots rated the quality of winter habitat from 0 to 100. Units with a score of zero are considered the poorest and 100 the best. The resulting scores on the project area ranged from the low 30's to the low 70's, which indicates that the majority of the project area has moderate to low value habitat.

In the Shamrock analysis the biologist used HSI scores of 0.7 to 1.0 for good habitat, 0.3 to 0.7 for average habitat and 0 to 0.3 for below average habitat. No acres of good habitat were recorded, 8.3 percent was considered average, 72.8 percent was considered below average and 19 percent of the acreage was considered unsuitable habitat because they scored zero HSI. The Shamrock EIS used the best information available at that time. Knowledge of how animals respond to habitat alterations has expanded so differences in analysis techniques are to be expected.

DR-5

Explain how the low population of deer within the Project Area is not directly related to timber harvest.

Response:

You are correct with your detailed history. Much of this was covered in the Forest Plan (1997 and 2008). Brainard (1996) located in the planning record, addresses many of your concerns. Moose prefer different food than deer. The wolf population has increased because of the increase in prey populations (bear, moose, deer, beaver etc). Bear

populations may have increased due to the increase in forage available due to old harvest units however, there is no evidence that this has actually occurred. In fact, restrictions to black bear hunting by non-resident and non-subsistence qualified residents have been put in place to maintain the black bear populations on both Unit 2 (POW) and Unit 3 (Kupreanof, Kuiu, Mitkof etc). Food for deer is not the limiting factor for deer population. Severity of winter weather, predation, competition, and other stochastic events such as; wind storms, the size of deer rumen (which does not allow the deer to eat large quantities of food unlike moose and elk) are all limiting factors. All of these and other factors can cause deer to be below carrying capacity and thus not utilizing all the food available to them.

Goshawks

USDI-1, USDI-2, State WC-6, OVK-3 SCS VI-14, SCS VI-15

Provide information detailing considerations to ensure Goshawk protection within the Project Area.

Response:

The DEIS indicates that more information on the Queen Charlotte Goshawk is available in the Biological Evaluation. The Wildlife BE is published in Appendix E of this FEIS. The DEIS discloses that there is high probability of goshawks occurring in the project area and there is a potential for a measurable effects to population in the analysis area (p3-69). However, all applicable Forest Plan Standards and Guidelines for goshawks will be applied in conjunction with reliance on the Conservation Strategy and Old-Growth Reserves to protect the species. Field surveys for the project were completed in 2006, 2007. These surveys were conducted using the most current inventory protocols. Field survey notes can be found in the planning record. If after two years of monitoring indicates no evidence that goshawks are present then buffers around "probable nests" may be subject to timber harvest.

Nest buffers were applied to the 6 known nests in the project area in accordance with the Forest Plan (4-99). The Forest Plan FEIS discusses goshawk nest buffers in Appendix D (22-25, also last paragraph of page D-45, last paragraph of page D-47 through top of page D-48).

Marten

State WC-7, OVK-1, OVK-3, SCS VI-6, SCS VI-7, SCS VI-8, EPA-4

The DEIS does not contain enough information concerning marten.

Response:

The DEIS analyzes marten in Chapter 3 on pages 70-71. The section discusses marten habitat, including those areas with higher value (high

volume old-growth coast habitats protected by beach fringe and riparian areas protected by riparian management area Standards and Guidelines). Current road density was provided with acknowledgement that increased road miles increases hunter and trapper access and potential pressure on marten. The analysis concludes that while there may be localized effects from the proposed activities there is not an anticipated effect to the marten populations. Marten are protected by the Forest Plan Standards and Guidelines, the Conservation Strategy, Old-Growth Reserves and beach buffers. This is expected to provide the habitat and prey to support marten. The 2008 Forest Plan standards and guidelines do not require identification of high value marten habitat or winter habitat. This requirement has been replaced with the Legacy Forest Structure Standard and Guidelines. Petersburg is listed as having no VCUs where retention is required (p. 4-90 and FEIS p. 3-279).

Wolf/Road Densities

State WS-6, GP V-12, OVK-2, SCS VI-9, State WC-4, GP V-10, GP V-4, SCS V-1

Address road density in the project area and its effect on wildlife.

Response:

Open road and total road densities for the project area are provided on page 3-72 of the DEIS and in Chapter 3 of the FEIS. It is recognized that increased road building may provide additional access for hunters/trappers. Road density was displayed at the project level because it is considered a closed road system and the smaller area would be more sensitive to project-level changes in miles of road. In response to comments, total road densities were run at the project level, Kupreanof Island-wide and at the biogeographic province. Total road densities for this analysis include open and closed NFS roads, as well as any private or State roads within the appropriate boundaries. Road layers of private and State roads may not be complete, for instance, Kake Tribal roads and actual densities may be higher. Municipal roads for Petersburg and the City of Kake were not included in the calculation. The following table provides the road densities at the different landscapes. Road densities can be found in the Wildlife section in Chapter 3.

Road densities (mi/mi2)	Alt 1	Alt 2	Alt 3	Alt 4
Project Area Open Road	0.27	0.31	0.41	0.28
Project Area Total Road	0.33	0.36	0.44	0.33
Kupreanof Island Total Road	0.22	0.23	0.25	0.22
Mitkof/Kupreanof Biogeographic Province Total Road	0.31	0.32	0.34	0.32

In consultation with ADF&G, concerns over different road density calculations, within the biogeographic province, were discussed. Roads were decommissioned or put into storage with the Scott Peak timber sale and additional roads in the biogeographic province have been closed using decommissioning and storage since the Scott Peak sale was analyzed. ADF&G specifically cited road densities published in the Scott Peak Timber Sale FEIS. In the Record of Decision (2006) for the Scott Peak FEIS, the erratum corrected (from the FEIS) the road density for all roads (including private and state) less than 1,200 feet for the Mitkof/Kupreanof Biogeographic Province as currently 0.44 miles per square mile. It also calculates cumulative effects road density of 0.456 miles per square mile.

The DEIS cites the Forest Plan discussion of habitat carrying capacity for the Biogeographic Province (p. 3-72) in both the 1997 Forest Plan and the 2008 Forest Plan Amendment (analyses which used the deer model). It concludes with implementation of any action alternative, deer would still average between 17 and 15 deer per square mile. The 2008 Forest Plan suggests using the most recent interagency deer habitat capability model for this analysis “unless alternate analysis tools are developed” (4-95). For this project, deer habitat was analyzed using Productive Old-Growth (POG) and utilizing the ADF&G Quick Cruise habitat plots in connection with local knowledge and field validation of deer habitat conditions.

Partial cuts are believed to maintain stand structure similar to un-cut old growth stands and the cutting had no significant effects on tree species composition (Deal and Tappeiner 2000).

Black Bear

OVK-4, SCS VI-4, SCS VI-5

Concern was expressed that black bears need to receive additional protection as black bear sport hunting has increased, and they are sensitive to harvest and road building activities.

Response:

We agree that riparian buffers are important to bears. All salmon streams are protected by Forest Plan S&Gs.
Currently ADF&G monitors the bear harvest on Kupreanof Island with a two bear limit per resident with an average of 28 bears taken per year from 1998 to 2007. Alaska Department of Fish and Game has given us no indication of any black bear restrictions forthcoming within the project area. While specific brown bear Standards and Guidelines were established in the Forest Plan, specific black bear Standards and Guidelines have not been established by the Forest.

Subsistence

State WS-7, OVK-6, SCS VI-21

Expand the discussion of subsistence use for the residence of Kake and how it may be impacted by further harvest activities.

Response:

Goldschmidt and Haas provide maps of lands belonging to tribes of the Tlingit and Haida (1946) and specifically of the claims of the Natives of Kake (Chart 13). These maps show traditional and customary use of northern Kupreanof, Kuiu, the southern western shores of Baranof and the southern part of Admiralty Island. The Subsistence section in Chapter 3 discusses subsistence use areas of Kake, focusing mostly on the 5 WAAs identified in the Forest Plan. The Central Kupreanof FEIS has expanded this discussion to include use areas on Kuiu and Baranof. It now also includes information on how reliance on the resources of Admiralty has increased while access remains difficult for residents, especially in the winter hunting months.

WS-8, SCS VI-22

Consider the effects on subsistence from other planned timber harvest activities in areas adjacent to the Project Area, such as the north end of Kuiu Island.

Response:

The wildlife habitat analysis considers adjacent areas of timber harvest in identifying cumulative effects. The DEIS under “Resource Analysis Area” specifically states that “It is possible animals move between Kuiu Island and Kupreanof Island, as a result several WAAs from Kuiu, as well as the WAAs from the Central Kupreanof project area will be included in the analysis” (DEIS p. 3-66). On page 3-84 under

"Cumulative Effects: WAA," it states the analysis included seven WAAs with three on Kuiu, as well as four WAAs on Kupreanof covering the Native Corporation lands (and past harvest of) near Kake. The analysis includes effects of timber sales at Kuiu, Threemile, and Crane Rowan. The DEIS discloses at this WAA level up to 28.3 percent of POG could be harvested cumulatively. The FEIS analysis has been updated to exclude the Threemile Timber Harvest as this is no longer a valid NEPA decision therefore reducing predicted reasonably foreseeable future cumulative effects.

The cumulative effects also analyzes effects at the Biogeographic Province including timber harvest on private lands and such timer sales as Bocephus, Scott Peak , Lindenburg, Finger Point, Overlook and Woodpecker timber sales. The analysis shows that up to 30.2 percent of POG could be harvested cumulatively.

GP V-12, GP V-12a, State WC-8

Expand the discussion relating to deer habitat capability.

Response:

The Forest Plan Standards and Guidelines referred to specifically talks about the management of the wolf (S&G XIV.A.). The DEIS cites the Forest Plan discussion of habitat carrying capacity for the Biogeographic Province (p. 3-72) in both the 1997 Forest Plan and the amended 2008 Plan (analyses which used the deer model). It concludes with implementation of any action alternative, deer would still average between 17 and 15 deer per square mile. The 2008 Forest Plan suggests using the most recent interagency deer habitat capability model for this analysis "unless alternate analysis tools are developed" (p. 4-95). For this project, deer habitat was analyzed using productive old-growth (POG) and utilizing the ADF&G Quick Cruise habitat plots in connection with local knowledge and field validation of deer habitat conditions.

SCS VI-20

Provide a more complete evaluation of access issues for subsistence uses, non-rural users and a growing guided sport hunting industry.

Response:

Currently there are no outfitter/guides permitted for the Kake road system. The DEIS discloses the effects of access to subsistence uses including potential changes in competition (Chapter 3). Subsistence hearing meetings were held in both Kake and Petersburg, Alaska during March 2009. While testimony in Kake included concerns about

maintaining current roads for subsistence and recreation access, no one testified that there is too much or too little motorized access available to users. The District wide Access Travel Management Plan will look at access across the entire Kake road system as well as across the District. This NEPA document will include intensive public involvement to better understand what roads are being used for subsistence and recreation activities, what roads are less important to these activities and what other access needs communities may have. See above response to "Traditional and Customary use areas; Use of Admiralty."

SCS VI-23

Provide a detailed discussion of competition from predators for deer and how this affects subsistence deer harvest.

Response:

Competition between predators and deer was analyzed at the Forest Plan level. Deer populations have rebounded from the winter kills of the late 1970s and early 1980s. Kuiu Island and Kupreanof Island have different prey patterns and differing predator relationships. Black bears are much more prevalent on Kuiu than on Kupreanof Island. Because of the winter kills subsistence patterns changed from Kuiu to Admiralty Island. While the population of deer has not returned to the pre-die off levels they have rebounded substantially. Subsistence hunters have not returned to Kuiu because of the hunting limit (2 buck deer) opposed to the hunting limit on Admiralty (5 deer), in addition to the length of the season (four months on Kuiu, six months on Admiralty).

SCS VI-19

POG analysis does not fully evaluate the effects to all subsistence resources. Commenter requests a reevaluation of the finding.

Response:

The evaluation of subsistence wildlife species within the project area is found in Chapter 3 of the DEIS (p.3-87 through 3-93). This evaluation refers to the habitat analysis found in the Wildlife section of Chapter 3. This section discusses wildlife species, such as black bear, wolf, deer and marten. The effects of timber harvest on wildlife habitat were analyzed by comparing changes in Productive Old Growth (POG) using the Size Density Model (SDM).

Page 3-89 of the DEIS determines that no significant effect of salmon, other finfish or invertebrate habitat capability is expected from implementation of any alternative. Reference to the analysis in the

essential fish habitat evaluation for this determination has been added.
A discussion specific to fisheries and invertebrate subsistence uses, including access, has been added to the subsistence section.
A discussion of vegetative subsistence uses has also been added in the FEIS to the Subsistence section in Chapter 3.

State ANILCA-3

Reference where in the DEIS information pertinent to ANILCA regulations is located.

Response:

Page numbers have been included to reference the subsistence analysis leading to subsistence conclusions contained in other sections of the FEIS. For example, the wildlife habitat analysis of POG can be found in the Wildlife section.

SCS VI-24

Concerns were expressed that concentrated cumulative harvest was affecting subsistence use areas of the Kake and Petersburg in respect to other Southeast communities.

Response:

Currently across the Tongass National Forest, several timber sales are being planned or implemented affecting various Southeast Alaska communities such as Thorne Bay, Craig, Hoonah, Ketchikan and Wrangell. Land Use Designations and their proximity to Southeast communities were allocated and analyzed in the Forest Plan.

Old Growth Reserves

DR-1

Commenter is concerned that the OGRs for VCU 4360 and 4350 do not provide suitable winter habitat for deer and moose.

Response:

During the 2008 Forest Plan development, the Forest worked with ADF&G and USFWS to complete a more comprehensive review and mapping effort concerning small old-growth reserves for the 2003 Forest Plan Supplement. Appendix D of the Forest Plan explains that these interagency designs were further reviewed by Ranger District staff and final refinement made by the Forest Supervisor. Appendix D explains that "this refinement process was conducted in order to consider multiple-use objectives in addition to pure biological ones" (FEIS Vol. II p. D-28). All small OGRs were adjusted to meet the criteria found in Appendix K of the 1997 Forest Plan. Small OGRs should include about 16% of a VCU land base, of which 50% should

be productive old-growth (volume class 4, 5, 6, and 7). As a result of the 2008 Forest Plan process, OGR locations were generally finalized for most small OGRs, including those within the Central Kupreanof Project Area.

DR-2

Commenter is concerned that road building will provide new corridors for predators to travel.

Response:

As explained in DR-1, small OGRs were adjusted during the Forest Plan Amendment. The OGR spanning VCUs 438 and 436 is within a Timber Production LUD. Originally the small OGR was located further south. The movement to this higher value habitat was a conscious decision. It is recognized that timber harvest and road building in the surrounding Timber Production LUD, according to the Forest Plan LSTA and evident in this specific project planning, can and will occur right up to the borders of the small OGRs. There are no buffers. It is recognized that increased road building may provide additional access for hunters, trappers and predators.

State WC-1, SCS VI-16

Provide a higher quality LUD map with information regarding OGRs in relation to proposed units, and disclose whether the Project Area OGRs were the ones designed by the interagency biologist team.

Response:

Roads will be added to the LUD map, Figure 1-2 in the FEIS. During the 2008 Forest Plan development, the Forest worked with ADFG and USFWS to complete a more comprehensive review and mapping effort on small old-growth reserves. Appendix D of the Forest Plan explains that these interagency designs were further reviewed by Ranger District staff and final refinement made by the Forest Supervisor. Appendix D explains that “this refinement process was conducted in order to consider multiple-use objectives in addition to pure biological ones” (FEIS Vol. II p. D-28). As a result of this process, OGR locations were generally finalized for most small OGRs, including those within the Central Kupreanof project area.

State WC-5, GP V-17. OVK-3, SCS VI-17, SCS VI-18

Explain the effects of habitat fragmentation, naturally occurring and man made, as related to OGRs and connectivity within the project area.

Response:

The DEIS discloses that landscape connectivity was analyzed for this project and the FP S& G (Forest Plan p. 4-91) was applied. The DEIS explains that landscape connectivity is maintained in the project area through the existence of non-development LUD, OGRs and beach fringe areas. Small OGRs were adjusted during the 2008 Forest Plan. According to the conservation strategy these adjustments provide for landscape connectivity (Forest Plan FEIS Appendix D). In designing the proposed action, additional consideration to connectivity was given by looking at the results of the deer quick cruise plots taken in the project area. Units with higher total quick cruise plot scores were dropped or prescribed for partial harvest methods to allow for better connectivity. The Forest Plan standard and guidelines do not require specific analysis methods in looking at connectivity. The analysis conducted complies with the Forest Plan standards and guidelines. The issue of connecting Prince of Wales Island with Kupreanof Island is not well understood as there is a large body of water between these two islands. Regardless this concept is beyond the scope of this project and should be addressed (if needed) at the Forest Plan level.

Productive Old Growth (POG) Analysis

GP V-2, GP V-6, GP V-7, SCS VI-2, SCS VI-3, SCS VI-5a

Commenter's feel that the wildlife analysis in the DEIS was not sufficient and do not agree with POG as a sufficient analysis tool.

Response:

Coarse canopy was evaluated during the initial stage of wildlife inventory and analysis. It was clear that the amount of coarse canopy depicted within the harvest units was limited and that the majority of coarse canopy in the project area was protected by the old-growth reserve system. High volume strata when depicted within the project area looked a lot like the coarse canopy. Because of the limited amount of this habitat type, the effects on coarse canopy and/or high volume strata would not provide a measurable difference between alternatives nor provide the decision maker with a meaningful comparison of alternatives/effects on wildlife.

Deer quick cruise plots were recorded in the majority of the unit pool which scores habitat from 0 to 100. Results were analyzed and the habitats with the highest total score were evaluated to make sure connectivity exists. Connectivity was evaluated in the project area

using POG and connectivity will be maintained. See IRI crew survey results in project record.
Looking at the reduction of POG provides a way to measure effects to wildlife as well as to display the amount of habitat that is no longer available to a suite of wildlife species. This approach provides a clear comparison of alternatives. A brief discussion of the relevant species' habitat preferences and requirements is also included in the FEIS.

It is recognized that the use of POG as the unit of measure for wildlife habitat is a broad tool and does not address specific seasonal habitat use of wildlife species. However, while there have been attempts to define the limiting winter habitat of various species, field studies are showing use occurring in all volume classes. Depending on winter severities, while volume class 6 and 7 provide snow cover, these stands offer little foraging opportunities. There may be many winters that volume class 5 stands, which provide some snow cover as well as large amounts of food, play a more important role in winter survival than the coarse canopy stands. There is still much to discover and understand about the relationship between wildlife species and their habitat use. In this particular project area, as discussed above, using productive old-growth makes sense to compare the effects of alternatives when the main effect to habitat in the project area is the reduction of a generalized productive old-growth base.

Effects were analyzed at various scales including the biogeographic province, multiple WAAs, and at the project level. Wildlife recommendations were addressed in the silvicultural prescriptions. These recommendations will be identified in the unit cards in the FEIS.

This project is consistent with Forest Plan direction involving landscape connectivity found on page 4-91.

Roads

State ANILCA-1

Commenter recommends allowing short-term limited access to temporary roads associated with the Project Area.

Response:

Temporary roads are built and authorized for use by the timber purchaser for the sole purpose of accessing timber. Temporary roads are at no time open to the public and are decommissioned after timber harvest. We have clarified and corrected information on the potential miles of increased access. However, the proposed new NFS and reconstructed roads would be closed with five to ten years after the completion of timber harvest.

State ANILCA-2

If closing roads associated with the project will restrict the public's subsistence access to those roads a formal closure process (ANILCA 811) would need to be followed.

Response:

The DEIS was clear in the intention that new and reconstructed NFS roads would be closed within five to ten years after timber harvest. This document is intended to give formal notification that while roads may be open to public use in the interim, ultimately the objectives for these roads are closure. ANILCA hearings were held in March (in both Kake and Petersburg). If an action alternative is selected and before physical closure of any road, the Forest Service will post public notices of specific road closures and dates per the Central Kupreanof Final EIS and Record of Decision. See Transportation section for an analysis of road construction activities. Roads are also discussed in the RAP, which will be forward for analysis in the District wide Access and Travel Management document.

We recognize people from Kake are going to Admiralty Island for subsistence uses. The Central Kupreanof DEIS and FEIS analyze the impacts of subsistence use for only the Kuiu/Kupreanof subsistence analysis area.

GP V-8

Address the impacts of road building and delayed road closures on wildlife.

Response:

Motorized access will increase during the sale and for up to ten years after timber harvest activities. The DEIS recognizes increased road building may provide additional access for hunters and trappers (3-72). The DEIS states this effect for marten, deer and wolves as well as access to all subsistence resources. Refer to discussion in Chapter 2 detailing the relationship between the ATM and this FEIS.

SCS V-1

Provide a discussion of road densities below and above 800 feet.

Response:

A table and discussion was added to the FEIS disclosing road densities for the project level, Kupreanof Island and the Mitkof/Kupreanof biogeographic province. The majority of the Central Kupreanof project is located at low elevations. Person (et al. 1996, 2001) stated that wolves spend the majority of their time below 1200 feet in

elevation. Wolf populations do not generally suffer when road densities are held below 0.7 to 1.0 miles per square mile (Person 1996, 2001, 2008; USDA 2008) as measured at the biogeographic province level. The Mitkof/Kupreanof Biogeographic Province has at most a road density of up to 0.44 miles per square mile, depending on which action alternative is selected. This road density was calculated for the entire biogeographic province for all elevations. The miles of road above 1200 feet would not count toward this road density and therefore this analysis would be more conservative approach.
The DEIS discloses in Chapter 3 the direct, indirect and cumulative effects on wildlife for this project using the measurement index of percent change in productive old-growth. Road densities and landscape connectivity were considered. Forest Plan standard and guidelines were specifically applied to the project area and proposed activities. Chapter 3 discusses the methods of analysis used for this project and the rationale for that method (discussion expanded in FEIS), including defining analysis boundaries and species were evaluated for further detailed analysis. Over two years of site-specific field resource inventory data was collected for this project and used to complete the project specific analysis.

This document does tier to the Forest Plan. The Forest Plan sets the stage for how we address issues. Scientific resources and literatures were used and cited in this analysis. Please refer to the literature cited in the Wildlife section of the DEIS and in the literature cited section of the Wildlife Resource Report.

See also Wolf/Road Densities in this section.

Wildlife Retention

DR-6, DR-7

Commenter would like wildlife retention areas to be incorporated into this Project.

Response:

Retention was provided by Forest Plan Sag's, OGRs (small OGRs in each VCU), silviculture prescriptions in various units (see Unit Cards in Appendix B of the DEIS, as well as Alternative Maps in Chapter 2), and travel corridors. Proposed units were evaluated by conducting Alaska Department of Fish and Game (ADF&G) "Quick Cruise" plots with in the project area which evaluated the quality of available vegetative habitat within the project. In consideration of additional landscape connectivity within the project area and deer habitat, units with the highest scores were either dropped from the proposed action or prescribed with partial harvest.

Specifically for the proposed action, Units 271, 272, and 314 were

dropped for connectivity and a portion of 273 was dropped as well. Unit 315 was prescribed for 50 percent retention.

DR-8

Commenter would like to know the number of acres of Class 6 and 7 old-growth that are reserved for deer and moose.

Response:

We looked at course canopy during the initial stage of wildlife inventory and analysis. We did not provide this map in the DEIS because after initial evaluation, it was clear that the amount of coarse canopy within the harvest units was limited and that the majority of coarse canopy in the project area was mainly protected by the Old-Growth Reserve system. High volume strata looks a lot like coarse canopy with the inclusion of volume class 5 and steep slopes >55%. There was not much high volume strata being affected by proposed harvest and road building to make a meaningful comparison of effects between alternatives. In consultation with the State, we have included in the project record, a map of coarse canopy as well as high, medium, and low volume strata in the project record.

Wildlife Effects

DR-11

Analyze the effects of road building and timber harvest on the wildlife populations within the Project Area.

Response:

Open and total road densities for the project area are provided on page 3-72 of the DEIS. It is recognized that increased road building may provide additional access for hunters/trappers and therefore with easier access, may create additional pressure in new areas. Cumulative total road densities for the project area, Kupreanof Island, and for Kupreanof/Mitkof Biogeographic Province by alternative have been included in the FEIS (see also response to “Wolves/Road Densities” in this Appendix). The Subsistence section in Chapter 3 disclosed the effects of the project on access to wildlife resources and potential changes in competition.

GP V-5, SCS VI-1

Conduct an analysis on the full range of MIS species to be impacted by this project.

Response:

The DEIS explains the methods of analysis for this project in Chapter 3 beginning on page 3-66. The appropriate method and level of analysis needed to determine potential effects are influenced by a number of variables, including presence of species or habitat, the scope and nature of the activities associated with the alternatives and risk that are known or expected to occur within the project. Table 3-19 displays the screening process for those species that need further detailed analysis. Pages 3-68 to 3-69 discusses further the analysis that can be found in the Biological Evaluation (to be published in Appendix E of this FEIS) as well as those species that are protected by the Forest Plan (conservation strategy, matrix of non-development lands, and standards and guidelines).

Volume Strata/Coarse Canopy

USDI-3, State WC-2, State WC-3, GP V-17

Revise maps for the FEIS to show coarse canopy, volume strata, and where OGRs are in relation to harvest units.

Response:

When initially looking at coarse canopy during the initial stage of wildlife inventory and analysis it was clear that the amount of coarse canopy within the harvest units was limited and that the majority of coarse canopy in the project area was protected by the old-growth reserve system. We also looked at high volume strata, which looks a lot like coarse canopy with the inclusion of volume class 5 and steep slopes >55%. Again when depicted on a map, there was not much high volume strata being affected by proposed harvest and road building to make a meaningful comparison of effects between alternatives. Volume strata (POG) is depicted in the DEIS in Figures 3-2 as well as Figures 2-1, 2-2, 2-3, and 2-4. POG as depicted would be affected by proposed activities and offers a meaningful comparison between the effects of alternatives.

According to Hanley and Freiberg (2009), all SDM categories are not equal. They found that grouping the seven SD classes into three supra-classes made sense statistically for the winter seasons. They placed SD4H in the small tree category because it produces the highest amount of deer forage during winter months (if it is available). The second category they called medium tree, which is composed of SD4S, SD4N, SD5H, SD5S and SD5N. Finally the large tree group, which comprised SD67, produced the lowest amount of winter forage for

deer. These three supra-classes make up POG and this analysis shows that the best winter habitat is comprised of small and medium tree categories and the lumping of all POG into suitable habitat is consistent with the best science available to predict alternative effects on deer winter habitat. While looking at the currently available studies on deer in Southeast Alaska, one thing becomes evident; the categories that make the up medium tree class provides good deer winter habitat and grouping the POG together creates a conservative approach to deer habitat during the winter (Schoen and Kirchhoff 1990, Doer et al. 2005, Farmer et al. 2006 and Schoen and Kirchhoff 2007 found in the Nature Conservancy Publication 2007). This analysis tiers to the Forest Plan Standards and Guidelines that require the consideration of Sitka black-tailed deer habitat needs as part of project analysis. As such, the reduction of POG habitat was used to analyze effects of all action alternatives.

After consultation with the State there is now included in the project record for the FEIS, a map of coarse canopy as well as high, medium and low volume strata. This additional review of coarse canopy and high volume strata again supports our decision to analyze productive old-growth (POG) as a tool to evaluate action alternatives.

General

GP V-16, OVK-3, SCS VI-12, SCS VI-13

The FEIS needs to expand the discussion dedicated to endemics and small mammals.

Response:

The DEIS in Chapter 3 discusses endemics, listing species known to occur in the project area and citing numerous scientific studies. A qualitative analysis follows in the DEIS, disclosing effects to small mammals from the removal of productive old-growth. The discussion also includes how the Forest Plan's conservation strategy and matrix lands, specifically on Kupreanof Island, provides protection for endemics. In accordance with the Forest Plan Standards and Guidelines (Forest Plan 4-97 XIX), existing information was adequate and used to assess project-level effects both qualitatively and with the POG analysis.

GP V-9

Explain what the term "vegetation treatments" as used in the DEIS, refers to.

Response:

The DEIS refers to the Project Common to all Action Alternatives when talking about potential vegetation treatments. This is the precommercial thinning or pruning designed with the wildlife biologist

to achieve habitat enhancement for second growth management that could be part of stewardship contracting opportunities in the project area.

GP V-15

Explain why there were no surveys, or analysis completed for the Marbled murrelet in association with this project, and conversely why Kittlitz's murrelet was included in the DEIS.

Response:

Forest Plan standards and guidelines for the marbled murrelet require that "if nests are found during project implementation maintain a 600-foot (circular) radius of undisturbed forest habitat surrounding identified murrelet nests, where available. Minimize disturbance activities within this buffer during the nesting season (May 1 to August 15). Maintain the buffer zone and monitor the site for nesting activity for not less than two nesting seasons after nest discovery. A buffer will be maintained if the nest site is active during the monitoring period. Buffer protection may be removed if the site remains inactive for two consecutive nesting seasons. It is recognized that nesting habitat relationships are poorly understood as well as the life history requirements and distribution.

The Kittlitz's Murrelet is considered for the protection and maintenance of known Kittlitz's Murrelet nesting habitats, as directed by Forest Plan standard and Guidelines for Sensitive Species (p. 4-100).

AFA-2

Commenter feels that the protections provided to wildlife are excessive.

Response:

This refers to the implementation of the Forest Plan, the conservation strategy, and the standards and guidelines. Decisions to consider deer habitat, landscape connectivity, road density considerations, legacy habitat, nest buffers, and old growth reserves were made in the Forest Plan Record of Decision (2008). This project is in compliance with the 2008 Forest Plan.

Alaska Forest Association

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February 2, 2008

Chris Savage
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USDA Forest Service
PO Box 1328
Petersburg, AK 99983

Kupreanof comments

AFA-1

1. A rough appraisal of your proposed action alternative (#2) indicates a purchaser would lose $86 per mbf if the sale were purchased at base rates. This loss could be reduced to $74 per mbf if all of the helicopter volume were dropped. The proposed 3 mmbf is too little volume to justify mobilizing a helicopter operation anyway.
2. Alternative #4 appraises only $48 per mbf below breakeven, so it seems to make more sense to work from alternative #4. Still, a lot of change will be needed to make this a viable timber sale.

AFA-2

3. The wildlife habitat remarks we made for the Logjam DEIS comments are applicable for this project as well:
    a. Increased logging in the area will increase the amount of browse and allow deer populations to increase. The deer can survive even harsh winters because of all the many stream buffers and other reserves where the snows will be less deep than in the open. The increased browse extends into these buffers and reserves and thus further improves the deer winter habitat. Further, the young-growth stands on the hillsides provide deer winter habitat after about 30 years. There are many such stands in the area.
    b. The wildlife in the area do not need “travel corridors”; they normally utilize the roads for travel, even when the “corridors” are available.
    c. Subsistence hunters will benefit from the improved deer habitat and the improved access provided by the roads – even after the roads are closed.
    d. The closed canopy concerns about deer are often greatly exaggerated. Most 30 to 40-year old young-growth stands show significant deer use, even in the winter. Often the deer will winter in older timber above the young-growth stands. This is particularly the case in east, south and west facing slopes. There is often less browse in the older young-growth (more than 40-years old), but that is more than offset by the increased browse on steep hillsides and along the harvest boundaries where the sunlight can reach to the forest floor. Once the young-growth timber reaches maturity (about 100-years), it should be harvested again and the cycle of improved deer habitat will repeat. If logging is not allowed to continue, then the deer habitat will gradually decline to the pre-harvest levels and that would be sad.
    e. The deer habitat model doesn’t seem to work. I think the Forest Service should contract with an unbiased third-party to develop a reliable, accurate deer habitat model.
    f. Wolf and marten populations can best be maintained through the State hunting and trapping rules, not through limiting the amount of access roads.
    g. The Legacy habitat guidelines are unnecessary. A better conservation strategy would be to set aside some untouched areas and fully manage the rest of the forest. The Legacy guidelines also result in much higher logging costs, much slower regrowth and the trees left standing in the harvest areas create additional hazards for our workers. People’s safety is much more important than this questionable habitat strategy.

h. Birds know how to build nests. It is not necessary to leave trees and buffers to protect the nests, because if a nest is lost, the birds will construct a new one!

i. Squirrel populations are not threatened by the minimal amount of logging that has been allowed on the Tongass. Remember, we have harvested only about 8% of the commercial timberland and 4% of the total timberland on the Tongass in the last 100 years.

AFA-2

j. Grouse populations appear to have increased in the 30-years I have been working in the Tongass. The increased hunting pressure mentioned in the DEIS can be managed through the State hunting regulations.

k. The Old-Growth Reserves, travel corridors and beach fringes are unnecessary in a forest where 92% of the original old-growth forest remains untouched and much of it is in congressionally protected status. Several agency biologists admit privately that all of these wildlife habitat protections are unnecessary, but the biologists don't want to "give-up" the additional protections and, since they are paid by the government, they don't really care about the economic consequences of the protectionist excesses that are borne primarily by the people working for private industry.

AFA-3

4. The modest decline in industry employment indicated on page 3-11 ignores the enormous decline that the industry has endured since 1990 when the volume of timber under contract began to plummet. The decline in employment is due to a lack of economic timber supply, nothing else.

5. We are not worried about impacts on the inventoried roadless areas in the project area because there are very large congressionally designated roadless and wilderness areas a short distance north, south, east and west of the project area.

AFA-4

6. Page A-15 includes a statement that "*The goal for Pool 3, volume under contract, is to maintain timber volume at approximately three times the amount of annual projected harvest. This allows the purchasers to have a continuous supply of timber volume available for harvest so they can plan their operations and be flexible to allow for weather conditions and market fluctuations*" The goal should be to provide a three-year supply of timber under contract that would allow the industry to achieve its goal of becoming full-integrated, sustainable and competitive again. Our goal requires a lot more than 66.4 mmbf of timber annually. If the Forest Service establishes a low goal and performs at or below that level, then their goal becomes a self-fulfilling prophesy.

AFA-5

7. In your conclusion on page A-20 & 21, please also acknowledge that the Secretary of Agriculture also established a goal of restoring a fully-integrated manufacturing industry on the Tongass.

8. The Forest Service must take care to carefully balance the impacts of their decisions on various multiple-use goals including recreation, environmental protection and providing a timber supply. This requirement is particularly true in Southeast Alaska where the agency has monopoly control over the timber supply. Providing an adequate supply of economic timber cannot be ignored simply because there may be an adverse impact on another goal.

AFA-6

9. The Forest Service 2008 land management plan indicates that there are 26,437 acres of commercial old-growth timber in VCUs 4260, 4271, 4290, 4360 & 4380 (wherein resides the Kupreanof sale area). Further, the agency has provided an economic analysis (the TETRA TECH analysis) of the timber base in the land management plan. That analysis indicates that there are only 8,455 acres of positive value (economic timber) acres within these VCUs. With this many positive value acres, it should be possible to design an economically positive (profitable) timber sale with as much as 200 million board feet of volume.

AFA-7

10. We have provided critiques of both the Annual Market Demand and the longer term demand analysis that the Forest Service relies upon in Appendix A. Those critiques demonstrate significant logic and assumption errors in both of the demand procedures the Forest Service is using. We can provide the critiques again if you have lost them. In summary, the critiques support our contention that the Forest Service is grossly understating the demand for Tongass timber.

We have not had time to analyze every cutting unit in the DEIS, but we will provide more detailed information as we develop it. Meanwhile, here are our initial detailed comments.

AFA-8 1. Units 222, 223 and 224 should be dropped due to the high cost of constructing roads into these units.

AFA-9 2. Units 241, 243, 246 and 248 should be enlarged.

AFA-10 3. In units 261 and 262 we recommend you drop the helicopter volume and expand the cable logging.

AFA-9 4. We recommend you enlarge unit 265.

AFA-10 5. We recommend you drop the helicopter portion of unit 266 and expand the cable portion.

AFA-8 6. We recommend you drop units 267, 268 and 269, along with road #45895 and make up the volume along the 45803 road.

AFA-9 7. We recommend you enlarge units 270 and 272.

AFA-11 8. We recommend you add a unit between units 274 and 275.

9. We recommend you drop units 274-277 because of the poor volume recovery per mile of road.

AFA-8 10. We recommend you drop units 279-281 because of the poor volume recovery per mile of road.

We are willing to sit down with your team and discuss ways to improve the economics of this timber sale – just let us know where and when.

Thank you for the opportunity to comment.

Sincerely,

Owen Graham
Executive Director
Alaska Forest Association
111 Stedman Suite 200
Ketchikan, AK 99901

Phone 907-225-6114

Purpose and Need

Among the purposes cited for the Central Kupreanof Timber Harvest, this planning effort is purported to, "Manage the timber...in an economically efficient manner." ; and, "... seek to provide a timber supply sufficient to meet the annual market demand for Tongass National Forest timber and the market demand for the planning cycle."

Beebe-1 There is every reason to doubt the validity of these claims of purpose given the backlog of recently offered timber sales which remain unsold and on the shelves. According to timber industry representatives, such sales are repeatedly described as "uneconomic". In the past, USFS timber planners have claimed proportionality rules are to blame.

Whether or not proportionality rules are a valid excuse as to why the USFS plans "uneconomic" timber sales, if only those sales (or portions thereof which target high volume old-growth stands) dominate that which does get sold, an end-run and loophole-enabling process will have been once again, achieved by this agency.

The timber planning and sale offering process as practiced is subverting those proportionality rules.

The USFS is adept at inverting the economic logic which, in any other industry, would spell that industry's economic demise. All the while, the inverted logic of piecemeal deconstruction of the rarest, and highest value areas essential to ecosystem integrity on the Tongass continues. This has an undeniable and inescapable history of socio-economic policy failure in the larger sense of national forest mismanagement and ultimately impoverishes the same rural residents which the extremely short term benefits resulting from "development" is purportedly going to benefit.

Given the fact that over a billion dollars of timber subsidies on the Tongass have been dedicated to this supposed "industry" which currently represents less than 1% of the regional economy underscores the fact that this agency and its planning efforts on the Tongass has accomplished the exact opposite of what constitutes an "economically efficient manner" of timber-at-all-costs planning.

With the present and near future state of the global, national, and regional economies imperiled by business as usual practices; commodities markets in shambles; and the outlook of severe recession, if not depression in the current planning cycle, such standard USFS "Purpose and Need" rhetoric belies these market realities.

The notion that this timber sale will, "Provide for a diversity of opportunities for resource uses that contribute to the local and regional economies..." remains unsupported by any facts. If anything, the available facts demonstrate the opposite conclusion.

The most recent evaluation of the state of Alaska's economic policies (Alaska Economic Performance Report 2007, released, Sept.08) point out the state also has spent far more than it has received in revenues generated by the timber industry sector. Given

the amount of unsold timber remaining on the shelves, there is simply no basis for the claim that this timber sale will provide for "a diversity of opportunities" which don't already exist on the Tongass.

Beebe-1 There has been no commensurate basis for the claim, "There was local interest in timber sale opportunities" (Appendix A.3), especially to the extent that justifies a set of proposed actions which in aggregate represent of 87 mmbf., close to 31 miles of additional logging roads and over 4500 more acres of clearcuts in proximity to areas already heavily impacted by native corporate logging. The project area in its undeveloped state already possesses a naturally fragmented landscape highly vulnerable to connectivity issues resulting from timber harvest and road building.

Significant Issues Overlooked

As one of the few commenting members of the public who has a historic and ongoing awareness of commercial crab fishing activities and the crab resource in Hamilton Bay, I'd like to pass on the following observations.

Beebe-2 Absent in the DEIS discussion on Significant Issues is the very significant issue of cumulative, historical and near-future impacts to the estuary and marine habitat of Hamilton Bay, which has been heavily impacted by past timber harvest and LTF activities. These activities do not have impacts limited to the confines of the LTF boundaries.

These impacts extend far beyond the confines of the LTF boundaries as designated, and thus require far more consideration than a cursory mentioning in the DEIS. Issues of habitat degradation associated with Hamilton Bay LTF have been raised in the past and it is surprising these concerns were not being carried forward into this DEIS.

There are many benthic and sub-tidal areas of Hamilton Bay demonstrating anoxic conditions of degraded mud substrates typical of bottoms receiving pulses of organic debris deposition. This has resulted in observable and dramatic population declines of dungeness crab accompanied by a high incidence of diseased crab typical of exposure to anoxic mud. Such evidence includes crab with ulcerating lesions, weak, lethargic skipmolt crab often encrusted with barnacles and/or heavy algal or other epibiont growth; heavily discolored shell abdomens; obviously affected egg clusters; and chemically-burnt, missing, or necrotic dactyls resulting from walking across mud bottoms with low pH and a mud which reeks of the smell of rotten eggs.

Dive surveys which ascertain "recovery" of benthic and subtidal habitat within LTF boundaries on the basis of measurements of bark depth alone, as the primary indicator of substrate habitability, are absurdly simplistic given the degree to which crab are being affected by physical contact with bottoms exhibiting no evidence of bark. Without an understanding of dissolved oxygen or pH as a function of habitability of substrate the

commercially valuable dungeness crab exist in, bark depth measurements reveal very little.

The other assumption around the effects of LTF-associated organic deposition is that somehow, in an area known for >20 ft. tidal exchanges occurring within a 6 hour time period, to say nothing of freshwater flow inputs, that there would be no tidal current effect on the further distribution of toxic substrates generated by LTF activity and timber harvest. This, nevertheless, is the case and demonstrates a failure in the environmental analysis of the effects of this timber sale.

In the absence of sufficient evidence demonstrating there are no significant impacts associated with in-water storage and transportation of log bundles, it is incumbent upon this agency to restrict LTF activities to barges only, should any timber harvest activity occur as a result of this planning effort.

Impacts resulting from seasonal ingress/egress of harvested timber within Hamilton Bay during the 4 month commercial season of dungeness crab fishing have also been overlooked. Log rafts are particularly problematic to the existing commercial fishing activities resulting in expensive gear replacement and lost fishing opportunities.

Beebe-2 Incorporating a biological assessment of the marine habitat of Hamilton Bay within the effects of this timber sale is the only way to understand whether deleterious impacts have occurred up to this point. Failure to establish baseline ecological indicators of habitat health, species distribution, abundance and diversity are representative of a flawed EIS assessment of impacts associated with timber harvest.

Effects of Project on Recreation, and Tourism

Beebe-3 The vastly more important tourism component of the regional economy is being threatened as this agency makes further incursions into inventoried roadless areas in proximity to popular tourist destinations such as Rocky Pass, the Big John Bay trail and Cabin.

The expense of long distances traveled to exotic locations such as the Tongass' coastal temperate rainforest becomes harder to justify when the same devastated landscapes of the lower 48 become virtually identical to what those tourists encounter on many landscapes of the Tongass.

Localized, ecologically destructive impacts resulting from this project fall upon Kupreanof Island residents and tourism dependent businesses by undermining the island's desirability as a tourist destination.

I have serious concerns for the validity of a final decision whether to harvest timber based upon the information that is disclosed in this environmental impact statement which, in its draft form, falls far short of the obligations of the Supervisor to fully review the full scale of impacts of the Central Kupreanof Timber Sale.

Pre-commercial Thinning Waste Streams

Beebe-4 There has been very little, if any, science conducted on the ecological implications of diverting woody biomass waste streams away from clearcut sites on the Tongass. Such a diversion represents a significant development on the Tongass National Forest which in itself requires a NEPA review.

Soils are dependent upon those same materials for nutrient recycling and the same woody biomass has been shown to be important in maintaining small mammal populations in forest understory elsewhere.

Thank you for this opportunity to comment.

David Beebe
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ER08/1280
PEP/ANC

January 29, 2009

Mr. Chris Savage
District Ranger
Petersburg Ranger District
P.O. Box 1328
Petersburg, Alaska 99833

Dear Mr. Savage:

The U.S. Department of the Interior has reviewed the November 2008 Draft Environmental Impact Statement (EIS) for the Central Kupreanof Timber Harvest project. The Draft EIS evaluates three action alternatives which provide various combinations of resource outputs and spatial locations of harvest units on Kupreanof Island, Petersburg Ranger District. The project proposes to harvest 28.2 to 70.2 million board feet (MMBF) of timber from 1,327 to 3,647 acres, construct up to 25.1 miles of new National Forest System roads and 6.1 miles of temporary roads, and reconstruct up to 9.1 miles of existing system roads. The harvested timber would be hauled to the existing permitted log transfer facility at Hamilton Bay.

We request that the following comments be taken into account in the Final EIS. These comments are submitted in accordance with the National Environmental Policy Act, Fish and Wildlife Coordination Act, and the Council on Environmental Quality guidance for providing technical expertise on water, biological, and geological resources.

If you have questions concerning our comments, or if we may be of further assistance with regard to trust resource information, please contact Mr. Bill Hanson, Juneau Fish and Wildlife Field Office Supervisor, at 907-780-1170.

Sincerely,

Pamela Bergmann

Pamela Bergmann
Regional Environmental Officer – Alaska

Attachment

ATTACHMENT

GENERAL COMMENTS

Threatened and Endangered Species. We concur with the statement in the Draft EIS that no threatened or endangered species under our jurisdiction exist in the project area.

Queen Charlotte Goshawk**.** Goshawks have a high probability of occurring in the project area, with potential for measurable effects to the population in the analysis area (Chapter 3, page 69). Surveys detected unspecified "raptor" nests, which have been buffered as required by the current forest plan (Chapter 3, page 67). Current forest plan standards and guidelines (USDA Forest Service, 2008) require maintenance of an area of not less than 100 acres of productive old growth forest generally centered over identified or probable goshawk nest trees. Research on Queen Charlotte goshawks in British Columbia has documented post-fledging areas of up to 230 hectares (568 acres) (McClaren et al. 2005). We recommend that 500 acres of old forest habitat be retained around all known nest stands and that this be specified in the Final EIS.

USDI-1

Effective management of goshawk nesting habitat depends on the knowledge of nest locations. Many goshawk pairs do not nest every year, and often use alternate nest locations in subsequent years. To reduce the risk that nest stands in the project area that were inactive during the recent survey would be inadvertently impacted by logging, we recommend that additional goshawk nest surveys be conducted, with the results included in the Final EIS; and that the surveys be continued on an annual basis.

USDI-2

SPECIFIC COMMENTS

Chapter 2, Pages 20-22, Figures 2-2, 2-3, and 2-4: The volume strata (high, medium, and low) used for determining forest structure (coarse canopy, etc.) in the project area appear to have been combined and displayed as "productive old-growth" in the maps for all action alternatives (Figures 2-2, 2-3, and 2-4). It is difficult to determine the exact location of the high, medium, and low volume strata relative to the proposed harvest units. Therefore, the volume strata need to be displayed as high, medium, and low in the Final EIS maps and unit cards to more accurately and completely display the effects.

USDI-3

Chapter 3, Page 40: The Draft EIS states that the Little Hamilton Bay Log Transfer Facility (LTF) is a steel piling and concrete dock facility. It also states that the LTF would be used to barge or raft the logs to the mill. The Draft EIS (page 3-104) states that the waters adjacent to the Little Hamilton Bay LTF, including the log storage area, were placed on the Section 303(d) list of impaired waters in 1996 due to the deposition of bark and woody debris as a result of logging operations. These waters have since been removed from the Section 303(d) list in 2002/2003. A dive survey done in June 2002 found that the bay was in compliance with water quality standards for residues. However, the storage of up to 70 MMBF of timber has the potential to again exceed the residues standard. Therefore, we believe it is important that logs be barged from this LTF, and note that barging was identified as an option in the Draft EIS. The use of a

USDI-4

USDI-4 barge would eliminate the deposition of additional bark and woody debris. We believe this issue needs to be addressed in the Final EIS.

USDI-5 Chapter 3, Page 69: We believe that potential effects to bald eagles need to be analyzed in the Final EIS. Bald eagles, their eggs, and their nests are protected by the Bald and Golden Eagle Protection Act and by the Migratory Bird Treaty Act. Eagles can be sensitive to habitat alterations and disruptive activities near their nests, leading, in some cases, to nest abandonment, mortality of eggs or young, or destruction of a nest. To help land managers and others avoid causing such impacts, USFWS has developed guidelines for management of nest sites. The National Bald Eagle Management Guidelines may be downloaded at the following internet site:

http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf

USDI-6 Chapter 3, page 101: The USFS has conducted road condition surveys to assess whether road crossing structures provide unimpeded passage for fish (Draft EIS Chapter 3, page 101, USDA Forest Service, 2001). Based on the road condition information provided in Appendix B-Road Cards, we recommend installation of bridges rather than culverts to ensure unimpeded juvenile fish passage and minimize maintenance at the following locations:

- Stream crossings on Roads 45808 and 45897 with gradients of 6-15% and 18%.
- Stream crossings at mileposts 1.44, 1.58, and 1.98 of Road 45897, where channel incision depths would require substantial fill for the placement of culverts.
- The 48 inch culvert proposed for the alluvial fan channel type at mile 2.83 of Road 45897, which may be susceptible to blockage by woody debris and bedload material.

We further recommend that this information be included in the Final EIS.

REFERENCES

McClaren, E. L., P. L. Kennedy, and D. D. Doyle. 2005. Northern goshawk (Accipiter gentilis laingi) post-fledging areas on Vancouver Island, British Columbia. Journal of Raptor Research 39:253-263.

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USDA Forest Service. 2008. Tongass Land and Resource Management Plan Final EIS. R10-MB-603f.

Woodbridge, B., and C. D. Hargis. 2006. Northern goshawk inventory and monitoring technical guide. USDA Forest Service, Washington Office, Gen. Tech. Rep WO-71. 84 pp.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

February 02, 2009

Reply to
Attn Of: ETPA-088 Ref: 06-083-AFS

Forrest Cole, Forest Supervisor
Tongass National Forest
Federal Building
Ketchikan, AK 99901

Dear Mr. Cole:

The U.S. Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (DEIS) for the proposed **Central Kupreanof Timber Sale** on Kupreanof Island, Petersburg Ranger District, Tongass National Forest, in southeast Alaska (CEQ No. 20080513). Our review has been conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The DEIS analyzes four alternatives including the no action alternative (Alternative 1) and the proposed action (Alternative 2) based on timber harvest in the Central Kupreanof project area on Kupreanof Island. Alternative 2 proposes harvest of 46.8 million board feet (mmb) on 2,506 acres, up to 7.3 miles of new roads and up to 3.9 miles of temporary roads, 4 additional Class I road crossings, and 434 acres of harvest within inventoried roadless areas (IRA). The silviculture treatments include 2,063 acres of clear cut and 2,427 acres of old growth harvest. The harvested timber would be transferred to the existing Little Hamilton log transfer facility (LTF). The decision on whether or not to harvest timber from this area, and if so, the manner in which it should be harvested, will be made by the Tongass Forest Supervisor in accordance with Forest Plan goals, objectives, and desired conditions.

The EIS does a good job discussing the issues of concern, illustrating harvest units by providing unit card figures (Appendix B), and explaining the relationship to other applicable laws including tiering from the 2008 Forest Plan. We believe that the alternatives strive to respond to the significant issues associated with the project and we understand the need to balance forest economics with resource protection. Alternative 2 balances economics and resource protection and appears to have a moderate amount of potential environmental impacts. Alternative 3 has the greatest potential impacts and Alternative 4 has the least potential impacts.

Due to concerns about potential impacts to essential fish habitat and water quality from increased harvest activities, we have given a rating of EC-2 (Environmental Concerns - Insufficient Information) to this project. An explanation of the EPA rating system and detailed comments are attached to this letter.

In general, we request that the Forest Service employ the following recommendations in the Final EIS and Record of Decision for the Central Kupreanof Timber Sale:

EPA-10
- Minimize or avoid construction of new roads.
- Reconsider alternate extraction methods and minimize ground-based extraction where feasible.
- Consider methods other than even-aged treatment (clearcut), particularly in the Scenic Viewshed LUD and in sensitive watersheds.

EPA-8
- Develop monitoring plans, including in-stream measures of water quality.
- Protect biological diversity, especially that of critical habitat or unique vegetation.

EPA-9
- Prohibit activities in areas where high hazard/high mass movement index soils are present, or in watersheds identified as most sensitive.

Thank you for the opportunity to comment on this draft EIS. If you would like to discuss our comments, please contact Lynne McWhorter at (206) 553-0205 or by electronic mail at mcwhorter.lynne@epa.gov or me at (206) 553-1601.

Sincerely,

/s/
Christine Reichgott, Manager
NEPA Review Unit

Attachment 1

EPA Comments on Kupreanof Timber Sale, Tongass National Forest, DEIS

Water Quality

The EIS states that direct effects may include localized increase in annual water yield, increased peak flows, and altered timing of water delivery in streams from harvest activities. Harvest activities include clear cut of 266 acres on soils rated as high hazard for mass movement. Although, BMPs will be used to minimize adverse effects including stream buffers, these activities can introduce sediments to stream systems and alter thermal processes, consequently degrading water quality, and impacting fish and their habitat. We support the required stream buffers and minimizing road construction, clear cut prescriptions, and harvesting areas with high landslide potential.

Section 303(d) of the Clean Water Act (CWA) requires identification of those waterbodies which are not meeting or not likely to meet State water quality standards. The EIS states that Hamilton Bay was placed on the 303(d) list of impaired water bodies for debris from log transferring activities in 1996 and we are pleased to see that surveys resulted in the removal from the list in 2002/2003. The EIS discusses that barging logs would have less effect on marine species versus rafting logs, which can diminish habitat for managed marines species and their prey due to bark accumulation. It is not clear which transportation mechanism will be used for what quantity of logs. We support barging logs and avoiding impacts to marine species and recommend clarifying how much of the harvest timber will be transported by which mechanism in a separate section and including a figure illustrating the transportation route in marine waters.

EPA-1 Antidegradation provisions of the CWA apply to those water bodies where water quality standards are currently being met. This provision prohibits degrading the water quality unless an analysis shows that important economic and social development necessitates degrading water quality. The EIS should explain how the antidegradation provisions would be met for the proposed project.

Essential Fish Habitat

The project area includes federally managed species of pink, chum, coho, and sockeye as well as populations of Dolly Varden, cutthroat trout, and steelhead. Streams on the Tongass National Forest are divided into value classes from I to IV indicating levels of habitat use by fish populations. Class I indicates streams with high fishery habitat values and there are 369 miles of Class I streams in the project area. The EIS states that increased sediment delivery to streams during construction activities may affect individual fish by reducing oxygen levels to developing eggs in spawning gravels and/or trapping emerging fry in the gravel, but the effect is expected to be short-term (48 hours or less) and the use of seasonal timing restrictions will minimize impacts to fish. In addition to protecting high value habitat, another key component of protecting fish populations is culverts that allow for fish passage. The EIS states that there are 61 fish crossing characterized as red (high certainty of not providing juvenile fish passage at all desired stream flows). The risk of sediment delivery to streams is higher at road crossings and increases the potential for culverts to become plugged with sediment and debris. The proposal includes the addition of two culverts and replacement of two culverts in Class I streams and the removal of

one red culvert within 10 years of timber harvest. We support the Forest Service analysis and characterization of streams and planning efforts to protect aquatic resources. However, we

EPA-2 believe that Alternative 4 more adequately protects aquatic resources by minimizing additional roads and increasing the removal or modification of more that one red culvert.

Log Transfer Facility

EPA-3 The EIS states that the LTF is still operating under a valid National Pollutant Discharge Elimination System permit (NPDES). On October 31, 2008, the Environmental Protection Agency (EPA) formally approved the state's NPDES Program application. The state's approved program will be called the Alaska Pollutant Discharge Elimination System (APDES) Program. We recommend that the final EIS include a discussion of this shift and whether or not this may affect the current NPDES permit.

Habitat

The project area includes four old growth areas and the proposed project includes harvest of 2,427 acres of old growth habitat in three of the reserves. The EIS does a good job explaining the resource analysis area for wildlife through the use of biogeographic povinces (BP), which are geographic areas defined by the Alaska Department of Fish and Game to manage wildlife populations. This analysis tiers to the productive old growth (POG) forest habitat in the Forest Plan. The EIS states that there would be a reduction of approximately 4.2 percent POG in the project area and should not have adverse effects on wildlife. The EIS also includes a cumulative effect analysis of private land adjacent to Forest Service land and states that intensive harvest in the past occurred on these lands. We support the analysis and minimizing harvest of old growth

EPA-4 stands that support wildlife populations. In particular we recommend maintaining legacy characteristics and not conducting even age stand cuts in POG areas. We also recommend that the EIS discuss any agreements that the Forest Service has with private land owners to promote stewardship or opportunities for agreements so that watershed function and habitat can be maintained across the landscape.

Invasive Species

Invasive species can aggressively spread into areas altered by road construction and harvest activities. Nationally, as well as in Alaska, the establishment of invasive nuisance species has rapidly become an issue of environmental and economic significance. EPA strongly supports

EPA-5 weed control and management during and after harvest activities. The EIS should provide a discussion to comply with the Executive Order (EO 13112) on invasive species. The status of noxious weed projects in the project area should be described, and weed monitoring and control features should be identified.

Monitoring

As discussed above, the proposed project has the potential to impact water quality, fish, and habitat. Predicting the severity of these impacts and devising effective mitigation measures remains an imprecise science. Monitoring is a necessary and crucial element in identifying and understanding the consequences of actions. In this case, monitoring is needed to evaluate compliance with the Forest Plan and effectiveness of Best Management Practices. The EIS

EPA-6 discusses monitoring and refers to the Forest Plan as well as the BMPs associated with the unit cards in Appendix B. However, we believe that the EIS does not include an appropriate level of detail about the proposed monitoring plan. Clear monitoring goals and objectives should be identified such as what questions are to be answered; what parameters are to monitored; where

EPA-6 and when monitoring will take place; who will be responsible; how the information will be evaluated; what actions (contingencies, adaptive management, corrections to future actions) will be taken based on the information; and how the public can get information on mitigation effectiveness and monitoring results. We recommend that general components from the monitoring plan be included such as how monitoring is conducted and frequency. We also recommend that a discussion of the results of past monitoring efforts in the project area and how they affected management direction be explained in order to understand the accuracy of past predictions and success of monitoring efforts. .

Climate change

Currently, there are concerns that continued increases in greenhouse gas emissions resulting from human activities contribute to climate change. Effects of climate change may include changes in hydrology, sea level, weather patterns, precipitation rates, and chemical reaction rates. The EIS states that climate change is not essential for a reasonable choice among alternatives considered in this analysis. EPA believes that the cumulative effects analysis in the NEPA document should include changes to resources that can reasonably be anticipated due to climate change that may have bearing on aspects of the project (e.g. changes in hydrology that may affect siting of roads or sizing of culverts). Therefore, we recommend that the EIS consider how resources affected by climate change could potentially influence the proposed project and vice versa, especially within sensitive areas.

EPA-7

Consultation with Tribal Governments

The EIS states that the Forest Service consulted with the Organized Village of Kake (OVK) and the Wrangell Cooperative Association (WCA), the tribal groups that are culturally affiliated with the project area. We appreciate the inclusion of the discussion of government to government consultation and we support activities that minimize impacts to the area's Native Alaskan communities. If continuing government-to-government dialog with potentially impacted Tribes reveals that the proposed project will have impacts on traditional resources of Alaska Native Tribes or their members, the final EIS should clearly specify which resources will be impacted and what mitigation measures will be included to minimize impacts.

• ***Greenpeace*** • ***Cascadia Wildlands Project*** • ***Juneau Group of the Sierra Club*** •
• ***Natural Resources Defense Council*** • ***Eric Lee*** • ***Becky Knight*** • ***Dave Beebe*** •

February 2, 2009

Chris Savage, Petersburg Dist. Ranger
ATTN: Central Kupreanof Timber Harvest
Box 1328
Petersburg, Ak 99833
Submitted to: comments-alaska-tongass-petersburg@fs.fed.us (Comments only)
ftp2.fs.fed.us/incoming/chugtong_R10/CK_Exhibs (Exhibits only)

Subj: **Comments on the Central Kupreanof Timber Sale DEIS**

Dear Mr. Savage;

These are jointly filed comments on the Central Kupreanof Timber Harvest DEIS, by Greenpeace, Cascadia Wildlands Project, Juneau Group of the Sierra Club, Natural Resources Defense Council, and three individual residents of Petersburg, Alaska: Eric Lee, Becky Knight, and Dave Beebe. All of the organizations have long-standing interests in management of the Tongass National Forest as well as the Kupreanof Island and nearby Kuiu Island areas in particular, as you already are aware. Becky Knight and Dave Beebe submitted comments on this DEIS previously, and join these comments because of additional topics that are covered. Please find our exhibits at the ftp address above, and add them to the planning record.

We wish to begin by thanking you for using the SDM (Size-Density Model) dataset, as was done in the 2008 Forest Plan. This is the first Tongass project to use SDM to replace the Vol-Strata dataset which is unsuitable for wildlife analysis, even though several other projects have published NEPA documents or decisions after adoption of the Forest Plan.

That said, SDM was not used to its best advantage in the Central Kupreanof wildlife and subsistence analyses, and we comment critically on those analyses. The are also deep flaws concerning the purpose and need for the project, the range of alternatives, and other aspects of the DEIS. We believe the DEIS falls far short of the requirements of NEPA and that substantial additional work is needed, including a Revised DEIS.

Accordingly, we advocate adoption of Alternative 1, and request that work start over on the project if the Forest Service still wishes to pursue it.

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Table of Contents

I. Throughout, This DEIS Fails the Requirements of NEPA in Its Glaringly Shallow Discussions of Important Issues, Incomplete Disclosure, and Other Faults.

Early (2005) notes of a meeting of the Forest Service's interdisciplinary team (IDT) for this project indicate a clearly recognized need to "work very carefully with other state and federal agencies," including doing field trips with them.[1] The planning record does not indicate that this level of cooperation was carried out by the IDT, and we believe that in general this lack has been detrimental to planning and analysis for the project. As one specific, when scheduling the fore-mentioned joint field trip proved initially to be difficult, it appears that the IDT simply gave up instead of pursuing other arrangements for this important field work.[2] The joint field trip was not pursued with the diligence that careful work would entail.

GPI-1 Also, evidence is very sparse in the planning record of consultation with other state and federal agencies, rather than showing careful work with them. Issues fairly raised by such agencies and the Organized Village of Kake were instead given short shrift in the DEIS and its supporting documents in the planning record.

The DEIS itself is extremely shallow in its discussion of many important issues. The Wildlife section of Chapter 3 is only 21 pages. It avoids discussion of many species that likely would be affected by the project, and what analysis it does contain concerns only the percentage change in the amount of productive old-growth forest (POG). There are no standards and guidelines by which to judge the statistics of such analysis, and judging the impact of a project primarily on such percentages and on little else can only be expected to misinform a decision. Similarly, the Subsistence section of Chapter 3 is less than 7 pages long, and is devoid of data and meaningful analysis. And so forth, throughout this important chapter of the EIS.

We can only conclude that the DEIS must be withdrawn and that if the Forest Service wishes to pursue the project further, it needs to start over.

II. The Project Is Contrary to the Forest Plan & TTRA, Because There Is No Foreseeable Market Demand for This Timber and No "Need" for the Project.

The purpose of the Central Kupreanof project, as disclosed by the district ranger in a radio story but not in the DEIS, is to put timber "on the shelf," not to meet a real need in the foreseeable future.

GPII-1 "And I think I mean, you know, the economic conditions we're seeing right now, and especially the current timber market -- we just felt we'd like as much opportunity as possible to be sitting on the shelf, so that we have the greatest flexibility depending on what the market conditions look for in the near future." [3]

The appraisals of the alternatives in the DEIS were based on shipment to the Silver Bay Mill in Wrangell. The mill has not produced more than minimal quantities of lumber in recent years, is presently not running, and sale of the mill has so far proven infeasible. Even if the mill were to restart the Forest Service substantial volumes of timber which are much closer

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[1] Project document 234, IDT notes of December 8, 2005. "We will work very carefully with other state and federal agencies. We should do field trips out there with partner agencies …"

[2] Project document 26, in combination with a lack in the record of documentation that a joint field trip was pursued further.

[3] Exhibit 1 and Exhibit 2. "Forest Service looks at logging south of Kake," KFSK Radio, Petersburg, 12-Jan-09. The exhibits are a transcript and an audio recording, respectively.

at hand to the this mill – part of the Backline and Doughnut projects on Wrangell Island, the Navy project on Etolin Island, and the Baht project on Zarembo Island. In addition, Alcan Forest Products has not logged the contract it holds on Zarembo Island, Skipping Cow, and that volume is conceivably available too.

We believe that for the foreseeable future, clearly, this project is unnecessary to the quest for meeting market demand. We also believe the scale of the project is detrimental to the sustained yield of all renewable resources. For these reasons, pursuing the project is doubly in conflict with the Tongass Timber Reform Act (TTRA).

III. Two of the Three Action Alternatives in the DEIS Exceed the Scope of the Project, Violating NEPA, and Therefore a Revised DEIS Is Necessary.

GPIII -1

The Purpose and Need for the project[4] is broadly worded and can accommodate a much broader range of action alternatives than those which were analyzed in the DEIS. The Purpose and Need does not specify how much timber is needed from this project, nor does Appendix A of the DEIS demonstrate a need for the 28 to 70 mmbf from this project's action alternatives. Alternatives with far lower timber volumes than those – even just a microsale program for example – would satisfy the stated needs to manage for sawtimber and other wood products, to contribute toward the agency's duty to seek to meet market demand, and to provide a diversity of opportunities for resource uses. Viable alternatives that would do a far better job of meeting the Forest Service's mission and other obligations were excluded without valid cause from detailed consideration in the DEIS.

GPIII-2

The Forest Service's intended timber yield from this project has varied willy nilly, as if there in fact is no rationally defined purpose and need for the project. The notice for the second scoping for the project, in January 2008, proposed the "production of up to 40 mmbf." (Emph. added.) This was a reduction from an 80 mmbf maximum in the earlier scoping, in 2006. Two of the three action alternatives in the DEIS exceed by significant amounts the maximum timber volume that was scoped last year. At 46.8 mmbf, the "Proposed Alternative" in the DEIS (Alternative 2) exceeds the scoped maximum by 18 percent, and at 70 mmbf the "Preferred Alternative" (Alternative 3) exceeds that maximum by 75 percent. In addition, with unit acreages of 2,506 and 3,647 acres, respectively, Alternatives 2 and 3 exceed the maximum acreage that was scoped for the project last year, 2,025 acres. NEPA requires that a DEIS "shall be prepared in accordance with the scope decided upon in the scoping process."[5] The scope process for this project established a project scope that extends from the no-action alternative to the maximum timber volume and maximum acreage that were specified in the January 2008 scoping document. Accordingly, the Forest Service has violated NEPA by studying Alternatives 2 and 3 in detail and featuring them as reasonable alternatives in the DEIS. They must be ruled "unreasonable" and be dropped from further consideration. Moreover, because doing this leaves only Alternative 4, and because a DEIS with only one action alternative is inadequate, a Revise DEIS is necessary.

IV. The Range of Alternatives Has Been Unreasonably Constrained, Preventing Reasonable Alternatives from Being Considered, in Violation of NEPA.

It is apparent from the planning record that the range of alternatives has been unreasonably constrained. Advice of the IDT Leader is contained in notes of a team meeting:

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[4] DEIS at 1-2.

[5] 40 CFR 1508.22(a).

> "Tiffany emphasized a wide range of alternatives is very important, *which does not mean a wide range of volume*. … be mindful of the volume to keep your alternative in the race." [6] (Orig. emph.)

Alternatives that produced lower volumes of timber were indeed dropped out of the "race," such as a completely roadless alternative that would have produced 18 mmbf.[7] Others alternatives that would have low volume, to accommodate just local milling in Kake for example, didn't even get the tentative level of development which that alternative received.

In early 2008 the district ranger directed that "the no-action alternative should be considered as a viable alternative and not just a baseline to compare action alternatives."[8] We are pleased to see this stated explicitly, as it is consistent with NEPA, however it appears to not have been acted upon by the IDT. This option of no timber harvest and no road building is a viable, reasonable alternative which establishes the lower end of scope of the project. No alternative between that reasonable minimum and the scoped maximum can legitimately be ruled unreasonable simply because it would produce only a low volume of timber, because even the alternative that would produce zero is reasonable according to both the district ranger's directive and NEPA. Therefore, the range of alternatives in the DEIS has been unfairly constrained, and the DEIS in not consistent with NEPA.

GPIV-1

Further, in the same memo the district ranger directed the IDT to "continue to encourage the public and other agencies to make suggestions to modify alternatives or create their own alternatives." This encouragement to the public was never given by the IDT. For example, in the subsequent January 2008 scoping document,[9] alternatives were not presented to the public, nor was the public encouraged to create its own. The framework of the scoping document was issues-focused and did not include an additional alternatives-focus. The public and other agencies were never invited, much less encouraged, to submit its own ideas for alternatives, and the implication of the scoping document was instead that the Forest Service would consider issues concerns in itself creating a range of alternatives.

GP IV-2

Nonetheless, in our scoping comments we did ask for multiple alternatives that would include no road construction, and multiple alternatives that would provide micro-sales to support the needs of Kake. No such reasonable alternatives were given any real consideration, yet unreasonable alternatives that out side the scope of the project got the emphasis and are even featured in the DEIS as the proposed and preferred alternatives.

So, not only has the IDT directly constrained the range of alternatives in the DEIS unfairly and illegally, it has not followed line officer direction to pro-actively seek from the public other alternatives.

Additionally, we incorporate by reference the Range of Alternatives section of the comments by Sitka Conservation Society and SEACC.

V. Wildlife & Subsistence Issues, Generally.

GPV-1

The wildlife section of this DEIS is superficial and fails completely to meet the Forest Service's duty under NEPA to take the hard look at the consequences of its actions and to fairly compare alternatives. Citations to scientific literature, field reviews or other sources of information are largely absent. There is no real analysis of impacts to specific species, just scanty, over-simplified analysis and unreliable conclusions. The DEIS falls far short of the requirements of NEPA and of providing a reasonable basis for public comment. This is yet

GPV-2

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[6] Planning document 238 (11/9/06).

[7] Planning documents 240 (11/28/06) and 253 & 364 (12/11/06).

[8] Planning document 189, January 8, 2008, signed by District Ranger Chris Savage.

[9] Planning document 178, request letter to the public for scoping comments.

another reason, in addition those discussed earlier and below, that the Forest Service must withdraw this DEIS and start over with its planning, if it wishes to continue to pursue this project.

A. Wildlife Issues of Significance Have Been Swept Aside, Despite Clear Identification in Scoping Comments.

IDT meeting notes of November 9, 2006 show that the IDT recognized that the public had raised issues including "deer model," "subsistence," "wildlife outside of subsistence (road density, goshawks, connectivity)," and cedar high-grading.[10] Another document from later that month discloses a decision to include as one of three significant issues the effect of building roads and harvesting timber on deer habitat, as it relates to subsistence.

In January 2008 the district ranger wrote a memo to the IDT to document required changes and set some new direction. "Based on past comments and project comments" it identifies deer habitat as one of two "expected issues. Concerning subsistence, the memo says road management and access issues will be covered by the RAP/ATM; however, those are only two issues related to subsistence deer hunting, and the matter of deer habitat to support subsistence used is covered by the fore-mentioned expected issue.[11]

GP V-3

In March 2008 there was a "close-out" of a review of the project by the Juneau Review Team (JRT).[12] Deer habitat and its carrying capacity were dismissed as significant issues (we contend wrongly, as noted elsewhere herein), and notes of an IDT meeting held a week later show that the team dropped all wildlife issues from consideration.[13] The planning record and DEIS do not contain a reasonable explanation of why this was done, and we believe there can be no reasonable explanation of dropping this class of issues from meaningful analysis.[14]

A key project document (*Issue Development and Alternative Review*) from April 2008 acknowledges that even if an issue is not identified as a significant issue, the intent of the process is that "all (such) other issues are meaningfully addressed in the analysis."[15] The DEIS has failed to do this. In order to excuse this, the document relies on analysis done in the Forest Plan, but which is not adequately site-specific, and it not adequate for a project-level NEPA review. The document attempted this explanation:

> "… the team felt wildlife and subsistence was really too broad in scope and pinpointed the concern to the effects on deer habitat. Subsistence (carried forward in terms of deer habitat), while concerned about deer habitat, also pointed to concerns about access that the team believed the ATM process would address." [16]

GP V-4

It makes no sense, however, expect deer habitat concerns (including those of subsistence)to be addressed through the access issues. Moreover, the Forest Plan S&G XIV.A.2 directs that analysis include use of the deer model in evaluating habitat carrying capacity, and that means considering more the simplistic POG analysis that was done in the DEIS.

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[10] Planning document 238, 11/9/06: IDT meeting notes of 11/9/06.

[11] Planning document 189 (1/8/08): "Letter of Direction for Central Kupreanof Timber Sale EIS (Update)," Chris Savage, District Ranger.

[12] Planning document 155, March 20, 2008. "Central Kupreanof JRT Checkpoint 2 Review Close-out"

[13] Planning document 153, March 27, 2008. IDT meeting notes.

[14] The analysis of wildlife issues in the DEIS is superficial, not meaningful.

[15] Planning document 403, 4/18/08. "Central Kupreanof Timber Sales Issue Development and Alternative Review."

[16] Id. at 10.

The Central Kupreanof DEIS is unique on the Tongass among EIS documents to date in having performed a de minimis analysis of wildlife, especially so for a project of this size. This attempted "easy pass" for the project is inconsistent with NFMA and NEPA. For no species was the analysis adequate.

B. The DEIS Has Failed to Evaluate Project Consequences Over an Adequate Range of Management Indicator Species (MIS).

GP V-5 The DEIS has not evaluated impacts of the project to the full range of MIS that can be expected to be in the project area. Analysis for all MIS in the area is important because represent numerous other species and ecological niches. Conspicuous in their absence from meaningful analysis in the DEIS are raptors, cavity nesting birds, small mammals, and endemic species.

C. The DEIS Is Overly Reliant on POG for Wildlife Analysis.

GP V-6 Use of a POG model alone is clearly insufficient analysis under NEPA. While we agree that POG is an important measure (among others), simply running the numbers tells us little about, for example, habitat connectivity, localized impacts, impacts to particularly important places, or species-specific impacts.

D. The DEIS is Overly Reliant on the Biogeographic Scale for Wildlife Analysis.

GP V-7 Over-reliance on the biogeographic province scale in wildlife and subsistence analysis (as done in the DEIS, and including even parts of Kuiu island) conceals the state of the current condition and effects of alternatives at the WAA and watershed scales. This results in a fatal inconsistency with NEPA over disclosure and the full and fair discussion of responsibly raised issues. An SDEIS is necessary to correct this deficiency. For example, wolf impacts are best understood at a wolf home-range scale (one or two WAAs, depending on their size.

E. The DEIS Wildlife Section Is Inadequate in Other Ways, Too.

It is incredible that the DEIS does not include any discussion of the goshawk.

The DEIS' consideration of wildlife is so inadequate, that a decision-maker would be left with the impression that the overall impact of the proposed timber sale on wildlife is positive. In the *Direct and Indirect Effects* subsection of the wildlife section, the first two sentences are:

> "Removal of stream crossings and closures of roads may benefit wildlife by limiting road densities and motorized human access. Vegetation treatments should benefit wildlife as it helps to restore side lighting to the forest floor, increasing the production of forbs and shrubs as well as well as helping to promote taller and denser stands of trees that can provide shelter (snow interception)." (DEIS at 81)

GP V-8 In the first place, it is inaccurate and misleading to tout road closures as a beneficial impact of this timber sale, since those closures will occur under the ATM in any event. The impact of the action alternatives on those closures is to delay them by prolonging use of the roads, with of course the additive impact of building new roads. Please consider the impact of road building and delayed road closures on wildlife.

GP V-9 It is unclear what "vegetation treatments" the DEIS is talking about, but assuming this refers to the proposed logging units, we are not aware of any scientific support for these conclusions. Cutting a pristine old-growth forest down does not "promote taller…stands of trees." It certainly does make stands *denser*, after several decades, but that is not a beneficial impact for winter habitat due to the lack of undergrowth and forbs in densely packed stands. Please review the seminal paper on forest succession, Alaback (1982). And, "side lighting" does not need restoring in old-growth stands. The abundant muskegs and old-growth forest gaps are natural, adequate sources of light for forbs. What this sentence seems to be talking

GP V-9 about is also known as the "edge effect," which is commonly understood to be a negative impact for interior-dependent species, such as goshawks. There is no basis for citing it as a positive.

VI. The DEIS Is Contrary to the Forest Plan Because the Standard & Guideline for Providing Deer Habitat Capability Was Not Followed.

Notes of an early 2007 meeting of the IDT with the ADF&G Area Biologist say,

> "A reduction in deer density is a concern, because deer density is already low in Central Kupreanof. … The effect of the Central Kupreanof timber sale on the already low deer populations is a concern because of illegal hunting pressure. … Lowell's concerns: • road density – its effect on legal and illegal harvest of wildlife; • the reduction in deer carrying capacity due to (timber) harvest – how to make the sale economically viable without negatively affecting deer habitat." [17]

ADF&G is "concerned about (deer) as they pertain to wolf viability and (status) and subsistence hunting opportunity." These are concerns of great significance, but nonetheless the Forest Service decided to do a substandard analysis of the effects of this large project on deer in area where populations are already acknowledge to be low.

In March 2008 a document closing out a project review by the Juneau Review Team (JRT) announced

> "it was decided that the real issue is not deer habitat, but tied more to Access to deer. … It was agreed that Deer Habitat would not be a significant issue (considered but eliminated) and that the ID team would carry forward Access as a significant issue." [18]

GP V-4 Neither the DEIS nor the planning record reflects any determination of deer carrying capacity by use of the deer model, as directed in Forest Plan S&G XIV.A.2. Given that the planning record clearly indicates that both modeled habitat capability and deer populations themselves are low in the project area, not ascertaining and disclosing the modeled carrying capacity of deer habitat is a significant deficiency in the planning work and the DEIS. Among timber projects of significant intended timber yield on the Tongass, the Central Kupreanof project is unique in not considering modeled carrying capacity, further underscoring the deficiency.

VII. The DEIS is Contrary to NFMA Because It Fails to Adequately Evaluate Effects on Wolf Viability and Wide Distribution.

A. Failure to Assure Adequate Deer Carrying Capacity to Support Wolves and Hunters.

GP V-10 A Forest Plan standard and guideline (XIV.A.2) requires providing sufficient deer habitat capability to sustain wolf populations and provide for human deer harvest. It requires use of the deer model toward providing a carrying capacity of 18 deer per square mile, which is the generally accepted minimum, as established by best available science, for where deer are the primary prey of wolves. Local knowledge needs to be considered as well, under the S&G, but determination of carrying capacity through application of the model is a firm requirement and is also the only means presently available for obtaining a numeric estimate of carrying capacity.

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[17] Planning document 113 (1/16/07), meeting of IDT with ADF&G Area Biologist Rich Lowell.

[18] Planning document 155 (3/20/08), "Central Kupreanof JRT Checkpoint 2 Review Close-Out."

GP V-10; V-4

In the DEIS, brief mention is made of that science has determined a need to provide this habitat capability of at least 18 deer per square mile;[19] however, the DEIS makes no mention of standard and guideline XIV.A.2 and it fails to follow the requirement to use the deer model to estimate carrying capacity. Not using the model violates: (1) the Forest Plan which directs that the model be used; (2) NFMA, which the Forest Plan was implementing in making that directive; and (3) NEPA, which requires application of the best available science, a full and fair discussion of all responsibly raised issues, and a hard look at impacts. Under the standard and guideline local knowledge must be used in concert with the modeled carrying capacity, not as a substitute for it.

Moreover, carrying capacity estimates from the deer model that underlie the 2008 Forest Plan indicate that two of the three WAAs (wildlife analysis area) that are directly affected by the Central Kupreanof project have carrying capacities which, at 17 deer/sq-mile are below the minimum of 18.[20] The third WAA[21] has a carrying capacity of 19, but in aggregate the three WAAs score just below the minimum of 18.

According to the science,[22] prey availability on the scale of a wolf pack home range is one important measure, and that scale is about 100 square miles. The three directly affected WAAs range in size from 110 to 168 square miles, so considering them individually and in aggregate, as above, is appropriate. Is is also worth noting that two other WAAs[23] that are immediately adjacent have low deer carrying capacities of 15 and 13 deer/sq-mile because, respectively, of past logging and natural habitat fragmentation.

Substantial questions are unresolved about the effect of this project on prey availability and game availability. The DEIS is fatally deficient in not having used modeled carrying capacity in the analysis. This can only be corrected with a Revised DEIS.

GP V-11

Concerning what was presented in the DEIS, the assessment of percent change in POG is a meaningless exercise for which there are no standards and which can easily lead to dangerous conclusions. Also, the DEIS did not present data to back up judgments that were made regarding deer habitat, and that does not satisfy the requirements of NEPA.

B. Failure to Adequately Analyze Wolf Mortality and Particularly Road Density.

Wolf mortality concerns that involve road density on Kupreanof Island and its biogeographc province have been brought to the attention of the Forest Service several times by the Alaska Department of Fish & Game.[24] We believe this should have triggered initiation and development of a Wolf Habitat Management Program (WHMP) for the area, as required by Forest Plan S&G XIV.A.1. The DEIS is deficient because it did not include a real analysis of road density (also a factor in that S&G) and because analysis underlying the DEIS should have been done in concert with the WHMP.

GP V-12

In addition, the Forest Service is required by its Forest Plan standard and guideline XIV.A to implement a different, Forest-wide program, along with the US Fish & Wildlife Service, "to assist in maintaining long-term sustainable wolf populations. This S&G has existed for over a decade, but has yet to be implemented to our knowledge. We believe the program is

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[19] DEIS at 3-71, citing Person et al. (1997).

[20] WAAs 5030 and 5033.

[21] WAA 5031.

[22] Person et al. (1997), planning document 326..

[23] WAAs 5132 and 5135.

[24] Planning document 113 and letters from Rich Lowell in 2004 and 2006, also in the record.

necessary to the sustainability of wolf populations on the Tongass, and that not having it may in part be a cause for the failures regarding wolves in this DEIS.

We submit for the planning record and for further consideration the recent paper concerning wolf mortality on the Tongass, Person & Russell (2008).[25]

Deficiency of the DEIS in regards to roads requires a Revised DEIS for correction and further public comment.

VIII. The DEIS is Contrary to ANILCA Because It Fails to Adequately Assess Effects on Habitat Carrying Capacity for Deer, a Proxy for Deer Abundance That Is Included in TLMP Standards & Guidelines.

GP V-12a

The IDT recognized early-on that the subsistence issue consists of "two components: access and the opportunity to harvest subsistence resources."[26] The deer model was used at that stage for a quartile analysis, but apparently not to determine deer carrying capacity and to apply the related S&G. The quartile analysis found that availability of quality winter habitat is so low that the top quartile of habitat is everything above an HSI of 0.29 (habitat suitability index) on a scale of 1.3.[27] The planning record document we reviewed says these results were validated by using Quick Cruise plot data; however, how this was done was not disclosed, and another later document shows that the creator of the Quick Cruise method contends that Quick Cruise is not suited to that purpose.[28] Although the IDT attempted to drop higher quality deer habitat from the unit pool, the habitat quality is low enough that even lower quality habitat may have importance that was not recognized. We believe there is little if any deer habitat capability to spare in this project area.

Incongruously, the Forest Service acknowledged in its "2008 Issue Sorting Table" for the project that the Alaska Department of Fish & Game raised concerns over deer habitat with respect to subsistence, yet the Forest Service concluded, without addressing the comment or further consultation and with scanty reasoning, that deer habitat is a non-significant issue, considered but eliminated.[29] ADF&G is characterized in the table as saying:

> "Deer, subsistence: The project area is rated by ADF&G's Tongass Fish and Wildlife Resource Assessment as being of the highest sensitivity to disturbances in the 'Sensitivity to Disturbances of Subsistence Use Areas Map'; particularly concerned and believe of significance is the effect to deer habitat." [30]

Accordingly, we believe there is a significant void in the subsistence analysis in this DEIS (as indicated here and in earlier sections concerning deer) and that clearance of the project under ANILCA is not supported by the analysis. A complete reconsideration of subsistence issues is needed, and a Revised DEIS.

IX. Partial Cutting, Deer Habitat, and the Dropped Deer Alternative.

Planning record documents indicate that the IDT developed a deer habitat alternative, which was dropped because it was deemed similar to the timber alternative, which had a 30%

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[25] Exhibit 4, Person & Russell (2008). "Correlates of Mortality in an Exploited Wolf Population," JOURNAL OF WILDLIFE MANAGEMENT 72(7):1540–1549; 2008) DOI: 10.2193/2007-520

[26] Planning document 363, November 27, 2006, "Subsistence Alternative."

[27] Planning document 113 (1/16/07). Meeting of IDT with ADF&G Area Biologist Rich Lowell.

[28] Planning document 135, IDT pers. comm. with Matt Kirchhoff of ADF&G.

[29] Planning document 331 (9/1/08) at 3.

[30] Id., at bottom of the 3rd page of the attached table.

greater timber yield. How such disparate alternatives could be considered similar was not disclosed, and we do not believe doing this was justified.

Further, we do not believe the deer alternative was reasonably constructed. First, the current carrying capacity of the area for deer was not estimated, contrary to Forest Plan S&G XIV.A.2. Also, the alternative included "partial harvest," apparently assuming that partial harvest has low impact on deer winter habitat – an assumption we challenge, given the prescriptions the Forest Service has been promoting. "The group looked at the relative highest deer habitat within the proposed units and removed these highest habitat units from harvest. The team then took the second highest units and applied partial harvest methods."[31] A thorough review of best available science shows, however, that the partial harvest prescription contemplated will result in what are effectively small clearcuts that initially diminish and ultimately remove winter deer habitat.[32,33]

GPV-13 We contend that the partial cut prescriptions considered do not protect deer winter habitat, contrary to the IDT's assumption.

X. Deer Concerns & Other Wildlife Concerns Were Not Taken Into Account on the Unit Cards.

In comparing the units cards to planning record document 272 ("Draft Deer Habitat Alternative, Winter 2008") we found that identified concerns for deer habitat in particular units were not reflected on the unit cards. The cards say "no concern." In particular for those units identified in the document as having connectivity or corridor concerns, on the unit cards the corridors are substantially restricted anyway, generally to less than a 300 foot width. While such width may allow mobility, it is still too narrow because predation mortality is promoted, and future blowdown may degrade the function of such narrow corridors.

With but one exception[34] all unit cards are labeled "no concern" for wildlife. We do not believe that many of the units do not raise wildlife concerns, and this leads us to question the adequacy of the field work, or its reporting, or the analysis that was done for the project.

GP V-14 The unit cards are generally bereft of the information that is commonly reported on Tongass timber project unit cards and upon which we rely in our evaluation of projects and their alternatives. The unit cards are not of adequate quality to allow us a satisfactory opportunity to review the DEIS. This is yet another reason that a Revised DEIS is needed.

XI. Other Wildlife Species.

GP V-15 Surveys should have been completed and analysis completed for the marbled murrelet, a species which is not even mentioned in the DEIS. Incongruously, Kitzlitz's murrelet appears twice in the DEIS, but there is no habitat for this species in the project area.

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[31] Planning document 403 (4/18/08) at 12, and document 331 (9/1/08) at 2.

[32] Exhibit 3, Ott & Juday (2002), "Canopy gap characteristics and their implications for management in the temperate rainforests of southeast Alaska."

[33] We caution: the Forest Service has relied on Deal (2007) and his earlier works as a basis for relying on partial cuts where there are deer concerns; however, these works must be interpreted with an understanding of the science they rely upon. In that regard, Hanley (2006) explicitly did not consider the effect of deep snow, which is a primary factor that contributes to the availability of deer for subsistence and wolves. Therefore, Deal (2007) is not as relevant as it may at first seem.

[34] A hawk nest in Unit 232.

A. Small Mammals & Endemic Species

The cursory discussion of small and endemic species known to occur in the project area (DEIS 3-74 to 75) is wholly inadequate. Among the obvious indicators of concern for species omitted from or glossed over in the DEIS are:

Long-tailed vole (*Microtus longicaudus*, previously *M. coronarius*) – listed as a species of ecological concern in West, E.W. 1991. Status Reports on selected Alaska mammals of ecological concern. Alaska Natural Heritage Program. Anchorage.

GP V-16 Northern bog lemming (*Synaptomys borealis*) – "distribution … remains poorly understood … limited number of specimens." MacDonald, S.O. and J. Cook. 2007. Mammals and Amphibians of Southeast Alaska. University of New Mexico. Albuquerque.

Northern American porcupine (*Erethizon dorsatum*) – "Specimens are few, suggesting further effort is needed to clarify the distribution and status of this species in the region." Macdonald and Cook (2007).

Wolverine (*Gulo gulo*) – International Union for the Conservation of Nature (IUCN) listed as vulnerable; special concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Wolverines in Southeast Alaska are genetically distinctive, suggesting limited exchange between inland populations and those in the region. Tomasik, E. and J. Cook. 2005. Mitochondrial phylogoegraphy and conservation genetics of wolverine (*Gulo gulo*) in northwester North America. Unpublished thesis. Idaho State University. Pocatello.

Western toad (*Bufo Boreas*) – IUCN listed as near threatened; COSEWIC species of special concern. "There is growing concern that Alaska populations are experiencing [rapid decline]. Long term residents from Haines to Ketchikan have noted sharp declines." Macdonald and Cook (2007).

B. Incorporation by Reference.

We incorporate by reference the comments by Sitka Conservation Society and SEACC on black bears, marten, goshawks, and endemics and small mammals.

XII. Fragmentation, Coarse Canopy Forest, Corridors, Connectivity & OGRs.

GP V-17 In our scoping comments we raised the issues of effects to habitat fragmentation, coarse canopy and interior forest conditions, wildlife corridors, landscape connectivity, and old-growth reserves. Each of these is a critical issue for this project because of the extraordinary degree of natural habitat fragmentation on much of Kupreanof Island and the additional contribution of past logging activity (within the project area, in other adjacent WAAs, and in the biogeographic province more broadly) to fragmentation and habitat loss in general.

The DEIS has failed in it duty to provide analyses that are of any substance for these topics, let alone providing the hard look that is demanded by the situation just described and the scale of this project. We incorporate by reference additional material in section VI.H of Sitka Conservation Society & SEACC's comments, on these topics.

Again, a Revised DEIS is needed if the project is to proceed.

XIII. Fisheries & Hydrology

GP XIII-1 Please consider impacts of the proposed action on both *increased* peak flows as a result of roads and clearcuts, and *decreased* low flows as a result of cuts, roads, and dense-stand regeneration. Old forests and wetlands serve a buffering function in both directions, that should be considered in the EIS.

We are concerned with impacts of proposed roads, and maintenance problems springing from the proposed action, on watersheds. The large number of red culverts and other fish passage problems, chronic sediment sources, landslides and mass soil movement, and increased traffic are all concerns. The proposed action would result in large percentages of watersheds being cut, and in large numbers of new stream crossings.

GP XIII -2 The Cederholm et al. (1980) "threshold" of 2.5% road coverage of a watershed is being misused. First, problems of fish passage occur wherever they occur, regardless of road density. Please consider and disclose where these problems occur. Second, there is nothing magical about the number 2.5%. A poorly maintained road along a stream can fill overwintering pools with sediment just as surely at a low road density, as at a high one. Third, the Cederholm study had more to do with peak flow events, such as rain-on-snow events that are critical in Washington and Oregon, but less so here in Southeast Alaska.

GPXIII-3 What is the implication of the stream crossing density column in Table 3-24? It's an interesting number but we're at a loss to determine what it is supposed to mean.

GPXIII-4 It is absolutely unacceptable that there be 61 red culverts on this road system. It is even more unacceptable to spend the money that should go to fixing those on building new roads and maintaining those needed to get the cut out. The impact of the proposed action on delaying the needed repairs should be considered as an important impact of the proposed action.

GPXIII-5 Please consider the impact of introducing fine sediment into stream channels that are important to overwintering and spawning habitat for salmon. In certain channel types, sediment can fill overwintering pools, and cover spawning gravels. Even were the actual release of sediment is temporary, the impacts certainly are long-term.

Please explain why it is you think sediment delivery from the proposed action, building then storing roads, would not degrade water quality enough to "fully maintain the water body's designated beneficial uses." Fish habitat is certainly a beneficial use, and it is likely to be impaired.

GPXIII-6 We are uneasy with the reliance on speculative road storage to mitigate road impacts to fish. As we comment above, it is not reasonable to expect that to actually happen.

GPXIII-7 The analysis of impacts to hydrologic function is improperly dismissed by saying impacts are hard to measure at the watershed scale. (DEIS, p.105) So what? When habitat is degraded in a stream reach, that has an impact. If those impacts are hard to measure at a watershed scale, then that is just an argument for analyzing those impacts at some different scale.

GPXIII-8 Alternative 3 proposes temporary road crossings on one Class I and three Class II streams. However, earlier information indicated that temporary roads were never used where special resource concerns like this exist.

GPXIII-9 Please consider the impact of the storage strategy, versus just maintaining the proposed roads, on stream crossings. Assuming pulled crossings will have to be rebuilt, is that a greater or a lesser impact on fish?

All in all the consideration of fisheries issues in the DEIS does not measure up to the immensity of the proposal. You are talking about building 139 new stream crossings, and keeping untold hundreds more open for years or even decades, and impacts are only considered in the vaguest possible way. Please conduct a more in-depth analysis for the FEIS.

XIV. Roadless Areas.

Though much of the Central Kupreanof project would be operated in previously roaded portions of the island, two of the three action alternatives also enter Inventoried Roadless areas (IRAs) for logging and road construction. These areas play a uniquely special role on the Tongass. As the Forest Service itself has determined in the Roadless Area Conservation Rule (RACR) process, the "Tongass is unique because the majority of subsistence and game species are integrally linked to the habitat qualities provided by unroaded areas." RACR FEIS at 3-374.

IRA lands that would be damaged by logging and/or road construction in Alternatives 2 and 3 include areas identified by the Alaska Department of Fish and Game (ADF&G) as being of special sensitivity for subsistence use by several communities, most notably Wrangell, Petersburg, and especially Kake. ADF&G rated the large majority of the project area as being at "Highest Value" for Community Use. And roadless area logging in Alternatives 2 and 3 would be in the headwaters of salmon streams that run through pristine lands to the east and northwest of the project area.

GP XIV-1 The proposed logging and road construction in IRAs would violate the RACR. We understand that in 2003 the Forest Service decided to exempt the Tongass temporarily from the RACR. However, for reasons explained below, we believe that the temporary exemption was itself illegal and therefore ineffective. Because the exemption was ineffective, the Tongass National Forest, like all others, must follow the RACR in planning and conducting timber sales and road construction.

The temporary exemption was illegal, in part, because the Forest Service never explained its about-face from 2001. In 2001, the agency carefully considered whether to include the Tongass in the RACR, and decided to do so for sound and well-explained reasons. It recognized that the unparalleled status of the Tongass, as our largest and most wild national forest and as a naturally fragmented archipelago, made protection of the remaining roadless areas here especially important. The decision adopting the RACR specifically cited "the unique and sensitive character of the Tongass National Forest, the abundance of roadless areas where road construction and reconstruction are limited, and the high degree of ecological health." Federal Register, vol. 66, p. 3254 (Jan. 12, 2001).

Any further roadless area entry beyond what was grandfathered under the RACR "would risk the loss of important roadless area values." Id. Because local decisions about local IRA abundance could not be expected to factor in adequately the national interest in preserving this unique resource and in reducing the proliferation of an unmanageable, extremely expensive road system, the Forest Service decided to end the practice on the Tongass. These were strong, valid reasons for protecting all remaining Tongass IRAs. Until and unless the agency explains why they no longer apply or are persuasive, we do not believe it is legal simply to abandon those protections.

Exemption of the Tongass from the RACR also was illegal because the Forest Service failed to provide a public NEPA process for its decision. This was ironic, given how the Bush Administration criticized the RACR process as inadequate, despite thousands of pages of environmental impact statements and many hundreds of public meetings. Relying on the old RACR FEIS was not justified for several reasons. First, the employment picture had changed dramatically. The RACR FEIS assumed that 900 direct jobs were at stake, based on logging levels that never materialized. In fact, the 2008 FEIS for the TLMP amendment shows that current logging levels can be sustained from the roaded timber base. That means no jobs are at stake, currently, from application of the RACR to the Tongass. Second, the RACR FEIS looked only at impacts to IRAs under the old roadless area inventory. Hundreds of thousands of additional acres were identified in the 2003 supplement to TLMP, however, meaning much more roadless acreage was at stake, actually or potentially, in the exemption

decision than understood in 2001. And finally, the management baseline for the RACR FEIS was the 1999 TLMP, which was more protective than the one in effect when the temporary exemption was adopted (and the one now in effect). Therefore foreseeable potential impacts from a rollback to the 1997 TLMP – which is very close to the 2008 amended plan – were greater than those reviewed in the RACR FEIS.

Finally, the Forest Service never provided any rationale for a temporary exemption. The exemption decision cited the need to provide certainty for the region. But it was a temporary exemption. By its nature, a temporary decision cannot provide long range predictability. And exempting the Tongass from the RACR certainly does not in any way reduce the controversy and conflict over roadless area entry. As noted above, the exemption did not protect jobs that did not exist. It did not help connect communities by facilitating powerline and public roads, at least not in the timeframe of a temporary exemption. Not one example of a potential powerline or community-connecting road that would run afoul of the RACR was cited in the exemption decision. And despite the decision's assertion that TLMP adequately protected roadless areas, the RACR protected another 2.4 million acres of them that TLMP left exposed. As discussed above, the Forest Service earlier recognized the national, even global, significance of these areas, unique in the national forest system. The exemption decision never explained why they were no longer important.

Because exemption from the Tongass from the RACR was illegal, the Forest Service cannot rely on the exemption in planning timber sales and logging. None of the logging and road-building exemptions within the RACR apply to Alternatives 2 and 4 of the Central Kupreanof project. To pursue these alternatives would therefore be illegal. They should be dropped from consideration or modified to comply with the RACR.

XV. Transportation & Roads

There are many good things to say about this EIS's treatment of transportation. We are especially pleased you consider road management/access as a significant, alternative-driving issue. Thank you also for your consideration of both open and closed roads, and for recognizing and considering the maintenance costs associated with road management. These are major steps forward after years of brushing these issues under the rug. This is an issue on which there is a lot of common ground, and where there is a lot of good work for the Forest Service to do.

GP XV-1 It also is encouraging that the relevant Roads Analysis is done in time to inform this decision. We urge the Forest Service to *base* the actual decision on that information, in particular as it relates to maintenance shortfalls and the need to cut road density. Not having reviewed that document yet, we have no idea what it says. Please include the essential information from that analysis in the EIS, so that the public and decision-makers have access to it. The desire for shorter EIS documents is understandable, but all the important information should be put together in that single document, as per NEPA.

GP XV-2 Less encouraging is the fact that the relevant ATM plan has not been done. Please complete that process prior to issuing the FEIS are making any decision. Otherwise the decision would unfairly bias the ATM decision. The overlap also raises NEPA complications. Road management under this sale is a connected action with the overall ATM plan, and the impacts should be considered in a single NEPA document.

We are concerned with road densities, especially given impacts to watersheds, wolves and marten. A great many of these roads should be decommissioned and some should be obliterated. At the very least, we <u>strongly</u> oppose any road construction in roadless areas. Up to 13 miles of new road in a Roadless Area, as proposed, is outrageous.

Ironically, proposed roads would not even be multiple use, but rather single-use timber roads. Using scarce public roads funds for such narrow benefit is a poor use of resources, and it is questionable whether timber-only roads are an appropriate use of those limited funds.

Lack of maintenance is a continuing concern, as the DEIS discloses. They say the first stage to recovery is admitting that you have a problem. We look forward to the next stage, which is taking action to alleviate the problem. Several actions should be taken with regard to maintenance shortfalls:

GP XV-3
- Please fix all roads that will be used in relation to this sale, before any timber haul takes place. We see no reason why the Forest Service should be permitted to use unmaintained forest roads in timber operations, without following BMPs or having a 404 permit.

GP XV-2
- Please complete the ATM planning process, to enable fair evaluation of cumulative impacts.
- Do not commit limited funds to building new roads, when that money is urgently needed to do maintenance on roads that are already there.

GPXV-4
- Do not build any new roads, particularly in roadless areas.

GP XV-5 This DEIS is the best I've ever seen at analyzing road costs. Thank you for citing to specific numbers, and the frank disclosure of costs. (DEIS, p.3-45). We were interested to learn that only 35 miles of road can be maintained each year on a 114-mile road system. There is a substantial maintenance backlog and this must be addressed

It is not correct that road maintenance and this timber sale are entirely separate activities. (DEIS, p.3-43) The sale includes transportation management decisions that would impact on maintenance. For example, the DEIS says "having more maintenance funds available and less miles open to maintain the open roads to their operating standards and reduce deferred maintenance cost." (DEIS, p.3-47) The opposite is also true. This sale will have adverse impacts on road maintenance, including by:

- Increasing the number or road miles to be maintained[35]
- Increasing the number of road miles that will need to be decommissioned and stored;
- Spending available funds on timber sale-related maintenance and road construction.

GP XV-6 We are concerned with the quality of the RCS information on roads. The DEIS (p.3-42) seems to imply that only *some* of the project area roads have been surveyed. As you know, monitoring remote roads is one of the first maintenance tasks to be cut when budgets aren't adequate. Nonetheless, this monitoring work is extremely important to an informed decision both for this timber sale, and the ATM. Please conduct on-the-ground surveys of all roads connected with this sale, and consider that information in the FEIS. If that information is not available, please explain why it is not.

GP XV-7 The DEIS says, "all road construction would follow the applicable BMPs and meet or exceed Forest Plan standards and guidelines." (DEIS, p.3-43) However, it is evident that maintenance and perhaps even some reconstruction does not follow BMPs for TLMP S&Gs, in particular for fish passage, chronic sediment, and invasive species. Because these BMPs are not being followed on many roads in the timber sale system, it would seem that a Corps of Engineers 404 wetlands permit is necessary to use them for this timber sale.

[35] =$720K being (difference of 98 & 62 under Alt. 3, in added maintenance costs (assuming ten additional years, meaning 36*2.; difference of 98 & 62, $2K/yr maintenance;

Thank you for explaining that some roads would remain open an additional five to ten years post-sale. (DEIS, p.3-43) It's important to remember that a timber sale is a fairly long-term event, with "temporary" facilities that last for years and even decades.

GP XV-8 Because all the action alternative appraise so strongly in the red, and the Forest Service is prohibited from advertising negative sales, this sale raises an additional concern with regard to delaying implementation of road storage and decommissioning. What is likely to happen if it is "NEPA-cleared" is that this sale will sit on the shelf for years and years, in the vague hope for a turnaround in the timber industry. That will mean that decommissioning/storage work on these roads will not be done, in order to keep those roads available for this sale. Thus, we will get the worst of both worlds. The timber industry won't get any more timber to cut than they have already, and at the same time we won't get the benefit of road closures made possible by lack of an active industry. Please consider this likely consequence of issuing a ROD in the FEIS.

This problem of a very long "temporary" condition is compounded by the maintenance shortfall. We are concerned that storage and decommissioning prescriptions for roads are unfunded mandates. It is easy to say you intend for certain roads to be stored ten or fifteen years from now, but, is that a reasonable expectation? Given past experience and the available numbers we don't think that it is.

GP XV-3 It is unacceptable to use red culverts for timber haul. The DEIS says that, for NFS Road 6327, red crossings would be pulled "at the time of storage." (DEIS, p.3-47) These red culverts are violations of the Clean Water Act, and your designation of it as a travel route is unacceptable here.

The 45803 and 45808 roads are especially bad, encroaching on roadless areas, crossing headwaters and degrading habitat. These roads should be high priorities to drop.

GP XV-9 We question the layout of the "project area," in particular as it relates to analysis of road density. Since the project area includes large parts of roadless areas that are far from proposed roads and units, considering only road density in terms of the project area may give an inaccurate impression that they are low, when in fact the impacted watersheds and WAAs have high road densities. Please show road density for WAAs and VCUs.

GP XVI-1 ***XVI. A Detailed Public Investment Analysis Was Noted in Scoping As Required, and Was Requested But Not Provided in the DEIS.***

Enough said, and another reason a Revised DEIS is necessary.

XVII. Significant Issue One: Timber Supply and Sale Economics

We incorporate by reference Section III ("Significant Issue One: Timber Supply and Sale Economics") of the comments by Sitka Conservation Society and SEACC.

XVIII. CONCLUSION

For all of the above reasons we ask that either the DEIS be withdrawn, with a later Revised DEIS to be produced, or that the No-action Alternative be selected. We believe timber sales of appropriate scale for the local production of wood products in Kake can be accommodated through a micro-sale program (via categorical exclusions or an EA), and that larger projects in the area should be foregone; however, we defer to the Organized Village of Kake concerning what may be appropriate for consideration.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

February 2, 2009

Christopher Savage, District Ranger
Petersburg Ranger District
Tongass National Forest
P.O. Box 1328
Petersburg, Alaska 99833

RE: Central Kupreanof Timber Harvest
Draft Environmental Impact Statement

Dear Mr. Savage:

The National Marine Fisheries Service (NMFS) reviewed the Draft Environmental Impact Statement (DEIS) for the Central Kupreanof Timber Harvest. The project area begins approximately nine miles southeast of the community of Kake. The project will utilize the Kake road system. The action alternatives would make between 28.1 and 70.2 million board feet (MMBF) of timber available for harvest within the project area, and require 2.2 to 6.1 miles of temporary road and up to 25.1 miles of system roads. Up to 3.9 miles of new temporary road and up to 7.3 miles of new system roads would be constructed. Construction of these roads would require 8 to 139 stream crossings, depending on the alternative selected. This project would update the Road Analysis Process (RAP) which recommends road management objectives for the Kake Road System. Implementation of the recommended road management objectives would result in the removal of 19 culverts that do not meet fish passage standards. The Hamilton Bay log transfer facility (LTF) would be used to transport logs by saltwater to a processing facility. The operator has the option to barge or to raft the logs.

The DEIS identifies Alternative 2 as the Proposed Action and Alternative 3 as a Preferred Alternative. Alternative 2 would require four new Class I road crossings. Alternative 3 would require five new Class I road crossings. Alternative 4 would not require any new Class I road crossings. All proposed Class I and Class II road crossings on temporary roads would be log stringer bridges. Temporary roads would be decommissioned after timber harvest is complete.

The EFH assessment describes the potential impacts of the Proposed Action to EFH in fresh and marine waters. EFH includes all segments of streams where salmon reside during any life stage or period of the year, and the marine waters and substrates of Hamilton Bay. Freshwater fish habitat in the Central Kupreanof Timber Harvest area supports populations of pink, chum, sockeye, and coho salmon. Potential adverse effects to freshwater EFH include increased stream-flows, increased sediment delivery, altered riparian vegetation, disturbed channel integrity, potential blockage of upstream movement of fish at road crossings, increased wind throw, and potential loss of large woody debris. Potential adverse effects to marine EFH include the addition of wood debris from the transfer of logs which could smother marine organisms and natural habitat, the addition of hydrocarbon chemicals from boat motors or oil/gas spillage, loss

of habitat from the construction of structures in the intertidal zone, and reduced water quality.

NOAA-1 NMFS concurs with the U.S. Forest Service (USFS) determination in the EFH assessment that the Central Kupreanof Timber Harvest may adversely affect EFH.

NOAA-2 There are currently 61 red fish crossings in the project area. A red crossing is one that cannot pass juvenile fish at some or all flows and does not meet Forest Standards for passing fish in Class I or II streams. Blockage of fish passage is inconsistent with the best management practices under section 404(f) of the Clean Water Act. The 61 culverts that do not meet current standards for fish passage should be described in further detail, as well as the corresponding habitat that is impacted and not available or only partially available. The potential for correcting all of these culverts should be investigated as part of this timber sale. Removal of 19 culverts which are red fish crossings on roads proposed for closure through the RAP was identified in the DEIS as a stewardship opportunity.

The DEIS identifies some harvest in very high risk hazard soils (MMI-4). There is an increased risk of sediment delivery to streams when timber is harvested on high hazard soils or on over steepened slopes.

NOAA-3 The project will utilize an existing LTF in Hamilton Bay, which is a steel piling and concrete dock facility. The USFS is proposing to give the operator the option to place the log bundles on a barge or in the water. Hamilton Bay was placed on the list of impaired waterbodies in 1996 because of bark accumulation that exceeded water quality standards. It was removed from the list in 2002 after a September 2000 dive survey report found that the bark accumulation was less then 1 acre. Given the location of the LTF in the inner portion of Hamilton Bay and the limited flushing capability of the inner portion of the Bay, the in-water transfer of up to 70 MMBF of timber has the potential to create bark deposition in the Bay that will again exceed water quality standards.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires Federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make EFH Conservation Recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects.

NMFS offers the following EFH Conservation Recommendations pursuant to Section 305(b)(4)(A) of the MSA.

NOAA-4 1. Provide for adequate upstream fish passage at all road crossings on Class I and Class II streams.

NOAA-2 2. Repair the 61 red culverts in the project area to meet Forest Standards as part of the timber sale.

NOAA-5 3. Eliminate the acres of planned harvest on soils classified as MMI-4.

NOAA-3 4. Require the direct transfer of logs to barges as a condition of the timber sale contract to avoid the deposition of additional bark and woody debris in Hamilton Bay.

Thank you for the opportunity to provide comments. If you have any questions regarding our comments, please contact Cindy Hartmann at 907-586-7585.

Sincerely,

Robert D. Mecum
Acting Administrator, Alaska Region

cc: comments-alaska-tongass-petersburg@fs.fed.us
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01/30/2009 03:38 PM

Please respond to <MAJackson@KakeFirstNation.org>

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To <comments-alaska-tongass-petersburg@fs.fed.us>

cc "Gary Williams" <GEWilliams@KakeFirstNation.org>, <larry.edwards@wdc.greenpeace.org>, "'Buck Lindekugel'" <Buck@seacc.org>, "Chris S. Savage USFS PSG"

bcc

Subject Central Kupreanof Timber Harvest Comments by the Organized Village of Kake

History: This message has been forwarded.

Chris Savage, Petersburg District Ranger, USDA Forest Service

The Organized Village of Kake (OVK) would like to comment on the Central Kupreanof Timber Harvest, Draft Environmental Impact Statement (DEIS). OVK has general concerns about this DEIS, as being the Village that will be directly impacted by this proposed timber sale, they are as follows:

1. The wildlife section is only 21 pages, with the environmental consequences subjection is only 8 pages
2. The Subsistence section is less than 7 pages long – OVK being one of many villages that rely on Customary & Traditional Gathering as a way of Life

OVK-1 3. The Deer & Martin models were not used, deer being one of the most important Customary & Traditional Gathering

OVK-2 4. OVK residents have noticed that the Wolf population is very active on Kupreanof & Kuiu Islands. The Wolf standard and guideline (concerning mortality, road density, generally providing a carrying capacity of 18 deer/square mile) was not applied.

OVK-3 5. The subjects of Connectivity, Marten, Goshawk, and endemic species sections are too brief, nothing on Goshawk beyond a listing in a table; Kake residents have spotted Goshawk activity within the Kake & proposed timber sale areas.

OVK-7 6. OVK knows from experience that any US Forest Service timber Sales that have been made around the Kake area has hired barely a hand full of workers. The logging companies bring in their own workers on barges & contribute very little economic development/benefit to our community. OVK understands that there are no guarantees that the Forest Service can give to ensure that the local unemployed members will be hired.

7. One (1) out of seven (7) OVK Council members supports this timber sale, primarily because of no local hiring of workers in the past.

OVK-4 8. Over the past decade OVK has noticed that the Black Bear sport hunters have been increasing their take of Black Bear at a steady rate, we know from Customary & Traditional Knowledge, from thousands of years co-habituating with the Black Bear that if one species of wildlife is hunted too much that it will have a unraveling effect on our habitat.

OVK-5 The cumulative logging of watersheds add to siltation of our salmon streams, negatively impacting salmon spawn survivorship, thus impacting the salmon catch by OVK members, by fisherman, etc…and the Black Bear. The Black Bear is one large contributor of natural fertilizer to the existing prime watersheds/old growth trees that we are blessed with.

OVK-6 The cumulative effect of the loss of habitat for our Subsistence use & the loss of Black Bear to all the watersheds will have a vary negative effect on the OVK members & the habitat that we continue to live in.

OVK looks forward to the US Forest Service coming to Kake to continue the dialog with the Tribe about the Central Kupreanof Timber Sale and other subjects that you like to address.

Mike A. Jackson
Organized Village of Kake
Realty/Trust/Natural Resource/Trans. Planner/Tribal Court Officer
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February 1, 2009

Dear Ms. Benna:

The following are comments submitted on behalf of the Sitka Conservation Society (SCS) and the Southeast Alaska Conservation Council (SEACC) regarding the Central Kupreanof Timber Sale. SCS has a long history of involvement in the land management planning process on the Tongass National Forest. Our membership includes hundreds of Alaskans who use the Tongass National Forest and are concerned about management of its natural resources and roadless areas. Our members within the Tongass include commercial fishermen, Alaska Natives, tourism and recreation business owners, hunters and guides and citizens who use areas throughout the Tongass for recreation, scientific research and subsistence.

SEACC is a coalition of 15 volunteer citizen organizations in 12 communities across Southeast Alaska. Our individual members include commercial and sport fishermen, Alaska Natives, tourism and recreation business owners, small-scale high-value added wood product manufacturers, hunters and guides, and Southeast Alaskans from all walks of life. SEACC is dedicated to preserving the integrity of Southeast Alaska's unsurpassed natural environment while providing for the balanced sustainable use of our region's resources.

The alternatives indicate a timber take between 28 and 70 MMBF from Central Kupreanof Island. Much of the project area has been heavily fragmented from past logging and road construction. This project significantly increases logging in this area and would add as much as 34 more miles of open road for at least ten years, greatly increasing the road density and threatening numerous fish and wildlife species. Because of this significant damage from past logging and road construction, the extraordinary salmon productivity of project area watersheds, the importance of this area to Kake residents for subsistence and other activities, and the absence of a need for a project of this scale, we request that you withdraw this DEIS and that no further planning occur on this project.

Some of our problems with this DEIS flow from the newly amended TLMP. This DEIS and its planning documents rely on, tier to and reference the TLMP. We had hoped that the Forest Service would have taken the opportunity to revise the TLMP to reflect the significant changes in demand for timber, fish and wildlife, subsistence, tourism and recreation on the Tongass in a way that would help rather than hinder the ongoing transition in Southeast Alaska since the end of the pulp mill era.

Instead, the amended TLMP retained a "timber first" direction that failed to appropriately analyze and balance multiple uses of forest resources. The development of this large-scale project at an enormous public cost is an unfortunate but predictable outcome of the flawed TLMP amendment process. SCS and other groups appealed the TLMP to the Chief of the

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Forest Service and requested specific and major changes. These comments rely on, tier to and incorporate by reference those appeals.[1]

We would have preferred to review several alternatives with volumes scaled to the small mills in this biogeographic province rather than review a DEIS that couples lip service to small sale options with a large sale component that is both uneconomical and ecologically unacceptable. Under the circumstances, this DEIS leaves little choice but to support Alternative 1, the no-action alternative. We request that you cancel planning on this project or prepare a substantially revised DEIS with fundamentally downsized alternatives that adequately reviews environmental impacts.[2]

I. Preliminary Concerns

A. The Scoping Notice Failed to Describe the Scope of the Proposed Action In Violation of NEPA

In your responses to comments, please detail the history of scoping on this sale. A scoping notice must describe the proposed action and possible alternatives.[3] NEPA further requires that "[d]raft environmental impact statements shall be prepared in accordance with the scope decided upon in the scoping process."[4]

SCSI-1 The January 2008 scoping notice informed us of the intent to *log up to 40 million board feet*. The DEIS explains that "the proposed action has been adjusted to respond to on the ground conditions and resource concerns while remaining within the scope of the original proposed action."[5] The January 2008 notice provided no indication that the Forest Service intended to develop a proposed action alternative that would take up to 46.8 MMBF from this project area and develop a second of three alternatives that would take over 70.2 MMBF of timber from this project area.

The DEIS also states that a second public involvement letter was sent out stating that the project could take 80 MMBF following the development of an initial unit pool that would have taken 40 MMBF.[6] It does not specify when that second letter was sent. Our review of the planning record and of our files for this project show that the Forest Service has looked at and communicated to the public different volume options for this sale several times prior to the January 2008 scoping notice. The problem is that we do not have and did not find any indication in the planning record that there has been a subsequent notice after January 2008 that informed the public of this most recent change of plans. Other commenters with

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[1] Specifically, we incorporate Appeals No. 08-13-00-0027 (Southeast Alaska Conservation Council); -0028 (The Wilderness Society); -0029 (Sitka Conservation Society et al.): -0019 (Trout Unlimited Alaska); -0023 (Alaska Wilderness League); -0025 (Natural Resources Defense council); -0026 (Audubon Alaska). All of these filings, with their attachments, have been provided to Region 10 in the course of the 2008 TLMP amendment appeal proceedings and are readily available to the Forest Service on the Tongass website. We can also furnish these materials if needed. Most of the documents cited herein are contained in the project or TLMP planning record and we will supply several documents as attachments in a separate e-mail.

[2] 40 C.F.R. § 1502.9 (providing that "[i]f a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion").

[3] 40 C.F.R. § 1508.22(a).

[4] 40 C.F.R. § 1502.9.

[5] DEIS at 1-3.

[6] DEIS at 2-2.

specific concerns about the scale of this project as scoped also assumed that this would be a 40 MMBF project with 18 miles of roads.[7]

The failure to prepare this DEIS in accordance with the scope decided upon during the most recent scoping process violates NEPA. The most recent public notice clearly set a maximum volume that is now exceeded in two of the three action alternatives. We request that you withdraw the DEIS and issue a new scoping notice so that the public is fully aware of the plans for this project in the first instance.[8]

B. The Purpose And Need Statement Is Inadequate

SCSI-2

In our scoping comments, we asked that the purpose and need and the alternatives be scaled to the needs of any sawmills that are on the western Kupreanof road system, and that the project be designed to be attractive primarily to them at more or less the current level of production. The scale of this project appears to be designed primarily for shelf volume for large sales rather than for local and diverse opportunities for resource uses. Please revise the purpose and need statement to address the needs of sawmills on the Kupreanof road system and the restoration and maintenance needs in the area and redevelop alternatives accordingly.

C. The Streamlined DEIS

We have noticed over the past year an increasing tendency to reduce the amount of information provided in an EIS. Although the Forest Service's effort to improve the efficiency of the NEPA planning process are commendable, the result has been a DEIS that is inadequate given the significant impacts of large-scale timber harvest. This DEIS is not the "detailed statement" that NEPA requires federal agencies to produce so that environmental impacts receive consideration "to the fullest extent possible."[9]

NEPA compliant environmental analysis must take a "hard look" at the environmental consequences of a proposed action."[10] The information provided needs to be of high quality and include all pertinent information that is or should be part of the decisionmaking process.[11] Conclusory statements need to have some basis in scientific or objective data.[12] This DEIS supplies numerous unsupported conclusory statements about subjects that range from job generation to cedar regeneration. The DEIS measure impacts to fish and wildlife in an encyclopedic manner through reference to cumulative harvests and remaining POG without any site-specific analysis of project impacts.

Even the unit and road cards suffer from streamlining. The public reviewing those documents is led to believe that none of the cutting units implicate concerns with wildlife, recreation, sensitive plants, and a host of other resources. Yet there are materials in the

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[7] Cariello, J. 2008. State of Alaska DNR/OHMP Comments; Mecum, R. 2008. NOAA Scoping Comments for the Central Kupreanof Timber Harvest.

[8] This result would also redress several other concerns we raised about the January 2008 scoping notice – the time period between mailing and the requested comment submission date was very short, there was no purpose and need statement to indicate why the project was planned at this time, no proposed harvest techniques were discussed and impacts to the inventoried roadless areas were only vaguely discussed

[9] 42 U.S.C. § 4332(2)(C).

[10] Citizens Against Toxic Sprays v. Bergland, 428 F.Supp. 908 (D.Or. 1977).

[11] 40 C.F.R. § 1500.1(b); Trout Unlimited v. Morton, 509 F.2d 1276, 1282 (9th Cir. 19740.

[12] Citizens Against Toxic Sprays v. Bergland, 428 F.Supp. 908 (D.Or. 1977).

SCSI-3

planning record indicating connectivity concerns for some units and the Recreation section identifies specific units that will impact recreational uses. We find it surprising that cutting units containing 70 MMBF of timber could be harvested without any unit-specific wildlife concerns. In your responses to comments, please address whether the level of information provided in the unit cards is complete, and whether the individual units were surveyed for wildlife use.

SCSI-4

We also continue to be concerned that the public must then request copies of the project planning record to find material that should be in the DEIS and that is necessary to understand the nature and impacts of the project. We spent an inordinate amount of time reviewing the planning record for information on goshawks that should have been in the DEIS and ultimately realized that the information was not included there either. One of NEPA's purposes is to ensure that "environmental information is available to public officials and citizens."[13] The Forest Service is supposed to facilitate and encourage public involvement rather than discourage public involvement by obscuring material that best facilitates meaningful comment. Requesting and reviewing a project file of thousands of pages and hundreds of documents spanning years in order to meaningfully comment on a DEIS is not reasonable and does not further NEPA's goal of public participation.

For the reasons above and below, we request that the DEIS be withdrawn and redone. There are too many omissions of important details that are essential to a reasoned decision. An unreasonable decision to proceed with this project was the result.

II. Range of Alternatives:

SCSII-1

The alternatives are the heart of a NEPA document and one of the Forest Service's most important obligations under NEPA.[14] Because of the environmental damage and the significant taxpayer loss associated with road construction, our scoping comments requested that the Forest Service consider multiple action alternatives that eliminated new road construction as well as incursions into or impacts to roadless areas. We also requested alternatives consisting of economically efficient micro-sales scaled to the needs of local mills.

The DEIS proposes three action alternatives. Alternative 2 addresses timber economics and deer habitat and would take up to 46.8 MMBF of timber with 2,031 clearcut acres and 467 acres where some form of partial retention prescription would apply.[15] This alternative includes 14.1 miles of road construction or reconstruction.[16] Alternative 3 addresses timber economics by maximizing volume and would take up to 70.2 MMBF from 3,127 clearcut acres and 520 uneven-aged management acres.[17] This alternative involves 41.3 miles of road construction or reconstruction.[18] Alternative 4 minimizes road construction and takes 28.2 MMBF from 1,327 clearcut acres.[19]

We reiterate our requests for multiple alternatives that both minimize ecological impacts and maximize economic efficiency per unit of impact: road-based micro-sales. The Forest Service needed to "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their

[13] 40 C.F.R. § 1500.1(b).
[14] 40 C.F.R. § 1502.14; NRDC v. U.S. Forest Serv., 421 F.3d 797, 813 (9th Cir. 2005).
[15] DEIS at 2-3.
[16] DEIS at 2-3.
[17] DEIS at 2-3.
[18] DEIS at 2-3.
[19] DEIS at 2-4.

having been eliminated."[20] "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate."[21] The failure to consider a low volume alternative that minimized impacts to other important resource area values warrants production of a supplemental EIS.

A. The DEIS Improperly Excludes Other Reasonable Alternatives

The IDT selected three significant issues used to formulate and design alternatives: (1) Timber Supply and Economics; (2) Inventoried Roadless Areas and (3) Road Management/Access.[22] In our scoping comments, we raised several other issues that should have merited more serious concern in the alternative development process. In particular, we indicated that the project area contains several watersheds that are highly ranked for salmon productivity and we asked the Forest Service to consider some combination of impacts to fish, wildlife and subsistence uses of these resources as a significant issue.

SCSII-2

The scoping notice declined to consider subsistence as a preliminary issue because it was addressed in the Road Analysis Process/Access Travel Management Plan. But the scale of this project poses additional risks to subsistence resources beyond impacts resulting from road construction. Further, not all wildlife resources are synonymous with subsistence resources and we requested that the DEIS consider overall impacts to fish and wildlife as an alternative driving issue.

The DEIS did note that numerous concerns were raised about subsistence, access and deer.[23] But the only reasons given for eliminating the alternative was that additional units were added to the unit pool.[24] This explanation was confusing – does it mean that the Forest Service eliminated an alternative driven by wildlife, subsistence and access concerns because of the need for increased volume? We request clarification as the other two alternatives maximize timber volume and if the explanation is accurate, the entire range of alternatives has either to do with maximizing timber volume in general or maximizing timber volume and economics. The DEIS should disclose the opinion of several IDT members that a low volume alternative was preferable as it provided the best economics and pointed to the futility of high volume alternatives because the agency would have to "bear the burden of road building costs and impact more resources when the timber quality is marginal."[25]

Further alternatives around deer habitat were rejected on the ground that the proposed action incorporated deer habitat in the design.[26] We are extremely disappointed that the Forest Service did not consider a combined subsistence/deer habitat alternative. ADF & G expressly raised concerns about project impacts to deer habitat.[27] Nearby Kuiu Island is a predator pit with low deer numbers, Admiralty Island deer harvest requires vessels capable of transiting large stretches of open water during winter weather and Kupreanof Island does not have enough habitat to support large numbers of deer. Because of the importance of deer as a subsistence resource, the Forest Service should be managing this area to restore and protect deer habitat rather than planning for large-scale future removals of deer habitat and increasing deer removals through increased road density.

SCSII-3

[20] 40 C.F.R. § 1502.14(a).
[21] Westlands Water Dist. V. U.S. Dep't of Interior, 376 F.3d 853, 868 (9th Cir. 2004).
[22] DEIS at 1-17.
[23] DEIS at 2-10.
[24] DEIS at 2-10.
[25] Planning Record Document # 255.
[26] DEIS at 2-10
[27] Planning Record Document # 331.

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Please revise this DEIS to include alternatives that address subsistence and deer habitat as an alternative driving issue.

B. The Range of Alternatives Tiers to an Illegal and Arbitrary Forest Plan

The purpose and need statement for this project relies on guidance from the 2008 TLMP amendment. As a result, the range of alternatives was unreasonably restricted by the objective of meeting an overinflated market demand scenario pursuant to the 2008 TLMP amendment. These issues have been fully addressed by the administrative appeals filed by SCS and others and we will reiterate these problems in our discussion of Appendix A. We simply point out here that this particular project is an unfortunate result of the deficient Forest Plan analysis and flawed multiple-use balancing. All of the action alternatives include large-scale clearcuts and two of the three action alternatives authorize extensive road construction.

C. The Forest Service Improperly Excluded a Small or Micro-Sales Alternative

SCSII-4 In our scoping comments, we specifically requested that the project be scaled to the needs of local mills and that action alternatives offer only micro-sales. In light of the economic and ecological context, the development of a small and/or microsales alternative was essential to fulfilling NEPA's mandate to facilitate "informed decisionmaking and informed public participation."[28] A small or micro-sale alternative would have done by far the best job of "sharply defining the issues and providing a clear basis for choice among options."[29] The DEIS notes that "a number" of small mill owners have "expressed an interest in purchasing small sales from the project area."

1. The Small Sales Alternative Would Best Meet the Economic Goals of the Purpose and Need for this Sale

NEPA requires the Forest Service to discuss the reasons for eliminating alternatives from detailed study.[30] There was no discussion in the DEIS that explains the rejection of our suggested micro-sales alternative. Such an alternative would even be the most consistent with the unreasonably narrow purpose and need for this project – to "[m]anage the timber resource … in an economically efficient manner" and to "[p]rovide for a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska."[31]

Small sales may be the most feasible method of providing local employment and economically efficient projects:

> Small timber operators have the ability to sell smaller amounts of forest products in the local area, have less capital outlays, lower overhead, and have been able to develop niche markets for their products. The small and very small family owned businesses that currently constitute the Southeast Alaska woods products industry are adjusting to take advantage of these more

[28] Westlands Water Dist. V. U.S. Dep't of Interior, 376 F.3d 853, 872 (9th Cir. 2004).
[29] 40 C.F.R. §
[30] 40 C.F.R. § 1502.14(a).
[31] DEIS at 1-2.

> specialized markets. This is likely a normal phenomenon that is part of the transition occurring in the Southeast Alaska timber industry.[32]

This DEIS confirms that "[l]ocal processing avoids the cost of barging the timber to a larger mill, thus reducing logging costs and increasing the indicated bid amount for the volume harvested though small sales."[i33] Statistics corroborate the economic efficiency of smaller sales. On nearby Prince of Wales Island, the micro-sales generated an average bid value of $90.36 per MBF over a five-year period from 2003 to 2007 and the small sales program generated an average bid value of $64.75 per MBF.[34] During the same time period the larger sales program generated a bid value of just $11.44 per MBF for a much larger volume.[35]

These figures indicate that the most economically efficient timber is that timber taken from the road system in smaller volumes. Further, the small sale program is more effective at achieving local utilization of high value species. As indicated by the supporting documentation for the limited interstate shipment policy, the large sale program requires high levels of out-of-state processing in order for the sale to be economical.[36]

We have not conducted a detailed review of the Petersburg Ranger District sales program but have skimmed through information pertaining to bid data and sales cancellations.[37] As discussed in more detail in subsequent sections, the Forest Service should have taken a harder look at the recent history of its large sale program in this DEIS and such an effort would have better informed the development of alternatives. But in general, it appears that small sales from this ranger district have also generated a much higher bid value per MBF and that numerous large sales are in default, been cancelled or received no bids.[38]

In sum, we fail to see how preparing a large sale component solely for the purpose of shelf volume meets the purpose of managing the timber resource for economically efficient sawtimber production. If planning on this project continues pursuant to the current Purpose and Need statement, please include multiple small sales alternatives in a revised DEIS.

2. A Micro or Small Sale Alternative Best Meets Forest Plan Guidance

The two largest sales from the Petersburg Ranger District over the past five years, Lindenberg and Finger Point, received just one bid.[39] But the Forest Plan directs the Forest Serivce to "plan offerings to encourage competitive bidding in a range of total sale volume and species that provides opportunities for purchasers."[40]

In our view, the Forest Service should have reviewed bid data for sales from the district prior to eliminating a small or micro-sales alternative. It is clear from recent Thorne Bay Ranger

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[32] Couverden Timber Sales ROD at R-9.
[33] DEIS at 3-17.
[34] Mehrkens, J. 2007. Tongass Timber Bid Analysis. Excel spreadsheets on file with SCS and also attached as Exhibit 2 to the SEACC appeal of the Tongass Land and Management Plan Amendment available at http://tongass-fpadjust.net/FPA_Appeals.htm.
[35] Id.
[36] Housley, R., K Vaughan & S. Alexander. 2007. Forest Service Region 10 Timber Market Analysis of the Effects of Export and Interstate Commerce on Timber Sale Value and Volume. Regional Economist, USDA Forest Service, Alaska Region. February 20, 2007.
[37] Mehrkens, J. 2007.
[38] Id.
[39] Id.
[40] 2008 TLMP at 4-74.

District bid data (2005 – 2007) that small sales generated multiple bids while larger sales from the same district over a five-year period (2001-2005) received but a single bid from the same mill.[41] Notably, the competitively bid sales generated more than five times the value per MBF.[42]

3. There Are No Buyer For Large Sales and the Forest Service is Foreclosing Opportunities for Small Mills by Excluding Small Sales Alternatives

SCSII-5

As we explained at the outset of our comments, the large sale component of all the alternatives leaves us little choice but to support the no-action alternative. This is unfortunate because we would support road-based small sales from this project area that would facilitate employment in Kake and Petersburg. This support would minimize the delay associated with extended NEPA documentation and administrative appeals.

In the revised DEIS that explains why our proposed small sale alternatives were not considered, please discuss potential buyers for the large sale component. Three mills have bought recent sales from the Petersburg Ranger Districts in recent years. One, Silver Bay Logging, cancelled several sales and ended up going bankrupt trying to harvest these sales. Another, Alcan, has not harvested timber from any Tongass sales in recent years unless there was prior approval for export of the entire sale volume. The third, Viking Lumber, has cancelled several sales in the project area and may be seeking to cancel the remaining volume of its only current sale in the Petersburg Ranger District – Lindenberg – despite barely having enough volume to remain in operation.

Conversely, the DEIS mentions specific requests for small and micro-sales from small mills in Kake. There is no mention of any interest in large sales from this project area. This lack of interest is not surprising in light of the recent cancellations and large sales from this ranger district that have received no bids. We make three points here: (1) environmental organizations have repeatedly advocated and recently have negotiated for small timber programs that supply local mills; (2) small local mills requested small sales and (3) large sales from this project area have not helped larger mills. In light of these three points, please explain in some detail why the Forest Service has refused to uncouple small sales from large sales in developing alternatives. The only explanation we can see is that the agency wants to continue to blame environmentalists for its inability to supply timber to local users rather than conduct a sincere evaluation of the combined realities of poor economics, poor demand and the agency's own export policies that promote foreign processing of the most valuable trees.

4. Conclusion

SCSII-4 The DEIS did not respond to our request for multiple action alternatives consisting solely of small and micro-sales and consequently did not explain why this option was eliminated from study in violation of NEPA. We have provided numerous reasons why our proffered alternative best meets the economic timber component of the purpose and need, Forest Plan guidance and ecological concerns. Such an option furthers NEPA's goal of sharply defining the issues. To correct the deficiency of this DEIS, please include multiple small sales alternatives in a revised DEIS or explain why these alternatives were excluded in light of recent sales cancellations, the improved economic efficiency of small sales and the opportunities for competitive bidding.

[41] Mehrkens 2007.
[42] Id.

III. Significant Issue One: Timber Supply and Sale Economics

In our scoping comments, we noted a number of concerns pertaining to the economics of timber sales on the Tongass. Our first concern pertains to the market demand rationale for considering harvest in this project area. We request a re-evaluation of this analysis before you proceed with this project. Our reasons for this are discussed in our discussion of Appendix A at the end of these comments.

We also point out that this DEIS underestimates the costs associated with this project and overestimates the benefits. This DEIS measure timber sale economics in terms of six factors: (1) total volume measured in MMBF; (2) logging costs per MBF; (3) indicated bid value; (4) employment in direct number of jobs; (5) direct income based on projected employment; and (6) logging systems by harvest method.[43]

These measurements do not adequately reflect a true cost/benefit analysis of this project. In our administrative appeals and in comments on other timber projects, we have repeatedly asked the Forest Service to take a hard look at the employment and economic impacts of timber projects, to incorporate the true costs of road construction and other subsidies and to discuss detrimental impacts to other resource users. Our specific concerns follow.

A. The DEIS Overstates the Ability of the Forest Service to Affect Local Timber Industry Economics

SCSIII-1 In our scoping comments, we requested an accurate assessment of the number of jobs and the amount of revenue the project will generate in the region. We further asked the Forest Service to identify the amount of unprocessed lumber hemlock, spruce and cedar from this sale that is pre-authorized for transshipment or export and the amount of cedar that is likely to be exported based on past sales. The public has a legitimate interest in expecting that high-value timber will be available for value-added local processing and the DEIS failed to take a hard look at this important issue.

1. The DEIS Needs to Disclose the Likelihood of Out-of-State Shipment or Export

We remind the Forest Service that "[f]or an EIS to serve [its] functions, it is essential that the EIS not be based on misleading economic assumptions."[44] At a minimum, assumptions must at least be explained.[45] The DEIS suggests that a purchaser "may elect to process all the sawlogs locally or to ship up to 50 percent of the total sawlog volume and 100 percent of the utility volume to markets outside Alaska in the lower 48 states."[46]

We are unaware of any large sale purchased from this or any other ranger district where all of the timber received domestic processing. In fact, in 2007 the Forest Service issued permits to export or transship 16.3 MMBF of timber during a year where operators cut only slightly more than that – 18.7 MMBF. We recognize that there is a time lag between sale, cut, permit approval and actual export but it seems clear that purchasers of large sales typically ship out at least a third of sawlog volume without any local processing. For example, more than one-

[43] DEIS at 3-10.
[44] Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 446 (4th Cir. 1996).
[45] Van Abbema v. Fornell, 807 F.2d 633, 639-42 (7th Cir. 1986).
[46] DEIS at 3-19.

fourth of the volume from the 2004 Finger Point project had been approved for export by the end of 2007. Please compare export permit approvals with sales data from Petersburg Ranger District sales and evaluate whether the assumption that a sale purchaser may domestic process all sawlogs is valid. If there are no instances of 100% domestic processing for projects of this scale, please revise and redo this EIS to correct any misleading statements.

We also request clarification about the status of the 2007 limited interstate shipment policy. The DEIS fails to discuss the 2008 addendum to this policy that authorized foreign export of spruce and hemlock sawlogs. Please discuss whether the circumstances that led to the development of that addendum are still present and evaluate whether or not there may need to be an extension of that foreign export addendum in order to make this sale economic.

Regardless of whether there will be 50% interstate shipment or 50% foreign export, the requested information is critical so that the public and the decision maker have an opportunity to evaluate the extent to which this project will meet the stated purpose and need. The DEIS needs to fully analyze the economics of this sale in terms of the amount timber likely to be processed out of state.

There should also be a comparison of the respective values of sawlog species generally harvested for export versus those that may receive domestic processing. Although the amount of cedar sold between 2001 and 2005 was less than 20% of the volume of spruce and hemlock sold during the same period, the stumpage values were similar - $3.3 million for the spruce and hemlock and $2.8 million for the cedar.[47] The proposed action would take 5.7 MMBF of yellow cedar. Using 2008 figures from the most recent sale advertisement, the bid value for the amount of yellow cedar for this sale by far outstrips the bid value for hemlock even though there is five times as much hemlock.[48]

In sum, please indicate the respective values of this sale by species so that the public can review whether planning for this project is for the primary purpose of seeking cedar for export rather than promoting economically efficient sales for local processors.

2. Because of the Inadequate Analysis of Exports and Interstate Shipments, the Table on Mill Jobs is Misleading

In scoping comments, we asked that the DEIS clearly account for the probable percentage of workers who will be seasonal out of state workers based on information from previous years. Residents of Kake have indicated that timber operators bring in their own workers so that there is little contribution to the local economy through these projects. Please provide detailed statistics about past employment generated by large timber sales. We further asked for an accurate assessment of job generation based on a realistic analysis of exports and interstate shipments of raw logs out of the region. This information was important so that the decisionmaker and the public could evaluate whether the stated purpose and need for the project will be fulfilled.

The DEIS did not respond to these requests in any way. Instead, it proposed a range of jobs that reflects "the variety of options the timber purchaser has under the limited interstate

[47] USDA Forest Service Region 10, Timber Cut and Sold on National Forests, 2001-2005, available at http://www.fs.fed.us/r10/ro/policy-reports/for_mgmt/index.shtml.
[48] Kolund, L. 2008. Traitor's cove Sale Bid Notice. USDA Forest Service, Ketchikan Ranger District, Ketchikan Alaska: September 18, 2008.
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shipment policy."[49] The upper end of the range assume complete domestic processing of all sale volume and the DEIS says that the number of jobs is likely to fall between the high and low end of that range.[50] As discussed in the preceding subsection, we are unaware of any basis for the assumption that a sale purchaser "may elect" to process all the sawlogs in the region.

Consequently, Table 3-7's assertion that action alternative could generate as much as 221 jobs worth $8.3 million or 332 jobs worth $12.5 million is highly misleading. This table mischaracterizes the total annualized jobs and income by suggesting an upper range without providing any basis for the assumption that all the timber sold would ever be processed locally in Southeast Alaska.

3. The DEIS Needs to Evaluate the Long-Term Economic Impacts of Liquidating High-Value Trees for Export Now

One of our concerns with regard to cedar exports is that trees which have the highest potential for adding value to the local small industry are being cut now and will not be available to these small mills over the planning cycle. The CEQ regulations require the Forest Service to discuss "the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity."[51] Please explain how the near-term targeting of POG, which contains the relatively rare but much higher value cedar species, affects the long-term viability of the Tongass timber program.

SCSIII-2

4. Conclusion

The failure to take a hard look at export policy and its consequences warrants production of a revised EIS. Please include accurate information about job generation and job generation specifically in Kake and Petersburg. Please review Petersburg Ranger District sales data and compare bid values for large and small sales and discuss recent cancellations of large sales.

B. The Timber Financial Efficiency Analysis Needs to Discuss All Costs

SCSIII-3

In scoping comments, we requested a detailed public investment analysis that disclosed the full public costs associated with administering this project, including "pre-roading funded by taxpayers but not recovered in timber sales receipts.[52] We requested that the analysis take into account the fact that a substantial portion of timber sales offered in recent years have received no bids or been cancelled so that taxpayers incur the expenses of preparing the sales with no offsetting timber receipts.

In planning a timber project, the Forest Service needs to compare the public money it will spend administering a project with the prospective returns to the agency. That analysis "compares estimated Forest Service expenditures with estimated financial revenues" and allows the decision maker and the public to gain some understanding of "the future financial position of the program if the project is implemented."[53] Part of the purpose of this analysis

[49] DEIS at 3-19.
[50] DEIS at 3-19.
[51] 40 C.F.R. § 1502.16.
[52] Specifically, we expected comprehensive and accurate estimates of sale administrations costs, actual expenditures rather than estimates, associated costs such as the project's share of Region 10 timber program overhead and foreseeable post sale costs as well as information on the methodology uses whenever costs were estimated.
[53] Forest Service Handbook § 2400.18_30.

is to fulfill NEPA's requirement to "balance a project's economic benefits against its adverse effects."[54] Without a corresponding an accurate display of costs and harms, informed decisionmaking is not possible, the public is mislead and NEPA's hard look requirement is not met.[55]

This DEIS fails to provide a table that accurately displays and tallies administrative, engineering and road costs so that the public can compare the public money spent on this project with income generated. Table 3-6 does indicate that each alternative will generate a loss of between $1.6 and $5.1 million but does not specify the specific sources of those losses so the public cannot evaluate whether there has been a full accounting of administrative costs and costs associated with public works roads. Our more specific concerns follow.

1. Pre-Roading Contracts

SCSIII-3 The DEIS says that "in some years, public works funds are available to pay for all, or a portion of, road construction or reconstruction costs in a timber sale for roads that will be used in the long-term administration of the national forest."[56] As a result, the display of stumpage to mill costs fails to incorporate road construction and reconstruction costs and misleads the public as to the true costs associated with this project.

Nearly every large timber sale has been and will be dependent on pre-roading contracts. In our administrative appeal of the 2008 TLMP amendment, we provided examples of pre-roaded sales based on actual contracts issued and solicitations for bids on road construction contracts. There was well over $1 million spent of pre-roading for the Lindenberg and Finger point sales – an amount that tripled the value received from sales revenues.[57] Most timber sales involved considerably higher pre-roading costs that led to costs exceeding sales revenues by over $2 million per project for three projects.[58]

This DEIS fails to account for these costs and does not explain what public works purpose these road fulfill other than access to timber units. In light of the large scale of road construction proposed for this project, the Forest Service needs to include the cost of public works contracts in order to fully evaluate the financial efficiency of this sale. The DEIS indicates that road construction is "primarily … a function of the demand for access to timber resources" and "future construction is anticipated to be largely determined by the need to access timber resources."[59] If there is road construction funded through other Congressional appropriations for some other National Forest purpose in the project area, it should be explicitly discussed in the DEIS.

We request that a supplemental table be provided that fully accounts for the cost of taxpayer subsidized road construction in the project area regardless of the stated purpose of the road.

2. Cost Monitoring

SCSIII-3 This DEIS omits any discussion of the costs of administering this project and we request that the revised DEIS include a table that indicates the Net Present Value of the project after

[54] Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 446 (4th Cir. 1996).
[55] Id.
[56] DEIS at 3-17.
[57] SCS et al. TLMP administrative appeal
[58] Specifically, the Midway, Sunmore Change and Buckdance Madder projects.
[59] DEIS at 3-37.

SCSIII-3 incorporating administrative and public works road contracting costs. The only cost factored into the timber efficiency analysis in this DEIS is the stumpage to mill cost to the purchaser. As a result, the public and the decisionmaker have no information to review about the cost of NEPA analysis, the costs of sale preparation and administration and the cost of engineering support. According to one recent DEIS, these costs can amount to approximately $5 million for a 52 MMBF sale.[60] Thus, in a sale that had a positive indicated bid value, there was still a negative Net Present Value of -$3.7 million.

SCSIII-4 Further, we request that the Forest Service update its stumpage to mill cost calculations for the DEIS. We have repeated requested that the Forest Service update its measurements of logging and road costs. The information in this DEIS appears to be clearly outdated given that the closest appraisal point is a mill that is no longer in operation.[61]

3. Conclusion

The financial efficiency analysis failed to discuss a number of significant costs – particularly administrative costs and "public works" road construction costs. Without this information, the entire section is misleading. We request that the Forest Service prepare a revised DEIS that provides updated logging costs, includes administrative costs and includes all public works road construction costs that are related to timber access.

C. The DEIS Must Provide a More Thorough Analysis of Ecosystem Services

SCSIII-5 In scoping comments, we requested the inclusion of all non-timber-related economics of the area in the economics analysis section of the EIS including: recreation, tourism, hunting, fishing and subsistence. The financial efficiency analysis ignores these costs on the ground they are regional or on the ground that non-market benefits and opportunity costs are not easily quantifiable.[62] Costs to fisheries and recreation are shifted to those corresponding sections where we are told that the project will not impact those resources.

Obviously, the value of these factors will differ depending upon which alternative the Forest Service selects, but quantifying them as "zero" in the "No-action Alternative" does not portray these factors accurately to the public. A fully informed analysis of the economics of this timber sale should incorporate external costs. Courts have pointed out that "[t]here can be no 'hard look' at costs and benefits unless all costs are disclosed."[63] This DEIS fails to meet that standard because it focuses its economic analyses and forecasts solely on the wood products industry and ignores important economic contributions from other industries as well as the services and benefits that ecosystems provide. The cost of producing a good or service is not simply a factor of priced inputs such as logging costs. If environmental and other resource user costs are not factored into the economic analysis, the true value of resources being used to produce the timber is not accurately represented.

Forest Service scientists and the experts they work with are well aware of this dynamic and it needs to be incorporated into planning and project level analysis:

> ... management of the Tongass for carbon sequestration may be of equivalent economic value to timber harvesting. Valuation of potential carbon sequestration in the Tongass from ceasing

[60] See Logjam DEIS at 3-131.
[61] DEIS at 3-14.
[62] DEIS at 3-16; 3-19.
[63] Sierra Club v. Sigler, 695 F.2d 957, 975-76 (5th Cir. 1983).

all harvesting may be amplified by indirect benefits of eliminating harvesting, such as maintenance of the southeast Alaska fisheries and tourism industries and reduced expenses for the Tongass timber program.[64]

In previous timber project comments and in our administrative appeal of the 2008 TLMP amendment, we repeatedly emphasized that these values needed to be incorporated in the financial efficiency analysis. But this DEIS did not mention the more easily quantifiable values and it ignored real costs to other values by omitting non-quantifiable costs. Without taking readily available data and putting a number to these values or measuring losses in some way, the DEIS failed to fulfill its core NEPA obligation of informing the public and the decisionmaker. We request a revised DEIS that includes a cost/benefit analysis that incorporates ecosystem values and puts a number to subsistence resources, recreational values and fishery values so that the public can be fully aware of the economic value of non-timber forest resources and judge for themselves whether the value generated by timber warrants risking other resource values.

1. Legal Directives Requiring Eco-System Benefit Analysis

SCSIII-5

This request is supported by applicable legal directives. NEPA requires the identification and development of methods and procedures "which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations."[65] To implement this guidance, CEQ regulations require that a cost-benefit analysis "discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values and amenities."[66] The Forest Service need not necessarily monetize these considerations **but must include them where relevant and important to a decision**.[67]

Similarly, NFMA and its implementing regulations also require appropriate consideration of non-market goods and services when evaluating alternatives. Planning regulations require forest plans to "describe and analyze … the range and **estimated long-term value** of market and non-market goods, uses, services and amenities that can be provided by [by national forests] consistent with the requirements of ecological sustainability.[68] The regulations provide further guidance by defining "net public benefits" as "the overall long-term value to the nation of all outputs and positive effects (benefits) less all inputs and negative effects (costs) whether they can be quantitatively valued or not."

This DEIS entirely ignored these directives.[69] In our administrative appeal of the 2008 TLMP amendment we provided numerous means of quantifying non-commodity and other values that have been applied by resource economists and federal agency economists. These options include the travel cost and contingent use methods of valuing recreation and the IMPLAN input/output model used by the Forest Service to estimate the effects of agency actions on income and employment.[70]

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[64] Leighty, W., S. Hamburg & J. Caouette. 2006. Effects of Management on Carbon Sequestration in Forest Biomass in Southeast Alaska. Ecosystems (2006) 9:1051-1065.
[65] 42 U.S.C. § 4332(B).
[66] 40 C.F.R. § 1502.23.
[67] 40 C.F.R. § 1502.23.
[68] 36 C.F.R. § 219.21.
[69] DEIS at 3-16.
[70] Loomis, J.B. & R. Richardson. 2000. Economic Values of Protecting Roadless Areas in the United States. Fort Collins, Colorado, Department of Agricultural and Resource Economics, Colorado State University.

Other values such as fisheries and subsistence resources are easily quantified by calculating value per fish by fishery ex-vessel values and guided angler willingness to pay formulas or by calculating the value of subsistence resources by comparing prices of substitute protein products. In the following two sections we list the economic benefits provided by forest resources occurring within the project area that must be evaluated in order to reach a fully informed decision.

2. Specific and Measurable Economic Sectors: Effects on other Natural Resource-related Employment

SCSIII-6 The DEIS needs to acknowledge the economic impacts to sectors other than the timber economy. Jobs, personal income (wages or proprietor income) and mixed economy incomes (subsistence) realized in surrounding communities directly flow from continued preservation of natural environments. Given that non-timber sectors provide significantly higher levels of economic activity in surrounding communities, it was important for the DEIS to fully analyze these economic sectors in order to provide the information necessary to arriving at a fully informed decision.

a. Fisheries

There is ample indication in the project file to indicate that there are ecosystems services worthy of discussion at the project level. The DEIS entirely defers project level analysis of impacts to fisheries on the ground that the fishery economy is regional in nature.[71] Because the fishery analysis ultimately arrives at the flawed conclusion that as much as 30 miles of road construction and 70 MMBF of timber extraction poses no risk to fishery resources, the DEIS entirely declines to inform the public of the annually renewable value of project area fishery resources.

ADF & G specifically raised project-level impacts to fisheries in their scoping comments and pointed out that "[i]t is apparent that FS staff has not fully considered the relative values of productive watersheds within the Central Kupreanof Project area relative to communities here in Central SE Alaska."[72] The agency explained that project area watersheds contribute to subsistence, recreational and commercial fisheries and requested that the Forest Service review published information used to evaluate potential habitat impacts from proposed developments that identifies harvest, catch and productivity data used to identify high value community use areas.[73] ADF & G technical bulletins expressly identify project area watersheds:

> The Department's information clearly shows that in SE AK, both Hamilton Creek (VCU #s 4250, 4260) and Castle River (VUC #s 4350, 4360) were/are considered as Primary Salmon Producers as well as Primary Sport Fish Producers. These two important systems were also ranked as having moderate-high, and highest sensitivity, respectively, for disturbance of Subsistence use areas for communities in SE AK. In the same analysis, Tunehean and Irish creeks (VCU #s 4280 and 4290) and Big John Creek (VCU #4271) ranked as Secondary Salmon Producer. Taken together, we believe that this information clearly indicates that most of the potentially affected watersheds (5 of 7) have been identifies as productive and valued for the sustained benefits seen

[71] DEIS at 3-19.
[72] Cariello, J. 2008. ADF & G Sport Fish Division Scoping Comments.
[73] Cariello, J. 2008. ADF & G Sport Fish Division Scoping Comments (referencing Tongass Fish and Wildlife Resource Assessment, 1998, Alaska Deapartment of Fish and Game Technical Bulletin No. 98-4.

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> in subsistence, commercial and recreational fisheries. Sustained full habitat functioning in these watershed is important to our local communities, particularly Petersburg and Kake, and as such, we propose that timber sale alternatives and logging prescriptions reflect this.[74]

In 2007, commercial salmon fisheries in Southeast Alaska were worth $98 million in terms of ex-vessel value, meaning that this figure does not include processing jobs, transportation jobs and other ripple effects.[75] Given the maintenance backlog, the increased road construction and the concentration of cutting units around streams, we think this project will have real and immediate impacts on the productivity of Primary Salmon Producer streams in the project area. The DEIS needs to discuss the contributions of project area watersheds to the region's key economic sectors in order to fully inform the decisionmaker and the public about the costs and benefits of this project.

b. Recreation Employment

The DEIS needs to take a harder look at how timber harvesting activities impact the tourism industry. The DEIS notes that timber harvest activities would be readily apparent in the vicinity of key project area recreation places but concludes that these impacts are temporary and ultimately would have "little effect."[76] But this statement ignored the fact that the quality of the experience is important to ensuring that visitors return year after year.

SCSIII-7

The DEIS needs to quantify the value of recreation to local communities in order to ensure a full consideration of project area resource values. Recreation employment can be measured in terms of annualized jobs using the same methods to calculate timber annualized jobs. A significant portion of visitor expenditures becomes direct income to business owners and workers in recreation-related industries (e.g. gas stations, grocery stores, outfitters). Visitors spend income in the local area to replensish inventories or to purchase consumer services. Theses indirect and induced effects generate income throughout the community.

In 2004, over 100 businesses, including 17 Alaska businesses, addressed Congress pertaining to the outdoor recreation industry's concerns about logging roadless areas:

> While the timber industry in Southeast Alaska continues a sharp decline … the recreation and visitor industry continues to grow. Using Forest Service data, a 1997 comparison between the value of logging Tongass old-growth forest and recreation and tourism use of these lands showed that tourism was nine times more valuable than logging. By 2000, recreation and tourism on the Tongass contributed 30 time the value of clearcutting the forest. These are particularly interesting facts when considering that the failing Tongass timber program cost taxpayers $35 million in subsidies that same year. The estimated number of summer visitors to Southeast Alaska slightly more than doubled between 1993 and 2001, increasing from 502,800 in 1993 to 1,010,352 in 2001. Clearly, trees left standing for recreation and tourism contribute substantially more than logging to Southeast Alaska's long-term economy.[77]

Because the quality of the visitor experience can influence the number of return customers that is critical to the health of the tourism industry and local guide-outfitters, we strongly disagree that the DEIS can authorize timber extraction and road-building activities adjacent

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[74] Cariello, J. 2008. ADF & G Sport Fish Division Scoping Comments.
[75] ADF & G. 2007. 2007 Alaska Commercial Salmon Harvests and Exvessel Values. Available at www.cf.adfg.state.ak.us.
[76] DEIS at 3-176-177.
[77] Outdoor Industry Support Effort to Safeguard Tongass National Forest for Sake of Customers and U.S. Taxpayers. (Septmeber 29, 2004.

to identified recreation sites on Central Kupreanof that avoid detrimental impacts to visitor industries. The DEIS needs to include an analysis of the recreational business generated through use of the project area in its economic analysis so that the public and decisionmaker can evaluate the extent to which this project will impact the dominant economic uses of this area.

c. The Subsistence Economy

The value of wild foods on the Tongass has been quantified – wild food harvest provide 115% of the protein requirements for Southeast Alaska residents and the total value of wild food harvests to Southeast Alaska's 73,000 plus residents in 1999 was $15,193,527 at $3 per pound and $25,322,545 at $5 per pound.[78] The DEIS provides specific numbers of subsistence harvest from project area WAAs. This is adequate information to calculate the value of local subsistence resources by Kupreanof WAAs in terms of deer harvests but the DEIS declines to interpret the economic significance of these resources.[79] Again, this information should have been provided in the financial efficiency analysis.

d. Conclusion

In our view, many values such as individual sport or commercially caught fish or pounds of protein harvested for subsistence purposes are easily quantified and have been quantified in numerous studies. If the Forest Service can calculate annualized jobs based on MBF harvested it can certainly figure out the value of salmon and deer produced from area watersheds and recreational jobs per acre of intact forest. We request that an effort be made to provide these figures and to consider other ecosystem values that are not as easily quantified.

3. Carbon Storage

Carbon sequestration is an emerging topic but there is sufficient information from studies in the Pacific Northwest and from Tongass-specific studies to warrant consideration of carbon storage values in a project level EIS. Carbon credits have already been exchanged for between $10 and $20 per ton around the world and carbon credits could be worth between $300 and $600 per acre.[80] As indicated in one of the most recent Tongass-specific studies,

> The economic value of carbon sequestration associated with the cessation of harvesting in the Tongass may be significant relative to the value of the timber harvested. Our best estimates of the net annual economic value of carbon sequestration resulting from the cessation of all harvesting on the Tongass ($3 million to $7 million/y) are of similar magnitude to the annual revenue from timber sales in the Tongass ($6.5 milllion/y)(USDA Forest Service 2001).[81]

The timber financial efficiency analysis is entirely unsatisfactory for omitting this information that is well known to the Forest Service and an ongoing research focus of Forest Service scientists. We recognize that there is ongoing research into Tongass-specific sequestration capacity but still request that the DEIS mention that carbon sequestration values are

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[78] Wolfe, R. 2000. Subsistence in Alaska: A Year 2000 Update. ADF & G Div. of Subsistence: March, 2000.
[79] DEIS at 3-87-88.
[80] Walls. 1999.
[81] Leighty, W., S. Hamburg & J. Caouette. 2006. Effects of Management on Carbon Sequestration in Forest Biomass in Southeast Alaska. Ecosystems (2006) 9:1051-1065.
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significant in relation to timber sales values and quantify the value of sequestration per acre based on the most recent available science.

D. Conclusion

The analysis of timber economics is entirely deficient in numerous ways – it fails to account for export policy, fails to account for the inefficiency of the large sale program and fails to account for impacts to other valuable forest resources. As noted in the DEIS, timber harvests from public lands provides but a small fraction of regional employment. The notion that this project could somehow fulfill the purpose and need of providing regional resource development opportunities is wholly undermined by the Forest Service's own recent sales data and export policy liberalization – even at increasing levels of export authorizations numerous recent sales have solicited no bids or solicited bids and been returned.

The lack of quality analysis, misleading information and failure to incorporate other economic sectors into the analysis violates NEPA. In addressing the implications of income and employment trends, resource economists have pointed out that timber projects such as this are entirely misguided: "the ability of forest policy to impact the regional economy via the timber sector will be small."[82] Therefore,

> Although timber from the Tongass continues to play a role and efforts to assist the wood products industry restructure should continue, timber is not likely to be the most important contributor to future socioeconomic well-being in the area. Based on regional, national and international economic and demographic trends, the roles the Tongass plays as a provider of tourism and recreation opportunities and as the custodian of many of the unique natural amenities and ecosystem values that both attract tourists and enhance the quality of life for existing and potential residents, is likely to be of more importance to the economic vitality of the region. [83]

In a revised DEIS, please prepare an economic analysis that accurately depicts job generation, public costs and costs to other natural resource uses. As indicated above, there are numerous ways to quantify ecosystem services and requirements to discuss those values when they are not quantifiable. Without a hard look at these figures and values, an informed decision about the economic efficiency of this project is simply not possible. Clearcut logging has dramatically reduced numerous fish and wildlife populations throughout the coastal temperate rainforest biome. It is wholly unreasonable for the Forest Service to ignore these impacts by employing deceptive but bogus measurements of effects to these resources as an excuse to avoid analyzing them.

IV. Significant Issue Two: Impacts to Roadless Areas

Thank you for responding to our request to consider impacts to inventoried roadless areas as a significant issue for this project. It is especially critical that Inventoried Roadless Areas on central Kupreanof Island be maintained in an undeveloped state because of the significant past harvest and road construction that has occurred on this portion of the island and on nearby islands including Kuiu. Alternative 3 in particular proposes substantial road construction and timber harvest, mostly from the South Kupreanof IRA.

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[82] Crone, L. 2005. Southeat Alaska economics: A resource-abundant region competing in a global marketplace. Landscape and Urban Planning 72: 215-233.
[83] Id.

From an economic perspective, the uniqueness of these areas creates economic value by supporting the aforementioned fishery, recreation and subsistence economies. From an ecological perspective, inventoried roadless areas provide benefits to fish, wildlife and vegetation that are unavailable in developed areas. Further, given the strong scientific support for protecting Tongass roadless areas, including that of the TLMP Peer Review Team (Powell et al., October 1996 and September 1997), and the strong public sentiment that these areas should be protected, we see no valid reason for moving forward with any project that directly or indirectly degrades roadless areas and associated resources.

A. The DEIS Should Analyze Economic Costs and Benefits Specific to the Roadless Areas

SCSIV-1 In scoping comments, we pointed out that there are increased taxpayer deficits associated with road construction and timber take in roadless areas. We requested that the Forest Service consider the economic viability of proposed roadless cutting units and ensure that alternatives emphasize logging in areas where road construction is not necessary.

Timber harvest from roadless areas greatly increases costs. The DEIS clearly demonstrates that the bid value per alternative consistently decreases as the amount of impacted roadless acreage increases. Alternative 4 avoids roadless timber harvest and road construction and has a negative bid value of - $65.96 per MBF. Alternative 2 takes timber from 341 acres in the South Kupreanof IRA, mostly through helicopter logging with one mile of road and has a negative bid value of -$74.93 per MBF. Alternative 3 would have a tremendous impact on the South Kupreanof IRA with 1,184 acres of timber harvest and 15 miles of road and is by far the least economical sale with a negative value of -$86.55.

Conversely, in 2000, two economists studied the economic values associated with leaving roadless areas intact. The found that the average value of a recreation visitor day in a roadless area is nearly $42.00 per day and that roadless recreational expenditures flowed to other economic sectors and supported economic development outside the roadless areas.[84]

If you proceed with this project with continued planning for logging in the roadless units, please include information in a table or format that allows the public and the reviewing agency the opportunity to compare the economics of the sale in terms of roaded and roadless areas. The poorer economics associated with roadless cutting units indicate that making these units available will do little to satisfy even the narrow purpose and need for this project and further analysis would better inform the development of reasonable alternatives. We add that this analysis should consider the unique values associated with leaving roadless areas intact.

B. Roadless Areas Are Critical to Biodiversity and Species Viability and These Values Need to be Fully Analyzed Prior to the Inclusion of Roadless Units in Alternatives

Tongass specialist reports on the draft roadless EIS have noted that "[t]he Tongass is unique [from other national forests] because the majority of subsistence and game species are integrally linked to the habitat qualities provided by unroaded areas."[85] Also:

[84] Loomis, J.B. & R. Richardson. 2000.
[85] Johnston, 2000. Biological Resources Effects.

> Because relatively little is known about the current status, needs and response to management activities for some species on the Tongass, conservative management approaches that emphasize retention of roadless areas may provide a necessary "buffer to ensure higher likelihoods of maintaining biodiversity and species viability.[86]

Roads and road maintenance significantly disrupt these environments:

> Roads increase air and water pollution, promote the spread of invasive exotics, reduce watershed integrity, compromise fish and fish habitat, increase surface erosion and landslide potential, and are associated with declines in wildlife numbers.[87]

136 scientists had the following comments about roadless areas in their 1997 letter to President Clinton that best states our general concerns:

> A substantial amount of scientific information collected from both aquatic and terrestrial environments has demonstrated the importance of roadless areas in protecting the nation's wildlife, fisheries and water resources. ...[T]hey act as de facto refuges for numerous sensitive plant and animal species, reservoirs of genetic material, and benchmarks for experimental restoration efforts in intensively managed landscapes. [...] The ecological risks associated with developing these areas are extremely high, and may jeopardize the flow of goods and services that the national forests currently provide to human society.[88]

Our review of the minimal information provided in the DEIS and planning record verifies some of these concerns. According to the unit cards, incursions into the roadless areas entail road construction on wetlands and timber harvest from forested wetlands in the South Kupreanof IRA and risks to sensitive plants in the North Kupreanof IRA. Some of the units in the South Kupreanof IRA were apparently deemed important to connectivity for wildlife as they were previously recommended for inclusion into the small OGR.[89]

Unfortunately, neither the DEIS nor the planning record provides any further information about site-specific roadless values. Because of the significance of this issue, other Tongass ranger districts have provided information about specific wildlife uses of roadless areas to better inform decisions about roadless cutting units and we request that this DEIS do the same before any further planning on this project.[90] We reviewed the 2003 roadless area evaluation FSEIS and identified just a few of the numerous values that should have been analyzed prior to making the decision to proceed with alternatives that impact the roadless areas:

(1) the South Kupreanof roadless area "contains either the entire stream or the headwaters of approximately 20 ADF & G-numbered salmon producing streams";
(2) there are high opportunities for remote recreation;
(3) nearly all of the project area MIS and northern goshawk inhabit the roadless area, including known goshawk nests; and

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[86] Id.
[87] Dellasala, D. & J. Strittholt. 2006. Impact of Inventoried Roadless Areas and Unroaded Lands to Oregon's Natural Hertiage.
[88] Loomis, J.B. & R. Richardson. 2000.
[89] Parsley, C. 2006. Central Kupreanof Susbsistence Draft.
[90] See e.g. Iyougtug Timber Sales FEIS.

(4) the cities of Kupreanof and Petersburg opposed extensive logging and road construction in roadless area watersheds.[91]

SCSIV-2 In sum, we request that the Forest Service review the fish and wildlife values and other ecological services provided by the roadless areas, survey roadless cutting units for these values and discuss the results in a revised DEIS prior to proceeding with planning any timber harvest in the roadless areas.

C. Concerns About the Legality of Roadless Entries

We continue to have concerns about the continual loss of potential Wilderness areas on the Tongass and the impacts these losses will have on local economies as well as fish and wildlife. The South Kupreanof and Rocky Pass IRAs have high WARS ratings that may diminish through this and other future proposed actions.

SCSIV-3 Also, we think that roadless areas should remain intact on the Tongass pending NEPA analysis of the temporary exemption of the Tongass from the Roadless Area Conservation Rule. The Forest Service has repeatedly relied on a combination of the November 2000 supplemental information report and the absence of significant new circumstances to excuse the need for a supplemental EIS.[92] But neither the 2000 RACR FEIS nor the 2003 SEIS ever analyzed the reallocation of 234,000 acres from natural LUDs to development LUDs.

Further, the rationale for the temporary exemption was inadequate. The exemption is still being justified based on the 2000 FEIS's anticipation of "substantial negative effects."[93] The Forest Service needs to reevaluate whether the reinstatement of the roadless rule would have negative effects given that the exemption has not ameliorated the loss of timber jobs in the region and has little chance of improving the timber economy in the foreseeable future.

Due to the unsettled legal status of the temporary exemption of the Tongass from the RACR, we request that all roadless units be removed from further consideration. In the event that the Forest Service proceeds with these units, please evaluate whether "substantial negative effects" would result from leaving them intact.

V. Significant Issue Three: Road Management and Access

We incorporate by reference here the scoping comments of Greenpeace and the Cascadia Wildlands Project pertaining to the transportation system and road construction in the project area. In particular, we would re-emphasize the concerns about the maintenance backlog and lack of funding for restoration. Given the high value of fisheries and the low value of timber extraction, we find it particularly disturbing that the public funds road construction projects that degrade salmon habitat with no real assurance that mitigation measures will occur in a time frame that comports with short spawning cycles, if ever.

We will summarize the issues that the DEIS must address further:

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[91] USDA Forest Service. 2003. Final Supplemental Impact Statement, Roadless Area Evaluation for Wilderness Recommendations, Volume II: Appx. C part 1.
[92] December 20, 2003 FR at 75141.
[93] Brewster, P. 2008. Recommendation to Appeal Deciding Officer on the Iyouktug Timber Sale Appeal. USDA Alaska Region, Juneau, AK: Aug. 7, 2008.
21

SCSV-1 (1) there needs to be a discussion of road density by different elevation categories – below and above 800 feet - in order to fully assess impacts to wildlife;

SCSV-2 (2) in light of the extensive road construction proposed for this project, tiering to the as yet undeveloped Peterburg ATM is inadequate and the DEIS should address our scoping request that if temporary roads are to be constructed, there needs to be full information regarding the duration of their use, their maintenance regime, and how they will be stored or decommissioned once they are no longer necessary;

SCSV-3 (3) NEPA's requirement to analyze cumulative impacts requires the Forest Service to complete the ATM process before making a decision on roads for this project because road management under this sale is inextricably connected to the overall ATM plan and the impacts need to be considered in a single NEPA document;

SCSV-4 (4) lack of maintenance is a serious concern and the DEIS needs to analyze whether there will be sufficient funds to (a) maintain an increasing number of road miles; (b) decommission and store an increased number of road miles and (c) pay for culvert repairs and

SCSV-5 (5) in particular, drop roads 45803 and 45808 because of impacts to roadless areas, headwater crossings and other habitat impacts.

VI. Wildlife: Impacts on Wildlife Habitat and Populations

SCSVI-1 In general, the wildlife section is an example of why we object to the production of a "streamlined" DEIS. There was little information about potential impacts to wildlife – the DEIS considered only five MIS and entirely omitted the section on Threatened, Endangered and Sensitive species (TES). There was no project-level analysis discussed other than generalized statements about remaining productive old growth. The Wildlife Resource report

SCSVI-2 appears to be a draft version of the text in the DEIS and does not provide any site-specific information about wildlife habitat use in the project area.

A. The DEIS Needs to Actually Analyze Wildlife Habitat Values

SCSVI-3 The DEIS entirely failed to take a hard look at impacts to wildlife. The wildlife analysis for this project declined to use population models and instead simply measured effects based on a "quantitative approach which looks at the reduction of productive old-growth" without considering the value of specific types of old growth forests or analyzing the relative proportion of productive old-growth to the overall landscape. As a result, for each alternative the DEIS informs the public that habitat reductions are "considered insignificant and [are] not expected to affect wildlife populations."[94] The DEIS entirely fails to discuss the shortcomings of relying solely on POG reductions to measure impacts.[95] The measurement of impacts to wildlife was utterly meaningless and we request that project level analysis of specific habitat types and needs be provided in a revised DEIS.

B. The DEIS Improperly Excluded Analysis of a Number of MIS Species

The DEIS excludes analysis of a number of wildlife MIS species by tiering to the Forest Plan.[96] This exclusion misconstrues the purpose of selecting MIS – to indicate the effect of amanagement activities on other species with similar habitat requirements.[97] Application of

[94] DEIS at 3-85
[95] Inland Empire Public Lands Council v. Powell
[96] DEIS at 3-69.
[97] 36 C.F.R. § 219.19(a)(1)(1982); TLMP FEIS 3-351; Inland Empire Publ. Lands Council v. U.S. Forest Serv., 88 F.3d 754, 762 n. 11 (9th Cir. 1996).

the MIS concept is project specific – the Forest Service should evaluate each project alternative in terms of the impact on both MIS species habitat and MIS populations.[98] This DEIS evaluated 2 large ungulates, two large predators, one small predator and no birds, sensitive species or small mammals. Consequently, numerous species with a high probability of occurrence in the project area and the species they represent received no consideration whatsoever. We request that the revised DEIS analyze impacts to each MIS known to occur in the project area.

SCSVI-1

C. Black Bear

The DEIS says that impacts to black bear "will be inconsequential as bear are generalists, using a variety of habitats and are not exclusively dependent on productive old-growth."[99] This statement exemplifies our concern with using generalized statements that apply forest-wide to substitute for project level analysis. In fact, "most high quality black bear habitat in Unit 3 is associated with low-elevation, old-growth forest with abundant and productive salmon streams."[100] The DEIS needs to evaluate harvest impacts in more detail in terms of human caused disturbances to bears, particularly those related to roads and habitat loss.

SCSVI-4

1. Habitat Loss

ADF & G management reports contradict the unsupported assumption that project impacts to black bear will be minimal. In a 2005 report, the agency expressed concern "about the extensive habitat changes occurring throughout [GMU 3] due to logging."[101] The agency points out that the increased forage from early successional plant communities will soon be lost and that the succeeding second growth forest is of little value as bear habitat.[102] There has already been a 33% loss of summer black bear habitat.[103] The agency's conclusion was unequivocal: "[t]he long-term effects of logging will be detrimental to black bears."[104]

2. Hunting Pressure

The revised DEIS should analyze how road density impacts hunting effort and provide updated information about hunting effort. There is a reported increase in black bear hunting in nearly all areas of Southeast Alaska.[105] The increased take "is compounded by the increasing density of roads that are being constructed concurrently with logging in the southern islands."[106] This concern also implicates our point about the ecological values that inhere in roadless areas because "construction of roads into roadless black bear habitat will increase human access, which will likely increase the direct mortality of bears through legal hunting kills in defense of life and property, illegal killing and road kills."[107]

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[98] Idaho Sporting Congress v. Rittenhouse, 305 F.3d 957, 971-74 (9th Cir. 2002).
[99] DEIS at 3-70.
[100] Lowell, R.E. 2005. Unit 3 Black Bear Report. Pages 97 – 116 in C. Brown, editor. Black Bear Management Report of Survey and Inventory Activities. ADF & G Project 17. Juneau, AK. 2005
[101] Id.
[102] Id.
[103] Schoen, J. & D. Albert. Southeast Alaska Conservation Assessment at Ch. 4.17
[104] Lowell, R.E. 2005.
[105] Schoen, J. & D. Albert. Southeast Alaska Conservation Assessment at Ch. 6.3.
[106] Id.
[107] Id.

The DEIS should have discussed updated information about hunting effort. On average, black bear harvest in GMU 3 grew at an annual rate of 7% between 1990 and 2000.[108] Kupreanof Island provides a third of the harvest in this GMU.[109] The Board of Game limited black bear harvest on Kuiu Island in 2000, creating an incentive to increase black bear harvests on Kupreanof.[110] Residents of the Organized Village of Kake have observed a steady increase in black bear hunting and have asked the Forest Service to consider this increase and its effects – not only on black bear populations but also on the ecosystem services provided by black bear populations. Please address these concerns in the DEIS.

3. The DEIS Needs to Evaluate the Adequacy of Riparian Buffers for Black Bear

Because of the threats associated with logging and road construction, the Forest Service needs to consider the recommendations of the recent studies on the importance of riparian buffers to bear populations.[111] The TLMP does not delineate specific buffers for black bear but does direct that riparian buffers be increased from the standard buffer to 500 feet in important brown bear foraging areas. Black bear are more secretive than brown bear and should receive additional protection. The availability of spawning salmon as a food resource is a major influence on bear habitat quality and bears have the highest vulnerability to human activities in low elevation riparian areas during summer months.[112]

SCSVI-5

We request that the DEIS clarify whether class I streams will have only the minimum 100 foot buffer or whether black bear foraging areas will receive additional protections pursuant to 2008 TLMP guidance and the recommendations of regional bear experts. We add that experts recommend implementation of the 500 foot buffer for bears on both sides of class I streams regardless of whether or not there have been project field observations of an absence of anadromous fish.

4. Conclusion

In sum, the analysis of impacts to black bear was wholly inadequate and there have been ample concerns raised that were sufficient to trigger detailed analysis. Please fully discuss impacts to black bear in a revised DEIS and include site-specific information about riparian habitat use, updated hunting information, the cumulative effects of increased road density and illegal take and other topics listed above.

D. Marten

The DEIS fails to provide any project-level analysis of impacts to marten. It simply cites TLMP Standards and Guidelines, Conservation Strategy, OGRs and buffers without discussing how or where these measures apply in the project area.

SCSVI-5a

This is the first wildlife analysis we have seen on the Tongass that fails to evaluate the specific habitat needs of marten and instead measures impacts solely on the basis of POG reductions.[113] As a result, the DEIS provides a "one-size-fits-all" measurement of effects to

[108] Lowell, R.E. 2005
[109] Id.
[110] Id.
[111] Flynn, R.W.; S.B. Lewis; R.B. LaVern & G.W. Pendleton (2007). "Brown bear use of riparian & beach zones of N.E. Chichagof Island: Implications for Streamside Management in Coastal Alaska." Alaska Dept. of Fish & Game, Douglas, Alaska.
[112] Audubon/TNC Conservation Assessment (Albert & Schoen 2007) Ch. 6.3.
[113] DEIS at 3-69.

wildlife that fails to consider specific needs of wildlife species and informs the reader that for every action alternative, the "reduction in habitat due to the action alternative considered insignificant and is not expected to affect wildlife populations."[114] The DEIS analyzes these topics only at the large scales of the biogeographic province and multiple WAA levels without ever considering the loss of POG at the project level or by VCU.

SCSVI-5a

In a revised DEIS, please address the issues discussed below.

1. The DEIS Needs to Apply the Marten Model and Factor in Road Density

But the DEIS also seems to recognize that low elevation habitats have higher value for marten, especially in winter and specifically high volume old growth habitats and riparian areas have the highest value.[115] The interagency habitat capability model (Suring et al. 1992) calculates a Habitat Suitability Index (HIS) based on timber volume strata, elevation and typical snowfall. For these reasons, the marten model must be applied to consider impacts to high value marten habitat. Neither the DEIS nor the planning record includes any consideration of high value marten habitat in an unusual departure from the practice of most ranger districts of evaluating high value marten habitat in an EIS.

Total road density in the project area is .35 miles per square mile.[116] The DEIS does not indicate what project area road density will be when adding in road construction from this project and other projects. Alaska Department of Fish and Game area management biologists have expressed concerns about increasing road density in this project area and prices for pelts are dramatically increasing because of China's entry into the market for marten pelts. Road density is a matter of critical importance for marten and the failure to address it in detail would raise population viability concerns.

SCSVI-6

In the revised DEIS, please consider road density and incorporate it into the marten model so that the public can fully evaluate impacts to marten habitat. Apply the table appended to Suring et al. (July 1992), which adjusts model results for road density and ensure that total road density is incorporated rather than just open roads.

2. Other Factors Affecting Project Area Marten – Forest Structure Retention, Prey Densities and Trapping Refugia

The 1997 TLMP mandated forest structure retention in this biogeographic province but the new Forest Plan excludes this area from the new forest legacy standard. The former TLMP required 30 percent canopy closure retention in gaps of over two acres in VCUs in high risk biogeographic provinces where over 33% of the productive old growth was harvested or will exceed that amount after a proposed project activity.[117] For VCUs where less than 33% of the original POG was harvested, openings larger than two acres needed to retain approximately 10-20% of the stand structure.[118]

Because this DEIS measure POG reductions only at the biogeographic province level and at the level of multiple WAAs, we cannot speculate as to the extent of matrix land protections that no longer apply to this project area. We request that the revised DEIS include an

SCSVI-7

[114] DEIS at 3-85.
[115] DEIS at 3-71.
[116] Id.
[117] 1997 TLMP at 4-119.
[118] 1997 TLMP at 4-119.

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SCSVI-7 analysis that compares the amount of forest retention for marten in this project area to the amount of retention required under the 2008 amended TLMP.

We are concerned about the viability of marten populations on Kupreanof because of the weakened forest plan standards and the previously mentioned pelt market changes and road density. Please evaluate whether the new Forest Plan will adequately maintain marten population viability in the project area or whether additional protections will be necessary.

SCSVI-8 The DEIS only briefly discusses the significance of patch sizes for marten habitat values and entirely omits any discussion of prey availability in the project area.[119] Scientists at the recent Conservation Strategy Review Workshop made clear that this would be the most effective means of addressing marten refugia.[120] This DEIS should adhere to the practice of Tongass ranger districts by providing a table that identifies the amount of patches of sufficient size to provide de facto trapping refugia for marten.[121]

In sum, we are highly disappointed in the analysis provided for marten and request a revised DEIS that uses the marten model, considers trapping refugia and otherwise fully evaluates impacts to this species.

E. Deer and Wolves

Given continued effects from past declines in deer population in the 1970s, evidence of last winter and this that record-setting snow falls must be anticipated despite global warming, and the importance of deer for subsistence, we are particularly concerned about the project's impacts to the Sitka-black tailed deer and wolves. The needs for subsistence resources and for wolf viability are closely intertwined, and if wolf viability is not protected, subsistence will not be protected either. It has been well documented that road access significantly contributes to wolf mortality.

1. Wolf Mortality and Road Density

The construction of significant additional roads associated with the Central Kupreanof Project will increase road density. Studies have shown that roads can have a negative impact on wolf survival and long-term population viability. Rather than build new roads the Forest Service should address ways to close existing roads to reduce wolf mortality in the area. In considering road density, the Forest Service must use the total miles of all roads both open and closed, using both the mileage and land area below 1200 feet in accordance with the best available science.[122]

SCSVI-9

The DEIS does not say much about road density other than to state present road density in the project area. There is no disclosure of post-project road density and no discussion of the cumulative effects of other road construction projects that are likely to occur. In 2004, ADF & G indicated that "the high likelihood of future timber harvest and road construction within small areas" implicated long term wolf mortality and viability concerns.[123] ADF & G pointed out that road densities in some portions of this biogeographic province already exceed

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[119] DEIS at 3-71.
[120] Tetra Tech 2006 at 12.
[121] Tetra Tech 2006 at 12.
[122] Person. 2006.
[123] Lowell, R. 2004. Letter to Patricia Grantham re Wolf Mortality and Road Density. ADF & G Div. of Wildlife Conservation, Petersburg, AK: March 23, 2004.

established guidelines for wolf mortality.[124] ADF & G personnel reiterated these concerns during the interagency review process.[125] Further, ADF & G pointed out that the Kake/Petersburg Inter-tie or roads associated with timber projects such as this one will trigger or approach recommended thresholds for wolf mortality.[126]

Under the Forest Plan, the identification of wolf mortality concerns triggers several duties. At a minimum, wolf sustainability concerns trigger the duty to further analyze project level impacts: "[l]ocal knowledge of habitat conditions, spatial locations of roads, and other factors need to be considered by the interagency analysis rather than solely relying on road densities.[127] Further, the concerns raised by ADF & G implicate the need to develop a Wolf Habitat Management Plan pursuant to TLMP Standards and Guidelines.

Person and Russell (2008) produced a recent study that needs to be considered in managing wolf populations. Please incorporate the findings of that study into a revised DEIS and address the following issues:

(1) discuss the relationship between road density and resident wolf mortality rates;
(2) discuss the relationship between non-resident wolf mortality and clearcuts;
(3) discuss the survival rate for dispersing wolves;
(4) discuss use of closed roads;
(5) discuss wolf harvests, both legal and illegal and the factors motivating or contributing to illegal take and the effectiveness of harvest regulations;
(6) discuss the relationship between road densities above the TLMP standard and local extirpations and
(7) consider road densities at appropriate elevations.[128]

2. Further Site-Specific Concerns: Wolf/Deer Modeling and Subsistence

We incorporate by reference here the comments of Greenpeace et al. pertaining to the analysis of deer and its relationship to wolves and subsistence. As pointed out in those comments, the deer model should not be used to predict actual numbers of deer and this shortcoming in the model must be disclosed. The DEIS needs to adequately assess affects on deer habitat carrying capacity. Further, the measures used to address high value winter deer habitat are not adequate – partial harvest prescriptions ultimately create small clearcuts that eventually diminish winter deer habitat values. Finally, game management units in northern Southeast Alaska have experienced significant winter-related deer mortality in recent years. Climate change predictions for Southeast Alaska indicate a likelihood of extremes of warm and cold during future winters and greater precipitation. The Forest Service needs to analyze the cumulative effects of these events when considering winter deer habitat and concentration of hunting effort. Please consider erring on the side of safety in protecting winter deer habitat.

SCSVI-10

3. Conclusion

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[124] Id.
[125] Planning Record Document # 113.
[126] Lowell, R. 2004. Letter to Patricia Grantham re Wolf Mortality and Road Density. ADF & G Div. of Wildlife Conservation, Petersburg, AK: March 23, 2004.
[127] TLMP at 4-95.
[128] Person, D. & Russell. 2008. Correlates of Mortality in an Exploited Population. This document is on file with the Thorne Bay Ranger District and included in the planning record for the Logjam Timber Sale DEIS. Copies can be provided if needed.
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SCSVI-11 We think that there are numerous reasons why the DEIS needed to take a harder look at available deer habitat, road density and wolves. We here reiterate our request that some combination of subsistence/deer habitat/road density impacts on wildlife be considered a significant and alternative driving issue. Please respond with a revised DEIS that includes multiple alternatives to respond to these concerns.

F. Endemics and Small Mammals

In scoping comments, we requested that you review Cook et al. (2006), Smith (2005), and Smith & Zollner (2005) and apply the understandings and advice of those papers in analyzing the effects of the project on small mammals and especially endemics. We explained that thorough surveys were needed to enable meaningful analysis and pointed out that both the 1997 and amended 2008 TLMP required surveys in this circumstance.

SCSVI-12 The TLMP recognizes that loss of unique species on the Tongass is an issue of concern. Standards and Guidelines require the Forest Service to "maintain habitat to support viable populations and improve knowledge of habitat relationships of rare or endemic terrestrial mammals that may represent unique populations with restricted ranges."[129] Surveys are required when information necessary to assess project-level effects is lacking.[130]

But the DEIS simply excuses analysis on the ground that Kupreanof Island received a relatively low rating for endemism in comparison to other islands.[131] The DEIS (and identical language in the Wildlife Resource Report) lists a number of endemic species but then says that Forest Plan standards and guidelines are met by the following analysis:

> Species that are associated with old growth would be affected because we are harvesting old growth. Old growth habitat is being removed causing a change at the stand level. This change will remove cover and possible habitat for small mammals they may be exposed to a greater degree to predation. The increased side light may provide an increase in vegetation that may benefit small mammals. This analysis is adequate for all old growth species based on site specific old growth and connectivity analysis and the Forest Plan analysis.[132]

Given that a large number of the endemic species identified by Macdonald and Cook inhabit Kupreanof Island, we do not think that general statements about old growth removal affecting small mammals in a general way meets Forest Plan guidance. This discussion provides no indication as to whether enough information exists to excuse further research into endemic habitat in the project area. Cook et al. have pointed out an absence of information about the lineages of ermine on Kupreanof and in our view this is enough to trigger Forest Plan survey requirements.

SCSVI-13 Further, in our scoping comments we requested that the DEIS consider connectivity between Kupreanof Island and other areas for endemics as this issue was an element of the forest-wide Conservation Strategy. We would point out that black bears from Kuiu have been observed on Kupreanof, goshawks have departed Prince of Wales for Kuiu, and the roadless FSEIS has indicated the northern flying squirrels from Prince of Wales have started to occupy project area roadless areas. The Forest Service is well aware that cumulative impacts of

[129] TLMP at
[130] TLMP at
[131] DEIS at 3-73.
[132] DEIS at 3-74.

SVSVI-13 logging on dispersal and isolation of these populations needs further examination and that adequate surveys have not been conducted on many portions of larger islands.[133]

SCSVI-12 In sum, please conduct surveys for endemics and discuss what existing information there is on endemism in the project area and what information is still needed to assess project level effects. Please also evaluate the role of Kupreanof Island as available habitat for endemic movement from other islands.

G. Goshawks

The goshawk is a sensitive species, meaning that population viability is a concern on the Tongass. TLMP Standards and Guidelines mandate that "[s]pecial consideration should be given to the possible adverse impacts on habitat of sensitive, threatened and endangered species."[134] The goal of the sensitive species program is to ensure adequate numbers and distribution of species and avoid extirpation and/or federal listing.[135] We expected that this DEIS would adhere to the usual practive of Tongass ranger districts by describing impacts to goshawks in greater detail because, as one recent DEIS explained, this species has additional management concerns.[136] Residents of Kake have reported goshawk activity in the project area and the 2003 roadless FSEIS has indicated that goshawks use project area IRAs.

SCSVI-14 But the DEIS entirely omits analysis of the goshawk despite acknowledging a high probability of occurrence in the project area and the potential for measurable effects.[137] Instead, it refers the reader to a Biological Evaluation that was not included in our copy of the planning record.[138]

This raptor is the rarest and most old-growth dependent of all the North American goshawks, has been virtually extirpated from Washington and Oregon and is listed as a threatened species in Canada. The extinction risks are all due to extensive logging of old growth forests in those areas.[139] In our scoping comments, we requested that the Forest Service complete and document at least two years of goshawk surveys in all proposed units and roads using the best available science, along with a habitat quality analysis takes into account all available information on differential utilization of various forest types and structures. Since the new Forest Plan has eroded protections for this raptor, we requested a detailed discussion of measures that will be taken to maintain goshawk population viability.

The FWS recently concluded that the Queen Charlotte goshawk warrants protection as an endangered species in Canada but not in Alaska.[140] The FWS determined that logging has eliminated roughly half of the species' rangewide habitat and expects continued habitat declines.[141] The FWS based its determination that Alaska populations did not merit listing based on two conclusions: 1) the 1997 forest plan provided adequate protections for the

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[133] Haufler et al. 2005. Maintaining wildlife habitat in southeastern Alaska: implications of new knowledge for forest management and research.
[134] 2008 TLMP at 4-89.
[135] 2008 TLMP FEIS at 3-226.
[136] Iyouktug DEIS at 3-135 (September 2007); Baht DEIS at 3-147 (October 2006).
[137] DEIS at 3-67.
[138] DEIS at 3-69.
[139] U.S. FWS. 2007. Queen Charlotte Goshawk Status Review. Juneau, Alaska: U.S. Fish and Wildlife Service, Alaska Region. April 25, 2007.
[140] Greenwald, N. 2007. Queen Charlotte Goshawk Granted Protection as Endangered Species in Canada, But Not Alaska. Portland, OR: Center for Biological Diversity, November 8, 2007.
[141] Id.

goshawk and 2) the Canadian and Alaskan populations constituted two distinct population segments (DPS) so that the agency could consider each DPS separately in its listing decisions.

The reviewing public should not have to request and review a planning record in order to ascertain whether or not the Forest Service is playing Russian roulette with the Endangered Species Act.

Because of concerns pertaining to this species, we request that the Forest Service revise and redo this DEIS and provide a TES section that fully analyzes impacts to this raptor. Please discuss the results of surveys and provide maps of historic or occupied nest sites and stands and locations of other observations of goshawk habitat use. Please discuss how Forest Plan guidance, the TLMP Conservation Strategy and information from recent scientific studies will be considered and implemented to goshawk habitat in the project area. Specifically, we request that the DEIS discuss nest buffer sizes, foraging habitat and matrix land protections – especially for nest sites located outside of the OGRs.

SCSVI-15

H. Fragmentation, Connectivity and Old Growth Reserves: Impacts to TLMP Conservation Strategy

1. The Forest Service Needs to Discuss the Inter-agency OGR Recommendations and Implement Those Recommendations

During scoping, we requested an extended scoping period because of several concerns pertaining to the scoping notice. The LUD and Unit Pool maps did not take into account the updated old-growth reserve proposals in the 2008 Forest Plan revision. We requested an updated and accurate unit pool map that reflects modifications to small old growth reserves based on interagency small old growth reserve review recommendations that were incorporated into the forest plan. The reserve locations affected the available unit pool – without the updated map, we were not able to evaluate and comment on the proposed action.

We further pointed out that the amended forest plan map did not adopt all of the interagency old-growth reserve proposals. We requested that the Forest Service consider making a non-significant amendment to the new forest plan and modify old-growth reserves to conform to the interagency biologist's recommendations or explain why the recommendations were rejected.

SCSVI-16

Throughout the wildlife section the DEIS asserts that the old-growth reserve component of the Conservation Strategy on Kupreanof adequately protects endemics and a number of MIS species.[142] NEPA requires discussion of a "full range of responsible opinion on environmental effects."[143] We believe this means that the Forest Service must explain to the public the reasons for modifying the inter-agency recommendations and disclose the inter-agency recommendations in the DEIS with a map so that the public can review and comment on fragmentation and connectivity.

It appears that the not all of the interagency OGRs providing east-west connectivity were adopted. Cutting units 276 -280 were include in a previous OGR recommendation but in the DEIS they appear as cutting units.[144] We have often found it difficult to seek out and review

[142] DEIS at 3-69; 3-74.
[143] Seattle Audubon Soc. V. Moseley, 798 F.Supp. 1473, 1479 (W.D. Wash. 1992).
[144] Parsely et al, 2006. Draft Subsistence Alternative.

material necessary to analyze the effectiveness of old growth reserves. The DEIS should have provided a map showing both the interagency recommendations and the public should not have to delve into the TLMP planning record to evaluate the history of OGR development in a project area.

SCSVI-16

In sum, please discuss the history of OGR design for the project area and include maps of the interagency recommendations. Please also explain the reasons for any divergences from the interagency recommendations.

2. Fragmentation and Connectivity

In scoping comments, we requested that the DEIS detail what impacts additional logging and other development activities in the surrounding area will have on wildlife populations by fully explaining the extent of habitat fragmentation in the area to date, and analyzing the cumulative effects from the logging and road construction associated with this project. We also requested that the Forest Service discuss and map both low elevation coarse canopy forest (and such forest generally) in the sale units, and at larger scales. We requested specific details about the current and future state of wildlife travel corridors and connectivity in the area.

SCSVI-17

The DEIS asserts that "[c]onnectivity is maintained in the project area."[145] It refers to OGR adjustments that provide for connectivity but does not explain what those adjustments are or discuss the inter-agency recommendations. The single paragraph provided about connectivity in the DEIS and the Wildlife Resource report does little more than cite Forest Plan amendment changes without explaining what those adjustments were or how they apply in the project area. It did not discuss the number and nature of the connections between various non-development areas nor does discuss the adequacy of those that are connected. There is no map showing important connections. There is no discussion of how adequate or marginal those connections may be, or how project development will affect them. Corridor width, habitat type, elevation and degree of continuity of interior old-growth forest are important factors, and must be considered in view of the connectivity needs of a spectrum of species.

SCSVI-18

Further, in scoping comments, we requested that the Forest Service address the issue of connectivity between Kupreanof and other biogeographic provinces. The 1997 Tongass Land Use Plan established, in as much as it was possible, an unbroken reserve of un-logged and unroaded lands stretching from Prince of Wales Island's Honker Divide and Thorne River to the northern shores of POW. The Forest Service has also acknowledged the importance, and has cited as an administrative goal in public presentations, the connecting of the POW reserves to the inventoried roadless areas of Kupreanof Island. The purpose of this large system of connecting reserves was and is to maintain connectivity in an already heavily damaged and fragmented landscape. The central Kupreanof Timber Sale Project will compromise this established conservation strategy and makes a mockery of the Forest Service's public statements. This concern was not addressed anywhere in the DEIS or planning record.

The treatment of these topics in the DEIS is wholly unsatisfactory and does not satisfy NEPA's requirements to take a hard look at project impacts and to facilitate public participation. Please include a connectivity analysis in further NEPA documentation that

[145] DEIS at 3-73.

includes maps of important connections, considers connectivity between islands and addresses species-specific needs.

VII. Subsistence

We were disappointed that this DEIS did not consider subsistence as an alternative driving issue. The project area is rated in the Tongass Fish and Wildlife Resource Assessment as having the "highest sensitivity to disturbance" in ADF & G's "Sensitivity to Disturbance of Subsistence Use Areas" map.[146] But the subsistence section included a mere 7 pages of content that mostly reviewed past use of a limited number of subsistence resources rather and failed to evaluate impacts on the wide range of subsistence uses.

SCSVI-19

We requested a detailed discussion of impacts of the proposed road building and logging activities on the existing uses of the forest by nearby residents and other forest users. This is a particular concern as much of the project area and surrounding lands (including northern Kuiu Island) are already heavily fragmented and contain large portions of what is currently, or soon to be, unsuitable deer habitat due to canopy closure in the extensive created openings and second-growth stands.

A. The Analysis of Subsistence Use Fails to Take a Hard Look at Community Uses

The amended Forest Plan seems to exclude the southern portions of Central Kupreanof from consideration as part of the Kake Community Use Area. Our impression is that the project area lies within the traditional and ancestral territory of the Kake Tlingit and the southern portion of the project area will in any event become increasingly important to subsistence use should the Forest Service proceed to increase the density of cutting units in the watersheds closest to Kake. The Organized Village of Kake has actively opposed timber sales within its ancestral lands in recent years, and we are concerned that further timber extraction would significantly restrict subsistence and other cultural and traditional uses.

SCSVI-21

It is necessary to consider that many such activities have been displaced from places where they once occurred, that continuing displacements caused by past forest development can be expected, and that additional displacements or diminishments are adverse and need to be avoided. We attached to our scoping comments the document "*Position Paper on Customary & Traditional Gathering (Subsistence)" by the Organized Village of Kake,* April 13, 1997. This document details the extent and variety of forest resources used for subsistence and the DEIS needed to take impacts to multiple forest resources into account.

B. Access

In scoping comments, we requested an assessment of the impacts on subsistence from increased access for sport hunting and fishing due to more roads. The DEIS defers project level analysis of road closures and road management objectives to the District Access Travel Management process.[147] With regard to competition for wildlife, the DEIS concludes with the self-contradictory statement that "[i]ncreased access can be favorable for subsistence users but may have a long-term adverse impact to users if over-harvesting occurs."[148] Ultimately, the DEIS concludes that "[n]one of the action alternatives are expected to have any effect on

[146] Cariello, J. 2008. ADF & G Sport Fish Division Scoping Comments.
[147] DEIS at 3-91.
[148] DEIS at 3-91.

the competition between rural and non-rural residents since none of the alternatives change the existing access patterns to other communities."[149]

SCSVI-20 We request a more complete evaluation of access issues. Please explain whether there is enough motorized access now available to subsistence resource users and whether project impacts to subsistence use areas will be responsible for increased access needs to other areas. Please also consider that this is not simply a rural-non-rural hunting issue in terms of competition but rather an issue of a growing guided sport hunting industry and evaluate competition through this lens.

C. Subsistence Use of Deer

Three of the bio-province's top ranked watersheds for winter deer habitat are within the project area. Kake's subsistence activities have been severely impacted by past public and private land timber harvests. Intensive high-grading of higher habitat-value old growth has contributed to reduced winter carrying capacity for deer not only here but also on Kake's other major subsistence use area, northern Kuiu Island. The DEIS states that the most important area for Kake's subsistence use of deer is Admiralty Island but fails to mention that this area is not as easily accessible for Kake residents. The central Kupreanof project will only put additional strains on subsistence uses by residents of Kake.

SCSVI-21

SCSVI-22 Also, analysis of project impacts on subsistence should also consider and fully disclose impacts of other proposed timber projects in the area. In particular, there is a large timber sale planned on northern Kuiu Island and several others that have been planned around the project area. Please specify in the DEIS the status and impacts of these and other projects as they have the potential to concentrate subsistence harvest efforts on central Kupreanof.

SCSVI-23 Further, the DEIS needs to analyze competition from other predators. Modeling of the deer/wolf community is necessary to fully, fairly and accurately discuss and evaluate project impacts on deer subsistence hunting. It is well known that Kuiu Island is a predator pit where deer populations have not been able to recover due to predation from wolves and black bear. As both these species consume deer in the project area, the DEIS needs to discuss and analyze competition for subsistence deer harvests from other predators.

D. ANILCA Compliance

The DEIS determines that "in terms of cumulative effects, this project is not expected to affect subsistence use of deer in the reasonabl[y] foreseeable future" and that "[n]one of the action alternatives has a significant possibility of a significant restriction to subsistence uses."[150] This conclusion is based solely on the measurement of changes in POG.[151] As we have previously explained, this measurement fails to take into account the numerous factors affecting deer habitat in the project area nor does it consider the full range of subsistence resources used. Please reevaluate the significant restriction finding after fully analyzing impacts to subsistence resources.

SCSVI-19

Further, the DEIS restates the form language frequently cited in other similar documents with regard to whether the Forest Service is using the minimum amount of public land necessary to accomplish its objectives – that "[i]t is not possible to lessen timber harvest in

[149] DEIS at 3092.
[150] DEIS at 3-89; 3-92.
[151] DEIS at 3-89.

one area, and concentrate it in another without influencing one more more rural communities' important subsistence use areas."[152] This recitation of pre-prepared language fails to evaluate the concentration of large scale timber projects in affected community use areas. By scheduling timber harvest in this project area in combination with the Kuiu project and the pending development of the Tonka project, the Forest Service actually is concentrating timber harvest in one locale. We request that the Forest Service verify whether or not it is concentrating harvest in the Kake and Petersburg community use areas by comparing past, current and proposed timber harvest in these areas with other community use areas.

SCSVI-24

VIII. Hydrology/Fisheries/Effects to Aquatic Habitat

We discuss some concerns with effects to fisheries habitat in the following subsections and also incorporate here by reference the comments of Greenpeace et al. regarding fisheries and hydrology impacts from this sale.

A. The Forest Service Must Conduct a Watershed Analysis

The TLMP directs the Forest Service to conduct watershed analyses in cases where there are multiple risks to fish in the watershed. Because of the level of past development in this area, the likelihood of increased sediment yield risks or erosion potential, and the high density of existing and proposed roads along with past maintenance problems, we request a full watershed analysis be conducted as required by the TLMP. The reasons why an analysis is required are detailed in the following discussion.

1. Road Construction/Reconstruction

We have particular concerns about the number of failed culverts across the Tongass. The Forest Service is proceeding with road construction and reconstruction on the Tongass without adequate assurances that existing and future problems will be fixed. There are approximately 2,000 red culverts restricting fish passage on the Tongass and the proposed action will add further passage restrictions.[153] The Forest Service recently signed a pre-roading contract for the Sea Level sale at a cost of $580,000 to build 6.9 miles of road for the purpose of accessing $215,000 worth of timber. Yet this project leaves 42 red stream crossings remaining in area watersheds without any guarantee of funding.[154]

The explanation of effects relies on mitigation measures that may never be implemented. The DEIS says that newly constructed road would be stored within 10 years but defers specific road closure analysis to the pending Petersburg ATM.[155] This information should be included in this DEIS because the Forest Service needs to fully analyze the likelihood of implementation of mitigation measures in order to fully assess the cumulative effects of this project on affected watersheds. We request that a revised DEIS provide detailed information on funding for mitigation measures such as road closures and culvert repairs and detail the history of implementation of mitigation measures from past projects. Without this information, it is impossible for the public to meaningfully analyze project impacts to watersheds.

SCSVIII-1

[152] DEIS at 3-93.
[153] Mecum, R. 2008. NMFS Scoping Comments for the Central Kupreanof Timber Harvest.
[154] DEIS at 3-101.
[155] DEIS at 3-104, 3-108.

2. Hydrologic Function

The DEIS states that project effects are likely only at small scales for short periods of time and changes in water yield, peak flow and timing of water delivery "are assumed to be site specific and have negligible effects at the watershed scale."[156] The DEIS minimizes the level of hydrologic effects indicating that percentages of harvested acres by watershed are well below the 20% threshold that impedes hydrologic recovery. Please evaluate past harvests at the scale of riparian forests. Across the biogeographic province, riparian forests have been logged at a much higher rate than is shown by cumulative watershed harvest. This concern is particularly pertinent in the Big John Bay and Hamilton Creek watersheds where proposed clearcuts abut previously harvested stands in numerous locations.

SCSVIII-2

3. Stream Class Designation Concerns: Need for a Full Watershed Analysis

ADF & G requested that the Forest Service undertake additional late-season verification of stream class boundaries between class II and class III streams located within timber unit boundaries.[157] There has been recent evidence of salmon utilization of class III stream segments that challenges existing classifications.[158] Undetected class III stream usage can create conditions where BMPs fails to provide intended protections for headwater tributary productivity and for fish populations that may seasonally access these stream segments.[159]

SCSVIII-3

B. High-Value Watershed Concerns

The DEIS entirely failed to take a hard look at project-level impacts to high value watersheds or even discuss the unique features of watersheds that will be compromised by this project. The encyclopedic recitation of cumulative harvests and road densities combined with the uninformed reliance of future mitigation measures entirely failed to address these important concerns.

a. Marxan Rankings

This project takes place in watersheds of high ecological value. There are 1,000 miles of freshwater salmon habitat in this biogeographic province, making it the fourth highest ranked in the region for all salmon combined.[160] The major salmon producing watersheds on Kupreanof will be directly impacted by this project. VCU's 4360 and 4380 are ranked under the Audubon- Nature Conservancy Marxan Ranking Program as being in the highest tier of ecological importance within their bio-geographic province. VCU 4290 is in the 2nd highest tier. Four of the bio-geographic province's most productive salmon producing watersheds are within the project area, Hamilton Creek, Castle River, Big John Creek and the Keku Creek/Irish Lakes system. These watersheds provide one of the highest amounts of freshwater salmon habitat in the region but the project area also has one the highest proportions of development LUDs and lowest amounts of protection in the region. The community of Kake depends on these watersheds for its fishing dependent economy.

SCSVIII-4

b. Unique Fishery Values

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[156] DEIS at 3-105.
[157] Cariello, J. 2008. ADF & G Sport Fish Division Scoping Comments.
[158] Id.
[159] Id.
[160] Schoen, J. & D. Albert. 2007. Southeast Alaska Conservation Assessment Ch. 4.17.

SCSVIII-5 The Forest Service has previously considered four project area watersheds for designation as Wild, Scenic and Recreational Rivers but concluded that these watersheds contained no features unique to the bio-geographic province.[161] However, Castle River and Hamilton Creek contain populations of Fall/Winter Steelhead that are unique to the biogeographic province and receive special management protections form ADF & G.[162] ADF & G requested that the Forest Service consider the impacts of increased road access, timber harvest and road construction activities to these unique populations.[163]

c. Stream Temperature Data

The DEIS notes that water temperature exceedances have been noted on Hamilton Creek and assumes that the exceedances are likely due to the characteristics of the wide channel.[164] In our administrative appeal of the TLMP, we pointed out that there have been numerous stream temperature exceedances throughout the state of Alaska and some particularly egregious temperature-related fish kills in intensively managed watersheds on Prince of Wales Island.

SCSVIII-6 Please discuss stream temperature considerations in some detail. When were the exceedances recorded? Is the historical stream gage still in operation and if so, how often have is it checked? The cumulative effects of climate change and land management may pose significant risks to fishery resources and we encourage the Forest Service to take a hard look at stream temperature data prior to commencing management activities in high value watersheds.

C. Use of LTFs

SCSVIII-7 The LTF proposed for use was recently removed from Alaska's impaired waterbody list in 2002 after being listed in 1996. Please evaluate the likelihood that further use could result in woody debris accumulation that can impair site productivity for an extended period of time. Please include the results of recent dive monitoring surveys, including the existing extent and depth of bark accumulation and discuss the expected amount of additional debris from the proposed action by alternative. After reviewing this information, please consider the option of using barges for transport rather than the LTF.

X. Timber/Vegetation Silviculture

A. NEPA Required the Forest Service to Take a Hard Look at Cedar Decline and Regeneration and NFMA and TLMP Require Specific Responses to These Issues

SCSX-1 In our scoping comments, we emphasized concerns about a trend across the forest to high-grade certain types of forest structure stands and cedar species. This problem is magnified in the project area because of history of intensive high-grading on both federal and private lands within the Kupreanof/Mitkof Island biogeographic province. Highgrading poses risks to old-growth associated species including deer, wolves, the American marten, small mammals (especially endemics), and marbled murrelets.

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[161] Cariello, J. 2008. ADF & G Sport Fish Division Scoping Comments.
[162] Id.
[163] Id.
[164] DEIS at 3-97.

Because of these concerns, we requested a thorough discussion of forest stand diversity, tree species diversity, species composition within the sale units, and canopy texture variation and opportunities for compensatory low-grading. We asked for information about what percentage of each sale unit and the project area as a whole is composed of Alaskan yellow and red cedar; what percentage of the cedar is dead, in decline, healthy green trees; and what percentage of each sale unit is comprised of each of the four canopy texture descriptors as well as the number and average diameter of each species to be removed compared to the number, average diameter, and diameter distribution of trees expected to be felled, in comparison to the same statistics for the affected WAAs and western Kupreanof Island as a whole. The DEIS did not respond to these comments.

NEPA's "hard look" demanded a more serious inquiry into these issues. Further, the diversity provision of the NFMA planning regulations requires the Forest Service to preserve tree species diversity and analyze the consequences of forest-wide cedar highgrading in circumstances where the agency prescribes diversity reductions to meet multiple use objectives.

> Management prescriptions, where appropriate and to the extent practicable, shall preserve and enhance the diversity of plant and animal communities, including endemic and desirable naturalized plant and animal species, so that it is at least as great as that which would be expected in a natural forest and the diversity of tree species similar to that existing in the planning area. Reductions in diversity of plant and animal communities and tree species from that which would be expected in a natural forest, or from that similar to the existing diversity in the planning area, may be prescribed only to meet overall multiple use objectives. Planned type conversion shall be justified by an analysis showing biological, economic, social and environmental design consequences, and the relation of such conversions to the process of natural change.[165]

Because of the high appraisal value of exportable cedar and the deficit sale advertisement prohibition, the majority of recent sales have occurred in locations on the southern Tongass that contain high percentages of cedar. For the same reasons, sales in the planning stage and future federal timber harvests and public land transfers will also occur in cedar-saturated sections of the southern Tongass. A recent market analysis using 2005 prices demonstrated this problem. The analysis demonstrated that it was significantly more difficult to overcome the deficit sale advertisement ban for north Tongass timber sales than for southern Tongass timber sales largely because of the availability of cedar.[166]

Recent timber sales data corroborates that analysis. Even though cedar was roughly 20% of the volume cut in between 2001 1n3 2007, it generated nearly half the value.[167] In between 2003 and 2007, nearly 187 MMBF of the total 221 MMBF sold Tongass-wide came from the Petersburg, Wrangell, Ketchikan, Thorne Bay and Craig Ranger districts.

SCSX-2

The DEIS discusses cedar composition but declines to analyze it in any meaningful way and ultimately relies on unsupported assumptions in stating that levels of timber harvest "are not expected to have an adverse effect on the quantity or composition of cedar."[168] But the composition of Southeast Alaska forests is changing due to yellow cedar decline and other issues and the Forest Service needs to evaluate how individual timber projects contribute to the cumulative impacts on these changes.

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[165] 36 C.F.R. § 219.27(g).
[166] Housley, R. 2007.
[167] FS cut and sold reports.
[168] DEIS at 3-127.

1. NFMA, NEPA and the Forest Plan Require Analysis and Management Responses to Cedar Decline at the Project Level

The TLMP amendment FEIS points out that yellow cedar decline is "one of the most widespread and important forest problems on the Tongass."[169] The 2008 TLMP requires the Forest Service to monitor forest health and evaluate silvicultural prescriptions in light of future stand diversity, particularly overstory species such as yellow-cedar.[170] Further, TLMP requires the Forest Service to evaluate other units in the project area for the purpose of examining the re-establishment of desirable tree species.[171]

Further, the failure to adequately analyze cedar decline in the biogeographic province and to review cedar regeneration prescriptions also violates NEPA in various ways. The absence of any discussion of more recent studies undermines the scientific integrity of the DEIS and deprives the public and the decisionmaker "of the full range of responsible opinion on environmental effects."[172]

SCSX-2 In our scoping comments, we indicated that there was ample recent documentation about cedar die-off and pointed out that it is more important than ever to conserve yellow cedar. We were shocked that the DEIS cited a ten-year old study for the purpose of explaining that "[t]he cause of yellow-cedar decline is not completely understood" but "could be caused by freeze damage to fine roots."[173] Forest Service scientists have produced four studies since that time that refine the root-freezing hypothesis and more clearly tie cedar decline to a topic entirely ignored in this DEIS – climate change.[174] Also, the Forest Service has clearly indicated that yellow cedar decline does alter stand structure, favors succession of other conifer species, alters understory successional species and "may lead to diminishing populations (but not extinction) of yellow-cedar, **particularly when the poor regeneration of the species is considered.**"[175]

The brief analysis provided for this subject was particularly disconcerting because, as noted by the DEIS, there are approximately 84,000 acres of mapped cedar decline on Kupreanof Island.[176] The Forest Health Report included in the planning record contains a map that makes clear that the most severe case of cumulative yellow cedar decline is in the project area. The material in that report suggests that Kupreanof and neighboring Kuiu Island appear to be the two locations in Southeast Alaska where the combination of terrain and temperature are most likely to facilitate yellow cedar decline.[177]

NEPA also requires the Forest Service to consider the cumulative impacts of a proposed action which are defined as follows:

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[169] 2008 TLMP Amendment FEIS at 3-120.
[170] 2008 TLMP at 4-70 – 71; 4-14.
[171] 2008 TLMP at 4-75.
[172] 40 C.F.R. § 1502.24; 40 C.F.R. § 1500.1(b); Seattle Audubon Soc. V. Mosely, 798 F.Supp. 1473, 1479 (W.D. Wash. 1992).
[173] DEIS at 3-125.
[174] See http://www.fs.fed.us/r10/spf/fhp/cedar (providing links to more recent Forest Service studies of cedar decline that provide guidance on causes, landscape considerations and regeneration and conservation strategies).
[175] Forest Health Report at 59.
[176] DEIS at 3-125.
[177] Forest Health Report.

> [T]he incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.[178]

SCSX-2 The cumulative effects of climate change and timber harvest are a significant issues that merits detailed analysis. Logging creates openings that create greater soil and air temperature fluctuations that directly pertain to the freeze/thaw cycle and cedar decline:

> Air and soil temperatures respond primarily to exposure. Open canopies provide inlets for solar radiation that warm vegetation and the soil surface and also allow more rapid loss of energy at night. Denser forest canopies intercept solar radiation by shading during warm periods and insulate the loss of energy during cold periods, thus creating buffered, less extreme temperature conditions. Soils located under open canopies warm more quickly in spring than the soil under dense canopies, as expressed by the rapid accumulation of soil degree days in the open canopy forest zones. The surface of these soils is also exposed to slightly colder night temperatures due to less insulation from the canopy.[179]

Also, Forest Service scientists have observed that yellow cedar "does not reproduce prolifically and may require measures to ensure that it successfully regenerates."[180] These scientists are developing a yellow cedar conservation strategy and advise "an active forest regeneration program is needed" and that the "success of natural regeneration (e.g., seed tree harvests) needs to be evaluated."[181] Further, "[s]urviving yellow-cedar trees in patches of intensive decline could have experienced selective pressure favoring spring cold tolerance and would be good candidates for genetic testing."[182]

We reiterate our request that the Forest Service indicate in the DEIS what portion of yellow-cedar proposed for harvest in this project is in decline and what portion is healthy. We further request details about regeneration in the biogeographic province so that the public can review whether the assumptions made in the DEIS are supported by evidence given that the assumptions made contradict the best available science.

The failure to adequately analyze yellow-cedar decline warrants production of a revised DEIS. Please review and discuss the implications of the more recent studies on yellow cedar decline produced by Forest Service scientists based in Juneau. In light of these studies and the extent of cedar decline in this biogeographic province, the revised DEIS should incorporate the findings of these studies into project planning and include alternatives that eliminate any logging of healthy yellow cedar trees.

2. Red Cedar

In scoping comments, we requested that the Forest Service ensure protection of the northernmost red cedar stands. It has been noted that neighboring Mitkof Island contains

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[178] 40 C.F.R. § 1508.25(c)(3).
[179] D'Amore, D.V. & P.E. Hennon. 2006. Evaluation of soil saturation, soil chemistry and early spring soil and air temperatures as risk factors in yellow cedar decline. USDA Forest Service, Pacific Northwest Research Station, Junea, AK.
[180] http://www.fs.fed.us/r10/spf/fhp/cedar/regen.html.
[181] http://www.fs.fed.us/r10/spf/fhp/cedar/management.html.
[182] http://www.fs.fed.us/r10/spf/fhp/cedar/regen.html.

SCSX-3 some of the northernmost stands of red cedars in the archipelago.[183] The DEIS indicates that the action alternatives will take between 79 and 191 MBF of red cedar but neither the unit cards nor the DEIS disclose the location of these stands. We specifically requested that cruise stand data and field observations on stand structure be included in the DEIS and this information was critical for the public to be able to review whether or not red cedar would be taken from the northernmost extent of its range. Because of the significance and value of red cedar, the same TLMP, NFMA and NEPA requirements raised in our discussion of yellow cedar also apply here.

It is important for the public to know how the project's silvicultural prescriptions will affect the success of regeneration efforts. Please disclose the species composition of previous sales in the area and the progress of regeneration efforts in those sales, by species. Recent deer-exclusion studies indicate that red cedar regeneration in analogous forest types can be drastically impeded by deer browsing because of its palatability.[184] The authors' conclusion is particularly pertinent to this project area:

> The likelihood that young, year-round palatable, redcears can escape deer browsing in an understorey already severely depleted in resources for deer is understandably very limited. Our results indicate that any effort to restore redcedar regeneration in old-growth forest patches will need to achieve a significant reduction in deer abundance and maintain this reduction over a long period of time.[185]

Ironically, red cedar canopies benefit deer by intercepting more snow than other forest types. We recommend that the Forest Service drop any cutting units that contain red cedar. In the event that the Forest Service proceeds with planning for red cedar harvest, please discuss any proposed cutting units that contain red cedar in detail. We request that you evaluate regeneration in these stands and discuss the significance of removing the northernmost stands of this species in the context of a changing climate.

3. Conclusion

SCSX-2 SCSX-3 Yellow-cedar decline and red-cedar regeneration are two of the key areas where the Forest Service erred in deferring climate change mitigation to adaptive management at some as yet undetermined point in the future. Please discuss the cumulative effects of climate change, harvest of live yellow and red cedar trees in subsequent NEPA documentation and discuss efforts to monitor these issues in this biogeographic province and identify how the Forest Service has implemented its adaptive management approach with regard to these issues.

B. The DEIS Needs to Explain the Justifications for Clearcutting

SCSX-4 The DEIS does not provide an adequate justification for the even-aged management prescriptions. Previous entries have clearcut large blocks of forest to the detriment of old-growth dependent species and salmon runs. If the Forest Service must proceed with this project, the revised DEIS should include alternatives that rely on light-touch partial cutting prescriptions that fully address wildlife and watershed concerns.

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[183] Schoen, J. & D. Albert. 2007. Southeast Alaska Conservation Assessment at 4.17.
[184] Stroh, N., C. Baltzinger & J. Martin. 2007. Deer prevent western redcedar (thuya plicata) regeneration in old-growth forest of Haida Bwaii: Is there a potential for recovery? Forest Ecology and Management 255 (2008) 3873-3979.
[185] Stroh et al. 2007.

The DEIS does not explain whether the clearcutting prescription is for the purpose of minimizing windthrow, eliminating dwarf mistletoe or other concerns. The DEIS seems to imply that clearcutting is justified "where there are no other conflicting resource issues so that residual trees are not damaged by traditional logging systems."[186] It also cites the need to improve timber sale harvest economics and logging feasibility.[187]

NFMA's standards are clear. Clearcutting may only be used when "it is determined to be the optimum method" to meet Forest Plan objectives and requirements and where "such cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, esthetic resources and the regeneration of the timber resource."[188] This means that clearcutting is appropriate "only in exceptional circumstances" and when these exceptional circumstances exist, the Forest Service must "proceed cautiously" and "only after a close examination of the effects that [clearcutting] will have on other forest resources."[189]

The DEIS failed to conduct the requisite "close examination" of effects on other forest resources. Concerns raised about clearcuts include: (1) creation of young-growth forests that are poor habitat for wildlife and understory plant species; (2) reduction of plant biodiversity; (3) diminishment of old growth stand structural components; (4) reduction of slope stability, increased landslide activity and accelerated erosion and sediment production leading to degraded fish habitat.[190] All of these concerns point to prescriptions that require a much higher forest retention level per unit. Wildlife experts recommend retaining more than 50% of stand basal area to protect small mammal habitat needs.[191]

The DEIS also does not explain the role of TLMP guidance in the decision to proceed with the development of large-scale clearcut alternatives. The unit cards do not provide information about windthrow risks to units and the DEIS indicates that dwarf mistletoe is minor in the project area.[192]

Further, the absence of windthrow analysis is particularly troubling because several portions of the project area would place new clearcuts adjacent to previous clearcuts that are now or approaching the stem exclusion stage. This problem is particularly evident in VCU 4271. For example, units 207 and 314 propose 97 and 100 acre clearcuts that abut previously harvested stands. This scenario often creates "creeping megacuts" where one contiguous clearcut can easily exceed Forest Plan size limits. If cutting unit density is so high in this VCU that new units must abut the old ones, there is no reason to clearcut additional units in the VCU.

In sum, we request that the revised DEIS and unit cards provide information about windthrow risks, dwarf mistletoe and cedar decline. This information should also include an evaluation of the effects of clearcutting on other forest resources.

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[186] DEIS at 3-129.
[187] DEIS at 3-129.
[188] 16 U.S.C. § 1604(g)(3)(F)(i), (v).
[189] Sierra Club v. Thomas, 105 F.3d 248,k 251 (6th Cir. 1998).
[190] McClellan et al,. 2000. Alternatives to Clearcutting in the Old Growth Forests of Southeast Alaska: Study Plan and Establishment Report. Gen. Tech. Rpt. PNW GTR 494. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 40 p.
[191] Flynn, R. & M. Ben-David (AR 985 in TLMP planning record).
[192] DEIS at 3-126.

C. Biogeographic Province Highgrading of Large Tree Old-Growth

SCSX-5

An EIS needs to disclose the effect of continued highgrading on the Tongass and this DEIS needs to analyze this project in light of continued highgrading.[193] The wildlife section analyzed POG removal at various scales but the DEIS contains no analysis of highgrading the large tree old-growth forests that provide winter carrying capacity for deer.

Even though the biogeographic province has a high amount of POG, the amount large-tree old-growth is low compared to other provinces.[194] Therefore, even though only 16% of the original POG has been taken, "a conservative estimate indicates that nearly half of the large-tree forest has been logged in this province."[195] Nearly half of the remaining large-tree old-growth occurs in the timber base.[196]

In the revised DEIS, please evaluate this project in light of remaining large-tree POG. This analysis should include a discussion of highgrading at multiple scales: (1) at the stand level in terms of past selections of large tree and high value species and future harvests of these species; (2) at the landscape scale and (3) at the biogeographic landscape scale.

X. Appendix A

SCSX-6

Appendix A contains an explanation of the reasons for proceeding with this large sale. We recommend that the Forest Service revise this DEIS to include an updated and accurate market demand analysis that includes a realistic assessment of the viability of the timber industry and that does not overinflate the ability of the timber sale program to offset the declines in timber industry employment.

NEPA mandates that an EIS must not rely on misleading economic assumptions and similarly, an economic analysis cannot rely on unexplained assumptions, inaccurate data or outdated reports.[197]

The administrative appeals of the 2008 TLMP amendment by SCS et al., SEACC and The Wilderness Society addressed our concerns with the market demand analysis and we will not discuss them in detail here. In general, we continue to maintain that the market demand analysis and other reasons for developing large sales suffer from the following flaws:

(1) the Forest Service has misinterpreted Section 101 of the TTRA's language directing it to "seek to meet market demand" as a mandate rather than an exhortation that is limited by NFMA's requirement to be "consistent with providing for the multiple use and sustained yield of all forest resources;
(2) the 2006 market demand analysis and 2008 addendum create four scenarios that rely on unrealistic assumptions;
(3) the history of the timber program over the past decade clearly demonstrates that even the low volume scenarios were overly optimistic and
(4) the most realistic scenario applicable to the current situation is neither the limited lumber nor the expanded lumber scenario but rather a scenario of declining demand.

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[193] NRDC v. U.S. Forest Service. 2005.
[194] Schoen, J. & D. Albert. 200. Southeast Alaska Conservation Assessment at 4.17.
[195] Id.
[196] Id.
[197] Hughes River Watershed Council v. Glickman, 81 F.3d 437, 446 (4th Cir. 1996); Van Abbema v. Fornell, 807 F.2d 633, 639-42 (7th Cir. 1986); Johnston v. Davis, 698 F.2d 1088, 1094 (10th Cir. 1983).
42

In sum, the Forest Service needs to reevaluate its market demand studies prior to proceeding with a project of this scale. At current rates of harvest, there is enough volume in Gates 1 and 2 of the timber pipeline now to supply the timber industry for half a decade without this sale. If the Forest Service proceeds with further planning on this project, we request that there be a further addendum to the market demand analysis that evaluates a declining demand scenario and considers realistic targets for the timber pipeline.

XI. Climate Change

In scoping comments, requested an evaluation of the expected effect of climate change on seasonal soil moisture, frequency and intensity of storms, land slides, and changes to precipitation patterns. We also asked for an evaluation of the cumulative habitat loss from natural forces combined with those from past, proposed, and planned future logging. This DEIS entirely omitted discussion of climate change impacts even though the leading hypothesis for the 84,000 acres of cedar decline in the project area pertains directly to a warming climate.

NEPA requires the Forest Service to analyze the cumulative effects of climate change impacts.[198] We addressed a number of specific and projected impacts thoroughly in our administrative appeal of the TLMP. In a revised DEIS, please discuss the following subjects:

SCSXI-1 (1) the potential for managing the Tongass for carbon sequestration and the loss of project area sequestration capacity in the near term;[199]

SCSXI-2 (2) whether climate change may affect the ability to reach a desired Forest Plan condition in the project area such as forest succession;[200]

SCSXI-3 (3) "whether some element of the proposal will result in direct, indirect or cumulative effects on GHG emissions or the carbon cycle and the direction of effects"[201] and

SCSXI-4 (4) whether timber harvest in watersheds cumulatively increases risks due to severe precipitation events, landslides and other projected results of climate change.

XII. Conclusion

As noted at the outset, it is necessary to re-start the scoping process if the Forest Service is to proceed with the volume proposed in the action alternatives. We further request that the revised DEIS consider the general and specific concerns about the quantity and quality of information provided in the current document because it deals with too many issues in a cursory manner. Finally, we emphasize that we would very much prefer to review a DEIS that responds to the current status of the timber industry, the needs of the communities of Kake and Petersburg and the impacts to fish and wildlife by providing alternatives consisting primarily of small sales with an emphasis on avoiding priority watersheds, minimizing road construction and avoiding high value deer habitat. Such a DEIS would provide the public a much better opportunity to offer constructive comments pertaining to specific cutting units.

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[198] 40 C.F.R. § 1502.22(b)(1); Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 583 F.3d 1172 (9th Cir. 2008).

[199] See FSEEE. January 2009. Help make national forests key to mitigating climate change. (proposing amendments to federal laws and forest plans that provide legal authority for making carbon sequestration a priority use for national forests).

[200] Kimbell, G. 2009. Climate Change Considerations in Project Level NEPA Analyses.

[201] Id.

Sincerely,*

*Electronic signatures are provided in a separate attachment.

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STATE OF ALASKA

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February 2, 2009

Chris Savage
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Petersburg Ranger District
PO Box 1328
Petersburg, AK 99833

RE: Central Kupreanof Timber Sale DEIS

Dear Mr. Savage:

The State of Alaska reviewed the Draft Environmental Impact Statement (DEIS) for the U.S. Forest Service's proposed Central Kupreanof Timber Sale. Specifically, this project proposes to harvest 28.2 to 70.2 MMBF of timber from approximately 1,327 to 3,647 acres, and to construct up to 25.1 miles of new National Forest System (NFS) roads, 6.1 miles of temporary roads, and to reconstruct up to 9.1 miles of existing NFS roads, depending on alternative. Under all the action alternatives, the harvested timber volume would be hauled to the existing permitted log transfer facility at Hamilton Bay. The DEIS identified Alternative 3 as the Forest Service's preferred alternative for this project. This alternative proposes to harvest approximately 70.2 MMBF of timber from an estimated 3,647 acres, and would involve the construction of 25.1 miles of new NFS roads, 6.1 miles of temporary roads, and the reconstruction of 9.1 miles of existing road.

These comments were compiled based on input from the Department of Natural Resources, the Department of Fish and Game, and the Department of Environmental Conservation.

Introduction and Context
The State appreciates the opportunity to review this document. We share the goal of conducting a well-designed timber sale in this area. Unfortunately, for a variety of reasons, we find the DEIS, as currently written, inadequate under the National Environmental Policy Act and insufficient as a timber sale planning tool. For example, we find that none of the alternatives are economically viable. In addition, the Wildlife section and Road Cards lack critical information necessary to evaluate the proposal. To address these and other deficiencies, we request the DEIS be revised and republished for another round of public review per 40 C.F.R. 1502.9. We fully recognize that additional work will be necessary to develop an improved DEIS and we are available to assist in this effort. As you know, since completion of the Tongass Land

Management Plan, state resource agencies and the Forest Service have been working together to forge a more cooperative relationship. Through implementation of this more collaborative and constructive approach, we are confident this timber sale can be designed and adequately analyzed in a new DEIS – leading to a successful, economically sound project that also meets environmental protection goals and standards.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
(Contact: Kevin Hanley, 907- 465-5364)

Alaska Coastal Management Program

With the notable exception of instream work activities within fish bearing waters, per 11 AAC 112, the activities described in the DEIS are consistent with the Alaska Coastal Management Program under the terms of the Tongass National Forest General Consistency Determination (GCD) issued on December 4, 2006. Timber harvest activities under the scope of this GCD meet or exceed the standards of the Alaska Forest Resources & Practices Act (AFRPA) and Regulations.

Clean Water Act Section 319 and National Environmental Policy Act (NEPA)

The following comments address both Clean Water Act Section 319 and NEPA concerns:

Stream Crossing Structures on Roads 45808 and 45897

According to the information presented in the road cards, the culverts that are proposed for the Class II stream crossings on Roads 45808 and 45897 will be incapable of providing upstream fish passage given the gradients at the crossing sites. Specifically, these include the following:

State HC-8

Road 45808: An 84-inch culvert is proposed for a Class II HC2 channel with a gradient of 6-15 percent.

State HC-7

Road 45897: At milepost 1.44, *"48in culverts"* are proposed for a Class II HC2 channel with a bankfull width of 3-50 feet, an incision depth of 3-33 feet, and a gradient of 6-15 percent; at milepost 1.58, *"48in culverts"* are proposed for a Class II HC4 channel with a bankfull width of 13-50 feet, an incision depth of 20-66 feet, and a gradient of greater than 6 percent; at milepost 1.98, *"48in culverts"* are proposed for a Class II HC3 channel with a bankfull width of 23 feet, an incision depth of 56 feet, and a gradient of 6-15 percent; and at milepost 2.83, *"48in culverts"* are proposed for a Class II Alluvial Fan channel with a bankfull width of 3.4 feet, and incision depth of 2.5 feet, and a gradient of 18 percent.

With gradients of 6 to 18 percent, all of these structures would create velocity barriers to upstream juvenile fish passage. In addition, the channel incision depths of the streams at mileposts 1.44, 1.58, and 1.98 of Road 45897 would require substantial amounts of fill for the installation of culverts at these locations, and the culvert proposed for the alluvial fan channel at milepost 2.83 would be very susceptible to clogging by bedload and woody debris.

State HC-1

Consequently, we request bridges, rather than culverts, be installed at these locations to ensure the maintenance of fish passage, which is a requirement of not only AS 16.05.841, but also the Section 404(f)(1) silvicultural exemption of the Clean Water Act.

Hamilton Bay Log Transfer Facility
According to the DEIS (page 3-40), the Hamilton Bay LTF "*is a steel piling and concrete dock facility*" at which the operator will have the option to barge or raft the logs from the project area. As indicated in the DEIS (page 3-104), the waters adjacent to the LTF, including the log storage area, were placed on the 1996 Section 303(d) list of impaired waterbodies due to an exceedance of the water quality standard for residues, specifically, the accumulation of bark and woody debris as result of log transfer, storage, and rafting activities.

State HC-2: Although these waters were subsequently removed from the Section 303(d) list in 2002 and are currently in compliance with the Water Quality Standards, given the limited flushing capability of this inner portion of Hamilton Bay, the in-water transfer of up to 70 MMBF of timber has the potential to once again exceed the residues standard. Therefore, since barging is indicated as being feasible at this site, we request it be used in lieu of conventional in-water log transfer, storage, and rafting to avoid the deposition of additional bark and woody debris on the benthic habitat of this portion of Hamilton Bay.

ALASKA DEPARTMENT OF FISH AND GAME
(Contact: Jim Cariello, 907-772-5224)

Alaska Coastal Management Program

With the notable exception of instream work activities within fish bearing waters, per 11 AAC 112, the activities described in the DEIS are consistent with the Alaska Coastal Management Program under the terms of the Tongass National Forest General Consistency Determination (GCD) issued on December 4, 2006. Timber harvest activities under the scope of this GCD are expected to meet or exceed the standards of the AFR&PA and Regulations.

Alaska Forest Resources and Practices Act

The information provided on the road cards appear to be conceptual and lack site specific stream information and proposed culvert size. Due to the lack of information we are unable to evaluate this project in accordance with 11 AAC 95.305. The preferred alternative is proposing the construction of 25.1 miles of road with 139 stream crossings therefore this represents a

State HC-3: significant impact to fish habitat and water quality. The road location section on the road cards appear to be generic statements and lack site specific information on unstable areas and identification of slopes greater than 67%. The lack of information makes it difficult to evaluate the project in accordance with 11 AAC 95.285 and 11 AAC 95.290.

National Environmental Policy Act

ROADS
The preferred Alternative 3 is proposing the construction of 25.1 miles of new NFS road, 6.1 miles of temporary road and the reconstruction of 9.2 miles of existing road. There will be 139 new stream crossings constructed. Of particular concern are the Castle River and Hamilton River watersheds, identified as primary sport fish produces in the Tongass Fish and Wildlife Resource Assessment (1998). The DEIS Alternative 3 is proposing 29 new stream crossings in the Castle River watershed and 31 in the Hamilton River watershed.

The road cards only identify eight stream crossings (AHMU Class I & II) with site-specific design criteria. Most of the structures recommended are inadequate for fish passage and do not meet FRPA requirements for hydraulic conveyance based on the site specific information provided. It appears the stream measurements for these crossings on the road cards (gradient, bankfull width, incision) are estimates taken from the Channel Type Users Guide. The lack of field data on stream crossing sites along with missing road location information on the road cards raises doubt whether the road location has been field verified and if areas of instability and slopes exceeding 67% have been properly identified.

State HC-3

State HC-4

In addition, NFS road reconstruction associated with Alternative 3 would require the replacement of two Class I and four Class II crossings. The DEIS should have included crossing information along with recommended structures for these locations.

State HC-5

The ADF&G requests this information to determine if the stream crossing structures are designed and constructed in accordance with FRPA standards11 AAC 95.300 and 11 AAC 95.305 as well as the Soil and Water Conservation Handbook (FSH 2509.22) and TLMP Standards and Guidelines.

ROAD CARDS

State HC-6

<u>Road 6326</u>
The Road Card for Route No.6326 (Appendix B page 278-280) indicates the .50 mile long road is planned however, aerial photos indicate the road has already been constructed. The USFS GIS roads cover does not show this road existing. Road Condition Survey data indicates maintenance needs with five ditch relief culverts needed. This section of road did not appear on the North Irish timber sale maps and it appears it may have been constructed without any NEPA analysis. Please explain the history of this road and why the DEIS does not acknowledge that this road has already been constructed.

State HC-7

<u>Road 45897</u>
The first major crossing (at about 1000') is indicated as a Class III crossing. Has this site been sampled for fish? It is questionable that the stream would go Class I to III without some amount resident Class II habitat. If possible, adjust road layout to avoid the need for a fish pipe.

The following sites are proposing 48" culverts in high gradient streams where fish passage design will be difficult and it is also questionable whether these structures will meet FRPA requirements for hydraulic conveyance. Final designs will need to be reviewed by ADF&G Division of Habitat in accordance with the Title 16 MOU:

Road 45897 MP 1.44
Road 45897 MP 1.58
Road 45897 MP 1.98
Road 45897 MP 2.83

State HC-8

Road 45808
The following site is proposing an 84" culvert with a stream gradient of 6-15% where fish passage design will be difficult. Final designs will need to be reviewed by ADF&G Division of Habitat in accordance with the Title 16 MOU:
Road 45808 2+00(no milepost noted)

State HC-9

Road 45886
MP 0.09 Can the road be re-located slightly to avoid the need for the stream crossing? If not, final designs will need to be reviewed by ADF&G Division of Habitat in accordance with the Title 16 MOU.

State HC-10

Road 45887
The proposed temp road crosses a Class I stream yet there is no indication of the type of structure proposed nor stream geometry. We recommend a temporary log stringer bridge with no instream work required.

State HC-11

Road 45892
At approximately 1500' the road crosses an alluvial fan with many, small drainages noted in Unit 254. Locate road at apex of fan to avoid culvert problems and road failure. Numerous V notches are crossed (Class III) with no site specific design criteria noted. Road card indicates large culverts will be required.

ROAD RECONSTRUCTION

State HC-4

The reconstruction of 9.2 miles of NFS road is proposed in Alternative 3, requiring the replacement of two Class I and four Class II crossings. Road cards should include site specific design criteria for these six sites along with any structures on Class III streams associated with reconstruction.

RED PIPES

State HC-12

The DEIS does not recognize the cumulative impacts to fish habitat from past road construction. With approximately half of the existing stream crossings impeding fish passage, we request the DEIS address existing impacts to fish habitat and include actions that would correct fish passage deficiencies during implementation of the timber sale and not defer them until road closure at a later date.

State HC-13

In addition, the DEIS indicates on page 3-101 "*there are 61 red crossings, 6 gray crossings, and 56 green crossings within the project area and on the haul route between the project area and the Little Hamilton LTF. While 19 of these may be corrected through the proposed road closures identified through the RAP process the remaining culverts will be prioritized on a forest wide level.*" It is unclear how 19 of these crossings may be corrected when the preferred alternative states "*An indirect effect of this alternative would be the closure of 2.0 miles of NFS Roads 6330 and 6327 within 10 years of harvest, including removal of two red fish crossings.*"

State HC-9

UNIT CONCERNS
Unit 314: Could the 45886 road alignment to be changed to avoid the stream crossing?

State HC-7 Unit 273: Stream #8/9 is indicated as a Class III crossing. Has this site been sampled for fish? It is questionable that the stream would go Class I to III without some amount resident Class II habitat. If possible, adjust road layout to avoid the need for a fish pipe.

WINDTHROW

The DEIS does not acknowledge the potential for windthrow adjacent to units and on stream buffers. Page 3-125 of the DEIS states: "*Survey crews examined leave trees and unit edges of previous harvest units and stands within the proposed harvest units for windthrow and found only minor amounts. The risk of significant wind disturbance as a result of timber harvest in the project area was determined to be low due to the insignificant amount of preexisting windthrow and an analysis of contributing risk factors. Additional wind protection measures are not planned for any of the proposed harvest units.*"

State W-1

The Kupreanof Island Analysis, page 66, states "*The southern end of Kupreanof Island has large areas of wind disturbance, but windthrow is found throughout the island.*"
The proposed Threemile Timber Sale harvest was designed to mimic natural disturbance. The Threemile Timber Sale FEIS (April 2004) discussed in detail natural disturbance ecology and acknowledged "*The strongest windstorms on Kuiu Island usually come from the southeast to the southwest (Kramer, 1997 and Harris, 1989*)." Since the Threemile project area is adjacent to the Central Kupreanof project area, it is reasonable to expect similar wind disturbance. Since the DEIS is proposing a substantial amount of harvest in the southern end of Kupreanof Island in watersheds with high fisheries values, unit cards should address this potential, along with measures taken to minimize windthrow.

The Forest Plan calls for providing reasonable assurance that Riparian Management Areas (RMAs) are windfirm. Where the risk of windthrow is moderate or greater, RMAs are protected by leaving additional windfirm trees standing adjacent to the RMA. The Unit Cards do not include any measures to assure the windfirmness of the RMA. A review of aerial photos of the project area show many wind generated stands. Unit 279 for example is adjacent to a wind generated stand.

IDENTIFICATION OF FISH STREAMS

State HC-14 We request the DEIS include a description of field methods used to verify stream classes, identify fish presence and the upper limit of fish habitat. Recent studies indicate seasonal movement of fish into higher gradient streams where they might not have been present during summer months. We are concerned that fish sampling methods may not be capturing the upper extent of fish habitat. ADF&G staff would like to visit several units in summer and fall to confirm the accuracy of the determination of the upper extent of fish habitat and will report our findings to USFS staff.

ECONOMICS

State EC-1 Logging costs evaluated using NEAT_R included barging to the Silver Bay Mill in Wrangell. Though this may be the closest the mill has not purchased a USFS sale for years, has no current sales under contract and is currently not operating. Appraisal to the Viking Lumber Mill in Klawock would be a more realistic appraisal point.

Table S-1 and Table 2-1 need a footnote to make it clear that an Indicated Bid in parenthesis ( ) represent a negative value.

WILDLIFE CONCERNS

The DEIS does not provide sufficient information for agency staff and the public to evaluate the impacts of the proposed actions on wildlife and their habitats. As stated in 40 CFR §1501 (b) "*…NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.*" The DEIS for the Central Kupreanof Timber Harvest does not meet this standard. In order to analyze and provide substantive comments on the potential impacts of the proposed action alternatives on wildlife and their habitats, the following information and analysis needs to be included in a revised or supplemental DEIS:

State WC-1	• A higher quality LUD map showing the location of Old Growth Reserves relative to existing units, the unit pool, and existing and planned roads. This is particularly important given that the initial public scoping for this project was done with an outdated and inaccurate LUD and unit pool map.
State WC-2	• A coarse canopy habitat map needs to be provided at the same scale as the various action and no action alternative maps, and should provide landscape features such as existing roads, existing units, volume strata, and the location of old growth reserves that allow the reviewer to easily evaluate the location of coarse canopy stands relative to proposed harvest units. Also include tables showing the impacts of the various action alternatives on this stand type and the resulting changes from the historic condition.
State WC-3	• Maps showing volume strata or the location of high volume stands in relation to existing and planned harvest units and roads, at the same scale as the various action and no action alternative maps, and with landscape features such as existing roads, existing units, and the location of old growth reserves that allow the reader to easily evaluate the location of coarse canopy stands relative to proposed harvest units. Similar to coarse canopy, include tables showing the impacts of the various action alternatives on high volume stands and the resulting changes from the historic condition.
State WC-4	• The department continues to have concerns about increasing road densities at various locations and geographic scales within the Petersburg Ranger District, including the Mitkof/Kupreanof biogeographic province. The DEIS does provide some information on open and total road densities at the project level scale, however, it does not address cumulative road densities at larger geographic scales. While road densities do not currently exceed established recommendations at the smaller project level, human access, hunter and trapper harvest, and illegal kill may lead to wolf mortality concerns within the biogeographic province.
State WC-5	• The Central Kupreanof Project Area occurs in a landscape where productive old growth stands are naturally fragmented by noncommercial forest lands and muskegs. Because old growth fragmentation from both past and planned timber harvest further reduces the size and connectivity of old growth forest stands, we request the DEIS include an analysis of interior old growth habitat patches and impacts of fragmentation.
State WC-6	• The northern goshawk has been previously petitioned for T&E listing status, the DEIS contains virtually no information on goshawks, even though there are 5 to 6 known goshawk nesting areas located within the project area.. The DEIS simply states "*…Queen Charlotte goshawks have a moderate to high probability of occurring in the*

State WC-6	*project area and have a potential for measurable effects to the population in the analysis area.*" Rather than summarizing the analysis of impacts to northern goshawks from this project, the document simply refers readers to the Biological Evaluation in the planning record.
State WC-7	• The Kupreanof Island Analysis (USDA Forest Service, 2000) states that …"*The Forest Plan has identified Mitkof/Kupreanof biogeographic province as a higher risk area for marten.*" The DEIS, however, contains no maps of marten winter habitat relative to existing and planned timber harvest and roads, and no information regarding the impacts of the various action alternatives on high value marten habitat or habitat capability trends at the project level, island-wide, and the biogeographic scales. Despite the relatively large scale of this project, including up to 70 MMBF of old growth timer and over 31-miles of new road, the DEIS simply concludes on (Pg 71) "*…there is not an anticipated effect to the marten population.*" We disagree with that statement.
State WC-8	• Deer are an extremely important species in the region, not only in terms of recreational and subsistence hunting opportunity and also as a prey base for maintaining viable wolf populations. The DEIS provides little to no analysis or discussion of deer habitat capability in the Central Kupreanof Project area and little to no information concerning the impacts of the proposed action on important deer winter habitat.

ALASKA DEPARTMENT OF NATURAL RESOURCES/DIVISION OF FORESTRY
(Contact: Clarence Clark, 907- 225-3070)

GENERAL
Chapter 1, page 2 of the Central Kupreanof Timber Harvest DEIS list 3 purposes for the project [emphasis added]:

1. Manage the timber resource for production of sawtimber and other wood products from suitable lands made available for timber harvest on an even-flow, long-term sustained yield basis, and in **an economically efficient manner**.

2. **Seek to provide a timber supply sufficient to meet the annual market demand** for Tongass National forest timber and the market demand for the planning cycle.

3. Provide for a diversity of opportunities for resource uses that **contribute to the local and regional economies of Southeast Alaska**.

State EC-2	The Central Kupreanof Timber Harvest DEIS does not meet any of the 3 purposes as stated above. None of the four alternatives presented in the document provide a timber supply that meets market demand in an economically efficient manner and contributes to the local and regional economies of southeast Alaska. All of the three action alternatives have negative indicated bid values; with the DEIS preferred alternative (Alt. 3) being the most negative. In light of the Congressional mandate to offer only positive value timber sales on the Tongass, we request the revised EIS include an economically viable alternative that addresses this mandate. A subset of units from existing alternatives may provide the opportunity to offer a positive value timber sale.

During our review of the DEIS we used Alternative 3 as a foundation to develop an economic alternative for the timber sale project; based upon a rough appraisal using information provided in the Draft Environmental Impact Statement and Regional Timber Valuation Appraisal information, this economic alternative appraises approximately $3/mbf (negative 3 dollars per mbf) at this point in time. In January of 2006, the State of Alaska and the USFS Tongass National Forest signed a Memorandum of Understanding for the purpose of "*…the development of economically and technically viable timber sales on the Tongass National Forest….*" Under this MOU the State of Alaska is interested in working with the USFS to modify Alternative 3 to provide an economically alternative for the Central Kupreanof Timber Harvest project.

State EC-3

Alaska Forest Resources and Practices Act

Chapter 3, page 43 to 44, last paragraph states: "These roads would be intermittent service roads (maintenance level one) within ten year and would be physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored."

Under the definition of Road Storage in Chapter 4, it states that drainage structures in live streams are completely removed. As copied from other documentation:

State RC-1

Storage definition from MOU between State of Alaska and USDA Forest Service, Alaska Region on Coastal Zone Management Act / Alaska Coastal Management Program – Consistency Reviews. (CZMA MOU #00MOU-111001-026)

Storage: Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, revegetate. This is intended to be the primary maintenance strategy applied on intermittent use roads during their closure cycle. In this strategy, bridges and culverts on live streams are completely removed to restore natural drainage patterns. Cross drains and ditch relief culverts will be bypassed with deep water bars but left in place to minimize the cost of reusing these roads in the future. Due to the isolated nature of the road system, which makes maintenance costly and difficult, and their infrequency of use, storage is the most appropriate strategy for these roads. Maintenance Level 1, closure and basic custodial maintenance, is assigned. Storage eliminates car and truck use, and discourages use by other motor vehicles.
This level of maintenance is synonymous with FRPA closed roads.

State RC-2

Chapter 3, page 44 and Chapter 4, page 18: The text on page 44 indicates that temporary roads will be decommissioned; culverts and bridges will be removed. The definition for Road Decommissioning in Chapter 4 does not specifically mention removal of bridges. Based on the text on page 44, presume when time comes to decommission the roads, any bridges will be removed. Will the removal of culverts include relief culverts or just those on surface waters?

State RC-1

Chapter 3, page 47 to 48, Alternative 2, 3, 4: States that the specified roads will be closed and placed into storage, any red fish crossings would be pulled at time of storage. As indicated in Comment #1, storage translates to closed under Alaska Forest Resources and Practices Act; to be considered closed under AFRPA (11 AAC 95.320), all bridges, culverts, and fills need to be removed from surface waters.

State RC-3	Chapters 3, page 52: States "*side slopes of greater than 72% would be mitigated by full bench construction…*" Under AFRPA Best Management Practices, full bench construction or other mitigation measures are usually required on slopes greater than 67% (11 AAC 95.290).
State RC-1	Appendix B, page 235: Second to last paragraph states that when roads are stored, bridges and culverts may be removed from live streams. As stated in the USFS definition of road storage, structures are completely removed from live streams when a road is placed into storage.
State RC-1	Appendix B, page 238: Describes the AFRPA road status definitions. Besides the text given, for closed roads in areas accessible to highway vehicles the definition also includes road being blocked to highway vehicles (11 AAC 95.320(b)(3)).
State RC-1	Appendix B, page 243 (and other subsequent road cards), Travel Management Narrative: States that within ten years, roads will be maintenance level one and the roads will be closed/stored by being physically blocked with gate or vegetation and drainage structures will remain in place. As stated in the definition of road storage, structures are to be removed from live streams when a road is placed into storage. If drainage structures are to remain in place and the road considered closed by presence of gate, the road would be classified as inactive under AFRPA and would need to be maintained to the appropriate standards (11 AAC 95.315(c)).
	Appendix B, page 263 (and other subsequent road cards): Maintenance Narrative states "*AFRP&A Regs. Inactive status: Road is stored*." USFS definition of stored road is equivalent to closed road under AFRPA. Inactive road under AFRPA is roughly equivalent to USFS maintenance level 2.
State RC-4	Appendix B, page 267 and page 273, 6327 and 45891 roads: The road cards mention the crossing of 20 to 30 feet deep v-notches. Best management practices under AFRPA recommend a bridge as the preferred structure when crossing deep v-notches or when excessive fill is needed for culvert placement (11 AAC 95.300(a)(7)).

ALASKA DEPARTMENT OF NATURAL RESOURCES/ANILCA PROGRAM
(Contact: Sally Gibert, 907- 269-7477)

Timber Sale Relationship to the District Access Travel Management Plan

State ANILCA 1	The DEIS identifies new and/or improved temporary roads associated with timber harvest areas, which are intended for remediation when implementation is complete. It appears (e.g., Chapter 3, top of page 91) these roads will be available during their temporary life for public use, including for subsistence purposes. While we would support this intent, we understand there are legal impediments to allowing such public access on temporary roads in active timber harvest areas. We request the revised EIS clarify the status of these temporary roads and explore ways to allow short-term or limited off-highway vehicle use if possible. As you know, recently harvested areas often create productive habitat on the short term and consequently provide enhanced opportunities for wildlife and firewood harvest. Over time, such short-term subsistence access opportunities could contribute to the intent in Section 811(a) to "*ensure that rural residents*

engaged in subsistence uses shall have reasonable access to subsistence resources on public lands."

State ANILCA 2	To the extent the DEIS provides for or allows motorized access for subsistence activities during the life of the project, the eventual restriction of such subsistence access will require a formal closure process to comply with ANILCA Section 811(b), as expressed in the Regional Forester's "*Interim Guide: Providing Access for Subsistence Purposes (ANILCA 811) During Access and Travel Management Planning*," dated May 23, 2008. This implementation requirement also applies to the 1.1 to 2.0 miles of "existing" Forest Service roads that will be closed after timber harvest activities are complete. We are available to discuss possible ways to intersect this timber sale DEIS and the annual update of the Motor Vehicle Use Map.

ANILCA Section 810 Analysis

State ANILCA 3	The Subsistence Section in the Environment and Effects Chapter includes information and conclusions that would clearly be a part of a Section 810 Analysis, even though the organization of the document does not indicate this explicitly. We also note the Subsistence discussion references other sections and other documents that contain certain related analyses. While the DEIS contains an "ANILCA Compliance" section that briefly notes conclusions drawn elsewhere in the document, it does not reference where the various analyses are located. We therefore recommend a titled "ANILCA Section 810 Analysis" section that consolidates the pertinent information and conclusions that meet the specific requirements of ANILCA and existing Service policy.

Thank you very much for the opportunity to comment on the Logjam Timber Sale DEIS. If you have any questions, you can reach me at 907-269-8423.

Sincerely,

Ed Fogels
Director

January 30, 2009

United States Forest Service
Attn: Tiffany Benna
Petersburg Ranger District
12 North Nordic Drive
PO Box 1328
Petersburg, AK 99833-1328

Re- Central Kupreanof Timber Harvest DEIS Comments

Submitted electronically on behalf of Audubon Alaska, The Alaska Wilderness League, and Trout Unlimited to tbenna@fs.fed.us .

TU-1

The Central Kupreanof area contains important fish and wildlife habitat including some of the most productive salmon producing watersheds on the central islands of the Tongass. Audubon Alaska and Trout Unlimited believe the timber harvest activities proposed in the Central Kupreanof Timber Harvest Draft Environmental Impact Statement preferred alternative pose significant potential risk to fish and wildlife habitats and the long-term viability of both resident and anadromous fish populations within large portions of the sale area. We are especially concerned in this regard with respect to the Irish/Keku Lakes system (VCU 4290), the Upper Castle River area (VCU 4360) and Duncan Bay (VCU 4380). These VCU's were identified as Conservation Priority Watersheds through the TNC-Audubon Conservation Assessment (Albert, and Schoen 2007; http://conserveonline.org/workspaces/akcfm)
which was in turn, was used by Trout Unlimited (TU) to identify 31 High Value Fish Producing Tongass VCU's which TU recommended for conservation status as part of the recent Tongass Land Management Plan Revision. In addition, the Castle River was identified as a one of the top 19 quality fish-producing watersheds in the region by the Alaska Department of Fish and Game. Salmon are an important keystone species in southeast Alaska and are used by a host of other wildlife species including many birds, bears, and wolves.

Our concerns for salmon conservation in these VCU's are largely based on the findings noted in the "Summary of the 1997 Fish Habitat Risk Assessment Panel" (Dunlap, 1997) which was convened by the Forest Service to analyze the impacts of the management activities proposed in the seven alternatives in the 1997 TLMP. A full summary of these findings is available at http://www.fs.fed.us/pnw/tlmp_app/050797a.pdf , however the

five primary issues of concern (summarized below) bear directly on the actions proposed in the Central Kupreanof Timber Sale EIS.

TU-2

1. Roads, especially those that cross streams, may have negative effects on fish habitat. The panel identified Prince of Wales, **Kupreanof**, Kuiu and Chichagof Islands as having road densities currently sufficient to be of concern to maintaining adequate fish habitat.
2. Risk to fish habitat increased as the amount of timber harvest increased.
3. Allocation of reserves free from timber harvest, which include entire watersheds, reduces risks to fish habitat.

TU-3

4. Watershed Analysis should be conducted prior to management activities (road construction and timber harvest).

TU-4

5. Protection of the upper portions of watersheds is important to preserving fish habitat throughout entire stream systems.

The DEIS preferred alternative proposes the addition of 25.1 miles of new roads to the 35 miles of roads presently in these VCU's. The DEIS also proposes 139 new stream crossings in addition to the existing 117 stream crossing (61 of which are "red pipes") (Table S-1 DEIS). We do not believe the DEIS adequately addressed the cumulative impacts of the proposed 60 miles of road and 256 total stream crossings. Furthermore, the proposed roads and stream crossing quite clearly run counter to the recommendations set forth for optimizing the protection of fish habitat set forth by the Fish Habitat Risk Assessment Panel.

TU-5

Given the high anadromous fish production of the Central Kupreanof VCU's named above and their significant contributions to commercial, sport, and subsistence fisheries in the region, we believe VCU's 4290, 4360 and 4380 should be removed entirely from the project. Doing so will protect the outstanding fisheries and wildlife values in the area while still providing timber for harvest in adjacent areas. In summary, TU and Audubon Alaska strongly object to harvesting timber and building roads in Conservation Priority Watersheds with high fish production areas and valuable wildlife habitats.

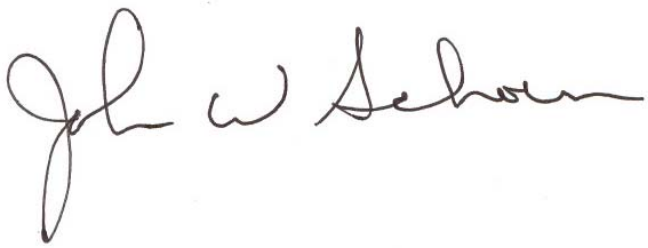
We encourage the Forest Service to revise this sale accordingly. Thank you for the

opportunity to comment; we look forward to further collaborative participation in the future regarding the Central Kupreanof Timber Sale.

Sincerely,

Mark Kaelke
Trout Unlimited
Southeast Alaska Project Director
419 Sixth Avenue # 200
Juneau, AK 99801

Laurie Cooper
Rainforest Program Director
Alaska Wilderness League
419 6th Street, #228
Juneau, AK 99801



John Schoen, Ph.D.
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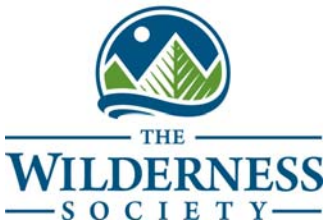


Tiffany Brenna
Tongass National Forest
Petersburg Ranger District
Attn: Central Kupreanof Timber Sale
PO Box 1328
Petersburg, Alaska 99883

Re: Comments on Central Kupreanof Timber Sale DEIS

February 2, 2009

Dear Ms. Brenna:

The following comments are submitted on behalf of The Wilderness Society for the Central Kupreanof Timber Sale Draft Environmental Impact Statement (DEIS). Thank you for the opportunity to provide comments on the proposed timber sale.

The Wilderness Society (TWS), founded in 1935, is a non-profit membership organization devoted to preserving wilderness and wildlife, protecting America's prime forests, parks, rivers, deserts, and shorelines, and fostering an American land ethic. With over 310,000 members and supporters nationwide, TWS has many members in Alaska who use the Tongass National Forest and are concerned with management of its natural resources and roadless areas. The Tongass National Forest, an internationally significant and nationally valued natural treasure, must be managed to conserve biological diversity, support local communities and their quality of life, and protect the ecological integrity of the coastal temperate rainforest in southeastern Alaska.

The Central Kupreanof timber sale proposes to harvest 28.2 to 70.2 MMBF of timber from approximately 1,327 to 3,647 acres, and to construct up to 25.1 miles of new National Forest System (NFS) roads, 6.1 miles of temporary roads, and to reconstruct up to 9.1 miles of existing NFS roads, depending on alternative. The DEIS identifies Alternative 3 as the Forest Service's preferred alternative for this project. This alternative proposes to harvest approximately 70.2 MMBF of timber from an estimated

3,647 acres, and would involve the construction of 25.1 miles of new NFS roads, 6.1 miles of temporary roads, and the reconstruction of 9.1 miles of existing road.

We have several concerns with the project as it is currently proposed and with the 2008 Tongass Land Management Plan (TLMP) to which it is tiered. Our concerns with this project include: the proposed harvest of significant amounts of timber from areas of high ecological significance, the flawed economic demand analysis that is the underlying basis for the purpose and need of this project, the importance of the area to the communities of Kake and Petersburg for subsistence and cultural reasons, and the proposed harvest of timber in Inventoried Roadless Areas (IRA).

Much of the project area has been heavily fragmented from past logging and road construction. The project significantly increases harvest, builds more roads, greatly increasing the road density, and threatens numerous fish and wildlife species. Because of the significant damage in this area from past logging and road construction, the importance of this area to Kake residents for subsistence and other activities, and the impacts of this project on IRAs, we do not support this timber sale as planned.

Summary of Concerns

Flawed Economic Demand & Suitability Analysis: The Tongass Timber Reform Act (TTRA) provides that the Forest Service may provide a timber supply that (1) meets annual market demand for timber from the forest and (2) meets the annual market demand from the forest for the planning cycle. In August of 2005, the 9th Circuit Court of Appeals ruled that a previous error in calculating demand required the Forest Service to revise the Forest Plan. In response, new timber demand projections were completed and published in 2006.[1]

WS-1 The new timber demand projections are in error and we have repeatedly made this case, based on economic analysis, in our comments on previous timber sales and in our TLMP appeal last May. We incorporate by reference the May 15, 2008 appeal by The Wilderness Society of the 2008 Tongass Land Management Plan. We have also attached a copy to our comments.

WS-2 Additionally, as our appeal of the Forest Plan shows, we believe the process of determining the suitability of lands for timber management was flawed. We question the suitability of the lands in this project area, as well as across the Forest. We believe NFS lands on the Tongass have been improperly allocated to management areas (MAs) that allow commercial timber harvest. Absent this misallocation, we believe much of this sale area and many other areas across the forest would have been assigned to non-timber

[1] Brackley, A.,D.J. Parrent, and T.D. Rojas et al., 2006. Timber products output and timber harvests in Alaska: projections for 2005-2025. Gen. Tech. Rep. PNW-GTR-677. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 33pp.

management MAs. This issue is ripe for consideration given the project proposal at hand. Our appeal of the Forest Plan provides more detail on each of the concerns.

WS-3 Ecological Context: We have considered information developed in the The Nature Conservancy (TNC) / Audubon Alaska "*Conservation Assessment for the Coastal Forests Ecoregion*" to evaluate the ecological values and current condition of the watersheds contained in this planning area. The majority of the proposed units in the preferred alternative fall in top tier, ecologically significant watersheds

The Central Kupreanof area contains some of the most productive salmon producing watersheds on the Tongass. The preferred alternative poses significant potential risk to fish habitat and the long-term viability of both resident and anadromous fish populations within large portions of the sale area. We are especially concerned with the Irish/Keku Lakes system (VCU 4290), the Upper Castle River area (VCU 4360) and Duncan Bay (VCU 4380), all three of which were identified as Conservation Priority Watersheds through the TNC/Audubon conservation assessment. In addition, Upper Castle River was identified as a one of the top 19 quality fish-producing watersheds in the region by the Alaska Department of Fish and Game.

WS-4 Development of Phases: Upper Castle River (VCU 4360) is identified as a high priority watershed by five of the six ranking systems considered in the development of the Tongass Timber Supply Program Adaptive Management System. In document 1637 from the 2008 TLMP Planning Record, all suitable acreage in VCU 4360 is deferred to Phase 2. Yet in spite of the watershed's significant value to many stakeholders, acknowledged in the Forest Service planning process, the VCU was somehow ultimately included in Phase 1 and added to the Central Kupreanof timber sale. We can find no explanation for why this change was made; it defeats the purpose of the phasing process.

WS-5 Inventoried Roadless Areas: The preferred alternative proposes to harvest up to 1,339 acres of timber in Inventoried Roadless Areas (IRAs). Several of the units, 275-277, and 279-281, are in an IRA and in VCU 4360, a high value TNC/Audubon watershed and the VCU that at one point was deferred until Phase 2. Roadless areas are an important concern as they are essential to subsistence, water quality, conserving biological diversity, and providing opportunities for solitude and recreation. We do not support timber harvest at such a large scale in such a critically important IRA, and see no valid reason for moving forward with any project that directly or indirectly degrades roadless areas and associated resources.

WS-6 Wolf Mortality and Road Density: The construction of additional roads associated with the Central Kupreanof Project will increase road density. Studies have shown that roads can have a negative impact on wolf survival and long-term population viability. Rather than build new roads the Forest Service should address ways to close existing roads to reduce wolf mortality in the area. The DEIS says little about road density other than providing present road density in the project area. There is no disclosure of post-project

WS-6

road density and no discussion of the cumulative effects of other road construction projects that are likely to occur. In 2004, the Alaska Department of Fish & Game (AF&G) indicated that "the high likelihood of future timber harvest and road construction within small areas" implicated long term wolf mortality and viability concerns.[2] ADF&G pointed out that road density in some portions of this biogeographic province already exceed established guidelines for wolf mortality.[3] ADF&G personnel reiterated these concerns during the interagency review process.[4] Further, ADF&G pointed out that the Kake/Petersburg Inter-tie or roads associated with timber projects such as this one will trigger or approach recommended thresholds for wolf mortality.[5]

Under the Forest Plan, the identification of wolf mortality concerns triggers several duties. At a minimum, wolf sustainability concerns trigger the duty to further analyze project level impacts: "[l]ocal knowledge of habitat conditions, spatial locations of roads, and other factors need to be considered by the interagency analysis rather than solely relying on road densities."[6]

WS-7

Community Use: Three of the biogeographic province's top ranked watersheds for winter deer habitat are within the project area. Kake's subsistence activities have been severely impacted by past public and private land timber harvests. Intensive high-grading of higher habitat-value old growth has contributed to reduced winter carrying capacity for deer in this project area, and in Kake's other major subsistence use area, northern Kuiu Island. The DEIS states that the most important area for Kake's subsistence use of deer is Admiralty Island but fails to mention that this area is not as easily accessible for residents. The central Kupreanof project will only put additional strain on subsistence use activities.

WS-8

Analysis of project impacts on subsistence should also consider and fully disclose impacts of other proposed timber projects in the area. In particular, there is a large timber sale planned on northern Kuiu Island and several others that are planned around the project area.

Future Timber Sale Planning

In spite of our significant concerns with this sale and with the 2008 Tongass Land Management Plan, we remain interested in working with the Forest Service to identify future timber sales that meet community and industry needs. We recognize that in the coming years there will be considerable challenges in providing the existing industry with

[2] Lowell, R. 2004. Letter to Patricia Grantham re Wolf Mortality and Road Density. ADF&G Division of Wildlife Conservation, Petersburg, AK: March 23, 2004.
[3] ibid
[4] Planning Record Document # 113.
[5] Lowell, R. 2004. Letter to Patricia Grantham re Wolf Mortality and Road Density. ADF & G Div. of Wildlife Conservation, Petersburg, AK: March 23, 2004.
[6] TLMP at 4-95.

timber volume, and that many of the upcoming sales meant to fill that void were designed without the benefit of the collaborative relationships that have developed through the Tongass Futures Roundtable. We have been closely involved in the 5-year timber sale planning process, and acknowledge the efforts of the agency and other partners to work toward future management of the Tongass that multiple stakeholders can support. It is clear that no one is interested in continuing the yearly, agonizing process of poring over sales in a desperate attempt to figure out what sales may or may not meet the needs of the diverse stakeholders and the existing industry.

Our hope is that as we, other members of the conservation community, and additional stakeholders work with the agency and partners to revise some aspects of these sales, and work to find immediate volume, future timber sales will truly begin transitioning the industry to something other than old growth clearcut timber harvest, a future to which multiple stakeholders within and outside of the Roundtable have made a stated commitment.

Future timber sales must begin to consider and include opportunities for young growth harvest, prescriptions other than clearcut, and be in areas that make biological, economic, and social sense. The Central Kupreanof timber sale is not such a project. Timber sales should include a range of forest management activities evaluated from a holistic, resource-balanced perspective. Activities might include restoration, thinning (for wildlife, riparian, and timber purposes), road storage and decommissioning, small scale timber harvest, and existing condition inventories. We envision such a process would help transition toward a new style of forest management, one that takes an ecosystem level perspective and is not driven by large scale, old growth clearcut harvests.

Conclusion

In addition to concerns about logging in high value biological, roadless, and social areas, we are particularly dismayed to see that the Forest Service continues to offer very large sales, such as Central Kupreanof, based on an inflated demand scenario, that are unlikely to have buyers. It is hard for us to imagine, given the rapid increase in fuel costs over the past two years, that this project will attract a buyer, especially considering the negative bid estimate. Our concern is that planning such sales squanders valuable Forest Service resources and time that could be better spent on other opportunities, such as young growth inventory or restoration activities.

This type of sale perpetuates the tiring pattern of designing sales that conservation groups and other stakeholders have concerns with, and will eventually appeal or litigate, making it nearly impossible to end the cycle many interests are trying to break out of. Timber sales such as Central Kupreanof, Kuiu, and Central Gravina make it especially difficult for us to work with the agency to find the common ground and future we all desire.

The Wilderness Society does not oppose continued logging in the Tongass. But we do believe timber harvest levels should be based on realistic projections of actual market demand and that taxpayers should not be subsidizing activities that undermine other valuable forest resources. Timber is just one of many resources found in the Tongass, and demand for this resource has been steadily declining. The Wilderness Society believes that the Forest Service should manage the Tongass in a manner that reflects its true worth, investing in stewardship activities that more accurately reflect market conditions, that apply the most relevant science, that respect community values, and that benefit current and future generations. Some examples include: restoring high value watersheds previously impacted by logging; shifting timber production from old-growth to young-growth; establishing a harvest level more appropriately scaled to market demand from existing local mills; and permanently protecting ecologically and socially valuable areas of the forest.

The Tongass contains many other economic assets in addition to its timber resources, including wild salmon streams, clean water and scenic views, all of which could be negatively impacted by the logging activity proposed in this DEIS.

We strongly believe the Forest Service should not be planning such large timber sales on the Tongass, particularly those that enter ecologically important, roadless watersheds. Coupled with the significant impacts to this area from past logging and the importance of this area to Kake residents for subsistence, we urge the Forest Service to cancel this project and instead look at ways to begin restoring this area.

Sincerely,

Karen Hardigg
Alaska Forest Program Manager
The Wilderness Society

PO Box1331
Petersburg, Alaska 99833
Jan. 20, 2009

Chris Savage
Petersburg District Ranger
ATTN: Central Kupreanof Timber Sale
USDA Forest Service
PO Box 1328
Petersburg, Alaska 99833

Following are my brief comments for the proposed Central Kupreanof Timber Sale.

BK-1 Given that there is currently little to no market for Tongass timber, I find it hard to understand the circumstances under which this proposed action makes any social, economic, or otherwise sense. Your document seems to recognize that fact based on the deficient resource analysis contained in the EIS. In particular your deer analysis is totally deficient. In addition, because there is little high value deer habitat remaining on the island what remains is extremely important to deer. Your analysis completely ignores this fact.

BK-2

BK-3 Preparation of a timber sale with a gross overstatement of timber demand in order to "put the volume on the shelf" in the hopes that a market will somehow materialize is irresponsible. According to the latest available FS Tongass online reporting "Forest Facts" and "Forest Finances" (figures appear to be from 2004) the ASQ was 267 MMBF, timber offered was 110 MMBF, and timber cut was 50 MMBF. The forest made $108,989 in cash from sale of this timber, and spent $17,729,493 for roads! In contrast, the forest earned $1,676,804 from recreation site fees. Market conditions are even worse now. Although the Tongass is supposed to be for multiple uses, we all know what the priority use is. Obviously the FS needs a sea change to rethink priority uses of the Tongass.

BK-4 I suggest that the forest would be better put to use as a reserve for carbon sequestration. In fact, several studies illustrate that old growth forests are indeed the best resources for carbon sequestration. Please refer to the work of Dr. Sharon Levy of Oregon State University and others. According to Dr. Levy "Money does grow on trees if you allow the trees to grow."

BK-5 For this reason, I request that you chose the no-action alternative and cut no old growth from the project area. This is NOT "outside the scope" as your EIS (at 18) would suggest.

Thank you, Rebecca Knight
Rebecca Knight

Petersburg Ranger District
Tongass National Forest
P.O Box 1325
Petersburg, Alaska 99833

February 23, 2009

Attention: Tiffany Benna
Team leader

Subject: Central Kupreanof Timber Harvest

Upon review of the Central Kupreanof Timber Harvest packet dated January 2008, I noticed outdated and inaccurate information you provided to the public as to your proposed activities.
My concerns and questions on this project deal with issues on

1. Deer Habitat
2. Deer and Moose populations
3. Wolf and bear predation upon deer and moose populations
4. Affected fish streams
5. Mining activities

My concerns are:

1. I see no Wildlife Retention areas set aside in the entire project area

2. Your old growth reserve areas are within the boundaries of Volume Class 3 old-growth: more commonly they are situated in areas of muskeg or areas unsuitable for deer winter habitat and survivability.

DR-1

A. The old growth reserve in LUD #4360 is in a valley that basically faces a northerly direction and is probably 2 miles from the closest beach estuary or fringe. This area is totally unacceptable for deer and moose to navigate in severe winters to find sanctuary in beach fringe or estuaries. Predation in this area is bound to be extremely high along with deer and moose morality in extremely high numbers.

B. The 2 old growth reserve in LUD #4350 also fall into a category of Volume Class 3 old-growth as they are also in areas of muskeg or areas unsuitable for deer winter habitat and survivability. With no proposed harvest or roads in this area the predation should be expected to be at normal levels.

PLEASE NOTE THAT THERE ARE EXISTING MINING CLAIMS IN THIS AREA.

C. The old growth reserve in LUD#4380 actually comes closer to acceptability as it begins to meet some of the qualifications for habitat suitability with some Volume Class 4 and Classes old-growth, unacceptable for this LUD#4380 are:

DR-2

1. The extensions of roads #45803, #45808 and unmarked road between the above 2 roads as it will create new corridors for predators to access your proposed old growth reserve in 3 new directions (south, southeast, and west). This particular valley which connects West Duncan Canal to Big John Bay is extremely valuable to moose migration across Kupreanof Island.

2. The proposed roads mentioned above will impact an area of higher habitat suitability for deer winter survival than most any other area you propose to harvest.

3. It appears to me that your decision to harvest this area is a contradiction to proper wildlife management as your explanation of old growth forest and actual habitat suitability are in conflict.

A. "Old growth forest is of major importance to biodiversity of deer as it provides habitat required by these species. High volume old growth forest provides important winter habitat because the closed canopy filters out heavy snow while open under story provides adequate forage. These characteristic are lacking in dense second growth stands and in more open canopy, low volume forests. The Sitka black tailed deer is a useful indicator for old growth forest habitat because it depends on the unique structural features characteristic of high volume old growth stands, particularly for winter range."(Shamrock Timber Sales, July 1993).

B. Percentages of habitat suitability in the Shamrock area listed as:

DR-3

1. Unsuitable- 19%
2.unfavorable-73%
3. Marginal-8%
4. Suitable-0%
(Shamrock Timber Sales, July 1993)

By Harvesting additional timber and building new roads systems you are knowingly increasing the gap between old growth forest for deer survival and present habitat capabilities.

4. I cannot agree with the close proximity of proposed extension to road #45804 and timber harvesting to Castle River and its tributaries as this area is extremely sensitive for its value to trout's, salmon, and steelhead populations. Sedimentation from any activity (road building or timber harvesting) is of the utmost concern. I see 7 tributaries directly impacted by this activity; some within 300 yards of Castle River and others extremely close to beaver ponds which feed the river system.

DR-4

5. Road #45808 in LUD #4380 is also unacceptable as it also violates the unnamed fish stream and tributaries by proposed activity.

6. Untrue is your assessment of habitat capability models for Sitka black tailed deer winter range in the Shamrock area. You acknowledge the low densities of deer now found on Kupreanof Island following a series of hard winters in the 1970's but do not quantify the whole scheme of things:

A. There was an abundance of deer until the bounty on wolves was abolished by the State of Alaska in 1964. Deer harvest levels were extremely high prior to this; Bag limits were 4 deer per year with harvesting of does until 1960(check state harvest returns for these dates).

B. The U.S.F.W. had at one time a program of dropping poison baits from aircraft onto frozen lakes to promote wolf control and the State of Alaska continued this program for sometime after statehood .

DR-5

C. The community of Petersburg alone harvested between 450 to 550 deer per year in 1961 and 1962. The reason I know this is because I was an employee of the State of Alaska as a wildlife Aide III during that period and worked under the supervision of Harry Merriam, the area biologist at that time. The majority of deer harvested during that period came from the Wrangell Narrows and Duncan Canal with Little Duncan, Castle River, Tower Arms and Salt Chuck as the largest producers of wildlife.

D. It was not until the abolishment of wolf control programs and the severe winters of late 1960's and early 1970's did the deer population decline.

E. As you can see the deer habitat was there prior to these determining factors; the only changes to the habitat and its carrying capacity can be attributed to timber harvest, road construction and unwise use of our natural resources.

7. Your agency has not addressed the effect that timber harvesting has promoted the increase of moose population and subsequent increased activity with in the proposed Central Kupreanof harvest.

8. Your agency has not addressed the increased wolf and black bear activity within the proposed Central Kupreanof harvest.

9. These last 2 opinions(#7 and #8) alone are enough to upset your harvest levels which you base on deer habitat and carrying capacities to promote your current harvest levels.

After reviewing your LUD and unit pool legend letter of January 2008 I do have some questions I would like answered in writing within a reasonable time as guaranteed by the freedom of information act. My questions are:

DR-6 1. Do you have any areas for the retention of wildlife in LUD # 4350, #4360 and # 4380?

DR-7 2. Do you intend to incorporate any wildlife retention areas into this project?

DR-8 3. How many acres of Volume Class 6 or 7 old growth are reserved for deer and moose habitat?

4. How do you justify sacrificing deer and moose habitat by creating old growth reserves out of Volume Class 3 and lower level old growth areas?

5. What biological studies have been performed to date, and at which date to:

DR-9 A. Analyze the effects of road construction upon predation levels to deer and moose?

DR-10 B. Analyze the deer, moose, bear and wolf populations in this project area?

DR-11 C. Analyze the total effect on wildlife populations by road building , timber harvesting and human activity in this project area?

DR-12 6. What areas are affected by mining claims in LUD # 4350, # 4360, and #4380; What are the mining activities expected to be in these areas?

DR-13 7. Is the existing timber market demand above or below previous levels of 5 or 10 or 15 years ago?

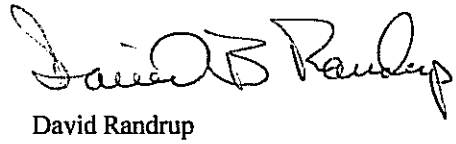
8. Will you provide me with written information on all of my questions?

9. Will you document all answers to my questions with bonifide research papers you used to propose this project?

10. Will I have an opportunity to comment further on this Central Kupreanof project?

This project areas is rated the highest sensitivity to disturbance of any community in S.E. Alaska and therefore is severely impacted. Subsistence users do not rely strictly upon beach fringe to harvest but might go miles inland to complete their subsistence. This project creates the potential to cause significant and long term adverse affects upon these resources.

Please advice me of any hearing or meeting that this project will produce so I can attend them.



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