

Attachment A

Letters from Agencies, Elected Officials, and Tribal Governments

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**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

April 20, 2007

Dennis E. Bschor
Regional Forester
USDA Forest Service
Alaska Region
P.O. Box 21628
Juneau, AK 99802-1628

RE: Tongass Land Management
Plan Amendment, DEIS

Dear Mr. Bschor:

The National Marine Fisheries Service (NMFS) reviewed the Tongass Land Management Plan (TLMP) Amendment Draft Environmental Impact Statement (DEIS). Our specific comments are enclosed and our general summarized comments follow below.

Overall Comments

The revised TLMP provides an opportunity to restore fish habitat and improve fish passage in areas that have been degraded as a result of past management practices. Below and in the enclosure we recommend several changes for the Final EIS and TLMP Amendment to ensure that future timber sales and forest management decisions incorporate measures to restore access to fish habitat blocked by inadequate culverts, restore fish habitat, and minimize further impacts to anadromous fish.

The proposed plan makes some changes in the Soil and Water, Riparian, and Transportation Standards and Guidelines (S&Gs) which improve the S&Gs from a fish habitat perspective. In particular, the Transportation S&Gs now include road storage and decommissioning, providing greater specificity as to what to consider and how to conduct road closure activities.

The Final EIS should provide additional clarity and information in the following areas:

Effects of Roads on Fish

NMFS recommends the environment and effects fish section include an analysis of the number of culverts on the forest that do not fully meet the criteria for passing fish (red and gray culverts). The analysis should include the potential cumulative effect of constructing additional roads with culverts that may not meet fish passage criteria. NMFS recommends that the products of the Fish Passage Working Group (decision information matrix and biological significance model) be incorporated into the EIS and into the proposed plan.

Restoring fish passage through red culverts should be a high priority in the Forest Plan. In addition to disclosing the number and location of problem culverts the Final EIS should include plans or opportunities for remedies in future timber sales pursuant to the revised TLMP.

Road Density

The density that is displayed by alternative is the average road density in all value comparison units (VCUs) including VCUs with no development. NMFS recommends that the average road density in VCUs with past and or proposed harvest be displayed and discussed for all alternatives. Such information would give a better idea of the density of roads in developed VCUs where impacts are most likely to occur.

Riparian Management Objectives and Riparian Standards and Guidelines

NMFS supports the continuation of riparian buffers along Class III streams. NMFS is aware of some discussions to eliminate riparian buffers along Class III streams. We are glad this was not a proposed change in the DEIS. As documented in a March 10, 2006, paper titled "Evaluation of Concern 04-25, Class III Stream Management" by Steve Paustian, Colleen Grundy, Dennis Landwehr and other Forest Service staff there is compelling scientific rationale to continue buffers along Class III streams. Recommendations made by this group include the following: *The literature review indicates that the Riparian Management Objectives and Standards and Guidelines in the forest plan are appropriate. Class III streams need large woody debris to function properly and that woody debris inputs need to be understood at the scale of decades or centuries. The literature indicates that forest plan objectives could be broadened to include invertebrate production, the majority of streamflow within a watershed, and contributions to primary productivity. Cumulatively Class III and IV streams may account for 60 to 80 percent of the runoff volume in Tongass Watersheds. Headwater streams need to be understood on decadal scale or centuries scale.*

Watershed Restoration

NMFS recommends that the Forest Plan place a greater emphasis on watershed restoration as a means of reversing the negative consequences of past forest management activities on watershed health, especially timber harvest and road building impacts. Restoration of aquatic habitat and ecological processes should have priority over mitigation (so-called watershed improvement projects).

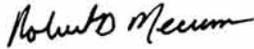
NMFS Recommendations for a Preferred Alternative

Fish and the aquatic resources on the Tongass National Forest support major subsistence, commercial, and sport fisheries, as well as traditional and cultural values. Road building and timber harvest can negatively impact fish resources. Adverse effects can be minimized with best management practices but not eliminated. Alternatives 1, 2 and 3 provide for a range of timber harvest and have less potential effects on fish than alternatives 4, 5, 6, and 7 with higher allowable sale quantity (ASQ). NMFS recommends that the Forest Service preferred alternative be Alternative 1, 2, or 3. This alternative range allows for harvest at the present rate and higher and will satisfy a medium integrated-industry level of timber demand according to the Brackley study cited in the DEIS. These alternatives minimize entry into roadless areas which would leave most roadless watersheds in the forest intact. These alternatives provide a mix of National Forest uses and activities and allow up to an ASQ of 204 million board feet which significantly exceeds current demand.



If you have questions regarding our comments contact Cindy Hartmann at (907) 586-7585 or John Hudson at (907) 586-7639.

Sincerely,



Robert D. Mecum
Acting Administrator, Alaska Region

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John Hudson
Cindy Hartmann

April 20, 2007

Enclosure (1)

cc: * r10_tongass_juneau_rd_plan_adjustment@fs.fed.us
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*Bill Hanson, USFWS, Juneau
*Kevin Hanley, ADEC, Juneau
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*Steve Kokkinakis, NOAA, Silver Spring
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*email

H-A2

National Marine Fisheries Service (NMFS) Comments on TLMP Amendment - Enclosure

Comments Specific to the: Tongass Land and Resource Management Plan, Draft Environmental Impact Statement (EIS), Plan Amendment, January, 2007.

Page 3-57 to 3-58, Environment and Effects, Fish, Essential Fish Habitat (EFH)

The EIS states "Habitat areas of particular concern are identified as living marine substrates in shallow and deep waters, and freshwater habitats used by anadromous fish (NMFS 2003)." This definition is no longer valid. An August 8, 2005, record of decision (ROD) selected Alternative 3 of the April 2005 Final Environmental Impact Statement (FEIS) for Essential Fish Habitat Identification and Conservation in Alaska (EFH EIS) for the identification of habitat areas of particular concern (HAPCs). Under this alternative the previous HAPC identifications (living marine substrates in shallow and deep waters, and freshwater habitats used by anadromous fish) were rescinded. Existing HAPCs in the vicinity of the Tongass are offshore on the Fairweather Grounds and near Cape Omnaney.

The descriptions of EFH for Pacific salmon were also modified per the August 2005 EFH EIS ROD. NMFS refers you to Appendix D pages D-77 to D- 82 (EFH descriptions for Alternative 3) of the EFH FEIS found at <http://www.fakr.noaa.gov/habitat/seis/efheis.htm>.

Page 3-59, Environment and Effects, Fish, Invasive Aquatic Species

NMFS recommends that the Forest Service make changes to this section as noted below (additions are underlined and deletions are lined through). The recommended additional citation follows the paragraph on invasive aquatic species.

Invasive aquatic species can affect native species by eating them, competing with them, hybridizing with them, disrupting or destroying their habitat, or introducing pathogens or parasites that sicken or kill them (Schrader and Hennon 2005). In addition to natural range extension, several potential pathways exist for introduction of invasive aquatic species. These pathways included fish farms, international and local movement of bait and game fish, trade in live seafood, aquaculture, and contaminated sport angle gear brought into Alaska, as well as ballast discharge from international vessels (Fay 2002, Schrader and Hennon 2005). Several aquatic species have been noted as potential threats to Alaska, including fish (northern pike, Atlantic salmon, yellow perch, ornamental aquarium fish), invertebrates (green crab, New Zealand mudsnail, Chinese mitten crab, zebra mussel, signal crayfish, spiny water flea), plants (cordgrass) and several additional other miscellaneous taxa (Fay 2002, Schrader and Hennon 2005). Additionally, eastern brook trout (non-native) and non-endemic rainbow trout have been stocked in many areas where they were not native and compete or hybridize with native trout (Schrader and Hennon 2005). Of these fish, transplanted northern pike and Atlantic salmon are the two fish species of greatest concern (Fay 2002). The invertebrates Chinese mitten crab, green crab, and New Zealand mudsnail, even though they have not been found in Alaska, are of major concern because of their potential to do serious damage to

the Alaskan ecosystems (Hines et al. 2004; Schrader and Hennon 2005). Atlantic salmon that have escaped from fish farms pose a threat to native salmon by competing for habitat and introducing diseases and parasites. This species has already been observed in Southeast Alaska marine waters and rarely in streams (Fay 2002). Also, northern pike, which has not appeared in Southeast Alaska (with the exception of a native stock in Yakutat), have caused widespread damage to resident trout where they have been introduced, and could potentially affect coho salmon through predation. Northern pike have the potential to cause serious environmental and economic damage to highly productive salmon streams in Southeast Alaska (Fay 2002). In the Tongass there is a risk that these and possibly other non-native sport fish may be introduced into lakes and rivers by individuals seeking to increase sport fishing opportunities. As the road network is extended into more areas of Southeast Alaska, this risk increases.

Additional Citation:

Hines, A.H., G.M. Ruiz, N.G. Hitchcock, and C. deRivera. 2004. Projecting Range Expansion of Invasive European Green Crabs (*Carcinus maenas*) to Alaska: Temperature and Salinity Tolerance of Larvae. Smithsonian Environmental Research Center, Research Report Submitted to Prince William Sound Regional Citizens' Advisory Council. 1 February 2004.

Page 3-61, Environment and Effects, Fish, General Effects, Roads

A previous section on fish habitat enhancement (page 3-55) had a paragraph on restoration of habitat access to streams through replacement of culverts that did not meet current fish passage design criteria. It stated that approximately 240 culverts have been replaced through 2006. It also stated, "The culvert replacement program declined in 2006 due to funding reductions and is projected to continue to decline in future years." The roads effects section should include a discussion on the number of culverts that do not meet current fish passage design criteria. Culverts that do not meet current fish passage design criteria (Q2-2day duration design flow or the stream flow that exists two days before and two days after a peak flow) have been classified as RED culverts, GRAY culverts require more analysis to determine their juvenile passage ability, GREEN culverts have a high certainty of meeting juvenile fish passage at all desired stream flows. There are currently approximately 2000 red culverts on the Tongass National Forest. Because of changes in standards and guidelines, better engineering ability, and implementation monitoring the number of red culverts from past road construction may not be predictive of future fish passage problems. However, fish passage through culverts is an important issue that needs further discussion in the general effects/cumulative effects section. The number of red and gray culverts should be identified and their impacts discussed in the EIS. Restoring fish passage through culverts should be a high priority in the Forest Plan.

NMFS participated in an interagency Fish Passage Working Group regarding red and gray culverts. The working group completed a number of products that could be used to further efforts to remediate red culverts. These products included a decision information matrix and a biological significance model. These products are tools that could be used

in a process or decision framework designed to identify which red culverts to fix, and which culverts to submit for Clean Water Act 404 permitting (compensatory mitigation) instead of fix. The products were tested on the North Thorne Watershed stream and culvert replacement data set. The results of this test are documented in a January 27, 2006, paper titled "Test of a Process to Assign Fish Passage Remediation to Culverts in the North Thorne Watershed." The January 27 paper identified three components of the overall process that needed to be completed before expansion to the entire Tongass. Automating data acquisition was one component which included completing a stream crossing layer in the Forest Service GIS that contains all the attributes to run the biological significance model. NMFS hoped that these components would have been completed in time for this process to be incorporated into the Forest Plan Amendment and EIS. We recommend that the Forest Service make completing these components a high priority. At a minimum the data acquisition component should be automated and data gaps filled so the number of red culverts can be included in the EIS as well as the costs of fixing them. Our preference is for the full modeling and decision process to be incorporated into the Forest Plan Amendment.

Given funding reductions in the culvert replacement program, it is unlikely sufficient funding will be available to remediate the fish passage problem at one time Tongass-wide. Until such time, NMFS recommends that an analysis of the red and gray culverts within a timber sale area be incorporated into the timber sale NEPA process. Opportunities to fix red culverts should be expanded from the road maintenance planning process and the capital investment program to timber sale planning.

References that emphasize the importance of the potential effects of roads on fish include the following two references:

"Numerous studies show that watersheds with fewer roads are often associated with healthier fish populations, and roads may have unavoidable effects on streams, regardless of how well they are located, designed, or maintained (USDA Forest Service and USDI Bureau of Land Management 1995).

Citation: USDA, Forest Service and USDI, Bureau of Land Management. 1995. Decision Notice/Decision Record, Finding of No Significant Impact, and Environmental Assessment for the Interim Strategies for Managing Anadromous Fish-Producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California. Washington, DC. 206 pp.

And from "Fisheries", Vol. 30, No. 1

".....the Alaska Department of Fish and Game reported that 66% of the culverts in salmon streams in the Tongass National Forest may be inadequate for fish passage, and 85% of the culverts across trout streams may be likewise (Flanders and Cariello 2000). A briefing document by Trout Unlimited (J. Konigsberg, Trout Unlimited, Anchorage, Alaska, pers. comm.) reported that one of the more significant threats to Alaska's wild

salmon was barriers created by culverts, causing loss of spawning and rearing habitats upstream."

Citations:

Gibson, J.R., R.L. Haedrich, and C.M. Wernerheim. 2005. Loss of fish habitat as a consequence of inappropriately constructed stream crossings. Fisheries Vol. 30 No. 1.

Flanders, L. S., J. Cariello. 2000. Tongass road condition survey report. Alaska Department of Fish and Game Technical Report 00-7.

Page 3-62, Environment and Effects, Fish, General Effects, Roads

The EIS states: "Currently the average road density in all VCUs is 0.19 mile per square mile, while the average road density in only VCUs with some past harvest is approximately 0.46 mile per square miles." "After more than 100 years of Forest Plan Implementation, the estimated overall road density on NFS lands would range from 0.26 under Alternative 1 to 0.43 mile per square mile for Alternative 7." NMFS interprets your use of "overall road density" to be the average road density in all VCUs. Since many VCUs are designated wilderness, national monument, remote recreation or LUD II (congressionally-designated unroaded areas) displaying only the average road density in all VCUs by alternative does not provide a true picture of road density in VCUs with moderate and intensive development. Since roads pose the greatest risk to fish resources on the Tongass (page 3-61) NMFS recommends adding a line to Table 3.6-2 which has the average road density by alternative for VCUs with timber harvest (past and/or future harvest) and adding a table and/or graph showing the distribution of road densities among all VCUs. These numbers then need to be fully discussed in the effects section.

Page 3-69, Environment and Effects, Fish, Essential Fish Habitat Assessment

NMFS offers the following clarification: Section 305(b)(2) of the Magnuson-Stevens Act requires all Federal agencies to consult with the Secretary on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH.

Comments Specific to the: Tongass National Forest, Proposed Land and Resource Management Plan with EIS Appendices, January, 2007.

Pages 2-4 and 2-5, Chapter 2 - Goals and Objectives, Soil and Water Resources

Under Soil and Water Resources two objectives (see below) related to watershed restoration were deleted from the DEIS.

Deleted: Perform watershed restoration projects in at least two large watersheds (over a ten-year period). **Replaced with:** Complete Hydrologic Condition Assessments and Restoration Plans for priority watersheds.

Deleted: Perform an average of 3 single-year-type watershed improvement projects annually across the Forest. **Replaced with:** Complete watershed restoration projects in conjunction with Integrated Resource Program (see Appendix C).

These objectives were replaced with statements that lack the narrowly defined, precise, and measurable quality of an objective. The deleted objectives should be retained in the Final EIS because they provide a better means of gauging progress towards the stated goals of protecting and restoring watershed integrity. Many of the other objectives in this chapter are rather vague "general intentions" lacking the details required to properly evaluate progress towards achieving goals. All objectives should be reviewed and, if necessary, re-written as narrowly defined, precise, and measurable statements.

Page 4-4, Chapter 4 – Forest-wide Standards and Guidelines, Beach and Estuary Fringe, I. C. 1.

The proposed plan states: "The estuary fringe is an area of approximately 1,000 feet slope distance around all identified estuaries." If available, this definition should include reference to the source or sources that give the location of estuaries on the Forest.

Pages 4-8 to 4-12, Chapter 4- Forest-wide Standards and Guidelines, Fish Habitat Planning: FISH112

Past forest management practices that failed to consider the impacts of certain logging and road construction practices on watershed health have resulted in degraded fish habitat and productivity in many watersheds on the Forest. NMFS appreciates and supports the numerous references to restoration in the Fish Habitat Planning (FISH112) Standards and Guidelines. Fish habitat restoration should be a critical component of the Forest Plan. In the current draft, guidelines for fish habitat restoration are found in section IV under the Fish Habitat Planning heading (pages 4-9 and 4-10). NMFS would like to see fish habitat restoration elevated to a higher level within the Forest-wide Standards and Guidelines for Fish. To that end, NMFS recommends the addition of a "Fish Habitat Restoration" section to the Standards and Guidelines for Fish.

Page 4-8, Fish Habitat Planning, III. Fish stream value classification, B. 2. Class II

In defining Class II streams the phrase "have limited fisheries values" is used. Does "fisheries values" refer to the economic value of a fish population to a fishery? If so, why should the economic value of a fish population determine the classification of a stream channel? Fish populations can exhibit a wide variety of values - ecological, genetic, and economic among others. NMFS recommends that term "fisheries values" be defined and, if necessary, quantified and include the genetic and ecological benefits of a fish population.

Page 4-8 and 4-9, Fish Habitat Planning, III. Fish stream value classification, B. 3. Class III

The definition for Class III streams should describe the objective and measurable characteristics of a stream reach that result in an "immediate" influence on downstream water quality and fish habitat. How does one quantify whether a stream reach has an immediate or delayed or gradual influence on downstream reaches? Would a perennial or intermittent stream that is not flowing at the time of a survey be misclassified because it does not influence downstream water quality and fish habitat? The Forest Plan should clarify what immediate means. Also, NMFS recommends retaining the following statement from the current forest plan in the definition of a Class III stream: "in channels

with less than 30 percent gradient, special care is needed to determine if resident fish are present."

Page 4-9, Fish Habitat Planning, IV. Objectives/guidelines for management affecting fish habitat, A. 1.

Modify guideline number 1 to read:

1. Width-to-Depth Ratio. Relationship between average bankfull width and average bankfull depth, expressed as average bankfull width / average bankfull depth.

Page 4-12, Fish Habitat Improvement: FISH22

NMFS recommends that the Forest Plan distinguish between the terms "improvement" and "restoration" as applied to watershed and fish populations and habitat. This distinction would help to avoid confusion over projects that may have similar goals yet are achieved by very different means and with different ecological effects (e.g. stocking hatchery fish versus adding large woody debris to a stream. While both enhance fish populations, the former enhances an existing population – for example, with hatchery fish - while the latter allows an existing population to expand in numbers by increasing the quality and quantity of habitat). Although not explicitly defined in the Forest Plan, watershed and fish habitat improvement projects appear to be those projects which seek to enhance existing populations or create new populations such as through the construction of fish ladders, stocking programs, or lake fertilization. These types of projects are often promoted as mitigation for unavoidable impacts to fish habitat from timber management activities. Improvement projects can be quite costly (e.g. fish ladders) and certain improvement projects (e.g. lake fertilization) require continual expenditures and oversight to ensure long-term success. Despite careful planning and design, many improvement projects do not meet their target goals. In the case of fish ladders and stocking projects, the resulting enhanced fish production may come at the expense of resident fish populations through competition, predation, or interbreeding. In contrast, restoration projects seek to restore the original functionality and productivity of a watershed and associated fish population to its pre-managed condition. Watershed restoration projects may include road obliteration, enhanced fish passage (i.e. culvert replacement), tree thinning, and fish habitat creation. Although up-front costs for restoration can be quite high, restoration projects are typically self-sustaining because they re-establish ecosystem components and processes that sustain fish production without management intervention. As written, the Forest Plan focuses on watershed and fish habitat improvements. NMFS would like to see the Forest Plan address improvement and restoration separately with restoration being a priority. For example, under Section VIII Projects in the Fish Standards and Guidelines, the highest priority for fish habitat project work should be restoration/rehabilitation, followed by mitigation and enhancement (a.k.a. improvements).

Page 4-92 to 4-93, Watershed Resources Improvements: S&W2, I. Soil and Water Quality Protection and Improvement

Management activities have negatively impacted watershed health and fish habitat in numerous watersheds throughout the Forest. To date, restoration efforts have occurred in

only a small percentage of these watersheds. Watershed restoration must be a major component of a new forest management plan. Use of the term "improvement" in the Soil and Water standards and guidelines fails to recognize the current impaired status of many watersheds. Restoring watersheds to their pre-impact condition should be the goal of a new forest plan, not merely implementing improvement projects. NMFS recommends modifying the Soil and Water Standards and Guidelines as follows (additions are underlined and deletions are lined through):

Watershed Resources Improvements Restoration: S&W2

I. Soil and Water Quality Protection and ~~Improvement~~ Restoration

A. Protect or ~~improve~~ restore water quality and sustain soil productivity.

1. Conduct Watershed Condition Surveys and develop Watershed Restoration Plans to determine treatment priorities and needs. Consideration of treatment needs should include evaluating changed fish habitat and population levels, riparian vegetation community structure and function, and hydrology as measured against natural conditions predicted by baseline ~~fish habitat~~ objectives (see Fish Forest-wide Standards & Guidelines). Identify and prioritize needs in the NRIS Watershed Improvement Tracking (WIT) database. Complete watershed restoration project plans and coordinate with fish habitat ~~improvement~~ restoration projects. Include projects in Sale Area Improvement Plans and use K-V funds as appropriate. (Consult FSM 2510 and 2520.)
2. Give priority to cost-effective watershed ~~improvement~~ restoration projects in watersheds with the most erodible conditions directly affecting the beneficial uses of water.
3. For revegetation of disturbed sites, erosion control, fire rehabilitation, riparian restoration, forage enhancement, and other revegetation projects, consider natural revegetation as an alternative to seeding or planting. Encourage natural revegetation where seed source and soil conditions are favorable. Use native species of seeds and plant in revegetation projects where seeding or planting is appropriate. Native plant material sources include commercial nurseries, agency native seed programs, and local seed collection.
4. Inspect all watershed ~~improvements~~ restorations until the final evaluation indicates that maintenance is no longer needed.
5. Road decommissioning and storage projects to ~~improve~~ restore watershed conditions should pay special attention to fish passage, channel stability and water quality issues (Consult *Tran 24* guidance, and Soil and Water Conservation Handbook, FSH 2509.22).

Page B-2, Appendix B – Information Needs, II. Priority Research Needs

NMFS strongly supports research need #8: "Assess the effectiveness of restoration efforts in increasing fish habitat and fish production."

Page B-9, Appendix B, N. Soil and Water

Change Information Need number 20 from "Classify and develop a cost effective mapping scheme to map wetlands on the forest" to "Develop a cost effective mapping scheme to classify and map wetlands on the forest."

Page G-4), Appendix G - Log Transfer Facility Guidelines, S7. Sensitive Habitats, Discussion

The discussion concerning impacts of bark deposition on benthic water quality and biota tends to understate the biological impacts of bark accumulations. This section should be modified as noted (additions are underlined). The recommended additional citation follows the discussion on woody debris.

Woody debris from log transfer and water storage can be carried by currents and deposited on these plant and animal communities. Debris may cover the area and physically smother plants and animals. There is a concern that debris accumulation may reduce dissolved oxygen concentration in the water below the minimum level required by fish and other aquatic life. Bark debris is expected to reduce dissolved oxygen concentration in the bark interstices. High oxygen demand can lead to an anaerobic zone within the bark pile where toxic sulfide compounds are generated, particularly in brackish and marine waters. Reduced oxygen levels, anaerobic conditions, and the presence of toxic sulfide compounds can result in reduced localized habitat value for groundfish species and their forage base (National Marine Fisheries Service 2005). One study found that the dissolved oxygen, pH, oxidation reduction potential, and concentration of toxic products of decomposition in the water column at 30 centimeters (12 inches) above the bark were not significantly different than at the control sites. Reductions in dissolved oxygen below Water Quality Standards have not been documented.

National Marine Fisheries Service. Appendix G, Non-fishing Impacts to Essential Fish Habitat and Recommended Conservation Measures. April 2005

Congress of the United States

Washington, DC 20515

April 30, 2007

Chief Abigail Kimbell
USDA Forest Service
1400 Independence Ave., SW
Washington, DC 20250-0003

Dear Chief Kimbell:

We are writing to express our concern about the proposed action for the January 2007 Draft Land and Resource Management Plan for the Tongass National Forest. Under the revised plan, the timber sale program would continue to require annual federal subsidies of \$40-50 million.

Since 1982, the Forest Service has lost nearly a billion dollars subsidizing timber sales on the Tongass. During this time, timber employment has significantly decreased due to declining demand for Tongass timber products, however; program costs remains high. As a result, fewer than 300 jobs are now attributable to the Tongass timber sale program. The cost to federal taxpayers is over \$150,000 per job per year.

The high cost of the Tongass timber sale program is based on past economic conditions in southeast Alaska. The new Forest Service plan fails to address these changes. The agency continues to plan timber sales at volumes far exceeding the demand.

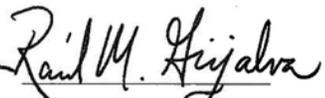
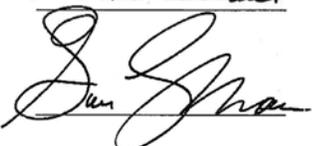
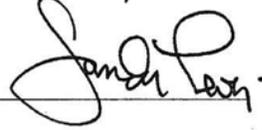
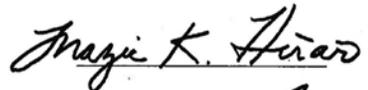
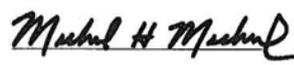
Most timber sales continue to be planned in remote areas requiring expensive road construction, and resulting in significant adverse effects on wildlife, tourism, subsistence, and recreation. The Tongass National Forest contains the largest remaining tracts of old-growth temperate rainforest in the world, including many roadless watersheds with native species such as bald eagles, brown bears, wolves, black-tail deer and salmon. Given that almost four percent of the Tongass is made up of the large old growth that is vital to fish and wildlife, this habitat is a valued treasure. Already, more than half this rare and valuable old-growth in the Tongass has been clearcut.

The Tongass forest planning process now underway presents an opportunity for change. However; the proposed action does not make any substantial changes to the current plan. The annual allowable timber sale quantity would remain at 267 million board-feet; the total volume logged on the Tongass in the last six years combined. Like the existing plan, the proposed action leaves 2.4 million acres of roadless areas open to road construction, with most of the timber coming from these costly-to-access sections. The new plan should reduce costs to the federal taxpayers by decreasing the planned timber sale volume and eliminating new logging roads. Continuing without change is not sustainable and is a disservice to the American people and the residents of southeast Alaska.

We strongly encourage the USDA to reject the proposed action for the Tongass plan and adopt a balanced solution which meets the true needs of Southeast Alaska's communities and economy.

Thank you for your attention to this matter. We look forward to your response.

Sincerely,

H-A7

<u>John A</u>	<u>Jay McJury</u>
<u>William D Pelahut</u>	<u>Edward Dawson</u>
<u>Bill Parrell, Jr.</u>	<u>James [unclear]</u>
<u>Tom Lantos</u>	<u>Kelly [unclear]</u>
<u>Bob Filner</u>	<u>Wayne [unclear]</u>
<u>Stan N. Roth</u>	<u>George [unclear]</u>
<u>Alan [unclear]</u>	<u>Gregory [unclear]</u>
<u>Jerold Muller</u>	<u>Christopher B. Maloney</u>
<u>Eliza E. Tunney</u>	<u>Gary L. Acton</u>
<u>Jim Moran</u>	<u>Benny [unclear]</u>

<u>Ben Chandler</u>	<u>Eddie Bunting</u>
<u>Tim J Walsh</u>	<u>Luis Cappa</u>
<u>John W. Allen</u>	<u>Charles [unclear]</u>
<u>Tom Hill</u>	<u>Jeff [unclear]</u>
<u>Hank Johnson</u>	<u>Jim [unclear]</u>
<u>John B. Ruan</u>	<u>Pat [unclear]</u>
<u>Rud Holt</u>	<u>Alvin [unclear]</u>
<u>Jan [unclear]</u>	<u>Clara [unclear]</u>
<u>Frank Pallen, Jr.</u>	<u>Pete [unclear]</u>
<u>Doris O. Matari</u>	<u>Allyson J. Schwartz</u>

Rosa L. DeLauro Donald M. Payne

Paul E. Hall Ernie Hill

Harvey Waxman Howard L. Berman

Pete DeFazio Dale E. Kildee

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John Dingens Tom Baldwin

Dennis J. Kucinich Barbara Lee

Julia Carson Mike Doyle

Jim McGovern Wm. Lacy Clay

Brindley _____

Rep:

- Robert E. Andrews
- Joe Crowley
- Alice Hastings
- Barney Frank
- Michael Michaud
- Jim McDermott
- Raul Grijalva
- Donald Payne
- Rush Holt
- Maurice Hinchey
- Jim Moran
- Jan Schakowsky
- Mark Kirk
- Pete Stark
- Henry Waxman
- Betty McCollum
- Julia Carson
- Peter DeFazio
- Jerry McNerney
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- Mazie Hirono
- Howard Berman
- Jose Serrano
- Dale Kildee
- Keith Ellison
- Gwen Moore
- Brian Higgins
- Thomas Allen
- Jerrold Nadler
- Hank Johnson
- Eddie Bernice Johnson
- Emanuel Cleaver
- Ben Chandler
- Frank Pallone
- Doris Matsui
- Tom Lantos
- John Yarmuth
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- Mike Honda
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- Lois Capps
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- John Conyers, Jr.
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 Albio Sires
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 Barbara Lee
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 Mike Doyle
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 George Miller
 Linda Sanchez
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United States Department of the Interior

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April 30, 2007

Mr. Forrest Cole, Forest Supervisor
 Tongass National Forest
 648 Mission Street
 Ketchikan, Alaska 99901

Dear Mr. Cole:

The U.S. Department of the Interior has reviewed the Draft Tongass National Forest Proposed Land and Resource Management Plan Amendment (Proposed Forest Plan) and Draft Environmental Impact Statement (Draft EIS). The Draft EIS evaluates seven alternatives for managing the 17 million-acre Tongass National Forest. We believe the information included in this letter needs to be taken into account in the Final EIS and in the Final Forest Plan. These comments are submitted in accordance with the Fish and Wildlife Coordination Act, the Multiple Use-Sustained Yield Act, the National Forest Management Act, the Alaska National Interest Land Conservation Act, the National Environmental Policy Act, and the Council on Environmental Quality guidance for providing special technical expertise on water, biological, and geological resources.

We support the Proposed Forest Plan goal of maintaining viable and well-distributed fish and wildlife populations across the Tongass. We appreciate the long history of the U.S. Forest Service (USFS), the Fish and Wildlife Service (FWS), and the Alaska Department of Fish and Game working together to develop and implement conservation measures to address this goal. As you know, the 1997 Tongass National Forest Land and Resource Management Plan addressed this goal through implementation of the Tongass Conservation Strategy, a landscape conservation approach with special emphasis on species and habitats associated with old-growth forests. The strategy helps reduce risks to rare and endemic species, and therefore helps minimize, and/or avoid, wildlife species' numbers declining to the point of requiring protection under the Endangered Species Act (ESA).

The USFS is evaluating potential changes to the Tongass Conservation Strategy as part of this Proposed Forest Plan revision. Elements of the Tongass Conservation Strategy essential to Queen Charlotte goshawks and their prey include Old-Growth Reserves (OGRs), nest buffers, beach and estuary fringe, and tree retention under the Goshawk Foraging Habitat Standards and Guidelines and the American Marten Standards and Guidelines. Key Tongass Conservation Strategy elements for the Alexander Archipelago wolf and its prey include OGRs for habitat, and beach and riparian buffers for connectivity between habitats. Landscape pinch points are also

ATTACHMENT A

important to wolf movement and dispersal across the landscape. Therefore, some of our key recommendations include: (1) eliminating, in the Final EIS, further consideration of Alternatives 4 and 7; (2) maintaining the Tongass Conservation Strategy in any alternative selected in the Final EIS, and implementing in the Final EIS and the Final Forest Plan, biological locations for Small and selected Medium OGRs as recommended by the Interagency Small OGR Work Group; (3) retaining in the Final EIS and the Final Forest Plan, the existing Goshawk Foraging Habitat Standards and Guidelines; and (4) improving in the Final EIS, the USFS proposed alternative 6 by adopting the Interagency Small OGR Work Group preferred biological locations for 48 additional Small OGRs and by retaining the existing Goshawk Foraging Habitat Standards and Guidelines, so as to help prevent the need to list the goshawk under the ESA. For more detailed information regarding these and other recommendations, see Attachments A, B, and C.

No threatened or endangered species under the jurisdiction of the FWS are currently known to exist in the project area. In response to a court-ordered remand, the FWS is currently evaluating the status of the Queen Charlotte goshawk and its habitat to determine if Vancouver Island is a significant portion of the goshawk's range and, if so, whether listing under the ESA is warranted in all, or part of, the goshawk's range. In addition to the goshawk, the Alexander Archipelago wolf has previously been petitioned for listing; and Kittlitz's murrelet is a candidate species. In addition, there are numerous other endemic and sensitive species on the Tongass that will require our continued collaboration in developing conservation provisions. More detailed information on specific Proposed Forest Plan revisions that may affect those species is included in Attachments A, B, and C.

If you have questions concerning our comments, or if we may be of further assistance with regard to fish and wildlife resource information, please contact Mr. Bruce Halstead, Juneau Fish and Wildlife Field Office, at 907-780-1161.

Sincerely,



Pamela Bergmann
Regional Environmental Officer - Alaska

Attachments

GENERAL COMMENTS

Tongass Conservation Strategy

We support the retention of the "Desired Condition and Goal" of maintaining viable, well-distributed fish and wildlife populations throughout the Tongass as outlined in the Draft Tongass National Forest Proposed Land and Resource Management Plan Amendment (Proposed Forest Plan) (Proposed Forest Plan, Pages 2-1 to 2-6). The Tongass National Forest Land and Resource Management Plan (1997 Forest Plan) addressed this goal through implementation of the Tongass Conservation Strategy, a landscape conservation approach with special emphasis on species and habitats associated with old-growth forests. These habitats are most at risk from timber harvest and road construction. The Tongass Conservation Strategy helps reduce risks to rare and endemic species in this naturally-fragmented landscape of islands, which are isolated from the rest of North America by coastal mountains, ice fields, and the Gulf of Alaska.

The Tongass Conservation Strategy is based on scientific information and assessments that specifically addressed species viability on the Tongass (Suring et al. 1993; Kiester and Eckert 1994; Suring et al. 1994). In April 2006, the U.S. Forest Service (USFS) convened a Tongass Conservation Strategy Workshop to review applicable scientific work completed since 1997. An expert panel including representatives of the USFS, U.S. Fish and Wildlife Service (FWS), and Alaska Department of Fish and Game (ADF&G) reconfirmed that the overall architecture of the Tongass Conservation Strategy continues to represent the best available science; and compiled more than 100 considerations for updating the Tongass Conservation Strategy and addressing scientific work published since 1997 (USFS 2006).

We believe it is important to retain the Tongass Conservation Strategy in its entirety throughout the Tongass, particularly the network of Old-Growth Reserves (OGRs), the 1,000-foot Beach and Estuary Fringe Standards and Guidelines, and the Goshawk Foraging Habitat Standards and Guidelines (Goshawk Standards and Guidelines). We also believe the Tongass Conservation Strategy represents the best management approach to help minimize, and/or avoid, wildlife species' numbers declining to the point of requiring protection under the Endangered Species Act (ESA). It is important to note that in 1997, the FWS found the revised 1997 Forest Plan and its Tongass Conservation Strategy adequate to sustain the Queen Charlotte goshawk (goshawk) and Alexander Archipelago wolf (wolf) in Southeast Alaska; therefore, concluding that ESA listings for those species were not warranted. Therefore, we recommend the Final Environmental Impact Statement (EIS) and Final Forest Plan retain the Tongass Conservation Strategy in its entirety throughout the Tongass, particularly the network of OGRs, the 1,000-foot Beach and Estuary Fringe Standards and Guidelines, and the Goshawk Standards and Guidelines.

Management of natural resources during climate change requires increased emphasis on building ecosystem resilience (WWF 2003). One of the most effective ways to help ensure ecosystem resilience is to eliminate or limit additional stresses through a system of OGRs and buffer zones (Noss 2001). We believe that retaining the Tongass Conservation Strategy in its entirety throughout the Tongass will provide the USFS with an important management tool for dealing with these changing conditions.

Old Growth Reserves

OGRs contain large blocks of old-growth forest set aside from timber harvest and most road construction to provide habitat for a wide array of old-growth associated species. Very Large, Large, and Medium OGRs are important for helping ensure the viability of wolves and goshawks, and for providing benefits for a wide array of endemic and other species. Small OGRs provide a system of “stepping stones” between the larger OGRs and help ensure that habitat is protected in each watershed. Small OGRs emphasize habitats important to birds (e.g., marbled murrelet and goshawk [e.g., known goshawk nests], small mammals (e.g., flying squirrel and marten), and deer [e.g., deer winter range]) (USFS 1997b, Appendix K; USFS 1997a, Appendix N).

It should be noted that implementation of OGRs across the entire Tongass was the most important factor in the 1997 ESA Finding that the goshawk did not warrant listing as a threatened or endangered species (FWS 1997b). It was also an essential factor in the “not-warranted Finding” for the wolf in 1997 (FWS 1997a). Appendix K of the 1997 Forest Plan (Appendix K) and various Tongass Plan Implementation Team (TPIT) clarifications (as identified in TPIT 1998) provide guidance for locating OGRs, including acreage requirements and other considerations pertaining to species of concern (e.g., marbled murrelet, black-tailed deer, marten, and goshawk) and special habitats (e.g., large blocks of productive old-growth, rare plants, highest volume stands, and deer winter range).

Small Old Growth Reserves

Biological Locations for OGRs. We believe that Alternatives 1, 2, 3, and 6 include better biological locations for Small OGRs than Alternative 5, the no-action alternative. Alternative 4 eliminates Small and Medium OGRs in 17 of 21 biogeographic provinces, effectively negating the overall Tongass Conservation Strategy. Alternative 7 eliminates all OGRs regardless of size and location. Therefore, we recommend that the Final EIS adopt an alternative (such as Alternative 1, 2, 3, or 6) that implements better biological locations for Small OGRs.

We believe it is important that the revised locations for Small OGRs, which fully meet the criteria specified in Appendix K and either fully implement, or implement, the intent of the Tongass Conservation Strategy, are adopted in the Final EIS and the Final Forest Plan. It is important to note that the proposed locations of 191 Small OGRs (see Attachment B, Tables 1 and 2) fully meet Appendix K criteria and either fully implement, or implement, the Tongass Conservation Strategy. Of those, 133 Small OGRs (see Attachment B, Table 1) implement the preferred biological locations. An additional 58 Small OGRs (see Attachment B, Table 2) implement acceptable (although not preferred biological) locations, thereby fully meeting Appendix K criteria, while implementing the Tongass Conservation Strategy and accommodating timber harvest, road construction, and/or other development activities. Therefore, we recommend that the Final EIS and the Final Forest Plan adopt the revised locations for Small OGRs that fully meet Appendix K criteria and either fully implement, or implement, the Tongass Conservation Strategy.

Revised Locations for Small OGRs. The 1997 Forest Plan identified draft locations for Small OGRs, and established an interagency process to identify the preferred biological location for each OGR (USFS 1997b, TPIT 1998). In accordance with that process, in 2006 and 2007, the Interagency Small OGR Work Group (which was comprised of USFS, ADF&G and FWS biologists and lead by the USFS) reviewed each of the draft locations for the 239 Small OGRs and recommended the preferred biological location for each Small OGR. The Interagency Small OGR Work Group then met with each of the USFS District Rangers and their respective foresters, engineers, and biologists, with the goal of reaching joint recommendations, through a collaborative process, that resolved potential conflicts between preferred biological locations and areas for proposed timber harvest and road construction. The results of that work were provided to the Forest Supervisor, who then reviewed and accepted 133 (see Attachment B, Table 1) of the joint recommendations as proposed locations. In addition, the Forest Supervisor proposed, in March 2007, additional changes to 48 Small OGRs (see Attachment B, Table 3) and 49 Medium OGRs (see Attachment B, Tables 4 and 5). It is important to note that the 48 Small OGRs listed in Attachment B, Table 3 do not fully meet the Appendix K criteria or fully implement the Tongass Conservation Strategy. Recommended changes for each Small and Medium OGR will be documented in the Interagency Small OGR Work Group’s final report, which we anticipate will be completed by June 2007 and presented to the Forest Supervisor for additional consideration.

Small OGR Resolution. While it is our understanding that the USFS plans to modify the 48 Small OGRs to ensure that each of these Small OGRs meet the acre criteria in Appendix K, we believe additional changes are necessary in order for each Small OGR to fully meet Appendix K’s other criteria and to fully implement the Tongass Conservation Strategy. We recommend that these changes be completed for as many of these Small OGRs as possible, so the resulting appropriately-modified Small OGRs may be included in the Final EIS and the Final Forest Plan. We believe this will result in more predictability, less uncertainty, and a reduced potential for conflict for the USFS and its Tongass stakeholders regarding these Small OGRs. Including this information in the Final EIS and the Final Forest Plan will also eliminate the need for time-consuming individual project (e.g., timber sale) reviews. If it is not possible for the necessary additional interagency review and analysis for the 48 Small OGRs to be completed and included in the Final EIS and the Final Forest Plan, we recommend that the Final EIS and the Final Forest Plan adopt the preferred biological locations as recommended by the Interagency Small OGR Work Group.

Interagency Small OGR Work Group Procedural Changes. As noted above, in the event there are Small OGRs remaining that do not fully meet the criteria in Appendix K or fully implement the Tongass Conservation Strategy, those Small OGRs will need to be addressed during individual project reviews. The process for the interagency review and analysis is delineated in Appendix K and various TPIT clarifications, as identified in TPIT 1998. We recommend that from this point forward, all interagency reviews and analyses of any OGRs include the following additions, which were identified and used in 2006 and 2007 by the Interagency Small OGR Work Group (Hanson et al. 2006):

- Development of a consistent protocol for incorporating interagency recommendations into the Forest Plan and individual National Environmental Policy Act projects.

- Documentation of the Appendix K criteria for each OGR, and periodic updating of that information.
- Assessment of the effects of roads in, and adjacent to, OGRs.
- Implementation of the TPIT clarification entitled "Conveyance on Overselected Lands and the Old-Growth Habitat Land Use Designation."

We further recommend that these additions to the interagency review and analysis identified above and TPIT clarifications as identified in TPIT 1998 be included in Appendix K in the Final Forest Plan.

[See Alexander Archipelago Wolf section below for information on the importance of adopting the Interagency Small OGR Work Group-recommended Small OGR for Value Comparison Unit (VCU) 5960 for the Rio Roberts watershed on Prince of Wales Island to address connectivity issues related to the wolf.]

Medium Old Growth Reserves

Out of a total of 130 Medium OGRs on the Tongass, as noted above in the Small OGR section, the USFS proposed in March 2007, changes to 49 Medium OGRs (see Appendix A, Tables 4 and 5). The proposed changes include relocations, addition and deletion of acreage, and replacement of some Small OGRs by adjustments to Medium OGRs. These changes, which were proposed primarily to facilitate potential timber harvest and road construction, have not undergone interagency review and analysis to fully consider the effects of these activities on the OGR system, to determine whether Appendix K criteria have been fully met, and/or whether the Tongass Conservation Strategy has been fully implemented.

While the remaining 81 Medium OGRs throughout the Tongass have not been reviewed, we believe such a review also needs to be undertaken for those Medium OGRs. As stated above, since 1997, land selections and transfers have affected, and in some cases, eliminated Medium OGRs. It is anticipated that this will continue to be the case in the future. For example, the Interagency Small OGR Work Group identified a small number of Medium OGR adjustments that need to be made to meet the 10,000 acres minimum size and the high-volume productive old-growth acres criteria required by Appendix K for Medium OGRs. We believe that Medium OGRs need to be considered in their overall landscape context, not only in relation to individual projects and/or OGRs, but also with respect to potential consequences to the Tongass Conservation Strategy.

We also believe a review and adjustment of Medium OGRs is warranted: (1) if any of the Medium OGRs fail to meet the Total Acreage, Productive Old-growth Acreage, and High Volume Acreage Standards described in Appendix K; (2) if any of the Medium OGRs have been compromised by land selections made by, and/or land transfers to, the State of Alaska and/or Native Corporations; and/or (3) if any of the Medium OGRs no longer fully meet Appendix K criteria and/or fully implement the Tongass Conservation Strategy. As shown in Attachment B, Table 5, at least 28 of the 49 Medium OGRs proposed for changes do not meet Appendix K acreage criteria.

In summary, we recommend that the USFS defer changes to Medium OGRs (see Tables 4 and 5) until a comprehensive interagency review and analysis of all Medium OGRs has been completed to determine whether these Medium OGRs continue to fully meet Appendix K criteria and fully implement the Tongass Conservation Strategy. As stated above under the Small OGR section, we further recommend that any comprehensive interagency review and analysis of Medium OGRs also include the additions to that process, which were identified in 2006 and 2007 by the Interagency Small OGR Work Group (Hanson et al. 2006), and the TPIT clarifications, as identified in TPIT 1998.

Beach and Estuary Fringe Standards and Guidelines

We believe retaining Beach and Estuary Fringe Standards and Guidelines of at least 1,000 feet will help support viable, well-distributed wildlife populations. Beach and estuary fringes, along with riparian management areas, are the primary landscape linkage between OGRs. Beach fringes protect long-term bald eagle habitat capability (Gende et al. 1998); help sustain habitat for goshawks and their prey; buffer the primary beach and estuary fringe from windthrow; and provide critical winter habitat for black-tailed deer, which are the primary prey of wolves and an importance species for subsistence users (USFS 1997a, Page 3-21).

Results from recent research conducted in Southeast Alaska support the retention of beach and estuary fringes at least 1,000 feet in width to mitigate loss of habitat for most forest-dwelling birds, such as the pacific-slope flycatcher and red-breasted sapsucker (Kissling and Garton in Review). Several species of thrushes had higher reproductive success in large (e.g., >1,000 foot) buffers (Sperry 2006). Some species (e.g., Townsend's warbler, brown creeper, and hairy woodpecker) are sensitive to small amounts of fragmentation on the landscape and require a minimum beach and estuary fringe of 1,000 feet in order to help maintain viable populations (see Kissling and Garton for details). Some goshawks preferentially use (presumably for foraging) areas close to the shoreline (Iverson et al. 1996). Birds constitute more than 70 percent of prey deliveries made to goshawk nests (Lewis et al. 2006). Thrushes are particularly important prey for goshawks early in the nesting period, and healthy beach and estuary fringe forests are critical to robust thrush populations. Therefore, we recommend that the Final EIS and the Final Forest Plan retain a Beach and Estuary Fringe Standards and Guidelines of at least 1,000 feet to help support viable, well-distributed wildlife populations.

Pinch Points

We believe it is important that the Final EIS and the Final Forest Plan (1) retain protection for pinch points, including those identified in the 1997 Forest Plan (USFS 1997b, Page 4-123) and the Proposed Forest Plan (Page 3-157); and (2) add protection for pinch points identified during the Small OGR review. The Draft EIS recognizes the importance of landscape pinch points to endemic species and other wildlife. Those pinch points serve as critical links between larger land units where future alterations in habitat could significantly reduce natural connectivity and limit the ability of land-based species to disperse or migrate (Draft EIS, Page 3-157; Kiester and Eckhardt, 1994). Four pinch points were included in the 1997 Final EIS and 1997 Forest Plan, and two more were added in the Proposed Forest Plan. We believe that pinch points are adequately addressed in Alternatives 1, 2, 3, 5, and 6. That is not the case, however, for Alternatives 4 and 7, since Alternative 4 only protects 1 pinch point and no pinch points are protected in Alternative 7 (Draft EIS, Table 2-17). It is important to note that none of the

alternatives or proposed changes to Small OGR protect pinch points at Anita Bay on Etolin Island or at Rio Roberts on Prince of Wales Island (see also the Alexander Archipelago Wolf section below). Therefore, we recommend that the Final EIS and the Final Forest Plan (1) retain protection for pinch points identified in the 1997 Forest Plan and the Proposed Forest Plan, and (2) add protection for pinch points identified during the Small OGR review, including pinch points at Anita Bay on Etolin Island and at Rio Roberts on Prince of Wales Island.

Connectivity

We believe it is important that corridors and connectivity meet the Viable Population Strategy described by Suring et al. 1993. The 1997 Forest Plan requires Tongass District Rangers to analyze connectivity during project reviews (USFS 1997b, Page 4-118). In addition, the TPIT identified a number of key areas requiring additional connectivity analysis (TPIT 1998). It is unclear, however, to what extent this has been accomplished. Therefore, we recommend that the Final EIS and the Final Forest Plan require the development of a standardized protocol for conducting connectivity analyses as directed in the Proposed Forest Plan (Page 4-123).

Legacy Forest Structure

Standards and Guidelines

The Proposed Forest Plan proposes replacing the American Marten Standards and Guidelines (Marten Standards and Guidelines), the Goshawk Standards and Guidelines, and Reserve Tree/Cavity-Nesting Habitat Standards and Guidelines (Cavity-Nesting Standards and Guidelines) with a Legacy Forest Structure Standards and Guidelines (Legacy Standards and Guidelines). The proposed Legacy Standards and Guidelines would require retention of forest structure within harvest units throughout the Tongass, depending on the amount of harvesting in the surrounding landscape and the size of the harvest units. We agree that retaining legacy forest structure (e.g., residual trees and snags and clumps of trees remaining in timber harvest units) throughout the Tongass provides important wildlife benefits. Along with the Marten and Goshawk standards and guidelines, the 1997 Forest Plan addressed the need for residual forest structure in harvest units through a combination of the Cavity-Nesting Standards and Guidelines and two-aged forest management, which were intended to benefit red-breasted sapsucker, brown creeper, hairy woodpecker, and red squirrel (USFS 1997a, Page 3-364).

While we understand that the Legacy Standards and Guidelines are intended to provide similar benefits, it is not clear that it does so. For example, while the Legacy Standards and Guidelines would encourage retention of trees in harvest units across the entire Tongass; it would reduce retention of trees in the most heavily harvested biogeographic provinces where goshawks are most at risk. Furthermore, the Draft EIS provides no scientific assessment to support the general or specific changes included in the proposed Legacy Standards and Guidelines. If the Legacy Standards and Guidelines are adopted, we believe the changes would reduce the existing conservation standards for the goshawk. As always, the FWS is ready to work with the USFS and ADF&G to identify ways to modify the existing Goshawk Standards and Guidelines to address wildlife values, while helping ensure timber harvesting operational feasibility. In the meantime, however, we recommend that the Final EIS and the Final Forest Plan retain the existing Goshawk Standards and Guidelines.

We believe it is important for the USFS to analyze the effects of replacing Marten, Goshawk, and Cavity-Nesting standards and guidelines with the Legacy Standards and Guidelines, since the Marten, Goshawk, and Cavity-Nesting standards and guidelines were each designed to reduce risks to species identified during panel assessments (USFS 1997a ROD, Page 33-35, USFS 1997a, Appendix N). We further believe that the analysis needs to compare the number of harvest units to which each of the Marten, Goshawk, and Cavity-Nesting standards and guidelines would apply and the total acreage protected under each; and that this needs to be analyzed for biogeographic provinces as well as other logical landscape units for each species.

Risk Levels of Value Comparison Units

We believe that "Risk" levels of VCUs – which are landscape units designated on the Tongass that generally compare to small watersheds – need to reflect the cumulative effects of harvesting both throughout the Tongass and on adjacent, non-Tongass lands, since forest-dependent wildlife respond to the availability of habitat across the landscape. Some watersheds have been heavily harvested by USFS contractors and by operators on adjacent land owned by non-Tongass entities (e.g., private, local government, and State of Alaska entities). We believe that Risk levels (i.e., "High," "Moderate," and "Lower") of VCUs need to be defined to include all ownerships within each VCU. Therefore, we recommend that the "High", "Moderate", and "Lower" Risk levels of VCUs include, in the Final EIS and the Final Forest Plan, cumulative effects of timber harvesting on both Tongass and adjacent, non-Tongass lands.

High-Risk Value Comparison Units

We believe it is important in High-Risk VCUs, to retain the legacy forest structure in all units larger than 2 acres. Current Goshawk and Marten standards and guidelines require uniform distribution of at least 30 percent canopy cover in harvest units larger than 2 acres in High-Risk (i.e., heavily harvested) VCUs. The Goshawk and Marten standards and guidelines were designed to retain key elements of legacy forest structure similar to old-growth forest. The key features of old-growth forest were derived from scientific literature (C. Iverson, USFS, personal communication, 2006). Natural openings in old-growth forest on the Tongass average less than 2 acres (Nowacki and Kramer 1998). We believe the loss of legacy retention in harvest units between 2 and 10 acres in High Risk VCUs would increase impacts of logging on the goshawk and other old-growth dependent species in landscapes where they are already most at risk. Therefore, we recommend that the Final EIS and the Final Forest Plan retain in High-Risk VCUs, legacy forest structure in all units larger than 2 acres.

Horizontal and Vertical Structure in Harvest Units

To accomplish the objectives stated in the Proposed Forest Plan for the Legacy Standards and Guidelines, legacy forest structure needs to penetrate into created openings. Uniform distribution of retained legacy forest structure throughout a harvest unit, as required by the Goshawk and Marten standards and guidelines, is less important than attaining both vertical and horizontal diversity within the harvested area (Franklin et al. 2002). Retention of windfirm patches and clumps can effectively accomplish this, if the windfirm and patches and clumps are

distributed within, rather than around the edges of, harvest units. Since the intent of the Goshawk, Marten, and Legacy standards and guidelines is to provide horizontal and vertical structure in harvest units, we recommend that the Final EIS and the Final Forest Plan retain legacy forest structure within harvest units, rather than along the perimeter of the units.

Maximizing Unit Size for Harvest Criteria

As currently written, neither the Proposed Forest Plan nor the Draft EIS provide a scientific rationale for the criteria for defining the maximum sizes of units that can be harvested and still retain legacy forest structure, and how much legacy forest structure must be maintained. This information needs to be included in the Final EIS and the Final Forest Plan, since both the maximum size of openings allowed without retention (i.e., 10, 20, or 30 acres) and the amount of legacy forest structure to be left (i.e., 10, 20, or 30 percent) depend on the risk level (i.e., amount of harvest) within VCUs. Therefore, we recommend that criteria (based on the best available science) that define the maximum sizes of units that can be harvested and still retain legacy forest structure, and how much structure must be maintained, be included in the Final EIS and the Final Forest Plan.

Since dead and downed trees are important habitat features, we believe retained legacy forest structure needs to be protected from firewood cutting and salvage logging, even if the trees die or blow down. Therefore, we recommend that the Final EIS and the Final Forest Plan retain legacy forest structure until the surrounding stand provides mature or old-growth structure. In addition, we recommend that the Final EIS and the Final Forest Plan include a system for tracking legacy forest structure and retention.

Threatened and Endangered Species and Species of Concern

Queen Charlotte Goshawk

OGR System and Beach and Estuary Fringe Standards and Guidelines. We believe it is important to retain the OGR system and 1,000-foot Beach and Estuary Fringe Standards and Guidelines throughout the Tongass to help protect key goshawk habitats. In 1994, the FWS petitioned to list the goshawk as endangered under the ESA. Goshawks nest and forage in mature and old-growth forests and, therefore, are sensitive to habitat loss caused by logging. The FWS found the 1979 (amended 1991) Forest Plan to be inadequate to sustain goshawks in Southeast Alaska (FWS 1995). It should be noted that the 1979 (amended 1991) Forest Plan was similar to Alternative 7 and much of Alternative 4 in the Draft EIS. Subsequently, the FWS determined the revised 1997 Forest Plan and its Tongass Conservation Strategy were adequate to sustain goshawks in Southeast Alaska, concluding that listing was not warranted (FWS 1997b). That conclusion was subsequently challenged in court; and litigation is ongoing. The FWS is currently re-evaluating the status of the goshawk and its habitat to comply with a court remand.

OGRs and other non-development Land Use Designations (LUDs), linked by beach, estuary and riparian buffers and other habitat corridors, help maintain key prey species, and provide nesting and foraging habitat. Goshawk nesting territories tend to be evenly spaced across the landscape, where habitat is suitable. We believe elimination of OGRs would likely result in loss of viable nest territories in harvested landscapes, as adjacent unharvested areas are likely to be occupied by resident pairs. OGRs also help support local prey populations, which are largely dependent

on mature and old-growth forest in Southeast Alaska. Beach fringes similarly provide important breeding habitat for goshawk prey species and foraging habitat for goshawks. Information presented at the Tongass Conservation Strategy Workshop confirmed that many species of birds preyed on by goshawks rely on both OGRs and beach buffers for nesting habitat, and that beach and estuary fringes should be at least 300 meters (1,000 feet) wide to provide adequate nesting habitat (DeSanto et al. 2006). Therefore, we recommend that the Final EIS and the Final Forest Plan adopt an alternative that (1) retains the Tongass Conservation Strategy in its entirety throughout the Tongass, since it contributed to an ESA Finding of "not warranted", and (2) offers protections at least equivalent to the 1997 Forest Plan. We further recommend retaining the OGR system and 1,000-foot Beach and Estuary Fringe Standards and Guidelines throughout the Tongass to help protect key goshawk habitats.

Nest Buffers. We believe it is important for goshawk nest buffers to be increased to 500 acres of productive old-growth to protect active and alternate nest sites and post-fledging habitat. Nest buffers protect known nests from disturbance and offer long-term protection to habitat features selected by goshawks in locations consistent with natural spacing between adjacent resident pairs. Existing Goshawk Standards and Guidelines require the retention of at least 100 acres of productive old-growth around known and suspected goshawk nests. Alternate nests are often clustered near an active nest, but may be up to several miles away. Circular nest buffers of 100 acres protected 54 percent of alternate nests used in subsequent years in 24 active territories studied on the Tongass. Alternatively, 775 acre buffers (1 km radius) would have protected 80 percent of the subsequent-year nests (Flatten and Lowell 2001; Titus et al. 2006), although the entire circular buffer would not be productive old-growth (or nesting habitat) in most cases. For this reason, although they did not specify a particular size, Flatten and Lowell (2001) recommended expanding nest buffers beyond 100 acres.

Goshawk fledglings learn to fly and hunt in the mature and old-growth forest surrounding their nest. This area is known as the post-fledging area and is important to the survival of fledglings. While the size of post-fledging areas has not been measured in Southeast Alaska, studies of goshawks elsewhere have documented post-fledging areas of approximately 500 acres (Reynolds et al. 1992, Kennedy et al. 1994, McClaren et al. 2005). The British Columbia study by McClaren et al. (2005) documented post-fledging areas for Queen Charlotte goshawks. Although the studies by Reynolds et al. (1992), and Kennedy et al. (1994) documented post fledging areas of the northern goshawk, which is the more common subspecies of goshawk, the nesting and post fledging requirements of all goshawks are similar enough to believe that the 500-acre buffer recommended for the Queen Charlotte subspecies is justified.

Currently, almost all known goshawk nests on the Tongass are located in old growth reserves or other non-development LUDs. Therefore, no goshawk nest buffers have been established to date (P. O'Conner, USFS, personal communication, 2006). As new nests are discovered during project development, monitoring programs, and/or other activities on the Tongass, OGR delineations will need be adjusted to encompass the goshawk nest and 500-acre buffer. If it is not feasible to enclose the goshawk nest and buffer within an OGR, then we recommend that a nest buffer of 500 acres of productive old growth be established around the active nest.

In summary, we believe buffers of 500 acres would protect active goshawk nests from disturbance; preserve most alternate goshawk nests; and provide suitable goshawk post-fledging habitat. Therefore, to protect active and alternate nest sites and post-fledging habitat, we

recommend that the Final EIS and the Final Forest Plan include goshawk nest buffers that are increased to 500 acres of productive old-growth.

Partial Canopy Retention. We believe it is important to retain partial canopy of legacy forest structure in all harvest units larger than 2 acres throughout the Tongass, including High-Risk VCUs. Forest legacy structure helps reduce impacts for many species, including goshawks and their prey. Because goshawks hunt primarily from perches, we believe leaving forest legacy structure in harvest units is likely to improve foraging habitat by providing perches and hiding cover. Kenward (1978, Page 458) reported that goshawks in Britain captured over 90 percent of their prey within 50 meters (164 feet) of cover, unless newly-fledged or starving prey were present, since newly-fledged or starving prey could be overtaken by goshawks on longer pursuits. Because a circular 2-acre opening has a radius of about 50 meters, larger openings are likely to have areas beyond the effective striking range of goshawks. We further believe that retention of forest legacy structure in High-Risk VCUs is likely to help reduce impacts on goshawks.

While the existing Goshawk Standards and Guidelines apply only to heavily harvested VCUs on Prince of Wales Island, the proposed Legacy Standards and Guidelines would be expanded to apply throughout the Tongass. We believe that if the proposed Legacy Standards and Guidelines require residual structure within, rather than along the perimeter, of harvested units, goshawks throughout the Tongass are likely to benefit. Therefore, we recommend that the Final EIS and the Final Forest Plan adopt partial canopy retention of legacy forest structure in all harvest units larger than 2 acres throughout the Tongass, including in High-Risk VCUs. (See the Legacy Forest Structure section for additional consideration.)

Nest Surveys. Effective management of goshawk nest sites depends on knowledge of nest locations. The Proposed Forest Plan eliminates the requirement for pre-project inventories. We recommend that the Final Forest Plan retain the requirement for pre-project (e.g., timber sale) surveys to locate goshawk nests as required under the 1997 Forest Plan (USFS 1997, Page 4-90). We further recommend that the Final Forest Plan include a requirement that the USFS adopt a goshawk inventory and monitoring program consistent with the guidance found in the USFS's recent publication on this topic (Woodbridge and Hargis 2006).

Investigation of Goshawk Biology. The Proposed Forest Plan eliminates the Goshawk Standards and Guidelines for cooperative investigation of goshawk biology. Much remains unknown about the goshawk and its responses to forest management. For example, the effects of increasing proportions of second-growth forest on survival and reproduction of both goshawks and their prey are not well understood. Despite considerable effort, we still do not have a good understanding of nesting densities or population size for goshawks throughout the Tongass. We believe these and similar unanswered questions are best investigated through cooperative, interagency research and monitoring. Therefore, we recommend that the Final Forest Plan retain the Goshawk Standards and Guidelines requirement for cooperative investigation of goshawk biology.

Alexander Archipelago Wolf

We believe it is important to retain the OGR system and 1,000-foot Beach and Estuary Fringe Standards and Guidelines throughout the Tongass to help protect key wolf habitats. The FWS

was petitioned in 1993 to list the wolf, an endemic subspecies confined to Southeast Alaska, as a threatened species under the ESA. Following adoption of the 1997 Forest Plan and Tongass Conservation Strategy, the FWS concluded that listing the wolf was not warranted (FWS 1997a), assuming full implementation of the 1997 Forest Plan.

Person (2006a) reviewed scientific information and submitted considerations concerning viability of the wolf during the 2006 Tongass Conservation Strategy Workshop. Person concluded that maintaining well distributed, viable wolf populations depends on retaining the Tongass Conservation Strategy in its entirety throughout the Tongass, including fully-functioning, well-distributed OGRs. It was also noted that even with the existing Tongass Conservation Strategy and 1997 Forest Plan, it is likely that wolf and deer populations will be lower in the future. Since OGRs and other non-development lands serve as population sources for wolves (and possibly deer), we believe that eliminating or degrading OGRs and other non-development lands would increase the likelihood that wolf populations will decline. Therefore, we recommend that the Final EIS and the Final Forest Plan retain the OGR system and the 1,000-foot Beach and Estuary Fringe Standards and Guidelines throughout the Tongass to protect key wolf habitats.

Landscape pinch points are important to wolf movement and dispersal across the landscape. The largest and most complex system of OGRs is associated with Honker Divide on Prince of Wales Island. These OGRs provide refugia in which wolves produce enough offspring to supplement areas with higher risk and less stable populations (Person et al. 1996). The Rio Roberts watershed is an important denning area and provides for dispersal through a pinch point created by timber harvest from the Honker Divide area to the southern half of Prince of Wales Island, as confirmed by ADF&G telemetry studies from 1998 to 2002 (D. Person, ADF&G, Personal Communication, 2006). Therefore, we recommend that the Final EIS and the Final Forest Plan adopt the Interagency Small OGR Work Group-recommended Small OGR for VCU 5960 (see Attachment B, Table 3) to protect the Rio Roberts watershed.

Murrelets

Kittlitz's murrelet, a candidate species for ESA listing, is found in marine waters adjacent to the northern Tongass. This species is likely to be most susceptible to increased recreation near tidal glaciers and high-elevation land activities such as mining. Therefore, we believe that proposed changes in the Proposed Forest Plan do not appear to pose a significant risk to Kittlitz's murrelets.

Since 1993, the marbled murrelet has been listed in the Lower 48 States as threatened under the ESA. Marbled murrelet populations in Alaska have declined by about 70 percent during the past 25 years (Piatt et al. 2007). While it is unlikely that the decline is attributable to timber harvest alone, we believe that maintaining old-growth habitat for nesting is essential to the persistence of the species. When fully implemented, we believe the existing Tongass Conservation Strategy should provide adequate nesting habitat for the marbled murrelet, while the factors that are leading to the population decline are identified and addressed, where possible. Therefore, in order to continue providing marbled murrelet nesting habitat, we recommend that the Final EIS and the Final Forest Plan retain the OGR system throughout the Tongass.

Subsistence

The Draft EIS states that “deer habitat capabilities in portions of the Tongass may not be adequate to sustain current/future harvest levels under any of the alternatives” (Draft EIS, Table 2-18, Page 2-57). Therefore, to help minimize, or prevent, restrictions on subsistence and competition with other users (including the wolf), we recommend that the USFS maximize protection of important deer winter range, which is the primary limiting factor for deer populations (Person 2006b). To that end, we further recommend retaining the Tongass Conservation Strategy in its entirety throughout the Tongass, including OGRs and the 1,000-foot beach and estuary fringe.

Areas with High Wildlife Values

In 2003, the USFS revised the 1997 Forest Plan to address inventoried roadless areas (USFS 2003). In reviewing this revision, FWS biologists conducted on-the-ground and/or aerial visits to each area, and then ranked the quality and importance of each area’s habitat. As a result of this work, 13 inventoried roadless areas with outstanding fish and wildlife values and 20 inventoried roadless areas that contain important fish and wildlife habitats and populations were identified (DOI 2002). We recommend that the alternative selected by the USFS in the Final EIS include the 36 areas listed in Attachment C for their habitat value and their important contribution to maintaining viable, well-distributed fish and wildlife populations throughout the Tongass.

Conservation Principles and Priorities

As in comments previously made by the U.S. Department of the Interior, (DOI 1996), we continue to support the USFS using the best available scientific information for planning and forest management activities related to the Tongass. Scientific assessments and risk assessment panels ensured that the Tongass Conservation Strategy and 1997 Forest Plan were based on a strong scientific foundation. We believe proposed changes to the Tongass Conservation Strategy and the 1997 Forest Plan need to be based on an equivalent level of science. Therefore, we recommend that the Final EIS provide the scientific rationale for any changes to the Tongass Conservation Strategy and 1997 Forest Plan as well as a comparison of the effects between the existing and proposed plan components.

Alternatives

In developing the Draft EIS for the Proposed Forest Plan, the USFS developed 7 alternatives that are fundamentally the same as alternatives in the 1997 Final EIS (Draft EIS, Page 2-50). The USFS adopted this approach so the panel assessments from the 1997 Final EIS may be applied to the 7 alternatives included in the Proposed Forest Plan. The panel assessments rated the likelihood that each of the alternatives would ensure viable, well-distributed populations of wildlife species throughout the Tongass. Alternatives 4 and 7 of the Draft EIS are designed to be essentially the same as Alternatives 2 and 6 in the 1997 Final EIS.

Alternatives 4 and 7

We believe the adoption of Alternative 4 or Alternative 7 would eliminate or undermine the Tongass Conservation Strategy, which, in turn, would fail to ensure that viable, well-distributed populations of goshawk, wolf, endemic mammals, and other species, would be maintained (Draft EIS, Table 2-17, Page 44). It is important to note that alternatives similar to Alternatives 4 and 7 were removed from final consideration during the 1997 Forest Plan revision process because those alternatives would not provide a “relatively high assurance that the habitat needed for long-term viability of all wildlife species would be maintained and commercial, sport and subsistence use sustained” (TLMP 1997 Record of Decision (ROD), Page 15). The Draft EIS identifies the “distribution of high quality old-growth blocks” as the key indicator of “protection of the wildlife habitat and biodiversity” across the Tongass (Draft EIS, Page 1-8), and concludes that Alternatives 4 and 7 would provide only “poor” distribution of high quality old-growth blocks across most or all of the Tongass (Draft EIS, Page 2-50). The 1997 Record of Decision stated that a “relatively low level of risk” to these resources was considered essential in order to meet stated goals of the 1997 Forest Plan, which included a biodiversity goal to “maintain healthy forest ecosystems [and] maintain a mix of habitats at different spatial scales (i.e., site, watershed, island, province and forest) capable of supporting the full range of naturally occurring flora, fauna, and ecological processes native to Southeast Alaska.” (USFS 1997b, Page 2-2). The goal identified in the Proposed Forest Plan (Draft EIS, Page 2-7) has not appreciably changed over the goal included in the 1997 Forest Plan. Therefore, we recommend that in the Final EIS, Alternatives 4 and 7 be eliminated from further consideration.

Alternatives 1, 2, 3, 5, and 6

We believe Alternatives 1, 2, 3, 5, and 6 retain the Tongass Conservation Strategy in its entirety throughout the Tongass and provide reasonable assurance that viable, well-distributed wildlife populations will be maintained. For example, Alternatives 1, 2, and 3 are rated “high” to “very high” for all species except endemic mammals, which are rated as “moderate” to “high”. Alternatives 5 and 6 are rated “moderately high” to “very high” for the goshawk, wolf, and brown bear, and “moderate” for endemic mammals and marten (Draft EIS, Table 2-17, Page 44). Therefore, we recommend adoption of an alternative in the Final EIS that retains the Tongass Conservation Strategy in its entirety throughout the Tongass and provides reasonable assurance that viable, well-distributed wildlife populations will be maintained.

Alternative 6

With respect to Alternative 6, the USFS proposed alternative, we note that it retains the Tongass Conservation Strategy; implements improved locations for 191 Small and 21 Medium OGRs; and retains the 1,000-foot beach buffer. However, we believe that Alternative 6 could be improved if it (1) included the Interagency Small OGR Work Group preferred biological locations for 48 additional Small OGRs; and (2) retained the existing Goshawk Standards and Guidelines. To help prevent the need to list the goshawk under the ESA, we recommend that in the Final EIS, Alternative 6 be amended to include the preferred biological locations for 48 additional Small OGRs (see Attachment B, Table 3) and to retain the existing Goshawk Standards and Guidelines.

SPECIFIC COMMENTS

Proposed Forest Plan, Page 2-51: The description of Alternative 4 needs to be corrected in the Final Forest Plan to match the ratings in Table 2-17 (Page 2-44) from which it is drawn. As currently written, the narrative incorrectly uses the ratings from Alternative 3.

Proposed Forest Plan, Page 3-5: In recognition of its high fish, wildlife, and subsistence values, we recommend that in the Final Forest Plan, the area currently designated "Young Bay Research Natural Area (RNA)" revert to the same LUD as Admiralty National Monument. The Young Bay RNA on Admiralty Island is proposed to be released and a new RNA is proposed for establishment in the Cowee Creek watershed near Juneau. As written, the Draft Forest Plan leaves the new LUD for Young Bay unspecified.

Proposed Forest Plan, Page 4-126: Forest owls, specifically western screech-owls, barred owls, and northern saw-whet owls need to be included in the Final Forest Plan in the list of nesting raptors to be surveyed in proposed management areas.

Proposed Forest Plan, Page 4-128: We believe the "Endemic Terrestrial Mammals Standards and Guidelines" need to be re-titled, in the Final Forest Plan, as "Endemic Terrestrial Wildlife Standards and Guidelines". We also believe the Endemic Terrestrial Wildlife Standards and Guidelines need to be: (1) revised to include surveys for rare and endemic mammals, birds, amphibians, and insects, which may represent populations that are unique and/or which have restricted ranges; and (2) subsequently included in the Final Forest Plan.

Draft EIS, Page 3-173: The population decline estimates and discussion for the marbled murrelet need to be updated in the Final EIS, using the recent U.S. Geological Survey status review (Piatt et al. 2007).

Draft EIS: Since Appendix N of the 1997 Forest Plan, "Additional Evaluation of Wildlife Habitat Conservation Measures," (USFS 1997a, pp. N1 - N50) provides essential background information related to the Tongass Conservation Strategy and provides an important reference for understanding the rationale for specific components of the strategy, we believe Appendix N needs to be revised to include updated information and then included in the Final EIS.

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ATTACHMENT B

Table 1.

Small OGRs that implement preferred biological locations. These OGRs fully meet Appendix K criteria and fully implement the Tongass Conservation Strategy (Small OGR Work Group Report, in prep.). (See Small Old Growth Reserves section for additional information.)

Value Comparison Units* (Total 133)

190, 240, 250, 380, 520, 550, 690, 700, 720, 730, 740, 750, 800, 810, 880, 890, 950, 960, 970, 1060, 1080, 1090, 1100, 1110, 1170, 1970, 2050, 2070, 2080, 2090, 2250, 2300, 2330, 2340, 2360, 2380, 2390, 2400, 2410, 2420, 2450, 2460, 2790, 2800, 2810, 2880, 2920, 2930, 2960, 2980, 2990, 3010, 3060, 3130, 4020, 4160, 4190, 4200, 4250, 4260, 4270, 4271, 4290, 4300, 4330, 4390, 4410, 4411, 4430, 4460, 4480, 4500, 4580, 4610, 4620, 4670, 4680, 4690, 4700, 4710, 4750, 4760, 4770, 4780, 4830, 4870, 4890, 5020, 5040, 5140, 5150, 5160, 5170, 5210, 5230, 5250, 5290, 5310, 5330, 5420, 5440, 5550, 5560, 5570, 5590, 5600, 5700, 5820, 5860, 5872, 5880, 5900, 6090, 6200, 6290, 6330, 6350, 6370, 6740, 6800, 6830, 7220, 7320, 7350, 7330, 7400, 7470, 7530, 7560, 7570, 7600, 7640, 7650

Table 2.

Small OGRs that implement acceptable (but not biologically preferred) locations to provide for development activities. These Small OGRs fully meet Appendix K criteria and implement the Tongass Conservation Strategy (Small OGR Work Group Report, in prep.). (See Small Old Growth Reserves section for additional information.)

Value Comparison Units* (Total 58)

200, 230, 510, 680, 2040, 2170, 2180, 2220, 2310, 2320, 2940, 3070, 3230, 4170, 4180, 4310, 4360, 4380, 4420, 4540, 4560, 4650, 4800, 5010, 5200, 5240, 5260, 5300, 5380, 5390, 5400, 5470, 5490, 5500, 5710, 5790, 5800, 5810, 5830, 5840, 5871, 5910, 5972, 6230, 6380, 6390, 6780, 6850, 6880, 6920, 6930, 7100, 7170, 7360, 7370, 7460, 7552, 7610

* Value Comparison Units are landscape units designated on the Tongass that generally compare to small watersheds.

H-A20

Table 3.

Small OGRs that do not fully meet Appendix K criteria or fully implement the Tongass Conservation Strategy (Small OGR Work Group Report, in prep.). These Small OGRs require interagency review and analysis to determine how these Small OGRs need to be changed to ensure that each of these Small OGRs fully meet Appendix K criteria and fully implement the Tongass Conservation Strategy. (See Small Old Growth Reserves section for additional information.)

Value Comparison Units* (Total 48)

160, 410, 770, 790, 820, 830, 870, 1180, 1930, 2290, 2160, 4220, 4320, 4400, 4440, 4520, 4570, 4640, 5320, 5341, 5350, 5360, 5371, 5372, 5430, 5450, 5460, 5542, 5580, 5620, 5720, 5850, 5940, 5960, 5980, 6100, 6140, 6150, 6160, 6340, 6360, 6710, 6750, 6890, 6910, 7180, 7380, 7390

Table 5.

Proposed Medium OGR changes that do not meet Appendix K acreage and/or other Appendix K criteria and may (or may not) be in appropriate locations. It is unknown whether these Medium OGRs (as proposed) fully implement the Tongass Conservation Strategy. These Medium OGRs need interagency review and analysis to determine how each Medium OGR needs to be changed to ensure that it fully meets Appendix K criteria and fully implements the Tongass Conservation Strategy (Small OGR Work Group Report, in preparation). (See Medium Old Growth Reserve section for additional information.)

Value Comparison Units* (Total 28)

840, 2010, 2260, 2270, 2280, 2890, 2910, 3980, 3990, 4210, 4350, 4470, 4790, 5050, 5410, 5510, 6110, 6170, 6180, 6190, 6250, 6300, 6310, 6320, 6760, 7200, 7210, 7630

Table 4.

Proposed Medium OGR changes that appear to meet Appendix K acreage and other Appendix K criteria and appear to be in appropriate locations. It is unknown whether these Medium OGRs (as proposed) fully implement the Tongass Conservation Strategy. These Medium OGRs need interagency review and analysis: (1) to verify whether each of these Medium OGRs fully meets Appendix K criteria and fully implements the Tongass Conservation Strategy; and if not, (2) to identify changes that will ensure that Appendix K criteria are fully implemented and the Tongass Conservation Strategy is fully met for each of these Medium OGRs. Small OGR Work Group Report, in preparation). (See Medium Old Growth Reserve section for additional information.)

Value Comparison Units* (Total 21)

1960, 2230, 2240, 2430, 2440, 6120, 6130, 6210, 6220, 6240, 6700, 6720, 6770, 6790, 6810, 6820, 7190, 7230, 7430, 7440, 8642

H-A21

ATTACHMENT C

Inventoried Roadless Areas with Special Values (DOI 2002)

Roadless Areas with Outstanding Fish and Wildlife Values (total 13)

201 Fanshaw
 207 Harding
 209 Anan
 215 Castle
 242 Camden
 244 Bay of Pillars
 245 East Kuiu
 308 Windham-Port Houghton
 311 Chichagof
 328 Hoonah Sound
 507 Eudora
 528 Cleveland
 529 North Cleveland

Roadless Areas with Important Fish and Wildlife Habitat and Populations (total 23)

204 Madan
 205 Aaron
 218 Woewodski
 225 Kadin
 233 Mosman
 234 South Etolin
 240 Security
 243 Rocky Pass
 246 South Kuiu
 301 Skagway-Juneau Icefield
 302 Taku-Snettisham
 303 Sullivan
 304 Chilkat-West Lynn Canal
 306 Mansfield Peninsula
 307 Greens Creek
 326 North Kruzof
 330 North Baranof
 339 Yakutat Forelands
 515 Koskiusko
 519 McKenzie
 530 Hyder
 531 Nutkwa
 577 Quartz



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
 1200 Sixth Avenue
 Seattle, WA 98101

April 30, 2007

Reply to
 Attn Of: ETPA-088

Forrest Cole, Forest Supervisor
 USDA Forest Service
 Alaska Region, Tongass National Forest
 648 Mission Street
 Ketchikan, Alaska 99901



Ref: 06-015-AFS

Dear Mr. Cole:

The U.S. Environmental Protection Agency (EPA) has reviewed the **Draft Environmental Impact Statement (DEIS) and Proposed Tongass Land and Resource Management Plan (TLMP) Amendment** for the Tongass National Forest in southeast Alaska (CEQ No. 070003). 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. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the DEIS will consider the expected environmental impacts, and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

The 16.8 million acre Tongass National Forest is the largest forest in the National Forest System. Management of this forest is guided by the Tongass Land Use Management Plan (Forest Plan). The current Forest Plan was revised in 1997, and was intensively reviewed in 2005 (5-Year Review). Since 1997, the Forest Service (FS) has been responding to a variety of appeals and litigation on the processes that were used to create the 1997 Plan. In August 2005, the U.S. Court of Appeals for the Ninth Circuit issued a decision that found deficiencies in the process used to develop the 1997 Forest Plan revision. Specifically, the Court found inadequacies related to timber demand, the range of alternatives considered relative to timber demand and potential effects on roadless areas, and cumulative effects from activities conducted on non-National Forest System lands.

The current DEIS is intended to address these deficiencies, and to incorporate opportunities identified through the 5-Year Review into the Plan. The DEIS considers projections of timber products output and timber harvest over the next 20 years under four different timber demand scenarios (low to high). The DEIS evaluates seven alternatives that encompass all of these demand scenarios in a variety of ways, while addressing three key issues. Those key issues are identified as:

- Key Issue 1 – Protection of high value roadless areas from road development and timber harvest activity on the Tongass National Forest is of local and national importance, particularly for wildlife and biodiversity, recreation, and tourism.

- Key Issue 2 – The Tongass National Forest needs to provide a sufficient timber supply to meet the market demand and help maintain a vibrant economy in Southeast Alaska.
- Key Issue 3 – Protection of the wildlife habitat and biodiversity of the Tongass National Forest is of local and national significance and is affected by road development and timber harvest activities.

The alternatives differ principally in the amount of land designated for development (in development land use designations or LUDs), and the amount of timber harvest proposed.

- **Alternative 1** would place 1.2 million acres in Development LUDs, and 15.6 million acres in Non-development LUDs. The estimated suitable forest land base (harvestable land base) would be .43 million acres, and the allowable sale quantity (ASQ) would be 4 million board feet (MMBF).
- **Alternative 2** would place 2.0 million acres in Development LUDs, and 14.8 million acres in Non-development LUDs. The estimated suitable forest land base would be .54 million acres, and the ASQ would be 152 MMBF.
- **Alternative 3** would place 3.0 million acres in Development LUDs, and 13.8 million acres in Non-development LUDs. The estimated suitable forest land base would be .68 million acres, and the ASQ would be 204 MMBF.
- **Alternative 4** would place 4.7 million acres in Development LUDs, and 12 million acres in Non-development LUDs. The estimated suitable forest land base would be 1.01 million acres, and the ASQ would be 360 MMBF. In addition, Alternative 4 uses a different strategy to provide old-growth habitat.
- **Alternative 5** is the no action alternative. This alternative would maintain 3.6 million acres in Development LUDs, and 13.2 million acres in Non-development LUDs. The estimated suitable forest land base would be kept at .76 million acres, and the ASQ would remain 267 MMBF.
- **Alternative 6** is the proposed action alternative. This alternative is similar to Alternative 5 (3.6 million acres in Development LUDs, and 13.2 million acres in Non-development LUDs), however, it includes refinements to the boundaries of a number of small old growth reserves and other refinements. The estimated suitable forest land base would be .79 million acres, and the ASQ would be 267 MMBF.
- **Alternative 7** would place 5.1 million acres in Development LUDs, and 11.7 million acres in Non-development LUDs. The estimated suitable forest land base would be 1.15 million acres, and the ASQ would be 421 MMBF. In addition, Alternative 7 would have the least restriction on harvest in old-growth forest. It does not include old-growth reserves or have minimum old-growth retention requirements.

The EPA appreciates the efforts of the Tongass National Forest in preparing this DEIS and in developing an innovative website and CD to help agencies and the public analyze impacts associated with the proposed alternatives. We have assigned a rating of EC-2 (Environmental Concerns – Insufficient Information) to the DEIS. This rating and a summary of our comments will be published in the Federal Register. A summary of the rating system we used in conducting our review of the DEIS can be viewed at <http://www.epa.gov/compliance/nepa/comments/ratings.html>. The FS did not identify a preferred alternative, therefore we focused our review on the full suite of alternatives within the context of the three key issues identified in the document.

Based on this review, we find alternatives 1, 2 and 3 to be environmentally preferable. These alternatives provide significant protection of water quality and a connected network of aquatic and terrestrial habitats, afford extensive protection of old growth, minimize road development and associated impacts, and provide a sustainable supply of timber consistent with current and recent timber harvest levels. The conservation emphasis under these alternatives is less sensitive to agency budget levels and less dependant on active management. Our environmental concerns with Alternatives 5 and 6 primarily relate to high and moderate intensity land use designations, increased road development, and associated impacts to aquatic and terrestrial habitats and water quality. Additional information on how these impacts will be minimized and on monitoring and adaptive management strategies should be provided in the FEIS. We believe that as currently proposed, Alternatives 4 and 7 do not address key issues 1 and 3, and hence, are not viable. EPA would have serious objections to the selection of Alternative 4 or 7 as the Preferred Alternative in the Final EIS/Record of Decision.

In general, we recommend that the FS select an Alternative in the Final EIS and Record of Decision that:

- Minimizes the acreage of forest designated for Intensive or Moderate Development;
- Protects high value roadless areas for wildlife and biodiversity, recreation and tourism, thus supporting local and regional economic viability and subsistence activities;
- Accurately reflects the most recent timber industry market trends; and
- Clearly identifies monitoring plans and adaptive management strategies to be employed for the next planning cycle.

Thank you for the opportunity to comment on this draft EIS. If you would like to discuss our response further, please contact Jennifer Curtis, at (907) 271-6324 or me at (206) 553-1601.

Sincerely,



Christine Reichgott, Manager
NEPA Review Unit

Enclosure

cc: Lee Kramer, Project Manager, Tongass National Forest

**EPA Region 10 Detailed Comments
Tongass Land and Resource Management Plan Amendment
Draft Environmental Impact Statement**

As noted above, the FS identified three key issues to frame each of the alternatives. EPA appreciates this strategic and focused approach to the Plan amendment. We have accordingly structured our own detailed comments around the identified key issues.

Key Issue 1 - Protection of high value roadless areas from new roads and timber harvest is locally and nationally significant for wildlife and biodiversity, recreation, and tourism.

EPA agrees with the identification of high value roadless areas as a key issue, and we commend the FS for establishing this as a standard of review. The Tongass is the earth's largest, intact temperate rainforest, and contains some of the largest, intact blocks of forest in North America. Each of the 21 distinct bio-geographic provinces within the Tongass contributes to the biodiversity of the national forest system, making the Tongass rich with endemic species. The Tongass also contains nearly 5,000 salmon-supporting streams (Halupka et al. 2000). These streams provide the spawning and rearing habitat for more than 90 percent of the salmon commercially caught in southeast Alaska.

As recognized in the document, those alternatives that place emphasis on maintaining inventoried roadless areas (IRA), protecting productive old growth (POG), and limiting road construction and the amount of acreage placed in Development LUDs, pose a lower risk of direct and indirect effects to focal resources. Alternatives 1 and 2 perform well against this measure. As noted on page 2-41, none of the 21 biogeographic provinces would contain less than 50 percent of their areas in Non-development under these alternatives. Alternatives 3, 5, and 6 represent higher harvest levels and additional road building, but would retain good to very good spacing of old growth reserves and other Non-development LUDs. These alternatives are less protective than Alternatives 1 and 2 but, when taken together with site-specific analyses and interagency monitoring, continue to address Key Issue 1. Alternatives 4 and 7 would each result in five biogeographic provinces with less than 50 percent in Non-development LUDs, and do not appear to be as responsive to Key Issue 1.

We are particularly concerned about the number of roads that would be constructed under Alternatives 4 and 7. At present, there are 4,942 miles of road on the Forest. The Tongass Road Condition Survey Report (ADFG, 2000) looked at approximately 40 percent of these roads (2,153 miles). The report documents numerous instances of ditch plugging, ditch erosion, cut-slope and fill-slope erosion, road surface erosion, catch basin failure, ditch blockage, culvert inlet and outlet erosion, and other system failures. These are the very kinds of failures that resulted in the listing of Katlian River and Nakwasina River on the CWA 303(d) list for sediment and turbidity. In addition, the Road Condition Survey indicates that 66 percent of the culverts across anadromous streams (Class I streams) are assumed not to be adequate for fish passage, and eighty-five percent of the culverts across resident fish streams (Class II streams) are assumed not to be adequate for fish passage. EPA acknowledges that the FS has used the results of this report to help target restoration work, and to acquire additional road maintenance funding. We also note, however, that the 2003 Forest Level Roads Analysis for the Tongass (p. 75) indicates that deferred costs for solving all passage problems at maintenance level 3, 4, and 5 road-stream crossings could be as high as \$30 million. Given current budget shortfalls and anticipated

reduction in staff, we question the ability of the FS to maintain the existing road network, address fish passage and other road-related issues (such as drainage and road stability), while at the same time undertaking to construct over 5,000 miles of new road. We recommend that the document give discussion to how the FS will meet the proposed construction, maintenance and decommissioning goals while continuing to address the deferred maintenance backlog. A recent letter from the Wrangell District Ranger, Mark Hummel, regarding the decision to select an alternative for the Wrangell District Road Analysis and Access and Travel Management Plan stated the following: "This alternative will reduce the potential for resource damage more than any other alternative by removing the most miles of risk from culvert failure, loss of fish passage, erosion, and sedimentation. The sooner the District acts to close roads it can no longer maintain, the more likely that funding is available to close them. Funding is currently anticipated for the next few years. After that, the likelihood is greatly reduced." This statement recognizes that budget shortfalls will continue into the future.

In addition, we note that many of the transportation corridors authorized under Public Law 109-59 would cross the Tongass, as would a number of power transmission lines currently proposed by the State of Alaska. Given that Transportation and Utility LUDs would be given priority over all underlying LUDs, including LUDs that do not normally allow road construction, it is critically important to fully analyze road-related cumulative impacts. We recommend that the document more fully address the cumulative impacts of existing roads, the proposed increase in roads under the various alternatives, road activity on non-NFS land, and the proposed road and energy infrastructure under Public Law 109-59.

Lastly, we note that the DEIS states that, "[p]rotection for riparian areas would be the same under all alternatives" (p. 3-40). Regardless of which alternative or combination of alternatives the FS selects, EPA recommends that the Forest Plan Amendment include the riparian standards and guidelines as shown in the Proposed Land and Resource Management Plan (p. 6-41).

Key Issue 2 – The Tongass National Forest needs to provide a sufficient timber supply to meet the market demand and help maintain a vibrant economy in Southeast Alaska.

EPA agrees with the identification of sufficient timber supply as a key issue. As noted in the document (page 3-424), the Tongass Timber Reform Act (TTRA) of 1990 states that "...the Secretary shall, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber and (2) meets the market demand for each planning cycle." Additionally, we recognize that there is a particular need in southeast Alaska for year-round, family wage employment, as well as a need to strengthen and diversify the regional economy.

The Alternatives proposed in the DEIS roughly correspond with four timber demand scenarios developed by Brackley et al. (2006): (1) Limited Timber Production (under this scenario, total derived demand is projected to be 65 MMBF in 2020); 2) Expanded Lumber Production (163 MMBF in 2020); 3) Medium Integrated Industry (204 MMBF in 2020); and 4) High Integrated Industry (325 MMBF in 2020).

The document gives discussion on page 3-441 to the ability of the various alternatives to meet these demand scenarios. In general, Alternatives 1 and 2 would be sufficient to meet

limited timber production. Alternatives 3, 5 and 6 would provide volume sufficient to meet scenarios 1 thru 3 (up to the medium integrated industry scenario). Only Alternatives 4 and 7 would provide volume sufficient to meet scenario 4 (high integrated industry). We do not disagree with the premise that sufficient “shelf volume” is needed in order for the timber economy to fully realize market demand and stimulate investment (thereby addressing key issue 2) but we do question the attainability of the highest volume scenario (scenario 4 - high integrated industry).

The model developed by Brackley et al. considers a number of drivers affecting timber demand (timber statistics, trade data, etc.), but is unable to account for other factors potentially affecting timber demand, such as competition, fuel costs, labor costs, complicated shipping logistics, litigation and Congressional action. The study in fact notes (p. 34) that changing conditions in Alaska and world markets are rapidly making the existing model and approach obsolete, and that future attempts to project demand for National Forest timber in Alaska will require new methods and additional information.

We also note that the Forest has not harvested over 50 MMBF annually since 2000, and that the wood products industry accounted for only 1 percent of total regional employment in 2004 (p. 3-413). Notably, this is under the current ASQ of 267 MMBF, which according to the study is enough to support medium integrated industry. The lack of investor response to date would seem to indicate that there are variables outside the realm of FS influence (and available ASQ) that are limiting investment into wood products in the Tongass region.

Additionally, we question some of the assumptions in the DEIS related to projected employment. Page 3-449 indicates that projected timber industry employment figures were calculated assuming a linear relationship between harvest and employment levels (a one percent change in harvest resulting in a one percent change in employment). We are concerned that not only will changes in employment lag changes in harvest, but that given current trends in automation, there is not a direct linear relationship between harvest and employment. This could lead to an overestimation of the amount of employment generated by the higher timber output scenarios. An examination of the timber market in Oregon concluded that even if harvest levels could be maintained, increased productivity would result in a 1.2% drop in employment over a 7-year period (Conway and Wells 1994).

In summary, Alternative 1 would maintain current harvest levels. As noted by the Brackley study, this may be the “most probable outcome” (p. 32), but it also falls short of fully satisfying key issue 2. Alternatives 2, 3, 5 and 6 would provide for a timber economy that is expanded from present levels. It is likely that each of these alternatives would, to varying degrees, satisfy key issue 2. Alternatives 4 and 7 would clearly provide ASQ levels sufficient to meet any potential timber demand, but, given the noted uncertainties surrounding the timber economy in Alaska, we question the whether these sale quantities are in fact attainable.

Key Issue 3 – Protection of the wildlife habitat and biodiversity of the Tongass National Forest is of local and national significance and is affected by road development and timber harvest activities.

EPA agrees with the identification of wildlife habitat and biodiversity as a key issue. The Tongass is naturally fragmented by islands and coastal ice fields and many of the islands have

distinct climatic, floral, and faunal differences. This presents a challenge for conservation of biodiversity and highlights the need to manage for intact habitats as a priority.

Impacts to habitat and biodiversity vary under the alternatives according to the amount of road construction and timber harvest proposed. Because ecosystems in naturally fragmented landscapes are less resilient to further fragmentation, logging additional unroaded areas poses a higher risk to species existence and persistence.

Chapter 3 of the DEIS provides an excellent discussion of the effects of the alternatives on landscape connectivity and biodiversity, noting the importance of an intact Old Growth Reserve (OGR) strategy in terms of ensuring long-term habitat viability. The reduction of OGR protections under Alternative 4, and the elimination of OGR protection under alternative 7, would effectively eliminate old-growth connectivity across numerous ecological “pinch-points” (3-187) and reduce the functional connectivity of the old-growth ecosystem (3-188).

Based on the information provided, we concur that Alternatives 4 and 7 could have a low likelihood of maintaining viable, well-distributed populations (3-186), and that Alternative 7, in particular, would result in the greatest loss of biodiversity among the alternatives (3-143). Based on the analysis, it seems clear that Alternatives 1 and 2 would result in good distribution of high quality old-growth over the long term, Alternatives 3, 5 and 6 would likewise continue to provide good habitat distribution, though to a lesser degree (affecting one ecological “pinch-point”) and Alternatives 4 and 7 do not meet key issue 3.

In addition to old-growth as a habitat component, we are concerned about affects to wetland structure and function due to timber harvest and road construction. As noted on page 3-47, wetlands provide important physical, biological, and chemical functions that contribute to the overall functioning within a watershed and landscape. These functions are particularly critical to maintaining stream health. Page 3-45 indicates that 22 percent of existing road miles are in wetland areas. New road miles under the various alternatives range from 434 miles under alternative 1 to 2,043 under Alternative 7. As noted above, road impacts have resulted in the listing of two Tongass streams on the state 303(d) list. We are concerned that opening new wetland areas to road construction and harvest could increase sediment yield to streams within the Tongass and, subsequently, add more miles of streams to the 303(d) list. Site specific analysis and the TLMP riparian conservation strategy will help to mitigate some of these impacts, but as the FS has recognized, road construction can have significant unavoidable adverse impacts to water quality, regardless of how well the roads are designed constructed or maintained (USFS, 2001). Given the potential adverse effects of roads on aquatic life, we feel that in order to be consistent with key issue 3, the FS should pursue an alternative that minimizes road construction, particularly in wetland areas.

EPA Recommendation for a Preferred Alternative

Alternatives 1, 2, and 3 place the most emphasis on maintaining inventoried roadless areas (IRA), protecting productive old growth (POG), and limiting road construction and the amount of acreage placed in Development LUDs. These alternatives are environmentally preferable from a water quality, habitat, and roadless value perspective. Alternatives 5 and 6 are more responsive to key issue 2, and seek to strike a balance on habitat and roadless values, but result in significantly greater impacts. Given site-specific analysis and interagency monitoring, it is likely

that Alternatives 5 and 6, together with the robust TLMP aquatic and riparian strategy, would continue to address key issues 1 and 3. Alternatives 4 and 7 appear designed to respond principally to key issue 2, and in fact go beyond the ASQ deemed necessary for a highly integrated industry. We are concerned not only with the assumptions driving this high ASQ, but also with the lack of responsiveness these alternatives demonstrate to key issues 1 and 3.

Regardless of which alternative is selected in the Final EIS and Record of Decision, we cannot stress enough the importance of continuing to engage Federal and non-Federal partners in the monitoring and assessment of the Land Management Plan (including POG designation). The Forest's use of the 1984 planning rule to pursue this amendment is testament to the Forest's commitment to broad collaboration. We commend you for making this a priority, and encourage you to maintain that focus as the plan moves once again into implementation. Specifically we request that the Interagency Monitoring Group be engaged in the 5-Year Review process, in addition to the involvement it has in the annual assessment report.

Comments Specific to the Tongass National Forest, Proposed Land and Resource Management Plan with EIS Appendices, January, 2007

Page 4-92 to 4-93, Watershed Resources Improvements: S&W2, I. Soil and Water Quality Protection and Improvement

Past road building and timber harvest activities, in combination with extensive harvest on adjacent private lands, have negatively impacted water quality and watershed health. This is particularly true for those biogeographic provinces with a history of intensive timber harvest (such as Kupreanof-Mitkof islands). Watershed restoration should be a major focus of the Forest Plan for these areas in order to ensure that they do not lose their ecological integrity.

The Soil and Water standards and guidelines talk of the need to "improve" these areas. This terminology does not adequately convey the current impaired status of these watersheds. Furthermore, when speaking of water quality protection, the wording in the Plan should be consistent with wording in the Clean Water Act. That Act mandates *restoring* and *maintaining* the chemical, physical and biological integrity of the nation's waters. We recommend amending S&W2 to remove the words "improve" or "improvement" and insert the words "restore" or "restoration."

Page G-2, Appendix G – Log Transfer Facility Guidelines, S7. Siting Guidelines

Impacts of Log Transfer Facilities (LTFs) typically include: 1) disruption of biota during log transfer and storage; 2) leaching of soluble materials that may be toxic; and 3) loss of bark and resultant effects on the benthos (Jackson, 1986). In order to avoid cumulative effects on sensitive marine environments, an examination of past and current LTF impacts should be made prior to siting. We recommend that the Siting Guidelines require a cumulative impact assessment prior to siting that references the following parameters: 1) measurements of bark and organic accumulation; 2) measurements of the concentration of organic log leachates, biological oxygen demand, dissolved oxygen, and hydrogen sulfides; and 3) a comparative survey of the kinds and relative abundances of benthic organisms.

Page 4-20, Invasive Species Protection

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 extreme environmental and economic significance. EPA commends the FS for incorporating invasive species standards and guidelines into the Plan. We recommend that the new section be expanded upon to include discussion of Integrated Pest Management (IPM). EPA promotes IPM because it represents a prudent approach to understanding and dealing with environmental concerns. IPM promotes a thoughtful awareness of the pest management inherent in natural systems through an understanding of pest life cycles and through the use of beneficial organisms, cultural modifications, physical barriers and other mechanical controls. It does not rule out the use of pesticides, but requires that their use be thoughtfully considered.

We also recommend that the Invasive Species section discuss compliance with Executive Order (EO 13112) on invasive species. This Order emphasizes the need to address invasive species in the context of NEPA, and mentions six key categories of issues federal agencies should consider. Specifically, the Order states: "Each Federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law:

- (1) identify such actions. [and]
- (2) use relevant authorities to: (i) prevent the introduction of invasive species, (ii) detect and respond rapidly to and control populations of such species..., (iii) monitor invasive species populations reliably and accurately, (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop the technologies to prevent introduction and provide for environmentally sound control of invasive species and (vi) promote public education on invasive species..., and
- (3) not authorize, fund or carry out actions that it believes are likely to cause or promote the spread of invasive species in the U.S. or elsewhere unless...benefits of such actions clearly outweigh the potential harm caused...."

Page 6-3, Monitoring and Evaluation

EPA continues to view the Monitoring and Evaluation Plan in Chapter 6 as a critically important element of the proposed Plan, especially with the FS's application of an adaptive management strategy to forest planning activities on the Tongass. An interagency monitoring and evaluation program designed to provide the necessary feedback on the successes (and failures) of management practices specified in the Plan and implemented on-the-ground is the cornerstone of a successful adaptive management strategy. EPA's support of the current Plan continues to be predicated on the full implementation of a successful interagency monitoring and evaluation program. In light of budget shortfalls, we are encouraged that the FS is continuing to place a high level of emphasis on monitoring in the Plan. We ask that you continue to work in close collaboration with other Federal and non-Federal partners as you move forward with this program.

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April 27, 2007

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Mr. Forrest Cole
Forest Supervisor
Tongass National Forest
Federal Building
648 Mission Street
Ketchikan, AK 99901-6591

Re: State of Alaska Comments on the Tongass Land and Resource Management Plan
Amendment and Draft Environmental Impact Statement

Dear Mr. Cole:

The State of Alaska (State) appreciates the opportunity to work with the USDA Forest Service (USFS) as a Cooperating Agency under the 2006 Memorandum of Understanding to amend the Tongass Land and Resource Management Plan (TLMP). A Management Plan that will minimize legal challenges and stabilize the supply of resources to the economic enterprises of Southeast Alaska is essential to the well-being of the entire region. Our comments describe our goals and principles for the plan amendment and Draft Environmental Impact Statement (DEIS). These comments focus on timber management in the context of wildlife conservation. Overall, we seek to balance protection of fish and wildlife resources, recreation and tourism activities, and development of timber and minerals within the Tongass National Forest (TNF). This letter summarizes our general comments, with more detailed information in the following pages and appendices.

I understand that this plan amendment is primarily in response to timber issues, and our comments are accordingly focused. However, I must emphasize that the State of Alaska acknowledges that the Tongass National Forest has many other uses and benefits to the local residents, the State of Alaska, and the Nation. However we decide to manage the timber resources of the TNF, we must always consider these non-timber uses in our decision making.

Timber industry. The State of Alaska supports a sustainable timber industry in Southeast Alaska as part of a diversified regional economy. A sustainable timber industry is one which operates efficiently and supports reinvestment in capital infrastructure. Sufficient timber must be available from federal land to allow the

Mr. Forrest Cole
April 27, 2007
Page 2

existing industry to operate efficiently and sustainably. This will require annual timber sales of at least 167.5 million board feet of economically feasible timber (see Appendix A). Historically, the volume of economically feasible timber offered has been significantly different than the gross Allowable Sale Quantity (ASQ) figure. The focus should be on the volume of economically feasible timber offered, not the ASQ. More detailed comments on this topic follow in the section on specific issues (see page one of our detailed comments).

Transitioning to a sustainable industry supported by second-growth timber is a key objective. However, given current timber stand ages, fully transitioning to second-growth harvests will take at least 50 years. Reaching this goal will require considerable investment, and intensive management of second-growth stands. We are committed to working with the USFS, the timber industry, and the full range of interests in Southeast Alaska to develop a strategy for this transition.

In the interim, it is critical that the USFS provide a sufficient, predictable supply of old-growth timber that sustains the existing industry and has the flexibility to incrementally increase timber supply as the industry expands. This will best be achieved by concentrating timber harvest in areas that are intensively managed. This will reduce the area affected by harvesting, improve timber sale economics, and increase the undisturbed area for wildlife, recreation, subsistence, and other uses. Within intensively managed harvest areas, it is appropriate to relax some Standards & Guidelines (S&Gs), in exchange for more stringent S&Gs in other areas.

Conservation Strategy. The timber goals must be balanced with a sound, science-based, conservation strategy. Conservation values and economic values are not mutually exclusive - both are needed for a healthy economy and a healthy environment. Regardless of land status, the State is obligated to manage all renewable resources on a sustainable basis, including habitat for fish and wildlife, public access, and wilderness values.

These resources should be managed on the basis of the most recent, credible, scientific studies available, including information compiled by the 2006 Conservation Strategy Review. We request that the USFS complete a synthesis of key findings from the review so that the information can be used to identify and address proposed or anticipated modifications to the S&Gs. To the extent possible, implementation of conservation measures should be flexible enough to enable tailoring them to site-specific conditions and facilitate design of economically feasible timber sales. Measures may vary from area to area to reflect different species concentrations and sensitivities, and to concentrate timber harvesting in intensively managed areas rather than

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dispersing harvesting throughout the forest. Intensive timber management which minimizes the areas affected by harvesting will have the least impact on conservation values and the best chance of broad public support.

The system of small, medium, and large old-growth reserves (OGRs), along with beach and riparian buffers, must remain the cornerstone of the wildlife conservation strategy. The system of buffers and reserves provides a safety net for the conservation of viable fish and wildlife populations. Combined with the other protected areas in Southeast Alaska (e.g., wilderness areas) and prudent management of the lands where timber harvest is allowed (matrix lands), the overall strategy provides habitats sufficient for providing sustainable and usable fish and wildlife populations.

Tongass Futures Roundtable. We strongly support the efforts of the Tongass Futures Roundtable (TFR) to find common ground among the many entities with deep interest in the Tongass National Forest. The TFR is striving to build consensus on a plan to convert to an industry based on second-growth and to identify areas where more intensive timber management can occur with minimal impacts on fish and wildlife conservation. We are committed to active participation in these efforts. We believe that building consensus offers the best chance to alter the pattern of litigation over Tongass management. The TLMP amendment must retain flexibility to implement consensus recommendations developed by the TFR, without compromising adoption of the amended plan this fall.

IMPLEMENTATION STRATEGY

The State recommends that the USFS employ a phased strategy to implement the plan quickly, stabilize timber supply, protect fish and wildlife resources, and provide time for the TFR to develop consensus recommendations. Throughout implementation of this strategy, we also support development of other commercial and personal uses of the forest such as recreation, tourism, subsistence, commercial fishing, and mining. The following outline describes this strategy.

Phase 1 – Short-term – Support the existing timber industry and continue to apply the existing Conservation Strategy.

- Offer at least 167.5 million board feet of economically feasible timber annually to support the existing timber industry at an efficient level and allow for a facility that can utilize low value timber. Focus harvests on roaded areas. Limit incursions into unroaded areas to the level necessary to provide economically feasible timber during the transition to a second-growth industry. Due to the young age of most existing

stands, timber harvest would continue to be predominantly old-growth in this phase. Monitor timber demand and encourage local, value-added timber uses.

- Maintain the existing Conservation Strategy, including the old-growth reserve system, beach and riparian buffers, and Standards and Guidelines. Monitor the effectiveness of the Strategy.
- Continue TFR efforts to plan for conversion to a timber industry based on second-growth, identify areas for intensive timber management and flexible implementation of S&Gs, and assess opportunities for flexible implementation of the S&Gs that would improve operability for timber harvesting without compromising fish and wildlife conservation.
- Prepare for the conversion to second-growth harvesting by:
 - Developing a coalition to work with Congress to revise the National Forest Management Act (NFMA) requirement for use of Culmination of Mean Annual Increment to determine rotation age. The NFMA should be revised to allow shorter rotations for second-growth;
 - Considering appropriate means to reduce the rotation age for second growth stands through intensive management; and
 - Working with recreation, tourism, timber, and conservation interests to review portions of Modified Landscape and Scenic Viewshed LUDs that are outside areas protected under the Conservation Strategy, for potential inclusion in Timber Production LUDs.

Phase 2 – Mid-term – Expand timber harvest based on industry growth, demand, and demonstrated success of the Conservation Strategy with a goal of developing an integrated timber industry.

- Review results of monitoring on timber demand and conservation effectiveness.
- Update the Conservation Strategy based on consideration of research (including the 2006 Conservation Strategy Review), monitoring results, and TFR recommendations on flexible implementation of S&Gs in intensively managed areas.
- As the timber industry grows and demand increases, increase the volume of economically feasible timber offered for sale.
 - Most harvests would continue to be old-growth due to the young age of most second-growth stands; harvests would include second-growth where suitable stands exist.
 - Concentrate timber harvests in intensive management areas and incorporate TFR recommendations on the location of these areas.

Phase 3 – Long-term – Convert to a timber industry focused on second-growth harvests.

- Offer economically feasible timber sales in second-growth based on demand. Given the distribution of stand ages in the forest, full conversion to a second-growth

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harvesting will not be feasible until at least 2057. Intensively manage second-growth to maximize the available timber volume and minimize the area needed to support the timber industry. If intensively managed, we expect second-growth stands to produce a greater volume of timber per acre and provide more flexibility in management.

- Review the Conservation Strategy and modify it as necessary to tailor it to conditions of second-growth harvesting, address slash management, and incorporate restoration activities. The review should include information developed in the Tongass-Wide Young Growth Study (TWYGS) and other research.

Under all three phases

- Continue restoration management work, including commercial thinning in second-growth, stream habitat restoration, road removal and fish passage improvements.
- Support development of other economic activities that utilize the forest for recreation, tourism, mining, commercial fishing, and subsistence activities at a variety of scales and from commercial to personal in scope.

ANILCA AND FEDERAL LAND MANAGEMENT ISSUES

The proposed plan amendment is inconsistent with several provisions of the Alaska National Interest Lands Conservation Act (ANILCA) and other federal-state laws and policies. In particular, there are issues with restriction of off-highway vehicle use for subsistence activities, application of required zoning for public recreation and encounter rates to limit public uses on Forest Service lands, and allowance for fish and wildlife management activities and facilities in Wild and Scenic River Corridors, Research Natural Areas, and Experimental Forests. We request that the Final EIS and plan amendment be consistent with ANILCA and other federal-state agreements on these issues.

The State of Alaska supports completion of Alaska Natives Claims Settlement Act (ANCSA) land conveyances for Sealaska Corporation. The lands to be conveyed to Sealaska must be of a nature and character to fulfill the promise of ANCSA. This can only be achieved by the conveyance of lands suitable to meet Alaska Native cultural, traditional, and economic needs.

AGENCY STATUS AND PLAN IMPLEMENTATION

The State urges the USFS to implement the TLMP amendment in a timely fashion. While the recent legal settlement allows Tongass timber to make it into the "pipeline" and provides short-term relief to the timber industry, final plan approval

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and implementation is critical to the industry and economy of Southeast Alaska. Until the timber supply is stabilized, there is no assurance that the industry can survive.

Under the 2006 MOU between the State and USFS, the State is a cooperating agency for TLMP amendments and revisions through 2013. We are committed to working with you throughout the remaining process. We strongly believe that an interagency effort that includes expertise in timber management, economics, and fish and wildlife science and management has the greatest chance of success.

In addition to the overview of our goals and policies above, specific comments on the DEIS and Proposed Amendment follow.

We look forward to working with you during the completion of the TLMP amendment process and implementation of the plan. I am confident that our collective efforts will result in a viable and widely supported plan amendment.

Sincerely,



Sarah Palin
Governor

Enclosure

- cc: The Honorable Ted Stevens, U.S. Senator
The Honorable Lisa Murkowski, U.S. Senator
The Honorable Donald E. Young, U.S. Congressman
Dennis Bschor, USDA Forest Service, Region 10
John Katz, Office of the Governor
Larry Hartig, Commissioner, Department of Environmental Conservation
Tom Irwin, Commissioner, Department of Natural Resources
Denby Lloyd, Commissioner, Department of Fish and Game
Emil Notti, Commissioner, Department of Commerce, Community, and Economic Development
Erin Dovichin, Tongass Futures Roundtable

H-A29

DETAILED COMMENTS

Timber Issues

Timber Sale Thresholds. In this document, the State refers to three harvest levels that represent different thresholds for the timber industry.

- First, a volume of 83.5 million board feet (MMBF) is the bare minimum needed to keep existing Southeast Alaska mills in operation over the next one to two years while the supply of timber from the Tongass National Forest is increased. With this amount of timber, the existing mills could operate only a single shift daily and could not stay in business long-term.
- Second, 167.5 MMBF are needed to 1) allow the existing mills to operate two shifts daily, and 2) provide 30 MMBF per year for development of a new facility that utilizes low-value timber. This level of volume is necessary for efficient mill operation over the longer term, and for development of an integrated timber industry. This is the level of sales that must be achieved to support a sustainable timber industry in Southeast Alaska.
- Lastly, 231.7 MMBF would be required for the existing mills to operate at full capacity (three shifts daily) while still providing 30 MMBF for a facility to utilize low-value timber.

These volumes refer to the volume of economically feasible timber that is required annually, not the Allowable Sale Quantity (ASQ). See the section on Timber Sales and ASQ on page 8 for a more detailed discussion of this topic.

Timber volume. A stable, moderate-sized, integrated timber industry is an important component of a vibrant economy in Southeast Alaska, and is a feasible objective. To make this a reality, TLMP must provide a sufficient, stable supply of timber from the Tongass National Forest. Timber industry survival depends on a sufficient supply of economically feasible timber. This requires that at least 167.5 million board feet be offered annually, and that all timber sales be economically feasible for the purchasers. Economic considerations and expertise in timber harvesting must be included from the very beginning of timber sale design.

Timber supply and demand. The new analysis of the demand for Tongass timber prepared by Brackley et al. (2006), and released by the Pacific Northwest Research Station (PNW) is a significant improvement over the demand analysis prepared by Brooks and Haynes (1997), which was used in the 1996 Supplement to the DEIS and the 1997 Record of Decision. Specifically, Brackley et al. (2006) includes results from other analyses since 1996, describing the potential markets for Tongass timber if sufficient supply is made available (e.g., McDowell 1999 and McDowell 2004). We disagree, however, with some of the assumptions that were made in the timber demand study by Brackley et al. (2006), and note that it did not consider several important factors affecting timber sale purchases.

First, the study failed to acknowledge the influence of timber supply on timber demand. Until a few years ago, the Southeast Alaska timber industry was set up to process all of the components of a timber sale, with the possible exception of some of the utility volume. Utility logs are

defined as cull logs with 50% chip volume. Low value and small diameter logs were being processed by Viking Lumber and Pacific Log and Lumber. Both mills also chipped the better quality utility logs for sale to the Pacific Northwest. They were also ready to provide the Ketchikan veneer mill with veneer quality logs. Shake and shingle mills were operating on Prince of Wales Island. The reason this partially integrated industry did not persist was the lack of a sufficient, long term supply of economic timber. Without a reasonable assurance of sufficient supply, the veneer mill could not continue to operate, forcing the existing mills to process this volume. The lack of a consistent supply also affected the existing mills' ability to fill the market requests for their products. The supply of timber was not enough to meet the market demands, and the mills lost part of their market share. At reduced production levels, the mills' costs per unit increased. Current mills are operating at just a third of their capacity or less. At this level of production, they must focus solely on high quality logs. If the existing mills (including the veneer mill) had a sufficient supply of timber to operate at full capacity, we would expect to have an integrated industry. Supply greatly affects the level of demand!

Second, high logging costs that result from poorly designed sales also affect the mills' ability to process all of the volume from the timber sales. Higher logging costs increase the delivered cost of logs to the mills, negating the mills' ability to process low quality and small diameter logs. Reducing the logging costs by providing economic sales would allow the mills to process all the volume from these sales, as they did in the past.

The quality of the timber in the timber sales is the third factor. Areas of non-merchantable timber should be excluded from timber sales. Tongass timber sales contain more and more non-merchantable timber. This strongly affects the economic viability of the sale and forces the purchaser to deal with unusable volume.

Finally, re-establishing an integrated timber industry in Southeast Alaska will require a means to fully utilize lower grades of logs. When the pulp mills ceased operation, there was no longer a market for low grade logs. This contributed substantially to the problem of uneconomic timber offerings in the Tongass. Efforts made by the USFS to address this problem in the short term have included offering some sales with the option of leaving utility volume in the woods, and granting more export permits for low grade hemlock. These measures have not been entirely satisfactory in addressing harvest economics, and the challenge of finding an economically viable means of utilizing the low grade timber remains. The timber industry should be given an opportunity to redevelop itself so that the full range of Tongass timber resources can be utilized and processed efficiently in the mid-term and long-term scenarios. The USFS should continue to support efforts to identify new products and markets for low-grade timber, and ensure that the Plan allows a harvest level that can support new operations that can use low-grade timber.

Timber Sale Design. As noted above, the timber sale planning process often fails to adequately incorporate timber sale economics into sale design decisions. Many proposed sales are not economically feasible, which defeats the purpose of the sale and wastes agency resources. Sales must be designed so that they still include sufficient economically feasible timber after meeting the requirements of the Conservation Strategy.

We request that the plan amendment and DEIS recognize that providing economically viable timber is the primary consideration for timber sale design within the sale boundary. Timber sales can be designed within the constraints of the existing Conservation Strategy, but only if economic feasibility is the clear goal throughout the design process. Except for site-specific concerns about endemic species of fish and wildlife¹, conservation requirements beyond those required by the Conservation Strategy should not be instituted for individual sales during the sale design process. A standard requiring economic timber sale design should be included in the section on Standards and Guidelines.

We also request that the USFS include personnel with experience and expertise in timber economics in all stages of the timber sale design process. The process should include people with a thorough knowledge of timber value, road construction and harvest costs, harvest methods, and access construction in Southeast Alaska. We look forward to working with you to accomplish this through the Economic Timber MOU between the State and the Tongass National Forest.

Timber sales and ASQ. Timber offered for sale must be economically feasible to have any value to the timber industry. Several factors result in a significant falldown between the ASQ set for the Tongass and the amount of economically feasible timber that is purchased and processed locally. Factors contributing to falldown include:

- ▶ In the sale design process, standards and guidelines established to protect non-timber values decreases the amount of timber available for harvest in a unit. This increases the cost of road access and the cost of harvesting the timber.
 - ▶ The Interdisciplinary Team (IDT) process used to design timber sales often fails to adequately incorporate timber sale economics into design decisions for individual harvest units and for total sales. Many proposed sales are not economically feasible, and are pulled from offerings prior to sale or are not purchased when offered.
 - ▶ Timber sales that are economically feasible are commonly subject to court challenges that delay or eliminate the sale.
 - ▶ Export is allowed on up to 50% of the timber in USFS sales. This improves the sale economics but decreases the volume that goes to support local mills.

As a result, the current timber supply to support local mills is actually far smaller than the ASQ volume. Based on work prepared for the bridge timber committee of the Tongass Futures Roundtable², 167.5 MMBF per year is required for the existing mills to operate efficiently (i.e., at two shifts per day) and allow for a facility to use low-value wood (see Appendix A). The existing mills need this volume to stay in business. Operating at full three-shift capacity would require 237.1 MMBF (see Appendix A).

¹ Endemic species are those that are prevalent in or peculiar to particular isolated localities.

² It should be noted that the TFR never adopted the bridge timber committee report. This work was done at the committee level and presented at a work session in Juneau on July 12-13, 2006. Some TFR members do not agree with the report's finding concerning mill capacity, which is a controversial subject. The mention of the TFR is not meant to imply an endorsement of this statement, but rather cites the source for where the work was accomplished.

Timber supply timing. If the amendment and implementation of TLMP fails to promptly provide sufficient economically feasible timber, the remaining family-owned companies that depend on Tongass timber will go out of business in the next few years. Even if the plan amendment is adopted and implemented quickly, there will be a lag between the current situation and a significant increase in timber sales. The federal timber pipeline is constricted at the top and has a weak outflow that may produce less than 25 MMBF of timber for purchase in the next year. At least 83.5 MMBF is needed to run a single shift at the existing mills – this volume could keep the mills in operation temporarily while timber flow increases, but it is not sufficient to support long-term operations (see Appendix A).

The year 2010-2011 is a crux year for timber supply. The old timber pipeline is not producing sufficient economic volume, a new pipeline under the TLMP amendment will not be flowing, and state bridge timber efforts will be nearing completion. Over the past three years the state stepped up its timber sale program in Southeast Alaska to supply some critically needed volume to the industry. However, this effort can continue for only 1-2 more years before reaching the cap on what the state can offer within its sustained yield capability of 12.8 MMBF per year. Federal timber sale volume for 2009 and 2010 is primarily in roadless areas where timber sales have been subject to litigation from the environmental community. Based on the USFS sale projections for the next five years, there is only enough volume in the pipeline to supply timber for Alternatives 1, 2, and 3, and that is only possible if there are no roadless issues. If appeals and litigation over roadless areas impede the timber sale process, there will only be enough volume for Alternative 1. The roadless issue must be resolved promptly to provide enough volume to keep the mills open even to 2010.

The state requests that the USFS promptly adopt and implement the TLMP amendment, and continue efforts with the TFR to find innovative and collaborative ways to keep timber volume flowing to the mills while a long-term management solution is crafted.

Second-growth and old-growth. The State strongly supports efforts to convert the current industry from old-growth timber to second-growth timber. However, it will take at least 50 years to reach the point where sufficient second-growth volume could be available to fully support the local industry. Continued harvest of old-growth timber will be necessary during the conversion period and may need to continue on a limited basis after that to provide sufficient economically feasible timber to meet demand.

Based on USFS studies on second-growth stands, the rotation age for second-growth stands should be at 90 years, not 160 years. Maintaining a 160-year rotation on second-growth stands will produce only enough volume for Alternative 1.

Converting the industry to second-growth manufacturing should result in intensive management and harvest of these second-growth stands. Changing just the rotation age will only provide enough volume for Alternatives 1, 2, and 3. Providing additional volume may require relaxation of current Standards and Guidelines (S&Gs) within second-growth areas. Some of the S&Gs established to protect wildlife in old-growth harvest areas do not reflect second-growth conditions, and may need to be applied differently in those areas. For example, we recommend allowing selective second-growth harvesting in the portion of beach and estuarine buffers that is

more than 500' from the water, as well as within the portion of second growth riparian buffers that is more than 100' from rivers or streams. We anticipate this requiring project level review to define appropriate amounts and layouts for such harvests. Other guidelines that should be reviewed for possible revision in intensively managed second-growth areas include the S&Gs for marten and goshawks.

We recommend that the USFS emphasize pre-commercial thinning in second-growth stands that are available for harvest. The goal of the pre-commercial thinning is to shorten the rotation age from 160 years to 90 years, which will greatly increase the second-growth volume that is available for harvest. Pre-commercial thinning also creates openings in dense second-growth stands which have short-term benefits for wildlife. By contrast, commercial thinning is aimed at producing large, high quality logs. Mills designed to process second-growth are not likely to be able to handle large (>32" DBH) logs.

Conversion to a second-growth industry will be expensive. Existing mills must be replaced with new mills capable of efficiently processing smaller trees, and second-growth stands must be managed more intensively than old-growth stands. A second-growth industry uses mechanized harvesting equipment and manufacturing equipment specifically designed for smaller logs. After businesses convert to the new equipment, their ability to harvest and manufacture large logs will be severely limited. Sufficient second-growth volume must be provided to justify the capital investment. Much of the initial supply of second-growth is on outer islands where handling and transportation of small timber will be costly. Log transfer facilities (LTFs) will have to be secured and roads maintained to facilitate harvesting in second-growth areas. Finally, to be profitable, second-growth mills will have to process a larger volume of timber than existing mills, to offset the increased costs of handling more, smaller pieces of wood to produce a given volume. On the positive side, intensively managed second-growth stands should produce more volume per acre than typical old-growth stands.

Concentrated vs. dispersed timber harvest areas. Concentrating timber harvesting may benefit both the timber industry and wildlife conservation, and is an approach suggested previously by the State. Allowing more intensive harvest of timber within certain areas -- especially in areas that are already roaded -- may reduce the need for roads into new areas. Reducing the footprint of logging on the landscape would likely reduce the cost of logging operations and decrease the area affected by new timber harvesting. Human access, ATV use, hunting, trapping, and fishing typically increase along new roads, even if they are closed to vehicular use after logging. Potential benefits could accrue to wildlife if concentrating harvest areas allows conservation of more high-value old-growth. Timber management strategies that minimize road development are generally better for certain wildlife species and should be considered whenever possible. Roads pose one of the greatest risks to fish habitat on the Tongass, and minimizing road development often benefits fish as well.

Existing S&Gs apply throughout the Tongass. S&Gs contribute to the high cost of harvesting timber in the Tongass and reduce the available timber. The plan should strive to identify areas where harvesting would have relatively low impacts on other resources and focus harvesting on these areas. Within these areas, timber should be managed intensively to improve economic feasibility and timber volume output. The goal for these areas would be continued second-

growth production and harvest rather than a return to old-growth conditions. Concentrating harvest areas to reduce impacts may require conscious tradeoffs in the application of S&Gs between intensively harvested areas and other more sensitive lands. In intensively managed areas, S&Gs might be loosened in exchange for applying more stringent requirements in other areas.

This approach assumes that more impacts occur to wildlife if logging activity is dispersed. This assumption should be tested through studies to confirm whether it is correct and assess the benefits and impacts of concentrating harvests in intensively managed areas.

Fish and Wildlife Issues

Best available data. Use the best available information for evaluating impacts to fish and wildlife and establishing the Conservation Strategy. At a minimum, the amendment should include a synthesis of key findings from the 2006 Conservation Strategy Review workshop, incorporate the findings into the Final EIS where possible, and identify when and how other study results will be addressed subsequent to adoption of the amendment. Appendix C of our comments includes a summary of new information from the workshop that is relevant to the Conservation Strategy. This includes information presented by State staff on specific species (e.g., goshawks, forest birds, wolves, deer, marbled murrelets, and brown bears). Appendix D of our comments includes a list of associated references and cited literature.

Sustainability. The Plan protects habitats capable of providing for viable, well-distributed populations of fish, wildlife, and other resources, but also recognizes a need to provide for a variety of uses, including subsistence harvests, big-game guiding, fishing charters, and wildlife viewing programs. The standard for fish and wildlife population levels should be based on sustainability rather than viability. A sustainable population provides for both human use and biological survival; viability only guarantees survival in the absence of human use. A standard of sustainability is consistent with the State of Alaska's constitution.

Conservation Strategy

Old-growth reserves. The system of small, medium, and large old-growth reserves (OGRs) is, and must remain, the cornerstone of the wildlife conservation strategy. The reserve system provides a safety net for the conservation of habitat for minimum viable populations. It was not designed to ensure habitats necessary to provide for the sustained yield use of key fish and wildlife populations in the locations where the public has a history of subsistence or recreational harvest. For the reserve system to ensure sustainable populations of wildlife, it must include plant communities whose structure and composition are representative of the forest types. Reserves should be established in proportion to their occurrence and abundance across the Forest before widespread logging. The reserves also need connectivity to allow for animal movements. Finally, they must be well-distributed across biogeographic provinces and larger islands, as well as across the range of elevations and aspects. Failure to adhere to these design principles will jeopardize sustained yield and increase risks of extirpation for some wildlife species on the forest. Insights on this are offered by Cushman et al. (2006; see Appendix D).

Some of the timber management options under consideration in this plan revision would require modifications or reductions to the existing OGR system. While the state recommends assessing possible flexibilities within the Conservation Strategy, any relaxation of existing requirements must not unduly compromise the conservation of fish and wildlife habitats. Changes that reduce the OGR system will increase the risks associated with maintaining viable populations of some wildlife species and eventually could lead to consideration of listing species, subspecies, stocks, or endemic populations under the Endangered Species Act. Recent wildlife surveys have shown significant levels of mammalian endemism on some islands within the forest. In these isolated areas, current reserves may not be adequate to maintain an acceptable level of risk for population viability. We encourage the USFS to work with other agencies to assess such risks and consider alternative conservation measures.

Small OGRs: Specifications and design requirements for establishing small OGRs were included in the 1997 TLMP; however, many small OGRs were never finalized, some were subsequently relocated, and several have been blamed for creating issues for timber sale reviews and analyses. As a result, the USFS, Fish and Wildlife Service (USFWS) and ADF&G reviewed all small OGRs to resolve remaining issues of size and location, and map the final small OGRs in the TLMP amendment. We supported this goal and contributed significant amounts of staff time and expertise to the process. USFS district staff reviewed the recommendations from the interagency group, and with few exceptions agreement was reached on their final configuration and placement. The Forest Supervisor subsequently reviewed all the small OGR decisions and changed roughly 40% of the agreed upon locations. The interagency group reconvened to assess and comment on these changes.

At the time of this review, the group expressed discomfort with some of the placements and agreed to place the reviewed small OGRs into one of three categories: (1) those that were considered biologically preferred (IOGR), (2) those that were not considered biologically preferred, but could be accepted (FPOGR), and (3) those that were not considered to be acceptable and should be further evaluated as part of project level reviews (PROGR).³ The group also identified 13 small OGRs that raised especially high levels of concern for wildlife. These were later reviewed cooperatively by the group and Forest Supervisor, and resulted in 4 being classified as IOGR, 6 as FPOGR, and 3 as PROGR. Overall, of the 238 small OGRs identified on the Tongass, it is our understanding that 133 (56%) are now classified as IOGRs, 58 (24%) are classified as FPOGRs, and 47 (20%) are classified as PROGRs. We encourage the USFS to review future PROGRs with an eye to timber operability and economics as well as fish and wildlife conservation. Overall, we conclude that the newly proposed sizes and locations for the small OGRs are better than they were previously.

Since the adoption of the 1997 Forest Plan, small OGRs have been examined and adjusted during project level reviews. In most cases, the result has been growth in the gross acreages included in OGRs and a reduction in available timber. Appendix B shows the resulting reduction in suitable and available acres by project over the past 10 years. Of particular concern is that project-level reviews removed more than 5,100 acres of Productive Old Growth (POG) from the suitable land base during 1998 – 2005 (USDA, unpublished 2005 monitoring report found at http://www.fs.fed.us/r10/tongass/projects/tmlp/2005_monitoring_report/#1).

³ IOGR = Interagency OGR; FPOGR = Forest Plan OGR; PROGR = Project Review.

This steady erosion of the timber base presents a significant obstacle to maintaining a viable timber industry in Southeast Alaska. Therefore, we appreciate the joint effort under way to map final locations of small OGRs across the Tongass. We urge that this cooperation continue beyond the current planning effort and further urge that transfer of POG from the suitable land base into small OGRs be kept to the minimum necessary to achieve the stated wildlife goals and to satisfy the criteria in Appendix K of TLMP.

Medium OGRs: The interagency OGR group only reviewed small OGRs. The USFS has modified some medium OGRs, and some of the existing medium OGRs do not meet the minimum requirements specified in Appendix K of TLMP. We do not know how these changes and conditions will affect the Conservation Strategy, and we urge the USFS to undertake an interagency assessment of medium OGRs. This process should include state and federal expertise on both wildlife conservation and timber management. We further urge the USFS to do this as soon as possible in order to avoid limiting or eliminating suitable options to meet requirements for the size, placement, and composition of medium OGRs.

Beach and Riparian Buffers. In 1997, forested beach buffers were extended from 500 to 1,000 feet. This extension reflected the value of this habitat to a host of wildlife species, including river otters, mink, bears, wolves, Sitka black-tailed deer, bald eagles, goshawks, and others. Beach buffers are a key component of the Conservation Strategy and must be retained. At the same time, we recognize the utility of allowing some selective timber harvesting of second-growth within beach buffers, to the extent that it accelerates a return to characteristics of the old-growth condition and is a benefit to wildlife. For this reason, we recommend allowing selective harvesting of second-growth timber in the portion of beach and estuarine buffers that is more than 500' from the water, and within the portion of riparian buffers that is more than 100' from rivers and streams. We do not support the use of beach buffer or riparian buffer areas for old-growth harvesting.

Forested buffers along all Class I and II streams are critical elements of the Conservation Strategy. Class I and II streams provide valuable spawning and rearing habitat for species of Pacific salmon, trout, and char, and forested riparian buffers along Class I, II, and III streams provide protection from erosion, sedimentation, and temperature increases.

Class III streams are also a component of the Conservation Strategy and are important sources of water, energy, nutrients and organic matter for downstream reaches. Land uses along headwater streams influence this linkage with downstream areas (Wipfli 2005). At the same time, we appreciate that implementation of Class III stream buffers can reduce the timber base and create difficulties for timber economics. This issue is further complicated by mis-classification of some Class III streams. Field verifications of Class III streams often occur during the drier summer months, when fish typically are not present. As a result, some streams classified as Class III may actually provide fish habitat and have fish present at some time during the year and should be reclassified as Class I or II streams. In other cases, some streams classified as Class III streams may be more accurately classified as Class IV.

We recommend that the USFS in consultation with the State, develop objective criteria and protocols to use for stream classifications, and train USFS staff in application of the classification criteria. We also urge the USFS to use existing flexibility in the Class III guidelines to protect water quality and downstream fish habitat in a manner that is practical for timber harvesting. Lastly, we would like to discuss with the USFS, industry, and other agencies and groups flexibilities within the existing Class III S&Gs, and would be willing to discuss possible alternatives to existing stream buffer requirements for Class III streams, provided that they assure conservation of habitats for fish and wildlife.

Riparian buffers are important to wildlife, including river otters, which are known to use cavities adjacent to inland streams as natal dens (Woolington 1984), and to brown bears, which strongly select for these areas during the salmon spawning season (Schoen and Beier 1990, Titus et al. 1999, Flynn et al. 2007). They also provide critical connectivity between old-growth reserves and are important for maintaining the ecological function of small OGRs.

Marten & Goshawk / Legacy Forest Structure Standard and Guideline. Under the amended plan, a new "Legacy Forest Structure" (legacy) S&G is proposed as a substitute for the existing "Marten and Goshawk" S&G. We understand this change is being proposed because: (1) the existing S&G is not particularly effective for conservation of marten and goshawks, and (2) the marten and goshawk S&G creates significant difficulties from a timber harvesting standpoint (feasibility, safety, and cost).

The proposed legacy S&G would apply when the harvest levels in various planning units exceed set thresholds, much as it does under the existing marten and goshawk S&G. However, unlike the requirement for trees to be individually dispersed or clumped under the marten and goshawk S&G, the legacy S&G could result in trees being retained primarily along the back edges of cutting units. Following are our observations and uncertainties associated with replacing the existing marten and goshawk S&G with the proposed legacy S&G. These are follow-ups to two letters sent by ADF&G to the USFS on this subject during September, 2006.

1. To the best of our knowledge, there is no supporting science for adopting the legacy S&G. At the same time, it is our understanding that the proposed legacy S&G does not significantly benefit the timber industry. To better understand this, we encourage the USFS to include in the FEIS a scientific assessment for the proposed legacy alternative. Without that assessment, we have no information with which to assess any benefits of the S&G to marten or other wildlife populations. At the same time, because the legacy S&G provides less habitat value for martens, it cannot be considered a replacement that would maintain the same level of risk. We also encourage the USFS to include a quantitative analysis of how the marten and goshawk S&G has been applied, and the extent to which the existing S&G has impacted timber harvesting activities. Included in the analysis should be the number of units that have been harvested in a manner that results in retention of "individual trees" versus retention of "clumps" of trees; the average size of retained trees; the amount of retained timber that has been suitable and merchantable versus non-developable or non-merchantable; and how the implementation of the S&G has affected the design of safe and economically feasible timber sales. Also, we would appreciate clarification of the proposed legacy S&G relative to the amount of timber harvesting that would be allowed. As presented, it appears that there is no

upper limit to the amount of harvesting that could occur within areas where this S&G would be applied. It seems to us that leaving 1/3 of the old-growth with each successive entry could result, in the extreme, in having only 3 trees left in a given area and still being able to harvest 2 of them. There should be a lower threshold for remaining old-growth within areas below which no more timber harvesting is allowed.

2. It is our understanding that the current marten and goshawk S&G includes flexibility to locate retention trees in ways that facilitate safe and economically feasible timber sales. For example, retention trees may be clumped to avoid conflicts with logical cable settings. We would appreciate affirmation or correction of this understanding. Additionally, we encourage the USFS to ensure that training and policy direction for unit lay-outs are clear and well understood so that available flexibilities can be used to better provide economically feasible timber sales.

3. The possibility of intensifying timber harvesting in some areas while avoiding or minimizing harvesting in other areas may require some level of flexibility within existing or newly-developed S&Gs. These flexibilities should be explored as a way to better provide economically feasible timber harvesting while also providing conservation of fish and wildlife habitats. We suggest that an interagency assessment of the implications of such action on marten, goshawk, and other wildlife be undertaken as part of this effort. This cooperative assessment should also include an effort to identify areas where concentrated timber harvesting may occur.

4. Regardless of what S&Gs are ultimately adopted, there should be an assurance that trees retained for wildlife should not be logged commercially or for personal use over the life of the rotation. With each new forest plan revision, the need for and amount of wildlife habitat retention should be re-evaluated. Moreover, efforts should be made to locate old-growth retention in places where it is not susceptible to catastrophic blow-down. Where feasible, in instances where blowdown, landslides, or disease kills >75% of retention trees, we suggest harvesting the downed trees and designating an equivalent amount of old-growth for retention elsewhere in

Endemic Species.⁴ A considerable amount of new information about island endemic animal species, including new wildlife taxa and distribution information, was presented during the April 2006 CSR Workshop. This information has significant management implications for maintaining sustainable populations of wildlife and should be summarized and included in the TLMP amendment. The plan should include considerations for adjusting timber harvest on islands as more information becomes available about the habitat associations and population status of endemic species.

Fish passage. The DEIS states that the culvert replacement program declined in 2006 due to funding reductions and is projected to continue to decline in future years (DEIS, page 3 -55). This is a concern to us and we suggest that the culvert replacement program be given a higher priority to increase the possibility of funding. Culvert replacement and maintenance will only

⁴ Endemic species are those that are prevalent in or peculiar to particular isolated localities.

become a greater issue in the future as more culverts are put in place and existing culverts continue to age and deteriorate, thereby further restricting fish passage.

Fish and Wildlife Management in Research Natural Areas and Experimental Forests. We request that the final plan amendment clarify that Research Natural Areas and Experimental Forests will not preclude the State's management responsibilities for fish and wildlife, including use of various facilities, such as weirs or radio towers, necessary for state wildlife or fisheries management purposes. ADF&G is the primary manager of fish and resident wildlife in Alaska, regardless of land ownership. Approval from the Director of the Pacific Northwest Research Station should not be required to conduct routine management responsibilities in these areas. The USFS has recognized the State's authorities regarding fish and wildlife through the USFS-ADF&G Master Memorandum of Understanding (MOU), which was re-signed in 2004. In addition, a national-level MOU between the Association of Fish and Wildlife Agencies and the Forest Service/Bureau of Land Management spells out respective responsibilities for fish and wildlife management in designated Wilderness

Fish management in Wild, Scenic, and Recreational Rivers. In Alaska, USFS management of potential wild, scenic, and recreational river corridors applies only to uplands. Restrictions on public use are subject to the Alaska National Interest Lands Conservation Act (ANILCA), including Section 1110(a). However, the proposed management prescriptions for scenic and recreational rivers contain language that appears to restrict activities below the ordinary high water mark. For example, we question language in the management prescriptions discouraging weirs from potential scenic and recreational rivers. Most weirs do not impede stream flow or river traffic and are temporary structures that are removed at the end of the project or season. Nothing in ANILCA or the National Wild and Scenic Rivers Act prevents use of temporary structures in designated or potential wild and scenic river corridors. For potential wild and scenic rivers in designated Wilderness, Section 1315(b) of ANILCA allows for improvements and facilities such as fish weirs and other structures to restore or maintain fish production on national forests.

In November 1982, the Alaska Land Use Council approved "A Synopsis for Guiding Management of Wild, Scenic, and Recreational Rivers in Alaska" (Appendix 1). The Department of Agriculture, along with the State of Alaska and the Department of the Interior approved the guidelines. We suggest reviewing these guidelines and revising the "Management Prescriptions for Wild, Scenic, and Recreational Rivers" section, as appropriate, to ensure management prescriptions are consistent with these approved guidelines.

Off-highway Vehicle Access for Subsistence. The proposed plan amendment is not consistent with ANILCA provisions for off-highway vehicle (OHV) access. Under the plan, trails and routes for off-highway vehicle use will be "closed unless opened" through a District access and transportation plan. Additionally, in some land use areas, OHV trails may only be designated where documented local traditional use has occurred and the route is compatible with the land use designation objectives.

ANILCA provisions require that subsistence and other ANILCA protected access "shall" be allowed, subject to "reasonable regulation." This "open until closed" approach is a cornerstone

of ANILCA and the USFS cannot supersede this legislative intent by a national policy document. The Department of the Interior adopted regulations at 43 CFR Part 36 that outline a specific closure process that includes public notice and hearings. The State of Alaska advocates that the USFS adopt parallel regulations for ANILCA-protected access and address the discrepancies between the national policy and ANILCA. We remain available to assist the USFS in this effort.

Section 811 of ANILCA ensures that rural residents engaged in subsistence uses "shall" have reasonable access to subsistence resources on all federal public lands in Alaska by use of snowmobiles, motorboats, and other means of surface transportation traditionally employed for subsistence purposes. Such access includes off-highway vehicles where such methods were used generally in the area prior to ANILCA.

We urge the USFS to work with the State of Alaska and affected subsistence users in all districts on the Tongass National Forest to identify trails, routes, and areas where subsistence off-highway vehicle access occurs to ensure subsistence access is not inappropriately closed. Any closure or restriction of OHV use for subsistence purposes must use a regulatory process as addressed in Section 811(b). Please note that our comments should not be construed as categorical opposition to all OHV closures. We know there are several compelling reasons to seek OHV closures, such as public safety or to protect resources. This does not absolve the USFS from adhering to the required processes under ANILCA.

Status of Appendices. Our understanding is that sections of the 1997 TLMP that are not specifically revised by this amendment remain in effect, including Appendix K (Old-growth Habitat Reserve Criteria) and Appendix N (Additional Evaluation of Wildlife Habitat Conservation Measures). These appendices contain procedures that are integral to implementation of the Conservation Strategy. We request that they be retained in the FEIS and plan amendment except where explicitly changed during the amendment process. Please clarify the status of these appendices.

Information needs for the Conservation Strategy were addressed in Appendix B of the 1997 TLMP. The limitation of this appendix is that it was created as a static list of studies that were priorities at the time the Plan was developed. Funding for research and monitoring is limited and we need a dynamic, well-defined process to identify and prioritize information needs, and compare results against original hypotheses. ADF&G is working with the USFS and USFWS to develop such a process. When complete, this process should be included in Appendix B of the Plan amendment and FEIS. The new process will be more practical and achievable than the past focus on just Management Indicator Species (MIS), although future monitoring will continue to address at least some of the existing MIS. With new DNA (Taberlet and Luikart 1999; Mills et al. 2000; Lukacs and Burnham 2005) and modeling (MacKenzie et al. 2006) techniques and capabilities, wildlife monitoring can now more efficiently and cost-effectively provide useful information about population sizes and trends. We recommend these alternative approaches to monitoring be incorporated into future interagency discussions and funding allocations.

Scenery and recreation guidelines

Scenic Designations. Restrictions on harvest (such as requiring helicopter yarding, tree selection harvests and other partial cutting prescriptions) in the Scenic Viewshed and Modified Landscape LUDs greatly reduce the volume of economic timber that can be produced from areas so designated. In fact, it is often questionable whether a timber sale in these LUDs will be capable of meeting a reasonable economic test. Therefore, the State is concerned about how much economic timber these areas can actually contribute to a sustainable timber industry. The State therefore urges the USFS to immediately convene a joint federal-state process to identify areas that can be re-designated from Scenic Viewshed and Modified Landscape to Timber Production. This process should incorporate information from affected parties, such as the cruise industry and other recreation businesses. The State's expectation would be that underlying requirements of the Conservation Strategy, that restrict or prevent timber harvesting (such as OGRs) would remain intact in these areas.

Karst and Cave resources. The proposed plan allows "limited recreation development" on sites that have been identified as "highly-vulnerable karst lands." Recreation development should not be allowed on highly-vulnerable karst land.

Funds for pre-commercial thinning are limited. The USFS should prioritize thinning on second-growth areas that will be available for future harvesting and can benefit wildlife, rather than on karst areas where timber harvest is not allowed.

Recreation and Tourism. The most significant growth in tourism and recreation activities within the Tongass National Forest over the past decade has been in the volume of cruise passengers. Shore-side tours and recreation activities have grown in abundance and focus in several communities, most notably Hoonah. Commercial sport fishing ventures continue to be a substantial part of the local economy in many Southeast Alaska communities.

None of the proposed alternatives is likely to have a significant impact on tourism and recreation activities over the life of the Plan. The niche market for eco-tourism is likely to remain unaffected, since Wilderness and LUD II designations remain unchanged and the Plan, in all its alternatives, would continue to set aside vast acreages for remote and semi-remote recreation.

Only road-based recreation opportunities are constrained by the proposed amendment of the Forest Plan in any of its iterations. These opportunities could be expanded under Alternatives 4, 5, 6, and 7. Contrarily, Alternatives 1, 2 and 3 would likely not provide for significantly expanded road-based recreation opportunities.

Recreation Opportunity Spectrum and Encounter Rates. It is unclear whether encounter rates set out under the proposed forest plan are a hard-line indicator of public use, where management action would be taken to reduce use if rates are exceeded, or if they are meant as guidelines for visitor expectations within a given land designation. We encourage the USFS to use encounters as guidelines for public expectations and not as firm indicators for measuring the satisfaction of recreation experiences.

Land management agencies often use encounter rates to measure solitude and visitor satisfaction. However, in many cases, solitude is not an important factor in determining satisfaction. Instead, surveyed users often cite other factors such as the weather or mosquitoes as more important factors in visitor studies. In addition, blanket encounter rates often do not take into account variability of terrain and vegetation. In areas of dense undergrowth, an encounter rate of three groups per day may cause a greater negative reaction from some users than in open terrain areas.

Economic diversity

Mining. Some alternatives would have a direct negative effect on future mineral development opportunities within Southeast Alaska. We note the following specifics gleaned from the DEIS pages 3-269 – 280.

1. Fifty-two areas totaling 589,000 acres within the Tongass contain identified mineral resources. Of these, 25% are in areas withdrawn from entry. Under the current Plan, 29% of the open areas are in Land Use Designations (LUDs) that result in higher cost of entry if these resources were to be developed. Under Alternatives 1-3 this percentage increases, with Alternative 1 being the highest at 41%; under Alternative 6 it would remain the same; and under Alternatives 4 and 7 it would decrease to 23% and 22%, respectively.

2. Of the identified mineral tracts, 377,000 acres are considered Rank 1, having a "high potential" for being developed. Fifteen percent of the area in Rank 1 tracts is withdrawn from entry. Of the acres open to mineral entry, the current Plan places 30% in LUDs that result in higher cost of entry. Under Alternatives 1-3 and 6, this percentage would increase. Under Alternative 4, it would decrease to 24%, and under Alternative 7 it would decrease to 22%.

3. There are 6.6 million acres of potential, but undiscovered mineral resources within the Tongass. Of these, 989,000 acres are estimated to have a high or moderate likelihood of yielding a mineral resource that could be developed. Thirty-eight percent of this acreage is withdrawn from entry. Of the lands that are open to entry, the current Plan allocates 39% to LUDs that result in higher cost of entry. Only Alternatives 4 and 7 would reduce the percentage significantly (to 28% and 26%, respectively), while Alternative 6 would reduce it slightly (to 38%). Under Alternative 3 it would remain unchanged from the current Plan, under Alternative 1 it would increase to 51%, and under Alternative 2 it would increase to 46%.

Some of these changes are likely to prove to be a disincentive for companies considering new mineral exploration and development investments in Alaska and are therefore of concern to the State of Alaska. Mineral exploration, development, and production can be a critical component of a vibrant economy in Southeast Alaska, as it is in other parts of the State. Mineral activity can also be done in an environmentally sound manner, as is the case at Greens Creek and in other parts of the State. The TLMP should encourage responsible mineral investment in Southeast, and the final alternative should minimize the amount of land with a higher cost of entry.

Community impacts. The DEIS section in Chapter 3 that covers effects on each community fails to mention the Icy Straits Lumber Company sawmill and its role in the economy of Hoonah (pp. 3-520 to 3-524). Please add this to the FEIS.

Impacts to state land

The State believes that the impacts to State lands under all of the alternatives have been adequately addressed in the DEIS. In addition, the State believes that the potential cumulative impacts to State lands have been adequately identified and discussed in the draft DEIS.

Sealaska Entitlement

The DEIS, particularly in Appendix C but reflected in several other sections, misrepresents Sealaska's ANCSA land entitlement and out of withdrawal selection proposal by exaggerating potential negative effects of the proposal and largely ignoring the benefits. The State believes that fulfilling the entitlement will yield overall net benefits for the Southeast economy, environment, and culture, and the potential adverse effects are not significant.

The State believes that Appendix C should recognize that completing conveyances of land to Sealaska in a sustainable configuration is an entitlement under ANCSA and a priority for stabilizing Tongass National Forest management as well as the broader Southeast Alaska economy. The Appendix should not treat Sealaska's land entitlement and adjustment proposal as a negative encumbrance on the USFS or the public interest.

APPENDICES

- Appendix A - Industry needs for bridge timber
- Appendix B - Changes in the Tongass National Forest Suitable Land Base through Project-level Changes since 1997
- Appendix C - Species-specific comments on wildlife
- Appendix D - Citations

Appendix A -- Industry Needs for Bridge Timber

This table was prepared by the Bridge Timber Committee of the Tongass Futures Roundtable. The TFR never adopted the Bridge Timber Committee report. This work was done at the committee level and presented at a work session in Juneau on July 12-13, 2006. Some Roundtable members do not agree with the report's finding concerning mill capacity, which is a controversial subject. The mention of the TFR is not meant to imply an endorsement of this statement, but rather cites the source that accomplished the work.

	Total Volume Needs (MMBF) for bridge timber at 66% of mill capacity 1/	Total Volume Needs (MMBF) for bridge timber at full mill capacity 1/	Survival Volume Needs 3/ (MMBF)
Sawmills			
Viking Lumber Company	53.0	80.0	25.0
Pacific Log and Lumber Silver Bay Logging Company	22.0	33.6	22.0
Icy Strait Lumber Company	43.0	65.0	25.0
Small Sales	13.0	20.0	5.0
Micro Sales	5.0	7.0	5.0
Veneer Mill	1.5	1.5	1.5
Ketchikan Veneer Mill 2/	30.0	30.0	25.0
Total	167.5	237.1	108.5

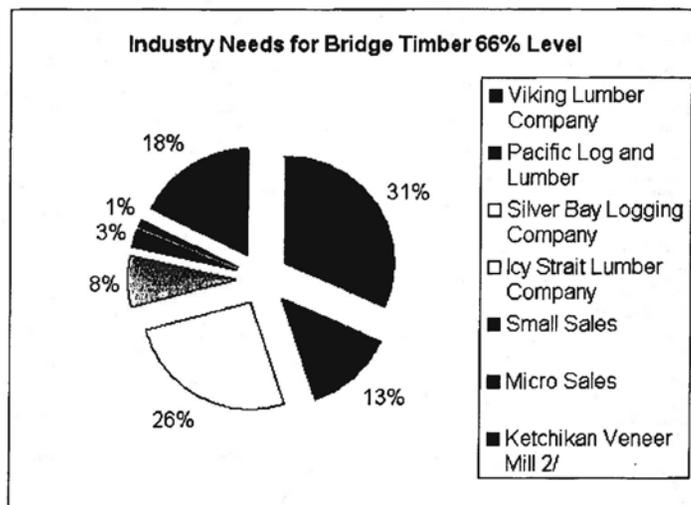
1/ Mill capacity needs from Juneau Economic Development Council (Dan Parrent).
See chart on following page.

2/ Estimate of need. Gateway Forest Products did not operate sufficiently to establish capacity.
3/ Mill survival capacity needs from phone conversations with mill owners 8/06 (C. Maisch)

Existing mills in operation can operate on a yearly flow of volume noted. Mills like Silver Bay (currently being considered for sale with no USFS timber under contract) and the Ketchikan Veneer Mill will need to acquire volume under contract prior to start-up operations. This volume is critical in order to obtain operating capital from lending institutions. Without volume under contract, mills will not be sold and can be expected to be dismantled to recoup some of current mill owner investment.

8/06 Notes: Volume for mills must be economical volume and is not considered the most efficient operating level by mill owners. For example, Viking Lumber would operate at a two shift level if volume was available and the veneer mill would run two shifts. Veneer mill would add a second shift approximately 3 months after resuming operations. The most efficient operating level for all mills is a 2 shift or higher basis.

Appendix A, cont.



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Appendix B -- Changes in the Tongass Suitable Land Base through Project-Level Modifications of Old Growth Reserves since 1997^{5,6}

Project Name	Non-developable area changed to suitable (acres)	Suitable area changed to non-developable (acres)	Net change in suitable area (acres, decreases in <brackets>)
Crystal Creek EIS 1998	481	1,152	<671>
Todahl Backline EA 1998	2	383	<381>
Nemo Loop EA 1998	177	932	<755>
Control Lake EIS 1998	446	142	304
Chasina EIS 1998	0	78	<78>
Canal Hoya EIS 1998	0	151	<151>
Sea Level EIS 1999	185	500	<315>
Kuakan EIS 2000	416	542	<126>
Doughnut EIS 2000	0	19	<19>
Luck Lake EIS 2000	257	794	<537>
Salty EA 2000	99	126	<27>
Polk Small Sales EA 2000	0	153	<153>
Fire Cove Salvage EA 2002	186	633	<447>
Woodpecker EIS 2003	180	130	50
Cholmondeley EIS 2003	894	6,873	<5,979>
Finger Mountain EIS 2003	0	593	<593>
Madan EIS 2003	377	1,501	<1,124>
Threemile EIS 2004	458	826	<368>
Kensington Gold EIS 2004	0	1,615	<1,615>
Couverden EIS 2005	0	790	<790>
Scott Peak EIS 2006	1,089	1,962	<873>
Overlook EA 2006	354	578	<224>
Tuxekan EIS 2006	431	1,614	<1,183>
Scratchings EIS 2007	460	1,519	<1,059>
Totals	6,492	23,586	<17,094>

⁵ Prepared by Dept. of Commerce, Community, and Economic Development based on information provided by the USFS, including published accounts in project-level decision documents.

⁶ The Cholmondeley project modified both a small and a medium OGR. All other changes affected small OGRs only.

Appendix C – Species-Specific Comments on Wildlife

Queen Charlotte Goshawk

Environment & Effect: We suggest that the USFS revise some of the background information, as portions of the species summary are inaccurate (DEIS, page 3-161). As currently portrayed in the proposed Plan, the understanding of the relationship between goshawk habitat and forest management is less now than when the 1997 plan was developed. However, the opposite is true. Both in Southeast Alaska and across their range, knowledge of goshawks and forest management has increased. The use of available literature in the DEIS, both unpublished and in journals, is poor or missing. None of the annual or final Southeast Alaska specific reports produced by ADF&G are referenced (e.g., Flatten et al. 2001) and none of the diet studies published by Lewis and colleagues (2006) are referenced. It is also unfortunate that none of the numerous and relevant goshawk studies published over the past decade were used in the plan amendment, particularly those from the Pacific Northwest.

Examples of mis-portrayed information include statements such as: “The northern goshawk inhabits forested lands throughout North America . . .” This statement is not accurate as many eastern forested lands do not have goshawks. In the next sentence, the background information notes that the Queen Charlotte goshawk is a distinct subspecies and cites Iverson et al. (1996) as the reference. Rather than citing Iverson et al. (1996), the document should list the primary references where the subspecies is described or its taxonomy is accepted (e.g., Taverner 1940, AOU 1957, Whaley and White 1994).

The USFS should consider the habitat associations of key goshawk prey as a tool for sustaining goshawks (Reynolds et al. 1992, Reynolds et al. 2006). The first step in this process should be to use diet data from Lewis et al. (2006) and determine the habitat associations of key prey (for examples, see Reynolds et al. 1992, and Drennan 2006).

While some available information suggests that important goshawk prey species (e.g., grouse, red squirrels) can be negatively impacted by even-aged silvicultural practices (Doerr et al. 1984, Carey 1995, Russell 1999), there is a lack of information on how these practices specifically affect sooty (formerly known as blue) and spruce grouse, red squirrels, medium to large forest passerines (e.g., varied thrushes, Steller's jays), and woodpeckers. We recommend that studies of these prey species in Southeast Alaska focus on how alteration of forest structure and landscape patterns specifically affect their abundance and availability to goshawks. For goshawks, management should focus on their habitat needs and accompanying prey base for long-term viability and sustainability on the Tongass.

The paragraph starting on page 3-161 and ending on page 3-162 of the DEIS implies that findings from the analysis of goshawk telemetry data in Southeast Alaska produced similar results to those observed in the southwestern United States (Boyce et al. 2006, Reynolds et al. 2006). It is specifically stated that when mature forest habitats are not available, goshawks will nest in younger forests or in smaller patches of trees and forage in young forests as well as along edges and in openings (Boyce et al. 2006, Reynolds et al. 2006). However, this has not been observed with great frequency in Southeast Alaska. A few nests have been found in older

second-growth (~80-100 year old stands) and use of this type of habitat is known to have occurred in other areas (Squires and Kennedy 2006). Telemetry data from radio-tagged birds has been analyzed a number of times and consistently suggests strong selection for old-growth forest habitat. Past interagency attempts to evaluate habitat selection relative to edge have resulted in no detectable patterns, noting that the Tongass GIS layers are probably not well suited for such an analysis for goshawks.

Based on research conducted on the Tongass and multiple peer reviews related to the 1997 forest plan, we believe that conversion of mature forests to even-aged second-growth will negatively affect goshawks. Not only do dense second-growth habitats keep goshawks from entering them to hunt (affecting availability of prey to goshawks), but they likely affect the abundance of goshawk prey as well. For example, there is no information about goshawk numbers on Prince of Wales Island prior to the large-scale logging that took place in the last half of the 20th century; however, very few goshawks are now found on that island and nest failure has been documented there. This is likely due to an inability of goshawk pairs to capture and deliver sufficient food to their young (Lewis et al. 2006).

The USFWS is soon to rule on the remand of their decision not to list the Queen Charlotte Goshawk, and will be issuing a new 12-month finding. The goshawk is also listed as a threatened species in British Columbia. Given these conditions, the USFS should consider retaining all conservation guidelines for goshawks in the final TLMP amendment. The initial decision to not list the Queen Charlotte Goshawk was based on the conservation measures included for goshawks in the existing TLMP. ADF&G has consistently noted over the past decade that the science does not support listing the goshawk in Southeast Alaska. If the conservation measures are changed, it leaves open the possibility that any decision by the USFWS could again be remanded. Reference could be made to the results of the genetic study of goshawk relatedness in the west-coastal region of North America (Talbot 2006).

Standards and Guidelines: Most of our comments below suffer from not having a draft appendix to evaluate the context of the proposed S&G changes. We request that the USFS complete such a science-based management document for the proposed goshawk changes. All proposed S&G changes for goshawks have been discussed in an interagency context for at least the past three to four years.

K. 1. b. page 4-98 It is unclear why “alternate” is added and “inactive” is deleted. By definition, a nest that is an alternate in any given year, is an inactive nest. We have information from the Tongass and elsewhere indicating that some alternate nests are used in subsequent years.

K. Deletion of monitoring requirement. We support removal of the need to “monitor” known goshawk nests because of the extensive time and money needed to do so. However, the effect of this is confusing because of the word change from “alternate” to “inactive” as described above. We suggest the continuation of USFS inventories to determine the presence of nesting goshawks in proposed project areas unless and until an alternative approach is developed and described. We further suggest using the most current inventory protocols developed in cooperation with the appropriate State and Federal agencies (Woodbridge and Hargis 2006). We encourage the USFS to describe their approach for monitoring goshawks in the FEIS.

K. 1. d. page 4-98 The Goshawk S&G regarding nesting sites appears to be based on the USFS's need to incorporate flexibility into the S&Gs for goshawk nest sites. We agree that flexibility is useful for land managers; however, moving the decisions to a landscape assessment or some other mid-scale analysis process is vague. As mentioned above, the operating rules for this flexibility and the science behind the decisions and alternatives need to be defined in an appendix to the FEIS, rather than as part of a future planning effort. This appendix should include the variety of conditions that would bring about the "alternate management" of goshawk nest sites.

K. 1. e. As mentioned above, we request the inclusion of an appendix where these science-based management details are described. We recognize that flexibility regarding goshawk nests located in contracted timber sale areas is warranted. The loss of such nest areas is probably not critical to goshawk viability, depending on how many times this situation occurs. Unfortunately, the plan does not mention the fact that as monitoring declines, there is an ever increasing probability that active and inactive goshawk nest trees will be harvested. Even when pre-timber sale monitoring occurs, there is a high likelihood that active goshawks nesting areas will be missed. Therefore, finding goshawk nests in areas already under sale or contract, or proposed for sale, will decrease as monitoring decreases.

Forest Birds

The S&G entitled "Endemic Terrestrial Mammals" (TLMP, page 4-129) should be expanded and re-titled "Endemic Terrestrial Wildlife." It should include surveys for rare and endemic birds, as well as amphibians and insects that may represent unique populations with restricted ranges.

Surveys for other nesting raptors in proposed management areas should include forest owls, specifically western screech-owls, barred owls, and northern saw-whet owls.

Deer and Wolves (General Comments)

The TLMP amendment DEIS does not take into account scientific findings available after 1997. We request that it be revised to incorporate recent research based on a thorough literature review.

The deer Habitat Suitability Index (HSI) model presented on page 3-165 purports to estimate carrying capacity for deer during an average snow winter. However, this does not provide protection in the event of severe snow conditions. Severe winters may drive deer and predator-prey dynamics long after an event has occurred. For example, in Game Management Unit (Unit) 3 (i.e., Mitkof, Kupreanof, Etolin and Zarembo islands), the severe winters of 1969 and 1971 resulted in a major crash in the deer population. It has taken over 30 years for that population to recover, largely because predation retarded recovery long after the severe winters. Planning for severe winter events is the best policy when considering protection of winter habitat for deer. The deer HSI model fails to do this. Further, climate change predictions for Southeast Alaska indicate the likelihood of extremes of warm and cold during future winters, along with much greater precipitation. That may mean occasional extreme snowfalls, not unlike what was experienced during the 2006-2007 winter. It would be wise, therefore, to emphasize the need to

retain winter habitat for deer and calculate HSI under the assumption that all areas are at risk of deep snow. This would result in more scientifically credible evaluations.

Wolves (specific comments)

Page 3-169, first paragraph: The discussion of habitat use by wolves needs to refer to and summarize Person (2001), otherwise it is out of date.

Page 3-169, second paragraph: This information is incorrect and needs to be updated. Wolf numbers are limited by prey availability, not social interactions. This section should refer to and summarize the appropriate sections in Mech et al. (1998) and Fuller et al. (2003). The density limit of 10 wolves/mi² is incorrect. For example, Isle Royale has had densities of wolves that substantially exceeded that limit.

Page 3-169, fourth paragraph: Units 2 and 3 support modest wolf densities compared to other areas where wolves prey on deer rather than moose, caribou, bison, and other larger prey. While wolf densities are high in Units 2 and 3 compared to the rest of Alaska (where deer are absent), they are not high when compared to other areas where deer are the principle prey (i.e., northern Minnesota, southeastern Ontario, and coastal British Columbia). More information on this is available in Person et al. (1996, 2001). The wolf population in Unit 2 is currently healthy but that does not imply it will be in the future when more of the landscape is in stem-exclusion forest. Current populations are not indicators of the future. Reference should be made to the concept of "succession debt," described by Person (2001).

The statement referring to a harvest objective of 39 wolves in Unit 2 is incorrect, and should actually be about 90 wolves, depending on available population estimates.

Page 3-170, first paragraph: The road density guideline in the TLMP amendment was purported to be based on analyses described in Person et al. (1996); however, the guideline has never been implemented in a manner consistent with Person et al. (1996). The 0.7 mi/mi² is to account for all open, closed, or overgrown roads in areas below 370 meters elevation, not simply open roads. This approach has been used because we have found it impossible to distinguish between open and closed roads, and further, the definition of what constitutes "open" versus "closed" roads is vague (i.e., some roads may be passable with snowmachines or ORVs). Even roads that are overgrown are used as hiking trails, providing easier access for wolf trapping and snaring. Additionally, the denominator should be land area below 370 meters because the vast majority of wolf activity occurs in this area (Person et al. 1996, Person 2001). The road density guideline should be applied at a scale equal to an average wolf pack home range (300 km²) (Person et al. 1996). The incorrect use of the guideline has been brought up in numerous interagency meetings since 1997, but has never been corrected. We again recommend using the guideline described by Person et al. (1996).

The den buffer guideline has not been supported by scientific data. Information presented during the CSR Workshop indicated that the guideline needs revision. The guideline for roads is the most important because roads facilitate chronic disturbances long after timber harvesting activities are completed. Suitable areas for dens would only have a 45% probability of selection by wolves if a road was within 600 feet of the den (Person in prep, Conservation Strategy

Review Workshop). Moreover, as presented during the CSR Workshop, dens may be unused for up to 5 years before being used again.

Page 3-170, second paragraph: This paragraph implies that there is no established link between habitat changes and wolf populations. This is incorrect based on research findings (Person and Bowyer 1997, Person 2001, Mech et al. 1998, Fuller et al. 2003, and Fuller 1989). Wolf populations will increase and decline in response to changes in prey populations, and any habitat changes that affect prey will affect wolves. This has been modeled and presented in Person (2001) and Person and Bowyer (1997), along with projected effects of habitat change on wolves and deer in Unit 2. Additionally, Farmer et al. (2006) provide information on habitat features that influence predation. We recommend revising this paragraph to include information from the published literature identified in our list of references (see Appendix D).

Page 3-207, first paragraph under Alexander Archipelago wolf: Deer are not required for wolf persistence if other ungulate prey are present (i.e., moose, goats, or sheep). However, their densities will be much lower and home ranges much larger. Details on this are presented in Person et al. (2001) and other works such as Mech et al. (1998), Fuller et al. (2003), and Fuller (1989). Gaps in wolf distribution may occur, particularly on islands where deer numbers decline substantially, but the likelihood is that home ranges will get larger and wolf densities lower rather than experiencing local extirpations. That said, as deer numbers decline, there will likely be increased pressure from subsistence users to reduce wolves in an effort to protect deer. Under that circumstance, poorly managed hunting and trapping seasons and illegal killing could result in local extirpations. The implications of this are compounded because wolves in Southeast Alaska have low genetic diversity (e.g., the population in Unit 2 shares 1 mtDNA haplotype (Weckworth et al. 2005)). Lowering densities may therefore result in further reductions to genetic diversity. This would be especially true in small populations that are isolated on islands.

Page 3-207, second paragraph under Alexander Archipelago wolves: This section should be revised after referring to Person (2001). Specifically, reference should be made to the consequences of the non-linear density-dependent shape of change in deer populations in relation to carrying capacity (K) and how predation will affect deer numbers as K is reduced due to timber harvesting. This will lead to a better understanding and appreciation for how habitat changes will likely affect predator-prey dynamics. This is published in Bowyer et al. (2005), Person (2001), and Person et al. (1997), and much of it was presented during the CSR Workshop.

Pages 3-207 and 3-208: No mention is made of results from Person (2001) or Person and Bowyer (1997) concerning population viability and TLMP alternatives. That work provides insight concerning how the new alternatives might affect wolf-deer predator-prey dynamics. Results from wolf Population Viability Analysis (PVA) for Prince of Wales (POW) Island indicated that a substantial reduction of wolves and deer is likely under the current forest plan (Person 2001, Person et al. 1997). Any alternative that increases road development or logging from the current plan is likely to reduce the wolf population to very low levels. Add to that the higher risk of hunting and trapping mortality (legal and illegal) due to the perception that wolves are competing with hunters for deer, and the viability of wolf populations on POW could be compromised. Further, there is no mention of information provided at the CSR Workshop showing the relationship of undeveloped land with the ratio of recruitment to mortality of

wolves. Information presented during the workshop indicated that the ratio of recruitment to mortality approaches 1 for wolf packs occupying home ranges with < 44,000 undeveloped acres. That finding should be compared with existing OGRs to see how many may actually have a high probability of supporting source populations of wolves.

Page 4-127, TLMP: The new information provided at the CSR Workshop, along with findings published since 1997 have not been included in the S&Gs. The road guideline is still implemented incorrectly and the denning guideline is not consistent with available information. Given the noted disparity between the existing S&Gs and existing supporting scientific materials, we encourage the USFS, in consultation with the State, to consider revising the S&Gs in the Plan amendment or future Plan revisions.

Deer (specific comments)

Page 3-164, second paragraph under deer, fourth sentence: This sentence should read "The quantity, quality, distribution, and arrangement of winter habitat are considered the most important limiting factors for deer."

Page 3-165, first paragraph: It is unclear whether the USFS is using the deer HSI model correctly. The 1997 description of the model and its application was incorrect with respect to the deer multiplier. The highest HSI value (whether it is scaled to 1.0 or 1.3) should correspond to a density of 100 deer/mi².

Page 3-165, second paragraph: The first sentence states that the deer HSI model provides a tool for risk assessment. This is not true. There are no probabilities associated with the HSI index so it cannot be used to assess relative risk, only relative HSI values. For example, we do not know how much risk is associated with a difference in an HSI of 0.1. Further, as Bowyer et al. (2005), Person (2001), and Person et al. (1997) showed, an increment change in deer carrying capacity (which is what HSI supposedly represents) could lead to a much larger increment change in deer numbers due to the non-linear dynamics associated with predation. Therefore, there is no quantifiable risk associated with HSI values.

The paragraph describes the "FRESH" deer model but fails to include any mention of the other deer models presented at the CSR Workshop. The FRESH model cannot be extended from a stand level analysis to a landscape scale. It does not predict availability to deer due to patch size, location on the landscape, risk of predation, fragmentation, or connectivity. All of those features have a significant, if not primary, role in predicting habitat quality for deer (see Farmer et al. 2006, Kie et al. 2002). By itself, the FRESH model will be of very limited value as a replacement for the current deer HSI model.

Page 3-165, third paragraph: The statement on sources of predation should be clarified. Neonate fawns were not captured on Mitkof Island and bears were therefore not identified as a significant source of mortality to study animals. If neonates had been collared, the results would likely have shown substantial predation by black bears. Given their paucity on Heceta Island, black bears are not a major predator on fawns. However, on POW Island, where black bears are abundant, we observed significant black bear predation on neonate study animals (ADF&G, unpub. data).

We suggest deleting the last sentence in the paragraph because of its inaccurate context. That is, citing statistics for the Tongass as a whole (a forest of islands) is misleading given local differences in impacts. The amount of old-growth habitat remaining on POW Island, for example, will be substantially less than elsewhere on the forest and will thereby have more severe localized implications for wildlife and associated users.

Page 3-192, first paragraph under Sitka Black-Tailed Deer: It is inaccurate to say that the difference in magnitude of the HSI values when using the size-density forest classification versus the original classification is unimportant because only relative values are compared between alternatives. That is true only when the model is used to compare changes in HSI between alternatives. It is not true when applying the deer guidelines for wolves and subsistence. In those applications the magnitude of deer habitat capability is very important.

Page 3-194, third paragraph: This paragraph should discuss the effect of lowering K on deer populations exposed to wolf predation. Deer numbers likely will be reduced much more than predicted by changes in HSI because of the non-linear relation between K, deer recruitment, and predation. Please refer to Bowyer et al. (2005), Person (2001), and Person et al. (1997).

Page 3-194, last paragraph: The first sentence in this paragraph should note that there is great uncertainty about the effects of second-growth management on the availability of forage to deer. The value of treatments, the scale of treatment effects, and the potential of treatments to be implemented at scales meaningful to deer populations is unknown at this time. This paragraph makes no mention of Farmer et al. (2006). In that study, a positive relation was observed between risk of death of fawns and pre-commercial thinning. Also, Farmer et al. (2006) demonstrated that landscape level features play a large role in determining risks of death for deer. TWYGS and other studies do not address the scale, distribution, and arrangement of treatments on the landscape. Those factors will be as or more important than the amount of forage produced.

Elk

Page 3-179, fourth paragraph: Although a radio collared cow elk was located on Farm Island, at the mouth of the Stikine River, there is no evidence of any collared elk migrating up the Stikine River drainage (ADF&G, unpub. data).

Marbled Murrelets

The marbled murrelet should be identified as a Sensitive Species on the Tongass. We believe that the USFS would be remiss in not listing this species as part of the TLMP amendment given that they are known to be old-growth dependent for their nesting. Sensitive Species are defined as "those plant and animal species for which population viability is a concern on National Forest System (NFS) lands within the region. Either a significant current or predicted downward trend in population numbers or density, or a significant current or predicted downward trend in habitat capability that would reduce a species' existing distribution indicates a viability concern." The best available information suggests that marbled murrelets have declined by nearly 80% in Southeast Alaska since the early 1990s (Piatt et al. 2007).

The referenced literature on marbled murrelet ecology in Southeast Alaska should be updated. Cotter and Kirchhoff (2007) and Piatt et al. (2007) summarize existing data on marbled murrelets in Southeast Alaska, including new information on population status and trends, distribution, and habitat relationships.

The TLMP amendment should display the effects logging will have on marbled murrelet habitat under each of the alternatives. Preferred nesting habitat for marbled murrelets includes older trees, larger trees, and trees on steeper slopes (Schoen and Dovichin 2007, Appendix B). Habitat capability for marbled murrelets has declined significantly from past logging (Piatt et al. 2007), and will decrease further under the new Plan. These effects should be displayed in the FEIS.

Page 3-174: The Plan should show how much marbled murrelet habitat is protected by the OGR system. The Plan references the forest-wide system of OGRs as helping meet the conservation needs for marbled murrelets. Although any retention of old-age trees helps, a quantitative assessment of how effective these old-growth reserves might be is needed.

Page 3-174: "Uneven-aged management" should be specifically defined. Uneven-aged management "in many areas" is cited as mitigation for loss of marbled murrelet nesting habitat, yet the term is not specifically defined. To judge the effectiveness of this prescription for marbled murrelets, information on gap sizes and interspersions of individual trees or patches in the cutting units should be provided.

Page 4-128: Providing 600' buffer zones around discovered marbled murrelet nests (XVI. B.) provides no effective benefit. Marbled murrelet nests are extremely difficult to find because most are high up in old-growth trees, the birds are quiet on the nest, and they travel to and from nests in the dark. The fact that it was the last species in North America to have its nest discovered underscores the futility of an S&G that requires finding nests. We suggest dropping this S&G and re-establishing past murrelet surveys.

It is unclear what USFS supported marbled murrelet research and monitoring is ongoing. Appendix B (page B-11) lists a number of information needs for marbled murrelets (items 8, 13, and 15), and indicates the USFS is currently funding marbled murrelet studies. ADF&G has signed a cooperative agreement with the Juneau Ranger District to work together as opportunities present themselves. Beyond this, however, we are unaware of any USFS related marbled murrelet studies on the Tongass.

The USFS commitment to doing marbled murrelet surveys is unclear. In the early 1990s, the Ranger Districts across the Tongass embarked on rigorous training for doing at-sea surveys, and established numerous transect routes across the region (Piatt et al. 2007, Appendix M). Unfortunately, the surveys were not continued. This represents a big loss because it now appears from limited data that marbled murrelets are in serious decline. It is not clear whether identifying this as an "information need" in Appendix B constitutes a commitment to resume the surveys or not. We request that surveys be reinstated.

Martens

New information presented at the CSR Workshop indicated that two genetic lineages of martens occur on the Tongass NF (Cook et al. 2006). Based on genetic research, these authors suspect that the two lineages of marten found in Southeast Alaska actually represent two distinct species; *Martes americana* and *M. caurina*. If so, *M. caurina* has an extremely limited distribution in Southeast Alaska (Kuiu and Admiralty islands only) and globally (from northern California to Admiralty Island). Because of the limited distribution of *M. caurina*, these populations should be given special management consideration. Furthermore, given Flynn et al.'s (2004) finding of low marten populations on Kuiu Island, we encourage further research of marten on that island to better assess implications of forest practices and possible management measures (i.e., state and federal trapping seasons, federal habitat management).

Page 3-167. We suggest adding text (underlined) to the statement about marten habitat: The larger-sized, old-growth forest habitats have the highest value for marten.

In order to clarify the marten harvest for Kuiu Island, that island's harvest should be separated from harvests for the rest of Unit 3.

Page 3-168, last sentence. This statement needs clarification. We contend that the lack of any "clear correlation" between marten population trends and habitat changes reflects a lack of effort to study this dynamic rather than indicating no relationship. Determinations of population trends require long-term data sets, and these have not been collected. Consequently, modeling habitat changes is the best that can be done at this time.

Brown Bears

Substantial new information is available on the importance of riparian habitats for maintaining sustainable and high brown bear populations (Flynn et al. 2007). This new information is consistent with and further supports maintaining no-cut buffers along salmon spawning streams. The implementation of the current brown bear buffer was left to field reviews without easily measurable criteria. Recent research results indicate that field evaluations for identifying important brown bear feeding areas may be difficult to complete and will yield ambiguous results. Given the lack of mapping for lands buffered for brown bear foraging, it is difficult to evaluate the effects of implementing the current S&G.

Based on current information, the following recommendations are made regarding no-cut, riparian buffers for brown bears:

Page 4-124, TLMP, IX Bear Habitat Management: We suggest modifying the brown bear S&G to provide for no-cut buffers along all salmon spawning streams based on work conducted by Flynn et al. (2007) and presented at the CSR Workshop. This could be incorporated into section IX. B., as follows (replacement text is underlined):

B. Provide for additional protection of important brown bear foraging sites in addition to the buffers already provided by the Riparian and Beach & Estuary Fringe Forest-wide Standards and Guidelines, and the old-growth Habitat and other natural setting Land Use Designations. Establish no-cut forested buffers, where available, of at least 500 feet from

the stream at sites where additional protective measures are needed to provide cover among brown bears while feeding, or between brown bears and humans. This no-cut buffer should be applied more broadly than the current S&G which is unclear in application. In high density brown bear areas (e.g., ABC islands), all segments that support spawning salmon are important for foraging during the late summer and these need careful evaluation for protection. On the mainland, where brown bear numbers are lower and patchy in distribution, the no-cut buffers may be particularly important.

Page 3-168. We suggest revising this section to more accurately describe the distribution of brown bears north of Frederick Sound. For example, while it is true that brown bears occur on islands north of Frederick Sound, this is not all-inclusive (i.e., Douglas, Lincoln, Shelter islands do not currently support brown bears).

Reference is made to brown bear hunting being allowed in Unit 4. However, this statement needs to be expanded to reflect the fact that brown bear hunting is allowed throughout other parts of Southeast Alaska. Additionally, we suggest adding a statement or two about guide/outfitter uses of brown bears on the Tongass as well as available viewing opportunities (i.e., Pack Creek, Anan Creek).

The section suggests that the late summer season is the most critical time period for brown bears. No references are provided despite many available publications by ADF&G (i.e., Titus, Flynn, others), USFS researchers (i.e., Gende) and others (i.e., Ben-David). Some of these publications along with recent ADF&G experience suggest that spring is also a critical time for brown bears across Southeast Alaska. The estuarine beach and certain riparian habitats are key for providing certain sedges and grasses as the first food of the season for bears. Therefore, conservation of the beach buffer remains an important attribute of the forest plan for this species.

Preliminary results from an interagency, cooperative mainland brown bear study suggest differences between brown bear ecology on the mainland (e.g., Misty Fjords, Bradfield Canal) versus the very high density populations that have been well-studied in Admiralty and Chichagof islands. We suggest that the less abundant and patchy distribution of estuarine and salmon spawning habitat in the mainland may be very important for maintaining sustainable brown bear populations in these areas. ADF&G staff will work with USFS staff to help interpret results from this ongoing work for better, long-term management of mainland brown bears.

Fish

Page 3-56: The information used to characterize sport fisheries and the data used to describe fishing effort and demand appears to be rather dated. We recommend that the most recent information available from the ADF&G Statewide Harvest Survey (SWHS) be used.

Page 3-52: The table of fish species important for sport, subsistence, and commercial fisheries does not include Dolly Varden char and cutthroat trout as being important for subsistence (Table 3.6-1). These should be included here.

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Alaska State Legislature
 Representative Peggy Wilson
 House District 2
 Putting Alaska's Families First



March 26, 2007

Forrest Cole
 Forest Supervisor
 Tongass National Forest
 Attn: Forest Plan Adjustment
 648 Mission Street
 Ketchikan, AK 99901

Dear Mr. Cole,

The 1997 TLMP Revision is hurting the communities of Southeast Alaska. Since the revision, Wrangell, my hometown, has suffered a 20 percent decline in population due to the suppression the timber industry has faced. The residents who have chosen to stay in Wrangell have faced layoffs and serious financial hardship because the resource that they have depended upon for their livelihood has been taken away from them.

The industry decline is due primarily to the drastic restriction of the timber supply from the Tongass. The markets for lumber have been very good over most of the last decade, and the timber production has never once exceeded the market demand.

The timber supply constraints take two forms:

1. Not enough timber volume is planned and prepared and,
2. Most of the timber sale volume that has been prepared is too costly to be profitable despite the good markets the industry has experienced.

The industry has studied their timber volume needs and reaffirmed those estimates with independent economists. The consensus is that about 360 million board feet of timber is needed from the Tongass to support a sustainable, fully-integrated manufacturing industry.

I have discovered four elements of the 1997 TLMP conservation strategy that are causing most of the high cost:

1. The old-growth reserve strategy, which sets-aside the lowest cost, highest value timber in every harvest area

H-A46

2. The marten and goshawk Standard and Guidelines which require that we leave 30% to 50% of the timber standing in every harvest unit in most of the previously developed areas
3. The beach-fringe buffers which were increased from 500-feet to 1,000-feet in 1997
4. The blanket application of class-3 (non-fish) stream buffers

Alternative 7 for the TLMP Amendment is the option that makes the most sense, and I urge you to adopt it. It is the only option that supplies the necessary volume and incorporates a conservation strategy that does not have the devastating economic consequences of the 1997 conservation strategy.

Sincerely,



Representative Peggy Wilson
Alaska House District 2

CC:

Mark Rey
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Undersecretary for Natural Resources
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Alaska State Legislature



John Harris
Speaker of the House

Tongass National Forest
Attention: Forest Plan Adjustment
648 Mission Street
Ketchikan, AK 99901

I am writing to express my concerns and provide comment on the Tongass Land Management Plan Amendment Draft EIS. There are several issues regarding the Tongass National Forest that are important to Alaska and her citizens that I wish to address in the following comments.

The timber industry was once a vital economic engine for the State of Alaska and Southeast Alaska in particular. It is no longer the predominant factor it once was, but due to a variety of circumstances, it is our concern in the Alaska Legislature that we explore all possible avenues as we move forward with our efforts to diversify Alaska's economy. A rejuvenated forest products industry in Southeast Alaska could play a significant role in our efforts along those lines.

In searching for a meaningful proposal to invigorate the timber industry within the Tongass, it is important to note that we do not endorse any reduction in the effort to maintain a viable and healthy forest for the many other uses engaged in by the citizens of Alaska, or of the rest of the nation. We encourage the Forest Service to continue important protections for fish and wildlife habitat, as well as the recreational opportunities those resources supply.

With the above general thoughts and points in mind, I would like to highlight a few more specific, salient points that I believe should be considered as this process moves forward. First, I would like to say that the Tongass Futures Roundtable discussions hosted by the Nature Conservancy and the National Forest Foundation should be allowed to move forward with some assurance that the solutions they are able to conceive may be incorporated into this plan. Although the comment period is ending it seems that a stipulation allowing for further adjustments would be in order considering the level of community participation in the Roundtable.

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Session: (Jan-May)
State Capitol, Room 208
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H-A47

The current allowable sales quantity (ASQ) appears to be sufficient considering the amount being accessed by existing timber operations. However, it would seem prudent to build some flexibility into the plan. It should be imperative to provide an alternative that has the greatest opportunity for the Forest Service to react to changing conditions. It may be for the time being that an ASQ of 200 to 300 mmbf is adequate, but if market conditions are such that a greater volume is necessary, then the plan ought to be open to increases in market demands.

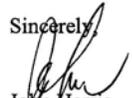
Careful consideration must also accompany strategies that are based on less than sound science. If there is incontrovertible evidence that conservation imperatives are necessary to sustain species within the forest then accommodations should be made for those strategies that will provide viable options for sustaining and recovering such species. However, the Forest Service and the Congress should seek legislative and regulatory parameters that bar the use of strategies that hamper sound economic and recreational uses by those who oppose multiple uses of our forest for philosophical reasons.

It appears there are recognized conservation needs resulting from some uses practiced in the past. It is my understanding that there may be cases where corrective measures to restore habitat to functionally productive states provides alternative economic opportunities for contractors. If that is the case, the plan should make use of those companies that are actively engaged in the forest products industry to provide man power and machinery to such recovery efforts. Such a strategy would enhance the economic viability of our existing logging companies.

I realize this is a major planning process with many intricate relationships between the forest itself and the various user groups among the public. That being the case, it seems the best interests of most people would be accommodated with a plan that supplied an adequate supply of timber to maintain current operations while holding the door open for changing market demands which may increase or decrease. The plan should carefully structure any use or activity so as to provide the best options to sustain the forest habitat and associated fish and wildlife populations. Last of all, the plan should accommodate reasonable economic and recreational activities as closely as possible to a multiple use framework.

I would like to thank the Forest Service for this opportunity to express my views on this important subject to Alaska. I hope my comments offer some constructive views as you work toward formulating an acceptable working plan for the Tongass. If you have any questions or would like to discuss further any of the comments reflected in this letter, please do not hesitate to contact my office.

Sincerely,


John Harris
Speaker of the House

ALASKA STATE LEGISLATURE



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SENATOR BERT K. STEDMAN

April 30, 2007

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

Dear Supervisor Cole:

I appreciate the opportunity to comment on the draft Tongass National Forest Plan Adjustment.

It's obvious that your team put a great deal of work into this adjustment to bring it into compliance with recent court orders. I have comments I would like you to consider in finalizing the plan.

For over a century, the United States Forest Service has managed our national forests and grasslands to provide for multiple uses. The Tongass National Forest provides recreational, mining, logging, hunting, and tourism opportunities, as well as providing the spawning grounds for one of the best fisheries in the country. It is important that all of these uses receive equal consideration under the new management plan.

In recent years, timber has not received this equal consideration. Since long before statehood, timber has been a mainstay of the Southeast economy, providing steady, well-paying and, most importantly, year-round jobs to many residents. In addition to the good jobs, communities benefited from the shared revenue generated by timber sales.

There are a dozen sawmills operating in Southeast employing over 150 residents and providing significant stimulus to the region's economy.

DISTRICT A

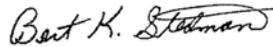
Ketchikan • Sitka • Petersburg • Wrangell
Pelican • Elfin Cove • Port Alexander • Saxman • Myers Chuck • Thorne Bay • Coffman Cove • Hollis

April 5, 2007
Page 2

However, they are woefully under capacity. In order for these mills to survive and compete effectively on the world market, a stable and sufficient timber supply is vital.

I realize that you must balance many interests as you move carefully towards an acceptable management plan. I firmly believe that timber harvesting can coexist with other activities in the Tongass and ask that you recognize the great benefits of a healthy wood products industry in Southeast when setting the final timber harvest levels.

Best regards,



Bert Stedman

H-A49

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

994
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COPY

SOUTHEAST REGION



April 25, 2007

Tongass National Forest
Attn: Forest Plan Adjustment
648 Mission Street
Ketchikan, AK 99901

RE: Corridor Omissions from the Tongass Land and Resource Management Plan

Dear Plan Preparers,

The Draft Environmental Impact Statement for the Tongass Land and Resource Management Plan is incomplete. It does not include eight Essential State Transportation and Utility Corridors listed in the Southeast Alaska Transportation Plan. Omitting these corridors is not an acceptable outcome to the State of Alaska.

Background

In 2004, the Southeast Alaska Transportation Plan was adopted as a component of the Alaska Statewide Transportation Plan. It identifies a total of 34 Essential Transportation and Utility Corridors that must be reserved and protected to meet future transportation needs. The Executive Summary of the plan specifically requests that the Forest Service incorporate each corridor into the Tongass Land and Resource Management Plan.

Affected Environment discussion

The text of pages 3-229 and 3-230 fails to explain how only a subset of the 34 corridors were incorporated into the Tongass Land and Resource Management Plan. Apparently, the Forest Service is confused because a subsequent Memorandum of Understanding did not include all 34 corridors.

Remedy

Revise the Tongass Land and Resource Management Plan so that the management prescription includes the Transportation and Utility overlay for each of the 34 corridors. Depict all 34 corridors on alternative maps. Revise the discussion of Affected

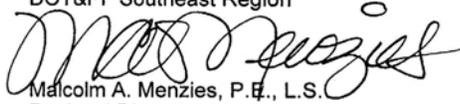
April 25, 2007

Environment to specify the preeminence of the entire set of 34 corridors with respect to the subsequent Memorandum of Understanding.

In conclusion, please revise the Tongass Land and Resource Management Plan per the above.

Thank you for the opportunity to comment.

Sincerely,
DOT&PF Southeast Region



Malcolm A. Menzies, P.E., L.S.
Regional Director

cc: Andy Hughes, Regional Planning Chief

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APPENDIX A. ESSENTIAL STATE TRANSPORTATION AND UTILITY CORRIDORS

Essential Transportation and Utility Corridors

The Southeast Alaska Transportation Plan (SATP) identifies 34 essential highway and utility corridors to be reserved and protected to meet future transportation needs. These corridors are required to connect communities to the regional transportation system and to establish a regional power grid. The state requests that the Forest Service incorporate all of these highway and utility corridors into the Tongass Land Management Plan and reserve and protect these corridors for these purposes. Adoption of this plan is an official expression of state policy that no other action by any other party should be taken (such as designations of wilderness areas) that would interfere with public use of any of the mapped corridors. In addition, the state requests that the Forest Service contribute to state efforts by improving and connecting forest roads that are located within essential road corridors identified by the state. Corridors of particular interest are Kake - Petersburg, Kake - Totem Bay, and North Prince of Wales Island Road - Red Bay.

In a region as rugged as Southeast Alaska, valleys and mountain passes represent invaluable corridors for highway routes and utility transmission lines. Maps 16 to 23 identify the transportation and utility corridors considered essential to the state. These corridors are identified below.

Corridor Descriptions

Lynn Canal Corridors — Juneau to Haines and Skagway

1. From Echo Cove northerly along the shore of Berners Bay and Lynn Canal to Skagway with a ferry terminal near the mouth of the Katzhin River.
2. From Skagway southerly along Taiya Inlet to Taiya Point, then northwesterly along Lutak Inlet to Haines.
3. From Haines across the Chilkat River/Inlet at or above Pyramid Island, then southerly along the west shore of Lynn Canal to a suitable ferry terminal site on William Henry Bay.

Taku River Corridors

4. From Thane Road southeasterly along Gastineau Channel to Bishop Point, then northeasterly along Taku Inlet to a suitable bridge crossing at Grizzly Bar.
5. From Jaw Point northeasterly along the southeast shore of Taku Inlet and River to the Canada border to provide ferry crossing options.

Mansfield Peninsula Crossing, Admiralty Island, Corridor

6. From Young Bay to Greens Creek, Hawk Inlet.

Chichagof Island Corridors

7. From a suitable ferry terminal site on Whitestone Harbor to Hoonah.
8. From Hoonah to a suitable ferry terminal site on Tenakee Inlet.
9. Pelican cut-off road from Tenakee Inlet Road to Pelican.
10. Kadashan Road from a suitable ferry terminal site on Tenakee Inlet southeasterly along the Kadashan River to a suitable ferry terminal site on the north shore of Peril Strait across from Rodman Bay.

Baranof Island Corridors

11. From the end of Halibut Point Road to a suitable ferry terminal site on Rodman Bay.
12. From the end of Sawmill Creek Road to a suitable ferry terminal site on Warm Springs Bay.

Kuiu Island Corridor

13. From a suitable ferry terminal site on Security Bay to a suitable ferry terminal site on Reid Bay for crossing Sumner Strait to Labouchere Bay on Prince of Wales Island.

Kupreanof Island Corridors

14. From Kake to a suitable ferry terminal site in Kupreanof for crossing the Wrangell Narrows.
15. From Kake to a suitable ferry terminal site in Totem Bay for crossing Sumner Strait to Red Bay on Prince of Wales Island.

Prince of Wales Island Corridors

16. North Prince of Wales Island Road from the intersection with Coffman Cove Road to a suitable ferry terminal site in the vicinity of Red Bay on Sumner Strait.

17. Neck Lake Road from North Prince of Wales Island Road easterly along Neck Lake to Wale Pass.
18. Cavern Lake Road from Wale Pass westerly to North Prince of Wales Island Road.
19. Caulder Road from North Prince of Wales Island Road near El Capitan northwesterly to a suitable ferry terminal site on Labouchere Bay.
20. North Prince of Wales Island Road north, then west from Cavern Lake Road to a suitable ferry terminal location on Labouchere Bay.
21. Sandy Beach Road from Thorne Bay north to Ratz Harbor, then along the east shore of Prince of Wales Island to Coffman Cove.

Mid-Region Access Corridors

22. Stikine Delta Causeway to South Mitkof Island to Rynda Island to Kadin Island to mainland, near Green Point, then along the eastern side of Eastern Passage to a bridge crossing point at "the Narrows."
23. Stikine River Corridor (according to the Alaska National Interest Lands Conservation Act [ANILCA], Section 1113).
24. A bridge crossing Eastern Passage at the Narrows between Wrangell Island and the mainland.
25. East side of Eastern Passage from the Narrows south to Bradfield Canal, then east along the north side of Bradfield Canal to the Bradfield River at the head of the Bradfield Canal.
26. Bradfield Road from the head of the Bradfield Canal along the North Fork of the Bradfield River to the Canada border at the Craig River.
27. From the head of Bradfield Canal along the south side of the Bradfield Canal west to Duck Point (or other suitable ferry terminal site on the Bradfield Canal).

Wrangell Island Corridors

28. From Zimovia Highway easterly along McCormack Creek, to Eastern Passage, then southerly to a suitable ferry terminal site on Fools Inlet.
29. From Zimovia Highway easterly along McCormack Creek to Eastern Passage, then to the Narrows bridge crossing site.

Cleveland Peninsula Corridors

30. Upper Cleveland Peninsula crossing from Bradfield Canal southeasterly along Eagle River to Point Lees to a suitable ferry terminal on the Behm Canal.

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Lower Cleveland Peninsula crossings:

31. From a suitable ferry terminal site on Santa Anna Bay southeasterly to a suitable ferry terminal site on Spacious Bay.
32. From a suitable ferry terminal site on Frosty Bay south to Santa Anna Bay, then southeasterly to Spacious Bay, then south to Port Stewart and along the southwest shore of Port Stewart to a suitable ferry terminal site on Helm Bay.

Revillagigedo Island Corridors

33. From a suitable ferry terminal site at or near Claude Point, then southwesterly via Benrer and Klam creeks to Shrimp Bay, then easterly to Cedar Lake and Orchard Creek, then southeasterly along Orchard Creek to a south branch extending toward Carroll Creek, then south to Carroll Inlet, then south along the west shore of Carroll Inlet to Shelter Cove, then westerly to the head of George Inlet to Ward Lake Road.
34. From the head of George Inlet south along the west shore of George Inlet to the end of South Tongass Highway.

H-A52

