

Appendix 3

Supplemental Information to the FEIS

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Introduction

The intention of this appendix is to present the Decision Maker with the most up-to-date information concerning this project. Included are the changes that have occurred between the earlier analysis of the Action Alternatives used in the Central Kupreanof Final Environmental Impact Statement (FEIS) and the recent analysis of the Selected Alternative in the Record of Decision (ROD), which is a modification of Action Alternative 3.

Due to the delayed release of the FEIS, some resource information became outdated; in addition new analysis was conducted to supplement the wildlife portion of the FEIS. Policy changes and changes in agency direction have also occurred between the printing of the FEIS and the completion of this Record of Decision (ROD).

All activities proposed in Modified Alternative 3 are analyzed by all resources in their associated resource reports and are available in the project record upon request at the Petersburg Ranger District.

New Information

Council of Environmental Quality (CEQ) regulations state that agencies shall prepare supplements to either draft or final environmental impact statements if the agency makes substantial changes in the proposed action that are relevant to environmental concerns; or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts (CEQ 1502.9).

The proposed action for the project has not changed and the new analysis included in this appendix is related to the Interagency Habitat Capability Model (deer model). While the deer model does represent new analysis, the outcome supports the analysis presented in the DEIS and FEIS. The deer model was run for all Action Alternatives presented in the FEIS and for Modified Alternative 3. The results are summarized in the wildlife section of this appendix. Further information regarding the deer model is in the project record.

The new information regarding wildlife includes:

- results of running the deer model for all Action Alternatives and modified Alternative 3;
- comparison of effects of the Deer Model with the POG analysis used in the FEIS;
- updates to the Sensitive Species List.

Changes in Policy/Agency Direction

On May 28, 2009, the USDA Secretary reserved decision making authority over construction and reconstruction of roads and the cutting, sale or removal of timber in inventoried roadless area in a memorandum that stated:

“The authority to approve road construction and timber harvest in Inventoried Roadless Areas is reserved to the Secretary of Agriculture (Secretary’s Memorandum 1042-154).”

The Secretary’s Memorandum is intended to ensure the careful consideration of activities in Inventoried Roadless Areas while long term roadless policy is developed.

In the interim the Record of Decision for this project has been completed using the most current direction provided.

- The FEIS addresses the issue of IRAs using the 2008 Roadless Inventory. Additionally, as interim direction is developed, this appendix addresses the issue of IRAs by comparing all Action Alternatives, Modified Alternative 3, using the 2001 Roadless Rule Inventory.

Updated Information

Only resources that had updated information to provide, such as updated harvest dates due to the delay in printing and distribution of the FEIS and the completion of the ROD, were included in this appendix. The effects on all resources for the Action Alternatives are disclosed in the FEIS and the associated resource reports. All resources also analyzed for the effects of Modified Alternative 3; these effects are also detailed in the individual resource reports that are located in the project record.

All information contained in this appendix is within the scope of effects presented to the public for comment in the DEIS. New information includes:

- updated Tongass Export Policy;
- changes in mill infrastructure in Southeast Alaska;
- new quarterly updates to the tools used in analyzing and comparing the economics of a timber sale;
- updated aquatics numbers and implementation date (2011 rather than 2009) based on the harvest units and associated road construction chosen for Modified Alternative 3;
- new numbers of timber acres under litigation and harvest levels for the 2010 fiscal year;
- revised Response to Comments section for any comments that needed updating between the printing of the FEIS in October of 2009 and the completion of this ROD.

FEIS Chapter 3 Supplemental Information by Resource

Issue 1-Timber Supply/Sale Economics

Introduction

This section updates and serves as a supplement to the Timber Supply/Sale Economics section in Chapter 3 of the FEIS (pgs 3-10 to 3-24).

NEPA Economic Analysis Tool Residual Value Updates and Analysis of the Modified Alternative

The NEPA Economic Analysis Tool Residual Value (NEAT_R version 2.16) is the Forest Service, Alaska Region, financial efficiency and economic analysis program for use in timber planning. This program uses the same logging costs and manufacturing costs developed for the Alaska Region timber sale appraisal program. Costs reflect production studies and data collected from timber sale purchasers in Southeast Alaska. Values generated by NEAT_R are estimates which allow a decision maker an opportunity to compare timber economics across all alternatives at a specific point in time. Timber economics at the time of actual offering will change during sale packaging as boundaries tend to change to conform to localized terrain features and as more accurate cruise data, specific to the package, become available.

If any modification of an established action alternative is to be analyzed, it becomes necessary to treat these modifications as a new and separate “alternative” in the NEAT_R program to assist forest planners in comparing those changes with the original action alternatives. Modified Alternative 3 analyzes the economics of the project after dropping those units and portions of units located within Inventoried Roadless Areas, dropping units due to the high cost of helicopter yarding, and dropping units located VCU 0436 or the headwaters of the Castle River (also located in an IRA). In addition updates to the program were added to reflect current export policy and mill infrastructure in the region.

The NEAT_R analysis for the Central Kupreanof project FEIS (beginning June 2007 and ending Feb 2010) applied “Lower 48” values to approximate the amount of Interstate Shipment of unprocessed hemlock and spruce permitted under the March 2007 Limited Interstate Shipment Policy. New updates to the NEAT_R program applies “Foreign Market” values to approximate the amount of Foreign Market export permitted under the November 2009 Limited Export Policy (memo File Code 2420-1-2/2430 November 10, 2009).

NEAT_R version 2.16 also applies 2nd Quarterly 2009 updates (February 11, 2009) to pond log value coefficients, wood defect coefficients, logs per tree

coefficients, and updates to the logging cost calculations for Base Year 2008 (NEAT_R 2Q2009 Updates Release Notes.) The NEAT_R update is likely to result in volume differences from older versions of NEAT_R because it uses the new average tree volumes by species, diameter class, and district from the Historic Cruise Database. The Historic Cruise Database is updated annually by adding log data from new cruises and deleting log data from the oldest cruises for each District. Eventually all of the oldest cruises will be deleted because they are not comparable to new cruises (cruising to 32 foot logs from 16 foot logs, calculated utility volume, and the addition of Special Mill log grade 6).

These updates to the NEAT_R program utilized in the analysis of Modified Alternative 3 has had a subtle increase on the overall estimated volume across all alternatives (see Table A3-4 and Table A3-5 Timber Financial Efficiency Analysis below). Conversely, indicated value, indicated bid rate, stump-to-mill cost, and estimated project employment and income values in Alaska are reflected by the new volume estimates from earlier analysis used in the FEIS. (See Tables A3-6, and A3-7).

Forest Products Employment

Data represented in the FEIS show employment figures through 2007. Updates have occurred to forest products employment data showing a continual downward trend in the number of logging, sawmill, and related industry jobs across Southeast, Alaska from 2002 to 2009 (see Table A3-1).

**Table A3-1. Employment in the Wood Products Industry in Southeast Alaska, 2002-2009
(FEIS Pg. 3-12)**

Year¹	Tongass Logging²	Tongass Sawmill	Tongass-Related Employment³	Other Sawmill	Other Logging	Total Industry Employment
2002	63	110	173	40	299	512
2003	108	91	199	64	298	561
2004	82	95	177	53	220	450
2005	88	96	184	52	263	499
2006	81	77	158	46	217	421
2007	44	70	114	63	225	402
2008	52	70	122	24	118	265
2009	48	39	87	19	110	216

Source: Alaska Department of Labor, Kilborn et al. (2004), Brackley et al. (2006), Brackley and Crone (2009), Alexander and Parrent (2010), and Parrent (2010). Data on file with: Regional Economist, Ecosystems Planning, USDA Forest Service, PO Box 21628, Juneau, AK 99802-1628

¹Reported in calendar years.

²Tongass National Forest logging estimated based on the ratio of Tongass timber harvest to total timber harvest in Southeast Alaska. Through 2001, it was assumed that all sawmill and pulp mill employment is dependent upon Tongass National Forest timber supply. Beginning in 2002, this assumption no longer held. Data from Kilborn et al. (2004), Brackley et al. (2006), Brackley and Crone (2009), Alexander and Parrent (2010), and Parrent (2010) show that Federal timber supplied 73 percent of the wood sawn in Southeast Alaska mills in 2002, 59 percent in 2003, 64 percent in 2004, 65 percent in 2005, 62 percent in 2006, 53 percent in 2007, 75 percent in 2008, and 66 percent in 2009.

³Tongass National Forest sawmill employment from 2002 through 2009 is estimated based on sawmill employment numbers and the ratio of sources of wood (Federal versus the total) reported by Kilborn et al. (2004), Brackley et al. (2006), Brackley and Crone (2009), Alexander and Parrent (2010), and Parrent (2010).

Road Access and Log Transfer Facility (FEIS pg 3-13)

Modified Alternative 3 will use the existing road system and the existing Little Hamilton LTF. Approximately 38 miles of NFS roads exist in Modified Alternative 3 project area. Table A3-2 shows the amount of existing and proposed roads by alternative within the project area represented in the FEIS compared to Modified Alternative 3.

**Table A3-2. Existing and Proposed Miles by Alternative within the Project Area
(FEIS Pg. 3-14)**

	Miles by Alternative				
	1	2	3	4	Modified Alternative 3
Existing NFS Road	79	79	79	79	38.0
Proposed NFS Road	0	7.3	25.1	0	1.8
Proposed NFS Road Reconstruction	0	2.9	9.1	2.6	1.0
Proposed Temporary Road	0	3.9	6.1	2.2	2.3

Source: Tongass GIS 2010

**Final Destination
of Tow and
Logging Systems
(FEIS Pg. 3-14)**

Quarterly updates to the NEAT_R program reflect changes in logging systems and barge cost per \$/MBF. The average cost of shovel yarding across all alternatives using NEAT_R version 2.16 (August 2010), which adds updates concerning Tongass Export Policy, is \$173/MBF, an 23\$/MBF increase from NEAT_R analysis used in the FEIS. The average cost of cable yarding all alternatives is \$249/MBF, which is a \$38/MBF decrease from earlier NEAT_R analysis (June 2008 output). Modified Alternative 3 utilizes only ground-based cable and shovel yarding systems. All remaining helicopter units and settings not located in IRAs were dropped from the project area due to the high cost associated with this logging system, specifically settings and Units 5, 203, 208, and 901.

Since the publication of the FEIS, there have been changes to the Southeast Alaska mill infrastructure in proximity to the project area. The original Central Kupreanof NEAT_R economic analysis was designed with an appraisal point destination to the Silver Bay mill located on Wrangell Island. Currently, the Silver Bay mill is dismantling their operation and is no longer viable. The log tow was recalculated for the Viking Mill located in Klawock on Prince of Wales Island. The round-trip-tow distance increased substantially which significantly affects the stump-to-mill cost across all alternatives. On average, the barging costs were estimated to be \$99/MBF, a \$19/MBF increase over previous analysis.

Retention of lower-value old growth also improves economics on a stand-by-stand basis where it is safe to do so. The prescription changed from clearcut to a two aged system, incorporating 30 percent retention on 578 acres. The prescription changed from clearcut to incorporate 15 percent retention on 39 acres within the project area. Table A3-3 displays the acres by yarding system for each of the action alternatives and changes that have occurred in Modified Alternative 3.

Table A3-3. Yarding System and Harvest Method (Acres) (FEIS Pg. 3-15)

Yarding System - Harvest Method	Alternatives				
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alternative
Cable - Clearcut	0	981	1,638	567	154
Cable - Clearcut with 10% Retention	0	90	90	26	39
Cable - Clearcut with 15% Retention	0	0	0	0	39
Cable - Clearcut With Reserves (30% Retention)	0	0	0	0	80
Shovel - Clearcut	0	934	1,373	721	519
Shovel - Clearcut with 10% Retention	0	26	26	13	0
Shovel - Clearcut with Reserves (30% Retention)	0	0	0	0	498
Shovel - Clearcut with Reserves (50% Retention)	0	33	0	0	0
Helicopter - Single Tree Selection (60% Retention)	0	442	520	0	0

Export Policy

Direction in export of timber sale volume has changed since the FEIS has been printed.

A time limited shipment of unprocessed hemlock and Sitka spruce logs approved on August 8, 2008 by the Regional Forester has been extended (memo File Code 2420-1-2/2430, November 10, 2009). Under direction of the Time Limited Export Policy, a purchaser may request approval to ship unprocessed timber outside of Alaska to the most advantageous markets in the Lower 48, including foreign markets. Up to 50 percent of the total sale sawlog volume (sum of all species) of unprocessed hemlock and Sitka spruce logs may be exported. A purchaser may also continue to request a permit to export unprocessed cedar to domestic and foreign markets. Timber volume, however, is not 'pre-authorized' for export. If a purchaser desires to ship timber to domestic (Lower 48) destinations outside the state of Alaska or export timber overseas, they are required to apply for a permit from the Regional Forester.

This authorization was put in place to offset the dramatic increase in costs, coupled with a decline in orders and selling values experienced by Alaska's timber industry at that time. Export permits will be good for the life of the contract. The Region will monitor the market conditions on an annual basis and adjust the allowable export percentage downward as domestic prices improve. These modifications will allow timber sales to have a far greater chance of appraising positive, while also allowing local timber purchasers and manufacturers options to stay in business and be poised to commence full operations when the market improves. Sales from the Central Kupreanof project may be offered for sale under this export policy. This project may be implemented over a period of several years; during which time market scenarios are subject to considerable change.

Timber Financial Efficiency Analysis and Opportunities to Improve Economics (FEIS pgs 3-16 - 3-24)

Modified Alternative 3 was designed to maximize economic efficiency while offering the most flexibility by selecting harvest units adjacent to the existing Kake road system. Units requiring extensive road building to gain access were dropped from consideration. Units requiring helicopter harvesting system were also dropped. Economics were further improved by adding 30 percent retention to lower value trees to approximately 578 acres within the project area. Dropping road segments and expensive logging systems has improved the overall economics, but lengthening the tow to Klawock has raised the overall logging cost across all alternatives. Table A3-4 shows the timber financial differences that have occurred between the action alternatives analyzed in the FEIS, and Modified Alternative 3.

The overall indicated rate per MBF of Modified Alternative 3 remains negative, Modified Alternative 3 will provide enough flexibility for small sales and Microsales that typically have improved economics based on lack of barge cost equating to short hauls to local small mill operations most likely to the community of Kake, and a localized workforce from Kake. Interest to purchase small sales and Microsales exist within the community of Kake. Microsales will be allowed along existing NFS roads 6040, 6314, 6326, 6328, 6334, 6336, and 6339 contained within the project area.

Larger offerings may be offered in the future to meet the timber demands of the region as economics improve. Potential small sales however, would not change the project's estimated total volume, number of jobs, direct income, or logging systems by harvest method. Further explanation of the differences in indicated bid rates among the action alternatives can be found in Chapter 3 of the FEIS in the Timber Financial Efficiency Analysis section.

Basal Area and Diameter Class Values in NEAT_R

Updates to the NEAT_R program occur each year which incorporate the latest volume estimates per diameter class as determined by the most recent cruise information across the Tongass. Recent updates to NEAT_R also include the incorporation of Special Mill logs, a grade assigned to higher value trees due to less seen defect, which equates to higher volume estimates and improves

selling value. Overall estimated volume per alternative and per species have increased with the incorporation of these updates to the program, having changed the basal area per diameter class values of some diameter classes by tenths and hundredths of a decimal point (Table A3-4). The variations in basal area values will have a subtle effect on estimated volume (see Table A3-5), indicated value, indicated bid rate, stump-to-mill cost, and estimated project employment and income in Alaska (See Tables A3-6 and A3-7).

Table A3-4. Timber Financial Efficiency Analysis³ (FEIS pg. 3-16)

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alternative 3
Volume - Sawlog (MBF)					
Sitka Spruce	0	7,085	10,375	3,799	3,682
Hemlock	0	27,743	42,601	17,213	14,590
Western redcedar	0	154	239	97	98
Alaska Yellow-Cedar	0	7,327	10,756	3,791	3,907
Total Sawlog Volume (MBF)	0	42,310	63,971	25,080	22,278
Pond Log Value \$/MBF¹	\$0	\$344	\$341	\$336	\$336
Stump to Mill Cost \$/MBF	\$0	\$420	\$458	\$398	\$387
Indicated Value² (\$ millions)	\$0	(\$3.2)	(\$7.5)	(\$1.6)	(\$1.1)
Indicated Rate \$/MBF	\$0.00	(\$75.99)	(\$116.63)	(\$62.44)	(\$51.17)

¹ Numbers may not add up to the totals shown due to rounding.

² () indicates negative value

³ NEAT_R v2.16 analysis 2010 output

Table A3-5. Estimated Volume in MMBF¹ (FEIS Pg. 3-17)

Estimated Volume	Alternatives				
	Alt. 1	Alt.2	Alt. 3	Alt. 4	Selected Alternative
Sawlog	0	42.3	64.0	25.0	22.3
Utility	0	7.7	11.8	4.7	4.0
Total	0	50.0	75.8	29.8	26.3

¹ NEAT_R v2.16 analysis 2010 output

Table A3-6. Timber Financial Efficiency Analysis (if public work funds cover NFS road construction costs)¹ (FEIS Pg. 3-19)

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alternative 3
Stump to Mill Cost \$/MBF	\$0	\$418	\$432	\$398	\$386
Indicated Value (\$ millions) ²	\$0	(\$3.1)	(\$5.8)	(\$1.6)	(\$1.1)
Indicated Rate \$/MBF	\$0	(\$73.85)	(\$90.37)	(\$62.44)	(\$50.35)

¹ NEAT_R v2.16 analysis 2010 output

² () indicates negative value

Projected Employment and Income

The number of sawmill jobs and related income is provided as a range in Table A3-7 to reflect the variety of options the timber purchaser has under the Tongass Export Policy. The purchaser may elect to process all the sawlogs locally or to ship up to 50 percent of the total sawlog volume (sum of all species) of unprocessed Sitka spruce and western hemlock of the sale to domestic and foreign markets outside Alaska. Purchasers may also choose to apply for a permit to export all Alaska yellow cedar and western red cedar from the sale. The upper range of the figure represents the number of jobs if a purchaser chooses to process logs locally. The lower range represents the number of jobs if a purchaser exports 50 percent of the total sawlog volume from the project. This analysis only provides percent comparison across alternatives of the project area as a whole, and does not take into consideration small sales and Microsales generated from the project area.

Table A3-7. Estimated Project Employment and Income in Alaska⁴ (FEIS Pg. 3-20)

Employment ¹	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alternative 3
Logging ²	0	98	148	58	51
Sawmills ³	0	70-140	106-212	42-83	58-115
Direct Jobs	0	168-238	254-360	99-141	88-125
Direct Income (\$ millions)	0	\$6.5-8.9	\$9.8-13.5	\$3.8-5.3	\$3.4-4.7

¹ Number of Job years

² Annualized jobs per MMBF based on net sawlog volume sold.

³ Sawmill jobs range based on 50 percent of net volume shipped to markets outside Alaska to all sawlogs processed in Alaska

⁴ NEAT_R v2.16 analysis 2010 output

Table A3-8. Comparison of Alternatives (FEIS Pg. 3-23)

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alternative 3 ¹
Indicated Bid ² Value/MBF	0	(\$75.99)	(\$116.63)	(\$62.44)	(\$51.17)
Stump to Mill Cost \$/MBF	0	\$420	\$458	\$398	\$387
Road Costs/MBF	0	\$18	\$48	\$17	\$27
Temp Road Miles	0	3.9	6.1	2.2	2.3
System Road Miles	0	7.3	25.1	0	1.8
Helicopter Sawlog Volume MMBF ¹	0	3.7	4.8	0	0
Ground Based Sawlog Volume MMBF	0	38.7	59.1	25.0	22.3

¹ NEAT_R v2.16 analysis 2010 output

² () indicates negative value

Summary of Changes from the FEIS

Modified Alternative 3

Modified Alternative 3 was designed to maximize timber harvest opportunities of the project area located outside of all IRAs while minimizing road building. This alternative selects harvest units adjacent to the existing road system from Modified Alternative 3. Units that required longer segments of new NFS

roadbuilding were dropped. Short NFS road extensions and short temporary road segments along with approximately one mile of road reconstruction will be necessary to facilitate access (See Figure R-2). Modified Alternative 3 will:

- Designate approximately 26.3 MMBF to meet the Purpose and Need for this project from approximately 1,329 acres.
- Proposes approximately 4.1 miles of new road construction. New road construction miles would be 44 percent NFS roads (1.8 miles) and 56 percent temporary roads (2.3 miles). Approximately 1 mile of road reconstruction will be necessary.
- Utilizes shovel and cable yarding systems (clearcut and clearcut with reserves 30 percent).
- Has an indicated bid value of (-51.17/MBF).
- Has an estimated logging and transportation cost of \$387/MBF.
- Provides an estimated 88-125 direct annualized jobs.

A comparison of unit specific and road activity changes between Modified Alternative 3 (Selected Alternative) for the ROD and Action Alternative 3 of the FEIS see Figure R-2 in the ROD and Figure 3-3 of the FEIS.

Issue 2-Inventoried Roadless Areas

The Roadless analysis in the Central Kupreanof FEIS is based on the 2008 Roadless Inventory. The purpose of this section is to provide the same information as presented in the FEIS concerning roadless areas using the roadless inventory of the 2001 Roadless Rule to compare all Action Alternatives and Modified Alternative 3. The intention is to provide a comparison of each roadless area until long term policy is developed.

One of the major differences between the 2001 and 2008 roadless inventories, in relation to this project, other than slight differences in their boundaries (see Figure R-2) is the implementation of the Shamrock Record of Decision. Activities associated with this decision were not considered in the 2001 Roadless Rule Inventory but were included as part of the 2008 Roadless Inventory. The decision cleared 38 MMBF of timber harvest and 33.8 miles of road.

Other differences between the 2001 Roadless Rule and 2008 Roadless Inventories in relation to this project are:

- acreage differences between each of the three Inventoried Roadless Areas;
- total number of acres harvested;
- total acres affected.

Table A3-9. Comparison of Inventoried Roadless Areas using the 2001 Roadless Rule Inventory and the 2008 Roadless Inventory

Inventoried Roadless Area (IRA)	Total Acres 2001 Roadless Rule Inventory	Total Acres 2008 Roadless Inventory	Total Proposed Acres of Harvest 2001 Roadless Rule Inventory	Total Proposed Acres of Harvest 2008 Roadless Inventory	Total Acres that would be Affected (including buffers) 2001 Roadless Rule Inventory	Total Acres that would be Affected (including buffers) 2008 Roadless Inventory
North Kupreanof IRA	114,637	99,566	111	242	490	715
South Kupreanof IRA	216,774	213,122	2,975	1,525	15,353	6,257
Rocky Pass IRA	78,148	79,103	10	6	163	216
TOTALS	409,559	391,791	3,096	1,773	16,006	7,188

Direct, Indirect and Cumulative Effects using the 2001 Roadless Rule Inventory

(Addition to FEIS pgs 3-30 to 3-35)

Effects Common to all Action Alternatives

Temporary roads and NFS roads were given the same buffer (1,200 feet) and are similarly treated in this analysis although temporary and closed system roads may have a lower degree of influence on wildlife, watershed and recreation resources after the timber harvest is complete. Temporary roads in particular will continue to have a diminishing effect on inventoried roadless areas over time as natural revegetation and water drainage are established.

In all action alternatives, the majority of effect to the IRA size is created by the 600-foot buffer and 1,200-foot buffer around harvest units and roads. These buffers account for the main indirect effects to IRAs.

While the overall roadless characteristic of each inventoried roadless area would remain unchanged, individually identified roadless values would either remain unchanged or be minimally influenced by the proposed activities. Soil, water and air quality would remain unchanged. There would be no effect to public drinking water. Each roadless area would still be able to support a diversity of plant and animal communities and provide habitat for sensitive species (no threatened or endangered species exist within the project area). While there may be some change, all areas would continue to provide for a variety of recreation experiences including primitive, semi-primitive non-motorized and semi-primitive motorized classes. All inventoried roadless areas would still provide large areas in natural settings that could serve as reference landscapes. While there would be limited visible changes to the inventoried roadless areas, overall scenic qualities would not change. No traditional or cultural properties or sacred sites would be affected by the proposed activities.

In all alternatives, the North Kupreanof, South Kupreanof, and Rocky Pass Inventoried Roadless Areas would remain greater than 5,000 acres in size and eligible for Wilderness consideration in subsequent forest planning.

Comparison of Alternatives

A greater number of acres would be affected under the 2001 Roadless Rule inventory than the 2008 Roadless Inventory. The direct effects of all alternatives would not change from the FEIS analysis, and the cumulative effects of the 2001 Roadless Rule inventory differs by 0.1 percent from the 2008 Roadless Inventory.

The indirect effects for each Action Alternative are greater using the 2001 Roadless Rule inventory due to the 600' and 1200' foot buffers (these were applied to the analysis in the FEIS as well) applied around harvest units and roads. These overlap IRAs and influence the indirect effects for each IRA.

Alternatives 2 and 3 include timber harvest within the boundaries of the North Kupreanof, South Kupreanof, and Rocky Pass IRAs. The predominant effects would be to the South Kupreanof IRA with approximately 866 acres of timber

harvest and one mile of new NFS road in Alternative 2 and the harvest of 1,842 acres and 15 miles of road construction in Alternative 3. In comparison, the North Kupreanof IRA acres of harvest would vary from 25 acres in Alternative 2 to 86 acres in Alternative 3. No new roads are proposed within the North Kupreanof or Rocky Pass IRAs. Both Alternatives 2 and 3 propose 5 acres of timber harvest within the Rocky Pass IRA.

Of the three action alternatives, Alternative 3 would affect the most roadless acres. Up to 9,789 acres would be treated in the South Kupreanof IRA. The affected acres represent about five percent of the South Kupreanof IRA.

Alternative 4 avoids timber harvest and road building within the boundary of IRAs. However, the application of the 600 feet and 1,200 feet around harvest units and roads would overlap the IRA boundaries. Alternative 4 affects the least total roadless acres of any action alternative.

Table's 3A-10 through 3A-12 below display the effects to IRAs by Alternative.

Alternative 1

This alternative does not propose road construction or timber harvest and would have no effect on any inventoried roadless areas.

Alternative 2

In the North Kupreanof IRA, approximately 25 acres of timber harvest is proposed, with no NFS or temporary road construction. In Unit 216 approximately 32 acres of harvest by single tree selection and helicopter yarding is proposed. In Units 215 and 903, harvest is proposed on approximately 58 acres by clearcut methods and conventional yarding. Approximately 135 total roadless acres (0.1%) would be affected with the 600 foot delineation around harvest units (Table A3-10).

In the South Kupreanof IRA, approximately 866 acres of timber harvest and one mile of NFS road construction is proposed. In Units 218, 219, 222, 223, 224, 232, 233, 234, 235, and 249 approximately 211 acres of harvest is proposed by single tree selection and helicopter yarding. Approximately 130 acres of harvest is proposed by clearcut methods and conventional yarding in Units 250, 252, 253, 270, 282, 284, and 285. Approximately 3,922 total acres (1.8%) of IRA would be affected with application of the buffers of 600 feet around harvest units and 1,200 feet for road construction (Table A3-11).

In the Rocky Pass IRA, approximately five acres of timber harvest (Unit 310 by clearcut methods) is proposed.. No road construction would occur inside the IRA boundary. Approximately 67 acres (0.08%) of the IRA would be affected (Table A3-12).

For all IRAs in Alternative 2, the characteristic values for availability as wilderness would remain unchanged. No unique attributes would be affected. The biological value of old-growth forest would be reduced proportionally by the amount of timber harvest in each IRA. Proposed timber harvest activities outside the Rocky Pass IRA would have minimal effects on the scenic quality of this IRA.

Alternative 3

In the North Kupreanof IRA, approximately 86 acres of timber harvest is proposed. No road building is proposed. Approximately 32 acres (Unit 216) of harvest is proposed by single tree selection and helicopter yarding. In Units

215 and 903, approximately 58 acres of harvest is proposed by clearcut methods and conventional yarding. Approximately 296 total acres (0.3%) of the IRA would be affected.

In the South Kupreanof IRA, approximately 1,842 acres of timber harvest, 13 miles of NFS road, and two miles of temporary road are proposed. All or portions of Units 218, 219, 221, 222, 223, 224, 232, 233, 234, 235, 236, 239, 241, 243, 246, 248, 249, 250, 252, 253, 254, 257, 258, 260, 261, 262, 263, 264, 265, 266, 267, 268, 270, 272, 274, 275, 276, 277, 279, 280, 281, 282, 284, 285, and 286 would be within the IRA. With the application of the 600-foot and 1,200-foot buffers around harvest units and roads, approximately 9,789 total acres (4.5%) of the IRA would be affected.

In the Rocky Pass IRA five acres of timber harvest is proposed in Unit 310 by clearcut methods. No road construction would occur inside the IRA boundary. Approximately 67 total acres (0.08%) of the IRA would be affected.

For all inventoried roadless areas in Alternative 3, the characteristic values for availability as wilderness would remain unchanged. The biological value of old-growth forest would be reduced proportionally by the amount of timber harvest in each roadless area. The scenic conditions to the Rocky Pass IRA would only be slightly changed by timber harvest activities outside the IRA.

Alternative 4

Alternative 4 proposes 267 acres of timber harvest within the South Kupreanof IRA. With the application of the 600-foot and 1,200-foot buffers around harvest units and roads, total acres affected would include 25 acres (0.02%) in the North Kupreanof IRA, 1,544 acres (0.7%) in the South Kupreanof IRA, and 0 acres in the Rocky Pass IRA.

For all IRAs, the characteristic values for availability as wilderness would remain unchanged. No unique attributes would be affected.

Modified Alternative 3

Modified Alternative 3 proposes no timber harvest or road building within the North Kupreanof, South Kupreanof, or Rocky Pass IRAs. However, when the 600-foot and the 1,200-foot buffers are applied to harvest units and roads proposed outside and adjacent to the inventoried roadless areas, the IRAs would be influenced by proposed activities. Total acres affected would include 34 acres (0.02%) in the North Kupreanof Inventoried Roadless Area, 98 acres (0.04%) in the South Kupreanof Inventoried Roadless Area, and 29 acres (0.03%) in the Rocky Pass Inventoried Roadless Area.

For all IRAs, the characteristic values for availability as wilderness would remain unchanged. No unique attributes would be affected. The biological value of old-growth forest would not be reduced as no timber harvest would occur within any Inventoried Roadless Area.

**Table 3A-10. North Kupreanof Inventoried Roadless Area – 2001 Roadless Rule Inventory
(114,637 acres)**

Measure of Direct and Indirect Effects By Alternative	1	2	3	4	Modified Alternative 3
Acres of timber harvest	0	25	86	0.24	0
Miles of NFS roads (closed after harvest)	0	0	0	0	0
Miles of temporary roads (decommissioned after harvest)	0	0	0	0	0
Total acres affected including buffers (600' for harvest units, 1200' for roads)¹	0	135	296	25	34
Percent of North Kupreanof Inventoried Roadless Area affected	0%	0.1%	0.3%	0.02%	0.02%

¹ Helicopter Units do not receive buffers

**Table 3A-11. South Kupreanof Inventoried Roadless Area- 2001 Roadless Rule Inventory
(216,774 acres)**

Measure of Direct and Indirect Effects By Alternative	1	2	3	4	Modified Alternative 3
Acres of timber harvest	0	866	1,842	267	0
Miles of NFS roads (closed after harvest)	0	1	13	0	0
Miles of temporary roads (decommissioned after harvest)	0	0	2	0	0
Total acres affected including buffers (600' for harvest units, 1200' for roads)¹	0	3,922	9,789	1,544	98
Percent of South Kupreanof Inventoried Roadless Area affected	0%	1.8%	4.5%	0.7%	0.04%

¹ Helicopter Units do not receive buffers

Table 3A-12. Rocky Pass Inventoried Roadless Area- 2001 Roadless Rule Inventory (78, 148 acres)

Measure of Direct and Indirect Effects By Alternative	1	2	3	4	Modified Alternative 3
Acres of timber harvest	0	5	5	0	0
Miles of NFS roads (would be closed after harvest)	0	0	0	0	0
Miles of temporary roads (would be closed after harvest)	0	0	0	0	0
Total acres affected including buffers (600' for harvest units, 1200' for roads)¹	0	67	67	0	29
Percent of Rocky Pass Inventoried Roadless Area affected	0%	0.08%	0.08%	0%	0.03%

¹ Helicopter Units do not receive buffers

Issue 3-Road Management/Access

Road building, reconstruction and closures associated with the timber sale may change access within the project area. Roads influence wildlife populations, water quality, subsistence use, and the type of recreational opportunities available. Comments ranged from requesting no more new roads and closure of most existing roads, to requests to increase access by building new roads and opening more existing roads. Concerns were also expressed over the ability to maintain open roads due to lack of funding.

Modified Alternative 3 will construct 1.8 miles of NFS road, reconstruct 1.0 mile of NFS road and build about 2.3 miles of temporary road to access timber. All newly constructed and reconstructed NFS roads will be closed after timber harvest activities. Specific information regarding these roads can be found in Appendix 2 of this ROD. Temporary roads will be decommissioned after timber harvest. See Unit Cards in Appendix 1 for temporary road site-specific details. Road costs are expected to be about \$696,700. Modified Alternative 3 may use the Little Hamilton Bay Log Transfer Facility.

Petersburg Ranger District Access and Travel Management

The Decision Notice for the Petersburg Ranger District Access and Travel Management Environmental Assessment was signed September 11, 2009. The road management decisions in this ROD are consistent with the ATM decision. Appendix 2 in this ROD contains the road management objectives for the NFS roads associated with the timber harvest in the Selected Alternative.

Other Resources Considered

Wildlife

This appendix provides up-to-date wildlife resource information since the printing of the FEIS. This additional information includes the run of the deer model and 2009 updates to the Sensitive Species List.

Deer Model

In the Wildlife Resource Report (July 2009) analysis for the DEIS and FEIS, the deer model was not run. In the past, the deer model was the primary method used to assess the effects of planning alternatives to deer habitat capability by comparing them to each other; this analysis compares theoretical habitat carrying capability and not actual deer population numbers. The design of the model was developed to assess the effects of forest management over a large geographical area (Forest Plan level) and was not intended to be used at the project scale (G. DeGayner personal communication 2005). The use of the deer model at the project-scale was identified as a concern (Item 04-7) identified in the 1997 Forest Plan 5-year review and is being further refined.

Currently, the 2008 Tongass Land and Resource Management Plan specifies to use the most recent version of the Interagency Habitat Capability Model, unless alternate analysis tools are developed. The Central Kupreanof Timber Harvest Environmental Impact Statement developed an alternate analysis tool to evaluate the effects of alternatives on winter habitat, as explained below. Therefore, the deer model was not run for the Central Kupreanof DEIS and FEIS.

For the Central Kupreanof DEIS and FEIS, the Productive Old-growth (POG) analysis was used, and it utilizes the size density model (SDM) categories described in the Tongass National Forest Land Management Plan (USDA 2008). Forest Service managers and planners have revised and refined forest mapping on the Tongass NF by creating a tree size and density mapping model (SDM) for POG forests (Caouette and DeGayner 2005 and 2008). This information is more applicable for assessing conservation of biodiversity, estimating timber values and developing wildlife habitat models. The Tongass National Forest has developed this approach (SDM) that uses tree size and density to model structural diversity in order to better define and describe forest structural attributes (Caouette and DeGayner 2005). This model has proven to be the best tool for representing forest structure (USDA 2008). The Central Kupreanof DEIS and FEIS analysis uses a quantitative approach that uses SDM to look at the reduction of productive old-growth (POG). POG is the habitat used by many animals because it provides cover and herbaceous forage. POG is old-growth forest capable of producing at least 20 cubic feet of wood fiber per acre per year or having greater than 8,000 board feet per acre.

The reduction of POG was used in this analysis to provide a way to measure effects to wildlife and display the amount of habitat that is no longer available to a suite of wildlife species.

During the DEIS scoping period, comments were received from Alaska Department of Fish and Game and Green Peace requesting that we expand the discussion relating to deer habitat capability, including running the Forest Plan deer model. Sitka Conservation Society requested use of the 1997 deer model running on Size Density data. To accommodate this request, the deer model was run for each alternative; results are displayed here.

The Forest Service realized that running the deer model would help the public understand the relationship between the model analysis and the newer alternative analysis as presented in the DEIS and the FEIS. The deer model is what the public is accustomed to seeing and has some utility as an index of effects only – not however as a means of comparing effects to absolute numbers of deer. It is an interim solution between final authorization to use newer models (i.e., Hanley, et al. 2006. Forage Resource Evaluation System for Habitat – Deer (FRESH-DEER) <http://cervid.uaa.alaska.edu/Home.aspx>.) and the discontinued use of the old model. In the interim the use of the Forest Plan description of Productive Old Growth (POG) and the SDM analysis in the Forest Plan, are being used for deer evaluation. SDM is a refinement of POG. As the Forest Service transitions to a newer, more robust and meaningful analytical process (the FRESH deer model), it is important for the public to be able to compare the old way of running the deer model.

The deer model uses four discrete variables (four levels of snow depth, three elevation zones, four aspects, and seven vegetation/successional stages) and the following assumptions to predict a habitat suitability index (USDA 2008).

- HSI values were standardized to range from 0 to 1.0, by dividing all values by 1.3, because outputs from such model represent a range from 0 to 100 percent habitat suitability, with higher values indicating higher habitat capability.
- To estimate the 1954 condition, previously harvested stands were assumed to be medium (SD4N, SD4S, SD5H categories) and high (SD5N, SD5S, and SD67 categories) volume forest; stands with a date of origin prior to 1954, were not changed.
- This analysis evaluated relative changes in habitat capability; actual habitat capability may be more or less than model predictions.

Consistent with the approach taken in the 2008 Forest Plan, direct effects to deer habitat capability are assessed on NFS lands only; non-NFS lands are not included in the analysis (Table A3-13). The output is intended to represent effects to habitat capability on NFS lands only within each WAA and is not intended to be applied at the scale of the WAA across all ownerships. Included in this approach are those WAAs within the project area (WAAs 5133, 5130 and 5131).

For cumulative effects on deer habitat capability, the deer model was run two ways: 1) including acres on all land ownerships (NFS and non-NFS) (Table A3-14); and 2) NFS lands only as in the 2008 Forest Plan (Table A3-13). Included in these approaches are those WAAs located on Kupreanof Island and Kuiu Island (WAAs 5012, 5013, 5018) Rocky Pass/Keku Strait is a narrow body of water that separates Kupreanof Island and Kuiu Island. This body of water does not impede large animals such as deer, wolves and bear between island groups and it is adjacent to the Central Kupreanof Project Area so it was included in the analysis.

Table A3-13. Winter Habitat Capability for Sitka black-tailed Deer on only NFS Lands in Wildlife Analysis Areas (WAAs) 5130, 5131 and 5133 based on Deer Model Results.¹ Alternatives 1-4 and Modified Alternative 3 also shows Percent Change from the Existing Condition.

Analysis Area	2008 Condition Calculated ²	Forest Plan 2008 Condition	Forest Plan Alt. 6 end of rotation (After 100+ Years)	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alt. 3
WAA 5130	19.6	19.1	17.0	19.6 (0%)	19.5 (0.5%)	19.5 (0.5%)	19.6 (0%)	19.5 (0.5%)
WAA 5131	17.4	17.0	15.6	17.4 (0%)	17.2 (1.1%)	17.1 (1.7%)	17.2 (1.1%)	17.3 (0.6%)
WAA 5133	17.7	16.6	14.4	17.7 (0%)	17.6 (0.6%)	17.5 (1.1%)	17.7 (0%)	17.7 (0%)

¹ Deer Model results are expressed as habitat capability with higher values indicating higher habitat capability. Deer Model results are rounded to the nearest tenth. Model results are typically expressed as whole number of deer.

²The numbers calculated for the 2008 condition are different from the 2008 Forest Plan because there are inherent rounding errors associated with the process. The Forest Plan was run using 2006 as the current condition year and this project was run using 2010 as the current condition year. The acres that were harvested between these time intervals changes the results slightly and explains the difference in numbers.

The results displayed above in Table A3-13 are not an actual population number but a theoretical long-term carrying capacity for the habitat in the Analysis Area (Wildlife Analysis Areas 5130, 5131 and 5133) and under normal winter conditions. Deer model results are typically rounded to the whole number; this is due to the low precision of the model. However, the table displays the model outputs to one decimal point so the difference between the No Action Alternative and the action alternatives are more clearly stated. These numbers, however, are not statistically different. The model shows Alternative 3 as having the greatest reduction in approximate habitat capability in all three WAAs, followed closely by Alternative 2, then Alternative 4 with Modified Alternative 3 providing the least impact. The Forest Plan Standards and Guidelines state: provide where possible, sufficient deer habitat capability

to first maintain sustainable wolf populations, and then to consider meeting estimated human deer harvest demands. This is generally considered to equate to the habitat capability to support 18 deer per square mile (using habitat capability model outputs) in biogeographic provinces where deer are the primary prey of wolves. The numbers generated by the Deer Model are calculated at the WAA level. The results displayed from the model show there is not an appreciable difference in model output numbers as compared to the No Action Alternative (Alt. 1).

The Deer Model results indicate there is less than a 0.4 difference for all action alternatives including Modified Alt. 3. The relative results of this model are consistent with the POG analysis used for deer in the FEIS in that they show a fraction of a percent difference in the effects of the action alternatives on deer habitat. The results presented in the model are consistent with the Wildlife Productive Old Growth Analysis (Central Kupreanof FEIS page 3-88 Table 3-20). The model results and Productive Old Growth Analysis both show a small difference between alternatives. The Productive Old Growth Analysis shows a small reduction in habitat between the alternatives and the model results show no statistical difference in habitat capability expressed as an output of the model. The results of the model do not change the effects analyzed in the Productive Old Growth Analysis and are still within the range of what the public reviewed and commented on in the DEIS.

A summary of deer model results for cumulative effects are displayed in Table A3-14 (private lands included) and Table A3-15 (only NFS lands).

Table A3-14. Winter Habitat Capability for Sitka black-tailed Deer within WAAs 5012, 5013, 5018, 5132, 5131, 5130 and 5133 based on Deer Model Results for Cumulative Effect including Non-NFS Lands^{1,2}

Analysis Area	1954 Deer Density as Determined in the 1997 Forest Plan ³	Alt. 1 and 2008 Current Condition ⁴	Alt. 2	Alt. 3	Alt. 4	Modified Alt. 3
WAA 5012	33	19.7 (0%)	19.7 (0%)	19.7 (0%)	19.7 (0%)	19.7 (0%)
WAA 5013	30	23.6 (0%)	23.6 (0%)	23.6 (0%)	23.6 (0%)	23.6 (0%)
WAA 5018	10.7 ⁴	19.3 (0%)	19.3 (0%)	19.3 (0%)	19.3 (0%)	19.3 (0%)
WAA 5132	10.1	6.3 (0%)	6.3 (0%)	6.3 (0%)	6.3 (0%)	6.3 (0%)
WAA 5130	26.6	19.0 (0%)	18.9 (0.5%)	18.9 (0.5%)	19.0 (0%)	19.0 (0%)
WAA 5131	21.0	16.7 (0%)	16.5 (1.2%)	16.5 (1.2%)	16.6 (0.6%)	16.5 (1.2%)
WAA 5133	18.6	16.5 (0%)	16.4 (0.6%)	16.3 (1.2%)	16.5 (0%)	16.5 (0%)

¹ Deer Model results are expressed as habitat capability with higher values indicating higher habitat capability. Deer Model results are rounded to the nearest tenth. Model results are typically expressed as whole number of deer as deer/mi².

²When private lands occur in the WAA they are set equal to zero (e.g., assigned zero habitat capability) and included to calculate total area (miles²), which is used to calculate deer/mi² for the entire WAA, across all ownerships.

³The 1954 condition is taken from unpublished Appendices to the 1997 FEIS Appendix N. Densities are shown for combined federal and non-federal lands that are less than 1500 feet in elevation representing deer winter range. Densities represent deer habitat capability from federal lands only and conservatively assume no deer production from non-federal lands (USDA 1997).

⁴It is unclear why the 2008 current condition and model outputs are larger than the 1954 condition as it is calculated in the 1997 Forest Plan. The Forest Plan 2008 condition is consistent with the 2008 Forest Plan Revision.

Table A3-15. Winter Habitat Capability for Sitka Black-tailed Deer within WAAs 5012, 5013, 5018, 5132, 5131, 5130 and 5133 based on Deer Model Results for Cumulative Effects on NFS Lands^{1,2}

Analysis Area NFS Lands Only	1954 Deer Density as Determined in the 2008 FP ²	Forest Plan 2008 Condition	Forest Plan Alt. 6 end of rotation	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alt. 3
WAA 5012	27.7	20.9	16.2	20.2 (0%)	20.2 (0%)	20.2 (0%)	20.2 (0%)	20.2 (0%)
WAA 5013	25.2	23.8	21.2	23.6 (0%)	23.6 (0%)	23.6 (0%)	23.6 (0%)	23.6 (0%)
WAA 5018	21.2	19.7	17.1	19.3 (0%)	19.3 (0%)	19.3 (0%)	19.3 (0%)	19.3 (0%)
WAA 5132	20.2	14.7	13.5	14.5 (0%)	14.5 (0%)	14.5 (0%)	14.5 (0%)	14.5 (0%)
WAA 5130	19.5	19.1	17.0	19.0 (0%)	18.9 (0.5)	18.9 (0.5)	19.0 (0%)	19.0 (0%)
WAA 5131	19.0	17.0	15.6	16.7 (0%)	16.5 (1.2%)	16.5 (1.2%)	16.6 (0.6%)	16.5 (1.2%)
WAA 5133	16.9	16.6	14.4	16.5 (0%)	16.4 (0.6%)	16.3 (1.2%)	16.5 (0%)	16.5 (0%)

¹ Deer Model results are expressed as habitat capability with higher values indicating higher habitat capability. Deer Model results are rounded to the nearest tenth. Model results are typically expressed as whole number of deer expressed as deer/mi². Zero values were used to calculate total area (miles²) for cumulative effects.

²The 1954 condition is taken from unpublished Appendices to the 1997 FEIS Appendix N. Densities are shown for combined federal and non-federal lands that are less than 1500 feet in elevation representing deer winter range. Densities represent deer habitat capability from federal lands only and conservatively assume no deer production from non-federal lands.

³The numbers calculated for the 2008 condition are different from the 2008 Forest Plan because there are inherent rounding errors associated with the process. The Forest Plan was run using 2006 as the current condition year and this project was run using 2010 as the current condition year. The acres that were harvested between this time intervals would change the results slightly and explain the difference in numbers.

The goal of the standard and guideline is to provide where possible 18 deer/mi². Because of naturally occurring conditions some WAAs are not able to support 18 deer/mi². This is the true in WAA 5132 which was not able to support 18 deer/mi² prior to wide-scale timber harvest (i.e., 1954) (USDA FS 1997). The 1997 Forest Plan reports WAA 5018 as also not being able to support 18 deer/mi² in 1954. However, the 2008 Forest Plan model outputs for

WAA 5018 in 1954 and 2008 show it as capable of supporting 18 deer/mi². The reason for this discrepancy is not known.

The results of these model runs are consistent (they fall within the predictions of the current 2008 condition and the predictions of the Forest Plan Alternative 6 at the end of rotation) with the predictions of the 2008 Forest Plan Revision, as well as the 1997 Forest Plan Revision. The deer model results for cumulative effects (including non-forest lands) is consistent with the 1997 Forest Plan Revision used to calculate the 1954 deer density in all WAAs in the project area except for WAA 5018. This WAA has a lower deer density (as calculated from the 1997 Forest Plan) than calculated for the 2008 condition.

The results from Table A3-14 for the alternatives are calculated using the same methods as the 2008 Deer Model. The 1954 condition (deer density) is determined from the 1997 Forest Plan. The 1954 condition is taken from unpublished Appendices to the 1997 FEIS Appendix N. Densities are shown for combined federal and non-federal lands that are less than 1,500 feet in elevation representing deer winter range. Densities represent deer habitat capability from federal lands only and conservatively assume no deer production from non-federal lands. These two processes used to determine deer density are calculated differently using different layers and elevations but they are both used to approximate deer density for cumulative effects including non-NFS lands. Table A3-14 shows the same values for the current condition and the Alternative 1 (the No Action Alternative) for four of the WAAs (5012, 5013, 5018, 5032) as there is no timber harvest proposed in these WAAs in this project. The action alternatives for WAAs 5130, 5131 and 5133 are different than the No Action Alternative (Alternative 1) because there is timber harvest planned in these WAAs.

Species Screen

In Table 3-19, FEIS page 3-73, the wildlife species screen analysis includes wildlife species from the Regional Foresters 2002 Sensitive Species List, as well as from the Regional Foresters 2009 Sensitive Species List. The updated Table A3-16 below reflects the 2009 Regional Foresters Sensitive Species List only. The effects are discussed in the Biological Evaluation dated July 2, 2009. Three sensitive species, trumpeter swan, American osprey and Peale's Peregrine falcon, were removed from the table.

Table A3-16. Species Screen Analysis

Species	Probability of Occurrence	Potential for Measurable Effects to Habitat in Analysis Area?	Need for Further Analysis?
Sensitive			
Kittlitz's murrelet <i>(Brachyramphus brevirostris)</i>	Low	No	No*
Aleutian Tern <i>(Sterna aleutica)</i>	Low	No	No*
Queen Charlotte goshawk <i>(Accipiter gentilis laigni)</i>	High	Yes	Yes*
Black oystercatcher <i>(Haematopus bachmani)</i>	Mod	No	No*

*See Biological Evaluation for further analysis

Table 3-19 of the FEIS addresses the species screen analysis by rating the probability of occurrence, the potential for measurable effects to habitat in the analysis area and the need for further analysis. The Peale's peregrine falcon, trumpeter swan, American osprey were deleted from the species screen. The, Kittlitz's murrelet, yellow-billed loon, Aleutian Tern, Black Oystercatcher and may occur in the project area but the potential for measurable effects to the habitat in the analysis area is very low. The Queen Charlotte goshawks have a moderate to high probability of occurring in the project area and have a potential for measurable effects to habitat in the analysis area. For more information about these species refer to the Biological Evaluation in Appendix E of the FEIS.

Productive Old Growth Analysis

Effects to POG for Modified Alternative 3

This alternative will directly affect approximately 1,265 acres of POG. This does not include an additional 64 acres of harvest of habitat considered by the SDM as non-POG. The alternative will directly affect 1,265 acres of POG out of 57,628 acres of POG within the project area. The area displayed in this project area analysis is different than the area displayed by other resources because this analysis used SDM and the other resources used volume strata. These numbers are different because volume strata define some area as POG where SDM considers some of this habitat as non-forested. The SDM layer is not run from the same macro as volume strata. These are two different layers that are similar but classify habitat differently. This would be about 2.2 percent of the project area POG and 0.4 percent of the available POG in the biogeographic province. The 2.2 percent reduction of POG habitat may have an effect on individuals but will not affect wildlife populations. The remaining 97.8 percent of the project area would remain unaffected by proposed activities.

Part of this remaining habitat is made up of non-developmental LUDs including riparian corridors, beach fringe, the matrix, as well as areas of partial harvest that can be used as wildlife habitat.

Table A3-17. Changes in POG for Modified Alternative 3 (FEIS Table 3-20)

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Mod. Alt. 3
Acres of POG Habitat harvested	0	2,427	3,568	1,261	1,265
Percent change from current condition within project area (57,628 acres of POG)	0%	4.2%	6.2%	2.2%	2.2%
Percent change from current condition (2008) within WAA (269,593 acres of POG)	0%	0.9%	1.3%	0.5%	0.5%
Percent change from current condition (2008) within biogeographic province (307,710 acres of POG)	0%	0.8%	1.2%	0.4%	0.4%

Effects to Road Density for Modified Alternative 3

Modified Alternative 3 has an open road density of 0.28 mi/mi² in the project area. The total road density for the project area is 0.34 mi/mi² and the total road density for Kupreanof Island Is 0.23 mi/mi².

Table A3-18. Road Densities within the Project Area

Road densities (mi/mi ²)	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Mod. Alt 3
Project Area Open Road	0.27	0.31	0.41	0.28	0.28
Project Area Total Road	0.33	0.36	0.44	0.33	0.34
Kupreanof Island Total Road *	0.22	0.23	0.25	0.22	0.23

* Includes cumulative road densities

Cumulative Effects

Biogeographic Province

Effects for Modified Alternative 3

There will be a cumulative reduction of approximately 29.4 percent of POG with Modified Alternative 3 in all land ownerships and a reduction of 11.4 percent of POG on Forest Service lands (since 1954) within the biogeographic province considering these action alternatives. This reduction of POG will reduce habitat capability for a range of wildlife species but is well within the predictions of habitat loss generated by the Forest Plan (FEIS pg 3-178). In Modified Alternative 3 there will be 70.6 percent of POG in the biogeographic

province remaining considering all lands in the biogeographic province as well as 88.6 percent of POG remaining on Forest Service Lands. The POG remaining includes 44.8 percent of the province in non-development LUDs. This includes 14.1 percent of the province in Old-growth reserves (OGRs) that is part of the conservation strategy. Non-developmental LUDs include riparian corridors, beach fringe, the matrix as well as areas of partial harvest that can be used as wildlife habitat.

Multiple WAAs

Effects for Modified Alternative 3

There will be a cumulative reduction of approximately 26.5 percent of POG in all land ownerships within the WAAs (5012, 5013, 5018, 5132, 5131, 5130 and 5133) considering these action alternatives. This reduction in habitat may affect individual animals but will not affect populations. This reduction of POG will reduce habitat capability for a range of wildlife species. In Modified Alternative 3 there will be 73.5 percent of POG in the WAAs remaining considering all lands in the WAAs. The POG remaining includes 46.8 percent of the WAAs in non-development LUDs this includes 11 percent of the province in OGRs that is part of the conservation strategy that provides for species conservation at the population level. Non-developmental LUDs include riparian corridors, beach fringe, the matrix as well as areas of partial harvest that can be used as wildlife habitat.

Table A3-19. Cumulative Reduction of POG within the Biogeographic Province

	Current Condition	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Mod. Alt. 3
Percent Reduction From Historic/Original Condition Biogeographic Province (431,217 acres of POG)*	-28%	-29%	-29.8%	-30.2%	-29.4%	-29.4%
Percent Reduction From Historic/Original Condition WAA (359,445 acres of POG)	-25%	-26%	-26.9%	27.3%	26.5%	-26.5%

* These numbers are lands of all ownership in the biogeographic province. The cumulative harvest on Forest Service lands ranges from 11% - 12.2% and is within the prediction of the Forest Plan.

Conclusion

In comparison to all Action Alternatives Modified Alternative 3 would remove the second lowest amount of POG from the area. Modified Alternative 3 would remove approximately 1.4 percent of POG habitat in the biogeographic province and 1.5 percent of the POG habitat in the WAA. This is not considered a significant impact to POG (wildlife habitat). Cumulative impacts would be slightly higher due to the amount of harvest on other Forest Service and non-Forest Service Lands.

Hydrology/Fisheries

Cumulative Watershed Effects

(FEIS pg 3-124)

The effects of Modified Alternative 3 on aquatic resources were reviewed and summarized below and in the ROD, Table R-1 and Table A3-20. This summary does not represent “new” analysis, as all activities proposed in Modified Alternative 3 were analyzed in the Aquatics Resource Report and Chapter 3 of the Central Kupreanof Timber Sale FEIS. Table A3-20 reflects updated numbers based on the harvest units and associated road construction chosen for Modified Alternative 3, as well as an updated implementation date.

Generally, effects to aquatic resources would be greater than those in Alternatives 1 and 4, and less than those in Alternatives 2 and 3 due primarily to relative amounts of proposed road miles and subsequent number of stream crossings, as well as total number of harvest acres.

Thirty year cumulative harvest levels have remained the same or decreased from those in the FEIS. The cumulative harvest percentages in the FEIS table assume all proposed acres are harvested and a 2009 implementation date. The updated numbers also assume all proposed acres will be harvested, but reflect a 2011 implementation date.

Proposed harvest levels in all watersheds are lower with Modified Alternative 3 than all other action alternatives. Direct, indirect, and cumulative watershed effects were analyzed by quantifying previous and future harvest levels in project area watersheds (assuming a 30 year timeframe for total hydrologic recovery), dominant sediment transport regimes of streams (e.g. transport, depositional), amount and location of high hazard soils within each watershed and proposed harvest units, number of existing and new stream/road crossings, and density and location of existing and proposed roads.

Appendix C of the FEIS was reviewed and all foreseeable activities in the affected watersheds were considered during cumulative effects analysis. Additional impacts from foreseeable activities related to harvest, roads, and stream crossings result in no or negligible increases in effects on water yield, water quality, and fish habitat. These effects are discussed in the Aquatics Resource Report located in the project record.

Cumulative watershed effects are minimized in Modified Alternative 3, which proposes no harvest in four of the seven watersheds analyzed for the FEIS. Modified Alternative 3 will increase cumulative harvest levels in the Hamilton Creek and Big John watersheds, which may result in increased water yield and sediment delivery to streams. However, trends in 30-year cumulative harvest levels are declining in all watersheds due to the ongoing re-growth of trees harvested over a period of decades. The resulting trend is toward hydrologic

recovery and improving condition in all project area watersheds. For example, 30-year cumulative harvest levels in the McNaughton Point watershed have decreased even though 465 acres are proposed for harvest in Modified Alternative 3. This reflects continued hydrologic recovery in the watershed, with 590 acres harvested in 1980 no longer included in the 30-year cumulative harvest calculation. If Modified Alternative 3 was implemented in 2011, 30-year cumulative harvest levels in all watersheds would remain less than eight percent, and by 2021 would be less than five percent.

Total number of stream crossings, as well as those on Class I and Class II streams is greater than in Alternatives 1 and 4, and less than Alternatives 2 and 3 (Table A3-20). This reflects new NFS and temporary road building associated with the harvest units chosen in Modified Alternative 3. Currently, an estimated 63 red pipes exist on Forest Service Roads that will remain open following the implementation of the Petersburg Ranger District Access Travel Management Plan. These culverts will be prioritized for replacement based on site specific habitat assessment. Cumulative effects of roads and closures associated with the Petersburg ATM are discussed in the Aquatics Resource Report located in the project record.

Table A3-20. Effects on Hydrology/Fisheries

30 year Cumulative Harvest Percentage by Alternative (Assuming a 2011 implementation date and that all proposed acres are harvested)					
	ALT. 1¹	ALT. 2	ALT. 3	ALT. 4	Modified Alternative 3
Hamilton Creek	1.9%	4.0%	4.1%	3.2%	3.5%
McNaughton Point	2.9%	7.8%	8.6%	5.9%	7.4%
Big John Creek	4.5%	6.8%	7.1%	5.8%	5.2%
West Duncan Canal	0.4%	1.3%	2.5%	0.6%	0.4%
Keku Creek	0.2%	0.4%	0.4%	0.2%	0.2%
Castle River	1.3%	1.5%	2.7%	1.5%	1.3%
Tunehean Creek	1.2%	1.9%	1.9%	1.5%	1.2%

Table A3-20. Effects on Hydrology/Fisheries (continued)

Total Number of Proposed Stream Crossings by Alternative					
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Modified Alternative 3
Hamilton Creek	0	22	31	2	5
McNaughton Point	0	14	14	1	7
Big John Creek	0	6	13	1	1
West Duncan Canal	0	5	43	0	0
Keku Creek	0	4	4	0	0
Castle River	0	4	29	4	0
Tunehean Creek	0	4	5	0	0
Total	0	59	139	8	13
Total Number of New Class I Crossings	0	4	4	0	1
Total Number of New Class II Crossings	0	5	12	4	1
¹ Values indicated under Alternative 1 reflect cumulative percentages in 2011 assuming no timber harvest.					

Reasons for Scheduling the Environmental Analysis of the Central Kupreanof Timber Harvest

Appendix A of the FEIS

This section updates Appendix A of the Central Kupreanof FEIS (Volume B). All sections included here have been updated or added to include current agency direction as of October 2010. For the complete Appendix A, please refer to the FEIS.

How Does the Forest Service Decide where Timber Sale Projects should be Located? How Does the Central Kupreanof Timber Harvest Project Fit into the Tongass Timber Sale Program?

(Updates FEIS pg A-1)

This project is currently in Gate 2, Project Analysis and Design (See Forest Service Handbook 2409.18, Chapter 30 and subsequent discussion about the Gate System) and involves environmental analysis and public disclosure as required by the National Environmental Policy Act (NEPA). The amount of volume considered for harvest under the Modified Alternative 3 for the decision on the Central Kupreanof Timber Harvest FEIS would be 26.3 MMBF, with harvest potentially beginning in 2011. This volume would contribute to the Tongass timber sale program. A no-action alternative was also analyzed in the FEIS. If an action alternative is selected in the decision for this project, this volume will be added to the volume available for sale.

Why is This Project Occurring in This Location?

(Updates FEIS pgs A-2 through A-3)

Areas are selected for environmental analysis for timber harvest projects for a variety of reasons. The reason this project was considered in this area include:

- The Central Kupreanof project will implement the new USDA objectives associated with the Transition Framework for Southeast Alaska and provide economic opportunities to the community of Kake.
- The project area offers economic timber that currently meets local demand, while transitioning to a viable timber economy.
- The project area contains many stewardship contracting opportunities for the nearby community of Kake.

- The Central Kupreanof Timber Harvest project area contains sufficient acres of suitable and available forest land to make this timber harvest proposal reasonable. Areas with available timber need to be considered for harvest in order to seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand from such forest, and (2) meets the market demand from such forest for each planning cycle, pursuant to Section 101 of the Tongass Timber Reform Act (TTRA). The WAAs within this project area have had low levels of past harvest.
- The Central Kupreanof Timber Harvest will use many existing roads to provide access to many of the proposed timber harvest units, and to transport harvested logs.
- The Central Kupreanof Timber Harvest project will use the existing and currently permitted LTF at Little Hamilton Bay.
- The proposed harvest units are within the Timber Production land use designation as allocated by the Forest Plan.
- The Central Kupreanof Timber Harvest project area is completely within Phase 1 lands as identified by the Timber Adaptive Management Strategy in the 2008 Forest Plan Record of Decision.
- Effects on subsistence resources from timber harvest are projected to have few differences based on the sequence in which areas are harvested. Harvesting other areas with available timber on the Tongass National Forest is expected to have similar potential effects on resources, including subsistence resources, because of widespread distribution of subsistence use and other factors. Harvest within other areas is foreseeable under the Forest Plan.

In conclusion, this project area can provide a mixture of uses in compliance with the laws that govern National Forest management and be consistent with the direction in the Forest Plan.

Tongass National Forest Land and Resource Management Plan (Forest Plan as amended)

(Updates FEIS pgs` A-4 and A-5 to include 2009 and 2010 harvest levels)

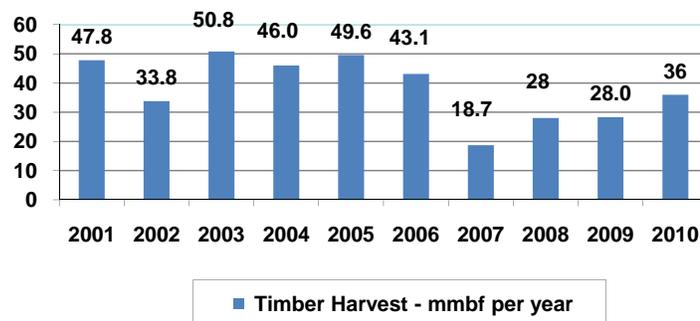
The Tongass Land Management Plan was completed in 1979 and revised in 1997. The Record of Decision (ROD) for the 2008 Tongass Land Management Plan Amendment (Forest Plan) was signed by the Alaska Regional Forester on January 23, 2008. The Forest Plan incorporates new resource information and scientific studies and reflects an extensive public involvement process. The 2008 Forest Plan defines appropriate activities within each of 19 land use designations (LUDs). Approximately 79 percent of the Tongass was allocated to LUDs where scheduled commercial timber harvest is not allowed.

The decision for the 2008 Forest Plan establishes the annual average allowable sale quantity (ASQ, the maximum amount of timber that may be offered for sale) at 267 million board feet (MMBF). This is the same as the ASQ established for the previous Forest Plan in 1997.

While technically a limit on sale volume, in effect the ASQ also limits the amount of timber that may be harvested on the Tongass National Forest.

The environmental effects analysis in the Final EIS for the 2008 Forest Plan assumed the maximum timber harvest allowed under each alternative would occur annually over the next 100 to 150 years. In that way, the Forest Plan analysis displayed the maximum environmental effects that could be reasonably foreseen. However, substantially less timber volume and acres have actually been harvested over the last several years than the maximum level allowed under the 1997 Forest Plan (see Figure A3-1). Thus, the effects on resources are expected to be less than projected in the 2008 Final EIS for the Forest Plan Amendment.

Figure A3-1
Tongass Timber Harvest, Fiscal Years 2001-2010



The Record of Decision for the 2008 Forest Plan Amendment includes transition language for projects that were being planned when the Forest Plan was completed. That language identifies three different categories of projects, depending on how far along they were in the project planning process when the Forest Plan Amendment was completed, and specifies the extent to which projects in each category must comply with the amended Forest Plan. The transition language lists this project as being in Category 3, which requires the project to be based on the Forest Plan as amended in 2008 and be consistent with all applicable management direction.

Roadless Area Conservation Rule

(Updates FEIS pg A-6 with 2010 information)

The Roadless Area Conservation Final Rule, which prohibits road building and logging within national forest inventoried roadless areas, was issued in 2001. The 2001 Roadless Rule has been - and remains - the subject of a number of lawsuits. Currently there are conflicting 9th and 10th Circuit Court opinions on the 2001 Roadless Rule. To ensure the USFS does not violate either of these Circuit Court opinions and to assure the careful evaluation of actions in

Inventoried Roadless Areas (IRAs) on National Forest lands, the Secretary of Agriculture issued several memos (1042-154, 1042-155, re-delegation of authority) reserving his authority to approve certain projects involving road construction and/or reconstruction and timber harvest on lands included in the 2001 Roadless Rule Inventoried Roadless Areas. Such activities; however, may occur on the Tongass where allowed by the 2008 Forest Plan.

An analysis of the effects to roadless areas within the project area has been included as part of the analysis for this project. This project is consistent with agency policy and procedures and has been designed to meet the management direction, goals and objectives, and standards and guidelines in the Forest Plan.

Transition Framework

(Addition to FEIS Pg. A-6)

The USDA is developing a "Transition Framework" program to help Southeast Alaska Communities transition to a diverse economy with jobs in renewable energy, forest restoration, timber and other sectors. The Alaska Region believes the transition can be made without entering into roadless areas (USDA 2010). The "Transition Framework" supports the USDA Strategic Plan for FY 2010-2015, and is strongly aligned with Pillar 5 in the Strategic Plan, namely "Generate and Retain Green Jobs and Economic Benefits through Natural Resource and Recreation (USDA 2005)."

The Transition Framework will help Southeast Alaska communities transition to a diversified economy by providing jobs associated with renewable energy, forest restoration, fisheries, mariculture, tourism, recreation, multi-year stewardship contracts, and young growth management. This project incorporates viable timber opportunities, forest restoration projects, and recreation enhancement projects providing the opportunity to pursue implementing these projects through stewardship contracts.

The annual market demand forecast is a methodology used to set the short-term goals for the Tongass timber sale program, volume the Forest plans to offer for sale in the current year pending sufficient funding.

Annual Market Demand

(FEIS pg A-9 updated with 2010 information)

The formulas and procedures used in forecasting annual market demand are described in a Forest Service report titled Responding to the Market Demand for Tongass Timber (Morse 2000). These procedures, which have become known as the "Morse methodology," are based on the premise that:

- Forest product markets are volatile, especially in the short run.
- Timber purchasers in Southeast Alaska have few alternative suppliers of timber if they cannot obtain it from the Tongass National Forest. Oversupplying this market has relatively few adverse economic effects; undersupplying it can have much greater negative economic consequences.

- It takes years to prepare National Forest timber for sale, including completion of environmental impact statements.
- It is difficult to estimate demand for timber from the Tongass, even a year or two in advance.
- Industry must be able to respond to rapidly changing market conditions in order to remain competitive.

Accordingly, the Morse methodology establishes a system that considers factors such as mill capacity and utilization of that capacity, and seeks to build and maintain sufficient volume of timber under contract (i.e., timber purchased but not yet harvested) to allow the industry to react promptly to market fluctuations. Industry actions such as annual harvest levels are monitored and timber program targets are developed by estimating the amount of timber needed to replace volume harvested from year to year. The methodology is adaptive, because if harvest levels drop below expectations and other factors remain constant, future timber sale offerings would also be reduced to levels needed to maintain the target level of volume under contract. Conversely, if harvest levels rise unexpectedly, future timber sale targets would also increase sufficiently to ensure that the inventory of volume under contract is not exhausted. By dealing with uncertainty in a flexible, science-based fashion, the Morse methodology is an example of adaptive management.

The Morse methodology originally used the projected harvest from the final 1997 Brooks and Haynes report. These procedures were recently updated (Alexander 2008) to use the annual projected harvest figures from Brackley et al. 2006 in calculations of annual timber offer targets. No further changes to the Morse methodology were required as a result of the updated long-term demand projections contained in the Brackley et al. study.

The planned annual timber volume offer could include a combination of new, previously offered, and reconfigured timber sales. Both green timber and salvage will be components of the program. Offerings will consist of those targeted for Small Business qualified firms, as well as a portion of the volume being made available for the open market.

Using the updated annual market demand procedures, the Forest Service has set a goal for volume to be offered in FY 2010 of 211 MMBF. This figure was calculated using the Brackley et al. 2006 “expanded lumber scenario.” Due to the Region 10 shipment policy and the success of Alaska producers in niche or specialty markets, Brackley et al 2008 determined that demand for National Forest timber in Alaska is on a trajectory most similar to the Scenario 2 (expanded lumber production).

The actual volume of timber offered for sale reflects a combination of factors, such as final budget appropriations, completing the NEPA process; the practice of offering smaller sales for smaller operators rather than all the volume from a NEPA decision; the statutory requirement that timber sales offered in the Alaska Region appraise positive; and volume enjoined from being offered because of litigation. The spreadsheet displaying the annual demand calculation and a summary of the factors used in these calculations are in the project record.

For planning and scheduling purposes, the Tongass uses a 5-year timber sale plan, which is consistent with Forest Service Manual 2430. This 5-year plan is based on completed and ongoing environmental analyses and contains information to purchasers and other interested parties, and provides a plan that can be adjusted in response to changing market conditions.

Both the “annual market demand” and the “planning cycle market demand” projections are important for timber sale program planning purposes. They provide guidance to the Forest Service to request budgets, to make decisions about workforce and facilities, and to indicate the need to begin new environmental analysis for future program offerings. They also provide a basis for expectations regarding future harvest, and thus provide an important source of information for establishing the schedule of probable future sale offerings. The weight given to the projections will vary depending on a number of factors, such as how recently they were done and how well they appear to have accounted for recent, site-specific events in the timber market. More information on timber demand on the Tongass National Forest is presented in Appendix G in the 2008 TLMP FEIS (USDA Forest Service 2008c).

Table A3-21. Accomplishments in Gate System and Timber Pools (MMBF)

Pipeline Pool Volume	2010 Goal	FY 10 (as of September 30, 2010)
Pool 1 Volume Under Analysis (Gate 1 and 2)	353 ¹	483
Pool 2 Volume Available for Sale (Gate 3, Gate 4 and Gate 5)	102 ²	56 ³
Pool 3 Volume Under Contract (Gate 6)	235 ⁴	98 ⁵

¹The goal for volume under analysis is approximately 4.5 times the projected harvest for the current year (78.5MMBF for 2010 based on expanded lumber scenario). Volume under analysis includes all timber volume in projects with a completed project plan (Gate 1) or a Notice of Intent through completion of the environmental analysis (Gate 2). This figure includes about 98 mmbf of young-growth and stewardship projects.

²The goal for volume available for sale is to have at least 1.3 times the projected harvest for the current year (78.5MMBF) in sales that have approved NEPA and completion of timber sale preparation.

³This is the estimated volume that is not slated for multiple small sales over a period of years. Some projects (73 mmbf) will have only small sales offered first and the total volume from these projects is not be available in any given year. This includes volume that appraises deficit to the point it can not be offered. This figure also includes volume under litigation – see Table A3-23.

⁴The goal for volume under contract is for purchasers to have three times the volume under contract as projected for harvest for the Fy 2010 (78.5 MMBF).

⁵Estimated volume under contract available for harvest estimated Spetember 2010

How Appeals and Litigation Affect the Timber Sale Program

(Updates FEIS pg A-15)

Timber harvest projects require site-specific environmental analysis that usually is documented in an environmental assessment (EA) or an environmental impact statement (EIS). The public is notified of the analysis and is provided the opportunity to comment on proposals and file an appeal on decisions. The administrative appeal process for most timber harvest projects takes up to 105 days before implementation to occur.

When decisions are appealed and affirmed through the administrative appeal process, the project can still be litigated. Litigation can be a lengthy process. Although litigation does not preclude offering timber for sale, the Forest Service and potential purchasers are often reluctant to enter into a contract where the outcome is uncertain. Recently, sales were enjoined from harvest after the contracts were awarded. The outcome of litigation affects the Forest's ability to provide a reliable timber supply.

Table A3-22. Timber Volume Involved in Appeals and/or Litigation ¹

Timber volume with decision reversed on appeals ²	83.0 MMBF
Timber volume involved with litigation	117 MMBF
Timber volume involved with litigation, enjoined.	8.3 MMBF

¹ As of October 2010.

² Decision overturned during internal review. Does not include volume in decisions currently in the appeal period or undergoing an appeal review.

Response to Comments

Appendix D of the FEIS

All letters received during the 45-day comment period for the Draft EIS from Federal and State agencies, organizations, and individuals were published in Appendix D (Response to Comments) of the FEIS. All Interdisciplinary team members have reviewed the responses published in the FEIS and provided updated information to any comments that had become out-of-date as this Record of Decision was being completed.

SCS IV-3, GP XIV-1

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

FEIS Response:

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

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

The Secretary's Memorandum 1042-154 is intended to ensure the careful consideration of activities in Inventoried Roadless Areas while long-term roadless policy is developed. The effects on the Roadless Areas are described in the Final EIS.

Update:

Recent national direction concerning Inventoried Roadless Areas (IRAs) reserves to the Secretary of Agriculture the decision making authority over the construction and reconstruction of roads and the cutting, sale, and removal of timber in IRAs as included in the 2001 Roadless Rule. To address concerns over timber harvest and road construction activities in designated IRAs, Modified Alternative 3 was created by removing all units and associated road building activities falling completely within an IRA as delineated by the 2001 Roadless Rule.

SCS IV-1

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

FEIS Response:

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

Update:

A modification of Alternative 3 was developed in which units that are located in an Inventoried Roadless Area (IRA) were removed from the unit pool. Additionally, those units requiring extensive road building for access were removed from the unit pool in portions of the project area not located in an IRA. While removing units from IRAs improves economics as seen in Table A3-6 in Appendix 3 of this ROD by limiting road building, there is also a direct correlation to improved economics by a decrease in log haul distances as compared to greater log haul distances from the project area that remain in IRAs. The Central Kupreanof project area does contain units located in IRAs that are directly adjacent to an existing and open road system. While these units have increased log haul distances, volume from these units could be offered as a small sale or Microsale opportunity where local haul to small mills located within the community of Kake could offset the higher logging cost associated with longer haul time.

AFA-3

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

FEIS Response:

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

Update:

Employment data had been updated and includes data from 2002-2009 (Table A3-1 Appendix 3 of the ROD). Data collected from this period demonstrates a decline in total timber industry employment figures.

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

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

FEIS Response:

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

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

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

Update:

Currently the Silver Bay mill has closed and is dismantling their mill. The appraisal point was recalculated to Klawock where the Viking mill remains one of the only viable larger mills operating in the region. Though the overall logging cost increased substantially due to longer tow distances to the mill (Table A3-4 Appendix 3 of the ROD), the rankings of the alternatives for financial efficiency remain essentially the same. In order to compare alternatives, the sale is considered as one sale although the volume may be sold in either one sale or multiple sales. The appraisal done prior to offering the sale for bid may be to the Klawock mill or another mill located in the vicinity of Kake depending on the size of the sale.

SCS III-1

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

FEIS Response:

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

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

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

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

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

The amount of export is reported on this public website:

http://www.fs.fed.us/r10/ro/policy-reports/for_mgmt/

The actual appraised sale value will be determined at the time of sale based on a statistically accurate cruise and the appraisal bulletin costs and revenues at

that time. Many of the factors that will determine the exact amount of revenue will be dependent on the purchaser's efficiency and business expertise and therefore not available at this time.

Update:

A time-limited shipment of unprocessed hemlock and Sitka spruce Logs approved on August 8, 2008 by the Regional Forester has been extended (memo File Code 2420-1-2/2430 November 10, 2009). Under direction of the Time Limited Export Policy, a purchaser may request approval to ship unprocessed timber outside of Alaska to the most advantageous markets in the lower 48, including foreign markets. Up to 50 percent of the total sale sawlog volume (sum of all species) of unprocessed hemlock and Sitka spruce logs may be exported. A purchaser may also continue to request a permit to export unprocessed cedar to domestic and foreign markets. Table A3-7 Appendix 3 of the ROD depicts the estimated range of direct jobs associated with the Central Kupreanof project area. The lower range depicted in the table assumes export of volume if a prospective purchaser so chooses.

Beebe-1, SCS II-5

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

FEIS Response:

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

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

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

Update:

Since 2007, five residents of Kake have expressed interest in purchasing small sales and Microsales from the Central Kupreanof project area. The 6367 Timber Sale #1 and #2, located in close proximity to the Central Kupreanof project area, were offered and sold to two residents of Kake in 2008 and 2010. A Microsale along the Kake road system, is scheduled to be advertised in 2010.

More information regarding small sales and Microsales has been added to the ROD.

GP XV-4

Build no new roads within Roadless Areas.

FEIS Response:

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

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

Update:

Recent national direction concerning Inventoried Roadless Areas reserves to the Secretary of Agriculture the decision making authority over the construction and reconstruction of roads and the cutting, sale, and removal of timber in IRAs as included in the 2001 Roadless rule. To address concerns over timber harvest and road construction activities in designated IRAs, Modified Alternative 3 was created that removes all units and associated road building activities falling completely within an IRA as delineated by the 2001 Roadless Rule.

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