

# Appendix M

## KPC Pulp Mill Shutdown and 1997 Timber Demand Projections: EIS Supplement Evaluation

### Issue Definition

The Forest Service entered into a long-term contract with the predecessor-in-interest of Ketchikan Pulp Company (KPC) in 1951. In October 1996, Louisiana-Pacific Corporation (LP), the parent company of KPC, announced its intent to close the KPC pulp mill. The pulp mill shut down in March 1997. Prior to the shutdown LP and KPC had been discussing with the government the effects of the decision to close the mill upon the long-term contract. A final agreement was reached as a part of which the Forest Service specified approximately 300 MMBF of timber from the Tongass National Forest as a supply for two sawmills operated by KPC over the three years beginning July 1, 1997. This agreement modifies the requirements of the long-term contract, canceling the rights of KPC and LP to receive any other timber under that contract. Any other volume that KPC purchases after the agreement will be part of a new, independent timber sale.

After the shutdown of the KPC pulp mill, timber demand projections by the Pacific Northwest Research Station (PNW) indicate a significant decrease in demand compared to their 1994 projections. The 1994 demand projections were used throughout the analysis of alternatives in the printed FEIS. These analyses have been updated in the errata sheet.

The National Environmental Policy Act (NEPA) implementing regulations (40 CFR 1502.9(c)) and Forest Service Handbook direction (1909.15-92-1, Section 18.2) provide that agencies:

- (1) Shall prepare supplements to either draft of final environmental impact statements if:
  - (i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or
  - (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.
- (2) May also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

This evaluation reviews the shutdown of the KPC pulp mill, the modifications to the long-term contract, and the 1997 PNW timber demand projections, relative to the Tongass National Forest Plan Revision and Final Environmental Impact Statement (FEIS) and determines whether a supplement to the FEIS is warranted.

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### Background

**Structure of the Wood Processing Industry in Southeast Alaska.** The major timber processing facilities in Southeast Alaska for fiscal year 1997 are listed in Table M-1.

The KPC pulp mill was the only manufacturing facility operating in Southeast Alaska utilizing most of the low-grade sawtimber and utility grade material. This includes chips that are produced as a by-product of lumber manufacture and are utilized by pulp mills to effectively reduce the requirement for whole logs. With the shutdown of the KPC pulp mill, there is no longer a Southeast Alaska market for this material, at least for an interim period. The low-grade logs could be chipped (meeting in-state processing requirements that primary processing of timber occur within the state) and exported, along with sawmill residual chips.

**Table M-1**  
**Timber Processors in Southeast Alaska in FY 1997**

Timber Processor	Installed Capacity (MMBF) <sup>(2)</sup>	Wood Fiber Consumed (MMBF Equiv.) <sup>(1)</sup>	Percent Capacity Utilized
<b>Major Operators <sup>(2)</sup></b>			
Ketchikan Sawmill	50	27	54%
Annette Island Sawmill	60	32	53%
Viking Lumber/Chip Mill	30	16	53%
Seley Corp.	35	19	54%
Wrangell Sawmill <sup>(3)</sup>	110	59	54%
<b>Minor Operators <sup>(2)</sup></b>			
M.I.T.E.	10	5	50%
Pacific Rim Cedar	10	5	50%
The Mill, Inc.	5	3	60%
Jim Ensley	5	3	60%
Other Small Mills <sup>(4)</sup>	7	4	57%
<b>Total</b>	<b>322</b>	<b>173</b>	<b>52%</b>

Source: USDA Forest Service, "Timber Supply and Demand, 1995

<sup>1</sup> Estimated 10-year average consumption.

<sup>2</sup> Capacity as reported by mill owner or based on operator data. Consumption estimated.

<sup>3</sup> The Wrangell Sawmill is currently closed, but is included in the analysis reflecting potential reopening.

<sup>4</sup> Includes music wood, cedar salvage, and small portable sawmilling operations

Two sawmills are also operated by the Ketchikan Pulp Company. Although cants, logs squared on two or more sides, have historically been the primary output of Alaskan mills, in more recent years an increasing volume of value-added products such as dimension lumber is being sawn. In 1989, KPC installed a modern sawmill in Ketchikan to process smaller diameter logs and manufacture planed lumber. Both export and domestic sizes can be manufactured. KPC also operates the Annette Island mill at Metlakatla. The primary output of this sawmill continues to be rough sawn cants.

**Quality and Characteristics of the Tongass Timber Resource.** Because the product mix is physically limited by the timber supply, the presence of both sawmills and pulp mills or some other use or market for the low-grade material is considered important to the economic viability of the industry. From the standpoint of commercial timber, the stands of coastal Alaska have been described as mature or overmature, of declining commercial quality, and suitable primarily for the manufacture of pulp. Mortality just balances growth over most of the region and the

stands most advanced in age may be very defective from a timber harvest perspective. On the average, total defect accounts for about 31 percent of the gross board-foot volume (Farr, Labau and Laurent, 1976). It is not unusual to find 40 percent or more of the wood volume unusable for sawlog manufacture. Furthermore, old growth hemlock tends to be more defective than Sitka spruce. However, intermixed in these predominately “pulpwood” quality stands is a supply of the finest quality Sitka spruce and western hemlock to be found anywhere. In these stands, western hemlock comprises over 50 percent of the standing sawtimber volume while Sitka spruce accounts for about 28 percent (see Table M-2).

**Table M-2.**  
**Net Volume of sawtimber, Scribner rule, on available softwood timberland by species and 9.0+ diameter classes; Chatham, Stikine and Ketchikan Areas, 1980-84 Inventories**

Species	Chatham	Stikine	Ketchikan	Total for Tongass	
	<i>Million board feet</i>				
Alaska Cedar	1,236	3,012	2,002	6,250	6.20%
Sitka Spruce	10,287	8,540	9,252	28,070	27.83%
Lodgepole Pine	28	22	83	133	0.13%
Subalpine Fir	10			10	0.01%
Western Hemlock	16,366	17,869	19,329	53,564	53.10%
Mountain Hemlock	3,763	1,459	2,292	7,514	7.45%
Western Redcedar		992	4,341	5,333	5.29%
<b>Total:</b>	<b>31,690</b>	<b>31,894</b>	<b>37,299</b>	<b>100,883</b>	
Available Timberlands (Macres)	1,357	1,220	1,528	4,105	
Volume per acre (MBF)	23.4	26.1	24.4	24.6	

Volume, Scribner rule (16-foot logs). The common board-foot timber scaling rule used locally in determining volume of sawtimber. Standing inventory volume is based on 16-foot logs. Does not include utility volume.

Log quality is closely related to tree diameter. In addition, there is a direct relationship of product volume recovery and value with log size (Fahey, 1983). Mill recovery studies have shown that peeler grade hemlock logs have a 67 percent product recovery rate and can produce over 50 percent of the product in C/Better or select grade lumber, while lower grade (number 3) logs can be expected to produce about only 10 percent in this lumber grade. Number 3 sawlogs product recovery rate is also considerably less, less than 50 percent of the cubic foot volume of the log (Woodfin and Snellgrove, 1976). In the old growth stands, among the larger trees, more high-quality logs can be expected.

While world markets prize the knot-free, narrow, uniform growth rings of the premium logs, the truly select grades represent less than two to three percent of the timber inventory. Lower valued number two and three grade logs account for roughly 80 to 90 percent of the sawlog inventory (see Table M-3). In addition to sawlog harvest, utility grade logs usually provide an additional 15 to 18 percent of volume to the total harvest.

**Table M-3.**  
**Grade distribution of sawtimber on available timberlands for Hemlock and Spruce; Tongass National Forest, 1980-84 inventories**

Species	Peeler/Select	Log Grades			Total
		No. 1	No. 2	No. 3	
Western Hemlock	2%	11%	47%	40%	100%
Sitka Spruce	3%	14%	59%	24%	100%

Grade distribution by Administrative Area is from Region 10, USDA-Forest Service, Alaska Region, Forest Management

Historically, about half of the total timber harvested on the Tongass has been delivered to the sawmills; most of the number two grade logs and nearly all the better grades have been sawn while most of the number three grade logs have been pulped. Usually the large diameter logs have been sent to the sawmill and the smaller diameters (15-16 small end scale diameter) sent to the pulp mill. Utility and cull logs have been primarily pulped, although the utilization of all lower grade logs in sawmills has increased with the presence of more specialized sawmilling capacity.

**Analysis of Information**

The proposed Forest Plan, as a NFMA land and resource management plan (LRMP), is a programmatic document. The revision when completed provides an updated framework of land use prescriptions, standards and guidelines and allowable sale quantity (ASQ) within which the Tongass timber sale program and other multiple-use management of the Forest may be implemented at the project level. The proposed Forest Plan does not compel the agency to undertake any projects, nor does it require timber harvest within the lands identified as suitable for that purpose. The ASQ is a decadal ceiling on the amount of timber that may be sold on the Forest, and is not a target. No irreversible or irretrievable commitment to harvest timber anywhere on the forest occurs until completion of the NEPA process for project implementation, tiered to the Forest Plan programmatic EIS [Tenakee Springs et al. v Block et al., 778 F.2d 1402, 1406 (9th Cir. 1985)].

**KPC Pulp Mill Shutdown.** The agreement between KPC and the United States terminated any obligation to provide timber under the long-term contract beyond that specified in the agreement. Much of the timber specified in the agreement had previously been offered and accepted by KPC. This did not change the TTRA section 101 requirement to seek to provide a supply of timber from the Tongass National Forest which meets market demand for timber from the Forest, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, and subject to appropriations, other applicable law, and the requirements of the National Forest Management Act.

The TLMP revision has not relied upon either meeting long-term contract volume needs or supplying the KPC pulp mill or other Alaska manufacturing facilities to constrain the range of action alternatives (for a detailed discussion of alternative development, please see Chapter 2 of the FEIS). The alternatives range in ASQ from 0 to 640 MMBF. At least three alternatives considered in detail in the RSDEIS and FEIS are projected to have had insufficient timber volume to meet the KPC long-term contract planning needs. At least three alternatives projected an insufficient volume to keep the KPC pulp mill in operation at historically operating levels. The preferred and all other alternatives providing sufficient volume of timber to meet KPC long-term contract needs did not assume continuation of the KPC long-term contract beyond the original scheduled termination date in the year 2004. The alternatives assume that continued harvest at or below the ASQ level

after termination of the long-term contract would occur through competitively bid short term contracts.

The KPC pulp mill shutdown results in a large reduction in the demand for low-grade timber, and presents a problem for utilization of the large percentage (about 47 percent of the spruce/hemlock) of such material comprising any timber sale. There is sufficient sawmill capacity to process the higher-grade logs. Low-grade material could be chipped (which meets the requirement for in-state processing, 36 CFR 223.160 (f)), and exported. In addition, the Regional Forester has the authority to allow the export of logs when the Regional Forester determines export is appropriate (36 CFR 223.161; 223.201). The Plan does not govern export policy, which is circumscribed by 36 CFR 223 regulations and related manual, handbook, and timber sale contract provisions.

The projection of potential environmental effects of alternatives in the RSDEIS and FEIS addresses the potential for timber harvest at less than ASQ levels. As indicated above, the EIS discussion of environmental effects is not dependent on any particular mill or timber sale contract configuration.

The employment and income impacts of potential mill closures on the region as a whole, to boroughs or Census Areas, and community groups has been discussed throughout the Regional Economy section, Chapter 3 of the RSDEIS and FEIS. This section has been updated in the errata sheet to reflect the changes in timber demand and employment due to the shutdown of the KPC pulp mill. The Regional Economy section, Chapter 3 of the FEIS includes an analysis of economic trends that would indicate those community groups more likely to be at risk to negative impacts due to mill closures.

The degree of employment and income impacts will likely depend to a large degree on what will be done with the excess supply of low-grade logs. In the short term, the authority exists to allow low-grade logs along with chip material from Forest Service timber sales to be exported. In the longer term, it may be feasible that alternative manufacturing could enter the market to take advantage of the local supply. The opening of such an operation would bring additional employment and income to the community selected for development. Export of low-grade logs and chips would likely dampen the total impact of the KPC pulp mill shutdown by stabilizing logging and transportation jobs. The opening or expanding of operations using the available low-grade log supply could also offset some or all of the employment losses.

The Governor of Alaska established a task force of Southeast Alaska community and timber industry leaders who developed a regional business plan for a viable timber industry without the KPC pulp mill. This task force addressed alternative manufacturing that would utilize available low-grade logs as well as higher-grade timber from the Tongass and other Southeast Alaska ownerships. The results of this work have been reviewed by the Forest Service. The task force and the Governor urged that the TLMP revision be completed as soon as possible, to provide an updated framework of increased certainty about the Tongass timber supply, within which business planning could proceed.

**Market Demand.** The PNW Station has recently completed new projections of derived demand for Alaska national Forest timber. These projections are shown in Table M-4, which also includes, for purposes of comparison, the previous projections done by the PNW Station. This information as it appeared in the FEIS has also been updated; see the errata sheet.

**Table M-4.**  
**Alternative Projections of the Average Annual Derived Demand for**  
**Alaska National Forest Timber** <sup>1</sup> (Million Board Feet)

Period <sup>2</sup>	Alternative Scenarios			Previous Projections	
	Low	Medium	High	Brooks & Haynes 1990 <sup>3</sup>	Brooks & Haynes 1994 <sup>4</sup>
1983-87	281	281	281	281	281
1988-92	414	414	414	414	414
1993-97	193	195	204	404	300
1998-2002	65	101	136	403	315
2003-07	71	119	171	397	332
2008-10	72	135	206	401	335

<sup>1</sup> See Brooks and Haynes, 1997, for a description of the scenarios.

<sup>2</sup> Years are the period over which 5 year averages are calculated. For data shown for 1993-1997, only data for 1997 are projected.

<sup>3</sup> Base projection.

<sup>4</sup> Base projection (1 pulp mill assumed to be operating).

The new projections are based on a consideration of changes in the Japanese timber and wood products market, changes in the structure of the Alaska forest sector, and continuing developments in the Pacific northwest and Canada regarding timber supply and competitive position.

The new projections include low, medium and high projections. The differences between the projections are primarily attributable to different assumptions regarding the Alaska share of North American lumber shipments to Japan, the North American share of Japanese softwood lumber imports, the share of Alaska shipments to export markets, and overrun in lumber production in Alaska.

All the projections assume that lower grade material that was previously directed to pulp production, including the low-grade sawtimber previously directed to the KPC pulp mill, can be exported. Thus, in these projections, the absence of a local market for the low-grade material and sawmill residues does not constrain sawmill production.

None of the projections explicitly incorporate assumptions about the possible emergence of new wood-using industries in Southeast Alaska. The report notes that new industries could emerge under any of the three projections, with value-added manufacturing most consistent with the high projection. Value-added manufacturing would add jobs to the local community under all three projections. Also, value-added manufacturing could provide local use, rather than export of sawmill residue and low-grade logs.

The projections have changed considerably in this decade. For example, in the time period 1998-2002, the most recent medium projections are 75 percent below the projections done in 1990 and 68 percent below those done in 1994.

**Determination**

The CEQ NEPA regulations require a draft or final EIS to be supplemented when there “are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts:” CFR 1502.9(c)(ii). The shutdown of the KPC pulp mill and new timber market demand projections are not significant new information relevant to environmental concerns and bearing on the proposed action. In the context of a broad-scale, long-term land and resource

management plan revision, at a time when the timber demand is in a great deal of flux and uncertainty, the short-term demand information is not significant to the choice of alternatives. A forest plan is a long-term plan of sustainable management and is not significantly influenced by short-term market conditions.

The KPC pulp mill shutdown is not significant new information relevant to environmental concerns and bearing on the proposed action because the KPC long-term contract was not a significant factor in the design of the alternatives. From the beginning of the planning process, alternatives were developed that met and did not meet the requirements of the KPC long-term contract. The alternatives were designed on the basis of long-term, multi-decade consideration and with the knowledge that the KPC long-term contract would expire in 2004.

The recent market demand projections are not significant new information relevant to environmental concerns and bearing on the proposed action because they are necessarily based on assumptions that are unreliable in this volatile time in the timber market in Southeast Alaska. Moreover, market demand is not independent of the TLMP revision, as market forces will probably be affected by the decisions made in the TLMP revision.

Decisions about how much timber to be offered each year are not made in the forest plan, but rather are the result of other decisions such as budget allocations, NEPA processes, and the response to timber offerings. In any event, if a timber sale is offered which is not in demand by the timber market, then no offer will be made for the sale and the timber will not be harvested.

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