Tongass Land Management

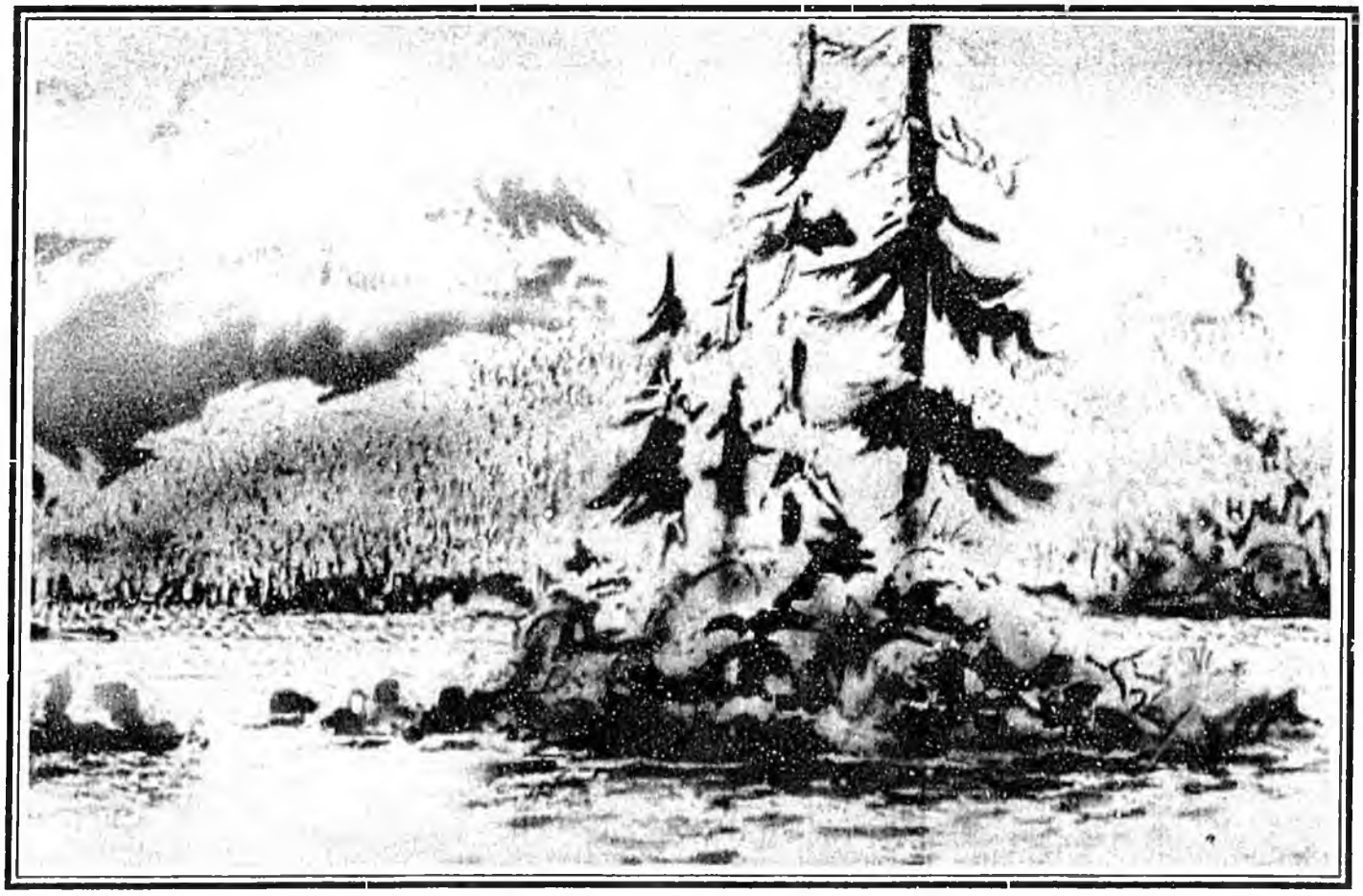
Tongass Forest Plan Review

A Newsletter for the Forest Plan Revision - Issue 12
April 1996

Summary

Revised Supplement to the Draft Environmental Impact Statement

Tongass Land Management Plan Revision



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This extended issue of the Tongass Review is a summary of the Revised Supplement to the Draft Environmental Impact Statement for the Tongass Land Management Plan Revision (hereinafter called the "Revised Supplement"), which is now out for public review. In 1994 the Revision process began to focus on specific unresolved issues, and this led to completion of several science assessments and resource reports, the development of preliminary alternatives and their presentation at public meetings, and the holding of a number of scientific panel assessment meetings. The Revised Supplement is the latest step in this process, presenting the Proposed Forest Plan and the environmental analysis required by the National Environmental Policy Act.

Introduction

Land and resource management planning is a process for developing, amending, and revising National Forest land and resource management plans (forest plans). Forest plans are required by the National Forest Management Act of 1976 (NFMA). Each forest plan is intended to guide the management of a National Forest for a 10-15 year period, after which a formal revision is required.

Contents of the Newsletter

The 17-million acre Tongass National Forest, the largest forest in the National Forest System, was also the first to complete a Land and Resource Management Plan under the National Forest Management Act. The original Tongass Forest Plan was approved in 1979, and has been amended twice (in 1986 and 1991). The first revision of this plan is now being considered. The Revised Supplement is the third release under the National Environmental Policy Act of a public review draft displaying Forest Plan alternatives and their estimated effects.

A draft environmental impact statement (DEIS) documenting the environmental analysis for this revision was released for public review in June 1990. In November 1990, Congress passed the Tongass Timber Reform Act (TTRA). This Act imposed several new requirements for management of the Tongass. This affected the Forest Plan and resulted in the preparation of a Supplement to the DEIS (SDEIS), which was released in August 1991, and which entirely replaced the DEIS. The release of a final statement (FEIS) and Record of Decision was anticipated for early 1993, but was deferred so that additional information necessary to making a decision could be obtained. The Revised Supplement is a supplement to the 1991 SDEIS.

Public Issues

Ten public issues for the Forest Plan Revision were originally identified in 1988. These were used for the 1990 DEIS, and remained the same, with some updating, for the 1991 SDEIS. The topics covered by these issues included *scenic quality, recreation and tourism, wildlife and fish habitats, subsistence uses and resources, timber harvesting, roads, minerals, roadless areas, wild and scenic rivers, and local (community and regional) economies.* The 1991 SDEIS displays in detail how these issues were addressed.

Since the release of and comment period on the 1991 SDEIS, considerable new information bearing on the Tongass Forest Plan Revision has come to light, including additional scientific reviews and studies, new or updated resource inventories, and comments and reports from interest groups and individuals. From this information emerged five issues needing more study and evaluation before a final Revised Forest Plan could

be adopted. Some of these issues are aspects or extensions of the original issues; others are new issues. The five focus issues are now described.

Wildlife Viability. This issue centers on questions of whether the current Forest Plan, or the alternatives considered for revising the Forest Plan (in either the 1991 SDEIS or the unpublished draft FEIS of 1992), provide for sufficient habitat to maintain viable, well-distributed wildlife populations within the Tongass National Forest. Early in 1993, the Alaska Regional Forester requested a scientific peer review of a wildlife viability strategy recommended by an Interagency Viable Population Committee, and other information related to wildlife viability in Southeast Alaska. The peer review concluded (in March 1994) that a strategy like that recommended by the Committee went further in ensuring habitat to maintain long-term distribution of viable populations of wildlife than the (1992) Revision alternatives, but that more study and information was necessary, and other methods and approaches needed consideration.

Maintaining options for habitats for viable wildlife populations was considered in developing the Fiscal Year 1994-95 timber sale/timber offerings schedule for the Tongass, and was followed by public release and review of a proposed Forest Plan amendment to further address short-term habitat concerns related to wildlife distribution and viability. Early in 1995 the U.S. Fish and Wildlife Service, in decisions on petitions for listing of two species (northern goshawk and Alexander Archipelago wolf) in Southeast Alaska under the Endangered Species Act, concluded that while neither species was found in need of listing at this time, future viability was a concern, and implementation of a further habitat strategy would be an important factor in deciding not to list in the future.

Fish Habitat. The Alaska Anadromous Fisheries Habitat Assessment (AFHA) was conducted in 1994, at the direction of Congress to study the effectiveness of current procedures for protecting anadromous fish habitat, and determine if any additional protection was needed. This assessment concluded that current measures and their implementation, though considerably improved over past practices, were not fully effective for preventing habitat degradation or protecting salmon and steelhead stocks in the long term. AFHA included recommendations to consider for the Tongass Plan Revision, and additional recommendations were made by the team that conducted the on-the-ground analysis for AFHA.

Karst and Caves. The extent and importance of the cave resources of the Tongass have only come to light recently. The 1991 SDEIS considered caves, and included some recognition of the "karst" geology in which they are typically found, in Forest-wide standards and guidelines, and through a proposed Karst Areas Geological Area. More recent studies and surveys have indicated a more extensive resource of world-class significance, and the need to consider improved standards and guidelines. Several recent timber sale projects in karst areas have identified a similar need.

Alternatives to Clearcutting. Commercial timber harvest in the Tongass National Forest has traditionally relied on one even-aged silvicultural system, clearcutting. This system has proven very successful in Southeast Alaska. On the other hand, clearcutting continues to be controversial; in Southeast Alaska, the principal objections are to the visual changes in the landscape, and potential adverse effects to streams, slope stability, and loss of old-growth forest, particularly as habitat for wildlife. Since the 1991 SDEIS, the Forest Service's Ecosystem Management policy has come out, which includes a strong emphasis on limiting the amount of traditional clearcutting, and on using alternative silvicultural systems.

Socio-economic Considerations. The socio-economic environment of Southeast Alaska and its relation to the resources and uses of the Tongass has undergone some significant changes in recent years. Since the 1991 SDEIS, the timber industry has seen the permanent closure of one of two major pulp mills (the Alaska Pulp Corporation mill in Sitka), closures of two sawmills, the development of several new small mill operations, and the termination in 1994 of one of two long-term sale contracts. The need to address habitat for wildlife distribution and viability has led to some reductions in timber sale offerings, and other potential sales have been delayed through legal action. At the same time, timber harvest volumes from private lands have dropped substantially since 1990.

The timber industry is not the only economic segment undergoing change. For instance, the tourism industry continues to see rapid growth, indicating a need to better reflect tourism needs and concerns through specific management direction and improved inventories. An extensive update of the social and economic settings and concerns of the 30+ Southeast Alaska communities became necessary in order to have the best information on local uses of, and economic ties to, the Tongass, and to better understand what each community itself desires from the Tongass National Forest.

What a Forest Plan Includes

Land management planning may be compared to city, county or borough zoning. Just as areas in a community are zoned as commercial (allowing business uses), industrial (allowing factories), or residential (allowing only homes, schools, etc.), the forest is also "zoned" to allow, or not allow, various uses and activities. Land management (forest plan) zoning is done through the use of land use designations.

Land use designations (LUD's) specify ways of managing an area of land and the resources it contains. LUD's may emphasize certain resources (such as Wilderness, or old-growth wildlife habitat), or combinations of resources (such as providing for scenic quality in combination with timber harvesting). Each land use designation has a detailed management *prescription* which includes practices and standards and guidelines.

Practices are specific actions or treatments used in the management of forest resources, such as even-aged timber harvest methods (clearcutting, for instance). Each management prescription specifies which practices are allowed to be considered for site-specific project proposals, and under what conditions.

Standards and guidelines, on the other hand, impose limitations on how, where, and when management activities are carried out, usually for specific resource protection purposes.

The land use designations are assigned, or "allocated," to specified areas of land. Some LUD's, such as Wilderness, are congressionally designated, but many can be allocated differently depending on the issue or issues being addressed. Under any one alternative, a given area of land will normally have only one LUD assigned to it.

The Alternatives, Including the Preferred

Nine alternatives are considered in detail in the Revised Supplement; an additional alternative, the Forest Supervisors' Preferred Alternative is identified and discussed in a cover letter to the Revised Supplement. Most of the alternatives are based on alternatives from the unpublished 1992 Final Environmental Impact Statement, which in turn were derived from alternatives in the 1991 SDEIS. The details of these relationships are discussed in the Revised Supplement. One reason that many of the original ten issues are not being revisited at this time is because they have been adequately addressed in the 1991 SDEIS. They were also addressed through alternatives contained in the unpublished 1992 FEIS, particularly in Alternative P, which was the preferred alternative at that time and which forms the basis for several of the new alternatives.

Options for Addressing the Issues. Information about the five focus issues just discussed has been combined with that used to develop the 1992 FEIS alternatives to create alternatives for detailed consideration in the Revised Supplement. For wildlife viability, information from several species assessments, an old-growth forest inventory, and other recent wildlife surveys and studies, was evaluated and synthesized to help identify ways in which adequate habitats to support viable wildlife populations could be provided. Four general approaches (each of which could include a variety of options or component parts) were identified:

1. A system of large, medium, and small old-growth reserves, or "habitat conservation areas," distributed across the forest, in which most management activities are restricted. Habitat corridors connecting reserves can be provided through beach fringe corridors, riparian areas and other measures.

2. Modifications to silvicultural harvest practices throughout the area of planned timber harvesting so that old-growth habitat characteristics, if not true old growth, are perpetuated or extensively achieved. These include "alternatives to clearcutting."

3. A combination of 1. and 2. could be used, such as using reserves in areas which have a history of extensive timber harvesting, and employing alternative silvicultural systems elsewhere.

4. Relying on existing withdrawn areas (such as Wilderness), areas to be managed for purposes other than timber harvesting, and other ways in which old-growth forest would be maintained (such as within riparian areas). This approach does not necessarily identify areas for protection based on specific wildlife habitat values, or their location and distribution across the Forest.

For considering fish habitat, three options for streamside (riparian) habitat management are available, all in the form of Riparian Forest-wide standards and guidelines. Option 3 is similar to the Stream and Lake Protection LUD used in the 1991 SDEIS (and, renamed Riparian Area, in the unpublished 1992 FEIS) for most alternatives. Option 2 basically represents the protection called for in the Anadromous Fish Habitat Assessment, providing greater protection than Option 3. Option 1, the most protective, incorporates additional measures over Option 2 to reduce the risk to fish habitat.

One of the three options available for karst and caves is contained in the Minerals, Geology, and Caves Forest-wide standards and guidelines from the 1992 draft FEIS. Along with caves these include some recognition of karst features, but not of karst as an ecosystem or unique system. The Karst and Cave Resources Assessment (1995) has used more and newer information, much of it from field studies, than was available in 1992, and has proposed in-depth, detailed Forest-wide standards and guidelines for Karst and Cave Resources. A third option is to apply cave protection measures only to the extent needed to comply with the Federal Cave Resources Protection Act, which provides for the identification and protection of significant caves.

Two alternatives to clearcutting, and one variation, are identified: uneven-aged management, which can be the harvest of individual trees or small groups of trees (although only experimental in Southeast Alaska so only incidental yields are expected); a system called "two-aged" management, which is designed to maintain and regenerate trees with two age classes but may trend toward uneven-aged conditions; and clearcutting that has planned future harvests occurring at longer time intervals than the minimum required by regulation. The time intervals for the clearcutting approach are called "rotation ages," signifying the age of a stand at the time it is harvested again. These can be extended from the current planned average rotation of about 100 years to rotations of 200 years or greater.

Alternatives have addressed socio-economic considerations in different ways. Alternative P from the 1992 FEIS emphasized several economically-important resources: recreation and tourism, minerals, subsistence, and timber. The land allocations of Alternative P were based on extensive internal analysis presented in the 1990 DEIS and 1991 SDEIS, and the public comments on those documents, to be responsive to a broad cross-section of the public. Providing a supply of timber sufficient to meet market demands is a goal. Alternative 2 in the Revised Supplement carries forward Alternative P. Alternatives 3-6, and the Forest Supervisors' Preferred Alternative, use Alternative P as a starting point. Another alternative considered in the 1992 FEIS and labeled there Alternative D++ was developed to offer the maximum opportunity for supplying timber. Alternative 7 is based on Alternative D++, and Alternative 8 uses it as a starting point. Alternative 9 is the current Forest Plan (which still has an annual allowable sawlog sale quantity of 450 million board feet). Recreation, tourism, and subsistence are emphasized in most alternatives. Commercial and sport fishing and hunting, through greater protection for important habitat elements, are positively addressed in Alternatives 1-6 and 8, and the Preferred Alternative.

Table 1 shows how many of the issue-related options have been included in the alternatives (including the Forest Supervisors' Preferred). (More options were used than are shown in the table or discussed above. These are discussed and displayed in the Revised Supplement.) The table also includes the ASQ for each alternative, and the NIC I and NIC II portions of the ASQ. Components and options are explained in the footnotes.

A Word on Timber Volumes and the "ASQ." The amount of timber that could be sold under a Forest Plan alternative is expressed as an "allowable sale quantity" (ASQ). The ASQ is the maximum amount of timber that may be sold from the area of suitable land covered by the Forest Plan within a given decade (although usually expressed in average annual terms). The ASQ is not a targeted amount. Many factors can result in timber sale offerings that are below the average annual ASQ, including Congressional budget constraints, new resource issues that need to be addressed, changes in timber markets, and sales held up by appeals or lawsuits.

In order to better address the uncertainties of timber markets and timber sale economics, the Revised Supplement expresses the ASQ in two parts, called non-interchangeable components, or "NIC's." The NIC I portion of the ASQ represents the amount that is projected to be economical to log, given ground conditions, market conditions, and available logging technology. The NIC II portion is that amount projected to be economically or technologically marginal to log. Harvest of the NIC II generally requires additional incentives for pre-roading and advanced logging system technology or improved market conditions.

One other point on timber volumes. In the past timber volumes have usually been expressed as "net sawlog," an estimate of the amount of wood usable for sawlogs. But a portion of harvested timber, typically about 15 percent, is usable for chips (though not sawlogs), and so the amount "sawlog plus utility" is a better representation of total usable wood volume. Throughout the Revised Supplement, and in this newsletter, timber volumes are expressed as sawlog plus utility, and will therefore average about 15 percent higher than most timber volume amounts shown in previous documents.

Table 1
Alternative Components and Options - Tongass Forest Plan Revision Revised Supplement

Component	Alternative 1	2	3	4	5	6	7	8	9	Preferred[1]
Base	1992 A	1992 P	1992 P	92 P	1992 P	1992 P	1992 D++	1992 D++	Current Plan	1992 P
OG Reserves	None	None	All	None	4 Prov.	4 Prov.	None	All	None	All
Rotation Age	200	100	100	200	200	100	100	100	100	100
Silv. System	UM	ES	UM, 2A	UM, 2A	UM, 2A	UM, 2A	ES	2A	ES	UM,2A,ES
Karst/Caves	K/C S&G	92 S&G	K/C S&G	K/C S&G	K/C S&G	K/C S&G	92 S&G	92 S&G	Cave Act	K/C S&G
Riparian:										
FHIP 1	Option 2	Option 3	Option 1	Option 2	Option 2	Option 2	Option 3	Option 2	TTRA/BMP	Option 2
FHIP 2,3	Option 3	Option 3	Option 2	Option 3	Option 3	Option 3	Option 3	Option 3	TTRA/BMP	Option 3
Beach Fringe:										
(0-500')	S&G	S&G	S&G	S&G	S&G	S&G	None	S&G	None	S&G
(500-1000')	UM	None	UM	UM	UM	UM	None	UM	None	None
Sale Quantity (average annual sawlog plus utility volume):										
ASQ (MMBF)	0	489	278	145	139	362	689	364	513	357
NIC I (MMBF)	0	406	232	121	114	300	577	305	474	297
NIC II (MMBF)	0	83	46	24	25	62	112	59	39	60
W&S Rivers	112	25	25	25	25	25	11	11	0	25

[1]This is the Forest Supervisors' Preferred Alternative. The ASQ figure assumes all two-aged management.

Abbreviations and Definitions:

S&G: Forest-wide standards and guidelines

Base: alternative, from 1992 draft FEIS or elsewhere, on which the alternative was initially based.

OG Reserves: All = application of old-growth reserve strategy forest-wide; 4 Prov. = old-growth reserves applied only to four biogeographic provinces.

Rotation Age: average length of time in years to next harvest.

Silv. (silvicultural) System : UM = uneven-aged management (single tree/group selection); ES = even-aged management (clearcutting); 2A = two-aged management (retention of 10-20% of trees per unit).

Karst/Caves: K/C S&G = lowest risk; 92 S&G = moderate risk; Cave Act = highest risk.

Riparian (level of riparian management): Option 1 = lowest risk; Option 2 = moderate risk (incorporates the AFHA report recommendations, as does Option 1); Option 3 = higher risk; TTRA/BMP (Tongass Timber Reform Act/Best Management Practices) = highest risk.

FHIP (Forest Habitat Integrity Project): FHIP 1 = higher quality watersheds for sport and/or commercial fish production. FHIP 2, 3 = moderate to less important watersheds for sport and/or commercial fish production.

Beach Fringe: standards and guidelines applied to the vegetation adjacent to saltwater shorelines. The 0-500' S&G typically excludes timber harvesting, and also applies to a 1,000' estuary fringe. The 500-1000' beach fringe, if used, would allow only uneven-aged silviculture.

Sale Quantity (average annual sawlog plus utility volume, in million board feet): ASQ = allowable sale quantity; NIC I = non-interchangeable component I (the more economic portion of the ASQ); NIC II = non-interchangeable component II (the less economic portion of the ASQ).

W&S Rivers: number of eligible rivers or river segments recommended as Wild, Scenic or Recreational Rivers.

The Nine Alternatives in the Revised Supplement. The basic themes of the nine alternatives are briefly stated here. Table 1 shows many of the key components of each, which are not repeated in these descriptions. The Preferred Alternative will be discussed following this listing.

Alternative 1. This alternative emphasizes National Forest resource uses and opportunities associated with undeveloped, natural settings. All geographic areas identified in public comments as deserving of protection, and all identified recreation places, are assigned natural setting land use designations. Alternative 1 allows uneven-aged timber harvesting in some areas, but does not schedule any harvest.

Alternative 2. This alternative provides a mix of National Forest uses and activities, including scenery, recreation, tourism, subsistence uses, and timber production. Alternative P from the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision is the basis of this alternative.

Alternative 3. This alternative provides a mix of National Forest uses and activities similar to Alternative 2, with additional emphasis on fish and wildlife habitat protection and the karst and caves resource. A system of large, medium, and small old-growth forest reserves is added to Alternative P from the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision.

Alternative 4. This alternative provides a mix of National Forest uses and activities similar to Alternative 2, with additional emphasis on fish and wildlife habitat protection and the karst and caves resource. The even-aged timber harvest of Alternative P from the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision is replaced with two-aged and uneven-aged management.

Alternative 5. This alternative provides a mix of National Forest uses and activities similar to Alternative 2, with additional emphasis on fish and wildlife habitat protection and the karst and caves resource. The even-aged timber harvest of Alternative P from the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision is replaced with two-aged and uneven-aged management using a 200-year harvest rotation. Large, medium, and small old-growth reserves are added in four biogeographic provinces.

Alternative 6. This alternative provides a mix of National Forest uses and activities similar to Alternative 2, with additional emphasis on fish and wildlife habitat protection and the karst and caves resource. The even-aged timber harvest of Alternative P from the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision is replaced with two-aged and uneven-aged management using a 100-year harvest rotation. Large, medium, and small old-growth reserves are added in four biogeographic provinces.

Alternative 7. This alternative emphasizes an economic supply of timber from National Forest lands intended to meet Southeast Alaska timber industry demand. Alternative D++, an alternative considered but eliminated from detailed study in the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision, is the basis of this alternative.

Alternative 8. This alternative emphasizes an economic supply of timber from National Forest lands, while also emphasizing fish and wildlife habitat protection and the karst and caves resource. A system of large, medium, and small old-growth reserves is added to Alternative D++, an alternative considered but eliminated from detailed study in the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision.

Alternative 9. This alternative provides a mix of National Forest uses and activities while maintaining a supply of timber comparable to or greater than the last 15 years. This alternative is the current Tongass Land Management Plan (1979, amended 1986 and 1991).

The Preferred Alternative

The Forest Supervisors' Preferred Alternative is a variation of Alternative 3 described above. It also provides a mix of National Forest uses and activities similar to Alternative 2, with additional emphasis on fish and wildlife habitat protection and the karst and caves resource. A system of large, medium, and small old-growth forest reserves is added to Alternative P from the unpublished 1992 Final Environmental Impact Statement for the Tongass Forest Plan Revision.

The Preferred Alternative differs from Alternative 3 in several ways (see Table 1). Riparian Option 2 is used for the higher quality watersheds rather than Option 1, and Option 3 (rather than Option 2) for the rest. Special management of the extended beach fringe (500-1000 feet) and management direction related to deer habitat capability are not included. The allowable sale quantity is 357 MMBF annually for the first decade, and the NIC I ASQ component is 297 MMBF, assuming all two-aged management.

The Forest Supervisors used nine criteria to identify a Preferred Alternative, and discussed their rationale for the selection in a cover letter accompanying the Revised Supplement. The criteria and some of the accompanying reasons are listed here:

1. **Incorporate a habitat management strategy for wildlife viability.** The Preferred Alternative will maintain wildlife populations through a complex of large, medium and small old-growth habitat reserves laid out across the Tongass totaling over one million acres outside Congressionally designated areas. Also, the Preferred establishes a beach fringe of 500 feet and an estuary fringe of 1,000 feet in which no scheduled timber harvesting will occur; and where site-specific conditions allow, it uses two-age management in which 10-20 percent of the trees in each harvest unit would be left uncut to improve the habitat quality of second-growth stands in the future.

2. **Strengthen the riparian management direction.** The Preferred Alternative improves protection of watersheds with high fish values by incorporating recommendations of the Anadromous Fish Habitat Assessment (AFHA) report (Riparian Option 2). In other watersheds, management direction is also substantially expanded over current stream protection direction.

3. **Protect karst and cave resources.** The Preferred Alternative increases protection for vulnerable karst areas and caves through Forest-wide standards and guidelines that exceed the Federal Caves Resources Protection Act.

4. **Address resource-supply needs and socio-economic effects on local communities.** The Preferred Alternative has an annual average allowable sale quantity (ASQ) of 357 MMBF, of which 297 MMBF is projected to be economically feasible to schedule for harvest. Of the 297 MMBF, an estimated 261 MMBF is sawlog timber. It will meet 95 percent of the estimated market demand for timber from the Tongass over the next 10 years, and will supply enough timber for both the Ketchikan Pulp Company long-term sale contract and about 100 MMBF or more annually to independent timber purchasers. The Preferred also meets the needs of the mining and fishing industries and should not significantly affect the tourism industry.

5. **Protect special and unique areas.** The Preferred Alternative recommends 25 rivers for Wild, Scenic, or Recreational River designation totaling 431 miles. It protects 16 new Special Interest Areas with unique geologic, zoological, or botanical features totaling 173,000 acres.

Recommended Wild, Scenic, or Recreational Rivers of the Preferred Alternative

Chatham Area:	Dangerous River, Glacial River, Hasselborg River, Kadashan River, Katzehin River, King Salmon River. Lisianski River
Stikine Area:	Anan Creek, Blind River, Fall Dog Creek, Farragut River, Harding River, Kadake Creek, Kah Sheets Creek, LeConte Glacier, Marten Lake and Creek, Petersburg Creek, Santa Anna Creek and Lake, Virginia Lake and Creek
Ketchikan Area:	Blue River, Chickamin River, Naha River, Salmon Bay Lake & Stream, Sarkar Lakes, Thorne River -- Hatchery Creek

Proposed New Special Interest Areas of the Preferred Alternative

Arena Cove, Bailey Bay, Blind Slough, Blue River, Clear River, Duke Island, Falls Creek Windthrow, Fish Creek, Karst Areas, Keku Islets, Mt. Edgecumbe, N. Hamilton River, Patterson Glacier, Pike Lakes, Soda Bay, Ward Lake

Table 2
Land Use Designation Group Comparisons (million acres)

Alt.	Wilderness	Natural Setting	Moderate Development	Intensive Development
1	5.9	10.9	<0.1	0.2
2	5.9	5.8	1.7	3.6
3	5.9	6.7	1.3	3.1
4	5.9	5.8	1.7	3.6
5	5.9	6.1	1.5	3.5
6	5.9	6.1	1.5	3.5
7	5.9	3.0	1.5	6.6
8	5.9	4.4	1.4	5.3
9	5.9	4.9	2.3	3.8
Preferred	5.9	6.7	1.3	3.1

Wilderness, Natural Setting, Moderate Development, and Intensive Development are roughly equivalent to LUD's I, II, III, IV of the current plan.

6. **Incorporate input from within and outside of the Forest Service on previous revision proposals.** The Preferred is based on Alternative P from the unpublished 1992 FEIS, which was a modification, based on public comment and additional analysis, of the Preferred Alternative in the 1991 SDEIS.

7. **Meet the requirements of all laws governing management of the Tongass.**

8. **Maintain future options and allow for changes based on new information.** The Preferred Alternative provides for a research program to generate additional scientific data over the next 10-15 years. It has the flexibility to adapt forest management strategies based on new significant information.

9. **Be implementable.**

Comparison of Alternatives

Table 1 compares many of the key components of the alternatives, including the projected timber sale quantities. This section includes one other tabular comparison, and briefly discusses some potential environmental consequences of the alternatives in relation to the public issues, with an emphasis on the focus issues.

Table 2 summarizes the land use designation (LUD) allocations of the alternatives using "LUD Group" combinations. The four LUD Groups are Wilderness, Natural Setting, Moderate Development, and Intensive Development; they combine the individual LUD's in terms of similarities in management and/or potential effects. Wilderness, including the National Monuments, does not vary by alternative. Natural Setting generally includes most of the non-Wilderness LUD's that do not allow timber harvesting (such as Remote and Semi-remote Recreation, Old-growth Habitat, and Special Interest Areas). Moderate Development includes the two LUD's in which timber harvesting is done in a manner that considers recreation and scenic values (Modified Landscape and Scenic Viewshed). Intensive Development includes the Timber Production LUD.

The table can be used to make some general comparisons. Overall, those alternatives with higher acreages in the Natural Setting LUD group (remembering that Wilderness stays constant) will maintain more portions of the Forest in natural settings for dispersed recreation uses, high scenic quality, and undisturbed wildlife and fish habitats, including old-growth forest. Alternatives with higher acreages in the Moderate and Intensive Development groups will have more areas in a roaded and/or harvested condition, with a different kind of recreation setting, more visual disturbance, and more fragmented or altered habitats for wildlife. Between Moderate and Intensive Development, the more acres in the former group relative to the latter group, the less will be the effects on the natural condition of recreation settings and often seen scenic vistas. Generally, a more positive economic condition would exist with more acres in the development groups.

Wildlife Habitat and Wildlife Viability. The analysis of these issues in the Revised Supplement includes both short-term and long-term considerations. Potential short-term effects focus on areas within the Tongass that are currently experiencing, or may experience within the next decade, adverse effects due to losses of old-growth habitat, and where current levels of deer harvesting (hunting) may not be sustainable. Alternative 1 schedules no additional timber harvesting.

Alternatives 3, 5, 6, 8, and the Preferred Alternative include old-growth reserve systems in all or most of the major geographic areas of concern, and Alternatives 4 and 5 would reduce potential effects by using extended timber harvest rotations. Alternatives 3, 4, 5 and 6 also maintain important deer winter range in areas where deer harvesting is high, to provide continued deer hunting opportunities at current levels. Alternatives 2, 7 and 9 would be expected to increase existing problems. Subsistence use associated with deer hunting could be correspondingly affected.

In the long-term, the ability of several alternatives to maintain habitats adequate to sustain well distributed viable wildlife populations Forest-wide is a concern, as evidenced in the ratings from six wildlife species panel assessments. (As noted in the Revised Supplement, these ratings embody considerable uncertainty about wildlife and habitat interactions, and are better used for alternative comparisons than actual - or quantifiable - measures of risk.) The alternatives tended to cluster in groups, with Alternatives 1, 4 and 5 generally having the least expected risk to well-distributed viable wildlife populations, and Alternatives 2, 7 and 9 the greatest risk. In terms of maintaining conditions in the future that would be likely to sustain well distributed viable populations, Alternatives 2, 7 and 9 rated lowest, Alternatives 3, 6 and 8 somewhere in-between, and Alternatives 1, 4 and 5 highest. These relative ratings were fairly consistent between species overall. The Preferred Alternative was not available for the panel assessments; it likely would fall in the Alternative 3-6-8 group. Due to existing altered or degraded habitats, and their likely persistence over time, none of the Alternatives was considered free from some level of risk.

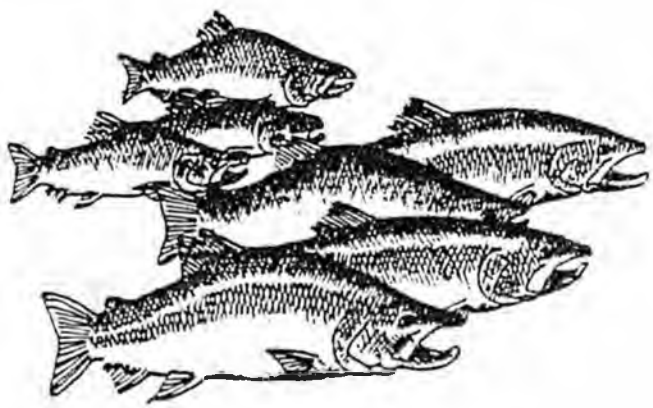
Fish Habitat. Most alternatives include combinations of three "Riparian Options" designed to minimize to various degrees potential adverse effects to fish habitat. Alternative 3 applies Option 1 (lowest risk) to the higher value watersheds, and is the only alternative applying Option 2 to other watersheds. Alternatives 1, 4, 5, 6, 8, and the Preferred Alternative use Option 2 for the higher value watersheds, and Option 3 for the rest. Alternatives 2 and 7 use only Option 3; Alternative 9 uses only current direction. All alternatives include minimum 100-foot no-harvest buffers on either side of anadromous and most other fish streams, and use Best Management Practices Forest-wide.

Beyond these riparian-area measures, risks to maintaining high-quality fish habitat come primarily from the amounts and methods of timber harvesting, and the associated amount of new roads constructed. These and other factors were considered by the Fish/Riparian panel. Their overall ranking of alternatives in terms of long-term risk to fish habitats Forest-wide, from lowest risk to highest, was:

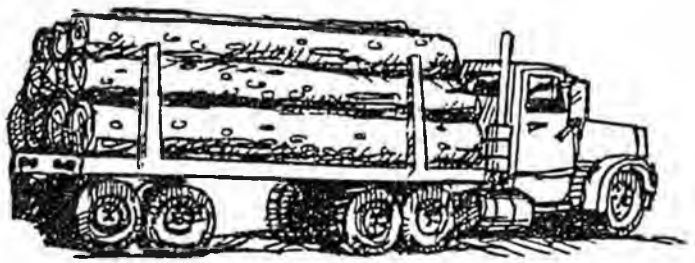
Alternatives 1, 5, 4, 3, 6, 8, 2, 9 and 7. The Preferred Alternative would likely rank similar to Alternative 6.

Noticeable short-term effects to fish habitat are most likely to occur in watersheds where past and near-term future activities are concentrated. This occurs most in alternatives with the highest levels of timber harvesting. These same alternatives project the greatest amounts of road construction over the next decade, and entry into more areas with steep slopes. Alternatives 2, 7 and 9 are distinctly higher in these categories, and also have the higher-risk riparian measures. They thus have higher short-term potential to adversely affect fisheries than the other alternatives.

Karst and Caves. All alternatives comply with the Federal Cave Resources Protection Act in protecting caves determined to be significant. However, most cave resources of the Tongass are part of an extensive limestone formation known as karst, which has complex relationships to water flows and forested lands. Fully protecting the cave resource requires a wider recognition of these karst areas. Special Karst and Caves Forest-wide standards and guidelines are applied in Alternatives 1, 3, 4, 5, 6, and the Preferred Alternative, and these alternatives are most likely to protect sensitive karst areas and the cave resource (still largely unexplored). Alternatives 2, 7, 8 and 9 have less protection, and also greater amounts of timber harvesting, and pose a higher risk to karst areas and caves.



Timber Harvest and Alternatives to Clearcutting. Projected timber harvest levels, as inferred from the ASQ's of the alternatives, range from no scheduled harvest in Alternative 1 to 689 MMBF in Alternative 7 (these and the following are all average annual amounts for the first decade). The NIC I portion of the ASQ is the amount considered likely to be economically viable over the next decade. Alternatives 2, 7 and 9 have a NIC I sale quantity higher than what has, on the average, been harvested annually over the last decade, and would be most likely to allow the timber industry in Southeast Alaska to operate at or above historic levels. Alternatives 6, 8, and the Preferred alternative are somewhat below this average, but have sufficient NIC I volumes to meet long-term timber sale contract requirements and supply a viable independent sale program. Alternative 3 is marginal in this regard. Alternatives 4 and 5 would probably not provide sufficient volume to meet long-term contract requirements, but could supply a viable independent sale program in the absence of such a contract. Alternative 1 has no scheduled timber harvest.



The Revised Supplement discusses the pros and cons of the different harvest methods, and describes the reasons for currently and historically relying on even-aged management, which has been very successful in regrowing forests across the Tongass. For Southeast Alaska there are many unknowns surrounding the silvicultural alternatives to clearcutting, and this translates into considerable uncertainty over their long-term success and effectiveness. This is a moot point for uneven-aged management, however, because this harvest method is generally not projected to be economically feasible. Only in Alternatives 2, 7 and 9, which all have substantial amounts of even-aged harvest, is a small amount of uneven-aged harvest scheduled (from areas where even-aged is not allowed).

Two-aged systems are used in Alternatives 3, 4, 5, 6, 8; and (where site-specific conditions allow) the Preferred Alternative. Alternatives 3, 6, 8, and the Preferred Alternative combine two-aged systems with 100-year rotations; Alternatives 4 and 5 combine the two-aged systems with 200-year rotations. The differences in sale quantities among these combinations can be seen in Table 1. Using two-aged rather than even-aged management with a 100-year rotation results in about 20 percent less timber volume scheduled for harvest; using a 200-year rotation instead of 100 years, with all else being equal, results in a drop of over 60 percent in harvest volume. Besides the reduced timber volumes from two-aged harvest, the ultimate success of this method is not assured, nor have the anticipated benefits to wildlife and diversity been tested. The use of this method instead of clearcutting did not appear to influence the wildlife-related panel assessment ratings.

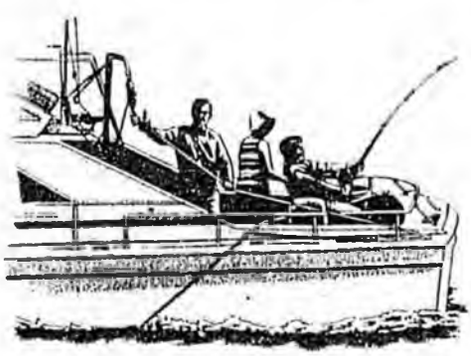
Socio-economic Considerations. The analysis of social and economic effects in the Revised Supplement includes an examination of regional (Southeast Alaska) industry and employment impacts, and a more qualitative look at potential effects to each of Southeast Alaska's 30+ communities (including effects on the availability of subsistence resources). The regional analysis concluded that only two employment sectors - timber and recreation/tourism - would show direct or indirect effects from Tongass management over the next decade. There is a fairly direct, linear relationship between the allowable sale quantity of an alternative and the timber jobs that could result from the harvest of that quantity. However, for alternatives with sale quantities (ASQ or the NIC I portion of ASQ) insufficient to keep a known mill operation in business, offering sales below that amount would not necessarily provide employment. Alternatives 2, 7 and 9 all have allowable sale quantities adequate to support an increase in timber-related employment over the next decade. Alternatives 6, 8, and the Preferred Alternative show a slight decrease, and the other alternatives progressively more of a decrease (Alternative 3, followed by 4 and 5, followed by 1).

Employment in the recreation and tourism sectors (considered together in the analysis) increases moderately, and about the same amount, under all alternatives during the first decade.

The subsistence analysis predicts no significant decline in salmon, other finfish, or invertebrate habitat capability from implementation of any alternative. The analysis does indicate that deer habitat capabilities in several portions of the Tongass may not be adequate to sustain the current levels of deer harvest and that implementation of any alternative could be accompanied by a restriction of subsistence uses of deer. The possibility for restrictions is less in Alternatives 1, 3, 4, 5 and 6 which apply a Forest-wide standard and guideline to exclude or minimize future timber harvesting in areas where habitat capability may be limiting.

Recreation and Tourism. LUD group allocations (Table 2) in relation to recreation opportunities were briefly discussed above. Alternative 1 has a considerably larger acreage in the Natural Setting category than the other alternatives (10.9 million). Alternatives 3, 5, 6, and the Preferred Alternative all have over 6 million acres, and Alternatives 2 and 4 have 5.8 million. Alternatives 7, 8 and 9 each have less than 5 million acres, with 7 offering only 3 million. "Roaded" recreation opportunities in the Moderate and Intensive Development groups are offered in the reverse of this order.

For the analysis of recreation and tourism, various types of "recreation places" - areas popular for specific types of recreation and for tourism - have been identified. In most cases, relatively undeveloped or natural settings for these places are preferred. It is predicted that none of the alternatives can meet the demand for natural settings with motorized access. Forest-wide, for all types of recreation places, Alternative 1 has the most acres in Natural Setting LUD's, followed by Alternatives 3 and the Preferred Alternative, then Alternatives 5 and 6, and then 2, 4 and 8,. Alternatives 7 and 9 have the fewest recreation place acres in natural settings. Tourism recreation places are recognized in generally the same order and relative amount, with the exception that Alternative 8 joins Alternatives 7 and 9 at a level noticeably lower than the other alternatives.



Scenery. Recognition of scenic quality through application of visual quality objectives is discussed in detail in the Revised Supplement. Outside of Wilderness, the Retention and Partial Retention categories would be considered capable of maintaining natural or natural-appearing scenery. Acres in these combined categories are highest in Alternative 1. Alternatives 3, 6, and the Preferred Alternative have 7 million or more acres, closely followed by Alternatives 2, 4 and 5 (6.7-6.9 million), and Alternative 9 (6.3 million). Alternatives 7 and 8 have considerably fewer acres in retention and partial retention objectives.

A list of "visual priority routes and use areas" has been developed to identify the viewpoints from which scenery will be managed. Apart from Alternative 1 (which, with no additional scheduled timber harvest or road construction, has essentially no future alterations affecting scenic quality), Alternatives 2-6 all include the majority of these routes and areas either in natural setting LUD's, or in the moderate development LUD's. Many are also included in Alternative 9 in the LUD II and LUD III categories, but many are also allocated to LUD IV. Alternatives 7 and 8 did not allocate LUD's based on these routes or areas.

Rationale for the Preferred Alternative

The Forest Supervisors chose the preferred alternative because they concluded that it best meets all the key criteria, and represents a balanced approach to management of the Tongass for the next 10-15 years. The process through which they arrived at the preferred alternative may be summarized as follows:

1. They concluded that changes are warranted to improve the current plan's protection of wildlife viability, fish habitat, and karst and cave resources. This led them away from Alternatives 2, 7, and 9.

2. They thought it would not be prudent to propose a wholesale shift to untried timber harvest and stand management methods without experimenting with them on smaller scales over the next 10-15 years. This led them away from Alternatives 4, 5, and 6.

3. They did not think it was necessary or appropriate to select an alternative with no commercial timber harvest program, which led them away from Alternative 1.

4. With Alternatives 3 and 8 left to work with, they felt that the land allocations developed out of the two previous rounds of extensive internal analysis and public involvement, as portrayed in Alternative 3, were more responsive to a broad cross-section of the public than those proposed by the State of Alaska in 1992 as a way of maximizing timber harvest, as portrayed in Alternative 8. This led them to Alternative 3.

5. Because of the concern for the potential socio-economic impacts of the revised plan, they made changes in Alternative 3 that would allow for timber harvest to continue during the next 10-15 years at near current levels and considered the likely environmental effects using the information described in the Revised Supplement.

6. They concluded that the Preferred Alternative would not have significantly different environmental effects if implemented in the next 10-15 years than would Alternative 3.

For all these reasons, they chose the modified version of Alternative 3 as the Preferred Alternative.

We have tried to take into account the desires of all parties, in this and future generations, who are interested in or affected by decisions we make in how to manage the Tongass National Forest. We also considered carefully the agreements reached by Forest Service Chief Jack Ward Thomas and Alaska Governor Tony Knowles last summer. Among those agreements are commitments to work with Alaskans toward:

- A strong, healthy, diversified economy for Southeast Alaska.
- Multiple, balanced, and sustainable use of the Tongass.
- Public participation in the forest planning process.
- Habitat protection measures based on science.
- Planning decisions guided, but not dictated, by scientific information that is reviewed by all interested parties.
- A supply of timber that meets the terms of the long-term contract with Ketchikan Pulp Company and also provides about 100 MMBF for independent and Small Business Administration purchasers.

The preferred alternative honors all of these objectives. In keeping with the commitment to public participation, we want reviewers to know that in order to meet the timber supply commitment, the Preferred Alternative would result in timber sales in areas where some members of the public have expressed strong opposition to such proposals in the past. The analysis indicates that without entering these areas, the timber supply commitment cannot be honored. We all must recognize each others' needs if we are to develop a balanced program for management of the Tongass for the future.

Your Turn

Your participation in the public review of the Revised Supplement is welcome. You may find the information summarized in this newsletter sufficient for you to comment on the alternatives, including the Preferred Alternative. Comments may be made orally at the 30+ public hearings scheduled throughout Southeast Alaska. These hearings will provide the opportunity to comment on the possible restriction of subsistence uses identified in the Revised Supplement. The schedule is given on the next page. Comments may also be made in writing, addressed to:

Tongass Forest Plan Revision Team
8465 Old Dairy Road
Juneau, AK 99801

ALL COMMENTS ARE DUE JULY 26, 1996. (This is one week later than the date published in the Revised Supplement.)

If you need more information, there will be an informational open house held just prior to each public hearing. Open houses will also be held in Anchorage, AK and Washington, D.C. Team members and local Forest Service personnel will be there to provide information and answer questions. The Revised Supplement itself, which this newsletter has summarized, may be reviewed at Tongass National Forest offices and local libraries throughout Southeast Alaska, and copies are also available upon request (at most Tongass National Forest offices or from the address above). The Revised Supplement is in four parts: the Revised Supplement to the DEIS (about 650 pages); a map packet; the Proposed Revised Forest Plan (about 600 pages); and a 14-page cover letter.

All of your comments are important. To be most useful to us, however, it will be helpful if you can focus on specific alternatives or resources you have concerns about, and give us not only your opinions, but your reasons behind them. Any specific information you may have about forest resources or uses, local geographic areas, or the practices and management direction being proposed, is likely to add to our information base. On the other hand, form letters or statements copied from interest group or industry publications are often not as useful in helping us understand how these alternatives affect you or your community.

All comments will be reviewed and analyzed, and, in combination with the public comments on the two previous Revision review documents, will be instrumental in developing a final revised Tongass Forest Plan.

Public Meeting/Hearing Schedule

Date	Community	Location	Time
Monday, May 20	Petersburg	ANB Hall	Open House 4-7 p.m. Hearing 7-9:30 p.m.
	Thorne Bay	Bay Chalet	Open House 4-7 p.m. Hearing 7-10 p.m.
Tuesday, May 21	Kake	Community Hall Kitchen	Open House 4-7 p.m. Hearing 7-9 p.m.
	Point Baker/Port Protection	Community Center	Open House 12-2 p.m Hearing 2-5 p.m.
Wednesday, May 22	Wrangell	St. Rose Parish Hall	Open House 4-7 p.m. Hearing 7-9:30 p.m.
	Coffman Cove	City Hall	Open House 4-7 p.m. Hearing 7-10 p.m.
Thursday, May 23	Sitka	Centennial Building	Open House 4-7 p.m. Hearing 7-9:30 p.m.
	Whale Pass	Community Building	Open House 4-7 p.m. Hearing 7-10 p.m.
Friday, May 24	Port Alexander	Bear Hall	Open House 2-4 p.m. Hearing 4-6 p.m.
	Naukati	Naukati School	Open House 4-7 p.m. Hearing 7-10 p.m.
Tuesday, May 28	Juneau	Centennial Hall	Open House 4-7 p.m. Hearing 7-9:30 p.m.
	Edna Bay	School Building	Open House 1-3 p.m. Hearing 3-5 p.m.
Wednesday, May 29	Skagway	City Hall Council Chambers	Open House 4-7 p.m. Hearing 7-9 p.m.
	Kasaan	City Hall (tentative)	Open House 12-2 p.m. Hearing 2-4 p.m.
Thursday, May 30	Haines	Municipal Building	Open House 4-7 p.m. Hearing 7-9 p.m.
	Metlakatla	To be Announced	Open House 4-7 p.m. Hearing 7-10 p.m.
Friday, May 31	Angoon	Community Center	Open House 2-4 p.m. Hearing 4-6 p.m.
	Ketchikan	Ted Ferry Civic Center	Open House 4-7 p.m. Hearing 7-10 p.m.
Monday, June 3	Tenakee Springs	City Hall	Open House 2-4 p.m. Hearing 4-6 p.m.
	Meyers Chuck	School Building	Open House 12-2 p.m. Hearing 2-4 p.m.
Tuesday, June 4	Hoonah	City Hall	Open House 4-7 p.m. Hearing 7-9 p.m.
	Saxman	To be Announced	Open House 4-7 p.m. Hearing 7-10 p.m.
Wednesday, June 5	Gustavus	School	Open House 4-7 p.m. Hearing 7-9 p.m.
	Craig	To be Announced	Open House 4-7 p.m. Hearing 7-10 p.m.
Thursday, June 6	Elfin Cove	City Building	Open House 4-7 p.m. Hearing 7-9 p.m.
	Hollis	To be announced	Open House 4-7 p.m. Hearing 7-10 p.m.
Friday, June 7	Pelican	City Hall	Open House 4-7 p.m. Hearing 7-9 p.m.
	Klawock	ANB Hall	Open House 4-7 p.m. Hearing 7-10 p.m.
Saturday, June 8	Hydaburg	City Council Chambers	Open House 4-7 p.m. Hearing 7-10 p.m.
Monday, June 17	Yakutat	High School	Open House 4-7 p.m. Hearing 7-9 p.m.

USDA Forest Service
Tongass Land Management Planning Team
8465 Old Dairy Road
Juneau, AK 99801

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Statement of
Mark Rey, Professional Staff
U.S. Senate Committee on Energy and Natural Resources
Hearing of the Alaska House of Representatives Committee on Resources
August 23, 1996

Good Morning, Mr. Chairman. I appreciate the opportunity to offer a brief statement on behalf of Senator Murkowski who chairs the U.S. Senate Committee on Energy and Natural Resources. I will review the Committee's and Alaska Delegation's recent activities in two areas. First, I will discuss efforts underway to provide a legislative extension to the fifty-year timber sale contract between the Ketchikan Pulp Corporation (KPC) and the United States Forest Service. Second, I will review the Committee's and Delegation's oversight of the Forest Service's development of the Tongass Land Management Plan (TLMP).

I want to commend your leadership in helping to develop a strong, bi-partisan majority of both the Alaska Senate and House of Representatives to recommend an extension of the Ketchikan Pulp Corporation contract. In response to your efforts, the efforts of the Alaska Senate, and those of the Governor, the Alaska congressional delegation introduced S. 1877, the Environmental Improvement Timber Contract Extension Act of 1996 on June 13. The bill extends the KPC contract for an additional 15 years, and modifies the contract to offset the negative effects that have occurred as a consequence of the unilateral contract changes made in the Tongass Timber Reform Act of 1990 (TTRA).

The contract extension is needed, as you know, to allow for the amortization of more than $175 million of capital expenditures to bring KPC into compliance with its consent decree with the Environmental Protection Agency (EPA), and into conformance with its waste discharge permits from the State and EPA. The bill imposes conditions set forth by the Governor for the contract extension.

The contract changes are designed to reverse some deleterious changes to the bilateral contract made in 1990. These 1990 changes have reduced operability of the contract, are the subject of damage claims filed (and in some cases already secured) by KPC, and ~~are very likely~~ may be to be found unlawful. In the July 1, 1996 decision U.S. v Winstar Corporation, the Supreme Court held that neither the government generally, nor Congress specifically, can use Sovereign Act authority to absolve itself from any liability incurred as a consequence of unilaterally modifying a contract with another party. Without the contract changes included in S. 1877 (including a requirement that liability associated with the 1990 changes cease upon enactment), we are concerned that the government will eventually be found liable for damage claims in excess of $300 million.

S. 1877, and a companion measure in the House, have been fully heard by the relevant Senate and House Committees. When Congress resumes in September we will be pursuing

every avenue available to secure passage of S. 1877. We appreciate the State's efforts to assist in building support for the measure. It will require unified, bi-partisan support from Alaska to convince the President to sign the bill. While the Clinton Administration has testified in opposition to the measure as introduced, we have already made some changes and are prepared to work further with the Forest Service and the Administration to produce a bill that responds to their concerns while protecting the economy of Ketchikan.

Now let me turn to the oversight of the ongoing Tongass Land Management Planning process. As you know, Congress has historically played a larger role in the management of the Tongass National Forest than any other national forest in the system. Separate pieces of legislation addressing management on the Tongass passed in both 1980 and 1990. This legislation has created specific statutory obligations for the Tongass that do not occur in other national forests. At the same time, management on the Tongass must still meet the requirements of the more generic National Forest Management Act (NFMA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and other relevant federal land management and environmental statutes.

Consistent with this larger congressional role in the management of the Tongass, our oversight of the TLMP process over the last two years has been detailed and extensive. Since the draft TLMP was first released earlier this summer by the Forest Service we have had three oversight hearings on the draft plan. These hearings occurred on April 18, in Washington, D.C., and on May 28 and 29, in Ketchikan and here in Juneau, respectively.

I would like to be able to say that our oversight has concluded that the draft TLMP is in full accordance with the statutes governing management of the Tongass specifically, as well as the public lands and environmental statutes generally. Regrettably, this is not the case as we have uncovered a series of significant problems associated with both the process used to develop the draft plan, as well as the substance embodied in the plan alternatives, including the preferred alternative. The findings of our oversight process have been reviewed with the Forest Service and transmitted to the Secretary of Agriculture, Dan Glickman, for his review and consideration.

Most recently, our problems with the draft plan were summarized in an August 15 letter to the Secretary, co-signed by the three members of the Alaska Delegation. I will submit this letter for the record of your hearing and summarize. In short, we registered serious concerns with the recent revelations that there would be a fall-down in the allowable sale quantity (ASQ) in all plan alternatives as a consequence of failure to properly account for forest-wide standards and guidelines and accurately calibrate the implementation of some forest-wide models. But apart from the most recent revelations concerning the fall-down in the ASQ, we also apprised the Secretary of four categories of failings that our oversight has uncovered.

First, we raised several concerns with the process used to develop the TLMP and questioned whether that process follows all of the NFMA planning regulations and NEPA public disclosure and comment requirements. In our view, it does not for reasons that are outlined in

the letter to the Secretary. The recent revelations about the fall-down in ASQ and subsequent modifications between the draft and final plan only heighten our concerns about compliance with NFMA and NEPA public involvement requirements. We are doubtful that the public will have had a meaningful opportunity to offer their views in an informed manner.

Second, we raised concerns about the applicability of the island biogeographic/habitat conservation area model on the Tongass. This model is not validated for southeast Alaska and appears to be applied on the Tongass in ways that are highly disputable. We do not accept the Agency's rationale that this type of approach is mandated by the species viability requirements of NFMA. Indeed, this approach is only one of several approaches to meeting species viability obligations that the Agency could choose. It is true that this approach has been ratified by a District Court judge sitting in this judicial circuit, and would likely be ratified by the Ninth Circuit. However, the Fifth Circuit has ratified a far different approach to maintaining species viability the Forest Service in the Lake States has embraced. The dispute among the circuits, in our view, affords the Administration much more flexibility in selecting an appropriate conservation plan than the Agency is exhibiting on the Tongass.

Third, we have raised serious concerns, as have you, about the inadequacy of the socio-economic impact analysis that has been performed to date. In our view, it does not meet the standards of either the NFMA or the TTRA.

Fourth, during the course of our oversight we have been apprised of a wide range of problems by past and current TLMP Team members. This series of revelations by Agency experts involved in the process is both significant and unique in our experience with land management planning.

We have apprised the Secretary that the Alaska Delegation is taking the view that TLMP fits within the definition of a "major rule" under the 1996 amendments to the Regulatory Flexibility Act (P.L. 104-121). Thus, we are assuming and we expect that the Department will submit the final Tongass Land Management Plan to Congress to provide us with the 60 statutorily-mandated session days to evaluate the plan and decide whether to endorse it or pass a resolution rejecting it. It is our view that the 1996 Act precludes the final plan from taking effect until the requisite session days have expired.

However, we have heard one persuasive rationale for why the Agency needs a final TLMP on a more expedited basis. That is, the Administration's July 10, 1996 testimony that it could not contemplate S. 1877 or similar legislation to extend the KPC contract without a final TLMP to evaluate the contract's extension against. Consequently, in the Delegation letter to Secretary Glickman, we offer to consider condoning the Agency going forward with a interim final document so that the Administration would have the information necessary to evaluate the KPC contract legislation if we succeed in passing a bill to send to the President for his consideration. Under these circumstances, the delegation might countenance an interim final TLMP with a mutually agreeable comment period to provide a fair opportunity for informed

public review. This is an option that fairly responds to the Administration's testimony on the contract extension, as well as provides a basis for closing on a TLMP that meets all of the Agency's statutory and regulatory obligations and strikes a fair balance for the country and the people of southeast Alaska.

Once again I appreciate the opportunity to testify today. I would be happy to respond as best I can to your Committee's questions.

STATEMENT OF
JIM CAPLAN, DEPUTY REGIONAL FORESTER,
ALASKA REGION, FOREST SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Before the
Resources Committee
Alaska House of Representatives
Alaska State Legislature

Concerning the Revision of the Tongass Land Management Plan

August 23, 1996
Juneau, Alaska

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I appreciate the opportunity to appear before this Committee and provide information regarding the management and use of natural resources on the Tongass National Forest. With me today are: Fred Norbury, Ecosystem Planning and Budget Director; Gary Morrison, Forest Supervisor for the Chatham Area; and Beth Pendleton and Doug Swanston, co-team leaders for the Tongass Land Management Plan Revision effort.

Mr. Chairman, you asked me to address four questions in your letter of August 14. The first two questions deal with the Administration's position on S. 1877, the Ketchikan Pulp Company Timber Contract Extension Act.

The Administration strongly opposes S. 1877, because it undermines the Secretary of Agriculture's authority to manage the resources of the Tongass National Forest; restricts the Secretary's ability to adapt to changing environmental information; and conflicts with certain existing laws, including the Tongass Timber Reform Act. I would ask that a copy of the Administration's July 10 testimony on S. 1877 be made part of the hearing record today.

Having answered your question about the legislation, I would like to emphasize that the Administration is committed to maintaining a sustainable flow of timber to Ketchikan Pulp Company in accordance with the terms of the existing contract, the Tongass Timber Reform Act, and other relevant statutes. Under Secretary Lyons said at the July hearings in Washington, D.C., that once the revision of the Tongass management plan is completed, he would welcome a discussion of timber-related opportunities for Southeast Alaska. Also, as indicated by Under Secretary Lyons if the United States decides to continue a contractual relationship beyond the year 2004 with KPC, we believe that the appropriate vehicle would be a new contract in accordance with the Tongass Timber Reform Act.

We agree that we will be better equipped to make decisions about future long-term commitments to the timber industry in Southeast Alaska -- reflecting sound scientific information and extensive public input -- once the revision process is completed. That is

why discussing the revision of the Tongass management plan with you today is so important, and why we hope to clear up the recent confusion surrounding the process that we have been engaged in over the last several years.

Turning to your remaining questions, let me address reports of reductions in Allowable Sale Quantities (ASQ) for the alternatives in the revised supplement to the Draft Environmental Impact Statement (DEIS).

No final plan or related ASQ has been established at this time. The Forest Service is still receiving public input on the draft revision. We extended the comment period in response to requests from many interests, including the Alaska Forest Association and C.A.R.E. (Concerned Alaskans for Resources and Environment), to provide more time for comment. Since April of this year, we have received over 16,000 comments from the public. These comments will be considered along with the original 10,000 comments we received in our initial revision process in 1992.

After the public comment period on the draft revision closes on August 16, we will continue to analyze public comment and develop the final revised plan. So, any estimates regarding ASQ in the final revised Forest Plan or Final Environmental Impact Statement alternatives are premature.

At this point in the planning process -- between draft and final

-- we are, among other things, validating computer-model runs and testing resource assumptions to ensure they accurately reflect resource conditions on-the-ground. These common sense steps do not indicate problems with the planning process or flaws in the information used to develop the draft alternatives.

We are reviewing our draft and making adjustments like this to assure that the final plan -- and the final direction for the management of the Tongass -- is based on the best information available.

The ASQ's for the alternatives in the Final Environmental Impact Statement could be higher or lower than those stated in the draft. This depends on the outcome of the computer validations and ground-testing, as well as changes that the Tongass Forest Supervisors and Forest Service planning team might make in response to new information.

Our Tongass Land Management Planning Co-team Leaders, Beth Pendleton, and Doug Swanston, and Fred Norbury, Ecosystem Planning and Budget Director, can provide you with insights into how the ASQ may be adjusted up or down as we move through the planning process to a final plan.

Mr. Chairman, I would ask that a copy of the letter from Regional Forester Janik dated August 16, 1996, to Mr. Jack Phelps, Executive Director for the Alaska Forest Association, Inc., which

discusses these issues, be made part of today's hearing record.

We know that people care deeply about the resources of the Tongass National Forest and we will continue to work toward completing the revision to reach an acceptable balance for management of the Tongass. We are committed to a viable timber industry and want to provide a resource program built on sound science. It will provide a sustainable source of raw material to the timber industry in Southeast Alaska while adequately considering all of the other important resources of the Tongass. When the final plan is published, we will make all of the planning information -- and the planners to explain it -- available to the public.

This concludes my testimony, Mr. Chairman. My colleagues and I would be pleased to address any questions you or members of the committee may have.

August 22, 1996

SENT VIA FAX
465-3075

Diane Mayer, Director
Division of Governmental Coordination
PO Box 110030
Juneau, AK 99811

Questions from the House Resources Committee to the Knowles Administration, for the House Resources Committee meeting, August 23, 1996.

The following is a list of more in-depth questions (supplement to the 8/14 hearing invitation letter) regarding the reported 23% reduction in TLMP Allowable Sale Quantity. other TLMP issues and Ketchikan Pulp Company contract extension issues.

1. Who informed the State of the 23% ASQ reduction Commissioner Hensley reported in Ketchikan on August 7, 1996?

2. Was the State made aware of the fact that 23% reduction in ASQ is a net number, made up of a series of "add backs" to the plan as well as "take aways" from the RSDEIS? What were you told in this regard? Have you been advised by the Forest Service of any additional shift in the figures?

3. Did the Forest Service advise you of how they intended to let the public comment on the propriety of what was added back and taken away to the current RSDEIS?

4. What type of follow up have you instituted in your office to determine the impacts from the 23% Allowable Sale Quantity (ASQ) fall down to each of the alternatives? Has the Forest Service told you of these impacts? What is the plan for letting the public respond to these impacts?

5. A 23% fall down from the 297 MMBF net including utility of the preferred alternative would leave us 229 MMBF net including utility in the preferred. Considering the point made by the Southeast Conference that the Forest Service has historically sold on 68% of the ASQ, does the preferred alternative protect the timber dependent communities and timber workers of Southeast Alaska?

6. Does the Knowles Administration still support pressing ahead with TLMP or does it favor delaying the current TLMP to straighten out the errors which Commissioner Hensley announced in Ketchikan? Why or why not?

7. Does the Knowles Administration still want the Forest Service to consider the impacts of the proposal for Landless Natives Legislation in the RSDEIS?

8. 36CFR 219.7d requires consultation with State and local governments and Indian tribal governments at the beginning of the planning process to develop procedures for coordination. This activity must take place prior to recommending the preferred alternative. Did USFS consultation activity with the State government occur prior to the USFS recommendation of the preferred alternative? If so, in what form did consultation take place.

9. 36CFR 219.7e requires the responsible line officer to seek input from Federal, State and local governments and universities in

developing the forest plan to help resolve management concerns and the planning process, and identify areas where additional research is needed. Was any input sought from State official under this section? If so, please explain in which manner.

10. 36CFR 219.12b requires the interdisciplinary team to identify and evaluate public issues and management concerns identified through the public process and through coordination with State and Federal agencies and local governments and Indian tribes. Did coordination occur between the USFS and State officials, and if so, in what manner?

11. 36CFR 219.7c requires a review of State land management plans and local government land use plans. Was there interaction between the State and the USFS, if so, in what form was such interaction?

12. 40CFR 1506.2 requires Federal agencies to cooperate to the fullest extent possible to reduce duplication between National Environmental Policy Act and State and local requirements. Cooperation is supposed to include joint planning, joint environmental research, joint hearings, and joint environmental assessments. Did any cooperation occur between the State and the USFS?

13. Would you please supply the Committee with all State correspondence with the USFS concerning TLMP. (The Committee does not expect such documentation at the 8/23 hearing, but would like such documents as soon as possible)

14. In a July 1995 memorandum, then Forest Service employees Guy Cellier and Kathleen Morse stated that they had advised the interdisciplinary team superiors of the need for a community-by-community effects analysis to describe the impacts of each TLMP alternative. They attached a description of how the socioeconomic analysis should proceed. Their plan was apparently rejected on the grounds that there was insufficient time or resources to perform it. Mr. Cellier has since resigned from the USFS and Ms. Morse has moved to the Alaska Department of Commerce and Economic Development. Has the state reviewed this memorandum and come to any conclusions on whether it is accurate? Has there been any follow up with Ms. Morse, who now works for the State, regarding whether the socioeconomic study in the RSDEIS is adequate?

15. Is the State concerned that the public is being denied a right to meaningfully comment on the RSDEIS because the 'add backs' and 'take aways' which have been made by the USFS to reduce the ASQ impacts it has discovered? Have the 'add backs' and 'take aways' changed certain land uses and standards and guidelines in the plan?

16. Has the State compared what was done in the RSDEIS with the requirements of the National Forest Management Act (NFMA) planning regulations? Has the State considered whether submitting the preferred alternative as a separate letter outside the RSDEIS meets the requirement the planning regulations?

17. Is the State concerned that the community effects analysis done by the socioeconomic Assessment Panel shows exactly the same decrease in jobs for each alternative harvest level ranging from no harvest to nearly 300 Million Board feet?

18. There was an explanation from the Governor in the Ketchikan Daily News on his efforts to extend the KPC contract. The Governor makes the excellent point that the one meeting with the President cannot resolve the issue. Your strong support for opening ANWR to development has helped keep that issue in the forefront of the national consciousness. What more, if anything, can the Knowles

Administration do to persuade the President of your resolve to see the KPC contract extended? Have there been other contacts by the Governor with the President?

19. The Governor's letter does not say anything about the contract modifications that KPC has testified are as equally important to its survival as the extension. Does the Governor support the contract modifications which KPC points out are needed to give the contract economic viability?

20. The Governor says the "there are no environmental constraints that require an immediate decision regarding the mill." Does that mean the Department of Environmental Conservation has now agreed to a mixing zone for KPC?

Thank you for your cooperation and willingness to testify. The Committee and the people of Alaska appreciate your hard work on their behalf.

Sincerely,

Representative William K. Williams, Co-Chair
House Resources Committee

cc. House Resources Committee

Summary of Tables and Effects

Tongass Land Management Plan Revision
Revised Supplement to the Draft Environmental Impact Statement

Table 3-5
Productive old-growth forest planned for harvest by Biogeographic Province by alternative

Biogeographic Province	Current [2] (1995)	Alternatives and Percent Cumulative Harvest After Decades 1 and 10																					
		Preferred		1		2		3		4		5		6		7		8		9			
		1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10
1	6	6	33	6	6	6	28	6	32	6	12	6	10	6	21	9	34	6	26	6	3		
2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	8	4	5	4			
3	11	13	37	11	11	15	42	13	30	12	31	12	29	14	34	16	43	13	31	15	4		
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			
5	12	20	36	12	12	23	43	18	28	13	31	14	31	15	42	21	52	18	31	23	4		
6	7	9	14	7	7	12	24	7	11	7	12	7	11	9	18	13	20	8	11	14	2		
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0			
8	2	5	17	2	2	5	23	4	11	2	9	4	11	4	22	5	35	4	15	5	2		
9	0	3	18	0	0	3	22	3	15	2	11	2	12	5	20	5	32	3	19	4	2		
10	10	14	39	10	10	13	44	14	38	12	25	12	25	15	41	14	47	14	39	13	4		
11	9	12	30	9	9	13	33	11	28	9	26	9	24	12	31	11	42	10	34	14	3		
12	2	5	14	2	2	6	15	4	13	4	11	4	11	5	15	10	26	7	18	8	2		
13	15	19	37	15	15	21	41	18	33	16	31	16	32	17	40	27	55	21	44	21	5		
14	32	35	55	32	32	36	64	35	52	32	50	32	46	34	53	39	74	36	58	38	7		
15	6	9	19	6	6	11	23	8	18	7	16	7	15	10	23	12	34	9	25	11	2		
16	14	15	23	14	14	16	26	15	20	14	18	14	21	15	24	17	33	16	23	18	3		
17	1	2	7	1	1	3	9	1	4	2	5	2	5	3	6	11	50	3	16	11	5		
18	1	5	18	1	1	7	23	5	14	5	16	5	15	7	23	8	39	6	21	9	3		
19	1	1	2	1	1	1	2	1	2	1	2	1	2	1	2	2	3	1	3	1			
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
21	4	5	7	4	4	6	9	4	6	4	6	4	6	4	9	5	10	4	5	5			

[1] All figures represent the cumulative harvest of productive old-growth forest to the end of the period specified (present cumulative harvest, and at the end of one decade and ten decades of alternative Revised Forest Plan implementation), expressed as a percent of 1954 productive old-growth. (Estimated acreages of old-growth harvest are contained in the Planning Record.)

[2] From Table 3-3.

Table 3-6
Old-growth harvest in selected biogeographic provinces, first decade by alternative [1]

Biogeo-graphic Province	Current Harvest Percent	Percent in Harvested Condition After Decade One Alternative [2]								
		Pref.	2	3	4	5	6	7	8	9
14	32	35	36	35	32	32	34	39	36	38
13	15	19	21	18	16	16	17	27	21	21
16	14	15	16	15	14	14	15	17	16	18
5	12	20	23	18	13	14	15	21	18	23
3	11	14	15	13	12	12	14	16	13	15
10	10	14	13	14	12	12	15	14	14	13
11	9	12	13	11	9	9	12	11	10	14
6	7	9	12	7	7	7	9	13	8	14
15	6	9	11	8	7	7	10	12	9	11
1	6	6	6	6	6	6	6	9	6	6

[1] See Table 3-5. All figures are percents of 1954 productive old growth. Provinces are listed in decending order by current harvest percent.

[2] All percents for alternatives represent cumulative old-growth harvest at the end of decade one (2005). Alternative 1 results in no change to the present percentages, and is not included in the column comparisons; however, the "Current Harvest" column can be taken to also represent Alternative 1 at the end of the first decade.

Table 3-20
Miles of system roads existing and planned by Alternative [1]

	Alternative									
	Pref	1	2	3	4	5	6	7	8	9
Existing Rds	4,335	565	4,364	4,335	4,375	4,350	4,350	4,377	4,356	4,327
New Roads	5,137	N/A	11,162	7,640	6,258	5,869	9,782	15,391	9,690	14,018
Total Roads	9,472	565	15,526	11,975	10,633	10,219	14,132	19,768	14,046	18,345
% Increase	219%	N/A	356%	276%	243%	235%	324%	452%	322%	424%
Rd. Density per sq. mi.	1.07	1.02	1.67	1.35	1.14	1.11	1.53	2.00	1.23	1.89

[1] Only roads in VCUs to be entered for timber harvest, in each alternative, are included. Road (Rd.) density calculations are based on the area of the VCUs being entered for timber harvest. (The FORPLAN model did not calculate road mileage for Alternative 1 because of low levels of harvest.)

Table 3-21
Estimated miles of temporary roads to be constructed during a 10-year period [1]

	Alternative									
	Pref	1	2	3	4	5	6	7	8	9
Miles of temp. Roads	357	0	488	278	145	139	362	689	364	521

Table 3-22
Riparian management levels applied in each Alternative, and percentage of streams in timber harvest VCUs receiving Option 2 (AFHA recommended protection level) protection. [1]

	Alternative									
	Pref.	1	2	3	4	5	6	7	8	9
Total miles of streams in VCUs entered	22,988	1,691	23,977	22,988	24,045	23,807	23,807	28,308	27,189	24,556
FHIP1, watershed level of protection	Opt 2	Opt 2	Opt 3	Opt 1	Opt 2	Opt 2	Opt 2	Opt 3	Opt 2	TTRA /BMP
% of total streams protected with Option 2 or higher	20	21	0	100	20	20	20	0	20	0
FHIP2,3 VCU level of protection	Opt 3	Opt 3	Opt 3	Opt 2	Opt 3	Opt 3	Opt 3	Opt 3	Opt 3	TTRA /BMP
% of total streams protected with Option 2 or higher	0	0	0	100	0	0	0	0	0	0

[1] Stream miles include all streams in the watershed and/or watershed.

Table 3-23
Ground-disturbing activities, first decade

Alternative	Timber Harvest (acres)	Road Construction (miles)
Preferred	117,640	1,550
1	0	0
2	167,672	1,791
3	94,338	1,212
4	49,432	633
5	47,120	602
6	123,178	1,577
7	232,414	2,983
8	123,253	1,589
9	177,477	2,643

Table 3-24
Inventoried karst area within Moderate and Intensive Development LUD groups by alternative

Alternative	Total Inventoried Karst Areas	Portion that is Tentatively Suitable Timber Lands
Preferred	258,870	129,086
1	6,183	3,321
2	316,753	160,574
3	258,870	129,086
4	316,753	160,453
5	238,136	143,617
6	238,136	143,617
7	268,832	191,543
8	297,653	127,264
9	356,021	188,665

Source: Query Qkarstrx.

Table 3-25
Effects on economic availability of identified mineral resources, shown as a percent of the 604,989 acre total

	Withdrawn Areas		Open Areas	
	Existing	Recommended	Higher Cost	Average Cost
Preferred	23.6%	0.5%	39.7%	36.2%
Alternative 1	23.6%	1.9%	53.2%	21.3%
Alternatives 2-6	23.6%	0.5%	39.7%	36.2%
Alternatives 7-8	23.6%	0.0%	37.9%	38.6%
Alternative 9	23.6%	0.0%	24.2%	52.2%

Based on 1991 SDEIS

Table 3-26
Effects on economic availability of undiscovered mineral resources, shown as a percent of the 6.66 million acre total

	Withdrawn Areas		Open Areas	
	Existing	Recommended	Higher Cost	Average Cost
Preferred	33.8%	0.8%	35.1%	30.3%
Alternative 1	33.8%	1.8%	45.9%	18.5%
Alternatives 2-6	33.8%	0.8%	35.1%	30.3%
Alternatives 7-8	33.8%	0.3%	34.9%	31.0%
Alternative 9	33.8%	0.4%	32.7%	33.1%

Based on 1991 SDEIS

Table 3-27
Unrealized values (in millions) due to potential withdrawals of identified or undiscovered mineral resources by alternative

	Alternatives				
	Preferred	1	2-6	7-8	9
Identified	$0.0	$705.0	$0.0	$37.0	$0.0
Undiscovered	$197.3	$830.9	$197.3	$247.9	$194.1
Combined	$197.3	$1,535.9	$197.3	$284.9	$194.1

Based on 1991 SDEIS

Table 3-31

Forest-wide Recreation Opportunity Spectrum (ROS) acres (in 1,000's), and percents by alternative after 150 years of plan implentation [1]

ROS Class [2]	1995	Alternatives								
		Preferred	1	2	3	4	5	6	7	8	9
P	11,010	9,094	10,711	8,975	9,094	8,975	9,020	9,020	7,293	8,755	8,243
	65%	54%	63%	53%	54%	53%	53%	53%	43%	52%	49%
SPNM	3,170	2,246	3,276	1,736	2,246	1,736	1,939	1,939	1,109	1,957	1,575
	19%	13%	19%	10%	13%	10%	11%	11%	7%	11%	9%
SPM	1,187	841	1,184	736	841	736	773	773	534	754	660
	7%	5%	7%	4%	5%	4%	5%	5%	3%	5%	4%
RN	191	428	286	404	428	404	419	419	302	302	436
	1%	3%	2%	2%	3%	2%	3%	3%	2%	2%	3%
RM	1,373	4,323	1,473	5,080	4,323	5,080	4,780	4,780	7,694	5,163	6,017
	8%	25%	8%	30%	25%	30%	28%	28%	45%	30%	35%
R, U	7	7	7	7	7	7	7	7	7	7	7
	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%

[1] Acres are rounded to the nearest thousand. All percents are percents of total Forest acres (16.939 million). Rural and Urban ROS have been combined, and represent less than one percent of total acres in all alternatives.

[2] P = Primitive; SPNM = Semi-primitive Non-motorized; SPM = Semi-primitive Motorized; RN = Roaded Natural; RM = Roaded Modified; R = Rural; U = Urban

Table 3-32

Forest-wide recreation place acres (in 1,000's), by LUD group by alternative.

LUD Group[1]	Alternatives									
	Pref.	1	2	3	4	5	6	7	8	9
W	1,316	1,316	1,316	1,316	1,316	1,316	1,316	1,316	1,316	1,316
NS	1,454	2,425	1,156	1,454	1,156	1,254	1,254	590	1,068	879
MD	446	11	602	446	602	550	550	277	230	679
ID	546	10	688	546	688	642	642	1,579	1,148	888

Source: Query Q249C

[1] W = Wilderness; NS = Natural Setting; MD = Moderate Development; ID = Intensive Development.

Acreage totals may not be the same as other tables due to rounding

Table 3-33

Home range recreation place acres (in 1,000's), by LUD group by alternative.

LUD Group[1]	Alternatives									
	Pref.	1	2	3	4	5	6	7	8	9
W	427	427	427	427	427	427	427	427	427	427
NS	829	1,406	645	829	645	720	720	370	640	510
MD	316	8	409	316	409	372	372	156	146	433
ID	277	8	368	277	368	330	330	896	636	478

Source: Query Q3093A

[1] W = Wilderness; NS = Natual Setting; MD = Moderate Development; ID = Intensive Development.

Table 3-34
Acreages (in 1,000's) in specific recreation place categories, by LUD group for each alternative.

Rec Place Type and LUD Group[1]	Alternative									
	Preferred	1	2	3	4	5	6	7	8	9
Marine Recreation										
W	443	443	443	443	443	443	443	443	443	443
NS	474	728	392	474	392	414	414	156	315	260
MD	162	<1	223	162	223	209	209	106	93	195
ID	96	2	116	96	116	108	108	468	323	276
Facilities										
W	448	448	448	448	448	448	448	448	448	448
NS	575	718	462	575	462	537	487	199	343	343
MD	132	4	181	132	181	161	161	105	86	231
ID	66	2	81	66	81	75	75	420	295	150
Hunting										
W	444	444	444	444	444	444	444	444	444	444
NS	651	1,040	530	651	530	559	559	299	473	485
MD	170	7	234	170	234	218	218	188	168	306
ID	233	7	290	233	290	277	277	567	413	263
Fishing										
W	166	166	166	166	166	166	166	166	166	166
NS	186	283	137	186	137	151	151	56	128	87
MD	58	1	85	58	85	76	76	40	34	116
ID	41	1	64	41	64	58	58	189	123	83

Source: Query Q3093A
[1] W = Wilderness; NS = Natural Setting; MD = Moderate Development; ID = Intensive Development.

Table 3-35
Tourism recreation place acres (in 1,000's), by LUD group by alternative.

LUD Group[1]	Alternatives									
	Pref.	1	2	3	4	5	6	7	8	9
W	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
NS	852	1,143	740	852	740	774	774	365	583	601
MD	190	9	258	190	258	238	238	189	171	297
ID	112	3	157	112	157	142	142	600	400	256

Source: Query Q3093A
[1] W = Wilderness; NS = Natural Setting; MD = Moderate Development; ID = Intensive Development.

Table 3-36
Allocation of the six suitable potential RNA's by alternative

	Alternatives [1]					
	Preferred	1	2	3-6	7-8	9
Warm Pass	R	R	R	R	R	N
Marten River	R	R	R	R	R	W
Robinson Lake	R	R	R	R	R	W
Tonalite Creek	R	R	R	R	R	N
Kadin Island	R	R	R	R	I	M
Rio Roberts	R	R	R	R	I	I

[1] Letter symbols represent the following: R= recommended for Research Natural Area designation; W= Wilderness LUD group; N= Natural Setting LUD group; M= Moderate Development LUD group; I= Intensive Development LUD group.

Table 3-37
Summary of how the priority potential RNA proposals are allocated in each alternative

	Alternatives [1]				
	Preferred	1	2-6	7-8	9
Akwe Beach	N	N	N	N	N
Akwe-Ustay Lakes	N	N	N	N	N
Mountain Lake	W	W	W	W	W
Pike Lakes	W/N/M	W/N	W/N/M	W/M/I	W/M/I
Upper Situk	W/N	W/N	W/N	W/N/I	W/N/I
Dayebas Creek	N	N	N	N	N
Blue Lake Lava	W	W	W	W	W
Twin Lakes	W	W	W	W	W
Crater Ridge-Freds Creek	N	N	N	N/M	M
Myriad Islands	W	W	W	W	W
Plotnikof-Pt Bank	W	W	W	W	W
Gambier Bay	W	W	W	W	W
Tiedeman Island	W	W	W	W	W
Pleasant Island	W	W	W	W	W
Upper Tenakee Hot Springs	N/M/I	N	N/M/I	N/M/I	N/M
Swan Cove	W	W	W	W	W
Bailey Bay Hot Springs	N	N	N	N	N
Falls Creek Windthrow	N	N	N	I	I
South Etolin Island	W	W	W	W	W
Mt. Calder-Virginia Mt.	N/I	N	N/I	N/I	N/I
Sarkar Lakes	N/I	N	N/I	I	N/I
Thunder Mountain	N	N	N	I	I
Klakas Lake	W/N/I	WN	W/N/I	W/I	W/N
El Capitan	N	N	N	N	N

[1] Letter symbols represent the following: W= Wilderness LUD group; N= Natural Setting LUD group; M= Moderate Development LUD group; I= Intensive Development LUD group.

Table 3-38
Allocation of total roadless area (in 1,000 acres) to LUD group by alternative [1]

LUD Group[2]	Alternatives									
	Preferred	1	2	3	4	5	6	7	8	9
NS	6,603	9,677	5,854	6,603	5,834	6,138	6,138	3,247	4,462	4,717
MD	872	13	1,223	872	1,223	1,105	1,105	1,457	1,356	1,914
ID	2,129	108	2,528	2,129	2,528	2,361	2,361	4,923	3,809	2,783

[1] This is in addition to the 5.7 million acres of Wilderness within the Tongass.
[2] NS = Natural Setting; MD = Moderate Development; ID = Intensive Development.

Table 3-42
Visual Quality Objectives by alternative, Forest-wide

Alternative	Visual Quality Objective			
	Retention	Partial Retention	Modification	Maximum Modification
Preferred				
Seen Areas	2,331,436	1,483,042	366,293	1,055,735
Seldom-seen	2,091,290	1,425,858	0	2,274,463
Wilderness	5,723,253			
Alternative 1				
Seen Areas	2,337,325	2,893,975	1,180	741
Seldom-seen	3,583,642	1,983,636	0	220,171
Wilderness	5,723,253			
Alternative 2				
Seen Areas	1,822,706	1,653,882	452,668	1,307,249
Seldom-seen	1,728,367	1,425,858	0	2,637,386
Wilderness	5,723,253			
Alternative 3				
Seen Areas	2,331,436	1,483,042	366,293	1,055,735
Seldom-seen	2,091,290	1,425,858	0	2,274,463
Wilderness	5,723,253			
Alternative 4				
Seen Areas	1,822,706	1,653,882	452,668	1,307,249
Seldom-seen	1,728,667	1,425,858	0	2,637,386
Wilderness	5,723,253			
Alternative 5				
Seen Areas	1,978,690	1,615,361	421,656	1,220,796
Seldom-seen	1,902,330	1,425,858	0	2,463,424
Wilderness	5,723,253			
Alternative 6				
Seen Areas	2,021,316	1,598,775	416,157	1,200,732
Seldom-seen	1,934,607	1,411,096	0	2,446,188
Wilderness	5,723,253			
Alternative 7				
Seen Areas	1,160,149	597,493	1,010,389	2,465,605
Seldom-seen	834,616	690,578	0	4,259,651
Wilderness	5,723,253			
Alternative 8				
Seen Areas	1,977,239	580,517	767,556	1,908,325
Seldom-seen	1,410,700	690,578	0	3,683,566
Wilderness	5,723,253			
Alternative 9				
Seen Areas	2,631,432	1,090,184	354,184	1,157,866
Seldom-seen	2,529,073	0	0	3,255,771
Wilderness	5,723,253			

Source: Q47D

Table 3-43
"Development" LUD and Natural Setting LUD Group acres (in 1,000's), by alternative [1]

		Alternatives								
LUD	**Pref.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Development LUD's:										
SV	815	1	815	577	815	761	759	0	0	
ML	856	0	856	680	856	761	755	1,484	1,368	
TM	3,482	222	3,482	2,981	3,482	3,295	3,258	6,336	5,058	
OD	181	169	181	181	181	181	181	181	181	184
WSR [2]	91	332	91	91	91	91	91	0	0	
LUD III										2,334
LUD IV										3,818
Natural Setting LUD Group	5,875	10,688	5,875	6,892	5,876	6,212	6,448	3,357	4,751	4,883

[1] SV = Scenic Viewshed, ML = Modified Landscape, TM = Timber Production, OD = other development LUD's (see text), WSR = Wild/Scenic/Recreational River. For Alternative 9, LUD III is roughly equivalent to the total of SV and ML in the other alternatives, and LUD IV equivalent to TM. In addition, each alternative has 5,723 thousand acres of Wilderness.
[2] "Development" in terms of timber harvesting or road construction would only occur in Scenic or Recreational Rivers. Rivers proposed within Wilderness are not included.

Table 3-44
Adopted VQO's for selected viewsheds by alternative [1][2]

Travel Route/ Viewshed	EVC	Pref.	Alternative 1	2	3	4	5	6	7	8	9
Behm Canal											
Type I EVC	28,797										
Retention(II)	160	9,674	25,979	2,645	9,674	2,645	2,645	2,645	120	9,330	3,985
Par. Ret(III)	3,729	7,710	13,776	9,252	7,710	9,252	9,252	9,252	420	420	6,009
Modific.(IV)	1,582	11,717		16,784	11,717	16,784	16,784	16,784	9,393	6,290	5,948
Max. Mod.(V)	5,487	10,654		11,075	10,654	11,075	11,075	11,075	29,822	23,715	23,813
Type VI EVC											
Chatham Strait											
Type I EVC	90,093										
Retention(II)	618	56,604	31,407	27,251	56,604	27,251	44,391	48,865	34,873	64,626	39,102
Par. Ret(III)	360	19,874	84,837	24,670	19,874	24,670	20,971	20,491			15,642
Modific.(IV)	700	3,733		8,173	3,733	8,173	4,993	4,754	5,768	4,148	1,819
Max.Mod.(V)	24,472	36,032		56,149	36,032	56,149	45,889	42,134	75,602	47,469	59,680
Type VI EVC	20										
Cholmondeley Sound											
Type I EVC	36,796										
Retention(II)		4,984	17,124		4,984					4,944	5,528
Part. Ret(III)		3,966	19,430	3,966	3,966	3,966	3,966	3,966			11,617
Modific.(IV)	360	11,567		11,567	11,567	11,567	11,567	11,567	11,018	3,297	6,771
Max. Mod.(V)	922	17,541		22,525	17,541	22,525	22,525	22,525	25,438	28,215	14,142
Type VI EVC											
Clarence Strait											
Type I EVC	46,498										
Retention(II)	782	23,126	21,047	4,800	23,126	4,800	14,032	14,032		24,170	5,080
Part.Ret.(III)	5,332	16,090	53,979	23,247	16,090	23,247	23,126	23,126			26,584
Modific.(IV)	13,603	18,008		27,419	18,008	27,419	18,408	18,408	12,177	8,396	5,479
Max.Mod.(V)	8,490	17,761		19,519	17,761	19,519	19,419	19,419	62,909	42,520	29,557
Type VI EVC	381										

Travel Route/ Viewshed	EVC	Alternative Pref.	1	2	3	4	5	6	7	8	9
Duncan Canal											
Type I EVC	16,547										
Retention(II)		6,275	5,614	1,219	6,275	1,219	6,275	6,275		7,794	3,895
Part.Ret(III)	300	7,375	22,106	10,952	7,375	10,952	7,375	7,375			7,075
Modific.(IV)	5,496	8,135		8,875	8,135	8,875	8,135	8,135	5,116	1,999	2,139
Max.Mod.(V)	5,397	5,934		6,674	5,934	6,674	5,934	5,934	22,604	17,928	14,611
Type VI EVC											
Eastern Passage											
Type I EVC	49,326										
Retention(II)	380	17,762	20,563	5,461	17,762	5,461	5,461	5,461		18,602	4,861
Part.Ret.(III)	7,802	37,347	51,169	48,869	37,347	48,869	48,869	48,869			30,965
Modific.(IV)	1,880	8,161		8,321	8,161	8,321	8,321	8,321	10,101	5,421	5,240
Max.Mod.(V)	12,903	8,461		9,081	8,461	9,081	9,081	9,081	62,191	48,269	23,863
Type VI EVC											
Ernest Sound											
Type I EVC	28,345										
Retention(II)		14,258	15,181	1,041	14,258	1,041	5,792	5,792		13,198	20
Part.Ret.(III)	20	6,583	16,202	7,302	6,583	7,302	6,883	6,883			
Modific.(IV)	3,157	7,298		10,872	7,298	10,872	8,217	8,217	4,842	4,222	3,802
Max.Mod.(V)		3,363		12,287	3,363	12,287	10,610	10,610	26,540	13,962	22,999
Type VI EVC											
Frederick Sound											
Type I EVC	63,082										
Retention(II)	2,060	15,851	17,874	1,221	15,851	1,221	4,714	4,714			1,861
Part.Ret.(III)	120	27,438	63,007	34,571	27,438	34,571	34,531	34,531			20,378
Modific.(IV)	10,117	7,242		7,362	7,242	7,362	7,322	7,322	2,822	2,782	1,421
Max.Mod.(V)	5,562	30,390		37,767	30,390	37,767	34,354	34,354	77,419	62,788	57,261
Type VI EVC											
Hyder/Salmon River Highway											
Type I EVC	24,025										
Retention(II)		11,302	12,362	11,302	11,302	11,302	11,302	11,302			11,282
Part.Ret.(III)		12,722	11,662	12,722	12,722	12,72	12,722	12,722	24,025	24,025	2,742
Modific.(IV)											
Max.Mod.(V)											
Type VI EVC											

Travel Route/ Viewshed	EVC	Alternative								
		Pref.	1	2	3	4	5	6	7	8	9
Icy Strait											
Type I EVC	36,237										
Retention(II)		14,623	5,607	220	14,623	220	260	1,021		14,483	80
Part.Ret.(III)	3,698	8,341	45,870	9,983	8,341	9,983	9,983	9,983	80		360
Modific.(iV)	280	560		560	560	560	560	560	1,740	1,380	1,380
Max.Mod.(V)	11,322	27,993		40,754	27,993	40,754	40,714	39,953	49,657	35,614	49,717
Type VI EVC											
Lynn Canal											
Type I EVC	138,617										
Retention(II)	401	42,184	28,316	20,470	42,184	20,470	20,470	20,470	12,140	48,102	63,395
Part.Ret.(III)	2,422	74,376	112,963	92,072	74,376	92,072	92,072	92,072	19,167	14,512	43,218
Modific.(IV)		21,797		21,817	21,797	21,817	21,817	21,817	84,133	53,427	
Max.Mod.(V)		2,963		6,961	2,963	6,961	6,961	6,961	23,302	22,702	18,681
Type VI EVC											
Mendenhall Glacier											
Type I EVC	252,987										
Retention(II)		163,780	163,540	163,780	163,780	163,780	163,780	163,780	163,520	163,540	140,604
Part.Ret.(III)	959	90,166	90,406	90,166	90,166	90,166	90,166	90,166	68,343	68,343	113,341
Modific.(IV)									11,505	11,505	
Max.Mod.(V)									10,578	10,558	
Type VI EVC											
Peril Strait											
Type I EVC	120,582										
Retention(II)	720	69,371	1,744	24,014	69,371	24,014	24,074	29,206	20	59,772	27,447
Part.Ret.(III)	2,194	40,690	165,515	44,684	40,690	44,684	44,684	39,552	24,953	24,953	57,020
Modific.(IV)	13,793	4,374		11,276	4,374	11,276	11,256	11,256	15,566	6,439	220
Max.Mod.(V)	26,151	52,904		87,365	52,904	87,365	87,325	87,325	126,720	76,095	71,890
Type VI EVC	5,239										

Travel Route/ Viewshed	EVC	Alternative								
		Pref.	1	2	3	4	5	6	7	8	9
Salmon Bay Lake											
Type I EVC	2,056										
Retention(II)	80	2,002	20	119	2,002	119	2,002	2,002		1,982	119
Part.Ret.(III)	1,761	1,499	4,174	3,162	1,499	3,162	1,499	1,499	20		3,778
Modific.(IV)		396		536	396	536	396	396	100	20	
Max.Mod.(V)	296	296		377	296	377	296	296	4,074	2,192	296
Type VI EVC											
Stephens Pass											
Type I EVC	127,296										
Retention(II)	1,061	35,401	9,114	12,149	35,401	12,149	12,149	13,083	2,508	36,714	10,625
Part.Ret.(III)	1,060	69,307	118,789	90,986	69,307	90,986	90,986	90,847	17,464	14,671	55,898
Modific.(IV)	520	1,573		2,607	1,573	2,607	2,607	2,091	41,618	27,228	1,440
Max.Mod.(V)	3,932	21,641		22,180	21,641	22,180	22,180	21,902	65,534	48,510	33,682
Type VI EVC											
Stikine Strait											
Type I EVC	32,848										
Retention(II)		8,853	1,302	461	8,853	461	461	461		8,392	461
Part.Ret.(III)	921	35,423	53,169	43,475	35,423	43,475	43,475	43,475			51,270
Modific.(IV)	4,619	1,883		1,883	1,883	1,883	1,883	1,883	461	461	
Max.Mod.(V)	16,083	8,312		8,652	8,312	8,652	8,652	8,652	54,010	45,618	2,740
Type VI EVC											
Sumner Strait											
Type I EVC	21,829										
Retention(II)	100	14,224	10,886	9,120	14,224	9,120	11,548	13,268	3,915	9,039	7,317
Part.Ret.(III)	4,553	17,408	54,905	17,508	17,408	17,508	17,408	17,408			23,853
Modific.(IV)	9,842	6,844		6,844	6,844	6,844	6,844	6,844	9,370	9,370	5,908
Max.Mod(V)	29,447	27,294		32,298	27,294	32,298	29,571	28,251	52,485	47,361	28,692
Type VI EVC											
Sweetwater Lake/Honker Divide											
Type I EVC	11,699										
Retention(II)	1,380	10,361	7,402	7,181	10,361	7,181	12,622	12,622		5,081	7,421
Part.Ret.(III)	4,881	5,620	14,859	7,060	5,620	7,060	4,699	4,699			8,821
Modific.(IV)	3,240	5,980		7,720	5,980	7,720	4,640	4,640	9,040	7,300	1,740
Max.Mod.(V)	1,080	420		420	420	420	420	420	13,221	9,880	4,400
Type VI EVC	100										

Travel Route/ Viewshed	EVC	Pref.	Alternative 1	2	3	4	5	6	7	8	9
Tenakee Inlet To Tenakee Springs											
Type I EVC	23,202										
Retention(II)		9,439	1,980	460	9,439	460	7,701	9,620		9,419	1,879
Part.Ret.(III)	780	20	41,288	1,400	20	1,400	20	20			4,700
Modific.(IV)	4,074	2,358		2,358	2,358	2,358	2,358	2,338	460	20	20
Max.Mod.(V)	14,772	31,450		39,049	31,450	39,049	33,189	31,289	42,788	33,808	33,548
Type VI EVC	440										
West Coast Waterway - P.O.W.											
Type I EVC	44,452										
Retention(II)	861	23,221	14,907	13,459	23,221	[illegible]59	19,390	21,637	8,855	21,722	3,494
Part.Ret.(III)	7,527	10,835	67,726	11,215	10,835	[illegible]	11,054	10,733			
Modific.(IV)	10,101	21,526		24,315	21,526	[illegible]	23,732	23,091	28,115	25,449	7,039
Max.Mod.(V)	19,671	27,031		33,624	27,031	33,624	28,436	27,152	45,664	35,461	16,230
Type VI EVC	100										
Wrangell Narrows											
Type I EVC	32,020										
Retention(II)	1,301	17,245	4,003	11,044	17,245	11,044	17,245	17,245		11,144	8,883
Part.Ret.(III)	920	19,542	38,785	25,022	19,542	25,022	19,542	19,542			28,686
Modific.(IV)	3,141	2,161		2,221	2,161	2,221	2,161	2,161	8,263	6,121	
Max.Mod.(V)	7,045	4,040		4,700	4,040	4,700	4,040	4,040	34,725	25,722	4,280
Type VI EVC											
Zimovia Strait											
Type I EVC	27,641										
Retention(II)	80	14,064	841	5,179	14,064	5,179	5,179	5,179		10,267	2,980
Part.Ret.(III)	2,800	21,121	39,24	25,662	21,121	25,662	25,662	25,662			17,678
Modific.(IV)	1,941	1,021		5,106	1,021	5,106	5,106	5,106	5,761	4,219	2,781
Max.Mod.(V)	7,644	3,820		4,080	3,820	4,080	4,080	4,080	34,345	25,620	16,667
Type VI EVC											

Source: Queries 47F and Viscomy

(1) EVC and VQO terms are defined in the Scenery affected environment section. With two exceptions the Wilderness portions of viewsheds are not included. The Clarence Strait viewshed includes a portion of South Etolin Island Wilderness, and the Duncan Canal viewshed includes a portion of Duncan Salt Chuck Wilderness.

(2) The acres in the table are only those seen from a Visual Priority Travel Route and Use Area

Table 3-45
Current cumulative roaded acres, and by alternative at the end of decades 1 and 5

Alt.	Current Cumulative Roaded Acres [1]	Cumulative Acres at End of Decade 1	Cumulative Acres at End of Decade 5
Preferred	13,950	18,600	27,450
1	13,950	13,950	13,950
2	13,950	19,323	32,310
3	13,950	17,586	24,303
4	13,950	15,849	18,951
5	13,950	15,756	18,684
6	13,950	18,681	27,585
7	13,950	22,899	41,448
8	13,950	18,744	27,684
9	13,950	21,879	38,568

[1]Total acres covered by roads as of 1995. Roaded acres are calculated based on an average of three acres per one mile of road.

Table 3-46
Projected timber harvest acres and estimated increased landslide frequency[1]

	Decade 1			Decades 1-5		
		Estimated Landslides			Estimated Landslides	
Alt.	Acres Harvested	Harvest Areas	Non-Harvest Areas [2]	Acres Harvested	Harvest Areas	Non-Harvest Areas [2]
Pref.	147,878	66	22	681,197	304	101
1	0	0	0	0	0	0
2	167,672	75	25	870,519	389	130
3	94,338	42	14	495,704	221	74
4	49,432	22	7	258,391	115	38
5	47,120	21	7	242,006	108	36
6	123,178	55	29	645,008	288	96
7	232,414	104	35	1,227,398	548	182
8	123,253	55	18	640,880	286	95
9	177,477	79	26	923,918	412	137

[1] Based on an average of one landslide for every 2,240 acres of timber harvesting. See text for explanation.
[2] Estimated number of natural landslides expected from similar landbase with no timber harvest activities. Alternative 1 has no acres scheduled for timber harvesting.

Table 3-50
Land Classification (thousands of acres) Tentatively Suitable and Suitable Lands

Classification	Preferred	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
1. Non-Forest land (includes water)	6,960	6,960	6,960	6,960	6,960	6,960	6,960	6,960	6,960	6,960
2. Forest land	9,978	9,978	9,978	9,978	9,978	9,978	9,978	9,978	9,978	9,978
3 Forest land withdrawn from timber production	4,174	4,174	4,174	4,174	4,174	4,174	4,174	4,174	4,174	4,174
4. Forest land not capable of producing crops of industrial wood.	2,416	2,416	2,416	2,416	2,416	2,416	2,416	2,416	2,416	2,416
5. Forest land physically unsuitable:										
•irreversible damage likely to occur	573	573	573	573	573	573	573	573	573	573
•not restockable within 5 years	63	63	63	63	63	63	63	63	63	63
6. Forest land - inadequate information	431	431	431	431	431	431	431	431	431	431
7. Tentatively suitable forest land (item 2 minus items 3, 4, 5 and 6)	2,321*	2,321*	2,321*	2,321*	2,321	2,321*	2,321*	2,321*	2,321*	2,321*
8. Forest land not appropriate for timber production										
Research Natural Areas	2	2	2	2	2	2	2	0	0	0
Remote Recreation	81	427	81	81	81	81	81	14	14	247
Old Growth	354	20	7	354	7	136	136	0	507	0
Semi-Remote Recreation	362	1,657	362	362	362	362	358	121	121	16
Scenic Viewshed (beach fringe)	48	0	65	52	66	62	62	0	0	28
Modified Landscape (beach fringe)	52	0	68	57	68	62	61	7	13	0
Timber Production (beach fringe)	107	6	121	129	127	118	118	103	245	69
Wild, Scenic or Recreation Rivers	30	82	30	30	30	30	30	0	0	0
Special Areas	29	24	29	29	29	29	32	1	1	0
LUD III -Special	0	0	0	0	0	0	0	0	0	53
Total:	1065	2,248	765	1,096	772	882	880	246	901	413
9. Unsuitable forest land (items 3, 4, 5, 6, and 8)	8722	9,905	8,422	8,753	8,429	8,539	8,537	7,903	8,558	8,070
10. Total suitable forest land (item 2 minus item 9)	1256	73	1,526	1,225	1,549	1,439	1,441	2,075	1,420	1,908
11. Total national forest land (items 1 and 2)	16938	16,938	16,938	16,938	16,938	16,938	16,938	16,938	16,938	16,938

*May decrease by 100,000 acres due to a data coding error in the Ketchikan database.

Table 3-51
Vegetative Management Practices

Average Annual Harvest Acres of Suitable Lands Modeled in First Decade	Alternative[1]							
	Pref.	2	3	4	5	6	7	8	9
Regeneration Harvest									
Clearcut		16,768					23,207		17,709
Clearcut w/Reserves	11,764		9,386	4,943	4,712	12,318		12,325	
Group Selection	64		48				35		38
Regeneration Treatments [2]									
Natural & Artificial	11,828	16,768	9,434	4,943	4,712	12,318	23,241	12,325	17,747
Intermediate Treatments									
Precommercial Thinning	6,300	6,300	6,300	3,150	3,150	6,300	6,300	6,300	6,300

Source: FORPLAN table F10.1 (Forest-wide Activity and Output Results)
[1] Alternative 1 is not displayed because it doesn't have any scheduled timber harvest.
[2] Artificial regeneration would occur on about six percent of the total acres.

Table 3-52
Timber management intensity by alternative (Thousands of acres) [1]

Alt	No Yield (Category IV)	High Timber Yields (Category I)	Moderate Timber Yields (Category II)	Incidental Yields (Category III)	Total [1]
Preferred	1,094	-	1,103	124	2,321
1	2,248	-	-	73	2,321
2	795	1,394	-	132	2,321
3	1,125	-	957	239	2,321
4	803	-	1,291	227	2,321
5	912	-	1,200	209	2,321
6	912	-	1,200	209	2,321
7	278	1,898	-	145	2,321
8	932	-	1,213	176	2,321
9	452	1,735	-	134	2,321

Source: Oracle Query QRegClassRS95, 21 Feb. 1996
[1] All tentatively suitable timber lands.

Table 3-53
Allowable Sale Quantity and Timber Sale Program Quantity (1st Decade, Average Annual)

Alt	Sawtimber (MMCF)	Utility (MMCF)	Total (MMCF)	Total (MMBF)
Pref.	75.6	12.9	88.5	357.0
1	0.0	0.0	0.0	0
2	104.7	15.6	120.3	488
3	59.5	8.8	68.3	278
4	31.1	4.6	35.7	145
5	29.6	4.4	34.0	139
6	77.5	11.8	89.3	362
7	146.2	22.5	168.7	689
8	77.8	11.4	89.2	364
9	109.9	16.2	126.1	521

MMCF = Million Cubic Feet
MMBF = Million Board Feet

Table 3-54
Implementation adjustments by alternative

Alt	Suitable Timber Base	Implementation Acres (Thousands of Acres) [1]	Scheduled Timber Base Periods 1-15	Scheduled as a % of the Suitable Timber Base
Pref	1,256	206	979	78
1	73		0	0
2	1,556	253	1,252	80
3	1,225	283	831	68
4	1,549	310	879	57
5	1,439	270	827	57
6	1,441	270	1,081	75
7	2,075	359	1,691	81
8	1,420	246	1,085	76
9	1,908	312	1,325	69

[1] Also known as "model implementation reduction acres."

Table 3-55
Average Annual First Decade Allowable Sale Quantity (ASQ) and Non-Interchangeable Components (NIC's).

Alt.	Average Annual ASQ MMCF[1]	NIC I MMCF[1]	NIC II MMCF[1]	Average Annual ASQ MMBF[2]	NIC I MMBF[2]	NIC II MMBF[2]
Pref	85.1	70.8	14.3	357	297	60
1	-	-	-	-	-	-
2	120.3	100.0	20.3	488	408*	80*
3	68.3	57.0	11.3	278	239*	39*
4	35.7	29.8	6.0	145	128*	17*
5	34.0	28.1	5.9	139	120*	19*
6	89.3	74.0	15.3	362	312*	50*
7	168.7	141.3	27.4	689	582*	107*
8	89.2	74.7	14.5	364	314*	50*
9	126.1	116.5	9.6	521	479*	42*

* Reflects a correction in utility calculation for Chatham and Stikine
[1] Million cubic feet
[2] Million board feet

Table 3-56
Scheduled Harvest acres by NonInterchangeable Component

Alt.	Period (decades)	NIC I (acres)	NIC II (acres)	Total (acres)
Pref.	1	98,276	19,366	117,642
	1 to 5	502,815	99,437	
	1 to 10	906,933	187,452	
1	1	-	-	-
	1 to 5	-	-	-
	1 to 10	-	-	-
2	1	139,199	28,473	167,672
	1 to 5	717,031	153,488	870,519
	1 to 10	1,251,473	260,044	1,511,517
3	1	78,383	15,955	94,338
	1 to 5	411,081	84,623	495,704
	1 to 10	751,139	158,835	909,974
4	1	42,222	7,210	49,432
	1 to 5	220,917	37,474	258,391
	1 to 10	450,254	78,943	529,197
5	1	38,820	8,300	47,120
	1 to 5	199,669	42,337	242,006
	1 to 10	407,510	87,472	494,982
6	1	101,986	21,192	123,178
	1 to 5	533,824	111,184	645,008
	1 to 10	974,599	211,810	1,186,409
7	1	194,193	38,221	232,414
	1 to 5	1,014,938	212,460	1,227,398
	1 to 10	1,808,582	365,376	2,173,958
8	1	102,987	20,266	123,253
	1 to 5	535,024	105,856	640,880
	1 to 10	967,544	206,032	1,173,576
9	1	172,935	4,535	177,470
	1 to 5	897,294	24,714	922,008
	1 to 10	1,563,141	41,135	1,604,276

Table 3-59
Allowable Sale Quantity and Long-Term Sustained Yield Capacity (MMCF) [1]

Alt	Decade 1	Decades 1 to 5	Decades 6 to 10	Decades 11 to 15	LTSY
Pref.	85.1	85.1	79	79.5	90.6
1	-	-	-	-	-
2	120.2	121.8	112.7	124.6	135.6
3	68.2	70.3	66.1	70.4	76.7
4	35.7	37.0	37.6	37.6	67.6
5	34.1	34.9	35.1	35.1	63.4
6	89.0	91.2	85.5	90.5	99.6
7	168.7	173.7	160.9	168.9	178.0
8	89.2	90.8	85.2	89.7	98.5
9	126.1	127.8	118.7	129.7	139.6

[1] Long-term sustained yield is only expressed in the cubic foot measure.

Table 3-60
Species Composition of the NIC I Component of the Annual Allowable Sale Quantities by Alternative, Decade 1 (MMBF)

Alt	Sitka Spruce	Western Hemlock	Red and Alaska Yellow Cedar	Total [1]
Pref.	96	181	17	295
1	0	0	0	0
2	133	250	24	406
3	77	143	13	232
4	40	75	6	121
5	38	70	6	114
6	100	185	16	300
7	188	355	34	577
8	100	187	18	305
9	155	290	28	474

Source: FORPLAN and timber inventory statistics.
[1] Totals may be off due to rounding

Table 3-61
Projected Hemlock and Spruce Log Grade Compositions of the NIC I component of the Allowable Sale Quantities of the alternatives, 1st decade (MMBF)

Alt	Hem-Spruce Sawlogs	Hem-Spruce Pulplogs	Cedar Logs	Total MMBF[1]
Pref.	161	116	17	295
1	0	0	0	0
2	222	160	24	406
3	128	91	13	232
4	69	48	6	121
5	64	45	6	114
6	166	118	16	300
7	315	228	34	577
8	167	120	18	305
9	259	187	28	474

[1] Totals may not sum due to rounding

Table 3-62
Projected Product Composition of the NIC I component of the Annual Allowable Sale Quantities

Alt	Gross Log Input Sawmill (MMBF)	Lumber Produced (MMBF)	Sawn Logs (MMBF)	Chipped Logs (MMBF)	MFG Residue [1]	Chip Logs [1]	Pulp Logs [1]	Total Chips & Residue [1]	Total BDUs
P	161	169	134	28	113	74	310	497	414
1	0	0	0	0	0	0	0	0	0
2	222	232	184	38	156	102	428	686	572
3	128	134	106	22	90	59	244	393	327
4	67	70	56	12	47	31	128	206	172
5	64	66	53	11	45	29	120	194	162
6	166	174	137	29	117	77	316	509	424
7	315	329	261	54	221	145	608	974	812
8	167	175	138	29	117	77	320	514	428
9	259	271	214	45	182	119	498	799	666

Gross log input = ratio of lumber production and log deliveries to sawmills, ratio is from Brooks and Haynes, 1994.
Ratio of gross log input and overrun = units are board feet of logs chipped per board feet of logs used for lumber.
[1] Thousand Dry Tons

Table 3-63
Historic harvest and ASQ comparisons [1]

Alt	80-94 Average Harvest [2]	ASQ NIC I	NIC ISurplus/ Deficit	ASQ	ASQ Surplus/ Deficit
P	340	297	-43	357	17
1	340	0	-340	0	-340
2	340	406	66	489	149
3	340	232	-108	278	-62
4	340	121	-219	145	-195
5	340	114	-226	138	-202
6	340	300	-40	362	22
7	340	577	237	689	349
8	340	305	-35	364	24
9	340	474	134	513	173

[1] All figures are MMBF, Sawlog and utility.
[2] Includes APC harvest.

Table 3-64
1989-91 Harvest and ASQ Comparisons [1]

Alt	Average Harvest [2]	NIC I	NIC I Surplus/ Deficit	ASQ	ASQ Surplus/ Deficit
P	426	297	-129	357	-69
1	426	0	-426	0	-426
2	426	406	-20	489	63
3	426	232	-194	278	-148
4	426	121	-305	145	-281
5	426	114	-312	138	-288
6	426	300	-126	362	-64
7	426	577	151	689	263
8	426	305	-121	364	-62
9	426	474	48	513	87

[1] All figures are MMBF, sawlog and utility.
[2] Includes APC harvest.

Table 3-66
KPC long-term contract area expected outputs (total volume), Decade 1 annual average [1]

Alt	Tentatively Suitable (million acres)	Suitable (million acres)	ASQ (MMBF)	ASQ NIC I (MMBF)	Planned Contract Harvest (MMBF)	ASQ Surplus/ Deficit (MMBF)	NIC I Surplus/ Deficit (MMBF)
P	0.9	0.46	132	119	192.5	-60.5	-73.5
1	0.9	.02	0	0	192.5	-192.5	-192.5
2	0.9	0.59	182	161	192.5	-10.5	-31.5
3	0.9	0.45	96	87	192.5	-96.5	-105.5
4	0.9	0.59	48	42	192.5	-144.5	-150.5
5	0.9	0.51	42	38	192.5	-150.5	-154.5
6	0.9	0.51	124	112	192.5	-68.5	-80.5
7	0.9	0.82	282	252	192.5	89.5	59.5
8	0.9	0.53	138	125	192.5	-54.4	-67.5
9	0.9	0.75	213	203	192.5	20.5	10.5

[1] All MMBF figures are sawlog plus utility

Table 3-67
Projected NIC I annual average output from the Chatham and Stikine Administrative Areas (1st Decade) [1]

Alt.	NIC I Chatham/Stikine Area (MMBF)	KPC Contract Surplus/Deficit (MMBF)	NIC I Contract Surplus/Deficit (MMBF)
Pref.	175	-73.5	101.5
1	0	-192.5	-192.5
2	245	-32	213
3	145	-106	39
4	80	-151	-71
5	77	-154.5	-77
6	188	-86.5	107
8	179	-68	111

[1] Sawlog plus utility volumes, all species.

Table 3-68
Small business program supply capability by alternative (MMBF) [1]

Alt.	Available ASQ NIC I [2]	SBA Goal	Surplus/Deficit
P	101.5	100	+2
1	-192.5	100	-292
2	213	100	113
3	39	100	-61
4	-71	100	-171
5	-77	100	-177
6	107	100	7
7	384	100	284
8	111	100	11
9	282	100	182

[1] All figures are MMBF's, sawlog plus utility.
[2] "Available ASQ" = NIC I ASQ portion less KPC contract planning need of 192.5 MMBF

Table 3-70
Alternative Timber Sale Action Plan Volumes (ASQ NIC I), Average Annual for Fiscal Years 1997 - 1999 in million board feet

Alt.	ASQ NIC I	Long-Term Contract Vol. (97-99)	Independent Volume (97-99)	Total Sale Schedule (97-99)	Remaining Volume (00-06)
Pref.	297	185	125	310	291
1	0	0	0	0	0
2	406	193	115	308	448
3	232	126	59[1]	185	252
4	121	56	28[1]	84	137
5	114	47	23[1]	70	133
6	300	108	70[1]	178	353
7	577	193	115	308	692
8	305	108	77[1]	185	356
9	474	193	115	308	545

[1] Volume may be redistributed to meet long-term contract obligations.

Table 3-71
Resource constraints affecting the ability of the alternatives to provide a timber supply[1]

Alt	OG Reserves	2-Aged Silviculture	VCU Harvest Thresholds	Riparian Habitat	Extended Rotations	Reduction (%)
P	X	X		X		0%
2						0%
3	X	X		X		40%
4		X	X	X	X	73%
5	X	X	X	X	X	77%
6	X	X	X	X		42%
7						0%
8	X	X		X		40%
9						0%

[1] Alternative 1 has no scheduled timber harvest and is not included.

Table 3-XX
Preferred Alternative Timber Sale Action Plan (1997-1999)

Area	Sale Name/Landscape Area	Proposed Volume (total) (MMBF)	Location (VCU's
Fiscal Year 1997			
Chatham	Duffield	11.5	289 - 292
	Indian River	10.0	220-222
	Lisa Creek	6.6	287-289; 291, 292, 299-302
	Neka 2*	10.0	193, 194, 196, 198-202; 222-224
	Saook Bay II (Enjoined)	8.0	294
	Waterworks	9.5	291-293
Ketchikan	Carroll*	20.0	744
	Control Lake #1*	30.0	552. 574-577
	Control Lake #2*	30.0	552, 574-576, 578
	East Twelve Mile*	35.9	619, 620, 621
	Heceta Sawfly	12.0	558,559,561,562,570
	Lab Bay 1*	20.0	527-530, 532-534
	Lab Bay 2*	20.0	535-540, 549, 550
	Misc. Small Sales	7.0	
	Sentenial Island	6.8	618
Stikine	King George II	2.0	462
	Rowan II	22.0	416, 417
	Small Sales	3.0	
	South Lindenburg	22.0	437
Total:		**286.3**	
Fiscal Year 1998			
Chatham	NW Baranof #5	8.0	287
	Port Houghton 1*	30.0	79-85, 89
	Ushk Bay 1	20.0	280, 281
Ketchikan	Bluff Lake*	20.0	737
	Control Lake #4*	30.0	552, 573-577
	Control Lake Misc	5.0	552, 573-577, 596
	Control Lake#3*	30.0	552, 573-577, 596, 597.1, 597.2
	Misc. Small Sales	4.0	
	Teal*	23.7	622
	Twelve Mile South	9.1	621, 624
Stikine	Canal/Hoya*	20.0	520, 521
	Fanshaw	40.0	87-89
	King George III	2.0	462
	Lindy	30.0	437
	Small Sales	3.0	
Total:		**274.8**	
Fiscal Year 1999			
Chatham	False Island	8.0	243-245
	Indian/Ten Mile	10.0	220-222

	Neka #3*	15.0	193, 194, 196, 198-202, 222-224
	Port Houghton 2*	16.0	79-89
	Port Houghton 3*	16.0	79-88
	Schulze	12.0	287-289, 291, 292, 299-302
	WhiteStone N/S	30.0	205, 207-211
Stikine	East Kuiu*	60.0	416-418
	Kaukan	11.0	525
	Muddy	11.0	487, 489
	Nesbitt Reef*	11.0	458
	Small Sales	5.0	
	South Zarembo*	11.0	459
Ketchikan	Chasina #1*	20.0	677-681
	Chasina #2*	20.0	677-681
	Control Lake #5*	20.0	591-595
	Control Lake Inde	5.0	591-595
	Misc Small Sales	4.3	
	Ratz #1*	10.0	572; 579-585
	Sea Level*	20.0	746; 753; 755-757; 759
	Tuxekan #1*	15.0	554.2; 556; 557; 560; 571; 587-590
	Vixen Inlet	40.0	708-710; 718; 720; 721
Total:		**370.3**	

*Sale offerings included in the KPC long-term timber sale contract.

Table 3-79
Alternative Sawlog composition in relation to projected demand for Tongass sawlogs in MMBF

Alt.	Sawtimber Projection (10 yr average) [2]	ASQ NIC I	Private/Other[2]	Total Supply	Surplus or Deficit
Pref.	206	134	0	134	-72
1	206	0	0	0	-206
2	206	183	0	183	-23
3	206	106	0	106	-100
4	206	57	0	57	-149
5	206	53	0	53	-153
6	206	139	0	139	-67
7	206	259	0	259	53
8	206	137	0	137	-69
9	206	219	0	219	13

(1) Million Board Feet
(2) From Brooks and Haynes

Table 3-80
Alternative Pulp log composition plus chip by-product in relation to projected demand for Tongass.

Alt.	Pulp Projection (10 yr average) [2]	Tongass (BDU) [1]	Private/ Other (BDU)	Total Supply	Surplus or Deficit
Pref	345	414	24	438	93
1	345	0	24	24	-
2	345	569	24	593	248
3	345	327	24	351	6
4	345	176	24	200	-145
5	345	162	24	186	-159
6	345	430	24	454	109
7	345	806	24	830	485
8	345	425	24	449	104
9	345	680	24	704	359

BDU = Bone Dry Units
(1) From Table 3-62
(2) From Brooks and Haynes

Table 3-81
Old Growth Conversion Periods and Young-Growth Rotation Ages and Management Ages (Regulation Class 1 and 2 lands) [1]

Alt	Conversion Period Existing Stands	Average Rotation Age Young-Growth/ Management Age	Young-Growth RotationManagement Age Range in Values
P	90	105	70-160
1	-	-	-
2	80	95	70-160
3	90	105[2]	70-160
4	150+	200[2]	
5	150+	200[2]	
6	140	100[2]	70-160
7	70	90	70-160
8	150+	100[2]	70-160
9	80	95	70-160

(1) Years
(2) Rotation age for two-aged management is based on the managed understory. These stands contain significant amounts of unmanaged old-growth structure in the overstory.

Table 3-82
Age class distribution (thousands of acres) at the end of the planning horizon (160 years), Timberlands (NIC 1)

Age Class	Pref.	Alt 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
10	65.4	113.1	66.2	34.5	33.4	77.1	161.7	86.5	137.6
20	64.7	113.5	63.1	38.4	38.9	85.4	150.3	81.6	138.9
30	58.4	103.4	53.1	42.0	38.8	67.2	142.0	74.4	133.0
40	64.9	90.0	57.7	42.2	40.7	73.8	151.8	73.8	115.4
50	72.4	89.4	62.4	43.9	40.1	82.7	157.3	82.1	115.4
60	74.2	113.4	64.8	46.5	41.9	84.5	160.9	82.6	142.9
70	70.7	84.1	63.0	48.2	42.9	80.8	116.3	81.4	101.7
80	70.4	49.0	60.4	45.4	42.1	83.2	52.0	78.0	69.0
90	73.6	63.3	68.9	45.3	40.9	86.4	56.7	78.0	95.4
100	73.1	85.3	64.1	45.1	40.6	83.8	93.6	79.2	110.7
110	33.8	60.3	25.3	45.8	40.2	31.1	63.6	34.4	75.0
120	16.0	18.3	15.1	44.3	40.2	18.0	14.5	18.0	18.0
130	16.0	29.7	12.4	43.5	39.9	11.7	20.6	11.2	19.3
140	3.6	16.0	4.7	42.2	38.8	7.2	6.4	4.8	13.2
160	46.1		89.3	325.1	307.2	61.2	23.8	59.6	26.1
Suitable Young Growth	803.3	1,060	771	932	866	934	1,372	926	1,312
Suitable Old Growth[1]	422.6	464.3	414.9	571.2	530.4	462.8	669.6	460.8	554.7
Total Suitable	1,226	1,524	1,185	1,504	1,397	1,397	2,041	1,386	1,866.
Unsuitable Timberland	4,499	4,201	4,539	4,221	4,328	4,328	3,683	4,338	3,858.
Other Forest Land[2]	4,249	4,249	4,249	4,249	4,249	4,249	4,249	4,249	4,249
Total Forest	9,974	9,974	9,974	9,974	9,974	9,974	9,974	9,974	9,974

(1) Suitable Old Growth: Available for harvest but not harvested because of model implementation reduction factors and poor economics (primarily NIC II land).
(2) Other Forest Land: low productive old-growth forests (i.e., muskeg)

Table 3-83
Forest wide stand structures at the end of the planning horizon (160 Years), Timberlands

Stand Structure	Pref.	Alt 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
					Thousands of acres				
Stand Initiation (0 - 20 Years)	130	227	129	73	72	163	312	168	277
Stem Exclusion (30-120 years)	607	757	535	449	408	691	1009	682	977
UnderStory Reinitiation (130-160 years)	66	76	106	411	386	80	51	76	59
Old-growth	423	464	415	571	530	463	670	461	555
Total Suitable	1,226	1,524	1,185	1,504	1,397	1,397	2,041	1,386	1,866
Unsuitable Old Growth Timberland	4,499	4,201	4,540	4,221	4,328	4,328	3,684	4,339	3,859
					Percent distribution				
Stand Initiation	2%	4%	2%	1%	1%	3%	5%	3%	5%
Stem Exclusion	11%	13%	9%	8%	7%	12%	18%	12%	17%
Understory Reinitation	1%	1%	2%	7%	7%	1%	1%	1%	1%
Old Growth	86%	81%	87%	84%	85%	84%	76%	84%	77%

Table 3-84
Annual and cumulative miles of new road construction by alternative.[1]

Alternative	Decade 1 Annual Miles	Decade 1 Cumulative (at end of Decade)	Decade 5 Annual Miles	Decade 5 Cumulalive (at end of Decade)
Preferred	155	6200	90	9150
1	0	4,650	0	4,650
2	179	6,441	116	10,770
3	121	5,862	62	8,101
4	63	5,283	18	6,317
5	60	5,252	17	6,226
6	158	6,227	84	9,195
7	298	7,633	153	13,816
8	159	6,248	85	9,228
9	264	7,293	159	12,856

[1] Includes all roads from the present (4,650 miles) to the end of the decade. Annual miles are rounded to the nearest mile.

Table 3-85
Existing (1995) and proposed roading in wetlands (in acres)

Alternative	1995	Cumulative Acres at End of Decade 1	Cumulative Acres at End of Decade 5
Preferred	4185	5580	8235
1	4185	4185	4185
2	4185	5796	9693
3	4185	5277	7290
4	4185	4755	5685
5	4185	4728	5604
6	4185	5604	8277
7	4185	6870	12,435
8	4185	5622	8,304
9	4185	6564	11,571

Table 3-86
Recommended river miles, by classification by alternative

Alternative	Classification			
	Wild	Scenic	Recreational	Total Miles
Preferred	287.5	86.5	57	431
1	1,085	154	55	1,394
2-6	287.5	86.5	57	431
7-8	211	0	0	211
9	0	0	0	0

Table 3-89
Estimated Deer Habitat Capability for Selected WAAs on Tongass National Forest

WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Proportion of Deer Habitat Capability Remaining at 2095										Total Acres [1]	Vicinity
				Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9		
101	102	1564	1513	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.68	0.87	1.00	38952	Gravina Is.
303	6	1616	1592	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85	1.00	1.00	46825	Duke Is.
404	9	3359	3359	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	180282	Revilla Is
405	18	2000	1850	0.84	0.98	0.80	0.86	0.88	0.88	0.81	0.74	0.84	0.75	53095	Revilla Is
406	87	2742	2409	0.80	0.96	0.73	0.82	0.83	0.83	0.74	0.66	0.78	0.68	127166	Revilla Is
407	66	1000	950	0.75	0.98	0.67	0.77	0.81	0.81	0.69	0.70	0.79	0.66	41895	Revilla Is
408	39	373	361	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	16667	Revilla Is
509	58	1285	1214	0.90	0.99	0.83	0.91	0.89	0.89	0.83	0.70	0.85	0.80	68817	Revilla Is
510	41	2445	1860	0.75	0.99	0.72	0.80	0.84	0.84	0.74	0.51	0.70	0.60	154271	Revilla Is
511	0	335	334	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	53258	Revilla Is
612	57	1825	1802	0.77	1.00	0.69	0.79	0.82	0.82	0.70	0.64	0.77	0.63	70653	Cleveland
613	104	1447	1405	0.85	1.00	0.75	0.86	0.85	0.87	0.79	0.69	0.83	0.71	45412	Cleveland
614	13	463	463	0.67	0.95	0.67	0.72	0.79	0.79	0.68	0.66	0.70	0.64	13247	Cleveland
715	4	855	853	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.65	0.83	1.00	101544	Cleveland
716	0	322	322	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	335103	Cleveland
717	1	469	469	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	145861	Misty Fiords
719	1	280	280	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	199356	Misty Fiords
821	2	1179	1179	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	110949	Misty Fiords
822	1	3288	3288	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	390568	Misty Fiords
823	1	2414	2414	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	189136	Misty Fiords
901	38	1958	1940	0.81	0.96	0.77	0.85	0.86	0.86	0.78	0.63	0.82	0.62	37184	Sumez Is
902	36	5403	5399	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.98	0.95	106385	Outer Islands
1003	142	3334	2639	0.69	0.75	0.59	0.71	0.67	0.67	0.62	0.55	0.70	0.55	44494	Heceta Is.
1105	2	5099	5071	0.96	1.00	0.93	0.97	0.97	0.98	0.96	0.60	0.88	0.60	104370	Dall Is
1106	65	388	388	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.65	0.98	0.65	7386	Long Is
1107	40	5804	5703	0.90	0.98	0.82	0.91	0.90	0.91	0.86	0.66	0.84	0.66	145775	POW
1108	16	3430	3420	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	85446	POW
1209	6	3311	3311	0.95	1.00	0.91	0.96	0.95	0.95	0.92	0.68	0.86	0.68	82253	POW
1210	20	2242	2242	0.80	1.00	0.74	0.83	0.86	0.86	0.76	0.55	0.76	0.68	85884	POW
1211	51	1833	1768	0.78	0.95	0.74	0.82	0.84	0.84	0.76	0.69	0.80	0.68	41720	POW
1212	24	1077	1073	0.87	1.00	0.87	0.90	0.93	0.93	0.88	0.77	0.84	0.74	37424	POW
1213	15	788	781	0.83	1.00	0.83	0.88	0.91	0.91	0.85	0.77	0.86	0.78	30003	POW
1214	91	1652	1405	0.75	0.96	0.65	0.81	0.79	0.84	0.76	0.62	0.76	0.62	74713	POW
1315	172	3006	2076	0.75	0.92	0.72	0.77	0.82	0.83	0.76	0.68	0.76	0.68	59798	POW
1316	72	740	739	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	39688	POW
1317	75	1651	992	0.84	0.98	0.73	0.87	0.84	0.89	0.84	0.67	0.81	0.66	61565	POW
1318	323	1276	1213	0.68	0.96	0.64	0.71	0.79	0.80	0.69	0.65	0.69	0.63	58023	POW
1319	302	2975	2364	0.78	0.94	0.65	0.76	0.80	0.84	0.78	0.58	0.74	0.58	103242	POW
1323	126	1677	1654	0.83	0.98	0.81	0.87	0.89	0.90	0.84	0.75	0.85	0.74	38713	POW
1332	65	2306	2104	0.79	0.96	0.74	0.82	0.84	0.87	0.80	0.69	0.81	0.66	65521	POW

WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Proportion of Deer Habitat Capability Remaining at 2095 Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9	Total Acres [1]	Vicinity
1420	121	1301	790	0.73	0.81	0.68	0.75	0.75	0.77	0.73	0.65	0.72	0.65	42738	POW
1421	242	3010	2442	0.76	0.89	0.65	0.76	0.76	0.84	0.80	0.52	0.69	0.58	90410	POW
1422	361	4701	3617	0.66	0.71	0.63	0.68	0.69	0.70	0.66	0.54	0.66	0.61	121272	POW
1524	2	649	649	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	11208	Warren
1525	42	3196	2003	0.75	0.85	0.66	0.80	0.76	0.80	0.77	0.60	0.77	0.60	41106	Kosciusko Is.
1526	56	2443	2328	0.94	0.97	0.92	0.95	0.95	0.95	0.94	0.91	0.94	0.91	66865	POW
1527	37	1632	1383	0.71	0.83	0.68	0.74	0.75	0.76	0.72	0.59	0.68	0.59	39344	POW
1528	43	322	247	0.93	1.00	0.73	0.92	0.88	0.97	0.94	0.72	0.94	0.74	24548	POW
1529	180	2572	2051	0.71	0.86	0.68	0.76	0.76	0.78	0.73	0.62	0.73	0.64	69126	POW
1530	161	2035	1427	0.80	0.88	0.75	0.82	0.81	0.83	0.80	0.70	0.79	0.71	59857	POW
1531	35	2898	2262	0.64	0.77	0.64	0.70	0.71	0.71	0.66	0.53	0.66	0.53	34289	POW
1601	1	1266	1263	0.69	1.00	0.65	0.75	0.80	0.80	0.67	0.59	0.68	0.58	43464	Farragut Bay
1602	5	820	810	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.58	0.99	1.00	139435	Farragut Bay
1603	3	648	607	0.94	0.99	0.79	0.94	0.88	0.88	0.81	0.66	0.88	0.71	78659	Thomas Bay
1605	53	944	767	0.72	0.96	0.72	0.74	0.82	0.82	0.72	0.66	0.73	0.65	149092	Thomas Bay
1706	21	287	287	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	99140	LeConte Bay
1707	3	940	940	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	79643	Stikine River
1708	0	864	864	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	240891	Stikine River
1810	2	660	660	0.61	1.00	0.53	0.67	0.75	0.75	0.58	0.47	0.54	0.52	55392	Back Channel
1811	1	696	688	0.87	1.00	0.78	0.88	0.88	0.88	0.80	0.56	0.81	0.62	92705	Back Channel
1812	4	857	852	0.95	1.00	0.94	0.96	0.97	0.97	0.95	0.68	0.81	0.87	99444	Bradfield
1813	0	401	288	0.92	1.03	0.91	0.93	0.97	0.97	0.92	0.81	0.91	0.91	237510	Bradfield
1814	0	402	397	0.88	1.00	0.88	0.90	0.93	0.93	0.89	0.73	0.80	0.85	69427	Bradfield
1815	0	366	337	0.98	1.00	0.98	0.99	0.99	0.99	0.98	0.92	0.93	1.00	43795	Cleveland
1816	5	646	597	0.79	0.97	0.76	0.81	0.86	0.86	0.78	0.68	0.79	0.68	36333	Cleveland
1817	22	1363	1363	0.92	1.00	0.63	0.93	0.79	0.91	0.85	0.57	0.91	0.55	64140	Cleveland
1901	14	3493	3275	0.74	0.98	0.68	0.79	0.82	0.82	0.71	0.56	0.75	0.58	132832	Etolin Is
1902	1	305	283	0.82	0.96	0.82	0.86	0.89	0.89	0.85	0.51	0.74	0.51	9554	Cleveland
1903	34	2676	2419	0.72	0.95	0.67	0.77	0.79	0.79	0.68	0.57	0.71	0.61	119083	Wragell Is.
1904	63	909	607	0.65	0.92	0.65	0.74	0.79	0.79	0.70	0.53	0.70	0.44	23113	Woronkofski
1905	74	3094	2582	0.69	0.91	0.62	0.71	0.74	0.74	0.63	0.59	0.69	0.59	117584	Zarembo Is.
1906	23	942	803	0.75	0.78	0.75	0.76	0.77	0.77	0.76	0.50	0.70	0.49	11376	Shruby Is.
1910	38	3222	3108	0.96	1.00	0.96	0.97	0.98	0.98	0.96	0.94	0.96	0.94	102222	Etolin Is.
2007	195	3103	2534	0.69	0.92	0.67	0.71	0.77	0.79	0.70	0.61	0.69	0.61	113403	Mitkof Is
2008	3	347	344	0.66	1.00	0.66	0.72	0.82	0.82	0.70	0.60	0.72	0.57	10636	Woewodski
2202	8	140	140	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.61	0.74	0.61	49374	Lynn Canal
2305	5	248	248	0.96	1.00	0.63	0.96	0.80	0.80	0.67	0.53	0.96	0.53	102183	Lynn Canal
2306	4	158	145	0.72	1.00	0.46	0.76	0.72	0.72	0.53	0.38	0.75	0.38	58598	Cross Sound
2408	0	61	61	0.57	1.00	0.57	0.59	0.75	0.75	0.59	0.57	0.59	1.00	19213	
2409	0	168	167	0.64	1.00	0.66	0.68	0.80	0.80	0.67	0.61	0.68	1.00	17579	
2514	0	311	311	0.87	1.00	0.78	0.88	0.88	0.88	0.79	0.76	0.88	0.74	37393	Juneau
2515	0	364	364	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.91	0.97	0.99	100456	Juneau
2517	14	150	150	1.00	1.00	0.93	1.00	0.96	0.96	0.93	0.90	1.00	0.90	76336	Juneau
2620	20	77	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.57	0.89	1.00	2560	N. Shelter

WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Proportion of Deer Habitat Capability Remaining at 2095									Total Acres [1]	Vicinity
				Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9	
2621	72	163	163	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.56	0.69	1.00	3750 Shelter Is.
2722	375	815	813	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.78	0.90	1.00	29529 Douglas Is
2823	4	186	186	0.74	1.00	0.68	0.77	0.83	0.83	0.72	0.55	0.69	0.61	410930 Whiting River
2824	2		0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	295473 Tracy Arm
2825	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	304900 Endicott
2926	7	445	438	0.61	1.00	0.61	0.65	0.78	0.78	0.63	0.50	0.63	0.50	131967 Hobart Bay
2927	2	368	367	0.64	1.00	0.58	0.69	0.76	0.76	0.60	0.51	0.65	0.48	148422 Port Houghton
3001	723	3420	2996	0.87	0.98	0.82	0.98	0.98	0.98	0.98	0.96	0.97	0.71	81361
3002	566	1067	807	0.86	0.94	0.86	0.94	0.94	0.94	0.94	0.77	0.86	0.81	80263
3003	341	1381	1381	0.92	0.93	0.79	0.92	0.85	0.85	0.80	0.69	0.92	0.66	60222
3104	260	3130	2809	0.72	0.88	0.69	0.81	0.81	0.81	0.77	0.79	0.81	0.66	55451 Kruzof Is
3105	157	1949	1939	1.00	1.00	0.98	1.00	0.99	0.99	0.98	0.88	0.97	0.88	53198 Kruzof Is
3206	143	939	939	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	44395 Baranof Is
3207	129	782	782	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100161 Baranof Is
3308	201	4150	3164	0.70	0.89	0.65	0.71	0.75	0.75	0.66	0.57	0.69	0.57	108946 Baranof Is
3309	152	1001	978	0.89	1.00	0.89	0.90	0.93	0.93	0.89	0.85	0.87	0.85	49424 Chichagof Is
3310	245	1442	1331	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	71588 Chichagof Is
3311	295	1532	1496	0.82	1.00	0.81	0.84	0.89	0.89	0.82	0.72	0.80	0.76	56224 Chichagof Is
3312	141	438	410	0.87	1.00	0.78	0.88	0.87	0.87	0.78	0.69	0.87	0.76	20654 Baranof Is
3313	131	2135	1508	0.66	0.81	0.63	0.70	0.78	0.78	0.64	0.58	0.66	0.58	74143 Baranof Is
3314	135	998	877	0.99	1.00	0.69	0.99	0.81	0.81	0.69	0.63	0.98	0.66	41827
3315	127	1392	1284	0.90	0.97	0.72	0.91	0.83	0.83	0.73	0.59	0.90	0.69	43994
3416	191	1690	1690	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	64812 Chichagof Is
3417	222	2644	2644	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	137909 Chichagof Is
3418	110	1744	1744	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	48478 Chichagof Is
3419	93	397	397	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	64869 Chichagof Is
3420	94	471	471	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	54028 Chichagof Is
3421	86	790	790	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	43300
3523	169	1346	1169	0.78	0.94	0.66	0.81	0.77	0.85	0.79	0.63	0.80	0.60	49623 NE Chichagof
3524	208	211	211	0.55	1.00	0.55	0.55	0.73	0.73	0.55	0.54	0.58	0.54	15524 NE Chichagof
3525	210	2441	2034	0.63	0.92	0.58	0.68	0.74	0.76	0.64	0.53	0.67	0.57	73679 NE Chichagof
3526	191	1394	1180	0.79	0.95	0.66	0.80	0.81	0.85	0.79	0.59	0.80	0.60	41048 NE Chichagof
3551	225	1846	1618	0.69	0.94	0.58	0.72	0.74	0.79	0.70	0.54	0.71	0.52	58338 NE Chichagof
3627	71	988	813	0.74	0.92	0.66	0.76	0.77	0.77	0.67	0.64	0.75	0.64	27295 Chichagof Is
3628	31	1042	1024	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	34220 Chichagof Is
3629	161	1830	1706	0.73	0.98	0.68	0.77	0.81	0.81	0.69	0.61	0.73	0.72	98178 Chichagof Is
3630	37	473	468	0.69	1.00	0.69	0.72	0.82	0.82	0.69	0.55	0.69	0.69	70736 Chichagof Is
3731	150	1291	1235	0.97	0.97	0.83	0.97	0.90	0.90	0.86	0.69	0.97	0.63	98751 Chichagof Is
3732	27	278	278	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	72061 Chichagof Is
3733	121	1813	1813	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	215555 Baranof
3734	120	2057	2057	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	126120 Baranof
3835	319	907	907	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.69	33033 Admiralty
3836	341	1592	1592	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.79	0.66	54569 Admiralty
3837	76	1131	1131	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	59128 Admiralty

WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Proportion of Deer Habitat Capability Remaining at 2095										Total Acres [1]	Vicinity
				Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9		
3938	267	3239	3239	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	76664	Admiralty
3939	297	2976	2976	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	66131	Admiralty
3940	244	2670	2670	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	67845	Admiralty
4041	75	2110	2110	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	54823	Admiralty
4042	107	2608	2608	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	52403	Admiralty
4043	78	1854	1854	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	111609	Admiralty
4044	211	1264	1264	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	69322	Admiralty
4054	47	2222	2222	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	66454	Admiralty
4055	77	2565	2565	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	67997	Admiralty
4145	159	1288	1288	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	65100	Admiralty
4146	158	907	907	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	65443	Admiralty
4147	194	1007	1007	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	44194	Admiralty
4148	162	1686	1686	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	36766	Admiralty
4149	141	1388	1388	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	36573	Admiralty
4150	228	953	953	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	22790	Admiralty
4222	170	2065	2021	0.84	0.99	0.80	0.85	0.88	0.88	0.80	0.79	0.84	0.79	89755	
4252	206	477	477	0.78	1.00	0.65	0.80	0.79	0.79	0.65	0.63	0.78	0.63	21869	
4253	123	1191	1042	0.78	0.95	0.67	0.79	0.80	0.80	0.69	0.70	0.87	0.57	46862	
4256	66	781	781	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	18837	Pleasant Is
5012	14	5687	4736	0.65	0.83	0.63	0.69	0.76	0.76	0.66	0.51	0.65	0.50	147820	Kuiu Is
5013	0	2289	2192	0.81	0.99	0.81	0.84	0.89	0.89	0.82	0.46	0.67	0.76	63271	Kuiu Is
5014	1	2278	2214	0.66	1.00	0.66	0.73	0.80	0.80	0.67	0.57	0.66	0.57	40093	Kuiu Is
5015	0	1191	1191	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	19084	Coronation
5016	0	3162	3127	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	69278	Kuiu Is
5017	0	6627	6535	0.85	1.00	0.85	0.89	0.92	0.92	0.87	0.80	0.87	0.81	124105	Kuiu Is
5018	3	1637	1559	0.83	0.98	0.82	0.84	0.89	0.89	0.82	0.54	0.75	0.82	49217	Kuiu Is
5130	11	2606	2576	0.80	1.00	0.77	0.80	0.87	0.88	0.80	0.67	0.80	0.78	92637	Kupreanof
5131	25	1247	1133	0.86	0.92	0.84	0.86	0.90	0.91	0.86	0.59	0.83	0.85	70472	Kupreanof
5132	56	1088	856	0.70	0.76	0.70	0.72	0.79	0.79	0.71	0.64	0.71	0.63	38610	Kupreanof
5133	21	1507	1483	0.72	1.00	0.67	0.72	0.81	0.83	0.72	0.60	0.70	0.61	107769	Kupreanof
5134	45	3280	3005	0.82	0.96	0.81	0.83	0.88	0.88	0.82	0.78	0.80	0.78	102411	Kupreanof
5135	0	805	804	0.82	1.00	0.77	0.85	0.86	0.89	0.82	0.76	0.82	0.76	55323	Kupreanof
5136	10	1084	944	0.61	0.85	0.61	0.66	0.77	0.77	0.63	0.58	0.63	0.57	59816	Kupreanof
5137	0	535	516	0.98	1.00	0.98	0.98	0.99	0.99	0.98	0.98	0.98	1.00	49570	Kupreanof
5138	47	1659	1507	0.66	0.95	0.61	0.69	0.75	0.78	0.67	0.55	0.65	0.55	60884	Kupreanof
Total	14892	260941	240912	0.86	0.96	0.83	0.88	0.89	0.90	0.86	0.76	0.85	0.78	12966235	

[1] all National Forest lands, including lakes, rock, ice, and high elevation alpine.
[2] The following WAAs have been omited due to low deer densites: 718, 820, 824, 825, 826, 1604, 1809, 2410, 2411, 2412, 2413, 2516, 2518, 2519, 2824, 2825, 4302-4607

Table 3-109
Employment and Income Levels--Total ASQ (1995-2005 Average)

Direct Employment and Income

	1994	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9	Preferred
Direct Employment (Average Annual Employment)											
Wood Products	2,225	297	2,478	1,760	1,070	1,033	2,055	3,147	2,049	2,563	2,032
Recreation/Tourism	2,771	3,520	3,500	3,500	3,510	3,510	3,500	3,460	3,500	3,470	3,500
Salmon Harvesting /1	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899
Mining	163	810	810	810	810	810	810	810	810	810	810
Total	7,058	6,521	8,682	7,971	7,284	7,249	8,261	9,313	8,253	8,738	8,241
Direct Earnings (Million 1994$)											
Wood Products	97	13	108	76	46	45	89	137	89	111	88
Recreation/Tourism	86	109	108	109	109	109	108	107	108	107	108
Salmon Harvesting /1	41	41	41	41	41	41	41	41	41	41	41
Mining	10	48	48	48	48	48	48	48	48	48	48
Total	233	211	305	274	244	242	287	333	286	308	285

Total Employment and Income

	1994	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9	Preferred
Total Employment (Average Annual Employment)											
Wood Products	3,471	463	3,866	2,746	1,669	1,612	3,206	4,909	3,197	3,998	3,170
Recreation/Tourism	3,664	4,654	4,628	4,628	4,641	4,641	4,628	4,575	4,628	4,588	4,628
Non-Res Rec/Tour /2	1,610	2,042	2,031	2,034	2,037	2,037	2,032	2,008	2,030	2,014	2,032
Salmon Harvesting /1	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697
Mining	284	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409
Total Earnings (Million 1994$)											
Wood Products	130.5	17.4	145.4	103.3	62.7	60.6	120.6	184.6	120.2	150.4	119.2
Recreation/Tourism	113.6	144.1	143.3	143.5	143.7	143.7	143.3	141.7	143.2	142.1	143.0
Non-Res Rec/Tour	49.9	63.3	62.9	63.1	63.1	63.1	63.0	62.3	62.9	62.4	63.0
Salmon Harvesting /1	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
Mining	16.9	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
Total Employment Generated in Southeast Alaska (Average Annual Employment)											
All Categories	8,061	6,612	10,002	8,887	7,811	7,755	9,344	11,024	9,333	10,118	9,303
Total Earnings Generated in Southeast Alaska (Million 1994$)											
All Categories	255.1	222.3	349.9	307.9	267.5	265.4	325.1	388.5	324.7	354.4	323.7

/1 Salmon harvesting employment and income are shown as constant across all alternatives because there is not expected to be a quantifiable effect on fish habitat capability resulting from activities during the next ten years. There is some risk of habitat declines, however, especially over the long term. For further information, refer to the Salmon Harvesting and Processing discussion later in this section and the Fish part of this Chapter.

/2 Non-resident Recreation/Tourism refers to employment generated by non-resident spending in the recreation/tourism sector.

Total employment and income levels are derived using multipliers cited in previous section. Recreation/Tourism employment generated from resident recreation activity was omitted from the calculation of total employment generated in Southeast Alaska. Totals may not sum due to rounding. See text for explanation of estimates for specific industries.

Table 3-110
Total Employment and Income Levels--NIC I Only (1995-2005 Average)

Direct Employment and Income

	1994	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9	Preferred
Direct Employment (Average Annual Employment)											
Wood Products	2,225	297	2,189	1,512	932	901	1,833	2,753	1,842	2,422	1,823
Recreation/Tourism	2,771	3,520	3,500	3,500	3,510	3,510	3,500	3,460	3,500	3,470	3,500
Salmon Harvesting /1	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899
Mining	163	810	810	810	810	810	810	810	810	810	810
Total	7,058	6,521	8,394	7,722	7,147	7,117	8,040	8,919	8,045	8,597	8,032
Direct Earnings (Million 1994$)											
Wood Products	97	13	95	66	41	39	80	120	80	105	79
Recreation/Tourism	86	109	108	109	109	109	108	107	108	107	108
Salmon Harvesting /1	41	41	41	41	41	41	41	41	41	41	41
Mining	10	48	48	48	48	48	48	48	48	48	48
Total	233	211	292	263	238	237	277	316	277	302	276

Total Employment and Income

	1994	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9	Preferred
Total Employment (Average Annual Employment)											
Wood Products	3,471	463	3,415	2,358	1,454	1,406	2,860	4,295	2,873	3,778	2,844
Recreation/Tourism	3,664	4,654	4,628	4,628	4,641	4,641	4,628	4,575	4,628	4,588	4,628
Non-Res Rec/Tour /2	1,610	2,042	2,031	2,034	2,037	2,037	2,032	2,008	2,030	2,014	2,032
Salmon Harvesting /1	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697	2,697
Mining	284	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409
Total Earnings (Million 1994$)											
Wood Products	131	17	128	89	55	53	108	161	108	142	107
Recreation/Tourism	114	144	143	144	144	144	143	142	143	142	143
Non-Res Rec/Tour	50	63	63	63	63	63	63	62	63	62	63
Salmon Harvesting /1	58	58	58	58	58	58	58	58	58	58	58
Mining	17	84	84	84	84	84	84	84	84	84	84
Total Employment Generated in Southeast Alaska (Average Annual Employment)											
All Categories	8,061	6,612	9,552	8,499	7,597	7,549	8,998	10,409	9,009	9,898	9,878
Total Earnings Generated in Southeast Alaska (Million 1994$)											
All Categories	255	222	333	293	259	258	312	365	313	346	311

/1 Salmon harvesting employment and income are shown as constant across all alternatives because there is not expected to be a quantifiable effect on fish habitat capability resulting from activities during the next ten years. There is some risk of habitat declines, however, especially over the long term. For further information, refer to the Salmon Harvesting and Processing discussion later in this section and the Fish part of this Chapter.

/2 Non-resident Recreation/Tourism refers to employment generated by non-resident spending in the recreation/tourism sector.

Total employment and income levels are derived using multipliers cited in previous section. Recreation/Tourism employment generated from resident recreation activity was omitted from the calculation of total employment generated in Southeast Alaska. Totals may not sum due to rounding. See text for explanation of estimates for specific industries.

Table 3-111
Estimated Timber Harvest (1995-2005 Average)

	1994	Pref.	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
Total ASQ Harvested (MMbf Is)											
Non-TNF	235.6	121	121	121	121	121	121	121	121	121	121
Hem-Spruce Sawlogs	--	190	0	259	148	77	74	194	362	192	272
Hem-Spruce Pulp Logs	--	140	0	192	109	57	55	143	268	142	201
Cedar Logs	--	28	0	36	20	10	9	26	54	28	40
Total TNF	275.8	357	0	487	277	145	138	363	684	362	513
Total	511.4	478	121	608	398	266	259	484	805	483	634
NIC I Only Harvested (MMbf Is)											
	1994	Pref.	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
Non-TNF	235.6	121	121	121	121	121	121	121	121	121	121
Hem-Spruce Sawlogs	--	156	0	213	121	63	60	158	299	159	248
Hem-Spruce Pulp Logs	--	116	0	158	90	47	45	117	222	118	185
Cedar Logs	--	25	0	34	19	10	9	25	51	26	41
Total TNF	275.8	297	0	405	230	120	114	300	572	303	474
Total	511.4	418	121	526	351	241	235	421	693	424	595

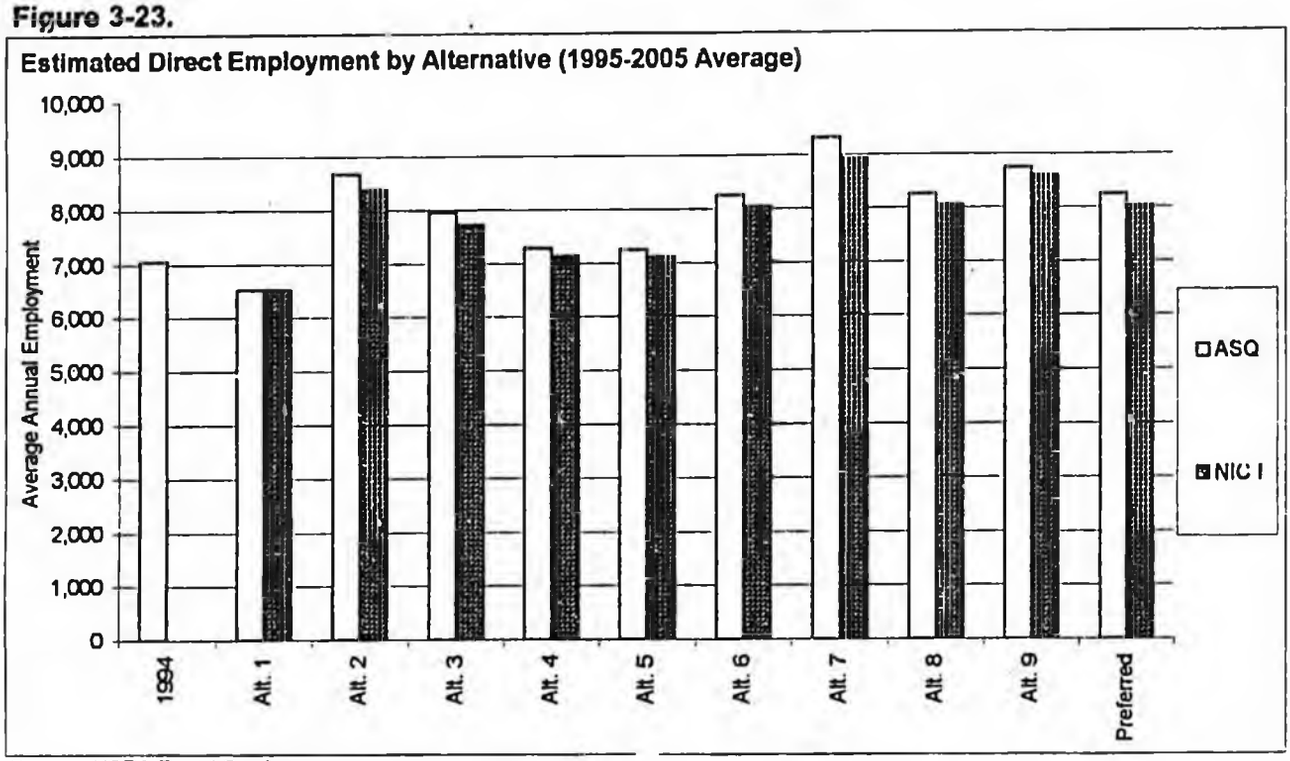
Source: USDA Forest Service. See text for explanations.

Table 3-112
Estimated Product Output (1995-2005 Average, MMbf log scale)

	Roundwood Conv.	1994	Pref	Alternative 1	2	3	4	5	6	7	8	9
Total ASQ Harvested (MMbf Is)												
Log Production	None	511	478	121	608	398	266	259	484	805	483	634
Lumber Production	0.79 (Mbf Is/Mbf It)	121	157	0	215	122	64	61	160	300	159	225
Pulp Production	0.90 (Mbf Is/Short Ton)	165	190	20	190	190	111	107	190	190	190	190
Chip Exports (surplus)	0.37 (Mbf Is/BDT)	26	52	0	135	3	0	0	57	256	56	149
NIC 1 Only Harvested (MMbf Is)												
Log Production	None	511	418	121	526	351	241	235	421	693	424	595
Lumber Production	0.79 (Mbf Is/Mbf It)	121	129	0	176	100	52	50	131	247	131	205
Pulp Production	0.90 (Mbf Is/Short Ton)	165	190	20	190	163	95	91	190	190	190	190
Chip Exports (surplus)	0.37 (Mbf Is/BDT)	26	14	0	81	[illegible]	0	0	16	183	17	123

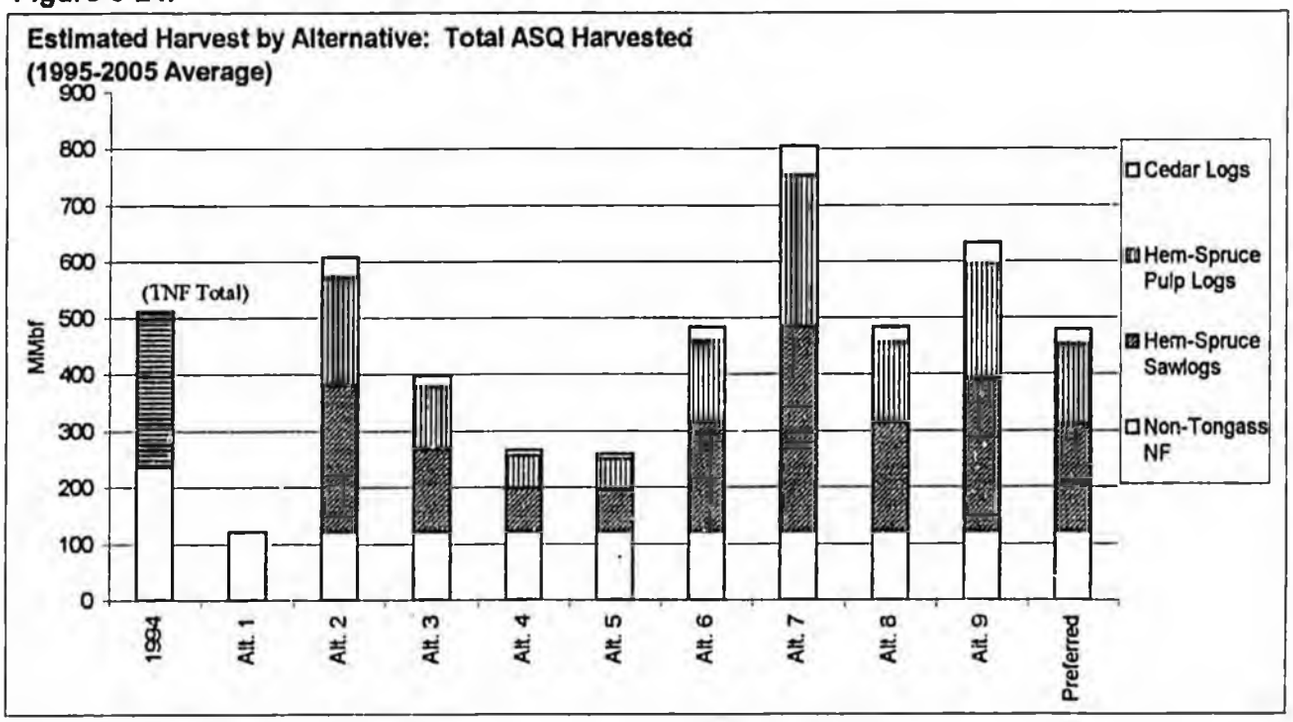
Source: USDA Forest Service. See text for explanations.

Figure 3-23.



Source: USDA Forest Service
Direct employment total for timber, recreation, salmon fishing and mining. See text for explanations.

Figure 3-24.



Source: USDA Forest Service.
See text for explanations.

Table 3-113
Timber Industry Employment (1995-2005 Average)

				Alternative								
	1990-94 Ave. Jobs/MMbf Is	1994	Pref	1	2	3	4	5	6	7	8	9
Total ASQ Harvested												
Employment (Average Annual Employment)												
Logging	1.95	1,177	932	236	1188	777	520	506	945	1572	943	1238
Sawmills	3.33	515	523	0	714	407	213	204	534	998	529	748
Pulp Mills	3.03	533	576	61	576	576	337	324	576	576	576	576
Total Direct	--	2,225	2,031	297	2,478	1,760	1,070	1,033	2,055	3,147	2,049	2,563
Total	Multiplier = 1.56	3,471	3,168	463	3,866	2,746	1,669	1,612	3,206	4,909	3,197	3,998
Income (million 1994 $)												
Direct	@43,453 $/ Job	97	88	13	108	76	46	45	89	137	89	111
Total	Multiplier = 1.35	151	138	20	168	119	73	70	139	213	139	174
NIC I Only Harvested												
Employment (Average Annual Employment)												
Logging	1.95	1,177	815	236	1027	686	471	459	822	1354	828	1162
Sawmills	3.33	515	430	0	585	333	174	166	435	823	437	684
Pulp Mills	3.03	533	576	61	576	493	287	276	576	576	576	576
Total Direct	--	2,225	1,821	297	2,189	1,512	932	901	1,833	2,753	1,842	2,422
Total	Multiplier = 1.56	3,471	2,841	463	3,415	2,358	1,454	1,406	2,860	4,295	2,873	3,778
Income (million 1994 $)												
Direct	@43,453 $/ Job	97	79	13	95	66	41	39	80	120	80	105
Total	Multiplier = 1.35	151	123	20	148	102	63	61	124	187	125	164

Source: USDA Forest Service. See text for explanations.

Figure 3-25

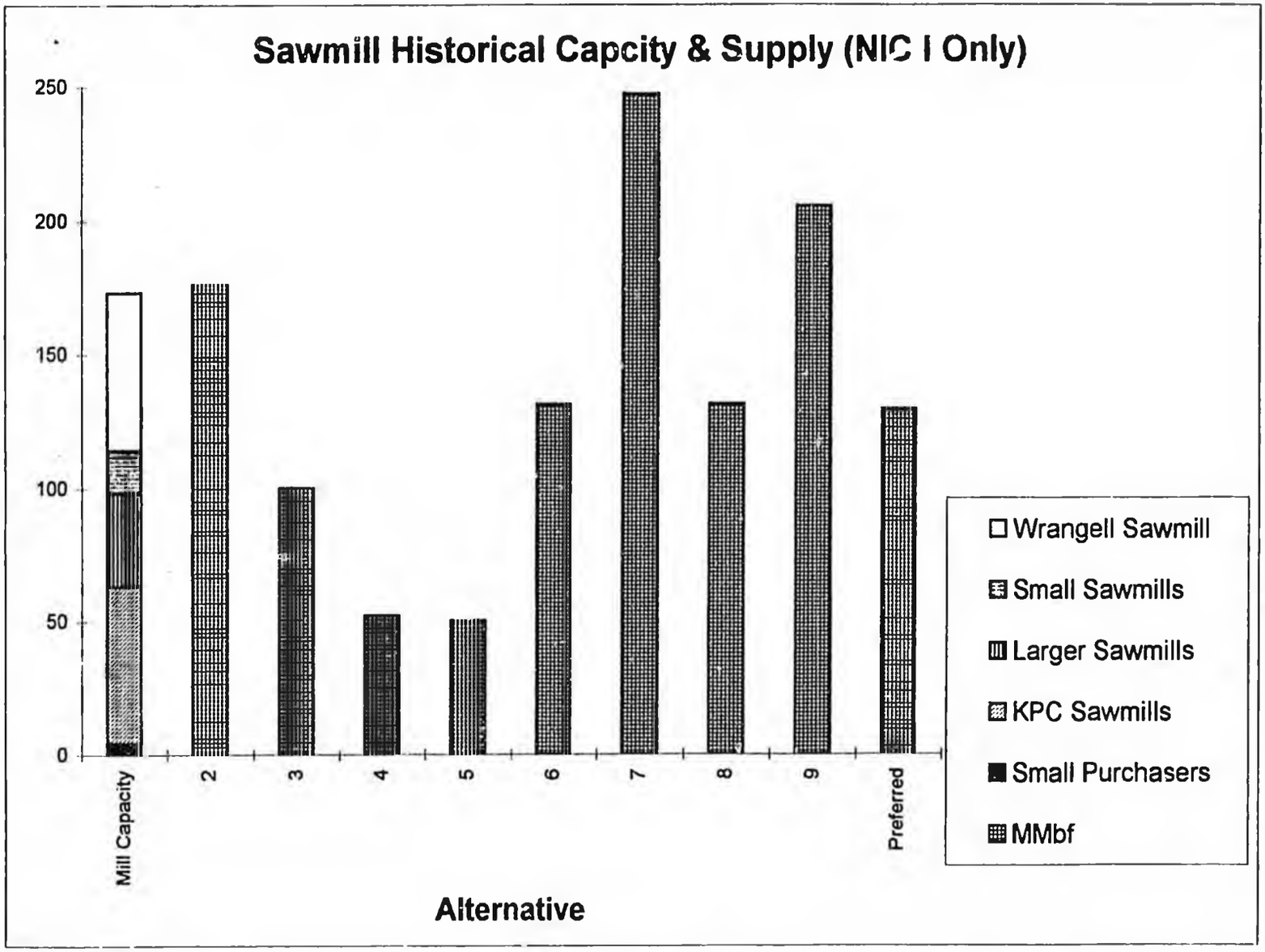

Sawmill Historical Capcity & Supply (NIC I Only)
250
200
150
100
50
0
Mill Capacity
2
3
4
5
6
7
8
9
Preferred
Alternative
Wrangell Sawmill
Small Sawmills
Larger Sawmills
KPC Sawmills
Small Purchasers
MMbf

Figure 3-26

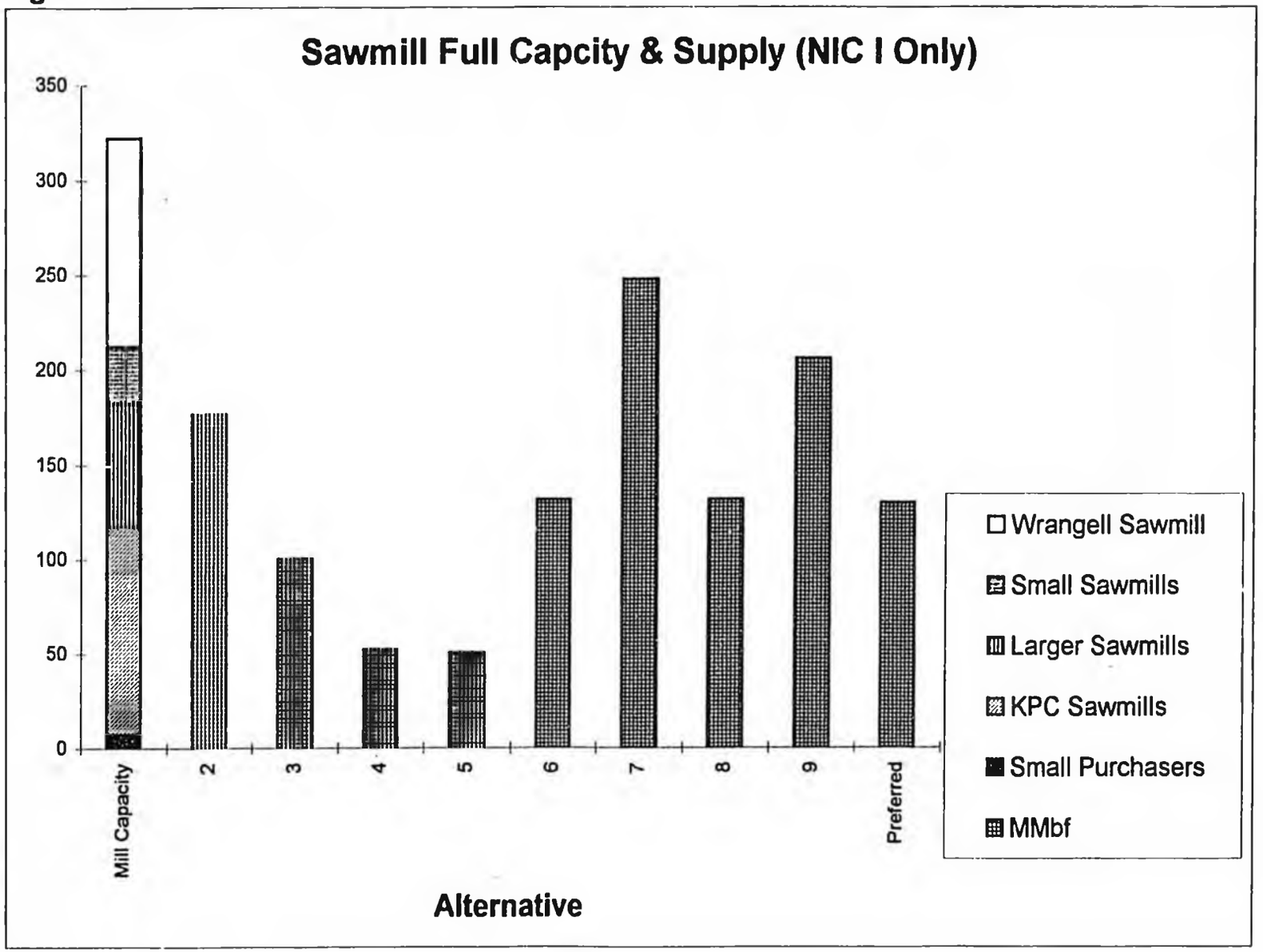

Sawmill Full Capcity & Supply (NIC I Only)
350
300
250
200
150
100
50
0
Mill Capacity
2
3
4
5
6
7
8
9
Preferred
Alternative
Wrangell Sawmill
Small Sawmills
Larger Sawmills
KPC Sawmills
Small Purchasers
MMbf

Figure 3-27

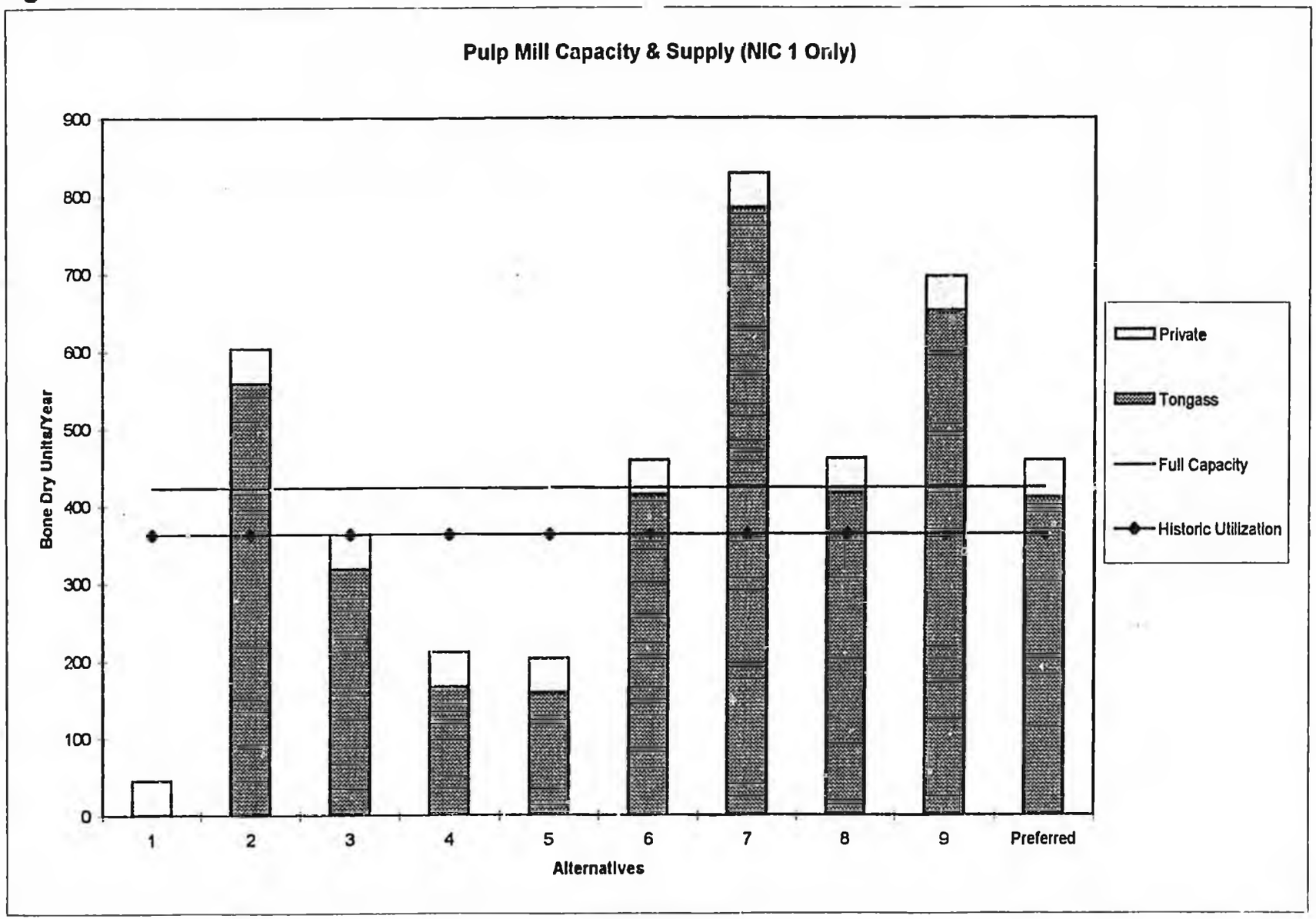

Pulp Mill Capacity & Supply (NIC 1 Only)
Bone Dry Units/Year
900
800
700
600
500
400
300
200
100
0
1
2
3
4
5
6
7
8
9
Preferred
Alternatives
Private
Tongass
Full Capacity
Historic Utilization

Table 3-115
Processing Capacity and Estimated Timber Surplus/Deficit (1995-2005 Average, MMbf)

	Alternative									
	Pref.	1	2	3	4	5	6	7	8	9
Total ASQ Harvested										
Sawlog Supply and Lumber Production										
@ Historic Utilization (173 MMbf/yr.)	17	(173)	86	(25)	(96)	(99)	21	189	19	99
@ Full Capacity (322 MMbf/yr.)	(132)	(322)	(63)	(174)	(245)	(248)	(128)	40	(130)	(50)
Chip Supply & Pulp Production										
@ Historic Utilization (163 MMbf/yr.)	79	(143)	162	30	(52)	(56)	84	283	83	176
@ Full Capacity (190 MMbf/yr.)	52	(170)	135	3	(79)	(83)	57	256	56	149
NIC I Only Harvested										
Sawlog Supply and Lumber Production										
@ Historic Utilization (173 MMbf/yr.)	(17)	(173)	40	(52)	(110)	(113)	(15)	126	(14)	75
@ Full Capacity (322 MMbf/yr.)	(166)	(322)	(109)	(201)	(259)	(262)	(164)	(23)	(163)	(74)
Chip Supply & Pulp Production										
@ Historic Utilization (163 MMbf/yr.)	41	(143)	108	(0)	(68)	(72)	43	210	44	150
@ Full Capacity (190 MMbf/yr.)	14	(170)	81	(27)	(95)	(99)	16	183	17	123

Source: USDA Forest Service. See text for explanations.

Table 3-116
Recreation/Tourism Supply, Demand and Consumption (1995-2005 Average)

Supply (1,000 RVDs)

		Alternative								
	1994	Pref.	1	2	3	4	5	6	7	8	9
ROS1	1,443	1,415	1,432	1,405	1,415	1,419	1,420	1,408	1,386	1,407	1,394
ROS2	1,668	1,645	1,666	1,639	1,647	1,652	1,653	1,641	1,587	1,637	1,599
ROS3	1,851	1,880	1,850	1,902	1,883	1,876	1,871	1,892	1,946	1,900	1,924
Total	4,962	4,940	4,948	4,945	4,945	4,947	4,945	4,941	4,918	4,944	4,917

Demand (1,000 RVDs)

	1994	2000
ROS1	455	706
ROS2	1,364	2,117
ROS3	346	538
ROS Total	2,165	3,361
Non-capacity Use /1	1,582	1,844
Total	3,747	5,205

Projected Consumption (1,000 RVDs) in year 2000

		Alternative								
	1994	Pref.	1	2	3	4	5	6	7	8	9
ROS1	455	706	706	706	706	706	706	706	706	706	706
ROS2	1,34	1,647	1,666	1,639	1,647	1,652	1,653	1,641	1,587	1,637	1,599
ROS3	346	538	538	538	538	538	538	538	538	538	538
ROS Total	2,165	2,891	2,909	2,882	2,891	2,896	2,897	2,884	2,830	2,881	2,843
Non-capacity Use	1,582	1,844	1,844	1,844	1,844	1,844	1,844	1,844	1,844	1,844	1,844
Total	3,747	4,734	4,753	4,726	4,734	4,739	4,741	4,728	4,674	4,725	4,687

Source: USDA Forest Service. See text for explanations.
(1) Non-capacity use includes activities that do not take place physically on the forest, (viewing scenery from cruiseships).

Table 3-117
Recreation/Tourism Related Employment (1995-2005 Average)

		Alternative								
	1994	Pref	1	2	3	4	5	6	7	8	9
Employment @ 1,352 RVDs/Job (Average Annual Employment)											
Direct Employment	2,771	3,500	3,520	3,500	3,500	3,510	3,510	3,500	3,460	3,500	3,470
Total Employment	3,664	4,628	4,654	4,628	4,628	4,641	4,641	4,628	4,575	4,628	4,588
From Non-Resident	1,218	1,537	1,545	1,536	1,539	1,540	1,541	1,537	1,519	1,535	1,523
Total From Non-Resident	1,610	2,032	2,042	2,031	2,034	2,037	2,037	2,032	2,008	2,030	2,014
Income @ 30,996 $ / Job (Million 1994 $)											
Direct Income	85.9	108.4	109.0	108.3	108.5	108.7	108.7	108.4	107.2	108.3	107.4
Total Income	113.6	143.3	144.1	143.3	143.5	143.7	143.7	143.3	141.7	143.2	142.1
From Non-Resident	37.7	47.6	47.9	47.6	47.7	47.7	47.8	47.6	47.1	47.6	47.2
Total From Non-Resident	49.9	63.0	63.3	62.9	63.1	63.1	63.1	63.0	62.3	62.9	62.4

Source: USDA Forest Service. See text for explanations.

Table 3-118
Tongass National Forest Receipts and Payments to Alaska (1995-2005 Average)

			Alternative								
	1994	Pref	1	2	3	4	5	6	7	8	9
					Cash Receipts (1,000 1994$)						
Timber Receipts	5,247	30,268	0	49,640	24,142	13,011	12,103	30,235	70,892	32,429	61,243
Other Receipts	906	385	220	384	384	386	386	384	377	384	379
Total Cash Receipts	6,153	30,653	220	50,024	24,526	13,397	12,489	30,620	71,269	32,813	61,621
Capital Improvements (1,000 1994$)											
Road Credits (PRC)	22,914	45,522	0	63,754	36,538	19,147	18,275	48,371	91,126	48,053	80,037
Other	5,838	154	0	220	124	65	62	161	304	161	272
Total Cap. Imp.	28,751	45,676	0	63,973	36,661	19,212	18,337	48,532	91,430	48,214	80,309
Total and Payments to State of Alaska (1,000 1994$)											
Total Receipts	34,905	75,945	220	113,997	61,187	32,609	30,826	79,152	162,700	81,027	141,930
Payments to AK	8,726	18,986	55	28,499	15,297	8,152	7,706	19,788	40,675	20,257	35,483

Source: USDA Forest Service. See text for explanations.

Table 3-119
Present Net Value for Recreation/Tourism and Timber

	Alternative									
	Pref.	1	2	3	4	5	6	7	8	9
Net Present Value (discounted @ 4 % per annum) (1,000 1994$)										
Timber	449	0	797	404	361	331	494	1,191	543	1,007
Recreation/Tourism	4,502	4,606	4,503	4,521	4,511	4,522	4,502	4,338	4,500	4,381
Total	4,502	4,606	5,300	4,924	4,872	4,853	4,996	5,529	5,043	5,387

Source: USDA Forest Service. See text for explanations.

Table 3-121. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Angoon residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Angoon Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
4042	40	92	2608	2607	2607	2607	2607	2607	2607	2607	2607	2607	2607
4055	34	75	2565	2558	2558	2558	2558	2558	2558	2558	2558	2558	2558
4054	25	47	2222	2222	2222	2222	2222	2222	2222	2222	2222	2222	2222
3308	24	201	3164	2206	2824	2246	2385	2385	2092	2046	1815	2178	1811
3315	21	127	1284	1161	1240	1167	1062	1062	943	924	759	1151	884
	144	542	11843	10754	11451	10800	10834	10834	10422	10357	9961	10716	10082
% Change in Habitat Capability From 1995:				-9.2	-3.3	-8.8	-8.5	-8.5	-12.0	-12.5	-15.9	-9.5	-14.9
Angoon Harvest As a % of 2095 Capability:				1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.4
Total Harvest As a % of 2095 Capability:				5.0	4.7	5.0	5.0	5.0	5.2	5.2	5.4	5.1	5.4

Table 3-122. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Coffman Cove residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Coffman Cove Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1420	39	107	790	576	790	534	790	790	790	790	516	571	517
1421	39	234	2442	1846	2184	1579	1864	1850	2048	1958	1278	1697	1423
Total	78	341	3232	2422	2974	2113	2654	2640	2838	2748	1794	2268	1940
% Change in Habitat Capability From 1995:				-25.1	-8.0	-34.6	-17.9	-18.3	-12.2	-15.0	-44.5	-29.8	-40.0
Coffman Cove Harvest As a % of 2095 Capab				3.2	2.6	3.7	2.9	3.0	2.7	2.8	4.3	3.4	4.0
Total Harvest As a % of 2095 Capability:				14.1	11.5	16.1	12.8	12.9	12.0	12.4	19.0	15.0	17.6

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-123. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Craig residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Craig Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1318	117	201	1213	828	1213	1213	1213	1213	1213	782	784	838	764
1422	84	343	3617	2380	2556	2447	2501	2535	2403	2291	1940	2381	2210
1319	43	299	2364	1835	3769	3660	3714	3748	3616	3073	2724	3219	2974
1323	43	126	1654	1379	1625	1341	1441	1470	1488	1396	1239	1408	1220
1529	43	179	2051	1464	1760	1395	1552	1564	1601	1495	1270	1494	1311
1421	34	234	2442	1846	2184	1579	1864	1850	2048	1958	1278	1697	1423
Total	364	1382	13341	9732	13107	11635	12285	12380	12369	10995	9235	11037	9902
% Change in Habitat Capability From 1995:				-27.1	-1.8	-12.8	-7.9	-7.2	-7.3	-17.6	-30.8	-17.3	-25.8
Craig Harvest As a % of 2095 Capability:				3.7	2.8	3.1	3.0	2.9	2.9	3.3	3.9	3.3	3.7
Total Harvest As a % of 2095 Capability:				14.2	10.5	11.9	11.2	11.2	11.2	12.6	15.0	12.5	14.0

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-124. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Edna Bay residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Edna Bay Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1525	32	40	2003	1510	1694	1608	1521	1608	1550	1328	1207	1551	1207
1526	19	56	2328	2185	2261	2204	2204	2217	2188	2150	2126	2189	2127
Total	51	96	4331	3695	3955	3812	3725	3825	3738	3478	3333	3740	3334
% Change in Habitat Capability From 1995:				-14.7	-8.7	-12.0	-14.0	-11.7	-13.7	-19.7	-23.0	-13.6	-23.0
Edna Bay Harvest As a % of 2095 Capability:				1.4	1.3	1.3	1.4	1.3	1.4	1.5	1.5	1.4	1.5
Total Harvest As a % of 2095 Capability:				2.6	2.4	2.5	2.6	2.5	2.6	2.8	2.9	2.6	2.9

Table 3-125. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Elfin Cove residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Elfin Cove Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3421	17	85	790	790	790	790	790	790	790	790	790	790	741
3418	4	107	1744	1744	1744	1744	1744	1744	1744	1744	1744	1744	1611
Total	21	192	2534	2534	2534	2534	2534	2534	2534	2534	2534	2534	2352
% Change in Habitat Capability From 1995:				0	0	0	0	0	0	0	0	0	-7.2
Elfin Cove Harvest % of 2095 Capability:				0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9
Total Harvest % of 2095 Capability:				7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	8.2

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-126. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Gustavus residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Gustavus Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
4256	51	66	781	781	781	781	781	781	781	781	781	781	781
4222	20	170	2021	1702	1998	1608	1714	1769	1769	1616	1599	1706	1599
Total	71	236	2802	2483	2779	2389	2495	2550	2550	2397	2380	2487	2380
% Change in Habitat Capability From 1995:				-11.4	-0.8	-14.7	-11.0	-9.0	-9.0	-14.5	-15.1	-11.2	-15.1
Gustavus Harvest % of 2095 Capability:				2.9	2.6	3.0	2.8	2.8	2.8	3.0	3.0	2.9	3.0
Total Harvest % of 2095 Capability:				9.5	8.5	9.9	9.5	9.3	9.3	9.8	9.9	9.5	9.9

Table 3-127. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Haines residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Haines Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
4222	89	170	2021	1702	1998	1608	1714	1769	1769	1616	1599	1706	1599
3629	28	161	1706	1241	1673	1162	1309	1379	1379	1183	1040	1251	1232
3420	27	94	471	472	472	472	472	472	472	472	472	472	472
3630	14	37	468	324	469	324	337	383	383	325	259	321	323
4253	14	123	1042	817	1042	695	1042	1042	1042	1042	733	904	592
3526	11	191	1180	931	1118	777	1118	1118	1118	1118	693	940	711
2202	11	8	140	140	140	140	140	140	140	140	86	104	86
3312	11	141	410	357	410	319	410	410	410	410	283	355	311
3421	10	86	790	790	790	790	790	790	790	790	790	790	741
3418	9	110	1744	1744	1744	1744	1744	1744	1744	1744	1744	1744	1611
4252	5	206	477	370	477	311	477	477	477	477	301	370	301
Total	229	1327	10449	8888	10333	8342	9553	9723	9723	9317	8000	8957	7979
% Change in Habitat Capability From 1995:				-14.9	-1.1	-20.2	-8.6	-6.9	-6.9	-10.8	-23.4	-14.3	-23.6
Haines Harvest % of 2095 Capability:				2.6	2.2	2.7	2.4	2.4	2.4	2.5	2.9	2.6	2.9
Total Harvest % of 2095 Capability:				14.9	12.8	15.9	13.9	13.6	13.6	14.2	16.6	14.8	16.6

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-128. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Hollis residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Hollis Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1317	8	75	992	829	971	727	864	835	886	830	661	800	653
1421	6	242	2442	1846	2184	1579	1864	1850	2048	1958	1278	1697	1423
1420	4	121	790	576	790	534	790	790	790	790	516	571	517
1211	2	51	1768	1383	1686	1312	1453	1481	1481	1345	1221	1419	1208
1315	2	172	2076	1556	1907	1499	1606	1696	1717	1575	1412	1569	1402
Total	22	661	8068	6190	7538	5651	6577	6652	6923	6498	5088	6056	5203
% Change in Habitat Capability From 1995:				-23.3	-6.6	-30.0	-18.5	-17.5	-14.2	-19.5	-36.9	-24.9	-35.5
Hollis Harvest % of 2095 Capability:				0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Total Harvest % of 2095 Capability:				10.7	8.8	11.7	10.1	9.9	9.5	10.2	13.0	10.9	12.7

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-129. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Hoonah residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Hoonah Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3523	93	169	1169	915	1103	767	1103	1103	1103	1103	732	937	696
3551	78	225	1618	1112	1618	942	1618	1618	1618	1618	877	1142	848
4253	70	123	1042	817	1042	695	1042	1042	1042	1042	733	904	592
4222	64	170	2021	1702	1998	1608	1714	1769	1769	1616	1599	1706	1599
Total	305	687	5850	4546	5761	4012	5477	5532	5532	5379	3941	4689	3735
% Change in Habitat Capability From 1995:				-22.3	-1.5	-31.4	-6.4	-5.4	-5.4	-8.1	-32.6	-19.8	-36.2
Hoonah Harvest % of 2095 Capability:				6.7	5.3	7.6	5.6	5.5	5.5	5.7	7.7	6.5	8.2
Total Harvest % of 2095 Capability:				15.1	11.9	17.1	12.5	12.4	12.4	12.8	17.4	14.7	18.4

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-130. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Hydaburg residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Hydaburg Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1332	11	60	2104	1658	2029	1560	1735	1766.2	1823.8	1687	1462	1698	1391
1319	10	299	2364	1835	2364	1536	2364	2364	2364	2364	1374	1757	1373
901	7	38	1940	1578	1864	1493	1643	1658.8	1658.8	1522	1231	1584	1204
1107	6	37	5703	5109	5590	4704	5199	5109.4	5191.6	4926	3758	4816	3792
1420	4	107	790	576	790	534	790	790	790	790	516	571	517
Total	38	541	12901	10756	12637	9827	11731	11688	11828	11289	8341	10426	8277
% Change in Habitat Capability From 1995:				-16.6	-2.0	-23.8	-9.1	-9.4	-8.3	-12.5	-35.3	-19.2	-35.8
Hydaburg Harvest % of 2095 Capability:				0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.5	0.4	0.5
Total Harvest % of 2095 Capability:				5.0	4.3	5.5	4.6	4.6	4.6	4.8	6.5	5.2	6.5

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-131. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Hyder residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Hyder Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1003	1	142	2639	1823	1970	1565	1865	1771	1771	1638	1439	1859	1439
1422	1	343	3617	2380	2556	2291	2447	2501	2535	2403	1940	2381	2210
Total	2	485	6256	4203	4526	3856	4312	4272	4306	4041	3379	4240	3649
% Change in Habitat Capability From 1995:				-32.8	-27.7	-38.4	-31.1	-31.7	-31.2	-35.4	-46.0	-32.2	-41.7
Hyder Harvest % of 2095 Capability:				0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05
Total Harvest % of 2095 Capability:				11.5	10.7	12.6	11.2	11.4	11.3	12.0	14.4	11.4	13.3

Table 3-132. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Juneau residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Juneau Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3835	307	319	907	907	907	907	907	907	907	907	907	907	630
3836	301	341	1592	1592	1592	1592	1592	1592	1592	1592	1153	1254	1052
4150	226	228	953	953	953	953	953	953	953	953	953	953	953
2722	195	375	815	813	815	795	815	815	815	815	636	734	813
4148	169	162	1686	1685	1685	1685	1685	1685	1685	1685	1685	1685	1685
4149	164	141	1388	1388	1388	1388	1388	1388	1388	1388	1388	1388	1388
3526	163	191	1394	931	1394	777	1394	1394	1394	1394	693	940	711
4147	155	[illegible]	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007
4145	151	[illegible]	1288	1288	1288	1288	1288	1288	1288	1288	1288	1288	1288
3629	121	161	1830	1241	1673	1162	1309	1379	1379	1183	1040	1251	1232
3938	114	267	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239
3525	113	210	2441	1285	2441	1186	2441	2441	2441	2441	1080	1369	1168
4146	104	158	907	908	908	908	908	908	908	908	908	908	908
3417	100	222	2644	2643	2643	2643	2643	2643	2643	2643	2643	2643	2624
4044	88	211	1264	1264	1264	1264	1264	1264	1264	1264	1264	1264	1264
3551	88	225	1846	1112	1520	942	1164	1190.6	1284.8	1128	877	1142	848
4222	81	170	2065	1702	1998	1608	1714	1768.8	1768.8	1616	1599	1706	1599
3420	68	94	471	472	472	472	472	472	472	472	472	472	472
2621	64	72	163	163	163	163	163	163	163	163	91	113	163
Total	2772	3900	27900	24593	27350	23979	26346	26497	26592	26086	22923	24263	23044
% Change in Habitat Capability From 1995:				-11.9	-2.0	-14.1	-5.6	-5.0	-4.7	-6.5	-17.8	-13.0	-17.4
Juneau Harvest % of 2095 Capability:				11.3	10.1	11.6	10.5	10.5	10.4	10.6	12.1	11.4	12.0
Total Harvest % of 2095 Capability:				15.9	14.3	16.3	14.8	14.7	14.7	15.0	17.0	16.1	16.9

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-133. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Kake residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Kake Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3940	92	244	2670	2669	2669	2669	2669	2669	2669	2669	2669	2669	2669
3939	46	297	2976	2975	2975	2975	2975	2975	2975	2975	2975	2975	2975
3938	18	267	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239
Total	156	808	8885	8883	8883	8883	8883	8883	8883	8883	8883	8883	8883
% Change in Habitat Capability From 1995:				0	0	0	0	0	0	0	0	0	0
Kake Harvest % of 2095 Capability:				1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Total Harvest % of 2095 Capability:				9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1

Table 3-134. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Kasaan residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Kasaan Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1315	6	150	2076	1556	1907	1499	1606	1696	1717	1575	1412	1569	1402
Total	6	150	2076	1556	1907	1499	1606	1696	1717	1575	1412	1569	1402
% Change in Habitat Capability From 1995:				-25.0	-8.1	-27.8	-22.6	-18.3	-17.3	-24.1	-32.0	-24.4	-32.5
Kasaan Harvest % of 2095 Capability:				0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4
Total Harvest % of 2095 Capability:				9.6	7.9	10.0	9.3	8.8	8.7	9.5	10.6	9.6	10.7

Table 3-135. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Ketchikan residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Ketchikan Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1421	121	234	2442	1846	2184	1579	1864	1850	2048	1958	1278	1697	1423
1422	99	343	3617	2380	2556	2291	2447	2501	2535	2403	1940	2381	2210
613	97	104	1405	1191	1398	1050	1204	1196	1224	1108	964	1172	1003
101	87	100	1513	1511	1511	1511	1511	1511	1511	1511	1026	1313	1511
1530	58	152	1427	1138	1427	1067	1427	1427	1427	1427	1003	1130	1015
406	55	84	2409	1917	2316	1761	1978	1999	1999	1788	1582	1875	1649
1529	55	179	2051	1464	1760	1395	1552	1564	1601	1495	1270	1494	1311
612	52	57	1802	1385	1801	1238	1426	1482	1482	1270	1153	1390	1140
1319	50	299	2364	1835	2364	1536	2364	2364	2364	2364	1374	1757	1373
407	49	63	950	713	933	633	736	766	766	654	663	748	626
1420	49	97	790	576	790	534	790	790	790	790	516	571	517
1214	46	82	1405	1049	1345	916	1138	1113	1178	1067	865	1067	869
1003	46	142	2639	1823	1970	1565	1865	1771	1771	1638	1439	1859	1439
509	43	57	1214	1087	1201	1008	1099	1086	1086	1010	852	1032	974
1211	40	38	1768	1383	1686	1312	1453	1481	1481	1345	1221	1419	1208
408	38	36	361	358	361	358	361	361	361	361	358	358	358
1323	38	126	1654	1379	1625	1341	1441	1470	1488	1396	1239	1408	1220
1315	32	150	2076	1556	1907	1499	1606	1696	1717	1575	1412	1569	1402
510	32	41	1860	1394	1838	1334	1479	1565	1565	1383	951	1296	1113
3315	30	127	1284	1161	1240	924	1167	1062	1062	943	759	1151	884
1106	28	46	388	388	388	388	388	388	388	388	253	380	253
Total	1145	2550	35419	27534	32601	25240	29296	29444	29844	27874	22118	27067	23498
% Change In Habitat Capability From 1995:				-22.3	-8.0	-28.7	-17.3	-16.9	-15.7	-21.3	-37.6	-23.6	-33.7
Ketchikan Harvest % of 2095 Capability:				4.2	3.5	4.5	3.9	3.9	3.8	4.1	5.2	4.2	4.9
Total Harvest % of 2095 Capability:				9.3	7.8	10.1	8.7	8.7	8.5	9.1	11.5	9.4	10.9

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-136. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Klawock residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Klawock Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1318	74	323	1213	828	1213	782	1213	1213	1213	1213	784	838	764
1422	35	361	3617	2380	2556	2291	2447	2501	2535	2403	1940	2381	2210
1323	30	126	1654	1379	1625	1341	1441	1470	1488	1396	1239	1408	1220
1319	27	302	2364	1835	2364	1536	2364	2364	2364	2364	1374	1757	1373
1421	19	242	2442	1846	2184	1579	1864	1850	2048	1958	1278	1697	1423
1529	14	180	2051	1464	1760	1395	1552	1564	1601	1495	1270	1494	1311
Total	199	1534	13341	9732	11702	8924	10881	10962	11249	10829	7885	9575	8301
% Change in Habitat Capability From 1995:				-27.1	-12.3	-33.1	-18.4	-17.8	-15.7	-18.8	-40.9	-28.2	-37.8
Kalwock Harvest % of 2095 Capability:				2.0	1.7	2.2	1.8	1.8	1.8	1.8	2.5	2.1	2.4
Total Harvest % of 2095 Capability:				15.8	13.1	17.2	14.1	14.0	13.6	14.2	19.5	16.0	18.5

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-137. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Metlakatla residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Metlakatla Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
303	8	8	1592	1590	1590	1590	1590	1590	1590	1590	1359	1589	1590
1210	3	19	2242	1799	2240	1653	1859	1917	1917	1702	1233	1699	1523
1422	2	343	3617	2380	2556	2291	2447	2501	2535	2403	1940	2381	2210
Total	13	370	7451	5769	6386	5534	5896	6008	6042	5695	4532	5669	5323
% Change in Habitat Capability From 1995:				-22.6	-14.3	-25.7	-20.9	-19.4	-18.9	-23.6	-39.2	-23.9	-28.6
Metlakatla Harvest % of 2095 Capability:				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
Total Harvest % of 2095 Capability:				6.4	5.8	6.7	6.3	6.2	6.1	6.5	8.2	6.5	7.0

Table 3-138. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Meyers Chuck residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Meyers Chk Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
614	5	13	1592	311	441	310	334	365	365	315	306	324	297
613	3	104	2242	1191	1398	1050	1204	1196	1224	1108	964	1172	1003
1531	3	33	3617	1451	1753	1452	1573	1604	1604	1504	1193	1497	1193
1526	2	56		2185	2261	2150	2204	2204	2217	2188	2126	2189	2127
Total	13	206	7451	5138	5853	4962	5315	5369	5410	5115	4589	5182	4620
% Change in Habitat Capability From 1995:				-31.0	-21.4	-33.4	-28.7	-27.9	-27.4	-31.4	-38.4	-30.5	-38.0
Meyers Chuck Harvest % of 2095 Capability				0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Total Harvest % of 2095 Capability:				4.0	3.5	4.2	3.9	3.8	3.8	4.0	4.5	4.0	4.5

Table 3-139. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Naukati residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Naukati Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1422	22	343	3617	2380	2556	2291	2447	2501	2535	2403	1940	2381	2210
1323	3	126	1654	1379	1625	1341	1441	1470	1488	1396	1239	1408	1220
Total	25	469	5271	3759	4181	3632	3888	3970	4023	3799	3179	3789	3430
% Change in Habitat Capability From 1995:				-28.7	-20.7	-31.1	-26.2	-24.7	-23.7	-27.9	-39.7	-28.1	-34.9
Naukati Harvest % of 2095 Capability:				0.7	0.6	0.7	0.6	0.6	0.6	0.7	0.8	0.7	0.7
Total Harvest % of 2095 Capability:				12.5	11.2	12.9	12.1	11.8	11.7	12.3	14.8	12.4	13.7

Table 3-140. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Pelican residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Pelican Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3419	57	81	397	397	397	397	397	397	397	397	397	397	376
3418	44	107	1744	1744	1744	1744	1744	1744	1744	1744	1744	1744	1611
3417	30	222	2644	2643	2643	2643	2643	2643	2643	2643	2643	2643	2624
Total	131	410	4785	4784	4784	4784	4784	4784	4784	4784	4784	4784	4611
% Change In Habitat Capability From 1995:				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.6
Pelican Harvest % of 2095 Capability:				2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8
Total Harvest % of 2095 Capability:				8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.9

Table 3-143. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Port Alexander residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Port. Alex. Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3734	50	120	2057	2057	2057	2057	2057	2057	2057	2057	2047	2056	2057
Total	50	120	2057	2057	2057	2057	2057	2057	2057	2057	2047	2056	2057
% Change in Habitat Capability From 1995:				0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	0.0
Port Alexander Harvest % of 2095 Capabilit				2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Total Harvest % of 2095 Capability:				5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.8	5.8

Table 3-142. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Point Baker and Port Protection residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Pt. Baker Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1529	16	43	2051	1464	1760	1395	1552	1564	1601	1495	1270	1494	1311
Total	16	43	2051	1464	1760	1395	1552	1564	1601	1495	1270	1494	1311
% Change in Habitat Capability From 1995:				-28.6	-14.2	-32.0	-24.3	-23.7	-21.9	-27.1	-38.1	-27.2	-36.1
Point Baker Harvest % of 2095 Capability:				1.1	0.9	1.1	1.0	1.0	1.0	1.1	1.3	1.1	1.2
Total Harvest % of 2095 Capability:				2.9	2.4	3.1	2.8	2.7	2.7	2.9	3.4	2.9	3.3

Table 3-141. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Petersburg residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Petersburg Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3939	257	297	2976	2975	2975	2975	2975	2975	2975	2975	2975	2975	2975
3940	136	244	2670	2669	2669	2669	2669	2669	2669	2669	2669	2669	2669
3938	108	267	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239
3731	91	148	1291	1200	1200	1020	1200	1115.4	1115.4	1059	853	1192	775
3315	79	127	1392	1161	1240	924	1167	1061.8	1061.8	943	759	1151	884
2007	52	188	3103	1761	2322	1691	1806	1957.8	1995	1777	1534	1760	1556
1605	41	53	944	555	737	550	570	626.6	626.6	553	509	558	501
3308	37	201	4150	2206	2824	2046	2246	2384.8	2384.8	2092	1815	2178	1811
1316	19	72	740	738	738	738	738	738	738	738	738	738	738
4146	19	158	907	908	908	908	908	908	908	908	908	908	908
Total	839	1755	21412	17412	18852	16760	17518	17675	17713	16953	15999	17368	16056
% Change in Habitat Capability From 1995:				-18.7	-12.0	-21.7	-18.2	-17.5	-17.3	-20.8	-25.3	-18.9	-25.0
Petersburg Harvest % of 2095 Capability:				4.8	4.5	5.0	4.8	4.7	4.7	4.9	5.2	4.8	5.2
Total Harvest % of 2095 Capability:				10.1	9.3	10.5	10.0	9.9	9.9	10.4	11.0	10.1	10.9

Table 3-144. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Saxman residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Saxman Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
406	2	84	2409	1917	2316	1761	1978	1999	1999	1788	1582	1875	1649
408	2	36	361	358	358	358	359	358	358	358	358	358	358
1315	1	150	2076	1556	1907	1499	1606	1696	1717	1575	1412	1569	1402
Total	5	270	4846	3831	4581	3618	3943	4053	4074	3721	3352	3802	3409
% Change in Habitat Capability From 1995:				-20.9	-5.5	-25.3	-18.6	-16.4	-15.9	-23.2	-30.8	-21.5	-29.7
Saxman Harvest % of 2095 Capability:				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Harvest % of 2095 Capability:				7.0	5.9	7.5	6.8	6.7	6.6	7.3	8.1	7.1	7.9

Table 3-145. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Sitka residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Sitka Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3001	511	723	3420	2621	3420	2456	3420	3420	3420	3420	2890	2896	2125
3002	335	566	1067	695	1067	695	1067	1067	1067	1067	625	691	654
3104	299	260	3130	2034	2460	1937	2271	2278	2278	2157	2214	2262	1853
3003	257	341	1381	1270	1381	1095	1381	1381	1381	1381	948	1270	909
3310	222	245	1442	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328
3311	219	295	1532	1220	1532	1215	1532	1532	1532	1532	1084	1194	1139
3105	165	157	1949	1937	1937	1895	1937	1912	1912	1895	1708	1874	1708
3206	147	143	939	938	938	938	938	938	938	938	938	938	938
3416	145	191	1690	1689	1689	1689	1689	1689	1689	1689	1689	1689	1689
3309	144	152	1001	869	1001	869	1001	1001	1001	1001	830	848	830
3312	144	141	438	357	438	319	438	438	438	438	283	355	311
Total	2588	3214	17989	14958	17191	14436	17002	16984	16984	16846	14537	15345	13484
% Change in Habitat Capability From 1995:				-16.8	-4.4	-19.8	-5.5	-5.6	-5.6	-6.4	-19.2	-14.7	-25.0
Sitka Harvest % of 2095 Capability:				17.3	15.1	17.9	15.2	15.2	15.2	15.4	17.8	16.9	19.2
Total Harvest % of 2095 Capability:				21.5	18.7	22.3	18.9	18.9	18.9	19.1	22.1	20.9	23.8

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-146. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Skagway residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Skagway Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3310	5	245	1442	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328
3836	5	336	1592	1592	1592	1592	1592	1592	1592	1592	1153	1254	1052
3629	4	161	1830	1241	1673	1162	1309	1379	1379	1183	1040	1251	1232
4146	2	158	907	908	908	908	908	908	908	908	908	908	908
4222	2	170	2065	1702	1998	1608	1714	1769	1769	1616	1599	1706	1599
Total	18	1070	7836	6771	7499	6598	6851	6976	6976	6627	6028	6447	6119
% Change in Habitat Capability From 1995:				-13.6	-4.3	-15.8	-12.6	-11.0	-11.0	-15.4	-23.1	-17.7	-21.9
Skagway Harvest % of 2095 Capability:				0	0	0	0	0	0	0	0	0	0
Total Harvest % of 2095 Capability:				15.8	14.3	16.2	15.6	15.3	15.3	16.1	17.8	16.6	17.5

Table 3-147. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Tenakee Springs residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Tenakee Sp. Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3526	34	166	1180	931	1180	777	1180	1180	1180	1180	693	940	711
3629	15	161	1706	1241	1673	1162	1309	1379	1379	1183	1040	1251	1232
3525	7	208	2034	1285	2034	1186	2034	2034	2034	2034	1080	1369	1168
Total	56	535	4920	3457	4887	3125	4523	4593	4593	4397	2813	3560	3111
% Change in Habitat Capability From 1995:				-29.7	-0.7	-36.5	-8.1	-6.6	-6.6	-10.6	-42.8	-27.6	-36.8
Tenakee Springs Harvest % of 2095 Capabilit				1.6	1.1	1.8	1.2	1.2	1.2	1.3	2.0	1.6	1.8
Total Harvest % of 2095 Capability:				15.5	10.9	17.1	11.8	11.6	11.6	12.2	19.0	15.0	17.2

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-148. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Thorne Bay residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Thorne Bay Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1319	139	299	2364	1835	2364	1536	2364	2364	2364	2364	1374	1757	1373
1315	75	150	2076	1556	1907	1499	1606	1696	1717	1575	1412	1569	1402
1422	31	343	3617	2380	2556	2291	2447	2501	2535	2403	1940	2381	2210
Total	245	792	8057	5771	6827	5326	6417	6560	6616	6342	4726	5707	4985
% Change in Habitat Capability From 1995:				-28.4	-15.3	-33.9	-20.4	-18.6	-17.9	-21.3	-41.3	-29.2	-38.1
Thorne Bay Harvest % of 2095 Capability:				4.2	3.6	4.6	3.8	3.7	3.7	3.9	5.2	4.3	4.9
Total Harvest % of 2095 Capability:				13.7	11.6	14.9	12.3	12.1	12.0	12.5	16.8	13.9	15.9

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-149. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Whale Pass residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Whale Pass Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1530	21	152	1427	1138	1427	1067	1427	1427	1427	1427	1003	1130	1015
1319	4	299	2364	1835	2364	1536	2364	2364	2364	2364	1374	1757	1373
1107	3	37	5703	5109	5590	4704	5199	5109	5192	4926	3758	4816	3792
1318	3	201	1213	828	1213	782	1213	1213	1213	1213	784	838	764
Total	31	689	10707	8910	10594	8089	10203	10113	10196	9930	6919	8541	6944
% Change in Habitat Capability From 1995:				-16.8	-1.1	-24.5	-4.7	-5.5	-4.8	-7.3	-35.4	-20.2	-35.1
Whale Pass Harvest % of 2095 Capability:				0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Total Harvest % of 2095 Capability:				7.7	6.5	8.5	6.8	6.8	6.8	6.9	10.0	8.1	9.9

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for those WAA's in those alternatives.

Table 3-150. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Wrangell residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Wrangell Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1904	76	63	909	394	909	394	909	909	909	909	324	422	270
1530	49	161	2035	1138	2035	1067	2035	2035	2035	2035	1003	1130	1015
1905	31	74	3094	1771	2338	1602	1842	1919	1919	1639	1516	1784	1519
1903	22	34	2676	1747	2301	1610	1852	1912	1912	1652	1390	1718	1485
1906	22	23	942	646	672	646	659	665	665	660	433	604	426
3733	17	121	1813	1813	1813	1813	1813	1813	1813	1813	1813	1813	1813
1910	16	38	3148	3017	3140	3017	3048	3076	3076	3034	2955	3031	2955
1528	10	43	247	230	247	180	247	247	247	247	178	231	182
Total	243	557	14864	10756	13455	10329	12405	12575	12575	11989	9612	10733	9665
% Change in Habitat Capability From 1995:				-27.6	-9.5	-30.5	-16.5	-15.4	-15.4	-19.3	-35.3	-27.8	-35.0
Wrangell Harvest % of 2095 Capability:				2.3	1.8	2.4	2.0	1.9	1.9	2.0	2.5	2.3	2.5
Total Harvest % of 2095 Capability:				5.2	4.1	5.4	4.5	4.4	4.4	4.6	5.8	5.2	5.8

*Within WAA's in bold text, average deer harvest exceeds 10% of the total deer habitat capability. In alternatives 1, 3, 4, 5, and 6, standards and guidelines prescribe that important deer winter range in these WAA's be maintained, so this analysis assumes no further reduction of capability for these WAA's in those alternatives.

Table 3-151. Estimated effects of alternatives on deer habitat capability and deer harvest opportunity within Wildlife Analysis Areas where Yakutat residents obtain approximately 75% of their average annual deer harvest.

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Yakutat Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3310	3	245	1331	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328
4256	3	66	781	781	781	781	781	781	781	781	781	781	781
3308	2	201	3164	2206	2824	2046	2246	2385	2385	2092	1815	2178	1811
3315	2	127	1284	1161	1240	924	1167	1062	1062	943	759	1151	884
Total	10	639	6560	5476	6173	5079	5522	5556	5556	5144	4683	5438	4804
% Change in Habitat Capability From 1995:				-16.5	-5.9	-22.6	-15.8	-15.3	-15.3	-21.6	-28.6	-17.1	-26.8
Yakutat Harvest % of 2095 Capability:				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Harvest % of 2095 Capability:				11.7	10.4	12.6	11.6	11.5	11.5	12.4	13.6	11.8	13.3

A.D.N.
2-23-96

Democratic U.S. Senate field is crowded with strange rangers

I was minding my own business and reading a book Wednesday night when the telephone rang.

"Are you watching KAKM?" a voice shouted. "No? Turn it on! Quick! You've got to see this!"

MIKE DOOGAN

I hadn't heard one of my colleagues that excited since a doughnut truck overturned outside the office. I flipped on the television set.

And what to my wondering eyes did appear but the seven candidates for the Democratic nomination for the U.S. Senate: Michael Beasley, Hank Blake, Larry Freiberger, Robert Gigler, Theresa Obermeyer, Joseph Sonneman and Frank Vondersaar. After watching them on their segment of "Running '96," I want you to know this: I've been to two goat ropings and a county fair, and I ain't never seen nothing quite like that before.

It's entirely possible that each and every one of these people is legally sane. But the show they put on looked like what would happen if the folks from Jabba the Hutt's headquarters dropped by the Mad Hatter's tea party.

Beasley is a three-time loser who looks like the late Truman Capote, if Capote had worn a really bad toupe and had eyes that could look in two directions at once. Blake is a big, square guy who deserves to finish second in a Sitka city council race. Freiberger is a security guard who campaigns by standing on street corners with a sign and waving at passers-by. Gigler never met a conspiracy he didn't like — or join. We'll come back to Obermeyer. Sonneman is a Ph.D. who can talk for 45 minutes about how to make a cheese sandwich without once using the word "cheese." And Vondersaar leads a life bedeviled by fascists and government agents.

The strength of this field can be judged by the fact that Obermeyer has a good chance of winning the nomination. For those of you who weren't around for her bizarre term on the Anchorage School Board — she is the only one of these people ever to win an election of any sort — Obermeyer is a sometimes rational woman with a voice that could scrape holes in your soul. She is convinced that her husband has flunked the state bar exam more than 20 times because all lawyerdom, including incumbent U.S. Sen. Ted Stevens, is conspiring against him. She recently finished 29 days in the stony lonesome for behaving in a way that upset the fuddy-duddies at federal court. Her doggedness and flamboyance, along with what seems to be a tendency to stop taking her meds, have given Obermeyer the local name recognition of Cher or Madonna. "Theresa — U.S. Senate," say her ads, and everyone knows who they mean.

If this isn't a series on Fox this fall, I'll lose my faith in the intelligence of television producers.

Now, before you call me up to say how mean it is to make fun of these people, remember that they are all volunteers.

Each had a beef, or some sort of need for attention, and the gall to offer himself or herself to the voters as competent to sit in the U.S. Senate.

Granted, the state's congressional delegation is composed of people who invite this sort of nonsense.

Stripped of their incumbencies, neither Don Young nor Frank Murkowski would stick out an inch from this crowd. But these seven people are trying to unseat the only smart, hard-working guy we've got in D.C.

They aren't the only ones. The Republican ballot offers Charles McKee, who is having a heck of a time with people trying to steal his formula for cold-water fusion, and Dave Cuddy.

The only difference between Cuddy and any of the other candidates is that he has $2 million and the lack of judgment to invest it in his campaign.

All I can say is that if this is the best Alaska can do in the way of alternatives, we'd all better hope Stevens lives to be as old as Methuselah.

❑ Mike Doogan's opinion column appears in the Daily News each Tuesday, Friday and Sunday. His e-mail address is: mdoogan@pop.adn.com.

United States Department of Agriculture | Forest Service | Tongass National Forest | Forest Plan Revision Team
8465 Old Dairy Road
Juneau, AK 99801

File Code: 1920

Date: April 5, 1996

To everyone interested in the future of the Tongass National Forest:

We are proposing, for your review and consideration, several changes in the management of the Tongass National Forest.

The National Forest Management Act (NFMA) of 1976 requires the Forest Service to prepare a Land and Resource Management Plan, commonly called a forest plan, for each national forest. Each forest plan guides the management of a national forest for 10 to 15 years, then the plan must be revised.

One of the key steps in revising a forest plan is to circulate for public comment a draft environmental impact statement, which must display the Forest Supervisor's recommended preferred alternative for the revision. The Tongass National Forest, by far the largest in the National Forest System, is comprised of three Administrative Areas, each with a separate Forest Supervisor. The three of us, therefore, have the responsibility of choosing a preferred alternative for inclusion in the draft environmental impact statement. After the public comment period, the Regional Forester has the responsibility to review the final proposed plan and final environmental impact statement and either approve or disapprove the plan. The purpose of this letter is to explain to the public what alternative we have recommended as the Forest Supervisor's preferred alternative and why.

Background

The Forest Service completed the Tongass Forest Plan (often called the Tongass Land Management Plan or TLMP) in 1979, and began working on a revision in 1987. A draft environmental impact statement (DEIS) for this revision was released for public review in June 1990. The Tongass Timber Reform Act (TTRA) was signed into law in November 1990, and made several changes in the management of the Tongass. Consequently, the Forest Service amended TLMP to reflect the changes made by TTRA, and subsequently released a Supplement to the DEIS in August 1991.

As part of the public involvement process associated with these two proposals for revising TLMP, the Forest Service held numerous public meetings in communities throughout Southeast Alaska, in Anchorage, Seattle, and Washington D.C., and received over 10,000 public comments. All of this input was analyzed and considered in the development of a final environmental impact statement (FEIS), which was scheduled for release in early 1993. As the FEIS was being

prepared in 1992, additional information became available regarding several of the issues involved in the revision. Accordingly, the Regional Forester, as the deciding official, withheld release of the FEIS and requested additional analysis on these issues.

Since 1993, extensive work has been done to provide additional information on these issues, which include wildlife viability, fish habitat, karst and cave resources, alternatives to clearcutting, and socioeconomic considerations. The Revised Supplement to the DEIS, which we are releasing for public comment with this letter, focuses on these issues, and the changes needed in the Supplement to the DEIS and the unpublished 1992 FEIS to address them. As a result, the Revised Supplement does not repeat all of the material published in the Supplement to the DEIS. The Revised Supplement reflects all of the analysis and all of the public comments on the first two TLMP revision proposals. It also represents our collective judgment of how best to respond to the additional information and issues on which the Revised Supplement is focused.

Another aspect of the Revised Supplement that bears noting is that it was developed with much greater involvement by Forest Service Research scientists and representatives of the Environmental Protection Agency and the Fish and Wildlife Service than any previous forest planning proposal for the Tongass National Forest. We have also worked closely with the National Marine Fisheries Service and several agencies of the State of Alaska in preparing the Revised Supplement. These scientists have worked to provide the best possible information base upon which to make decisions regarding how the Tongass should be managed over the next 10-15 years. At the same time, making those decisions has been left to management officials of the Tongass specifically assigned these responsibilities under law and regulation. We are confident that the preferred alternative we recommend for revising TLMP reflects a balanced judgment in how best to resolve the issues facing the Tongass because it is based on the analysis conducted by the interdisciplinary team and the scientists, with the input of these other agencies.

In making that judgement, and choosing a preferred alternative, we used nine key criteria. We wanted to choose an alternative that would:

1. Incorporate a habitat management strategy for wildlife viability.

2. Strengthen the riparian management direction.

3. Protect karst and cave resources.

4. Address resource-supply needs and socioeconomic effects on local communities.

5. Protect special and unique areas.

6. Incorporate input from within and outside of the Forest Service on previous revision proposals.

7. Meet the requirements of all laws governing management of the Tongass.

8. Maintain future options and allow for changes based on new information.

9. Be implementable.

Our Preferred Alternative

The Revised Supplement analyzes the environmental effects of nine alternative ways to revise TLMP in response to the public issues identified in earlier planning efforts and the five additional issues and information items mentioned above. These nine alternatives are described in Chapter 2 of the Revised Supplement. Table 2-1 of the Revised Supplement summarizes the components of each of the alternatives developed by the Tongass Land Management Planning Team.

Using the nine key criteria listed above, we have chosen Alternative 3, with three minor modifications, as our preferred alternative. Our preferred alternative is founded on the selected alternative of the unpublished 1992 FEIS. That alternative has become known as "Alternative P" in public debate over the last several months. Our preferred alternative includes the following features:

--a wildlife habitat conservation area strategy similar to the one developed by the Interagency Viable Population Committee (known as V-Pop), which was formed by the Forest Service to develop recommendations for maintaining viable, well-distributed populations of wildlife species on the Tongass;

--an average timber stand rotation of 100 years;

--a two-aged timber harvest system where site-specific conditions allow, in which 10-20 percent of the trees in each harvest unit would be retained;

--improved protection of watersheds with high fish values by incorporating recommendations made in the Anadromous Fish Habitat Assessment (AFHA), which was prepared by the Forest Service as directed by Congress and submitted in 1995 (the Revised Supplement calls this "option 2" protection);

--improved protection of other fish habitat by adopting "option 3" protection, which substantially expands current riparian direction;

--a beach fringe of 500 feet;

--an estuary fringe of 1,000 feet;

--a research program to generate additional scientific data over the next 10-15 years; and

--an average annual allowable timber sale quantity of 357 million board feet, of which we expect 297 million board feet to be economic under current technology and market conditions.

More detailed descriptions of these features are contained in Chapter 2 of the Revised Supplement. Our preferred alternative differs from Alternative 3 in three respects. Alternative 3 would include the following additional provisions not included in our preferred alternative:

--the riparian management direction of Alternative 3 would apply "option 1" riparian direction, substantially increasing riparian protection above the AFHA recommendations, on all watersheds with high fish values and option 2 on all other streams;

--the beach fringe direction of Alternative 3 would limit timber harvest between 500 and 1,000 feet of the shoreline to single-tree and group-selection methods; and

--the deer habitat direction of Alternative 3 would prohibit any land management activity that would reduce habitat capability in areas where the average annual deer harvest exceeds 20 percent of the habitat capability. It would also require efforts to maintain deer winter range in areas where average annual deer harvest is between 10 and 20 percent of habitat capability.

Rationale for Our Preferred Alternative

Making choices between competing objectives, and striking a balance between conflicting demands, is an inherent part of multiple use management. We chose the modified version of Alternative 3 as the preferred alternative because we believe, after careful review and considerable discussion, that it best meets all of our key criteria.

Wildlife Viability

This key criterion relates to the requirement of the NFMA regulations to manage habitat to maintain viable, well-distributed populations of wildlife species. Several elements of our preferred alternative respond well to the wildlife viability issue, including:

1. The concepts of the habitat conservation reserve strategy recommended by the V-Pop Committee would be implemented. A similar proposal in 1994 was an important factor in the decisions by the U.S. Fish and Wildlife Service not to list the Queen Charlotte goshawk and the Alexander Archipelago wolf under the Endangered Species Act.

2. At least 73 percent of the old-growth habitat that existed on the Tongass when large-scale logging began in 1954 would remain undisturbed, even after implementation of our preferred alternative for 100 years. After the first 15 years, at least 88 percent of the old-growth habitat would remain, compared with 91 percent that remains today. The marginal reduction of old-growth habitat over the planning period would be less than 3 percent. The distribution of old-growth habitat is addressed through the design of the habitat reserve strategy included in our preferred alternative.

3. As recommended by the PNW peer review of the V-Pop committee report, the function of the habitat conservation reserves would be enhanced by establishing corridors between them under a variety of land-use allocations or standards and guidelines. These include beach and estuary fringe, riparian buffers, special interest areas, Research Natural Areas, Wild and Scenic Rivers, and 600-foot corridors where needed.

4. A two-aged timber harvest and stand management system would be

incorporated where site-specific conditions permit, under which 10-20 percent of the trees in each timber harvest unit would be left uncut to improve the habitat quality of second-growth stands in the future.

5. The land-use allocations are based on those included in Alternative P from the unpublished 1992 FEIS. These allocations were developed in response to extensive public comments on a variety of issues, including maintaining viable wildlife populations.

Chapter 3 of the Revised Supplement describes how the TLMP Planning Team assembled several panels of scientists and resource specialists to assess, for each of the nine alternatives, the risk to continued persistence and distribution across the Tongass of various wildlife species. The panels predicted, with the possible exception of the panel considering small endemic mammals, that all wildlife species would persist for 100 years but risk to distribution varies across the alternatives. We evaluated this information carefully during the deliberations leading to our choice of a preferred alternative. In that evaluation, we used the panels' assessment ratings primarily as estimates of the relative risk to maintaining wildlife persistence and distribution associated with different alternatives.

It is very difficult to project effects of management activities on wildlife persistence and distribution for 100 years into the future. We do not have as much data and other scientific information as we would like to have on this subject. Consequently, each panelist made their own judgments of how likely different alternatives were to lead to different outcomes regarding some aspects of species viability. In some instances, these judgements vary widely. We utilized the panel results along with other available information to make our choice.

It is important to note that the panels assessed risks associated with continuing each of the management alternatives, including commodity outputs, unchanged for 100 years. This is unlikely to occur. Therefore, the panel estimates associated with each alternative, may overstate the effects of applying any alternative for 10-15 years. In addition, further scientific information will be developed and incorporated in our adaptive management strategy. It will be used in subsequent plan amendments. future plan revisions and site specific project level planning. Consequently, we determined that the risk estimates by themselves would not warrant rejection of an alternative from consideration in this planning cycle.

We understand that effects of landscape modifications over the next 10-15 years on wildlife populations may take decades to be detected, and may persist for decades beyond that if remedial action is not taken. We believe, after a thorough review of the panel assessments and related work in the Revised Supplement, that our preferred alternative, if implemented for 10-15 years, will maintain the viability and distribution of wildlife species across the Tongass.

We reviewed the alternatives presented in the Revised Supplement in light of these considerations. We began to focus on Alternative 3, which is relatively low in overall risk. We recognize that the changes we made to Alternative 3 will increase the risk to wildlife population distribution. We believe that any increased risk is small, and is outweighed by the additional benefits to be derived from these changes. We also believe our preferred alternative complies

with all applicable laws and regulations, including the wildlife viability requirements of the NFMA regulations.

To summarize our conclusions on the wildlife viability issues related to the Revised Supplement, we concur that our knowledge about the wildlife effects of management activities on the Tongass is evolving, and will continue to evolve over the next 10-15 years. In addition, our ability to estimate how great the associated risks are over 100 years, and what is needed to ensure they do not exceed acceptable levels, is imperfect. We are convinced, based on the analysis presented in the Revised Supplement, that we should adopt in the revised Forest Plan greater protection for wildlife than is included in the current Plan, and that the Forest Service should work hard to acquire additional scientific information on these issues over the next 10-15 years. We are equally convinced that more dramatic changes could impose significant social and economic effects on local communities and are not warranted.

Riparian Management

Our intent in this key criterion was to improve the protection of riparian areas and to address the AFHA recommendations. Our preferred alternative does that in two ways:

1. Option 2 protection, which substantially expands current protection for important fish habitat, incorporates all the AFHA stream-buffer recommendations, and exceeds some of them. In land-use allocations where timber harvest is permitted, option 2 standards and guidelines would be applied to those watersheds with the highest fish values. About 60 percent of Class I stream mileage (i.e., streams containing anadromous or high-value resident fish) is either protected by option 2, or is in land-use allocations where no timber harvest is allowed and thus receives maximum protection.

2. Option 3 protection would be applied on all other streams in areas where timber harvest is allowed. Option 3 includes the riparian guidelines from the unpublished 1992 FEIS as recommended by AFHA and some of the additional AFHA stream-buffer recommendations, and substantially expands current stream-protection direction.

Several factors influenced our choice of the preferred alternative's riparian management direction. Wilderness Areas, old-growth reserves, and other areas where timber harvest will not be allowed include about 50 percent of the Class I stream mileage on the Tongass. The other 50 percent of Class I stream mileage would be in land use allocations that permit varying levels of development, including timber harvest and road construction. In these areas, all watersheds with the highest fish values would be protected by option 2.

For the 40 percent of total Class I stream mileage that is in areas where timber harvest will be allowed but not in watersheds with the highest fish values, we believe that option 3 direction will adequately protect fish habitat.

For these reasons, we concluded that the riparian management provisions of Alternatives 1, 4, 5, 6, and 8, which we have incorporated into our preferred alternative, exceed what is needed to comply with applicable laws and regulations. This direction also provides for continued production of fish to meet the needs of commercial, sport, and subsistence fisheries.

Karst and Cave Resources

This key criterion responds to new information that has become available over the last few years about the extent to which much of the Tongass has a world-class resource that until recently has not been widely recognized. We wanted to ensure that this resource is recognized for its unique character, that adequate protection was included for it, and that additional information about this resource is generated over the next several years.

Our preferred alternative meets all of these objectives. It includes the latest standards and guidelines for karst and cave resources, which are based on a karst vulnerability assessment completed in 1995 through a partnership between the Forest Service and cave experts. These standards and guidelines exceed the requirements of the Federal Cave Resources Protection Act.

Resource-Supply and Socioeconomic Issues

Our objective in this key criterion is to ensure that the needs of the communities of Southeast Alaska are addressed in our preferred alternative, and that the social and economic effects of meeting these needs to various degrees are also adequately considered. Four industries play a significant role in the economy of these resource-dependent communities, including timber, tourism, mining, and fishing. The assessment of these issues done for the Revised Supplement is the most comprehensive ever done for Tongass Forest planning purposes.

Our preferred alternative has an annual average allowable sale quantity (ASQ) of 357 million board feet (MMBF), of which 297 MMBF is considered economically feasible under current technology and market conditions. A timber program operating at 297 MMBF annually would be sufficient to:

--meet 95 percent of the estimated market demand for timber from the Tongass over the next 10 years, as projected in the most definitive study of market demand available (produced by David Brooks and Richard Haynes of the Pacific Northwest Research Station in 1994); and

--supply enough timber to fulfill the obligations of the United States under the long-term timber sale contract with the Ketchikan Pulp Company and also allow supply of about 100 MMBF or more annually to independent timber purchasers.

If economic conditions improve, technology advances, or if sufficient investments are made to make currently uneconomic operations feasible, then our preferred alternative could allow the timber program to achieve 357 MMBF annually. This level could, in addition to meeting the above needs, supply timber for a 10-year contract for a medium-density fiberboard plant or other purposes that may be proposed. If operated at that level, we estimate the timber program on the Tongass National Forest would support approximately 2,100 direct jobs in the wood products industry in Southeast Alaska using current technology in timber harvesting and processing.

It is worth noting that ASQ figures constitute a ceiling, not a floor, for timber harvest activities. History also suggests that ASQ estimates do not guarantee achievable timber program levels, due to congressional budget

constraints and several factors that are difficult to estimate accurately until project field reconnaissance is completed. Therefore, even though adjustments have been made to account for such "falldown" factors, the actual annual sale program may be lower than the maximum number shown in the ASQ figures. Under current economic and technological conditions 297 MMBF is the projected sale quantity.

The needs of the tourism industry, which is growing in Southeast Alaska, are addressed in our preferred alternative. Of the 17 million acres in the Tongass, 14 million are allocated to land uses that maintain natural conditions. Standards and guidelines are included to maintain the scenic quality of the forest, especially along travel routes and in other frequently used areas. The scenic beauty of the Tongass is a prime attraction for tourists. Many land-use allocations, including recreational rivers, semi-remote recreation, and scenic viewshed allow development of private recreation facilities. In short, implementation of our preferred alternative is not likely to significantly affect the tourism industry, particularly over the next 10-15 years.

We also believe our preferred alternative meets the needs of the mining industry. The land-use allocations accommodate nearly all the acreage of the 12 mineral activity tracts that appear to be economic to develop. All of the jobs estimated to be associated with mining on the Tongass under any of the alternatives are related to the Greens Creek and Kensington projects near Juneau, and neither of these projects is in any way restricted by our preferred alternative.

With respect to the fishing industry, we conclude that our preferred alternative addresses these needs as well. We believe fish habitat is protected in our preferred alternative. We do not project any changes in habitat quality as a result of implementation for 10-15 years of our preferred alternative to be significant enough to have any effect on fishing jobs over that time period. Factors such as changes in ocean habitat conditions, seafood markets, fish processing technology, and fishing pressure have greater potential to affect stocks and employment than current and proposed management of fish habitat on the Tongass. This conclusion is based on the overall good condition of the habitat and the protective measures included in the preferred alternative.

Protecting Special and Unique Areas

This key criterion is related to our desire to make certain that areas with unusually high botanical, geological, research, recreation, or other resource values be given adequate protection in our preferred alternative for revising the Forest Plan.

Before addressing how our preferred alternative meets this criterion, it is worth remembering that the Alaska National Interest Lands Conservation Act (ANILCA) of 1980 designated 14 wildernesses on the Tongass, totalling some 5.4 million acres. In addition, the Tongass Timber Reform Act of 1990 designated 5 new wildernesses on the Tongass, and added to an existing wilderness, for a total of over 296,000 acres. TTRA also prohibited logging and limited road construction in an additional 12 "Land Use Designation II" areas totalling over 722,000 acres. As a result of these congressional designations, about 6.4 million acres, or over 38 percent of the forest, is in a protected status that

is not subject to reallocation in the Forest Plan. Many of the Forest's special or unique areas are permanently protected within these designations.

Beyond the existing congressional designations, our preferred alternative protects:

--6 existing and 6 new Research Natural Areas totalling 26,692 acres;

--16 new Special Interest Areas with unique geologic, zoological, or botanical features totalling 173,863 acres;

--additional large and medium old-growth habitat reserves totalling 964,639 acres, and small reserves yet to be identified that will total over 100,000 acres; and

--25 rivers proposed for Wild, Scenic, or Recreational River designation, totaling 431 miles.

Based on these land allocations, we conclude that our preferred alternative does an excellent job of protecting special and unique places.

Addressing Input Provided on Previous Proposals

The objective of this key criterion is to ensure that our preferred alternative incorporates as much as possible all the thousands of public comments received on previous proposals to revise the Tongass Forest Plan. We believe our preferred alternative accomplishes this by being based on Alternative P of the unpublished 1992 FEIS. That alternative was developed, among other things, to represent a balance between competing demands as expressed in public comments.

These allocations are still open to further review. We are seeking public comment on potential modifications to any or all of the alternatives presented in the Revised Supplement to change the management emphasis of one or more specific areas from what is proposed in the Revised Supplement, in order to enhance recreation opportunities, timber outputs, tourism activity, protections for fish and wildlife, cultural and subsistence values, commercial and sport fisheries, hunting, or for any other purpose in which you are interested.

Compliance with all Applicable Law

This key criterion represents the responsibility of the Forest Service to make decisions that meet the requirements of all applicable law, such as the Multiple Use-Sustained Yield Act, the National Forest Management Act, ANILCA, TTRA, the Endangered Species Act, the Coastal Zone Management Act, and other Federal laws that apply to management of the Tongass. This set of statutes, and the Federal regulations that implement them, constitute a complex network of requirements, some of which complement each other, while others are in competition, if not direct conflict.

We believe the preferred alternative meets all legal requirements and strikes a balance among competing demands for use of the Tongass.

Maintaining Options to Respond to New Information

This key criterion is an essential element of wise public land management, which is to:

--recognize that the information base upon which decisions are founded is always evolving and subject to further improvement;

--constantly seek to expand that information base to reduce the uncertainty associated with the choices that must be made;

--avoid foreclosing opportunities to respond to new information as it becomes available; and

--make management and policy shifts to the degree that such shifts are shown to be warranted, and avoid dramatic shifts unless necessary.

This management philosophy is called adaptive management. We believe our preferred alternative embodies this approach by recognizing that the revision will be in effect for 10-15 years, during which time a program of research and monitoring will be pursued to provide additional information on a number of issues associated with how to improve further the management of the Tongass. As an example, the Revised Supplement indicates that more concern exists regarding the distribution of goshawks, marten, and the persistence of small mammals than for other wildlife species. These issues will be a high priority in the research program.

The revised Forest Plan will also be subject to amendment at any time during the next planning period as additional information suggests a need to make such amendments. The old growth habitat reserves and other features of our preferred alternative will maintain options while we conduct additional research regarding wildlife persistence and distribution and other issues.

Feasibility

This key criterion represents our desire for an alternative that we are confident can be implemented. We chose our preferred alternative in part because it was based on Alternative P of the unpublished 1992 FEIS, which was developed using extensive input from Forest Service field-going personnel. We are confident that the elements in our preferred alternative are feasible and can be implemented.

A major concern with several other alternatives in the Revised Supplement is that they would require an abrupt change to timber harvest methods that have not been applied to any significant degree on a landscape like that of the Tongass. Experience shows that unanticipated problems always arise when implementing new requirements or methods that are very different from what has been done previously. Consequently, we are not confident that a forest-wide shift to untested methods could be done as quickly as would be required.

For these reasons, we conclude that adoption of Alternatives 4, 5, or 6 would not be prudent at least until alternative timber harvest methods are tried on a small scale first. Our preferred alternative would provide an opportunity for such experimentation through the research effort to examine alternatives to clearcutting as the primary timber harvest method in Southeast Alaska.

Effects of Our Preferred Alternative

We expect the effects of our preferred alternative to be essentially the same as those for Alternative 3, except for any differences that result from the three changes in management direction. With respect to the change in riparian management direction, we expect some increase in risk to fish habitat and wildlife population distribution to result from this change. In the Revised Supplement, the effects of implementing the riparian management direction included in our preferred alternative are displayed in the description of those effects for Alternatives 4, 5, 6, and 8, all of which have the same riparian management option as our preferred alternative.

The second change in Alternative 3's management direction is to drop the restrictions on the type of timber harvest methods allowed between 500 and 1,000 feet from the shoreline. This ecosystem component was deemed important for a number of wildlife species, including primarily the Queen Charlotte goshawk, American marten, and Sitka black-tailed deer.

Regarding goshawks, our preferred alternative incorporates direction that offers a level of protection comparable to that proposed in 1994, which was an important factor in the decision by the U.S. Fish and Wildlife Service not to list this species under the Endangered Species Act. In addition, the Revised Supplement states that "a principal rating component [for goshawks] was the net proportion of all old growth on the Tongass that would be harvested under each alternative." Alternative 3 would, if fully implemented over 100 years, reduce old growth on the Tongass from 91 percent of 1954 levels that remained in 1995 to 77 percent. The comparable reduction for our preferred alternative is from 91 to 73 percent. This reduction indicates some increase in risk to goshawk population distribution.

For marten, we estimate that the relative risk associated with our preferred alternative would approximate that of alternative 2, which has similar management direction but substantially higher timber harvest levels. We find the associated increase in relative risk acceptable. In addition, decisions made by the State of Alaska regarding trapping have significant influence on marten populations, and offer an additional mechanism to address population distribution concerns should they arise in the future.

Marten is a native species on some of the mainland portions of the Tongass, and on some islands. It has been introduced or used to supplement populations on other islands of Southeast Alaska. The viability requirements of the NFMA regulations apply only to native and desired non-native vertebrate species. The determination of a well distributed population is complicated by these introductions. In addition, a concern exists about adverse effects of marten predation on ptarmigan populations. There is some question whether marten is a desirable non-native species on the islands of the Tongass where it has been introduced.

The assessment panel's estimates were based on the assumption that the alternatives would be implemented for 100 years, while the actual decision to be made is which alternative to choose for implementation for only 10-15 years. Assuming timber harvest occurs at the maximum allowable level over the 15-year planning period, Alternative 3 would reduce old growth on the Tongass by about 2 percent, or from 91 percent to about 89 percent. Under the same assumptions, our preferred alternative would reduce old growth from 91 to about 88 percent.

For these reasons, we believe that the difference in relative risk to marten distribution between implementing Alternative 3 or our preferred alternative for 10-15 years is acceptable. Finally, we reiterate that other measures to protect marten populations could be taken if necessary, including action by the State of Alaska to reduce the number of marten taken by trapping.

For deer, the situation is different. Deer habitat is affected by both the second and the third changes in management direction from Alternative 3 to our preferred alternative, so the effects of these two changes need to be analyzed together. The third change is the deletion of requirements to maintain all current deer habitat capability in areas where deer harvest exceeds 20 percent of habitat capability, and seek to maintain deer winter range in areas where deer harvest is between 10 and 20 percent of habitat capability.

There is no viability concern expressed in the Revised Supplement for deer. Instead, the concern relates generally to maintaining probabilities of hunter success for this species near current levels, which are a function of weather and decisions made by the State of Alaska regarding hunting seasons and bag limits, in addition to habitat effects of Forest Service management decisions. We also note that Alternatives 3 and 2, if implemented over 100 years, would maintain 88 and 83 percent, respectively, of current deer habitat capability. We believe our preferred alternative's effects on deer habitat to be less than for Alternative 2, which has comparable habitat direction but substantially higher timber harvest levels. We do not believe that implementation of our preferred alternative for 10-15 years would have significantly different effects than those for Alternative 3.

Implementation of our preferred alternative may result in a reduction in total deer harvest. The balance of the harvest between sport and subsistence users may be affected. Subsistence hearings will be held in 32 communities throughout Southeast Alaska during the public comment period on the Revised Supplement, consistent with section 810 of ANILCA.

Conclusion

We chose the preferred alternative because we concluded that it best meets all our key criteria, and represents a balanced approach to management of the Tongass for the next 10-15 years. Among the reasons for reaching this conclusion are that our preferred alternative:

--incorporates a wildlife habitat strategy for maintaining well distributed, viable wildlife populations similar to what was proposed in 1994 that was an important factor in the decision by the U.S. Fish and Wildlife Service not to list the Alexander Archipelago wolf and the Queen Charlotte Goshawk under the Endangered Species Act;

--improves riparian protection over current practices;

--increases protection for karst and cave resources;

--maintains options to respond to new information;

--meets the requirements of all applicable laws;

--can be readily implemented; and

--avoids disruptive socioeconomic effects by meeting the needs of all resource-dependent sectors of the economy of Southeast Alaska.

We recognized all nine alternatives presented in the Revised Supplement as viable and the process through which we arrived at our preferred alternative may be simply summarized as follows:

1. We concluded that changes are warranted to improve the current plan's protection of wildlife viability, fish habitat, and karst and cave resources. This led us away from Alternatives 2, 7, and 9.

2. We thought it would not be prudent to propose a wholesale shift to untried timber harvest and stand management methods without experimenting with them on smaller scales over the next 10-15 years. This led us away from Alternatives 4, 5, and 6.

3. We did not think it was necessary or appropriate to select an alternative with no commercial timber harvest program, which led us away from Alternative 1.

4. With Alternatives 3 and 8 left to work with, we felt that the land allocations developed out of the two previous rounds of extensive internal analysis and public involvement, as portrayed in Alternative 3, were more responsive to a broad cross-section of the public than those proposed by the State of Alaska in 1992 as a way of maximizing timber harvest, as portrayed in Alternative 8. This led us to Alternative 3.

5. Because of our concern for the potential socio-economic impacts of the revised plan, we made changes in Alternative 3 that would allow for timber harvest to continue in the next 10-15 years at near current levels and considered the likely environmental effects using the information described in the Revised Supplement.

6. We concluded that our preferred alternative would not have significantly different environmental effects if implemented in the next 10-15 years than would Alternative 3.

For all these reasons, we chose the modified version of Alternative 3 as our preferred alternative.

We have tried to take into account the desires of all parties, in this and future generations, who are interested in or affected by decisions we make in how to manage the Tongass National Forest. We also considered carefully the agreements reached by Forest Service Chief Jack Ward Thomas and Governor Knowles last summer. Among those agreements are commitments to work with Alaskans toward:

--A strong, healthy, diversified economy for Southeast Alaska.

--Multiple, balanced, and sustainable use of the Tongass.

--Public participation in the forest planning process.

--Habitat protection measures based on science.

--Planning decisions guided, but not dictated, by scientific information that is reviewed by all interested parties.

--A supply of timber that meets the terms of the long-term contract with Ketchikan Pulp Company and also provides about 100 MMBF for independent and Small Business Administration purchasers.

Our preferred alternative honors all of these objectives. In keeping with the commitment to public participation, we want reviewers to know that in order to meet the timber supply commitment, our preferred alternative would result in timber sales in areas where some members of the public have expressed strong opposition to such proposals in the past. Our analysis indicates that without entering these areas, the timber supply commitment cannot be honored. We all must recognize each others' needs if we are to develop a balanced program for management of the Tongass for the future.

We encourage you to review these documents and provide your comments and suggestions to the Tongass Forest Plan Revision Team at the address provided above. The public comment period will close on July 26, 1996. Please note that this is a later date than that shown on the title page of the Revised Supplement. We will review all comments received, plus comments provided on our previous Forest Plan revision proposals, in developing a final revised Tongass Forest Plan.

Whatever your opinion may be, we ask that you join us in seeking a mutually satisfactory solution to these issues. The time for posturing is over. The time for reasoned debate and the search for acceptable, balanced solutions is here. We look forward to having you join us in that search.

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STATEMENT
OF
BERNE C. MILLER
EXECUTIVE DIRECTOR, SOUTHEAST CONFERENCE
BEFORE THE
ALASKA STATE HOUSE RESOURCES COMMITTEE
ON AUGUST 23, 1996

Good Morning Mister Chairman:

My name is Berne Miller. I am Executive Director of the Southeast Conference, a private non-profit regional development organization that works to help create strong economies, healthy communities, and a quality environment in Southeast Alaska. On behalf of the Board of Directors, I thank your for the opportunity to testify today on the Tongass Land Management Plan revision documents now out for public comment.

As you know, for the past year Southeast Conference has been an active participant in the TLMP revision process. Our fundamental interest has been, and is, in seeing the Regional Forester implement a Forest Plan that does no unnecessary economic or social harm to the people and communities of Southeast Alaska.

To that end, we've engaged the Forest Service in a continuing dialogue about what should be done during the revision process and what a good outcome from the revision process would be. In the past few weeks, we've learned that errors and omissions have been discovered in the assumptions, data, and analytical methods on which materials now before the public for review and comment have been based. Our understanding is that, as a result, the projected Economic Allowable Sale Quantity may be overstated by as much as 25 percent for all alternatives included in the draft RSDEIS.

We have been unable to get definitive details on the nature and magnitude of the problem, but our understanding is that errors or omissions have been discovered in the following areas:

- Impact of new Standards and Guideline understated;
- Impact of Visual Reserves understated;

- Impact of small Habitat Conservation Areas understated;
- Impact of watershed constraints understated;
- Impact of large Habitat Conservation Area reallocations understated;
- Impact of incorrect second growth rotation age assumption;
- Impact of two-age management regime omitted;
- Impact of potential Landless Natives claims settlement omitted;
- Amount of suitable forest land overstated;

These errors and omissions, compounded with other inaccuracies we have identified in the Forest Service's Timber Supply Analysis, could result in actual timber harvest as much as 40 percent below the ceiling at which the Forest Service seems poised to set the Allowable Sale Quantity. Some people have suggested that the problem we have identified doesn't exist, that the people of Southeast Alaska have nothing to fear. But, if reality unfolds in the way our analysis suggests, it will sound the death knell for people and communities in Southeast Alaska who depend on the timber industry for their economic and social health and well-being. And even if we're wrong, published Forest Service figures still state that as many one third of existing timber industry jobs could disappear under the draft preferred alternative.

Let me turn for a moment to the public participation process. Southeast Conference, along with many other people, has urged that everyone in Southeast Alaska become knowledgeable about what the Forest Service proposes to do and that everyone tell the Forest Service what they think about it. Affording people an opportunity for informed, intelligent involvement in public decision-making is what public participation is all about. For people to be well informed so they may make intelligent decisions and comments, they must be provided accurate, reliable information to read and review. Because of the errors and omissions enumerated above, the public has been provided inaccurate and unreliable information and the ten thousand or more comments the Forest Service has received to date have been in response to inaccurate and incomplete information. We think this situation makes for bad public process. We hold, therefore, that the Forest Service should withdraw their draft documents, correct them, and reissue the documents for another full round of public review and comment. If the Forest Service believes they can not do this and must go to final quickly, then the Forest Service should offer the Final EIS and Forest Plan for a significant period of public review and comment before implementation. Either of these steps would afford

the public accurate information for intelligent review and comment. One or the other is necessary for the kind of informed public participation we and others advocate and that is required by Forest Service regulation.

To touch but briefly on a related matter - Southeast Conference has long maintained the Forest Service should have prepared a detailed socio-economic analysis of the impacts of each TLMP alternative on every one of the 32 communities in Southeast Alaska. The Forest Service did include an analysis of impacts at the regional level, but gave our people and communities little, and contradictory, information about what might happen to them closer to home. Months ago, we suggested to the Forest Service what a good socio-economic analysis ought to contain - today, just for the record, I offer another example, a community-by-community analysis of the impacts of another Forest Plan conducted by the University of Idaho at the request of the Idaho State Legislature.

Simply correcting and reissuing TLMP documents seems like a simple, common sense way to fix the problems most everyone seems to agree are there. But the world very rarely works in simple, common sense ways. The Forest Service will probably make some adjustments and plow ahead to a decision. And that brings me full circle to where I started. Southeast Conference thinks the Regional Forester should select a TLMP alternative that brings no economic or social harm to the people and communities of Southeast Alaska. Southeast Conference thinks that until errors and omissions are expunged from TLMP documents, and until the public has been given accurate information for review and comment, the Regional Forester should select that alternative most likely to result in actual harvest of the 300 MMBF a year most people agree is the minimum needed to sustain our people and communities. Our analysis shows that actual harvest may fall much as 32 percent short of the computed Economic ASQ for all alternatives now before the public. The only alternative likely to be given serious consideration that has any probability of doing no harm to the people and communities of Southeast Alaska is Alternative 2. Southeast Conference recommends the Regional Forester select and implement that alternative.

Thank you.

A STUDY OF THE EFFECTS OF CHANGING FEDERAL TIMBER POLICIES ON RURAL COMMUNITIES IN NORTHCENTRAL IDAHO

An economic impact assessment project funded by the 1994 & 1995 Idaho Legislatures

Submitted by

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February 1996

EXECUTIVE SUMMARY

Who will live in Idaho's rural communities? The timber workers, miners, farmers and ranchers whose families may have laid the shape of present settlement--or a new wave of trade and service workers, catering to burgeoning recreation and tourism, retired families and life-style migrants escaping the strains of urban life. Is it possible to base a thriving economy on both--traditional industries complemented by recreation, tourism, and quality of life? Prompted by dramatic changes in federal timber policies that appeared to influence resource communities, the 1994 Idaho Legislature asked these very questions. They passed House Bill 956 to fund the present study.

Previous analyses had looked at impacts for broad multi-county regions, missing impacts that might be acute at particular communities. In contrast we focus on individual communities. We take into account growth in other parts of the economy, and then convert recent federal timber policy changes into forecasts of impacts on community jobs and income. We also consider local government fiscal impacts. While our study covers northcentral Idaho in detail, our findings have implications for federal policy and natural resource management throughout the West.

Federal Policies Could Close Idaho Sawmills

National Forests dominate Idaho's timber markets. When federal timber sales decline sawmills must compete for logs from smaller sources or close. This has happened throughout the West and mill closures have been frequent--since 1989 over 200 sawmills have closed in neighboring states. As federal timber sale reductions spread eastward, Idaho will see the same pattern.

The Clearwater and Nez Perce National Forests have been the source for nearly half of northcentral Idaho's log use. The uncut inventory from past sales had been keeping mills alive but is not being replenished. National Forest sales have dropped from an allowable sale quantity (ASQ) of 281 million board feet (MMBF) per year proposed in forest plans to only 21 MMBF in 1995. Federal log availability is projected to drop to less than 3 MMBF by year 2000. Our timber analysis predicts the probable closure of 6

KEY FINDINGS

- National Forests dominate Idaho's timber markets
- Federal resource policy changes can restructure local communities
- Clearwater timbershed National Forest timber sales have dropped 93%
- 6 of the area's 9 sawmills could close by year 2000
- Sawmill closures cause 2,900 job and $87 million annual earnings losses
- Region-wide analyses obscure variable community impacts
- Timber towns could lose 30% to 75% of all jobs
- Timber policies have little effect on agricultural or recreation towns
- Timber town losses cause trade center impacts
- Local government deficits could exceed 15%
- Tourism must quadruple to replace earnings losses from mill closures
- Tourism and lifestyle migration growth concentrates in high amenity towns
- Mill closures reduce chip supplies threatening pulpmills
- Forest plan high amenity alternatives would have maintained existing mill capacity
- State management of federal timberlands could keep mills open and supply 5 new ones.
- Effective policy formation requires community focused economic analyses

of the area's 9 sawmills as a direct result of these timber sale reductions.

As a backdrop for timber impacts we assembled a consensus growth forecast for other parts of the economy. Most industries should grow 1% to 3% per year through year 2000. However, agriculture and the federal government are projected to have no growth. Tourism has recently grown at a brisk 5% per year, and many see a similar growth in retired, leisure, and other lifestyle migrants into rural Idaho. We built these growth rates into our backdrop projections.

The Economic Impact of Mill Closures

In northcentral Idaho (Nez Perce, Lewis, Clearwater, and Idaho Counties), closing 6 of the region's 9 sawmills could cause 2,900 timber and timber-linked job losses, and $87 million in annual earnings losses. This would negate expected growth in other sectors. Total jobs stay roughly the same as 1994, but earnings per worker drop by 4%.

Community-level impacts vary greatly. Hardest hit are small towns that are highly specialized in wood products. Elk City could lose a sawmill, and 170 timber and timber-linked jobs. Even with growth forecast in other sectors, and in-migration, Elk City would have 25% fewer jobs in year 2000. Its residents will be poorer--earnings per worker drop by 25%. Kooskia could have 31% fewer jobs, Kendrick/Juliaetta nearly 45% fewer, and Pierce a stunning 75% fewer jobs.

Other Possible Futures

Federal lands can provide commodities or amenities but can they do both? The Clearwater and Nez Perce National Forests plans suggest they could. Their ***high amenity alternatives*** focused on recreational and environmental values, and permitted timber harvesting only where it would not conflict. Despite these limitations, the ***high amenity alternative*** prescribed annual allowable timber sales of 216 MMBF per year, 72 times higher than the 3 MMBF of availability we forecast for year 2000 with current timber policies.

If forests were managed according to the ***high amenity alternative*** the 6 mills previously forecast to close would remain open, and there would be additional volume sufficient to build 5 new mills. Compared to 1994 some communities could see job gains of as much as 40%. Region-wide employment could increase 13%. A proposal for the state of Idaho to manage federal timberlands has nearly identical economic effects.

Can Tourism Replace Lost Timber Income?

Tourism has been growing in Idaho so we asked how much it would have to increase to replace the earnings from 6 closed mills. By year 2000 tourism would have to quadruple. Communities are not equally endowed with amenities so while jobs nearly double in Riggins, Pierce still loses 65% of all its jobs.

Under this transitional scenario high wage timber jobs are replaced by low paying trade and service jobs. Some communities are pauperized, earnings per worker in former sawmill towns drop by as much as 40%.

Changing Timber Policies Affect Local Public Finance

We analyzed fiscal impacts for Idaho County. Timber sale reductions cause a decline in county revenues, including a 65% reduction in federal 25% fund and payments in lieu of taxes. The net effect could be an Idaho County budget deficit of $1.6 million (-17%). School districts face similar reductions. In contrast increased local log use under the Forest Service ***high amenity alternative*** generates a surplus of $1.2 million (13%). The tourism-replaces-timber scenario causes deficits of $2.4 million (-25%).

Sawmill Closures Could Affect the Lewiston Pulpmill

Sawmill closures reduce local wood chip availability causing prices to soar. The ***timber sale reduction scenario*** weakens the Lewiston pulpmill's competitiveness, but we have not yet forecast its closure. If the pulpmill were to close, Lewiston could lose 4,500 jobs (-21% of all jobs) and $145 million in earnings (-28%).

Impact Information Empowers Decision Makers

This study shows why community-focused analyses are necessary for decision makers to understand natural resource policy impacts. Our study is the most ambitious effort to estimate local economic impacts of Forest Service policy ever funded by a state legislature. The availability of such information empowers local authorities.

Who Will Live in Idaho's Rural Communities?

We conclude that National Forest policy greatly influences the answer.

Table of Contents

Tables

Figures

INTRODUCTION

The future of Idaho's resource-based communities is uncertain. In many regions this stems from changing public resource policy. We take an intensive look at the impacts of new National Forest timber policies on the economy of northcentral Idaho.

Timber has been a mainstay of many rural north Idaho communities.[1] For decades federal logs have been the main raw material for the region's wood products industries, and National Forest plans released in the late 1980s proposed an increase in sustainable harvests. However, new policies have markedly reduced federal timber sales.[2]

Lessons from Northeastern Oregon

In 1993 we examined the economic effects of similar timber policy changes in three counties of northeastern Oregon (McKetta, 1994). We predicted that within four years these changes would close five of eleven primary wood products mills. Our predictions proved to be conservative: six mills closed in the first year. We predicted that some rural, timber-dependent communities would lose over half or more of all jobs. The overall loss of almost 2,000 timber and timber-linked jobs is still working its way through that economy. While unemployment payments and other public assistance are easing the economic adjustment, the long-run outlook for many Oregon resource communities remains poor.

FIGURE 1 COMMUNITIES OF NORTHCENTRAL IDAHO

For decades federal logs have been the main raw material for the region's wood products industries. However, new policies have markedly reduced federal timber sales.

From 1989 to 1994, 222 sawmills closed in Washington, Oregon, Montana, and California. The loss of direct sawmill and logging jobs alone amounted to 29,090 (Ehinger, 1995).

The pattern in northeast Oregon is not unique. From 1989 to 1994, 222 sawmills closed in Washington, Oregon, Montana, and California. The loss of direct sawmill and logging jobs alone amounted to 29,090 (Ehinger, 1995). The pattern of federal timber policy changes is now affecting Idaho.

The authors acknowledge the sponsorship and support of Representative Charles Cuddy (Orofino) and Senator Judi Danielson (Council); and Idaho County Commissioner George Enneking who facilitated our work.

The Idaho Legislature Funds an Economic Impact Study

Idaho's stake in federal policy is understandable, 62% of its land area is federal (Burgess and Kelly, 1995). National Forest plans more than a decade in the making have been replaced by political and judicial decisions. The 1994 Idaho Legislature passed *House Bill 956* to fund this assessment of changing federal timber policies, economic impacts, and resource-dependent communities in northcentral Idaho's Clearwater timbershed. Figure 1 provides a map of the study region.[3]

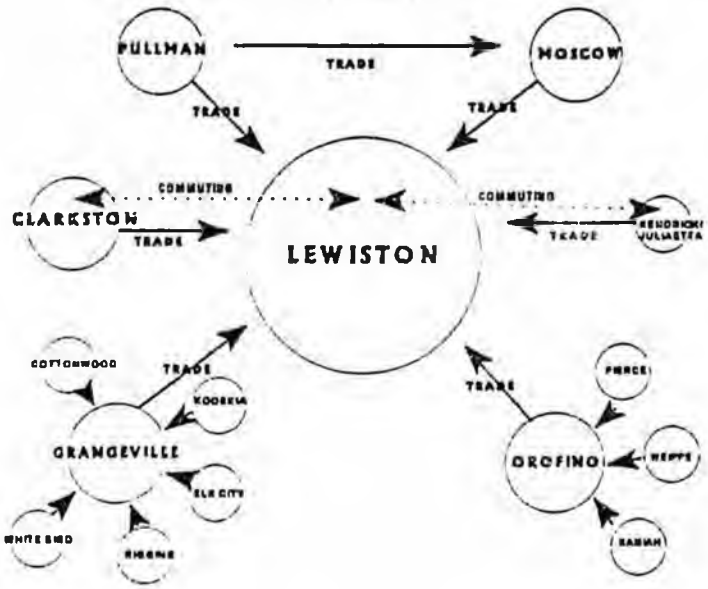
Our study required two types of economic analyses. A *timber analysis* reviewed the structure of the region's timber market, including public and private forest ownerships, log prices, log flows to specific sawmills, the economic vitality of mills, and other variables linking public timber policy to local sawmill activity. The second, our *impact analysis,* assessed the character of the local regional economy, profiled the industries and economic base of each community, and established the pattern of regional intercommunity trade.

Economic impacts averaged across broad regions obscure impacts that can be acute in particular places. Appreciating the impact of changing resource policies requires a community focus.

Rural communities differ greatly in size, social make-up, and economic base. Their responses to federal resource policies would also differ greatly.

Our techniques can estimate the overall job, income, and fiscal effects from changes in any particular sector such as sawmills, tourism, quality of life migration, agriculture, or mining. Technical details can be found in McKetta (1995), Robison (1995a), and Robison and Peterson (1996). A complete listing of community impacts can be found in Robison et al.(1996).

FIGURE 2 TRADE HIERARCHY FOR NORTHCENTRAL IDAHO



We Focus on Communities

The jobs and income impacts of federal land management are usually estimated for broad multi-county regions. National Forest plans, for example, typically include all adjacent counties. In reporting the impacts of ecosystem management in the interior Columbia Basin, the U.S. Forest Service proposed an even larger area: Idaho north of the Salmon River Gorge, most of eastern Washington, and a part of western Montana (USFS, 1995).

Economic impacts averaged across broad regions obscure impacts that can be acute in particular places. A policy-induced loss of jobs and income that might shock a timber community such as Pierce, Idaho, is obscured when averaged with unaffected communities and large diverse metropolitan areas. Appreciating the impact of changing resource policies requires a community focus.

TABLE 1 1994 ECONOMIC PROFILE OF RIGGINS

Community Income Account

	($1,000)	%
Inside Income		
Earnings	$11,391	51.2%
Property Income	$1,255	5.6%
Outside Income		
Property Income	$3,183	14.3%
Transfer Payments	$6,412	28.8%
Total Residents' Income	$22,241	100.0%

Earnings and Employment by Industry

INDUSTRY	EARNINGS ($1,000)	%	EMPLOY	%
Ag	$953	8.4%	68	11.4%
Mining	$1,413	12.4%	30	5.0%
Construction	$905	7.9%	52	8.7%
Wood/Paper	$734	6.4%	17	2.8%
Transportation	$205	1.8%	4	0.6%
Communications	$133	1.2%	12	2.0%
Trade	$1,035	9.1%	74	12.4%
Finance	$15	0.1%	10	1.7%
Motels/Dining	$1,325	11.6%	122	20.4%
Recreation	$528	4.6%	42	7.0%
Consumer Services	$118	1.0%	11	1.9%
Business Services	$26	0.2%	3	0.4%
Social Services	$160	1.4%	9	1.4%
Local Govt	$53	0.5%	3	0.4%
State Govt	$1,340	11.8%	64	10.8%
Fed Govt	$2,449	21.5%	77	13.0%
TOTAL	$11,391	100.0%	595	100.0%

TABLE 2 1994 ECONOMIC PROFILE OF PIERCE

Community Income Account

	($1,000)	%
Inside Income		
Earnings	$18,268	85.8%
Property Income	$674	3.2%
Outside Income		
Property Income	$51	0.2%
Transfer Payments	$2,293	10.8%
Total Residents' Income	$21,284	100.0%

Earnings and Employment by Industry

INDUSTRY	EARNINGS ($1,000)	%	EMPLOY	%
Ag	$12	0.1%	4	0.6%
Construction	$183	0.9%	13	2.2%
Manufacturing	$222	1.2%	10	1.8%
Wood / Paper	$14,788	81.0%	372	64.1%
Transportation	$337	1.8%	15	2.6%
Trade	$582	3.2%	43	7.5%
Finance	$209	1.1%	16	2.8%
Motels/Dining	$196	1.1%	25	4.3%
Consumer Services	$48	0.3%	4	0.7%
Business Services	$2	0.0%	0	0.0%
Social Services	$343	1.9%	23	3.9%
Local Govt	$73	0.4%	3	0.6%
State Govt	$844	4.6%	39	6.8%
Fed Govt	$450	2.5%	12	2.1%
TOTAL	$18,266	100.0%	580	100.0%

The Northcentral Region

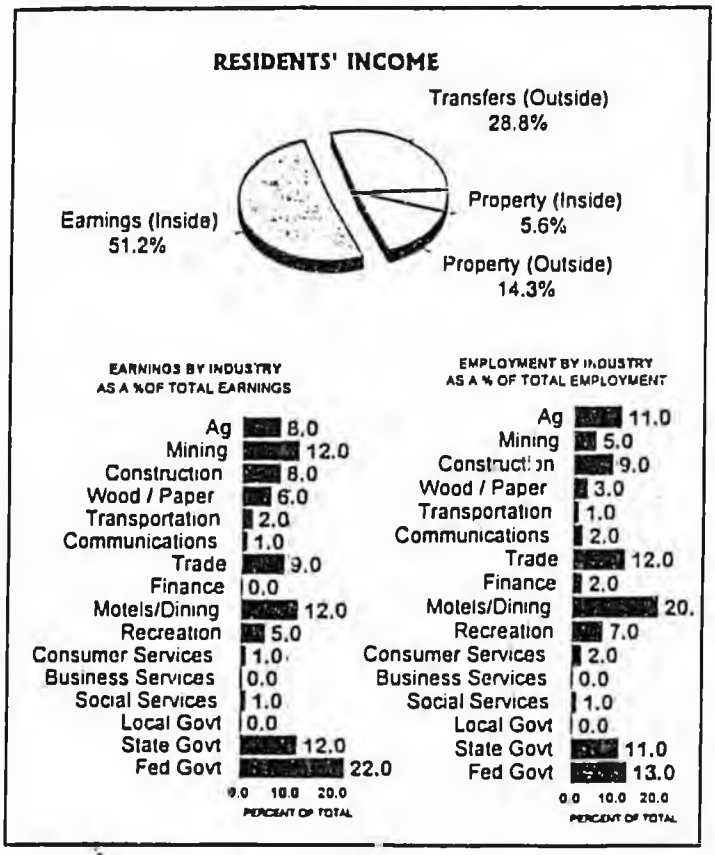
Lewiston is northcentral Idaho's leading trade center. Economic changes in any part of the region are eventually felt in Lewiston (see trade relationship diagram, Figure 2). The region has two smaller trade centers. Orofino economically dominates Pierce, Weippe, and Kamiah, while Grangeville dominates Elk City, Cottonwood, Kooskia, Riggins, and White Bird. Our regional economic analysis measures patterns of intercommunity trade, and includes them in our assessment of economic impacts.[4]

Rural communities differ greatly in size, social make-up, and economic base. Their responses to federal resource policies would also differ greatly. Riggins and Pierce both provide around 600 jobs to their workforces, and each has residents' income of about $22 million. However, here the similarities end. Tables 1 and 2, and

Residents with income from outside, including quality of life migrants, affect local job and income creation the same way as traditional export industries.

Figures 3 and 4, provide economic profiles for Riggins and Pierce.[5] As of 1994, Riggins obtained nearly half (43%) of its income from outside sources, while Pierce obtained only 11% of its income from outside. Much of Riggins' outside income is from retirees and leisure residents. Pierce is a *workers' town*, with most of its population depending on local employment for income. There are other differences. Riggins' economy is diverse, with a broad mix of sectors including government (federal and state), tourist services (motels, eating and drinking places, amusement and recreation), and a mix of timber (loggers), agriculture, and mining. In contrast, Pierce's economy relies on wood products, which accounts for over 80% of all direct earnings. Earnings includes wages, salaries, and proprietors' income.

FIGURE 3 1994 ECONOMIC PROFILE OF RIGGINS

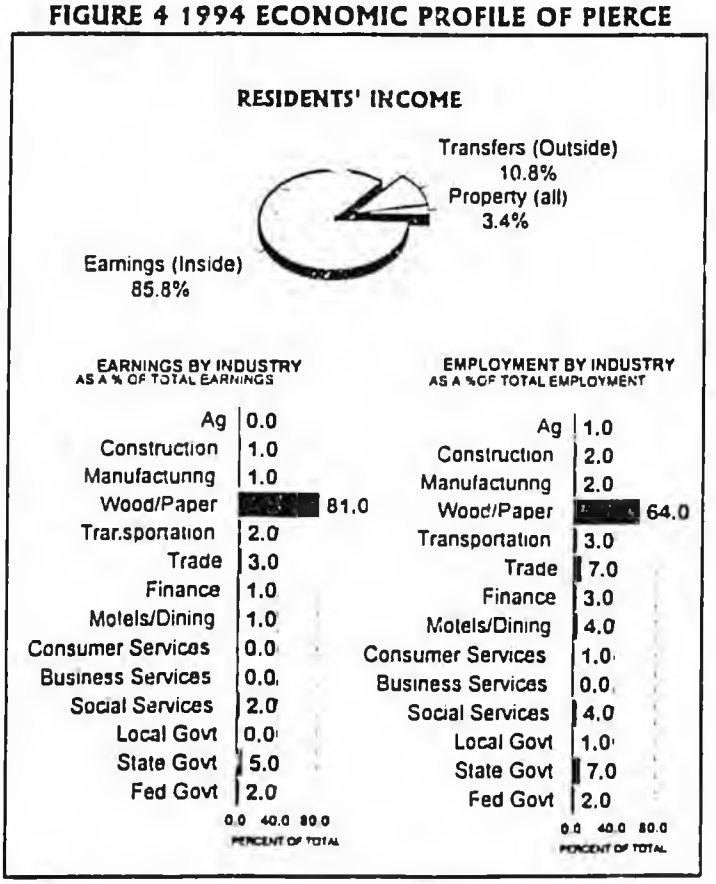


Timber industry jobs are among the highest paying in north Idaho, and this is reflected in community earnings per worker. Pierce's 1994 earnings per worker was over $31 thousand. Riggins has large service and tourism sectors which tend to be lower paying so earnings per worker was only about $19 thousand.[6]

Timber industry jobs are high paying. In Pierce (a timber town) earnings per worker in 1994 was over $31,000. In Riggins (a tourist town) earnings per worker was only about $19,000.

The wide differences between Riggins and Pierce are typical of the variation among Idaho communities. Such differences must be recognized in impact analyses.

FIGURE 4 1994 ECONOMIC PROFILE OF PIERCE



THE REGION'S ECONOMIC BASE

The ultimate source of community employment and earnings is the collection of activities that bring monies to the community from outside. These form the community's economic base.[7] Outside income-earning activities include the traditional export industries (timber and agriculture for example), the federal government, visitor and tourism-oriented sectors, and the income of retired and leisure residents. A community economic base assessment is useful in understanding employment and earnings formation. We assessed the economic base of each northcentral Idaho community. The Clearwater timbershed communities rely on five base functions.

FIGURE 5

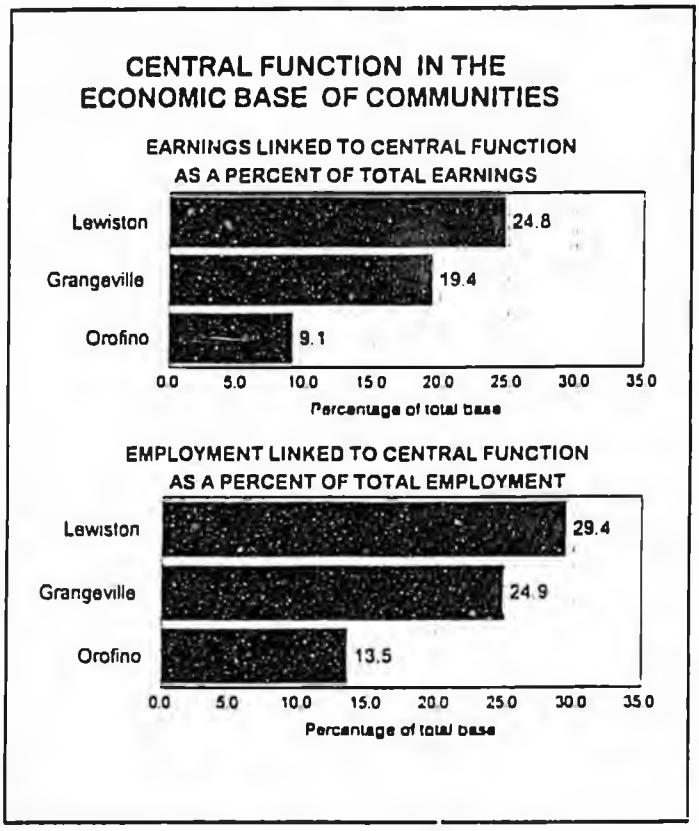
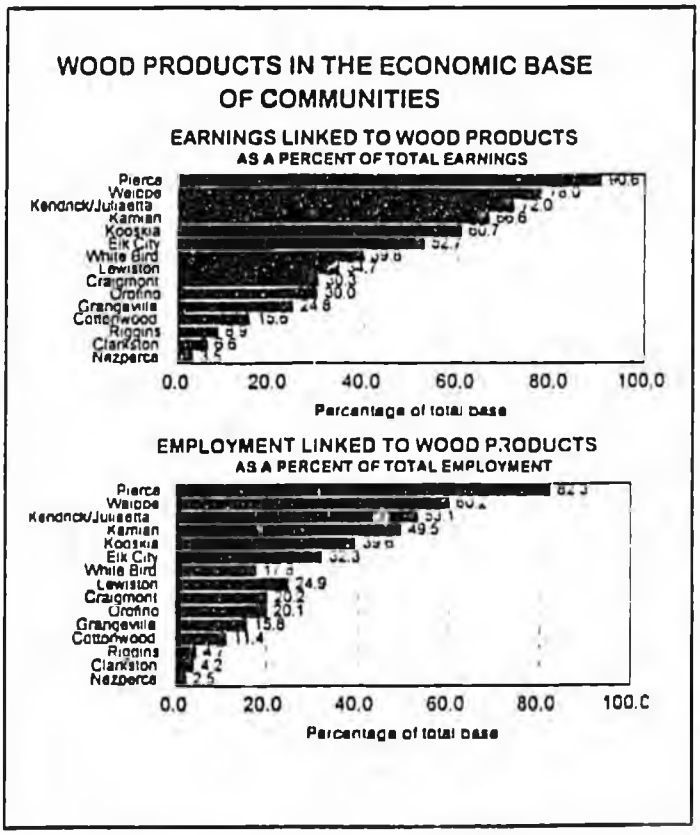


FIGURE 6



Trade Centers

Lewiston, Orofino, and Grangeville are regional trade centers (see Figure 2). When people from neighboring towns come to shop and use other services, the monies they spend fuel the community economic base. Figure 5 shows the role of trade(central functions) in the economic base of our three trade centers. Lewiston's economy is the most dependent on trade. Central functions provide 29% of all jobs and a quarter of its earnings. In Grangeville central functions provide nearly a quarter of all jobs and a fifth of all earnings. Finally, Orofino's role as a trade center explains over 13% of its jobs and 9% of its earnings.

Wood Products

Figure 6 illustrates the portion of all earnings and employment linked to wood products. Pierce ranks first among our communities, with wood products providing nearly 91% of all earnings and 82% of all jobs. Weippe and Kendrick/Juliaetta follow Pierce in their dependence on wood products. Even recreation-based Riggins is somewhat dependent on wood products, 9% of earnings and 5% of jobs are linked to logging.

Comparing Figures 4 and 6 illustrates the mechanics of economic base assessment. Wood products provide 81% of Pierce's direct earnings (Figure 4). The wood products economic base of 91% (Figure 6) adds the earnings of resident-serving industries linked to wood products through local business and consumer spending. The Pierce multiplier of 1.1 is small because Pierce residents shop in Orofino and Lewiston.

Our analysis shows that rural resource communities tend to be very specialized.

FIGURE 7

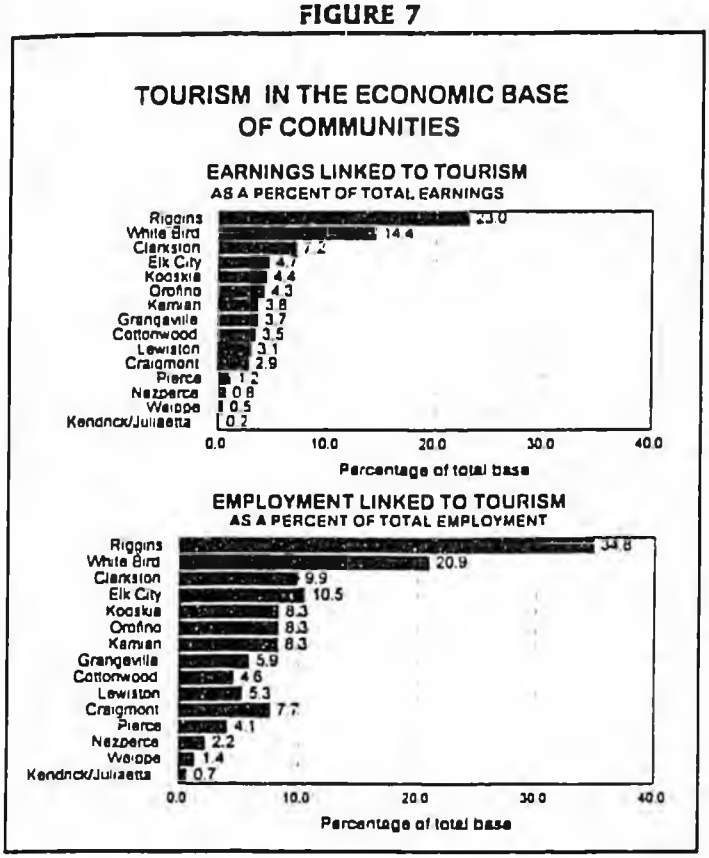
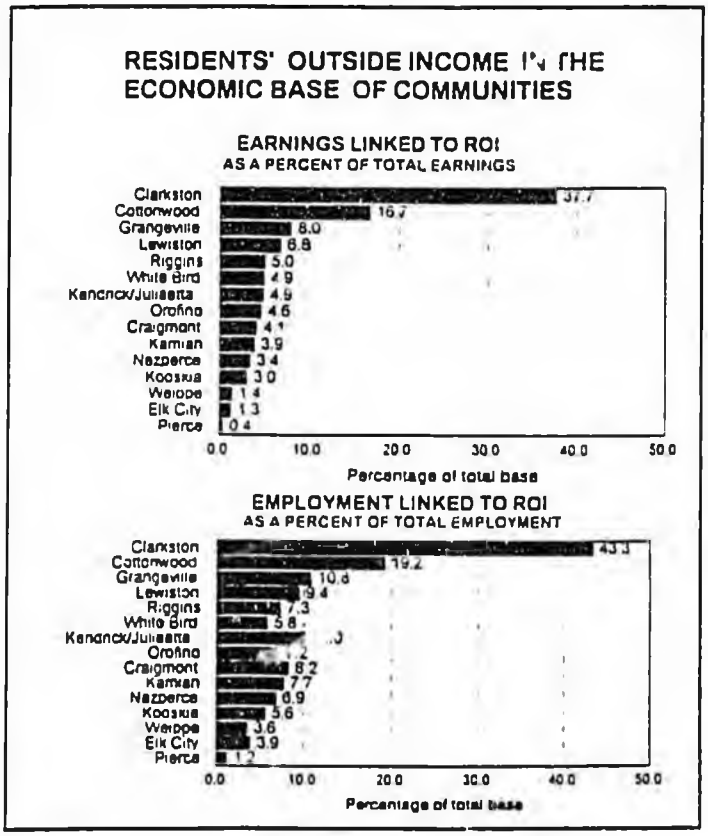


FIGURE 8



Visitors and Tourism

Northcentral Idaho hosts a variety of outdoor recreation opportunities and local businesses have grown to serve the needs of tourists. We identify the tourism sector by the non-resident sales of eating and drinking places, retail trade establishments, hotels and motels, and outfitters and guides.[8] Figure 7 shows the 1994 role of tourism in the economic base of northcentral Idaho communities. Greater Riggins (from Pinehurst to Slatecreek) is the most dependent on tourism, providing 23% of all earnings and 35% of all jobs. White Bird, which includes Hoot's Cafe on Highway 95, ranks second. Tourism provides more jobs than earnings, indicating below average earnings in the tourism sectors.

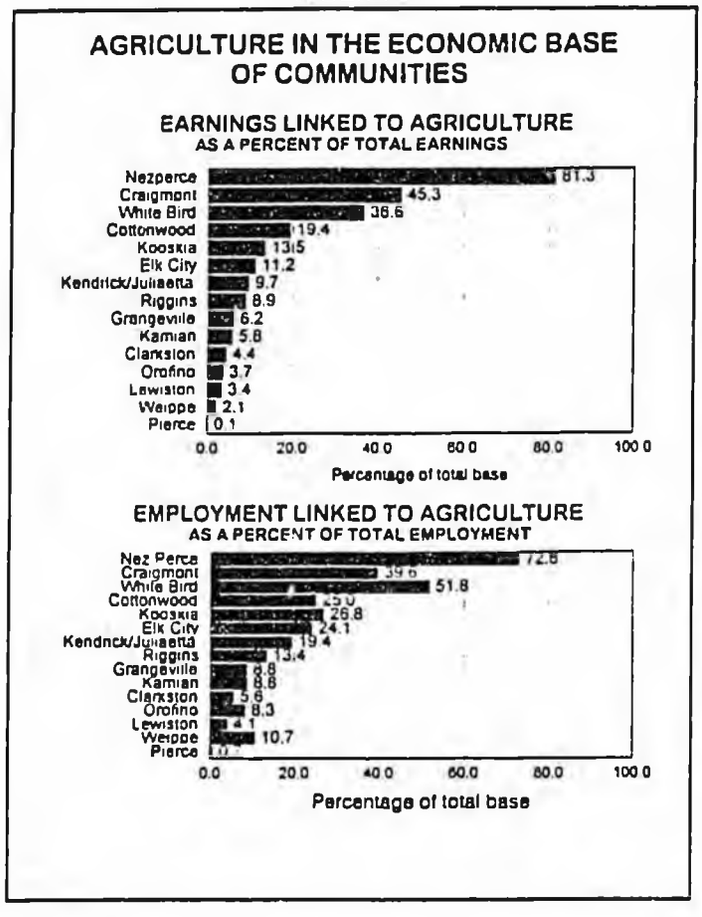
Residents' Outside Income (ROI)

Residents with income from outside affect local job and income creation the same way as traditional export industries -- local spending of outside monies creates jobs and incomes in the resident-serving economy. Residents with outside income can be roughly grouped in 4 categories: (1) retired families with retirement income, (2) families living on savings or on non-labor income (dividends, interest, and rent), (3) the indigent and unemployed living on public assistance, and (4) out-commuters. Figure 8 shows the role of residents' outside income (ROI) in the 1994 economic base of our communities. Clarkston, Washington, is the most dependent. It is a bedroom community for Lewiston, and Clarkston's heavy dependence on ROI reflects out-commuting. Cottonwood ranks second because of a large presence of retirees. Other communities have far less dependence on ROI. As a workers' town, Pierce has only about one percent of its earnings and employment linked to ROI.

Agriculture

Our community boundaries are broad, extending beyond city limits to include surrounding settlements and isolated homesteads. Many outlying areas

FIGURE 9



include significant agricultural land, and farm activity can appear prominent in a rural community's economic base. Figure 9 shows the role of agriculture by community. Nezperce (in Lewis County) ranks first with 81% of its earnings and over 72% of its jobs linked to agriculture. Craigmont is second, followed by White Bird.

Diversity and Specialization

Our analysis shows that rural resource communities tend to be very specialized. Pierce, Weippe, Kendrick, Juliaetta, Kamiah, Kooskia, and Elk City are overwhelmingly wood products oriented. Nezperce and Craigmont are agricultural towns. Riggins has a significant and growing tourism economy. Single-sector towns are sensitive to market ups and downs -- mining and timber towns are famous for booms and busts. Tourism towns are seasonally unstable.

Trade centers, such as Lewiston, and to a smaller extent Grangeville and Orofino, are more diversified. Changes in the hinterland are felt in trade centers, but to a lesser degree. Their impacts are mitigated by economic diversity. Retirement and bedroom communities have lower incomes, but generally exhibit more stability.

Diversification is often prescribed for economic stabilization. Increasing the variety of sectors implies that a decrease in one will have less impacts. Another approach is to replace unstable sectors with stable ones. Both approaches may have limited applicability in northcentral Idaho. Towns founded on timber or agriculture are often poorly suited for other activities. Pierce is ideally located for wood processing, but is too remote for commuting, and it has limited services and a climate weighing against retirement. It is insufficiently unique to attract tourism, except hunting and fishing.

PROJECTIONS TO YEAR 2000

If current federal timber policies continue, several sawmills will close in northcentral Idaho causing job and income losses. However, by year 2000 other changes will also take place, so we built independent projections of economic growth into our economic analysis.

We Translate Regional Growth into Community Growth

We obtained county-level projections from the U.S. Department of Commerce (1992), Idaho Power Company (1996), and extrapolated historic trends for each economic sector. From these we constructed a consensus forecast at the community level.[9]

Table 3 shows the forecast growth rates for employment, earnings, and residents' income. Rates vary depending on the mix of sectors in a community.

TABLE 3 GROWTH IN COMMUNITY ECONOMIES

1994 TO 2000
ANNUAL AVERAGE PERCENT

	Employment	Earnings	Residents' Income
Grangeville	1.30	1.00	2.40
Cottonwood	1.30	1.10	2.30
Kooskia	0.80	0.50	2.40
Craigmont	1.00	0.40	2.30
Nezperce	0.50	0.20	1.80
Elk City	0.70	0.30	2.10
White Bird	1.60	1.10	3.90
Riggins	2.40	1.50	3.40
Lewiston	1.40	1.00	2.10
Orofino	1.00	0.60	2.00
Kamiah	1.00	0.50	1.80
Pierce	0.30	0.10	0.70
Weippe	0.30	0.10	1.60
Clarkston	2.30	1.80	3.80
Kendrick/Juliaetta	0.40	0.20	2.20

TABLE 4 GRANGEVLLE PROFILE AND PROJECTIONS

Community Income Account

	1994 ($1,000)	2000 ($1,000)	%
Inside Income			
Earnings	$65,057	$68,900	5.9%
Property Income	$6,323	$6,802	7.6%
Outside Income			
Property Income	$13,525	$18,125	34.0%
Transfer Payments	$16,188	$21,693	34.0%
Total Residents' Income	$101,093	$115,520	14.3%

Earnings and Employment by Industry

INDUSTRY	1994 EARN	2000 EARN	%	1994 EMPLOY	2000 EMPLOY	%
Ag	$3,689	$3,670	0.2%	261	262	0.4%
Mining	$2,861	$2,946	3.0%	63	65	3.1%
Construction	$3,619	$3,738	3.2%	206	213	3.2%
Food Processing	$66	$75	14.6%	3	4	14.6%
Manufacturing	$1,157	$1,210	4.6%	76	80	5.1%
Wood/Paper	$10,387	$10,386	0.0%	227	227	0.0%
Communications	$584	$658	12.7%	42	47	12.5%
Transportation	$4,116	$4,490	9.1%	207	225	9.1%
Public Utilities	$1,337	$1,473	10.1%	37	41	10.2%
Trade	$8,298	$9,531	14.9%	551	636	15.3%
Finance	$1,284	$1,363	6.1%	122	130	6.6%
Hotels/Dining	$1,195	$1,509	26.2%	116	146	25.1%
Recreation	$490	$629	28.3%	50	62	25.2%
Consumer Services	$1,362	$1,566	13.4%	95	108	13.6%
Business Services	$1,152	$1,289	11.9%	54	60	11.2%
Social Services	$4,762	$5,436	14.2%	325	372	14.3%
Local Gov't	$1,861	$2,001	7.5%	89	96	7.5%
State Gov't	$5,535	$5,620	1.5%	265	269	1.5%
Fed Gov't	$11,302	$11,302	0.0%	356	356	0.0%
TOTAL	$65,057	$68,900	5.9%	3,149	3,402	8.0%

We illustrate the outcome of our community forecasts in **Table 4** for Grangeville. Three sectors have no growth expectations: agriculture, wood products, and federal government. Zero growth in agriculture and federal government are projections of the U.S. Department of Commerce. Zero growth in wood products is an "artificial" assumption to establish a baseline for our later analyses.[10]

Most other sectors are forecast to grow 1-2% per year. Our analysis includes two parts of the economy not covered in other forecasts—tourism and residents' outside income. In recent years tourism in Idaho has been growing in excess of 5% per year, and we assumed a continuation of this trend (Harris, 1995).

Beyond tourism, many argue that the salvation of declining rural communities is the attraction of quality-of-life migrants, and we assume this grows 5% per year (34% over 6 years).

Beyond tourism, many argue that the salvation of declining rural communities is the attraction of quality-of-life migrants (Rasker, 1995). A large part of such migrant income would appear under residents' outside income, and we assume this grows 5% per year (34% over 6 years).[11]

Economic Adjustment Takes Time

We chose 2000 as the year for reporting impacts to allow time for economic adjustment. Our timber analysis predicts mill closures as early as 1996. However, the effects will not be immediate. Workers' unemployment benefits, savings, and other resources provide an adjustment period. We assume full adjustment by year 2000 with the exhaustion of replacement incomes and out migration of the unemployed.

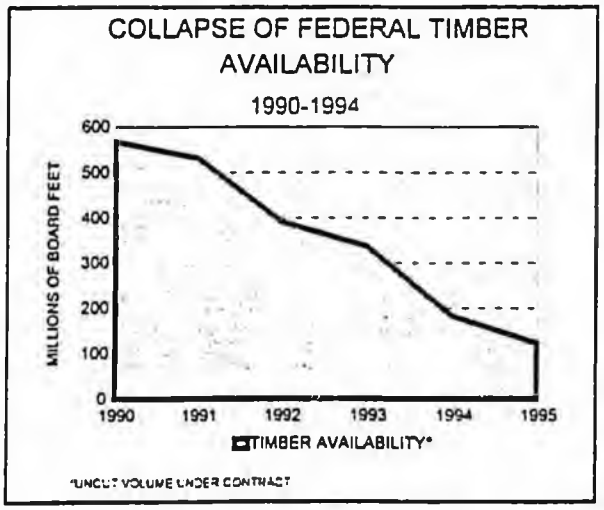
FEDERAL POLICY AND LOCAL MILLS

To assess community impacts, resource policy or market changes must be converted into changes in the geographic use of raw materials. Our timber policy analysis consists of two major components: (1) We predicted how policy changes cause new patterns of log availability and (2) We predicted how each wood products mill would react to changing log prices and availability.

Timber Market Distortions

Federal timber policies control local timber markets because they dominate the resource. Idaho National Forests have 67% of suitable timber acres and 73% of the suitable inventory.[12] The combined Clearwater and Nez Perce National Forest plans proposed an annual sales volume (allowable sale quantity) of 281 million board feet (MMBF) per year. By our reference years of 1991-1993, their average annual harvests had dropped to 190 MMBF per year of which only 103 MMBF of logs was consumed locally. Figure 10 and Figure 11 show how rapidly National Forest timber policies are changing. Their new timber sales dropped to 21 MMBF by 1995 while local milling capacity declined slowly. We use net uncut volume under contract as a primary index of local timber availability over time. Figure 10 shows that it is declining rapidly, and new Forest Service policies have caused local stumpage and log prices to rise quickly.[13]

FIGURE 10



We predict that the current timber sales reduction policy will reduce local National Forest harvests from 281 MMBF proposed in forest plans to 3 MMBF of local use by year 2000.

Projecting New Log Flow Patterns

Mills in the Clearwater timbershed used 272 MMBF per year of sawlogs from all sources in 1991-1993. Studies of private and public forest log flows and sawmill surveys showed that mills had unique patterns of dependence on particular forest ownerships and districts. We forecast total log availability for year 2000 assuming the National Forest timber sales reduction policy would continue. This reduces local federal contributions to only 3 MMBF per year by 2000. State sales had been elevated for the last decade, substituting for some of the National Forest shortfall, but they cannot be sustained. By 2000 their reduction should reach 30 MMBF. Private forest owners initially responded to the price increases but

FIGURE 11

FIGURE 12

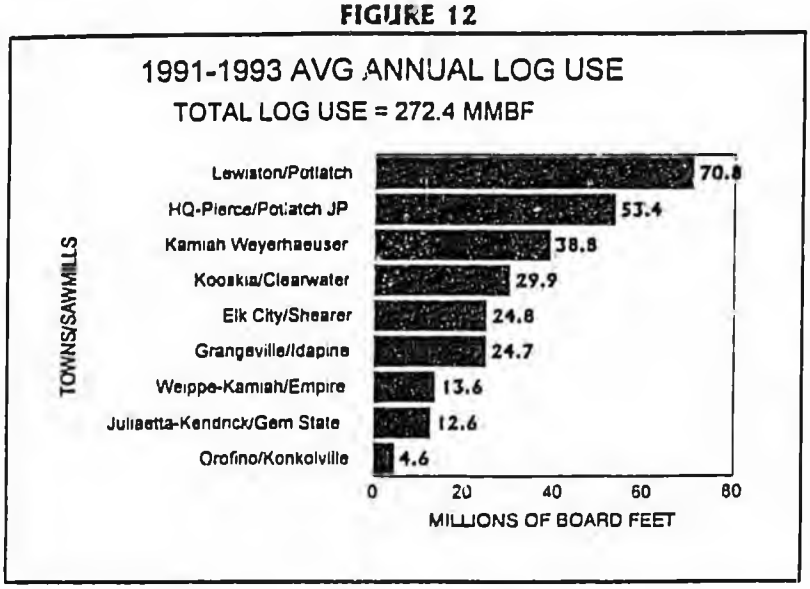
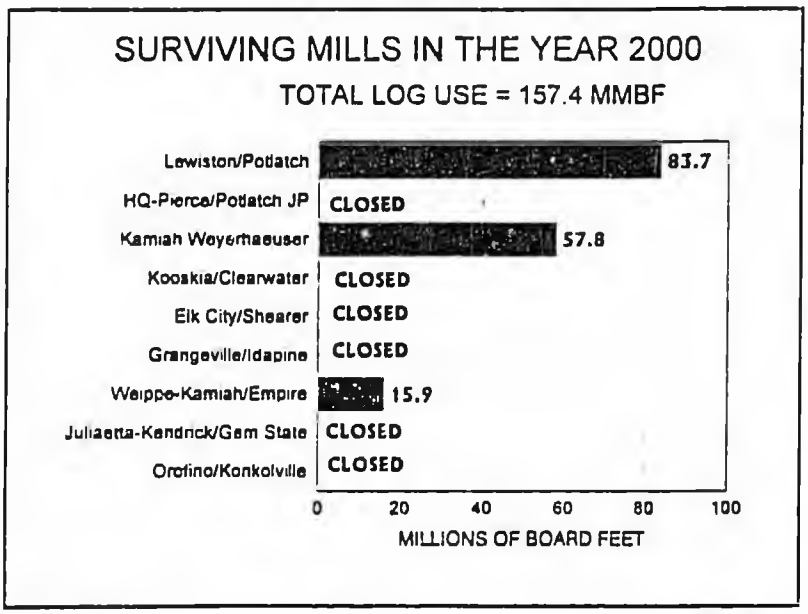


FIGURE 13



these peaked at 15 MMBF per year. Although significant local price increases would normally attract log and timber imports, federal policy has sharply reduced harvests in most western timbersheds. Logs from all sources (federal, state, and private) should decline from 272 MMBF in 1991-1993 to 158 MMBF per year (-42%) by the year 2000. The sales reduction scenario is plausible, however, as National Forest log flows are politically unstable, we also explored four alternative scenarios that are also feasible.[14]

Harvest Reductions Affect Local Sawmills

Rising log prices reduce profit margins and threaten mill survival. This aggravates a financial squeeze that characterizes the 1990s.[15]

We evaluate the viability of sawmills given changes in their individual financial and technical conditions. We forecast weak mill closures or reduced log consumptions. Some historically strong competitors (usually the larger mills with integrated forest ownerships) actually gain market share.[16] Assuming current federal timber policies continue, Figure 12 and Figure 13 show the results of our timber sales reduction scenario.

Mill viability depends on many factors beyond our analysis. In this example, the closure of the Pierce plywood mill instead of the Lewiston sawmill is problematic. In a dozen simulations other closure rankings occur and occasionally different communities are impacted. However, long-run gross log use capacity has to eventually match the reduced log availability caused by federal forest policy changes and only the location of impact varies.

Other Federal Policy Market Effects

Sawmills produce large volumes of hog fuel, wood chips and planer shavings as by-products of lumber production. Under the timber sales reduction scenario, these raw materials decline so costs for the biofuel energy, particle and flake board, and pulp and paper industries increase significantly.[17]

Once timber availability stabilizes, reduced price competition should lower stumpage prices. Surviving mills should again be profitable. However, lower long-run stumpage prices will reduce state and private forestry returns and make federal ecosystem management less feasible.

TABLE 5 GRANGEVILLE EMPLOYMENT IMPACT OF TIMBER SALES REDUCTION SCENARIO

	TOTAL EMPLOYMENT					
INDUSTRY	1994 ACTUAL	2000 BASELINE	2000 SCENARIO	CHANGE FROM 2000	% CHANGE FROM 2000	% CHANGE FROM 1994
	(1)	(2)	(3)	(4) (3)-(2)	(5) (4)/(2)	(6) (3-1)/(1)
Ag	262	262	260	(2)	-0.9%	-0.9%
Mining	63	65	60	(5)	-7.9%	-5.1%
Construction	206	213	195	(18)	-8.6%	-5.7%
Food Processing	3	4	3	(1)	-19.2%	-7.4%
Manufacturing	76	80	70	(9)	-11.8%	-7.3%
Wood/Paper	227	227	40	(187)	-82.3%	-82.3%
Communications	42	47	40	(7)	-15.7%	-5.2%
Transportation	207	225	175	(51)	-22.4%	-15.4%
Public Utilities	37	41	29	(12)	-29.5%	-22.3%
Trade	551	636	511	(126)	-19.7%	-7.4%
Finance	122	130	102	(28)	-21.6%	-16.4%
Motels/Dining	118	148	137	(11)	-7.6%	15.6%
Recreation	50	62	58	(4)	-7.2%	16.2%
Consumer Services	95	108	85	(23)	-20.9%	-10.2%
Business Services	54	60	48	(12)	-19.7%	-10.8%
Social Services	325	372	297	(75)	-20.3%	-8.9%
Local Govt	89	96	71	(25)	-26.2%	-20.6%
State Govt	265	269	254	(15)	-5.6%	-4.2%
Fed Govt	356	356	356	0	0.0%	0.0%
TOTAL	3,149	3,402	2,790	(613)	-18.0%	-11.4%

TABLE 6 REGION-WIDE EMPLOYMENT IMPACT OF TIMBER SALES REDUCTION SCENARIO

	TOTAL EMPLOYMENT					
COMMUNITY	1994 ACTUAL	2000 BASELINE	2000 SCENARIO	CHANGE FROM 2000	% CHANGE FROM 2000	% CHANGE FROM 1994
	(1)	(2)	(3)	(4) (3)-(2)	(5) (4)/(2)	(6) (3-1)/(1)
GRANGEVILLE	3,149	3,402	2,790	(613)	-18.0%	-11.4%
COTTONWOOD	1,123	1,209	1,130	(79)	-6.5%	0.6%
KOOSKIA	1,281	1,343	887	(456)	-33.9%	-30.8%
CRAIGMONT	554	588	583	(4)	-0.7%	5.2%
NEZPERCE	312	321	317	(5)	-1.4%	1.7%
ELK CITY	558	582	414	(168)	-28.8%	-25.7%
WHITE BIRD	170	186	167	(18)	-9.8%	-1.8%
RIGGINS	595	679	662	(17)	-2.5%	11.2%
LEWISTON	19,539	21,163	20,871	(292)	-1.4%	6.8%
ORofino	3,528	3,744	3,116	(628)	-16.8%	-11.7%
KAMIAH	1,455	1,540	1,701	161	10.4%	16.9%
PIERCE	580	591	150	(441)	-74.6%	-74.2%
WEIPPE	378	384	337	(48)	-12.5%	-11.0%
CLARKSTON	5,244	5,997	5,981	(16)	-0.3%	14.0%
KENDRICK/JULIAETTA	655	672	365	(308)	-45.8%	-44.4%
TOTAL	39,121	42,399	39,469	(2,930)	-6.9%	0.9%

ECONOMIC IMPACT OF CURRENT TIMBER POLICIES

Given a continuation of current federal timber policies, we predict that 6 northcentral Idaho sawmills will close by year 2000 (Figure 13). Each mill closure affects individual community economies. We begin our analysis of the ***timber sales reduction scenario*** with a detailed look at Grangeville, a milltown and trade center. We summarize the impacts to other communities.

Effects on a Single Community

We estimate an *impact-to-jobs* and an *impact-to-incomes* report for each community. Table 5 is the impact-to-jobs report for Grangeville.[18] The first column shows actual employment by sector. In 1994, Grangeville provided 3,149 full- and part-time jobs. Column 2 projects employment to 2000 with wood products employment held artificially constant. With no economic disruptions, total employment in Grangeville should grow to 3,402 jobs.

Column 3 shows Grangeville employment in 2000 given the Idapine mill shutdown, plus other predicted mill closures within Grangeville's trading area (Figure 2). Mill closures and logging reductions throughout this area will affect Grangeville. By year 2000, out-migration, re-employment, and other adjustments should have run their course. Even with growth in other sectors, Grangeville could lose 613 jobs and have 18% fewer jobs because of sawmill closures. The far-right column relates 2000

TABLE 7 REGION-WIDE EARNINGS IMPACT OF TIMBER SALES REDUCTION SCENARIO

	TOTAL EARNINGS ($1,000)					
COMMUNITY	1994 ACTUAL (1)	2000 BASELINE (2)	2000 SCENARIO (3)	CHANGE FROM2000 (4) (3)-(2)	%CHANGE FROM2000 (5) (4)/(2)	%CHANGE FROM1994 (6) (3-1)/(1)
GRANGEVILLE	$65,057	$68,900	$53,686	($15,214)	-22.1%	-17.5%
COTTONWOOD	$21,401	$22,823	$20,981	($1,842)	-8.1%	-2.0%
KOOSKIA	$30,729	$31,562	$15,404	($16,158)	-51.2%	-49.9%
CRAIGMONT	$13,681	$14,028	$13,878	($150)	-1.1%	1.4%
NEZPERCE	$7,590	$7,696	$7,541	($154)	-2.0%	-0.6%
ELK CITY	$14,566	$14,827	$8,046	($6,781)	-45.7%	-44.8%
WHITE BIRD	$3,082	$3,279	$2,606	($672)	-20.5%	-15.4%
RIGGINS	$11,391	$12,448	$11,887	($561)	-4.5%	4.4%
LEWISTON	$492,293	$522,808	$517,392	($5,416)	-1.0%	5.1%
OROFINO	$75,285	$78,192	$62,335	($15,856)	-20.3%	-17.2%
KAMIAH	$23,270	$30,052	$34,944	$4,892	16.2%	19.4%
PIERCE	$18,266	$18,399	$3,307	($15,092)	-82.0%	-81.9%
WEIPPE	$10,115	$10,191	$8,903	($1,288)	-12.6%	-12.0%
CLARKSTON	$106,607	$118,744	$118,499	($246)	-0.2%	11.2%
KENDRICK/JULIAETTA	$21,065	$21,339	$8,332	($13,007)	-61.0%	-60.4%
EARNINGS TOTAL	$920,398	$975,297	$887,742	($87,555)	-9.0%	-3.5%

employment to 1994. Despite growth forecast in other parts of the economy, overall Grangeville will provide 11% fewer jobs in 2000 than it did in 1994. Note that sectors oriented to tourism (amusement, recreation, motels, dining) increase by 16%. However, declines from mill shutdowns overshadow these growth sectors.

Consequences for All Communities

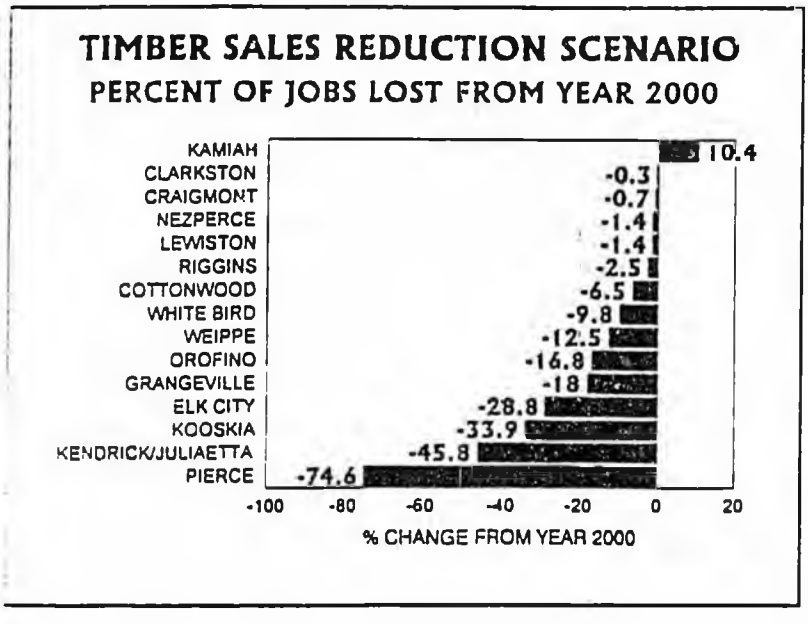
Table 6 and **Figure 14** summarize job impacts for all communities. The effect of mill closures across the entire northcentral region is a loss of 7% of all year 2000 jobs. The effect on timber-based communities is much greater. The loss in Kooskia could be 34%. Kendrick/Juliaetta is forecast to lose 46% of its year 2000 job base, while a Pierce mill closure could cause a stunning 75% loss.

The job loss in Kooskia could be 34% from the timber sales reduction scenario. Kendrick/Juliaetta is forecast to lose 46%, while a Pierce mill closure could cause a stunning 75% loss.

One community actually gains under the ***timber sales reduction scenario***. Kamiah could grow from 1,455 jobs in 1994 (column 1) to 1,540 jobs in 2000 with no-changes in sawmill activity (column 2). As shown in **Table 6** and **Figure 14**, the loss of 6 sawmills in other communities actually improves the competitive position of the Kamiah mill -- its log consumption increases from its 1991-1993 level of 39 MMBF to 58 MMBF in year 2000 (**Figures 12 and 13**). The increased mill activity, and associated multiplier effect augments Kamiah's year 2000 employment by another 161 jobs.

Kamiah is unusual. Outside of the internal timber industry redistribution that strengthens this community, our analysis finds no opportunity for any other community to benefit from sawmill shutdowns.

FIGURE 14



As shown in column 5, all communities other than Kamiah lose employment. The losses shown in Table 6 (column 6) occur in spite of projected growth in some other sectors. We assumed tourism and residents' outside income grow at 5% per year. Therefore industries catering to tourists and the needs of outside income recipients also grow at 5% per year. Some workers who lose jobs will find employment in growing sectors. However, these are already implicitly included in our analysis.

Table 6 (column 6) shows the net change in year 2000 employment relative to 1994. Several communities besides Kamiah may be gainers. Riggins loses 17 logger and related jobs (column 4), but still manages to provide 11% more jobs (column 6) than it did in 1994. The 5% tourism growth embedded in our baseline projections locally outstrips area sawmill losses. Relative to their 1994 levels, growth in other sectors could compensate for timber-linked losses in Lewiston, Craigmont, Nezperce, and Cottonwood. All other communities (Grangeville, Kooskia, Elk City, White Bird, Orofino, Pierce, Weippe, Kendrick, and Juliaetta) should have fewer total jobs in 2000 than in 1994.

Table 7 is the ***timber sales reduction scenario*** in terms of impacts-to-earnings. The loss of earnings is everywhere greater than the job loss. Job losses are 7% while region-wide earnings losses are 9%. Losses of high-paying timber jobs and no growth in high-paying federal government jobs will not be compensated by relatively brisk growth (5% per year) in low-paying trade and service sectors.

HIGH AMENITY ALTERNATIVE

Given the uncertainty regarding endangered species recovery, ecosystem management and other land use issues, the ***timber sales reduction scenario*** is the most likely through year 2000. However, public resource policy is politically unstable, and a wide variety of other timber policies are possible. One management option proposed in both the Nez Perce and Clearwater National Forest plans was labeled the ***high amenity alternative***. It was designed as an environment friendly alternative, and proposed a timber harvest considerably lower than the ***Forest Plan preferred alternative***. Illustrating the dramatic change in public forest management since the forest plans, the ***high amenity alternative*** projected an annual ASQ of 216 MMBF, ten times higher than the 21 MMBF per year actual average National Forest sales during 1995.

To visualize the northcentral

The high amenity alternative would provide enough local timber to keep existing mills operating at their 1994 levels, plus generate volume to supply five new mills

TABLE 8 REGION-WIDE EMPLOYMENT IMPACT OF FOREST PLAN HIGH AMENITY ALTERNATIVE

TOTAL EMPLOYMENT						
COMMUNITY	1994 ACTUAL (1)	2000 BASELINE (2)	2000 SCENARIO (3)	CHANGE FROM 2000 (4) (3)-(2)	%CHANGE FROM 2000 (5) (4)/(2)	%CHANGE FROM 1994 (6) (3-1)/(1)
GRANGEVILLE	$3,149	$3,402	$3,810	$408	11.99%	20.98%
COTTONWOOD	$1,123	$1,209	$1,254	$45	3.76%	11.73%
KOOSKIA	$1,281	$1,343	$1,360	$17	1.30%	6.19%
CRAIGMONT	$554	$588	$796	$209	35.58%	43.71%
NEZPERCE	$312	$321	$324	$3	0.81%	3.94%
ELK CITY	$558	$582	$736	$154	26.49%	31.89%
WHITE BIRD	$170	$186	$196	$10	5.63%	15.02%
RIGGINS	$595	$679	$689	$10	1.42%	15.67%
LEWISTON	$19,539	$21,163	$21,434	$271	1.28%	9.70%
OROFINO	$3,528	$3,744	$4,186	$443	11.82%	18.66%
KAMIAH	$1,455	$1,540	$1,588	$48	3.11%	9.15%
PIERCE	$580	$591	$625	$34	5.75%	7.76%
WEIPPE	$378	$384	$420	$36	9.36%	11.21%
CLARKSTON	$5,244	$5,997	$6,013	$16	0.27%	14.68%
KENDRICK/JULIAETTA	$655	$672	$720	$48	7.10%	9.83%
TOTAL	$39,121	$42,399	$44,151	$1,752	4.13%	12.86%

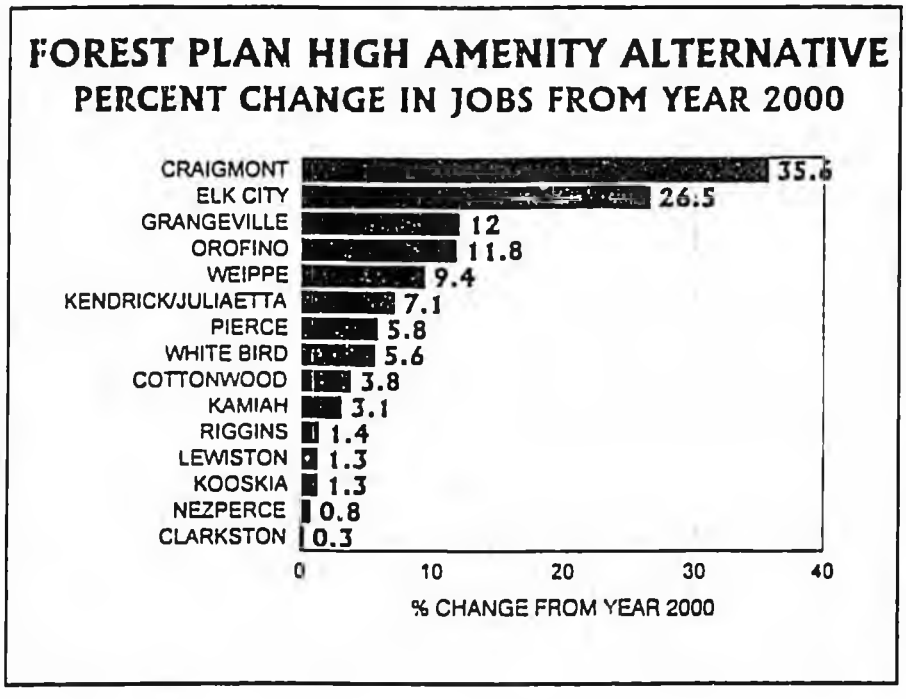
ERRATUM--TABLE 8
The dollar sign in columns 1-4 should not appear. The units are number of employed persons.

TABLE 9 REGION-WIDE EARNINGS IMPACT OF HIGH AMENITY ALTERNATIVE

TOTAL EARNINGS ($1,000)

COMMUNITY	1994 ACTUAL (1)	200 BASELINE (2)	2000 SCENARIO (3)	CHANGE FROM 2000 (4)	% CHANGE FROM 2000	% CHANGE FROM 1994
				(3)-(2)	(4)/(2)	(3-1)/(1)
GRANGEVILLE	$65,057	$68,900	$80,140	$11,241	16.3%	23.2%
COTTONWOOD	$21,401	$22,823	$23,880	$1,058	4.6%	11.6%
KOOSKIA	$30,729	$31,562	$32,141	$579	1.8%	4.6%
CRAIGMONT	$13,681	$14,028	$21,993	$7,965	56.8%	60.8%
NEZPERCE	$7,590	$7,696	$7,785	$89	1.2%	2.6%
ELK CITY	$14,586	$14,827	$21,078	$6,250	42.2%	44.7%
WHITE BIRD	$3,082	$3,279	$3,665	$386	11.8%	18.9%
RIGGINS	$11,391	$12,448	$12,770	$322	2.6%	12.1%
LEWISTON	$492,293	$522,808	$528,851	$6,043	1.2%	7.4%
OROFINO	$75,285	$78,192	$89,960	$11,768	15.1%	19.5%
KAMIAH	$29,270	$30,062	$31,424	$1,362	4.5%	7.4%
PIERCE	$18,266	$18,399	$19,447	$1,048	5.7%	6.5%
WEIPPE	$10,115	$10,191	$11,245	$1,054	10.3%	11.2%
CLARKSTON	$106,607	$118,744	$118,988	$244	0.2%	11.6%
KENDRICK/JULIAETTA	$21,065	$21,339	$23,257	$1,918	9.0%	10.4%
EARNINGS TOTAL	$920,398	$975,297	$1,026,624	$51,327	5.3%	11.5%

FIGURE 15



Idaho economy if federal timber harvests resumed contributing to local log availability, we estimated the community impacts as if the original ***high amenity alternative*** were in operation. This would provide enough local timber to keep existing mills operating at their 1994 levels, plus generate volume to supply five new mills the size of the former Idapine Grangeville mill.

We cannot predict where new mills might appear. Our simulation assumed over half of the additional volume would be consumed in-area. We hypothetically located new mills at Craigmont, Orofino, Elk City, and Grangeville, and reopened the Idapine mill at Grangeville. Given the uncertainty of new mill investments, the additional volume might be purchased outside the area, and thus provide only increased logging opportunities.

Northcentral Idaho tourism would have to quadruple from its 1994 level to replace lost timber earnings.

Table 8, Table 9, and Figure 15 summarize the ***high amenity alternative*** job and earnings impacts.[19] The impacts of this scenario are the reverse of the ***timber sales reduction scenario.***

Where the ***timber sales reduction scenario*** leads to a loss of 7% of all jobs by year 2000 (Table 6), the ***high amenity alternative*** could cause a 4% job gain (Table 8). Similarly, the ***timber sales reduction scenario*** cause a loss of 9% of region-wide earnings (Table 7), while the ***high amenity alternative*** would cause a 5% increase in earnings (Table 9).

A scenario that might shift federal timber management authority to the Idaho Department of Lands has almost identical positive effects.

CAN TIMBER INCOME BE REPLACED?

Resource-based recreation and quality-of-life migration are often suggested as replacements for losses in timber and other forest commodity activities. Tourism has been growing rapidly in Idaho, so has the flight of people and capital from urban to rural areas.

Our year 2000 baseline projections already contain growth in many sectors including a brisk 5% per year growth in tourism and retired and leisure in-migrants. Some, but not all displaced timber workers will find jobs in the growing sectors. Others who leave will sell their homes to retired and leisure in-migrants, and to in-migrants seeking jobs in the growing sectors. These offsetting effects are already represented in our impact estimates.

Our ***timber sale reduction scenario*** forecasts a loss of 9% of all northcentral Idaho earnings (Table 7). We asked: What tourism increase would be necessary to replace this earnings loss? Although the question is artificial, it explores the tourism replacement hypothesis.

Not all communities can become tourist towns.

The 9% loss is $88 million in regional earnings (Table 7). We developed a ***tourism-replaces-timber scenario*** by increasing tourist expenditures proportionally until the original $88 million earnings loss is compensated. This zeroes out the year 2000 region-wide earnings loss. Table 10 summarizes the impact to jobs, while Table 11 summarizes the impact to earnings. Lost timber and related industry earnings replacement would require a 257% tourism increase over its year 2000 baseline level. This is in addition to the 5% per year tourism increase already included in our year 2000 baseline projection. That means that northcentral Idaho tourism would have to grow 291% beyond its 1994 level (a quadrupling).

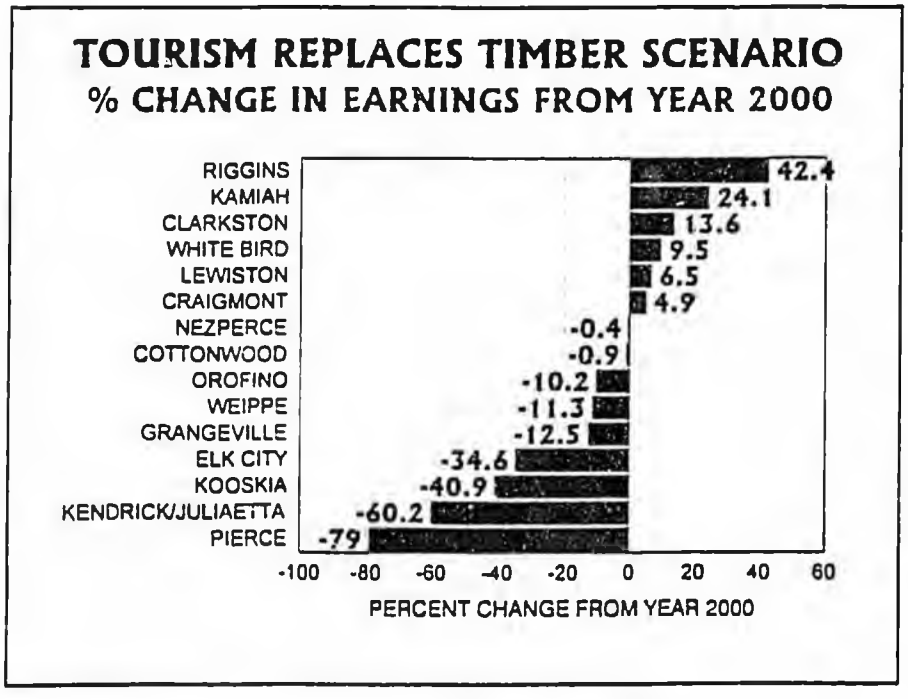
TABLE 10 REGION-WIDE EMPLOYMENT IMPACT OF TOURISM REPLACES TIMBER SCENARIO

	TOTAL EMPLOYMENT					
COMMUNITY	1994 ACTUAL (1)	2000 BASELINE (2)	2000 SCENARI (3)	CHANGE FROM 2000 (4) (3)-(2)	%CHANGE FROM 2000 (5) (4)/(2)	%CHANGE FROM 1994 (6) (3-1)/(1)
GRANGEVILLE	3,149	3,402	3,331	(71)	-2.1%	5.8%
COTTONWOOD	1,123	1,209	1,258	49	4.1%	12.1%
KOOSKIA	1,281	1,343	1,163	(180)	-13.4%	-9.2%
CRAIGMONT	554	588	678	90	15.4%	22.3%
NEZPERCE	312	321	332	11	3.5%	6.7%
ELK CITY	558	582	572	(10)	-1.8%	2.4%
WHITE BIRD	170	186	258	72	38.9%	51.2%
RIGGINS	595	679	1,188	510	75.1%	99.8%
LEWISTON	19,539	21,163	23,445	2,283	10.8%	20.0%
CROFINO	3,523	3,744	3,880	137	3.7%	10.0%
KAMIAH	1,455	1,540	1,956	416	27.0%	34.4%
PIERCE	580	591	208	(382)	-64.7%	-64.0%
WEIPPE	378	384	350	(35)	-9.1%	-7.5%
CLARKSTON	5,244	5,997	7,291	1,295	21.6%	39.0%
KENDRICK/JULIAETTA	665	672	379	(293)	-43.6%	-42.1%
TOTAL	39,121	42,399	46,289	3,890	9.2%	18.3%

TABLE 11 REGION-WIDE EARNINGS IMPACT OF TOURISM REPLACES TIMBER SCENARIO

	TOTAL EARNINGS ($1,000)					
COMMUNITY	1994 ACTUAL (1)	2000 BASELINE (2)	2000 SCENARIO (3)	CHANGE FROM 2000 (4) (3)-(2)	%CHANGE FROM 2000 (5) (4)/(2)	%CHANGE FROM 1994 (6) (3-1)/(1)
GRANGEVILLE	$65,057	$68,900	$60,272	($8,628)	-12.5%	-7.4%
COTTONWOOD	$21,401	$22,823	$22,623	($199)	-0.9%	5.7%
KOOSKIA	$30,729	$31,562	$18,654	($12,908)	-40.9%	-39.3%
CRAIGMONT	$13,681	$14,028	$14,721	$693	4.9%	7.6%
NEZPERCE	$7,590	$7,696	$7,662	($34)	-0.4%	1.0%
ELK CITY	$14,566	$14,827	$9,696	($5,132)	-34.6%	-33.4%
WHITE BIRD	$3,082	$3,279	$3,591	$313	9.5%	16.5%
RIGGINS	$11,391	$12,448	$17,724	$5,277	42.4%	55.6%
LEWISTON	$492,293	$522,808	$556,584	$33,775	6.5%	13.1%
OROFINO	$75,285	$78,192	$70,190	($8,002)	-10.2%	-6.8%
KAMIAH	$29,270	$30,062	$37,308	$7,247	24.1%	27.5%
PIERCE	$18,266	$18,399	$3,865	($14,534)	-79.0%	-78.8%
WEIPPE	$10,115	$10,191	$9,036	($1,155)	-11.3%	-10.7%
CLARKSTON	$106,607	$118,744	$134,931	$18,187	13.6%	26.6%
KENDRICK/JULIAETTA	$21,065	$21,339	$8,488	($12,851)	-60.2%	-59.7%
EARNINGS TOTAL	$920,398	$975,297	$975,346	$0	0.0%	6.0%

FIGURE 16



We do not speculate on the likelihood of this increase. We focus our attention on the pattern of specific community effects. While region-wide earnings could be compensated by tourism, the response of individual communities varies greatly (Figure 16). A community's ability to attract visitors depends on its location and recreation resources, and these are reflected in the relative size of the existing tourist economy.

The communities that experience the greatest absolute increase are those that start with the greatest recreation resources. With 23% of all 1994 earnings linked to tourism, Riggins is the most tourism-oriented of all our communities (Figure 7). It has a strategic location on the Salmon River for float-boat companies and other river recreation, and *U.S. Highway 95* for capturing the business of pass-through travelers. As a result Riggins gains most under our 291% increase in tourism, increasing its community-wide year 2000 earnings by 42% (Table 11).

Contrast this with Pierce. The community is remote and its surrounding woodlands are not unique. Its little visitor activity is generated from seasonal hunters and anglers who account for only 1% of earnings (Figure 7). On the other hand, the Pierce plywood mill is one of the region's largest wood users, and accounts for 91% of all

Pierce earnings (Figure 6).[20]

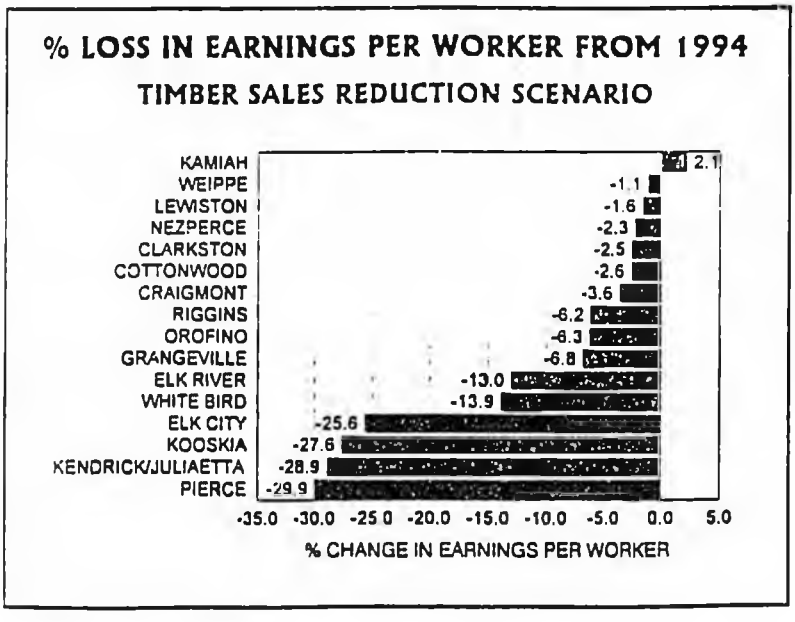
Under the ***timber sales reduction scenario*** this mill closes and 82% of the community's total year 2000 earnings are lost (Table 7). A 291% increase in tourism generates little added earnings because Pierce has so little tourism to begin with. It is unlikely that tourism could ever replace timber in Pierce's economy.

The Riggins and Pierce cases are extreme but illustrate two important points. First, not all communities can become tourist towns. The attractiveness and endowment of recreation resources varies widely. Second, some communities are more specialized and will have a harder time replacing lost timber income.[21]

TABLE 12 EARNINGS PER WORKER

COMMUNITY	1994 ACTUAL	2000 BASELINE	% CHANGE 1994
GRANGEVILLE	$20,659	$20,252	-2.0%
COTTONWOOD	$19,062	$18,879	-1.0%
KOOSKIA	$23,991	$23,506	-2.0%
CRAIGMONT	$24,687	$23,878	-3.3%
NEZPERCE	$24,359	$23,955	-1.7%
ELK CITY	$26,105	$25,478	-2.4%
WHITE BIRD	$18,092	$17,673	-2.3%
RIGGINS	$19,134	$18,335	-4.2%
LEWISTON	$25,196	$24,704	-1.9%
OROFINO	$21,339	$20,885	-2.1%
KAMIAH	$20,120	$19,520	-3.0%
PIERCE	$31,508	$31,139	-1.2%
WEIPPE	$26,755	$26,507	-0.9%
ELK RIVER	$11,108	$11,084	-0.2%
CLARKSTON	$20,329	$19,801	-2.6%
KENDRICK/JULIAETTA	$32,139	$31,749	-1.2%
TOTAL	$23,486	$22,966	-2.2%

FIGURE 17



TRENDS IN EARNINGS PER WORKER

Public forest policy affects earnings per worker under all scenarios (Table 12). Column 1 shows actual earnings per worker in 1994. The region-wide average of $23 thousand has a high community variance, ranging from a low of $18 thousand in White Bird to a high of $32 thousand in Kendrick/Juliaetta. The communities with lower than average earnings per worker are more dependent on tourism and residents' outside income. Businesses catering to the needs of tourists and residents with outside income are generally lower paying trade and service industries. In contrast, communities with higher than average earnings per worker are timber communities. Column 2 shows earnings per worker projected to year 2000 (in constant 1994 dollars). Tourism and residents' outside income are projected to grow at above average rates (5% per year), while high paying sectors including the federal government and timber are projected with either zero growth or low growth. As a result, every community exhibits a trend to a lower paying economy. Column 3 shows the decline from 1994 in percentage terms.

Figure 17 shows how earnings per worker would change from 1994 to the year 2000 under the ***timber sale reduction***

FIGURE 18

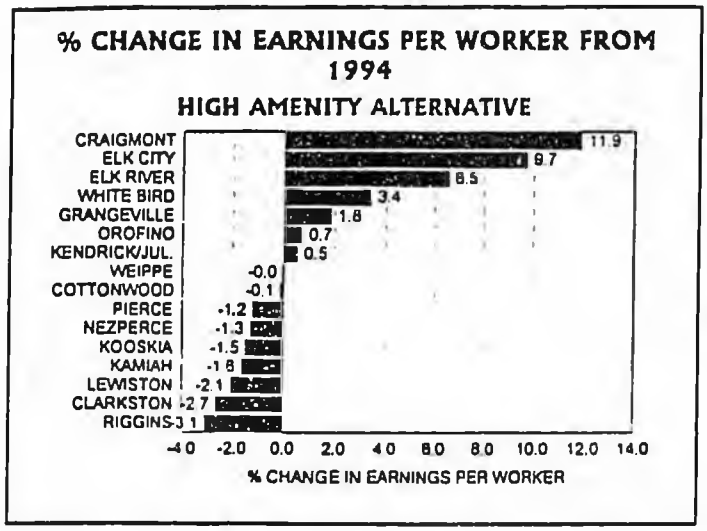
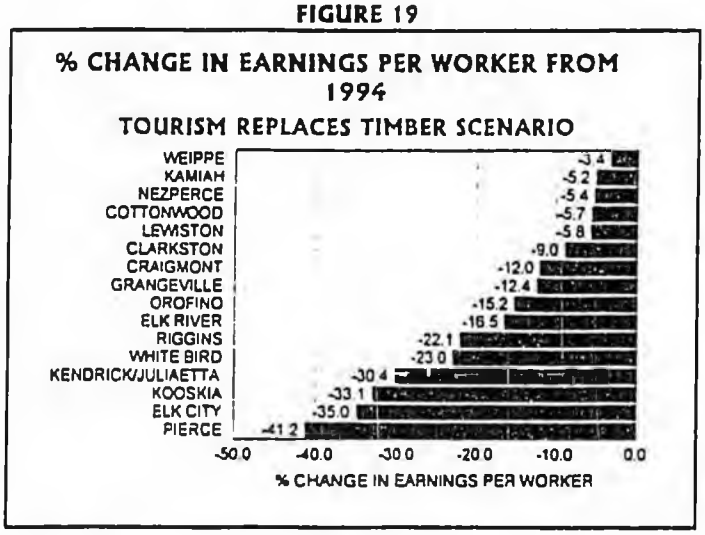


FIGURE 19



Replacing high paying timber jobs by many more low paying jobs in the tourist sectors pauperizes the economy.

scenario. Figures 18 and 19 refer to similar changes under the ***high amenity*** and the ***tourism replaces earnings*** scenarios. Earnings per worker are directly related to wood products activity and inversely related to tourism. The ***high amenity alternative*** actually has the largest remaining harvests and the lowest loss in earnings per worker (-1%) region-wide.[22] The ***timber sales reduction scenario*** has a greater negative regional impact (-4%) with some communities suffering up to a 30% loss.

The ***tourism replaces timber scenario*** causes the most dramatic decline in earnings per worker. Replacing high paying timber jobs by many more low paying jobs in the tourist sectors pauperizes the economy. Region-wide earnings per worker drops over 10% from its 1994 level. Predictably timber-dependent communities suffer the greatest declines. In Elk City earnings per worker drop 35%, in Pierce they drop 41%.

TIMBER POLICY EFFECTS ON LOCAL PUBLIC FINANCE

We constructed fiscal impact models to look at budget effects in Idaho County, Grangeville City, and the Grangeville and Cottonwood School Districts (Table 13).

Public Revenue and Expenditure Influences

Property taxes are the primary source of local government revenue. The federal government is exempt from property taxes, but funds local school districts and county governments through "payments in lieu of taxes" (PILT) and the "twenty-five percent fund," or PILT/25% payments.

Residents' income expands and contracts with business activity and migration. Property values respond similarly -- the more prosperous a business the greater its capital value (and therefore its taxable property value). Some in-migrants build new homes and these add to a county's tax base. Our fiscal impact model estimates government revenues as a function of residents' income, plus federal PILT/25% payments.[23]

The principal determinant of public expenditures is population. An increase in jobs or in-migrants requires greater government service expenditures.

Idaho County Government Impacts

Table 13 estimates the fiscal impact of all three policy change scenarios on Idaho County Government. Under the ***timber sales reduction scenario*** there was a significant loss of jobs in the Idaho County communities of Grangeville, Kooskia, and Elk City, and general losses in other Idaho County communities. By year 2000 we assume a full adjustment to job losses, including a significant out-migration from Idaho County. The impact on county expenditures could be a decline of 15%.

However, revenues decline more than expenditures. PILT/25% payments drop to a PILT floor. The net effect is an annual Idaho County Government deficit of $1.6 million, roughly 17% of year 2000 expenditures.

The ***high amenity alternative*** would have the opposite effect. Employment increases with this scenario, led by higher than average paying timber jobs, that increase area earnings more than employment. Both county revenues and expenditures increase, but revenues more so. PILT/25% increase 74% over the year 2000 baseline level. County revenues could be as much as $1.2 million over expenditures (a 13% surplus).

In the ***tourism replaces timber scenario,*** Idaho County tourism-linked earnings fall short of replacing all lost timber earnings. Total earnings fall some while employment (and thereby population) increase slightly. County expenditures increase 2%, PILT/25% payments decrease 65%, while other county revenues decrease 11%. The net effect is a county budget deficit that

TABLE 13 FISCAL IMPACTS, SELECTED LAYERS OF IDAHO COUNTY GOVERNMENT

IDAHO COUNTY	EXPENDITURES	REVENUES:			SURPLUS(DEFICIT)	
	TOTAL	PILT/25%	OTHER	TOTAL	$	%
TIMBER REDUCTION	-14.5%	-65.0%	-21.4%	-29.5%	($1,596,996)	-17.1%
HIGH AMENITY	7.0%	74.2%	10.4%	22.3%	$1,242,690	13.3%
TOURISM/TIMBER	2.5%	-65.0%	-10.7%	-20.8%	($2,377,193)	-25.4%

GRANGEVILLE SCHOOL DISTRICT	EXPENDITURES	REVENUES:			SURPLUS(DEFICIT)	
	TOTAL	PILT/25%	OTHER	TOTAL	$	%
TIMBER REDUCTION	-16.0%	-65.0%	-23.3%	-28.7%	($1,350,582)	-12.7%
HIGH AMENITY	7.6%	74.2%	11.2%	19.3%	$1,244,677	11.7%
TOURISM/TIMBER	2.5%	-65.0%	-12.1%	-18.9%	($2,273,433)	-21.4%

COTTONWOOD SCHOOL DISTRICT	EXPENDITURES	REVENUES:			SURPLUS(DEFICIT)	
	TOTAL	PILT/25%	OTHER	TOTAL	$	%
TIMBER REDUCTION	-7.1%	-65.0%	-9.2%	-14.6%	($203,755)	-7.5%
HIGH AMENITY	4.1%	74.2%	4.7%	12.6%	$229,508	8.5%
TOURISM/TIMBER	2.9%	-65.0%	-1.5%	-8.7%	($314,378)	-11.6%

GRANGEVILLE CITY	EXPENDITURES	REVENUES:	SURPLUS(DEFICIT)	
	TOTAL	TOTAL	$	%
TIMBER REDUCTION	-14.5%	-19.1%	($112,862)	-3.9%
HIGH AMENITY	9.6%	13.8%	$143,107	4.9%
TOURISM/TIMBER	-2.6%	-10.8%	($218,332)	-7.5%

could be as great as $2.4 million, or 25% of year 2000 expenditures.

Impacts on Other Layers of Government

The pattern of impacts on the Grangeville and Cottonwood school districts are similar to those in Idaho County: deficit under the ***timber sales reduction scenario***, surplus under the ***high amenity alternative***, and a severe deficit under the ***tourism replaces timber scenario***. City governments do not qualify for PILT/25% payments, so Grangeville City's impacts are less.

Summary of Fiscal Effects

1) The loss of high paying timber jobs and PILT/25% payments that accompany federal timber harvest reductions will cause fiscal pressures for local governments. These will be greatest where job and income losses are greatest. Counties and school districts will feel it most.

The Loss of high paying timber jobs and PILT/25% payments that accompany federal timber harvest reductions will cause fiscal pressures for local government

2) An increase in federal timber activity would improve fiscal conditions. Profitable sawmills and high paid timber workers increase property tax revenues, and PILT/25% payments would increase.

3) Major transition of the regional economy from timber to tourism could be accompanied by widespread fiscal strains. High paying timber jobs and PILT/25% payments would be greatly reduced, replaced by low paying tourism sector jobs. Because population increases while income doesn't, public services demand increases more than property tax revenues. [24]

SAWMILL CLOSURES COULD AFFECT THE LEWISTON PULPMILL

Sawmills produce large volumes of hog fuel, wood chips, and sawdust as by-products of lumber production, and these are raw materials for pulp and paper in the Clearwater timbershed. The Lewiston pulpmill purchases from sawmills within a 150 mile radius almost a million tons (93 thousand truck loads) of chips and sawdust annually. Sawmill closures reduce chip availability and pulpmills must run close to capacity or close.. Chip prices have soared. Alternative fiber sources are increasing but may be insufficient.

We have not yet forecast the closure of the Lewiston pulpmill. However, we recognize that the reduction in local fiber availability that accompanies our ***timber sales reduction scenario*** weakens that mill's competitive position. We simulated a hypothetical closure of the pulpmill to examine the potential losses of jobs and income.[25]

The Lewiston pulpmill annually purchases 93 thousand truckloads of sawdust and chips, and sawmill closures severely constrain chip availability

We already showed that Lewiston would lose just under 300 of its year 2000 jobs and approximately $5.4 million of its earnings from hinterland sawmill closures (Tables 6 and 7). If the Lewiston pulpmill closes, the net job loss rises to 4,500 and the earnings loss rises to $145 million. These substantial losses are seen in sectoral detail in Table 14 for employment and Table 15 for earnings. Assuming economic adjustments and relocations are complete by 2000, the

TABLE 14 LEWISTON PULPMILL CLOSURE

TOTAL EMPLOYMENT

INDUSTRY	1994 ACTUAL (1)	2000 BASELINE (2)	2000 SCENARIO (3)	CHANGE FROM 2000 (4) (3)-(2)	%CHANGE FROM 2000 (5) (4)/(2)	%CHANGE FROM 1994 (6) (3-1)/(1)
Ag	728	731	726	(5)	-0.7%	-0.3%
Mining	70	72	61	(11)	-15.9%	-13.4%
Construction	1,012	1,042	841	(201)	-19.3%	-17.0%
Food Processing	199	219	206	(13)	-5.8%	3.6%
Manufacturing	826	879	830	(49)	-5.5%	0.5%
Wood/paper	2,167	2,168	472	(1,696)	-78.2%	-78.2%
Communications	280	311	256	(55)	-17.6%	-8.3%
Transportation	841	887	626	(261)	-29.4%	-25.6%
Public utilities	69	74	47	(27)	-36.0%	-31.8%
Trade	3,864	4,402	3,686	(716)	-16.3%	-4.6%
Finance	1,313	1,415	1,147	(268)	-18.9%	-12.6%
Motels/Dining	1,301	1,537	1,269	(268)	-17.4%	-2.4%
Recreation	275	338	305	(34)	-9.9%	10.8%
Consumer Services	869	971	798	(172)	-17.8%	-8.2%
Business Services	1,176	1,288	1,091	(177)	-14.0%	-7.2%
Social Services	2,058	2,336	1,973	(363)	-15.5%	-4.1%
Local Govt	128	136	76	(59)	-44.0%	-40.8%
State Govt	2,003	2,018	1,895	(123)	-6.1%	-5.4%
Fed Govt	360	360	360	0	0.0%	0.0%
TOTAL EMPLOYMENT	19,539	21,163	16,665	(4,498)	-21.3%	-14.7%

TABLE 15 LEWISTON PULPMILL CLOSURE

TOTAL EARNINGS ($1,000)

INDUSTRY	1994 ACTUAL (1)	2000 BASELINE (2)	2000 SCENARIO (3)	%CHANGE FROM 2000 (4) (3)-(2)	%CHANGE FROM 2000 (5) (4)/(2)	%CHANGE FROM 1994 (6) (3-1)/(1)
Ag	$16,550	16,587	16,538	($49)	-0.3%	-0.1%
Mining	$2,404	2,475	2,171	($304)	-12.3%	-9.7%
Construction	$28,492	27,245	21,075	($6,171)	-22.6%	-20.4%
Food Processing	$6,122	6,729	6,398	($331)	-4.9%	4.5%
Manufacturing	$24,242	25,728	24,657	($1,070)	-4.2%	1.7%
Wood/paper	$113,311	113,344	24,337	($89,007)	-78.5%	-78.5%
Communications	$7,606	8,680	7,241	($1,439)	-16.6%	-7.2%
Transportation	$25,011	25,244	19,651	($5,593)	-25.1%	-21.4%
Public utilities	$2,839	3,033	2,013	($1,019)	-33.6%	-29.1%
Trade	$64,681	73,164	60,968	($12,196)	-16.7%	-5.7%
Finance	$28,682	30,432	25,217	($5,215)	-17.1%	-12.0%
Motels/Dining	$13,744	16,379	13,940	($2,439)	-14.9%	1.4%
Recreation	$2,640	3,292	3,040	($252)	-7.7%	15.2%
Consumer Services	$14,319	15,918	13,417	($2,501)	-15.7%	-6.3%
Business Services	$28,509	30,625	26,769	($3,856)	-12.6%	-6.1%
Social Services	$54,630	62,031	53,636	($8,395)	-13.5%	-1.8%
Local Govt	$3,074	3,250	1,894	($1,355)	-41.7%	-38.4%
State Govt	$48,153	48,518	45,712	($2,806)	-5.8%	-5.1%
Fed Govt	$9,133	9,133	9,133	$0	0.0%	0.0%
TOTAL EARNINGS	$492,293	$522,808	$377,808	($145,000)	-27.7%	-23.3%

Lewiston economy would falter with 21% fewer jobs and 27% less earnings from the 2000 year baseline. These are significant impacts in a large community.

A pulpmill closure poses troubling fiscal consequences to Nez Perce County. Of the county's 1995 tax collections, $7.7 million or 25% came from the Potlatch pulpmill-sawmill property (Nez Perce County, 1995).

ON THE ACCURACY OF OUR PREDICTIONS

We use an input-output model to predict job and income impacts.[26] These models' predictions are accurate provided that its conditions and assumptions are met. The reasonableness of predictions are judged on the reasonableness of assumptions.

Three Critical Assumptions

We make three critical assumptions: First, background industry job growth is extrapolated from historic trends, and forecasts from both Idaho Power and the U.S. Department of Commerce. These are the best baseline projections available.

Second we assume that by year 2000 displaced workers will either find employment in growing parts of the economy or out-migrate.

Third, houses vacated by displaced workers will not by themselves attract immigrants. In several scenarios, the eventual out-migration of displaced workers leaves vacant houses. The reduction on local housing prices could attract in-migrants.

Whether these are retired and leisure, or unemployed living off relief, their local spending could blunt some of the job losses in resident-serving sectors.

An Employment-Led Theory of Community Growth

A related issue is an amenity-driven employment-led theory of western regional economic growth (Power, 1995). Amenity rich locations could attract new residents independent of confirmed job prospects. New industry is then attracted to the area by the existence of the newly arrived and qualified, but underemployed work force.

Pulpmills must run at capacity or close. If the pulpmill closes, Lewiston would lose 4,500 jobs (21% of total) and $145 million in earnings (27% of total).

Where recreation and amenity resources are great, it is conceivable that outmigration and the bargain-priced housing that follows a sawmill closure could accelerate immigration which attracts new industry beyond baseline projections. However, most of our communities losing sawmills are not the region's amenity-rich places, and we know of little evidence of amenity-driven employment-led growth in the northcentral Idaho impact region.

CONCLUSIONS

We conclude that National Forest dominance of local resource markets is large, and that federal policies determine the character and economic viability of Idaho's resource communities.

Communities are specialized so changes in federal timber policy affect them differently. If federal timber sale reductions continue, 6 of northcentral Idaho's 9 major sawmills will close by year 2000. Pierce could be wiped out: a loss of 75% of all jobs. Impacts at other timber communities are also severe, job loses of 30% to 45%. Grangeville and Orofino lose mills, and lose trade with timber towns, but they are partially buffered by their diversity, and by growth in other parts of their economies. The Lewiston pulpmill is also threatened by reductions in chip supplies and its closure would significantly increase all regional impacts.

Forecast growth in lower paying service industries is leading a regional-wide trend toward lower real earnings per worker. The loss of sawmills accelerates the trend, with average real earnings dropping 5%. The drop is greatest in towns with sawmill closures, where earnings per worker fall as much as 30%. Federal payments to Idaho County, and its two school districts could decline by 65%, and other fiscal impacts increase county budget deficits.

Although tourism and in-migration are the fastest growing sectors they do not yet contribute as much as traditional industry to the region's economic base. Tourism would have to quadruple to replace timber losses. Even then only a few high amenity communities would benefit. Most timber communities would continue to decline. Transitioning from a timber to a tourism economy lowers earnings per worker, and results in fiscal strains on local government.

It may be possible to have both a healthy environment, including a thriving tourism sector and enviable quality of life, along with a healthy timber economy. Our high amenity scenario (and a state management of federal lands scenario) would reverse the timber sale reductions scenario--total jobs and earnings would increase significantly.

Studies of Forest Service policy funded by state legislatures are rare. We believe the present study empowers Idaho decision makers. Who will live in Idaho's communities? We conclude that National Forest policy greatly influences the answer.

Community Models Have Many Uses

Our purpose was to estimate the impacts of three scenarios involving policy changes and timber. We achieved our purpose. Our study is based on an ambitious community-level modeling approach which has potential uses beyond our original purposes. Analysts could use it to evaluate other policies, public projects, new business location efforts, or responses to changes in the general economy.

Idaho applications of community modeling are growing. Hamilton and Quinn (1989) analyzed visitor and outdoor recreation effects to examine how public lands influence the recreation economy. Robison and Hormaechea (1986) looked at the community economy effects of restoring anadromous fishing in the Southfork of the Salmon River. Robison et al. (1990) used a community model to analyze highway relocation in Sandpoint. Other examples of community modeling are found in Robison (1995c).

A set of community models for Idaho's Lemhi and Custer Counties were built to examine salmon recovery and its impacts on recreation and ranching (Robison et al. (1993). When a 1995 court injunction halted all mining, logging, and grazing in that region, within days this user-friendly model allowed the local extension agent to calculate job and income impacts (University of Idaho, 1995). Rapid impact estimation facilitated Idaho's political response.

The present study was time-consuming, developing subcounty data for a broad collection of communities, and estimating a complex pattern of inter-community trade. With this work behind us, new impact questions can be evaluated quickly and cheaply. With most of the research and development complete, we can build alternative resource change models and expand to new regions more quickly and at lower cost. With models widely in place Idaho decision makers can be empowered with information on the response of Idaho's economy to a variety of changes.

ENDNOTES

1. One study estimated that in Idaho north of the Salmon River Gorge timber and wood products directly or indirectly accounted for nearly 45% of all 1987 income (Robison et al., 1991).

2. Forest Plan ***Preferred Alternatives*** of the Nez Perce and Clearwater National Forest Plans projected combined allowable timber sale quantities of 281 million board feet (MMBF) annually. In contrast, 1995 sales fell to 21 MMBF. From this source we project local log availability to drop to approximately 3 MMBF by year 2000.

3. The 1995 Legislature passed ***Senate Bill 1276*** providing partial funding to extend the analysis to the St. Joe timbershed (Latah and Benewah Counties) and to the timbershed of the westcentral Idaho highlands (Adams, Boise, Gem, Payette, Valley, and Washington Counties). This work is in progress.

4. The technique for estimating intercommunity trade is described in Robison and Miller (1991), and Robison et al. (1993). The method for obtaining economic data at the community level entails the spatial disaggregation of published county data to communities. We accomplish this using mainly yellow page business listing, and U.S. Census information. Technique particulars are described in Robison and Miller (1991), Robison and Peterson (1995), and Robison (1995a).

5. Our detailed report of charts and impact tables (Robison et al., 1996) includes a ***community profile*** like tables 1 and 2, and figures 3 and 4, for every community in our northcentral Idaho impact region.

6. Our earnings estimates for all industries will normally stand considerably higher than wage and salary figures alone. "Earnings" includes proprietors' income as well as wages and salaries and this can be substantial in some industries. In addition, given the manner in which we estimate community earnings, our estimates include employer contributions to social insurance, mainly employer payments for employee social security, and these are normally not reported in wage and salary statistics.

7. Economic base theory has roots in both economics and geography (Lane, 1966). Particularly important works would have to include Andrews' (1953) nine article series in ***Land Economics,*** North (1955), and Tiebout (1956 and 1962). Recognizing the kinship of export base and input-output (Billings, 1969; and Merrifield 1987), our community models incorporate an export base component. We use our export-base/input-output model to make our static export base descriptions, and our more traditional input-output model to make predictions elsewhere in the document.

8. In the case of hotels and motels, and "miscellaneous amusement services," we assume 100% of their business serves visitors. Beyond these we identify tourism with the non-resident sales of eating and drinking places and retail trade. Ideally we would scientifically sample area eating and drinking and retail trade establishments to determine the portion of their sales to residents versus non-residents. Lacking the resources for this effort, we opted for an informal survey. At each community we contacted by phone several retail trade and eating and drinking establishments asking whoever answered to provide us with a rough estimate of the resident-non-resident breakdown of their business. In Robison et al. (1996) we provide a list of the contact establishments in each community.

9. The table below shows recent historic growth in county employment, and projections of future growth by the U.S. Department of Commerce (1992) and by Idaho Power (1993). Column 1 shows ***the annual average growth of employment*** during the fifteen-year period of 1978 to 1993 for the four counties of our impact region. These data are obtained from the U.S. Department of Commerce's Regional Economic Information System (REIS). Clearly northcentral Idaho counties have not been Idaho's fastest growing in recent years. Clearwater County jobs actually declined during the period, at rate of 0.5% per year. Idaho County grew, but at less that 1% per year. Lewis and Nez Perce Counties grew at 1.2% and 1.3% per year respectively, but even then this was roughly a percentage point less than the 2.2% per year growth in employment in the state as a whole. As columns 2 and 3 indicate, there is substantial disagreement between the U.S. Department of Commerce and Idaho Power.

Annual Average Growth in Total Employment in Selected Idaho Counties and Statewide, Historic 1978 to 1993 and Projected to 2000

County	Historic 78 to 93 (1)	Projected 1994 to 2000 U.S. Commerce Department (2)	Idaho Power* (3)
Clearwater	-0.5%	0.2%	2.6%
Idaho	0.9%	0.5%	2.2%
Lewis	1.2%	0.7%	1.6%
Nez Perce	1.3%	0.7%	1.9%
Idaho Statewide	2.2%	1.4%	2.7%

* Idaho Power projections refer to non-agricultural employment only.

Figures shown in all three columns are generally aggregates of roughly SIC one digit employment estimates. We considered the historic growth rate as a third projection and arrived at a "high average" compromise projection by taking the simple average of the higher two of the three projections. We fed our high average projections developed at the roughly SIC one digit level into the roughly SIC four level of our un-aggregated community economic models.

10. Our detailed report of charts and impact tables (Robison et al., 1996) includes a *profile and Projection* like table 4 for every community in our northcentral Idaho impact region.

11. While there is much talk of in-migration into amenity rich places in the west, most of the evidence is anecdotal. In a longitudinal analysis (1979 to 1989) of the Oregon economy Robison (1995) finds indirect evidence that in selected Oregon subregions significant in-migration has occurred.

12. The National Forests in Idaho have 9.7 of 14.5 million suitable acres (67%) and 101.6 of 139.6 MMMBF of suitable sawtimber inventory (73%).

13. Statistical tests show National Forest sales levels had minimal effects on local stumpage prices prior to 1990 when they were more stable. Tests made after timber sales reductions began to show large effects. From 1991 to 1994 stumpage prices rose $1.14/MBF for every MMBF reduction of National Forest uncut inventory. This one factor explained 44% of all variance in stumpage market prices. Many traditional determinants of stumpage value such as hauling distance or logging system (except helicopter) became insignificant.

14. Mill activity is based on forecast log availability from all forest ownerships but National Forest policies control the total log volume available. A small effective increase in salvage logging could raise total log availability to 178 MMBF/year. Transference of federal suitable timberlands to state management generates 393 MMBF/yr. A return to National Forest plan approved ASQ harvest levels makes 435 MMBF/year available. Finally, if National Forests operated at forest plan high amenity option ASQ's the annual availability would be 371 MMBF/year.

15. Initially, during the 1991-93 period mill production margins were rising as mills cut historically cheaper stumpage while lumber prices rose. However, during the prediction period higher stumpage sales prices became reflected in higher harvest prices. Then Canadian lumber import increases began lowering lumber prices squeezing the margin from the product side. In eight quarters from 93/1 through 94/4, the estimated Douglas-fir and larch margin dropped 58%.

16. Log redistribution simulations were based on extrapolations of historical mill reactions to margin changes. Margin sensitive mills lose log market share. Once their log purchasing power declines below the ability to

obtain a critical minimum capacity, the simulator closes the mill. It then redistributes any freed-up volume to remaining mills based on their historic dependence on specific forest sources and flexibility in acquiring logs from multiple sources. If a material deficit remains, the closure and redistribution cycle repeats until aggregate mill consumption is less than or equal to the projected log availability from all sources.

17. Quarterly delivered pulp log prices averaged $142/MBF from 1st quarter 1992 through 2nd quarter 1994. By the 3rd quarter of 1995 they had risen to $250/MBF. High pulp log prices induced rapid private harvest responses. The market glut will be temporary as private pulp timber inventories are limited and logging pulpwood from National Forests can be prohibitively costly.

18. Our detailed report of charts and impact tables (Robison et al., 1996) includes a community-level industry-specific ***employment impact of timber sales reduction scenario table,*** like table 5, for every community in our northcentral Idaho impact region. Table 6 shows summary employment impact information from these individual community employment impact tables. Similarly, our detailed report includes a community-level industry-specific ***earnings impact of timber sales reduction scenario table***, not shown, for every community. Table 7 shows summary earnings impact information from these individual community earnings impact tables.

19. Our detailed report of charts and impact tables (Robison et al., 1996) includes an industry-specific ***employment impact of high amenity alternative table,*** and an industry-specific ***earnings impact of high amenity alternative table*** for every community in our northcentral Idaho impact region. Tables 8 and 9 show summary information from those individual community impact tables.

20. The Pierce wood products mill actually accounts for 82% of the communities earnings. The additional 9% (91% = 9% + 82%) of earnings linked to wood products in Pierce refer to loggers who serve mills other than Pierce's in a given year. Thus, with a loss of the mill the community loses earnings linked to the mill, but retains the earnings of these outside-working loggers.

21. Our detailed report of charts and impact tables (Robison et al., 1996) includes an industry-specific ***employment impact of the tourism-replaces-timber scenario table,*** and an industry-specific ***earnings impact of the tourism-replaces-timber scenario table*** for every community in our northcentral Idaho impact region. Tables 10 and 11 show summary information from those individual community impact tables.

22. Recall that under the ***high amenity alternative*** we located new mills in a near-random fashion. Accordingly, while the region-wide earnings per worker impacts of this scenario are likely reasonable, the particular community impacts are artifacts of our choice of communities to receive new mills.

23. PILT payments are effectively a payment floor. In addition, where 25% of all revenues from federal lands exceeds the floor, the amount of excess is added on and remitted to the county and its school districts. Beyond the floor, therefore, federal payments are a function of federal timber sales, grazing fees, camping fees, and any other activity that generates federal government revenues from federal lands located in the county.

24. Our fiscal impact model is built from actual data from 1993 Idaho County budgets projected to year 2000. The model includes a population function, and links to our community economic models. However, our impact estimates must be viewed with caution. Fiscal impact analysis is more complex than depicted by the simple linear relations of our fiscal impact model. There are other local revenues, such as local fees, intergovernmental transfers, and sales tax rebates that are nonlinear functions of residents' income. Some expenditures depend on more than population. For example, age, health, and size of families, the number of school aged children, and rates of public infrastructure utilization may influence some budgets more than population.

25. The site of the Potlatch pulpmill just outside the Lewiston City limits is also site of a Potlatch sawmill. It is popularly held that the sawmill is complementary to the pulpmill and could unlikely maintain an existence independent of the pulpmill. Accordingly, in simulating the shut down of the Potlatch pulpmill we simultaneously shut down the sawmill as well. Note: The impacts of the pulpmill closure to local government in Tables 14 and 15 include county government.

26. Our particular input-output model is unique in that it conveys detail to the level of individual communities, and includes an estimate of intercommunity trade. For details on this approach see Robison, 1995a.

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FINAL

STATEMENT OF
JAMES R. LYONS, UNDER SECRETARY
NATURAL RESOURCES AND THE ENVIRONMENT
UNITED STATES DEPARTMENT OF AGRICULTURE

Before the
Committee on Energy and Natural Resources
United States Senate

Concerning S. 1877, the Ketchikan Pulp Company
Timber Contract Extension Act

July 10, 1996

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

Thank you for the opportunity to present the Administration's views on S. 1877, the Ketchikan Pulp Company Timber Contract Extension Act. I am accompanied today by: Phil Janik, Regional Forester of the Alaska Region; Jim Perry, Associate General Counsel of the Department of Agriculture; Brad Powell, Forest Supervisor of the Ketchikan Area of the Tongass National Forest; and Fred Walk, Alaska Region Timber Management Director and contracting officer for the Ketchikan Pulp Company contract.

The Administration strongly opposes S. 1877. The bill would unilaterally modify the provisions of the long-term timber sale contract with Ketchikan Pulp Company (KPC) and extend it for 15 years until 2019. In so doing, the bill undermines the Secretary

of Agriculture's authority to manage the resources of the Tongass National Forest; restricts the Secretary's ability to adapt to changing environmental information; provides special benefits to a private corporation; and conflicts with certain existing laws, including the National Forest Management Act and the Tongass Timber Reform Act.

Secretary Glickman has committed the Department to maintaining a sustainable timber flow to Ketchikan Pulp Company in accordance with the terms of the existing contract, the Tongass Timber Reform Act, and other relevant statutes. If the United States decides to continue a contractual relationship beyond the year 2004 with KPC, we believe that the appropriate vehicle would be a new contract in accordance with the Tongass Timber Reform Act -- not the one provided in S. 1877.

While the Department would welcome a discussion of timber-related opportunities for southeast Alaska, we strongly object to legislating an extension of the current KPC contract as provided for in S. 1877. Should the bill come to the President for signature in its present form or as an amendment to other legislation, we would recommend that he veto it.

What the Bill Does

We object to the statutory modification of the existing long-term timber sale contract with Ketchikan Pulp Company in S. 1877. The contract is almost 50 years old and is the subject of substantial

litigation. In addition, a number of significant environmental laws have been enacted since the contract was signed.

Section 2(b)(1) of S. 1877 states that the "contract" acknowledges an intention on the part of the Forest Service to supply adequate timber after the completion of the contract "for permanent operation of the purchaser's facilities." However, neither the original 1951 contract nor the post-Tongass Timber Reform Act contract obligate the Forest Service to grant or approve an extension of the long-term contract.

Language in Section 2(b)(3) states that KPC plans to make "environmental and operational" improvements to its facility. Language in Section 2(b)(4) states that 15 years is the minimum reasonable contract extension period necessary to allow for the amortization of these improvements. S. 1877 requires that the Government continue a contractual relationship with KPC in order to assure that investments made by KPC may be amortized. An arrangement of this kind between the Government and a private corporation -- to substantially reduce business risk associated with improvements made to a private facility -- is unusual. We are concerned that this may create a precedent.

The bill contains provisions that are unclear, problematic, or the subject of ongoing litigation: Section 2(a) contains problematic definitions, such as definitions of the contract, mid-market criteria, and proportionality. Language in section 2(c)(2) concerning the sale offering plan could effectively put the

contract above the land management plan. Language in Section 2(c)(3) and 2(e) would put into law volume requirements currently disputed in litigation. Language in Section 2(c)(4) requiring that contract stumpage rates not place the purchases at a "competitive disadvantage to similar enterprises in the Pacific Northwest" is legally inexact and would likely generate extensive litigation. Language in Section 2(c)(7) would compromise the Chief's ability to terminate the contract to prevent "serious environmental damage, serious damage to cultural resources" or should the contract be "significantly inconsistent with land management plans adopted or revised."

Background

Several fifty-year timber sale contracts were used in Alaska to promote rural development and economic stability. We believe that the long-term contracts in Alaska accomplished their objectives in facilitating the establishment of a timber industry in Southeast Alaska and contributing to the early growth and development of Southeast Alaska's economy.

The economic climate has changed dramatically since Ketchikan Pulp Company's contract was signed in 1951. Recreation and tourism now draw over 600,000 visitors a year to Southeast Alaska -- more than double the visitation in the past 15 years. Sport and commercial fishing are also significant elements of the economy of Southeast Alaska and one of the top producers of jobs and revenues.

Statutory direction has also changed since Ketchikan Pulp Company's contract was signed in 1951: the Multiple-Use Sustained-Yield Act, the National Forest Management Act, the National Environmental Policy Act, the Alaska National Interest Lands Conservation Act, the Alaska Native Claims Settlement Act, and the Endangered Species Act, as well as specific legislative direction in the Tongass Timber Reform Act (TTRA) have been enacted. These laws have affected the way that we manage the Tongass and require the protection of certain resources and the sustainability of other resources and multiple uses of the forest.

In addition, Mr. Chairman, public concern about natural resources has grown since KPC's contract was signed in 1951. More people in Alaska and around the nation are concerned about the sustainability of resources of the Tongass National Forest. They expect timber, recreation, fish and wildlife, as well as the other commodity and non-commodity resources to flow from the Tongass National Forest.

Changes in the economy, in the law, and in public expectations make it increasingly difficult to reach consensus on how to manage the Tongass and find the balance between commodity and non-commodity uses. Committing resources through a legislated extension of the KPC contract as provided in S. 1877 would further limit management options on the Tongass and undermine our ability to balance these competing interests.

Through the revision of the land management plan, the Forest Service has been working tirelessly over the last several years to build consensus on how to manage the Tongass National Forest. We are committed to completing the revision of the Tongass Land Management Plan in the near future. We believe that we will be better equipped to make decisions about future long-term commitments to timber-related industries in Southeast -- reflecting sound scientific information and extensive public input -- once the revision process is completed.

Mr. Chairman, let me provide you updated information about the Forest Service's ability to meet their timber volume commitment to Ketchikan Pulp Company's existing contract. From 1989 to 1994, the Forest Service offered KPC 935.6 MMBF of timber. In that same time period, KPC harvested 926.9 MMBF. In 1995 the Forest Service offered KPC 157 MMBF and we are targeting 217 MMBF for 1996. Most of the 1996 program for KPC has been offered already -- indicating Forest Service efforts to meet KPC's concerns about early delivery. Forest Service figures indicate KPC currently has 295 MMBF under contract, although as always, litigation may affect the availability of some of this timber volume to KPC.

One of the significant factors to be taken into consideration in any discussion with KPC is the pending litigation against the United States. KPC is currently pursuing four claims against the United States claiming hundreds of millions of dollars in damages. While KPC is suing the United States over the interpretation of the provisions of the original contract and the changes that the

Tongass Timber Reform Act made to the contract in 1991, it is difficult for the Administration to consider entering into any new arrangement with them.

Conclusion

Mr. Chairman, for the last half century, the Forest Service has worked with private companies in many ways to develop a stable economy in Southeast Alaska and to promote the long-term sustainability of natural resources. We believe that the mission of the contract -- developing an industry base and providing year-round employment to support socio-economic development -- has been accomplished.

We would welcome a broad-based discussion of future timber-industry opportunities in Southeast Alaska, but we object to S. 1877 that circumvents the planning process, conflicts with the Tongass Timber Reform Act, and obligates the resources of the nation to one company for one purpose only, without a thorough analysis and discussion of options.

This concludes my testimony. We would be pleased to answer any questions you may have.

United States Department of Agriculture | Forest Service | Alaska Region | P.O. Box 21628 Juneau, AK 99802-1628

File Code: 1920

Date: August 16, 1996

Mr. Jack E. Phelps
Executive Director
Alaska Forest Association, Inc.
111 Stedman, Suite 200
Ketchikan, AK 99901-6599

Dear Mr. Phelps:

This is in response to your August 9, 1996 letter concerning possible changes to the Allowable Sale Quantity (ASQ), following comments last week by Willie Hensley, Commissioner of the Alaska Department of Commerce and Economic Development. On August 7, Commissioner Hensley made it clear that no final ASQ figures are available, that additional analysis is being conducted, and that "There's nothing at this point that we could accurately announce."

A routine step in the final phase of the land management planning process is to validate models and assumptions. There have been several rounds of such verification conducted, and there will be several more. It is unfortunate that incomplete material was released prematurely.

Any estimates about what the ASQ will be in the final revised Forest Plan or Final EIS alternatives are premature. We are analyzing many factors that may affect the ASQ of the draft alternatives. We are refining our planning models, for example, to ensure they accurately reflect resource conditions.

For example, one change is being made to a timber growth and yield model to more accurately identify the culmination of mean annual increment of timber growth. The change may reduce estimated timber yields by about 15 percent from those displayed in the Revised Supplement to the Draft Environmental Impact Statement (RSDEIS). On the other hand, there are other changes being made that will increase the estimated ASQ, such as an additional 30,000 acres of suitable timber land that has been identified on the Ketchikan Area. It is too soon to say what the cumulative net effect of these changes will be.

The Forest Supervisors are currently deliberating on an alternative to recommend to me for decision in September. Their deliberations will continue and will take into account public comments received by the end of the extended comment period as well as other updated information and analysis that will be included in the Final EIS. All draft alternatives are still under

consideration. These range in ASQ from nearly zero to over 600 million board feet (MMBF) annually.

The Forest Service will continue to fully consider the potential socio-economic impacts of alternatives in completing the revision of the Forest Plan. We continue to seek to fulfill the commitments made last summer by Chief Thomas and supported by Governor Knowles to work with Alaskans toward, among other things, a supply of timber that meets the terms of the long-term contract with the Ketchikan Pulp Company and also provides for independent and Small Business Administration purchasers.

In short, we do not believe that the RSDEIS is "grossly inaccurate," or that it contains any "fatal flaws," as stated in your letter. On the contrary, it incorporates the best available information, which we are continuing to refine. Consequently, we see no reason to withdraw the RSDEIS from consideration, further supplement or prepare a new draft EIS, or to approve the draft Record of Decision prepared in February 1993.

Sincerely,

/s/James A. Caplan for
PHIL JANIK
Regional Forester

Alaska State Legislature

HOUSE RESOURCES COMMITTEE

State Capitol
Juneau, Alaska 99801-1182
(907) 465-3715

FOR IMMEDIATE RELEASE August 16, 1996

House Resources Committee Holds Timber Fact Finding Hearing

Forest Service TLMP Timber Shortfall, The State's Stance on TLMP and KPC Contract Extension Legislation on Agenda

The House Resources Committee will hold a fact finding hearing at 9:00 am on Friday, August 23rd, at the House Resources Committee room in Juneau.

The purpose of the meeting is to inform the Committee and the public about changes in the Tongass Land Management Plan (TLMP) which have resulted in the reported 10-23% reduction in the Allowable Sale Quantity (ASQ) of the Draft TLMP.

Also on the agenda is inquiry into the State of Alaska's official position on the TLMP alternatives and on federal legislation to extend and modify Ketchikan Pulp Company's contract.

The Knowles Administration has been invited to testify concerning the August 7 announcement by Commissioner Hensley that there is a 23% reduction in timber available for harvest than what is reflected in the published TLMP draft.

Representative Williams commented on the importance of the reported reduction in ASQ, "The people of Alaska need to know if the TLMP draft they are commenting on is accurate. The Committee has the responsibility to the public to find out what exactly is going on internally at the Forest Service. Depending on what information comes out of this meeting, maybe the Forest Service should withdraw the current draft TLMP, correct it, and then present an accurate version to the public."

One of the key purposes of the National Environmental Policy Act (NEPA) is to fully inform the public of the consequences of any major project affecting the human environment. One of the questions the Committee hopes to have answered is: Has NEPA been violated by the changes that the Forest Service has made in the Draft TLMP?

With the TLMP comment deadline fast approaching, Representative Williams commented on the State's TLMP position, "The public deserves to know the official position of the Knowles Administration regarding which TLMP alternative the State supports. Up to this point, the Administration has not made public its stance on the plan revision other than to say enough timber must be made available for both KPC and the independent timber program. The people of Alaska deserve to know where the State stands on the future of Southeast Alaska's workers, their families, and the timber dependent communities."

The urgency of the meeting is being driven by looming federal deadlines, the TLMP comment period ends August 26 and Congress is scheduled to adjourn in September. The Ketchikan Pulp Company, which employs thousands of workers in Southeast, has said they will be forced to shut down if Congress doesn't pass, or the President doesn't sign a 15 year contract extension.

The Committee will also ask the Governor if there is anything he can do to help convince President Clinton to sign a KPC extension if, and when it reaches his desk.

The public is welcome to attend the hearing, but public comment will not be taken. Those testifying will be the Forest Service, The Knowles Administration, and Southeast Conference.

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For more information, contact Pete Ecklund at 247-4672.

Committees:
House Resources
Co-Chairman
World Trade &
State Federal Relations
Transportation
Rules
Oil & Gas

Alaska State Legislature

Representative William K. Williams

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August 14, 1996

The Honorable Tony Knowles, Governor
State of Alaska
PO Box 110001
Juneau, AK 99811-0001

Dear Governor Knowles:

The House Resources Committee is planning to hold a hearing in Juneau at the House Resources Committee Room at 9:00 am on Friday, August 23rd. The Committee will review TLMP issues and the KPC extension legislation.

The importance of your Administration's participation is threefold: What more, if anything, can the State do to advance the KPC extension and contract modification legislation now in Congress; explanation of the State's findings on the Tongass Land Management Plan revision and the 23% reduction in Allowable Sale Quantity (ASQ); and finally the State of Alaska's position regarding TLMP. The presence of Commissioner Willie Hensley, or whomever you deem appropriate, is respectfully requested.

It appears that legislation concerning a 15 year KPC contract extension, with modifications, can pass Congress. The barrier to continuation of these important Southeast jobs appear to be the Clinton Administration's unwillingness to establish a dialogue with either the Congressional Delegation or KPC. The Committee requests the Administration to testify and articulate those steps which you are willing to take to open a dialogue and to urge the Clinton Administration to support the legislation.

On August 7, 1996, Commissioner Hensley announced in Ketchikan that the Forest Service had experienced approximately 23% fall-down in the estimated ASQ for each of the TLMP alternatives. The Committee is concerned about this 23% reduction in ASQ. These concerns are heightened by the admission of Beth Pendleton of the TLMP planning team that there is a 10-15% reduction in ASQ. It looks as if it is a net number, meaning there have been serious changes in various sections of the draft plan which is out for public

comment. These changes need to be explained so the public is not misled in responding to TLMP. In this regard, we would be most appreciative if you could also make Kathleen Morse, and anyone else from your staff you deem appropriate, available to testify at this hearing.

The Tongass Land Management Plan comment deadline is fast approaching. The final TLMP will dictate the life of all Southeast residents for many years. Up to this point, your Administration has not made public its stance on the plan revision in regards to specific alternatives other than to say enough timber must be made available for both KPC and the independent timber program. The people of Alaska deserve to know where the State stands on the future of Southeast Alaska's workers, their families, and the timber dependent communities. Therefore, the Committee requests someone from your staff to explain the State's position on the TLMP revision.

I have asked Pete Ecklund of my office to be in contact with your staff to follow through on these requests. The Resources Committee and the people of Alaska appreciate your cooperation.

Sincerely,

W. R. Williams

Representative Bill Williams, Co-Chair
House Resources Committee

cc: House Resources Committee

Committees:
House Resources
Co-Chairman
World Trade &
State Federal Relations
Transportation
Rules
Oil & Gas

Alaska State Legislature

Representative William K. Williams

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August 15, 1996

Berne Miller, Executive Director
Southeast Conference
124 W 5th Street
Juneau, AK 99801

Dear Berne:

The House Resources Committee is holding a hearing in Juneau at the House Resources Committee room at 9:00 am on Friday, August 23rd. The Committee will look into TLMP issues and the KPC extension legislation.

The Committee respectfully requests your participation in the hearing to lay out the facts you have gathered on the Tongass Land Management Plan revision. The Committee, and the people of Alaska, need to hear your perspective. The hard work and effort Southeast Conference has put into gathering the facts on the TLMP revision, and specifically the reported 23% reduction in ASQ, will be most beneficial.

Southeast Conference's position as the neutral third party source for facts regarding Tongass timber issues is very much appreciated. This fact finding hearing will be greatly enhanced by your participation.

Please contact Pete Ecklund of my staff at 247-4672 to coordinate or if you have any questions.

Sincerely,

P.E.P.
Bill Williams

Representative Bill Williams, Co-Chair
House Resources Committee

cc: House Resources Committee

Committees:
House Resources
Co-Chairman
World Trade &
State Federal Relations
Transportation
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Alaska State Legislature

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August 14, 1996

Mr. Phil Janik, Regional Forester
U.S. Forest Service
PO Box 21628
Juneau, AK 99802-1628

Dear Mr. Janik:

The Alaska House Resources Committee intends to hold a hearing in Juneau at the House Resources Committee room at 9:00 am on Friday, August 23rd, 1996, regarding the following issues:

1. What, if anything, can the State of Alaska do to obtain the support of the Clinton Administration for the legislation now in Congress to extend and modify the Ketchikan Pulp Company's (KPC) long-term contract?

2. What is the status of discussions between KPC and the Forest Service as was promised by both you and Undersecretary Jim Lyons?

3. What position do you recommend the State of Alaska adopt with respect to the Revised Supplement to the Draft Environmental Impact Statement (RSDEIS) for the Tongass Land Management Plan (TLMP) in light of the 23% reduction for the estimated Allowable Sale Quantity (ASQ) for each alternative in the RSDEIS?

4. What is the status of the repeated requests to extend the comment period especially in light of NEPA and the 23% ASQ reduction now projected?

Before the Committee can address the third point, we need to know what miscalculations were made to create this ASQ shortfall. It is my understanding that the 23% ASQ reduction is a very fluid number which could be higher or lower depending on changes to the plan which the Forest Service team is making as this letter is written.

The Committee and the people of Alaska need to know what these changes are in order to determine whether to recommend that the RSDEIS be withdrawn, corrected, and presented again to the public. Our concern is that the public not be mislead by the RSDEIS which is presently out for review.

As you know, one of the key purposes of the National Environmental Policy Act is to fully inform the public of the consequences of any major project affecting the human environment. What actions has the Forest Service taken behind closed doors in order to bring the ASQ up to the published levels? Certainly the anticipated impacts of the RSDEIS for TLMP will be significant in Southeast Alaska, particularly with respect to timber dependent communities and jobs.

Accordingly, it would be most helpful if you would make available to the Resources Committee for this hearing the three Forest Supervisors and the Planning Team members who are working on the changes to correct the miscalculations which have resulted in the reported 23% net reduction in the ASQ.

The Committee and the people of Alaska look forward to hearing from you on this matter. Pete Ecklund of my staff will be calling you, or whomever you designate to correspond directly.

Sincerely,

W. K. Williams

Representative Bill Williams, Co-Chair
House Resources Committee

cc: Forest Supervisors
House Resources Committee

TONY KNOWLES
GOVERNOR

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STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

July 5, 1996

The President
The White House
Washington, DC 20500

Dear Mr. President:

Congress is currently debating whether to extend the Ketchikan Pulp Company (KPC) contract. The Ketchikan Pulp Miil is the single largest employer and taxpayer in Ketchikan and is critically important to the jobs and families of the people who live and work in Ketchikan and surrounding communities.

Bette. than I can express, let me quote from a letter I recieved from Kay Sims, a community leader in Southeast Alaska, who cares a great deal about Ketchikan:

> Every day I realize how much every one of us is dependent upon the Timber and Fishing Industry... I really hesitated writing this letter, because who am I to tell you the Governor of Alaska what I feel he should be doing? But on the other hand, I'm a 45 year Alaskan resident; a part of a 4 generation Alaskan family with a parent, children and grandchildren making their home here in Ketchikan. I'm an Alaskan who loves and enjoys this beautiful state and never fails to marvel at its grandeur. I'm an Alaskan whose company has put a great deal of money back into its properties and the communities. I'm an Alaskan whose annual company payroll is close to three million dollars here in Southeast Alaska, a payroll that is 75% dependent upon a successful resource based economy: namely the Timber and Fishing Industry.

Attached is the letter I sent to Mark Suwyn, CEO of Louisiana Pacific regarding an extension to KPC's contract. I support a contract extension subject to the five principles outlined in the letter which include: compliance with environmental laws within three years; commitment to local hire and contracting; adherence to multiple use and sustained yield principles: expeditious completion of TLMP; and exploration of new technology to maximize the value of timber harvested.

To comply with these principles may well require a several hundred million dollar investment by KPC. I believe it is a sound and reasonable business principle to provide an opportunity to amortize this investment in technology which will protect our air and water, retool the mill to provide higher value-added products, and remain competitive in a global economy.

I know the details of a contract extension regarding contract duration, volume, and pricing must be determined by the federal public process.

I appreciate your consideration of this important matter.

Sincerely,

Tony Knowles
Governor

Enclosures

cc: Vice President Al Gore
Secretary Dan Glickman, Department of Agriculture
United States Senator Frank Murkowski
United States Senator Ted Stevens
United States Congressman Don Young

TONY KNOWLES
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STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

April 26, 1996

Mr. Mark Suwyn
Chairman and CEO
Louisiana Pacific Corporation
111 Southwest Fifth Avenue
Portland, OR 97204

Dear Mark,

Thank you for our recent discussions about the future of the Ketchikan Pulp Company (KPC).

As you know, my Administration has consistently supported a sustainable timber industry in the Tongass, including a predictable timber supply to meet the terms of the KPC contract and 100 million board feet for small operators through Small Business Administration sales. Thousands of Alaskan families depend on the Tongass for their livelihoods, subsistence hunting and fishing, recreation, and other uses.

With this letter, I want to inform you my Administration supports a KPC contract extension, contingent on the five principles outlined below. As you mentioned during our recent meeting, a decision to extend KPC's current contract is a federal one. While the state has no authority to grant an extension, the long-term partnership between the people of Southeast Alaska and the timber industry and between the City of Ketchikan and KPC gives us an important interest in the extension issue. This partnership has benefited the jobs and families of Southeast Alaska and has helped maintain healthy, safe, and stable communities.

Inherent in this long-term partnership are five principles:

1. Environmental Protection. Protection of air, water, and land, including fish habitat through compliance with applicable federal, state, and local laws. This means KPC should develop a plan to achieve full compliance with environmental laws within three years. This would include a meaningful public process that resolves public health and environmental issues.

2. Commitment to Ketchikan. A long-term commitment to Ketchikan and the maintenance of a stable workforce, including the hiring and training of resident Alaskans and a willingness to hire Alaska contractors. KPC should have longer term contracts with Alaska timber businesses to provide them the certainty to hire permanent employees from Alaska. KPC should support a policy for directing 50 percent of the timber from SBA sales to in-state secondary processing through contracts with SBA timber businesses.

3. Multiple Use. Adherence to sound principles of multiple use and sustained yield of forest resources. This means the production of sustainable contract volumes for KPC and the small timber operators in southeast and the protection and promotion of other forest uses and users, including tourism, fishing, subsistence, hunting, mining, and recreation.

The planning process is of little value if individual sales remain mired in controversy and litigation. Therefore, timber offerings in areas of high community interest and important fish habitat, such as Cleveland Peninsula, Honker Divide, East Kuiu, and Poison Cove, should be avoided. In addition, every effort should be made to bring about a transition from the harvest of old growth to second growth timber.

4. TLMP Process. The Tongass Land Management Plan, including full participation by the timber industry and other forest users, must be completed expeditiously. The timber volume available for harvest must be determined through the TLMP planning process.

5. Value-Added. The timber industry should continue to explore new processes and technology to maximize the use of timber harvested and increase the value of products.

As we discussed, the matter of volume, contract duration, and price must be determined by the federal public process.

I look forward to our continued cooperation.

Sincerely,

Tony Knowles
Governor

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STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

August 22, 1996

Dear Fellow Alaskan,

Since my April announcement to the Ketchikan community of my support for an extension of the Ketchikan Pulp Company (KPC) contract, my Administration has and continues to work hard to make that a reality. I take this opportunity to update you on our efforts so far.

I contacted the President urging his support of a contract extension. I brought members of my cabinet to Ketchikan in July to hear local concerns. I traveled to Portland to meet with Louisiana Pacific CEO Mark Suwyn.

I met with KPC President Ralph Lewis to discuss ways the state can provide assistance. My Administration provided testimony at congressional hearings in support of an extension. I sent Labor Commissioner Tom Çashen to Ketchikan to try to resolve long-standing KPC labor and management concerns and directed Environmental Conservation Commissioner Michele Brown to work with KPC on regulatory issues.

My support for a contract extension is based on five principles, with which most Alaskans, including U.S. Senator Frank Murkowski and KPC President Ralph Lewis, have told me they agree:

- Compliance with environmental laws;
- Commitment to local hire and contracting;
- Adherence to multiple use and sustained yield principles;
- Expeditious completion of a well conceived Tongass Land Management Plan (TLMP); and
- Use of new technology to maximize the value of timber harvested.

Now, many mill supporters believe a single meeting between President Clinton and me would make everything okay. I wish it were that easy. I have urged the President to support a contract extension and am awaiting a formal response from him.

I continue to do everything possible to take the issue to the President and other key officials of his administration. However, it will take the combined efforts of many Alaskans working together to find a resolution.

While the Clinton Administration has announced its opposition to legislation now pending in Congress, they have signaled a willingness to consider a contract extension--a process that likely will take several months to negotiate.

In the meantime, the top officers of KPC and Louisiana Pacific have told me of their plans to decide the mill's future by early October. Such hasty action appears unnecessary and would prevent the public process from working. A premature decision by KPC will cause heartache to the families of Ketchikan and the rest of Alaska.

The current KPC contract runs until the year 2004 and there are no environmental constraints which require an immediate decision. In fact, just this week the Department of Environmental Conservation issued a new air quality permit which includes a voluntary commitment by KPC to control several hazardous air pollutants not currently regulated under federal or state law. Similar work is underway for a new water quality permit that allows continued operations while improving environmental performance.

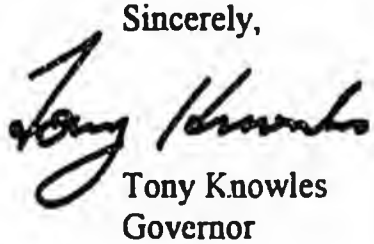
I believe the right answer for Alaska is negotiation. Rather than focusing exclusively on a proposal which the federal administration already opposes, I asked Senator Murkowski to negotiate with the Clinton Administration on an approach both sides can support. He agreed. KPC needs to adopt the same reasonable approach.

KPC should curtail any decisions about the mill's future until additional, realistic efforts are made to develop legislation which can be supported by the President, members of Congress, our own delegation, and KPC.

My Administration will continue our efforts to find a solution that provides a viable supply of timber and protects jobs in Ketchikan and Southeast Alaska. Standing up for Alaska's interests in Washington, D.C., means negotiating in good faith and in unity for a solution that protects the community of Ketchikan.

As Senator Ted Stevens has urged, it's time Alaskans work together to present a united front on this important issue.

Sincerely,



Tony Knowles
Governor

STATE OF ALASKA

DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

OFFICE OF THE COMMISSIONER

TONY KNOWLES, GOVERNOR

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JUNEAU, ALASKA 99811-0800
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August 20, 1996

Transmitted via facsimile machine
202-224-1070

The Honorable Ted Stevens
United States Senate
522 Hart Senate Office Building
Washington DC 20510-0201

Dear Senator Stevens:

I am in receipt of a copy of a letter from you and the other members of Alaska's Congressional Delegation that is addressed to the Honorable Dan Glickman, Secretary of the U.S. Department of Agriculture. The subject of the letter is the Tongass Land Management Plant(TLMP) process. While my copy of the letter is undated, it was apparently sent to Secretary Glickman earlier this month.

As a member of the state administration, I appreciate your diligence on monitoring the progress of TLMP. I recognize that your efforts are aimed at maintaining the timber industry in Southeastern Alaska while protecting the natural resources that we value so highly. These goals are shared by the administration of Governor Tony Knowles.

In the letter, I noticed several statements that require clarification or correction. As you are aware, the development of TLMP requires the resolution of a number of very difficult public policy issues. Our discussions on these issues would be best served by the use and dissemination of accurate information.

First, I am flattered that I am being cited as an informed authority on any aspect of TLMP. This is, however, an exaggeration of my role. I have been involved in some of the administration discussions about the state's comments on the draft TLMP plan, but do not possess the depth of knowledge necessary to arrive at definite conclusions as to the content of the plan or the validity of the data that is employed.

At this point, I regret–while trying to illustrate the complexity of working with the TLMP process– that I discussed a 23 percent possible reduction in the Allowable Sale Quantity(ASQ). This is a figure based on information passed on by the U.S. Forest Service and interpreted by state staff. I would not stand by this figure today, and should have not announced it at a public meeting without checking further into the actual situation. The Forest Service is still analyzing its data on the ASQ and is the best source of information on any adjustments to the ASQ calculations used in the plan. I would accept their figures over my own.

Your statement that the Regional Forester "is not now in a position to either confirm, deny, challenge, or qualify Commissioner Hensley's announcement" is not a fair statement. My understanding is that the ASQ calculations are still under review. My figure was both incomplete and premature.

Your statement that "the most significant cause of the decrease was discovered by Kathleen Morse" is completely inaccurate. Ms. Morse had nothing to do with discovering any cause for any decrease. Again, what I did was pass along information that was under review by the Forest Service that had been shared with the state's TLMP team. The Forest Service has the most complete information on reasons for adjustments in ASQ.

Additionally, Ms. Morse is on loan to the state from the Forest Service to work in the Division of Trade and Development on the development of more value-added potential for Alaska's forest products industry. Her assistance to the state on TLMP issues is secondary to her primary duties and is not the reason for her employment.

Finally, I wish to reiterate that the state supports the TLMP process, as well as its timely conclusion. We view TLMP as particularly important for public participation in a major regional decision-making effort. In planning efforts as complicated as TLMP, many examples can be cited of arguably incomplete information and why the conclusions may or may not be valid because of that information. However, we have many crucial issues to resolve and TLMP offers the best process for giving the forest products industry and everyone else the best sense of what the future holds for the Tongass National Forest. Also, as you note in your letter, the completion of TLMP may be crucial for addressing the issues surrounding the extension of the KPC contract.

In conclusion, I regret the extremely politicized and polarized situation we are in today in regard to TLMP where every statement is seized upon and used to the advantage of one side or another. At its heart, the TLMP process is, or should be, a discussion among people who live and work in the Tongass about the future of the Tongass. I know you share this conclusion. Like you, the state administration believes that the most important views expressed during the Tongass process are those of the many Southeastern Alaska residents whose lives and activities are, or will be, directly affected by the federal decisions for the management of the Tongass National Forest.

I thank you for the opportunity to clarify the above points.

Sincerely,

William L. Hensley
Commissioner

cc: Secretary Dan Glickman, U.S. Department of Agriculture
Governor Tony Knowles, State of Alaska

TONY KNOWLES
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STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

July 30, 1996

Mr. Bob Loescher
Executive Vice President
Sealaska Corporation
One Sealaska Plaza
Juneau, AK 99802

Dear Mr. ~~Loescher~~ Bob:

I am writing to follow-up on our recent meeting concerning the landless Natives issue. As I have stated previously, I believe the question presented by this issue can be divided into two parts: recognition and consideration. While I recognize this matter needs to be resolved by the federal government, my own judgement is there are Native communities in Southeast Alaska that warrant recognition and I support a fair settlement.

The challenge is how to arrive at a such a settlement. We believe there are many options available for consideration that should be thoroughly investigated prior to introduction of legislation concerning the final settlement. Some of the options that should be explored include land for tourism and other economic development both inside and outside the state. The state is willing to work with the landless Natives to explore those options.

In the event that consideration involves the Tongass, we believe it should be accomplished within the Tongass Land Management Plan (TLMP) since resource policy issues such as this need to be guided by sound science and good management. The state has consistently supported resolution of these types of issues through a process that includes all of the potentially affected parties including, in this instance, the landless Natives, Southeast communities, subsistence and non-subsistence hunters and fishers, and environmentalists. This is particularly important given the tremendous concern many constituencies have in relation to the Land Use Designation II areas which some have suggested should be part of the settlement.

It is our primary goal that there be a sufficient base of federal land to assure there is adequate timber available for harvest on a sustained yield basis for the existing independent operators, Ketchikan Pulp Company, and the other users of the forest. I also believe every effort should be made to promote value-added development of the timber resources within the Tongass.

In conclusion, the state will support legislation which confirms the claims of the landless Natives. However, in order to achieve a fair settlement, the state would urge all interested parties be involved in negotiations that incorporate the principles outlined above. Finally, negotiators of a final settlement should consider a possible mix of land, money, federal surplus property, or other appropriate compensation for these claims.

Thank you again for meeting with me to discuss this important issue for the people of Southeast Alaska.

Sincerely,

Tony Knowles
Governor

Alaska State Legislature

HOUSE RESOURCES COMMITTEE

State Capitol
Juneau, Alaska 99801-1182
(907) 465-3716

MEMORANDUM

TO: House Resources Committee members

FROM: Representative Bill Williams, Co-Chair
House Resources Committee

DATE: August 15, 1996

RE: Resources Committee meeting

****

The House Resources Committee will hold a hearing on Friday, August 23rd, at the House Resources Committee room in Juneau.

The purpose of the meeting is to inform the Committee and the public about changes in the Tongass Land Management Plan which have resulted in a lowering of the Allowable Sale Quantity (ASQ), and other TLMP issues of concern.

This fact finding meeting will also focus on the State's position regarding the federal legislation to extend and modify the Ketchikan Pulp Co.'s contract, and the State's official TLMP stance.

All members are encouraged to attend, but if you cannot, teleconferencing will be available.

586-6230 – 586-9700

The Forest Service, Knowles Administration, and Southeast Conference have been invited to testify. Members of the Congressional Delegation have also been invited to attend.

A more detailed agenda will follow. If you have questions, please contact Pete Ecklund of my office at 247-4672. Thank you.

Tongass Land Management Plan
Ketchikan Pulp Co Issues

SPORTS

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8/14/96 14th

Vol. 61 No. 191, (USPS 293-940), 28 Pages Ketchikan, Alaska, Wednesday, Augus

AFA requests Forest Service to scrap TLMP

JUNEAU (AP) — A miscalculation on a new management plan for the Tongass National Forest means fewer trees than projected could be cut under the proposal.

That has prompted a timber group to ask federal foresters to scrap the plan and start over.

The U.S. Forest Service overestimated the amount of timber that could be sold by 10 to 15 percent, said Beth Pendleton of the agency's Tongass Land Management Plan team.

The Forest Service, however, is moving ahead as scheduled, with a final decision on the plan expected to be out by late September, Pendleton said. The plan is an effort to settle differences among loggers and other forest users over how to manage the Tongass, the nation's largest national forest.

Second-growth error

The error occurred because harvest numbers were based on logging second-growth trees 60 years after an area had been cut, Pendleton said. Forest Service policy, however, requires logging to occur no less than 70 years after the previous harvest in the Tongass.

The Alaska Forest Association wants the Forest Service to withdraw the proposed forest plan and delay the planning process until the agency can release an accurate draft.

Jack Phelps, executive director of the association, said the group was willing to wait longer on the plan to make sure logging projections will be accurate.

"This new plan is going to estimate the pattern of harvest for the next 10 years," Phelps told the Juneau Empire on Tuesday. "It's vitally important it be accurate."

'Devastating' to industry

According to Phelps, the Forest Service error would be "devastating" to the timber industry, because even without the miscalculation, the allowable timber sales would not provide the industry with enough wood to sustain current operations.

The Southeast Alaska Conservation Council, an environmental group opposing more logging in the forest, also expressed disappointment in the error.

"It's kind of unfortunate to see something like this happen. In the short-term, I'm afraid it could slow down the planning process some more. It's about time they get this plan done," said council grass-roots organizer Tim Bristol.

Dog's eye view

Three-year
Saturday.

state Fish and Wildlife Trooper aircraft that was diverted to the search from a fisheries patrol, said Tanner.

Police officers arrived at Beaver Falls about 9:10 a.m. and Reed allowed the victim, who police declined to name, to leave the pickup and go to a police car, according to the news release.

However, he wouldn't stop at the officers' command and drove back toward the city, driving through two troopers' choke points with authorities in pursuit at speeds of 40 to 50 miles per hour, according to the release.

At the first chokepoint near Herring Cove, Reed slowed but continued through. A trooper fired three times shooting out three of the pickup

A Fish and Wildlife trooper's vehicle pushed Reed's truck into a ditch but he drove out of the ditch and back onto South Tongass Highway until he turned in at Benson Drive at Forest Park. His truck wouldn't go up the hill so Reed got out and began running, according to the news release.

He was taken into custody outside his parents' residence by a police officer and trooper after he was subdued with pepper gas, said Anslinger.

He was taken to Ketchikan Correctional Facility. Other charges might be filed as the investigation continues, said authorities.

The victim was unharmed, said Anslinger. She has had a domestic violence protective order in effect against Reed since July.

Chokepoints involve setting up two cars across a highway but leaving a single lane open. The chokepoint at 9.8 Mile S. Tongass Hwy., just beyond Herring Cove, involved two trooper sedans. The other chokepoint used two Fish and Wildlife pickup trucks and was set up near Mountain Point, said Tanner.

During the incident authorities were directing regular traffic to pullout areas or along the highway shoulder, said Tanner.

City police had set up a roadblock near the Coast Guard base, but Reed didn't drive that far, said Anslinger.

"We didn't want him coming back to the city," Anslinger said.

The chase and arrest involved at least 10 city police officers, six troopers and about a dozen vehicles, including a

See 'Kidnapping,' page A-3

A close-up of

Delegation tells Glickman that TLMP needs work

By NIKKI MURRAY JONES
Daily News Staff Writer

The Alaska congressional delegation has asked Secretary of Agriculture Dan Glickman to tell the Forest Service to hold up on completing the Tongass Land Management Plan and to offer a new comment period.

Sens. Frank Murkowski and Ted Stevens, both R-Alaska, and Rep. Don Young, R-Alaska, wrote to Glickman Aug. 15 citing what they say are problems with the forest plan, according to a delegation news release.

Two errors are the drop in estimated timber available for harvest and questions of whether the agency followed federal law in compiling the document, they said.

Calculations based on a 60-year second growth harvest rather than 70 years dropped the possible harvest by 15 percent. Decreasing harvest in the Chatham Area to meet Habitat Conservation Areas could reduce timber available there by 40 percent, for a possible "falldown" of 23 percent. Falldown refers to a reduction in timber amount.

They attributed that figure to Alaska Commissioner of Commerce Willie Hensley, according to the press release.

Federal leaders said the Forest Service had promised on April 18 that there would be no significant "falldowns" of harvest levels.

According to the letter, criticisms of the forest plan process include:

- An inadequate socio-economic impact analysis underestimates the effects of reduced harvest on Southeast communities.
- That the process hasn't followed federal law.
- That the biological basis for habitat conservation decisions are studies done elsewhere than Southeast Alaska.
- Testimony by three members of the TLMP team who have expressed "serious reservations about the process."

The delegation also wants the final TLMP submitted to Congress for review under new amendments to Regulatory Flexibility Act. That law gives Congress 60 session days to review and act on major rule changes. The delegates told Glickman they consider TLMP as a major rule change.

They also said the new comment period should be offered after the timber question and problems they outline with the plan are resolved, according to the release.

Most of the issues the delegation raises aren't new ones, said Brad Powell, Ketchikan Area forest supervisor.

"We're in the process of preparing a response to that letter," he said.

The Alaska House Resources Committee has scheduled a 9 a.m. hearing Friday in its committee room in Juneau about the possible 10-23 percent harvest reduction.

In brief

Driver sent south

A woman injured in a car wreck Sunday will be sent to Harborview Medical Center, and the male victim suffered multiple contusions and lacerations, said a hospital official.

Karen Tollfeldt, 40, has multiple fractures and possible internal injuries, said Wendy Gierard, Ketchikan General Hospital spokeswoman. Tollfeldt was be flown to the Seattle hospital with a medical escort on Monday. It is not a medivac, said Gierard. Tollfeldt is listed in stable condition.

Andre LeCornu, 47, will probably remain in the hospital a few more days. He is listed in stable condition, said Gierard.

The injuries occurred when Tollfeldt was driving northbound on South Tongass Highway in a 1992 Subaru about 3:15 p.m. and collided with the southbound 1989 Chevrolet driven by LeCornu, according to an Alaska State Troopers press release. Both are Ketchikan residents.

Rescuers had to use special equipment to remove drivers because they were trapped in their vehicles.

Both cars were likely totalled, said fire department Capt. Bill Kriegsman.

About 25 firefighters were involved in the rescuing the drivers.

South Tongass Fire Department provided a fire engine and hydraulic tools similar to "jaws of life." Ketchikan Fire Department sent a fire engine, two ambulances and a rescue truck, said Kriegsman.

Troopers are asking that anyone with information contact their office. The investigation is continuing and no charges have been filed.

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By M
Daily

The Ketchi Assembly deci month before the Southeast A fund — even t threatens pena legislative inte then.

The assemb ately draw do cally from the Forest Service possible. The the money wit

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By CA
Daily

A Ketchikan a precautionar morning just o

The plane gers en route pilot noticed a takeoff from C Amend, Ketchi tor.

The pilot ra landing the era Ketchikan A

KTN Daily News 8/20/96

...ence in Bush ... page A-...

NATION / WORLD
...S.: Turkey-Iran deal sends wrong message page B-1

ALASKA
State GOP delegates laud platform on development
page A-...

Ketchikan
...n Daily News
...n, Alaska, Tuesday, August 13, 1996 75Cents

...n Caskey, gave Brenda Spence a thrilling ride ...oon.

...pling, bed-racing

KPC requests Knowles meet with Clinton

By NIKKI MURRAY JONES
Daily News Staff Writer

Ketchikan Pulp Co.'s Ralph Lewis has written to Gov. Tony Knowles asking him to meet with President Clinton, but the governor said he already has told the president he supports the company's congressional request for a 15-year extension.

Lewis, KPC president and general manager, asked Knowles in a letter written Friday to "publicly and fully endorse the pending legislation" and to "fully use every possible personal effort and the full weight of your Administration" to convince the president to sign extension legislation.

The company seeks to extend and modify its existing 50-year contract with the U.S. Forest Service to harvest Tongass National Forest trees.

Knowles, who said he already wrote to Clinton supporting the contract, said he is surprised and disappointed at the "tone of the press release" KPC issued Monday, according to a news release from his office. At a meeting the previous Wednesday, Lewis had thanked him for support, he said.

Knowles has said repeatedly his support for KPC is contingent on five principles: compliance with environmental law, commitment to local hire, adhering to multiple use and sustained yield principles, a quick completion of the Tongass Land Management Plan, and exploring new technology to gain more value from harvested timber.

'The problem with the contract extension is in Washington, D.C., not in Juneau.'
— Gov. Tony Knowles

"The problem with the contract extension is in Washington, D.C., not in Juneau," Knowles said. The White House and several members of Congress have raised concerns about the legislation, he said. The Congressional delegation needs to work with the administration "rather than demanding 'all or nothing' deals that the administration has publicly stated they will oppose. This approach must provide for a viable timber indus-

See 'KPC,' page A-3

Record Low....................................45 in 1949
Tuesday Sunrise...1...........................5:16 a.m.
Tuesday Sunset................................8:26 p.m.
Wednesday Sunrise.............................5:18 a.m.

...ikan and Metlakatla

...be mostly cloudy with a 70-percent ...The winds will be coming out of the ...with highs near 60. Tuesday night will ...with a 30-percent chance of rain and ...Wednesday will become increasingly ...percent chance of rain and highs near

...entral Southeast

...will be an 80-percent chance of rain. ...e coming out of the southeast to 15 ...near 60. Tuesday night there will be a ...ce of rain with lows in the upper 40s. ...be mostly cloudy with highs in the

Local Tides

	Tuesday	
High	12:45 a.m.	16.3 Ft
Low	7:05 a.m.	−0.8 Ft
High	1:27 p.m.	14.1 Ft
Low	7:10 p.m.	2.3 Ft
	Wednesday	
High	1:20 a.m.	16.8 Ft
Low	7:37 a.m.	−1.1 Ft
High	1:57 p.m.	14.6 Ft
Low	7:44 p.m.	1.5 Ft

(Weather information provided by the National Weather Service on Annette Island. Precipitation, high and low temperatures provided by the FAA on Gravina Island.)

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Low	Pc
53	t
54	0.50
33	t
51	0.00
46	t
30	0.00
61	0.32
48	m
49	t
48	0.00
48	0.00
51	m
45	m
42	t
50	0.31
42	0.00
51	0.01
34	0.00
46	0.10
32	0.00
45	t
52	m
52	m
47	0.00
47	0.09
52	1.36

...k Pass.

ALASKA Weather

Tuesday, Aug. 13
AccuWeather® forecast for daytime conditions and high temperatures

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Alaska Summary

...ated Press
...pressure in the ...ught more rain ...Monday, with ...burg receiving

Rain also fell along the coast from Valdez all the way to Annette Island.

Milder weather was reported across the remainder of the state. High pressure moving into western Alaska brought mostly cloudy skies but little rain.

Temperatures were in a narrow range, with readings from the middle 60s in Anchorage to the low 30s along the North Slope.

Cruise-ship passengers do not pay the 11 percent hotel tax the city collects from independent travelers staying overnight, so the passenger fee is equitable, Crondahl said.

The city clerk's office will have 10 days to verify the signatures to determine if supporters gathered enough to measure, which members have indicated they are willing to do, to place the initiative on the ballot.

The assembly would have to enact a substantially similar measure within 45 days or hold a special election if the approved petition did not appear on the city election ballot.

KDN. 8/13/96

KPC

Continued from page A-1

try and protect timber jobs in Ketchikan and Southeast Alaska."

Support exists in Congress for the extension, but the Department of Agriculture has said it would advise the president to veto it, said Troy Reinhart, KPC spokesman, in Monday news release. KPC and its parent company, Louisiana-Pacific Corp., say the company can't continue to operate without the extension.

The legislation also contains changes the company considers "fair" to restore some earlier contract provisions that allowed it to operate more profitably, said Reinhart.

KPC's president said the letter to Knowles wasn't a closure announcement.

Projects to improve company operations are on schedule and the company isn't seeking relief from environmental requirements, he said.

Knowles cited the Department of Environmental Conservation's work with KPC on environmental issues as state support for the extension. Department of Labor Commissioner Tom Cashen also is in Ketchikan meeting with KPC employees and managers to "try to resolve long-standing labor and management concerns," he said.

In Knowles' news release, the governor didn't respond to Lewis' request that he meet with Clinton.

Lewis also wrote Friday to KPC employees about ongoing efforts for the extension.

Employees could sign a petition circulating at KPC or could write directly to the governor, he said.

Critics of KPC's extension request, particularly environmental groups, say the company repeatedly violates environmental regulations, was fined millions of dollars for breaking federal water quality laws, and doesn't harvest at a sustained yield level.

The Southeast Alaska Conservation Council said it supports harvest in the Tongass, but KPC's existing contract should be canceled.

Gold mine

Continued from page A-1

The action could be a political plus for Clinton, whose internal polls show that Americans — especially women — list the environment as a top voting-booth issue. The company loses potentially valuable property, but sheds a legal and public relations headache.

And the deal comes with a potential loophole: White House aides said it does not restrict the company's use of federal land secured in a swap. Unless negotiations impose restrictions, the company's next dig could be at another environmentally sensitive spot.

During his 1995 Wyoming vacation, Clinton imposed a two-year moratorium on mining around the site. "Last ...

from an unadorned wood platform in a dry mountain meadow 8,400 feet above sea level.

Clinton spoke to an audience composed mostly of environmentalists, standing against the backdrop of 10,400-foot Baronette Mountain in the extreme northeast corner of the 800,000 acre park. The mountain's layered and steeply terraced volcanic rock was picture-perfect for TV cameras.

Behind him, at the mountain's foot, white spruce and lodge-pole pine partially hid Soda Butte Creek.

"That's the creek that would have been threatened by acid trailing from any mining," said Mary Jensen, ...

four tables next year, said Brandon, donning a black-and-white referee's uniform.

In the Spelling Bee, sponsored by Ketchikan Adult Education, young contestants proved Dan Quayle human by misspelling "potatoes."

Annie Fox won the 12-and-under division with "communicate" while Erin Page must have read the last page of her dictionary, correctly spelling zymolysis to beat out her sister Margot for the adult title.

Hilary Koch, who decided at the last minute to enter the Friends of the Library's Trivia Contest, won by correctly answering that tetanus is another name for lockjaw. Ray Troll guessed "tendinitis" and earned runner-up.

The Bed Races, held for the first time at Walker Field, turned controversial this year. After a practice run, the Lions Club appeared to win a second race, but failed to eat their pies halfway through, so a third running was required. The City of Ketchikan Fire Department came on top that time, but the result was contested by Lions Club, the third-place finishers.

"It was protested for anything and everything you can think of," said Dan McElhinny, team captain for the winning squad.

The official "Blueberry" was Marie Dudzak, buried in a Blueberry suit. She seemed to have as much fun as the children who posed for photographs with her.

"That's why I'm here. To spread cheer and blueness," she said.

Complete results:

• Pie-Eating contest

Tribe settles sexual harassment suit against ex-Employment [illegible] Page A-3

SPORTS Tribe trips M's
page A-6

NATION
GOP keeps platform [illegible]

ALASKA
Judge rejects Exxon's bid to delay paying damages
page A-10

Ketchikan Daily News

Vol. 61 No. 186, USPS 293-940), 16 Pages | Ketchikan, Alaska, Thursday, August 8, 1996 | 75 Cents

Final TLMP figures likely to reduce harvest

By NIKKI MURRAY JONES
Daily News Staff Writer

Timber offered by the U.S. Forest Service could be nearly one-quarter less than originally estimated in its forest plan, said a state official.

Speaking at a Ketchikan Chamber of Commerce lunch, Willie Hensley, commissioner of the state's Department of Commerce and Economic Development, said the reduction was recently announced by the Forest Service.

He said later in the afternoon that the figures weren't final.

The federal agency didn't say the reduction would be 23 percent on Tongass National Forest harvest, but after adding up the various percentages, sale quantities across all Tongass Land Management Plan alternatives could be reduced that amount, said Kathleen Morse, forest products development specialist/economist for Hensley's department.

The new figures result from the Forest Service fine tuning its timber projections, she said.

It's too early to tell if that figure is accurate, but changes will be made to the amount of timber available for harvest, said Steve Kessler, assistant TLMP planning team leader, speaking from Juneau.

Further work with planning models that estimate existing timber, that estimate the rate trees grow back to a harvestable maturity, and that fine tune figures to verify projections, results in a more accurate picture that can raise or lower harvest estimates, he said.

Finalizing the model that estimates how quickly trees grow back could decrease the amount of available TLMP harvest by 10 to 15 percent. Another model that projects fall down could further lower timber estimates in different areas. The percentages of potential reduction would vary with each alternative, he said.


Willie Hensley

"The state's figure of 23 percent, I don't know if that's right or wrong," Kessler said.

Differences between the draft and final version of a forest plan are normal, said Bob Vaught, deputy forest supervisor for the Ketchikan Area of the Tongass.

The agency wants to be as accurate as possible when planning timber sales so the amount of timber projected is actually there, he said after the chamber lunch.

See 'Timber,' page A-9

Hensley says governor supports a viable timber industry

By NIKKI MURRAY JONES
Daily News Staff Writer

Gov. Tony Knowles is committed to keeping the timber industry healthy, to helping Alaska's economy grow and to creating jobs for Alaskans, said a state commissioner.

The state supports the 15-year contract extension requested by Ketchikan Pulp Co., said Willie Hensley, commissioner of the Department of Commerce and Economic Development. He spoke at a Greater Ketchikan Chamber of Commerce luncheon on Wednesday.

The support comes with five principles: KPC must comply with all environmental regulations, it must make a long-term commitment to

See 'Industry,' page A-9

Tug captain receives prestigious lifesaving medal

Six file for local seats

KDN 8/8/96

Timber

Continued from page A-1

"By and large what we've found indicates a downward trend, but I don't think there is a specific number that has been used," Vaught said. "Twenty-three percent may be a good number, or it may be too low or too high."

The three forest supervisors, Brad Powell, Ketchikan Area, Gary Morris, Chatham Area, and Abigail Kimbell, Stikine Area, will determine the final alternative to recommend to Regional Forester Phil Janik. They will develop an alternative that will balance timber industry needs "in a way that's appropriate for public policy," Vaught said.

"We hope people will allow us to work on these issues and give us the benefit of the doubt," he said. "We think we can produce a positive result that will allow for a healthy and viable timber industry."

The TLMP public comment period ends on Aug. 26, a 30-day extension from the original closure date.

The Forest Service has received more than 16,000 comments on the plan. About 10,000 of them were on the earlier version of it, said Vaught.

Owen Graham, Ketchikan Pulp Co. Timber Division manager, said Wednesday is the first time he's heard the 23 percent figure.

"I heard they made a mistake in their calculations, but the number wasn't as high as 23 percent," Graham said. "The numbers might be overstated. I heard from one administration official it will be much less."

Graham referred further questions to Walt Sheridan, a consultant hired by Southeast Conference to analyze TLMP.

Sheridan wasn't available for comment by press time.

Hensley called the Daily News late Wednesday afternoon saying he wanted to clarify his comment about the timber reduction.

"I didn't mean to cause consternation," said Hensley.

"I don't want to give the impression we're not working well together [with the Forest Service] because we are working cooperatively," he said.

The 23 percent he mentioned isn't the final figure on timber harvest reduction. The agency still is doing computer runs to get final figures, he said.

"There's nothing at this point that we could accurately announce," Hensley said.

Industry

Continued from page A-1

Ketchikan, and it must support multiple-use of the Tongass National Forest; the Tongass Land Management Plan needs to be completed and there must be a commitment to value-added ["You might substitute 'profit-added'," Hensley said].

Hensley said after the meeting that KPC already is committed to making environmental changes and is involved with the local economy. The company said it needs the extension to borrow $200 million to modernize its plant and meet environmental standards.

"We know they're looking at the future of their company, and we are looking at the entire forest," Hensley said.

"We want to develop a plan that could help KPC, other timber operators and secondary manufacture," he said.

The state is working on its TLMP comments to the Forest Service. It strongly supports protecting the existing timber supply and timber industry jobs.

"We want to ensure the industry will continue," he said.

The state also wants to help protect areas that communities consider important, such as Cleveland Peninsula, and to sustain other industries such as logging, tourism and mining, he said.

"It's important that everyone interested in the forest find common ground, he said.

"On the Washington, D.C., level, it's almost impossible to get anything done without agreement in Alaska," he said.

Another way the state is working to bolster the economy is Marketing Alaska, a program in which state officials meet with about 100 Alaska business owners in seven working groups to develop ideas, said Hensley. The state is considering 200 recommendations and has begun implementing them, Hensley said.

He listed other ways in which the state is working for the economy:

- Alaska Department of Fish and Game is working with processors and fishermen to determine the best harvest times for best fish quality.
- The Department of Labor waived housing space requirements to allow fish processors to handle the large influx of seasonal workers. It's also working with seafood producers to create more jobs for Alaskans.
- Gov. Tony Knowles supported 10-year agreements for state timber sales to help the secondary manufacturing industry.
- Division of Tourism is exploring new tour locations and studying increased facilities for the industry.
- Commerce and Economic Development is evaluating its small business programs for effectiveness.
- The Department of Transportation is evaluating airport leasing regulation changes.

Hensley and other state officials visited Ketchikan on Wednesday as part of a week-long swing through southern Southeast to become familiar with the area and its industries.

Officials visited Ketchikan Pulp Co., Metlakatla, Deer Mountain Hatchery, Neets Bay and Cape Fox Corp. on Wednesday.

Washington State Lottery
Wednesday drawing
Lotto: 1 - 14 - 24 - 25 - 36 - 41
Quinto: King of Spades, Five of Hearts, King of Diamonds, Eight of Clubs, Five of Clubs

cc:Mail for: Roger Poppe

Subject: article/hearing backdrop
From: Peter Ecklund 8/20/96 10:35 AM
To: Michael Johnson at ANC_LEGIS
To: Cliff Stone at ANC_LEGIS
To: Roger Poppe
To: Kristy Tibbles at ANC_LEGIS
To: Eleanor Roser at ANC_LEGIS
To: Robert Nelson at ANC_LEGIS

FYI----

this is one recent article that will help with the backdrop of the HRES hearing on friday. I'll also fax a couple of recent articles from the Ketchikan Daily news....

Thanks

Pete

8/16/96
MILL BACKERS ASK KNOWLES FOR A PUSH
KETCHIKAN PULP WANTS GOVERNOR TO PROD CLINTON
By DAVID GERMAIN
The Associated Press
JUNEAUûThough Gov. Tony Knowles favors a longer federal timber deal for Ketchikan Pulp Co., he is facing a barrage of complaints from critics who say he has not done enough to gain White House support.
Republican state legislators, timber industry supporters and the company itself this week said Knowles should use his influence with President Clinton to help secure the contract extension Ketchikan Pulp is seeking to continue cutting trees in the Tongass National Forest.
Knowles announced his support for the longer timber contract last spring, so long as Ketchikan Pulp meets some conditions on its environmental and local-hire practices. The governor says he has outlined his position in a letter to Clinton supporting the proposal.
That has not satisfied Ketchikan Pulp president Ralph Lewis, who asked Knowles to endorse legislation that would grant the contract extension and prod Clinton to agree, though the White House already has rejected the bill.
The company says it needs the 15-year contract extension, which would maintain its timber deal through 2019, to stay in business. Ketchikan Pulp employs about 850 people.
Ketchikan Pulp spokesman Troy Reinhart pointed out that Knowles said in his 1994 campaign that as a Democrat, he would have access to Clinton and sway with the White House on Alaska resource issues.
Knowles supporters, though, say thereÆs only so much a governor can do when a president spells out his opposition on an issue, even when both executives come from the same party.

ôWhen I look at my influence with the governor, weÆre in the same party, we agree on a lot of issues. But we donÆt agree on everything, thatÆs for sure,ö Ketchikan Mayor Alaire Stanton said Thursday. ôAll you can do is keep the lines of communication open. I think itÆs that way with Gov. Knowles and President Clinton, too.ö

Still, critics of Knowles say the governor could do more. Sen. Robin Taylor, R-Wrangell, said during a campaign trip in Ketchikan on Wednesday that Knowles has placed too many conditions on his support for the timber contract extension. ôEveryone of those conditions has loopholes that are big enough to shove the bowling alley through it,ö Taylor said.

House Speaker Gail Phillips, R-Homer, and Senate President Drue Pearce, R-Anchorage, sent a letter Wednesday asking Knowles to press harder for a longer timber contract.

ôIt is critical you use your influence with the president to avoid the pending disaster in Ketchikan,ö Phillips and Pearce said.

Jim Campbell, the Republican candidate Knowles beat in 1994, also sent a letter asking the governor to lead a task force to Washington, D.C., in support of the timber contract legislation.

About 300 timber industry supporters held a rally Wednesday night in Ketchikan, where speakers called on Knowles to do more for the mill. The group that sponsored the rally, Concerned Alaskans for Resources and Environment, also placed newspaper ads Wednesday comparing a potential shutdown of the Ketchikan mill to the 1964 earthquake in Anchorage. The ads urged people to contact Knowles and urge him to call Clinton.

Knowles spokesman Bob King said the governor might try to talk to Clinton about the deal at the Democratic National Convention this month in Chicago. Knowles, though, believes AlaskaÆs congressional delegation needs to hash out a contract proposal that would be acceptable to the White House, King said.

The Clinton administration opposes the current legislation, saying it would hamper federal management of the Tongass and conflict with current laws regulating the forest.

8/17/96

Alaska State Legislature

Committees:
House Resources
Co-Chairman
World Trade &
State Federal Relations
Transportation
Rules
Oil & Gas

Representative William K. Williams

During Session:
State Capitol
Juneau, AK 99801-1182
(907) 465-3424
Fax (907) 465-3793

In Ketchikan:
352 Front Street
Ketchikan, AK 99901
(907) 247-4672
Fax (907) 225-8546

August 14, 1996

Mr. Phil Janik, Regional Forester
U.S. Forest Service
PO Box 21628
Juneau, AK 99802-1628

Dear Mr. Janik:

The Alaska House Resources Committee intends to hold a hearing in Juneau at the House Resources Committee room at 9:00 am on Friday, August 23rd, 1996, regarding the following issues:

1. What, if anything, can the State of Alaska do to obtain the support of the Clinton Administration for the legislation now in Congress to extend and modify the Ketchikan Pulp Company's (KPC) long-term contract?

2. What is the status of discussions between KPC and the Forest Service as was promised by both you and Undersecretary Jim Lyons?

3. What position do you recommend the State of Alaska adopt with respect to the Revised Supplement to the Draft Environmental Impact Statement (RSDEIS) for the Tongass Land Management Plan (TLMP) in light of the 23% reduction for the estimated Allowable Sale Quantity (ASQ) for each alternative in the RSDEIS?

4. What is the status of the repeated requests to extend the comment period especially in light of NEPA and the 23% ASQ reduction now projected?

Before the Committee can address the third point, we need to know what miscalculations were made to create this ASQ shortfall. It is my understanding that the 23% ASQ reduction is a very fluid number which could be higher or lower depending on changes to the plan which the Forest Service team is making as this letter is written.

The Committee and the people of Alaska need to know what these changes are in order to determine whether to recommend that the RSDEIS be withdrawn, corrected, and presented again to the public. Our concern is that the public not be mislead by the RSDEIS which is presently out for review.

As you know, one of the key purposes of the National Environmental Policy Act is to fully inform the public of the consequences of any major project affecting the human environment. What actions has the Forest Service taken behind closed doors in order to bring the ASQ up to the published levels? Certainly the anticipated impacts of the RSDEIS for TLMP will be significant in Southeast Alaska, particularly with respect to timber dependent communities and jobs.

Accordingly, it would be most helpful if you would make available to the Resources Committee for this hearing the three Forest Supervisors and the Planning Team members who are working on the changes to correct the miscalculations which have resulted in the reported 23% net reduction in the ASQ.

The Committee and the people of Alaska look forward to hearing from you on this matter. Pete Ecklund of my staff will be calling you, or whomever you designate to correspond directly.

Sincerely,

W. K. Williams

Representative Bill Williams, Co-Chair
House Resources Committee

cc: Forest Supervisors
House Resources Committee

Alaska State Legislature

Committees:
House Resources
Co-Chairman
World Trade &
State Federal Relations
Transportation
Rules
Oil & Gas

During Session:
State Capitol
Juneau, AK 99801-1182
(907) 465-3424
Fax (907) 465-3793

In Ketchikan:
352 Front Street
Ketchikan, AK 99901
(907) 247-4672
Fax (907) 225-8546

Representative William K. Williams

August 14, 1996

The Honorable Tony Knowles, Governor
State of Alaska
PO Box 110001
Juneau, AK 99811-0001

Dear Governor Knowles:

The House Resources Committee is planning to hold a hearing in Juneau at the House Resources Committee Room at 9:00 am on Friday, August 23rd. The Committee will review TLMP issues and the KPC extension legislation.

The importance of your Administration's participation is threefold: What more, if anything, can the State do to advance the KPC extension and contract modification legislation now in Congress; explanation of the State's findings on the Tongass Land Management Plan revision and the 23% reduction in Allowable Sale Quantity (ASQ); and finally the State of Alaska's position regarding TLMP. The presence of Commissioner Willie Hensley, or whomever you deem appropriate, is respectfully requested.

It appears that legislation concerning a 15 year KPC contract extension, with modifications, can pass Congress. The barrier to continuation of these important Southeast jobs appear to be the Clinton Administration's unwillingness to establish a dialogue with either the Congressional Delegation or KPC. The Committee requests the Administration to testify and articulate those steps which you are willing to take to open a dialogue and to urge the Clinton Administration to support the legislation.

On August 7, 1996, Commissioner Hensley announced in Ketchikan that the Forest Service had experienced approximately 23% fall-down in the estimated ASQ for each of the TLMP alternatives. The Committee is concerned about this 23% reduction in ASQ. These concerns are heightened by the admission of Beth Pendleton of the TLMP planning team that there is a 10-15% reduction in ASQ. It looks as if it is a net number, meaning there have been serious changes in various sections of the draft plan which is out for public

comment. These changes need to be explained so the public is not misled in responding to TLMP. In this regard, we would be most appreciative if you could also make Kathleen Morse, and anyone else from your staff you deem appropriate, available to testify at this hearing.

The Tongass Land Management Plan comment deadline is fast approaching. The final TLMP will dictate the life of all Southeast residents for many years. Up to this point, your Administration has not made public its stance on the plan revision in regards to specific alternatives other than to say enough timber must be made available for both KPC and the independent timber program. The people of Alaska deserve to know where the State stands on the future of Southeast Alaska's workers, their families, and the timber dependent communities. Therefore, the Committee requests someone from your staff to explain the State's position on the TLMP revision.

I have asked Pete Ecklund of my office to be in contact with your staff to follow through on these requests. The Resources Committee and the people of Alaska appreciate your cooperation.

Sincerely,

W. K. Williams

Representative Bill Williams, Co-Chair
House Resources Committee

cc: House Resources Committee

Resolutions and Statements From Alaskan Communities, Civic Groups, Businesses and Associations Opposed to Extending Louisiana Pacific's KPC Long Term Contract

Partial List - Current 8/8/96

City of Pelican

City of Angoon

City of Tenakee Springs

Gustavus Community Association

Community of Elfin Cove

Port Protection Community Association, Inc

Port Alexander Fish & Game Advisory Committee

Tongass Hunting & Fishing Coalition

Sitka Friends of Southeast's Future

Point Adolphus Seafoods

Alaska Discovery, Inc.

Alaska Wilderness Recreation & Tourism Association

Wrangell Resource Council

Hoonah Indian Association

Alaska Clean Water Alliance

Alaska Center For The Environment

Alaskans For Juneau

Tenakee Historical Society

Sitka Conservation Society

Tenakee Hot Springs Lodge

Juneau Chapter Sierra Club

Toms Place Homeowners Association

Parker / Boyce Hunting Guide Service, Inc

Friends of Glacier Bay

Friends of Berner's Bay

Alaska Skiff Charters

Silver King Marine

Lielanski Lodge

Gustavus Inn

Gustavus Marine Charter

Good River Bed & Breakfast

Glacier Bay Sea Kayaks

Crondahl Bed & Breakfast

Alaska Up Close

Peyton Fisheries Business Consulting, Marketing & Development

Alaska Cruises

Laura Lucas Design

Sockeye Cycle

Dr. Margaret Davidson

Admiralty Island Sightseeing

Northwest Art

Old Harbor Books

Gearing Up

Peterson F.I.S.H.E.S.

Prince of Wales Conservation League

58°22' North Sailing Charters

Glacier Guides, Inc - Alaska Master Hunting Guides, Jimmie C., & Mary Ann Rosenbruch

Alaska Applied Sciences, Inc

Ravens Fire, Inc

Mark Kelley Photography

Inner Harbor Lodge

Rie Munoz, Ltd.

Alaska's Leading Edventures

Northern Keta, Inc

F/V Hansa

Bluejacket Passages

Laughing Raven Lodge

A Sign of Design

Southeast Exposure

The Bakery

The Rainforest Retreat

Icy Strait Adventures

Shearwater Lodge & Charters

Douglas Island Veterinary Service

Juneau Chapter Audubon Society

Boardwalk Bight

Mother Truckers Kayak & Bike Rental

Mountain Gears

Walton Radar Marine

Wild's Alaskan Seafarm

Cougar Productions

Earthtone Huskies

Tenakee Resource Recovery

Juneau Outdoor Center

Gusto Tours & Charters

Glacier Bay Photography

Cross Sound Lodge

Caribou Trails Photography

Starship Fisheries

Starbuck Charters

Annie May Lodge

Water Ouzel Outings

Taku Conservation Society

Johnson Enterprises

Baidarka Boats

Tongass Conservation Society

Lynn Canal Conservation, Inc.

Time Line Cruises, Inc

Manchee & McLean Computer Consultants

Tenakee Towing

Whalers Cove Lodge

Icy Straits Environmental Services

Sabeda, Inc

Association of Forest Service Employees for Environmental Ethics

Alaska Council of Trout Unlimited

Elfin Cove Fish & Game Advisory Committee

Tenakee Springs Fish & Game Advisory Committee

The Fiddlehead Restaurant & Bakery

MacDunnah's Ltd.

Southeast Alaska Land Trust

Alaska Bed & Breakfast Association

Salmon River Smokehouse

Alaska Outdoor Consultants

Pelican Charters

Alaska Rainforest Tours

Mount Juneau Inn

Alaska House Inn

Spirit Walker Expeditions

Puffin Travel, Inc

Angoon Trading Company, Inc

Wales Waterworks

Sea Otter Sound Seafoods, Inc

InterDesign / Mac Design

Southeast Alaska Veterinary Clinic, Inc

Alaska Passages Tours

Sea Fisk Consulting & Management

Wilson Engineering, Inc Consulting Engineers & Project Managers

Bear Track Mercantile

Dennis Hay's Elfin Cove Resort

More → →

Resolutions and Statements Opposed to Extending Louisiana Pacific's KPC Long Term Contract
Page 2

Hydaburg Alaska Native Brotherhood Camp #6

Tongass Cave Project / Project of the National Speleological Society

Libby Finesmith Stortz, ACSW, LCSW, BCD

Fairweather Adventures

Bear's Nest Cabins / Gifts / Cafe

Chichagof Conservation Council

The Observatory, ABAA

TRI Bed & Breakfast of Glacier Bay

Marine Adventure Sailing Tours

Old Harbor Press

Sticks & Stones

Wilderness Swift Charters

Tongass Adventures

Alaska Fly 'N' Fish Charters

Mona Lisa Originals Handwoven Designs

Southeast Alaska Ocean Adventures

Ellis, Inc.

Tongass Forest Plan Review

A Newsletter about the Forest Plan Revision
Issue 13 - July 1996

Comment Period Extended

You have an additional 30 days, until August 26, 1996, to review and comment on the Revised Supplement to the Draft Environmental Impact Statement (RSDEIS) and the draft Forest Plan. Regional Forester Phil Janik announced the extension on June 28th. Janik said, "After fully considering public comments received to date and the interest by the public to extend the comment period, the Forest Supervisors and I decided to grant this 30-day extension." The final record of decision on the revised forest plan is expected to be issued in late September.

Public Meetings Draw 1,100

Public meetings have been held in 30 Southesast Alaska communities, and Open Houses were held in Anchorage and Washington D.C.

Over 1,100 peoplein Southeast Alaska came to the public meetings. Thanks to everyone of the just over 400 people who gave us oral testimony. In Ketchikan, more than 300 showed up for the hearing and 80 testified. In some of the smaller communities, such as Edna Bay, Kasaan, and Port Protection, 60% - 70% of the community participated in the hearings. In Kake, over 30 native dancers testified through a native peace dance which was interpreted for us.

We have received about 1,700 comments, as this newsletter goes to print, including the 400 from oral testimony. Every comment is logged and coded for the specific recommendations and ideas you offer. The planning team then analyzes these comments and considers changes to the draft Forest Plan.

Comments on how we can provide forest resources to benefit people and still sustain the forest and all the wildlife, fish, caves, and special recreation areas are more helpful to us than just voting for one of the draft alternatives.

You Can Send It via E-Mail

As an alternative to normal mail, comments can be electronically mailed to the TLMP office now via the internet through your computer. These comments will be coded and analyzed along with oral testimony and other written comments. The name and physical address of the commenter should be included in the e-mail note. Our electronic address is:
/s=comments/ou1=r1ØfØ3dØ3a@mhs-fswa.attmail.com

Understanding the Plan

The future of the Tongass depends on all of us understanding the values of one another and the capability of the forest to continue to provide what we need and want from its resources.

To assist in understanding the five focus issues of the RSDEIS, we will be sharing more information in several ways throughout the summer. The focus issues are: wildlife viability, socioeconomic concerns and impacts, fish and riparian habitat, karst and cave resources, and alternatives to clearcutting in timber harvests. We hope these articles will answer some questions we heard during the public meetings and clarify what the Forest Service can and cannot do. One article follows in this newsletter. More will will be seen in newspapers and heard on radio in Southeast Alaska this summer.

Social & Economic Impact of the Tongass Forest Plan

Many of us living in Southeast Alaska are economically dependent on the continued availability of our region's abundant natural resources.

Forest Service employees realize that as the region's primary agency responsible for land management, we have the potential to directly affect opportunities for economic development in the private sector of Southeast Alaska. We take this responsibility very seriously.

Recently, our State and Private Forestry division has helped communities throughout the region, including Sitka and Wrangell, identify and capitalize on opportunities to strengthen and diversify each community's economy.

The Forest Service, however, does not "create" jobs. Investors, business men and women, and risk-takers in the private sector do that.

The jobs they create are affected not only by forest management, but also by changing global markets such as for forest products and recreation opportunities, and by the price fluctuations that accompany business cycles. The effects of outside economic forces are generally separate from the consequences of forest management.

In April, we released the Revised Supplement to the Draft Environmental Impact Statement (RSDEIS). The employment levels displayed in the preferred alternative represent our best estimate of how employment opportunities may be influenced by the proposed changes to Tongass forest management.

continued on back . . .

The preferred alternative has a timber allowable sale quantity of 357 million board feet, of which 297 is recognized as economic to harvest under current market conditions and using the current Southeast Alaska logging technology. An annual average harvest of nearly 300 million board feet would meet 95 percent of the projected demand for timber from the Tongass for the next 10 years. This harvest level results in the opportunity for 1,750 to 2,100 direct wood-product jobs for Southeast Alaska. This is a drop from the 1994 level of 2,225 jobs.

In industries such as tourism, employment projections are more difficult to make. Unlike the relationship between the amount of timber made available and the products likely to be manufactured, tourism-related jobs are dependent on the response of the private sector to the opportunities made available. We estimate that implementation of the Forest plan is likely to support 3,500 tourism related jobs, an increase of 700 jobs from the 1994 level.

The preferred alternative estimates for jobs in the four main industries of Southeast Alaska are based on many reports and studies from state, federal, and local agencies, and from private firms.

Our economists used their best judgment based on all of these sources to develop projections of the effects of each of the alternatives.

However, employment numbers and dollar values alone do not describe the array of social values tied to the resources of the Tongass forest. Quality of life, availability of customary and traditional subsistence resources and other factors strongly influence individuals and communities.We have made the best estimates we can on the effects of the draft alternatives on peoples' social values.

We are committed to a planning process that will help us develop methods to monitor and better understand the relationships that transcend economics between people and resources. Your values are important to us. The process we have developed includes listening to your comments at public meetings, long-term social assessments, community feedback and hearing from you in writing, via e-mail and in person at your group's meeting or conference. Let us know if you would like a TLMP team leader, Forest Supervisor, or District Ranger to visit your organized group.

Documents Still Available

Cop es of the RSDEIS, and draft forest plan, the packet of maps, the Forest Supervisors' letter and the Summary newsletter are still available by request from our office. You may also request documents via e-mail at the address listed at the bottom of the first page of this newsletter, although we cannot send documents to you electronically. Key findings from science assessments, panels, and resource analyses are also available.

****

Tongass Land Management Plan
8465 Old Dairy Road
Juneau, AK 99801

Official Business

COMMITTEE:

HOUSE RESOURCES COMMITTEE

DATE: August 23, 1996

Subject of meeting:

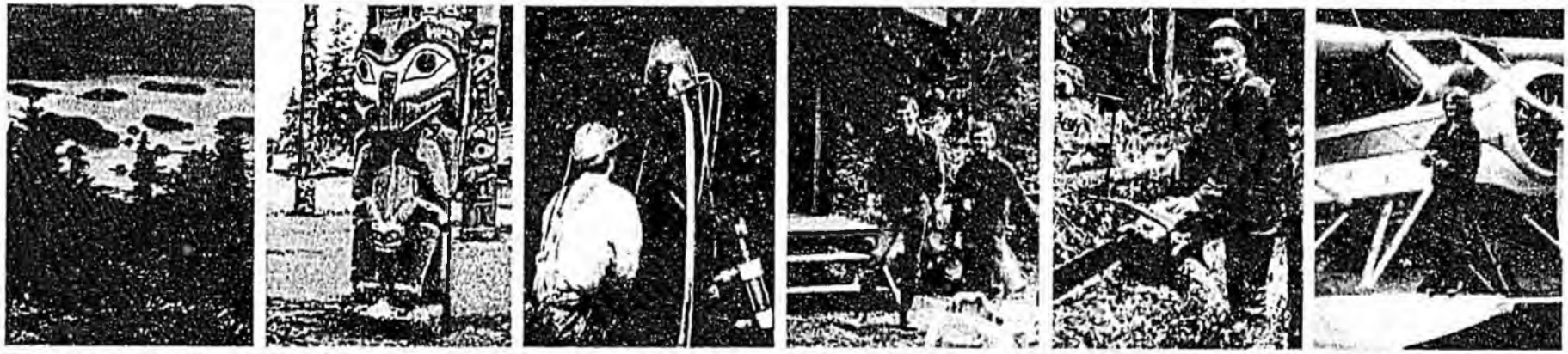
TONGASS LAND MANAGMENT PLAN - KETCHIKAN PULP COMPANY ISSUES

SIGN-IN

PLEASE PRINT!

NAME	ADDRESS (MAILING) & (ZIP)	PHONE	REPRESENTING	DO YOU WANT TO TESTIFY?
Doug Swanston	P.O. 130x 34255	586-8725	USFS	NO
JOHN DAY	PO Box 23146 Juneau AK	586-8706	USFS	NO
Terry Shaw	P.O. Box 211221 Auke Bay AK 99821	586-7011	USFS	NO
TRAI BEHNERT	4114 ASPEN AVE., JUNEAU, AK	789-2952	"	NO
Gary Morrison	204 Siginaka Way, Sitka, AK	747-6671	US Forest Service	
Jim Caplan	PO Box 20107 Juneau, AK 99802	364-2684	" " "	Yes
Bernie Miller	124 W 5th Juneau 99801	463-7445	SE Conform	Yes
DIANE MAYER	State of Alaska	465-8800	Division of Gov. Coordination	Yes
Beth Pendleton	USFS 8465 Old Dairy Rd, Juneau 99801	586-8703	US Forest Service	No
[illegible]	PO Box 21628 JUNEAU 99802	586-8886	"	Yes

The Future of the Tongass ...



... Depends on Understanding

By understanding our past and present, the Forest Service, with the help of the people who live here, can better design a Forest Plan for the future; a plan to better meet the needs and desires of all Americans while making sure that all the resources of the Forest are sustained well into the 21st century.

Almost 17 years have passed since the first Tongass Land Management Plan (TLMP) was issued. Much has changed in Southeast Alaska since then, in the growth and changing needs of communities, industries, and visitors. We also know more about sustaining the fish, wildlife, timber, and recreation opportunities in the Tongass.

The Forest Service wants to finish the Tongass Land Management Plan revision to take advantage of this new information, and science, and to provide for the changing values of Southeast Alaskans and visitors to this great land.

Release of the Forest Plan revision does not mean there will be no more changes in forest management. We have learned that significant new forest information, research, and changes in Southeast Alaska economies should be incorporated into the plan through amendments before it is time to revise the entire plan again in 10-15 years. Your comments now and in the future will help us determine significant issues and areas needing change.

We plan to release the final Forest Plan revision this fall. Following its release we will continue working with the communities in Southeast Alaska to explain how the new plan will be implemented and identify the changes it could bring to the Forest and the people of Southeast Alaska. We seek an ever increasing interactive role of Southeast Alaska communities in determining how the Tongass National Forest is managed.

These articles will hopefully help you understand some of the issues addressed in the Tongass Land Management Plan (TLMP) documents currently available for review.

Fish in the Forest

Fish, especially salmon are important to almost everyone who lives and visits Southeast Alaska. Whether it is making a living by commercial fishing, sportfishing or catching enough to freeze and smoke for your winter subsistence food, we know it is important to protect the freshwater fish habitat across the Forest. Having a productive salmon fisheries is a basic part of the culture, history and economy of Southeast Alaska.

Recognizing the importance of the fish habitat, the Forest Service has developed a set of standards and guidelines to protect habitats and the diverse fish populations for over 42,000 miles of streams in Southeast Alaska.

In the revision of the Tongass Land Management Plan, we developed a partnership with Forest Service research scientists to assure that the most current scientific findings were used in developing fish habitat management direction. A team of local and nationally recognized scientists reviewed the current watershed and streamside management practices on the Tongass. These scientists made recommendations on how to maintain existing fish habitat on the Tongass National Forest. Those recommendations were then analyzed and considered in the development of the draft Forest Plan.

The preferred alternative proposes two steps to strengthen the protection of the freshwater fisheries habitat. It recognizes the vital link between fish production and the protection of fish habitat across the Tongass.

Managing habitat for salmon, Dolly Varden, steelhead, cutthroat trout and other fish for generations to come is one of our fundamental responsibilities. We have developed a balanced management approach for sustainable fish, wildlife, plants, and other resources while serving the many public users of the forest, including the tourism, wood products, and other industries. We take the long-term view in management of the Forest because the impacts on the forest are often not seen in the short-term of 10-15 years. Natural processes which form and sustain fisheries habitat happen over many decades. Actions which we take today, will determine the availability of fish for generations to come.

The Anadromous Fish Habitat Assessment Report (AFHA) is the principal reference used by the Forest Service in preparing the TLMP revision regarding fish habitat and watersheds. The AFHA study was required by Congress and the study report was available in March of 1995.

Wildlife Habitats Across the Forest

The Forest Service recognizes that the Tongass National Forest is unique in many ways. Much of the forest land is undisturbed by people, yet we have one of the highest levels of *natural fragmentation* of any national forest in the country. This means that what we call *the forest* is actually a mosaic of islands, rock, ice, muskeg, scrub forest, commercially valuable trees, young trees, lakes, and streams.

Over thousands of years, the wildlife of the Tongass have adapted to temperate rainforest conditions and natural fragmentation. Villages and communities depend on local wildlife populations, such as deer. When we add the more recent human-caused fragmentation to the mix — be it from roads, timber harvesting, or developed recreation areas — we take the risk of going beyond the ability of some species to adapt and survive in smaller tracts of old-growth forest.

Regulations implementing the National Forest Management Act of 1976 include provisions for maintaining habitat for well-distributed viable populations of wildlife across national forests.

There are wildlife species on the Tongass living in large tracts of old-growth habitat. Though large areas of old-growth habitat in wilderness areas will continue to be protected in various portions of the Tongass, these may not be sufficient to maintain well-distributed populations for old-growth associated species.

In the preferred alternative the strategy for maintaining wildlife is to reserve tracts of old-growth habitat across the entire forest in combination with beach, estuary, and streamside buffers. Wilderness and other withdrawals are not evenly distributed across the Tongass and may not alone fully meet the need for well-distributed old-growth habitat for associated wildlife species.

We recognize that there may be other ways to maintain wildlife species viability, such as having longer timber harvest cycles on lands that permit timber harvesting. Some studies indicate old-growth habitat reserves may offer less risk to wildlife than other strategies.

Where possible we placed old-growth habitat reserves in lands already withdrawn from timber harvesting. Also, habitats close to communities can be managed to better serve the local needs for maintaining wildlife populations for recreation and subsistence use by people.

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The Forest Service recognizes that many factors influence the number and distribution of wildlife species. We are charged with maintaining habitat for well-distributed wildlife populations within the framework of overall multiple use objectives for the Tongass. We believe we need to take action now in order to provide for the future. The establishment of old-growth habitat reserves is one proposal to do just that.

Recommended Wild, Scenic, or Recreational Rivers of the Preferred Alternative

Chatham Area: Dangerous River, Glacial River, Hasselborg River, Kadashan River, Katzehin River, King Salmon River, Lisianski River

Stikine Area: Anan Creek, Blind River, Fall Dog Creek, Farragut River, Harding River, Kadake Creek, Kah Sheets Creek, LeConte Glacier, Marten Lake & Creek, Petersburg Creek, Santa Anna Creek & Lake, Virginia Lake & Creek

Ketchikan Area: Blue River, Chickamin River, Naha River, Salmon Bay Lake & Stream, Sarkar Lakes, Thorne River — Hatchery Creek

Underground the Tong: Karst and Cave Resou

It's not just what's on the surface of the T National Forest that matters — the plants an creatures, the streams and fish, the people an Beneath the surface lie other treasured resou including deposits of limestone and marble, that wind their way through them.

Southeast Alaskan caves and the karst top that accompany them may be unlike any othe world. Karst landforms are created when aci water dissolves limestone and marble, creatir gullies, and caverns. Linked together they fc ground channels where streams and rivers flc caves in Southeast Alaska are unique becaus conditions under which they are formed — c peratures, high rainfall, and highly acid wate off the peat bogs onto large deposits of very and limestone.

Since 1979 over 500 caves and the surrour landscape have been mapped and studied by Located primarily on Prince of Wales, Kuiu, Chichagof Islands, this karst covers about 80 miles. New caves are continually being disc caves have only recently received wide attent their world-class significance.

Standards and guidelines for the managem resource are represented in the RSDEIS for t Land Management Plan.

It is important to understand other values a with caves and karst resource. The ground ab often supports highly productive forests and number of wildlife and fish. The soils are wel and rich in calcium, and tree roots can secure in fissures in the underlying limestone and m Caves also provide shelter for wildlife, are a fossilized bones, and have archeological and significance.

Fossilized bear bones, including one belie over 41,000 years old, and the remains of ani extinct on Prince of Wales Island — includin grizzly, caribou, and red fox — have been fo caves on the island. Today the caves are freq variety of animals including otters that nest a their young there; deer, bear, wolves, and oth

Underground the Tongass—Karst and Cave Resources

It's not just what's on the surface of the Tongass National Forest that matters — the plants and wild creatures, the streams and fish, the people and structures. Beneath the surface lie other treasured resources, including deposits of limestone and marble, and caves that wind their way through them.

Southeast Alaskan caves and the karst topography that accompany them may be unlike any other in the world. Karst landforms are created when acid ground water dissolves limestone and marble, creating pits, gullies, and caverns. Linked together they form underground channels where streams and rivers flow. The caves in Southeast Alaska are unique because of the conditions under which they are formed — cool temperatures, high rainfall, and highly acid water flowing off the peat bogs onto large deposits of very pure marble and limestone.

Since 1979 over 500 caves and the surrounding karst landscape have been mapped and studied by scientists. Located primarily on Prince of Wales, Kuiu, and Chichagof Islands, this karst covers about 805 square miles. New caves are continually being discovered. The caves have only recently received wide attention due to their world-class significance.

Standards and guidelines for the management of this resource are represented in the RSDEIS for the Tongass Land Management Plan.

It is important to understand other values associated with caves and karst resource. The ground above caves often supports highly productive forests and a large number of wildlife and fish. The soils are well drained and rich in calcium, and tree roots can securely anchor in fissures in the underlying limestone and marble. Caves also provide shelter for wildlife, are a resource for fossilized bones, and have archeological and ceremonial significance.

Fossilized bear bones, including one believed to be over 41,000 years old, and the remains of animals long extinct on Prince of Wales Island — including marmot, grizzly, caribou, and red fox — have been found in caves on the island. Today the caves are frequented by a variety of animals including otters that nest and bear their young there; deer, bear, wolves, and other small fur discovery of human bones in a cave on Prince of Wales indicates that humans were in this area at least 10,000 years ago.

Today there is growing interest in using the caves for recreation. Two caves on Prince of Wales Island, El Capitan and Cavern Lake Caves, are public attractions. Tours of El Capitan Cave are offered by the Forest Service during the summer. A trail with a viewing platform leads to Cavern Lake.

Human activity must be carefully managed to avoid damage to the cave and karst resources. Road building, timber harvesting, and moving earth to construct buildings all have this potential. Other damage can occur when soil or logging slash washes down mountain sides and flows into caves and clogs underground drainage systems. Such events can change vegetation growth patterns on the ground above the caves.

The preferred alternative maintains and protects the natural processes that create karst and the ability of karst landscapes to maintain the productivity of the animal, plant, and aquatic communities.

Whatever alternative is chosen, the Forest Service sees management of this resource as necessary for the protection of fish and wildlife habitat, archaeological sites, drainage systems, municipal watersheds, recreation and cultural sites, peat bogs, and forested areas.

Communities and the Tongass Forest Plan

Community economic development and prosperity is important to all residents of Southeast Alaska. Many residents are dependent on the continued availability of our region's natural resources. The Tongass National Forest resources have the potential to directly affect opportunities for economic development in the private sector of Southeast Alaska.

The Forest Service does not *create* jobs; investors in the private sector do that. The jobs they create are affected not only by forest management, but also by global market changes, such as for forest products and various types of recreation opportunities.

In April, we released the Revised Supplement to the

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bearers that rest and den in the caves; birds that nest and feed in the entrances; bats that winter in the caves; fish that live part of their lives in cave streams; and small organisms that live their entire lives in the caves.

For many years Southeast Alaska Natives used the caves for ceremonial purposes, for habitation, and sometimes for burial of their dead. People were in the caves as long as 4,500 years ago as evidenced by their presence in artifacts and pictographs (pictures painted on rocks with pigments made by mixing grease or salmon eggs with charcoal, clay, or other minerals). A recent discovery of human bones in a cave on Prince of Wales indicates that humans were in this area at least 10,000 years ago.

Today there is growing interest in using the caves for recreation. Two caves on Prince of Wales Island, El Capitan and Cavern Lake Caves, are public attractions. Tours of El Capitan Cave are offered by the Forest Service during the summer. A trail with a viewing platform leads to Cavern Lake.

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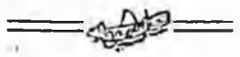

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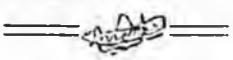

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- Forest Plan
- Forest Supervisors' preferred alternative
- scientific key findings (summary information from TLMP science assessments, panels, and resource analyses)

The **RSDEIS** explains the impacts of each of the draft management alternatives for the resources of the Tongass. The **draft Forest Plan** defines the standards and guidelines the Forest Service will follow in managing the forest. **The preferred alternative** describes land allocations the Forest Supervisors believe provides the best balance for the resources and the people. The **draft scientific key findings** summarize the best scientifically supported information applicable to the Forest Plan revision and describe the various risk levels associated with implementing the different alternatives. The final science assessments and resource analyses will be published and available this fall.

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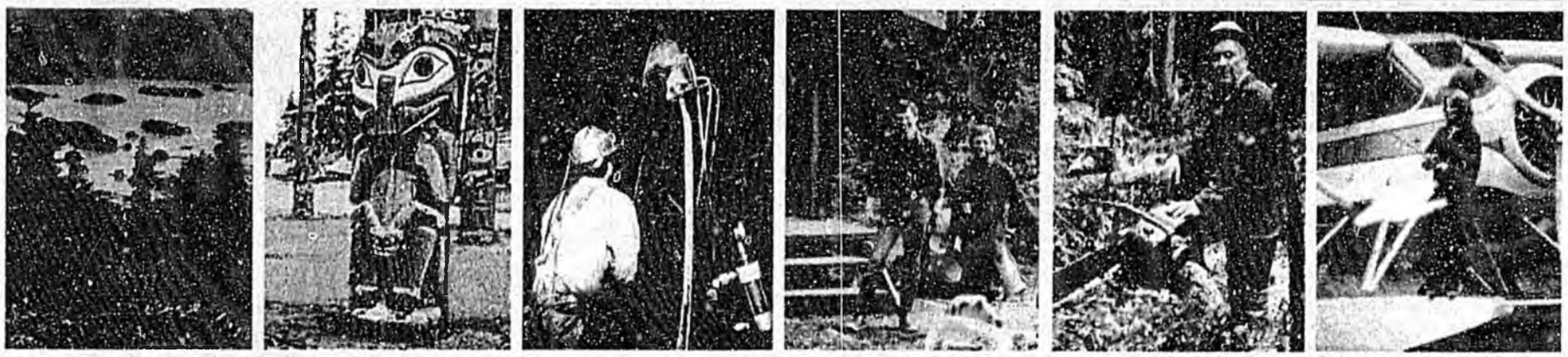

... Depends on Understanding

By understanding our past and present, the Forest Service, with the help of the people who live here, can better design a Forest Plan for the future; a plan to better meet the needs a desires of all Americans while making sure hat all the resources of the Forest are sustained well into the 21st century.

Almost 17 years have passed since the first Tongass Land Management Plan (TLMP) was issued. Much has changed in Southeast Alaska since then, in the growth and changing needs of communities, industries, and visitors. We also know more about sustaining the fish, wildlife, timber, and recreation opportunities in the Tongass.

The Forest Service wants to finish the Tongass Land Management Plan revision to take advantage of this new information, and science, and to provide for the changing values of Southeast Alaskans and visitors to this great land.

Release of the Forest Plan revision does not mean there will be no more changes in forest management. We have learned that significant new forest information, research, and changes in Southeast Alaska economies should be incorporated into the plan through amendments before it is time to revise the entire plan again in 10-15 years. Your comments now and in the future will help us determine significant issues and areas needing change.

We plan to release the final Forest Plan revision this fall. Following its release we will continue working with the communities in Southeast Alaska to explain how the new plan will be implemented and identify the changes it could bring to the Forest and the people of Southeast Alaska. We seek an ever increasing interactive role of Southeast Alaska communities in determining how the Tongass National Forest is managed.

These articles will hopefully help you understand some of the issues addressed in the Tongass Land Management Plan (TLMP) documents currently available for review.

Tongass Land Management Plan
8465 Old Dairy Road
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Fish in the Forest

Fish, especially salmon are important to almost everyone who lives and visits Southeast Alaska. Whether it is making a living by commercial fishing, sportfishing or catching enough to freeze and smoke for your winter subsistence food, we know it is important to protect the freshwater fish habitat across the Forest. Having a productive salmon fisheries is a basic part of the culture, history and economy of Southeast Alaska.

Recognizing the importance of the fish habitat, the Forest Service has developed a set of standards and guidelines to protect habitats and the diverse fish populations for over 42,000 miles of streams in Southeast Alaska.

In the revision of the Tongass Land Management Plan, we developed a partnership with Forest Service research scientists to assure that the most current scientific findings were used in developing fish habitat management direction. A team of local and nationally recognized scientists reviewed the current watershed and streamside management practices on the Tongass. These scientists made recommendations on how to maintain existing fish habitat on the Tongass National Forest. Those recommendations were then analyzed and considered in the development of the draft Forest Plan.

The preferred alternative proposes two steps to strengthen the protection of the freshwater fisheries habitat. It recognizes the vital link between fish production and the protection of fish habitat across the Tongass.

Managing habitat for salmon, Dolly Varden, steelhead, cutthroat trout and other fish for generations to come is one of our fundamental responsibilities. We have developed a balanced management approach for sustainable fish, wildlife, plants, and other resources while serving the many public users of the forest, including the tourism, wood products, and other industries. We take the long-term view in management of the Forest because the impacts on the forest are often not seen in the short-term of 10-15 years. Natural processes which form and sustain fisheries habitat happen over many decades. Actions which we take today, will determine the availability of fish for generations to come.

The Anadromous Fish Habitat Assessment Report (AFHA) is the principal reference used by the Forest Service in preparing the TLMP revision regarding fish habitat and watersheds. The AFHA study was required by Congress and the study report was available in March of 1995.

Wildlife Habitats Across the Forest

The Forest Service recognizes that the Tongass National Forest is unique in many ways. Much of the forest land is undisturbed by people, yet we have one of the highest levels of *natural fragmentation* of any national forest in the country. This means that what we call *the forest* is actually a mosaic of islands, rock, ice, muskeg, scrub forest, commercially valuable trees, young trees, lakes, and streams.

Over thousands of years, the wildlife of the Tongass have adapted to temperate rainforest conditions and natural fragmentation. Villages and communities depend on local wildlife populations, such as deer. When we add the more recent human-caused fragmentation to the mix — be it from roads, timber harvesting, or developed recreation areas — we take the risk of going beyond the ability of some species to adapt and survive in smaller tracts of old-growth forest.

Regulations implementing the National Forest Management Act of 1976 include provisions for maintaining habitat for well-distributed viable populations of wildlife across national forests.

There are wildlife species on the Tongass living in large tracts of old-growth habitat. Though large areas of old-growth habitat in wilderness areas will continue to be protected in various portions of the Tongass, these may not be sufficient to maintain well-distributed populations for old-growth associated species.

In the preferred alternative the strategy for maintaining wildlife is to reserve tracts of old-growth habitat across the entire forest in combination with beach, estuary, and streamside buffers. Wilderness and other withdrawals are not evenly distributed across the Tongass and may not alone fully meet the need for well-distributed old-growth habitat for associated wildlife species.

We recognize that there may be other ways to maintain wildlife species viability, such as having longer timber harvest cycles on lands that permit timber harvesting. Some studies indicate old-growth habitat reserves may offer less risk to wildlife than other strategies.

Where possible we placed old-growth habitat reserves in lands already withdrawn from timber harvesting. Also, habitats close to communities can be managed to better serve the local needs for maintaining wildlife populations for recreation and subsistence use by people.

The Forest Service recognizes that many factors influence the number and distribution of wildlife species. We are charged with maintaining habitat for well-distributed wildlife populations within the framework of overall multiple use objectives for the Tongass. We believe we need to take action now in order to provide for the future. The establishment of old-growth habitat reserves is one proposal to do just that.

Recommended Wild, Scenic, or Recreational Rivers of the Preferred Alternative

Chatham Area: Dangerous River, Glacial River, Hasselborg River, Kadashan River, Katzehin River, King Salmon River, Lisianski River

Stikine Area: Anan Creek, Blind River, Fall Dog Creek, Farragut River, Harding River, Kadake Creek, Kah Sheets Creek, LeConte Glacier, Marten Lake & Creek, Petersburg Creek, Santa Anna Creek & Lake, Virginia Lake & Creek

Ketchikan Area: Blue River, Chickamin River, Naha River, Salmon Bay Lake & Stream, Sarkar Lakes, Thorne River — Hatchery Creek

Underground the Tongass— Karst and Cave Resources

It's not just what's on the surface of the Tongass National Forest that matters — the plants and wild creatures, the streams and fish, the people and structures. Beneath the surface lie other treasured resources, including deposits of limestone and marble, and caves that wind their way through them.

Southeast Alaskan caves and the karst topography that accompany them may be unlike any other in the world. Karst landforms are created when acid ground water dissolves limestone and marble, creating pits, gullies, and caverns. Linked together they form underground channels where streams and rivers flow. The caves in Southeast Alaska are unique because of the conditions under which they are formed — cool temperatures, high rainfall, and highly acid water flowing off the peat bogs onto large deposits of very pure marble and limestone.

Since 1979 over 500 caves and the surrounding karst landscape have been mapped and studied by scientists. Located primarily on Prince of Wales, Kuiu, and Chichagof Islands, this karst covers about 805 square miles. New caves are continually being discovered. The caves have only recently received wide attention due to their world-class significance.

Standards and guidelines for the management of this resource are represented in the RSDEIS for the Tongass Land Management Plan.

It is important to understand other values associated with caves and karst resource. The ground above caves often supports highly productive forests and a large number of wildlife and fish. The soils are well drained and rich in calcium, and tree roots can securely anchor in fissures in the underlying limestone and marble. Caves also provide shelter for wildlife, are a resource for fossilized bones, and have archeological and ceremonial significance.

Fossilized bear bones, including one believed to be over 41,000 years old, and the remains of animals long extinct on Prince of Wales Island — including marmot, grizzly, caribou, and red fox — have been found in caves on the island. Today the caves are frequented by a variety of animals including otters that nest and bear their young there; deer, bear, wolves, and other small fur bearers that rest and den in the caves; birds that nest and feed in the entrances; bats that winter in the caves; fish that live part of their lives in cave streams; and small organisms that live their entire lives in the caves.

For many years Southeast Alaska Natives used the caves for ceremonial purposes, for habitation, and sometimes for burial of their dead. People were in the caves as long as 4,500 years ago as evidenced by their presence in artifacts and pictographs (pictures painted on rocks with pigments made by mixing grease or salmon eggs with charcoal, clay, or other minerals). A recent discovery of human bones in a cave on Prince of Wales indicates that humans were in this area at least 10,000 years ago.

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- scientific key findings (summary information f rom TLMP science assessments, panels, and resource analyses)

The **RSDEIS** explains the impacts of each of the draft management alternatives for the resources of the Tongass. The **draft Forest Plan** defines the standards and guidelines the Forest Service will follow in managing the forest. **The preferred alternative** describes land allocations the Forest Supervisors believe provides the best balance for the resources and the people. The **draft scientific key findings** summarize the best scientifically supported information applicable to the Forest Plan revision and describe the various risk levels associated with implementing the different alternatives. The final science assessments and resource analyses will be published and available this fall.

We hope this information will answer some of the questions we heard during the recent public meetings and clarify what the Forest Service can and cannot do in managing America's largest national forest, the Tongass.

United States
Department of
Agriculture

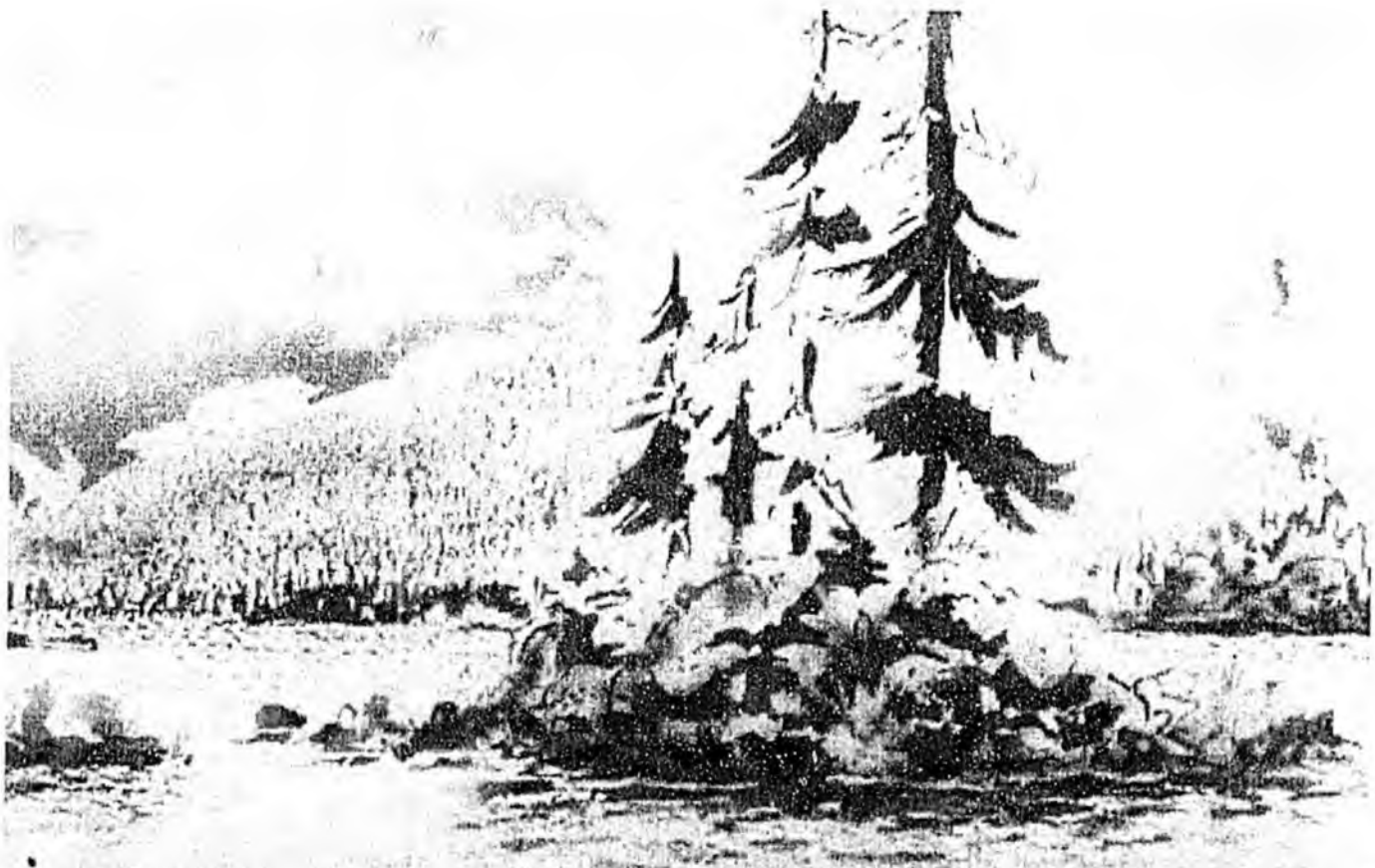
Forest Service

Alaska Region
R10-MB-314a

March 1996

Tongass Land Management Plan Revision

Revised Supplement to the Draft Environmental Impact Statement



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United States
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Proposed Revised
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