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United States
Department of
Agriculture

Forest Service

Tongass
National
Forest
R10-MB-100

June 1990

Tongass Land Management Plan Revision

Draft Environmental
Impact Statement

Summary

TONGASS LAND MANAGEMENT PLAN REVISION
SUMMARY
DRAFT ENVIRONMENTAL IMPACT STATEMENT

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SECTION ONE

YOUR PART IN FOREST PLANNING

Why Me?

We need your help in shaping a revised plan for the Tongass National Forest, one that will take us into the next century. You can help us determine what revisions to the current Forest Plan are needed.

A lot is at stake. The Tongass National Forest is the nation's largest at 17 million acres. It encompasses the famed "Inside Passage" and is known for its many bald eagles, salmon, and brown bear; old-growth rain forests and glaciers; unparalleled scenery and a rich Native culture. It is also a rich source of the natural resources that most of the small communities of Southeast Alaska depend on. It supports major uses such as tourism, fishing, timber harvest, subsistence, recreation, hunting, and mining. It is also no secret that many people hold a variety of strong views about how the Forest should be managed.

The revised Tongass Plan will direct all land management activities on the Forest. It will identify what land is to be managed for the different uses and how the environment is to be protected so these uses can be maintained.

You can now help us by reviewing and commenting on the contents of the documents and map packet, and through your continuing involvement in the plan revision process.

Shaping the Plan

This summary of the Draft Environmental Impact Statement (DEIS) presents ten feasible ways of managing the Tongass over the next 10 to 15 years. These alternatives were developed to show how the major issues, identified earlier in the planning process, could be resolved. The alternatives are described in this summary, and land allocations are shown on the accompanying maps.

At this stage the task is to identify the specific mix of land allocations and resource uses which best meets the diverse needs of the many individuals, organizations and agencies using the Tongass National Forest.

You can help us by identifying the alternative, or portions of alternatives, that you prefer, and other demands you believe will be placed on the Forest.

Your response, and the responses of others, will be carefully read and used to complete the revised Forest Plan.

Organization of the DEIS

The summary represents a small segment of the information that has been gathered and analyzed in preparation of the DEIS. You may wish to refer to the full set of documents in your review. The full DEIS is organized as follows:

Chapter 1. Purpose and Need describes the process, laws and regulations being used to revise the Tongass Plan. It describes the issues that were identified by the public and upon which the Plan Revision is based. It also describes the two-step planning process: the revision of the Forest Plan, followed by the site specific project review.

Chapter 2. Alternatives describes how the management options were developed, and describes the seven alternatives (and three variations) in detail. It also examines how each of the alternatives addresses the public issues, and compares the significant environmental effects of the alternatives.

Chapter 3. Environment and Effects describes the specific environment to be affected (for example, fish, minerals, old growth, timber or wildlife), and then discusses the significant effects that each of the alternatives could have on that environment.

The DEIS also includes a glossary, a bibliography, a list of preparers, a mailing list, and an index. The three-volume appendix to the DEIS provides additional information on the identification of issues, the modeling and analysis process, the management area prescriptions and standards and guidelines that direct implementation of the plan, 112 tentatively eligible Wild and Scenic Rivers, a description of each of the 106 roadless areas in the Forest, and a host of other information vital to development of the DEIS.

Map Packet

The same set of maps accompanies both the DEIS and the Summary you have received. The map packet includes a map of the current Tongass Land Management Plan and existing Transportation System, a map of roadless areas on the Tongass, and maps showing each of the seven alternatives. The alternative maps describe the management area prescriptions to be used for implementing the alternatives, show (in a bar graph) the amount of land allocated to each of the prescriptions, and identify which areas of the Tongass are to be managed according to which prescriptions.

SECTION TWO

FOREST PLANNING ON THE TONGASS NATIONAL FOREST

THE FOREST

The Tongass National Forest is the largest in the National Forest System, covering more than eighty percent of Southeast Alaska. It extends approximately 500 miles north to south, and 120 miles east to west at its widest point. (Refer to the vicinity map on each map in the map packet.)

About 65,000 people live in Southeast Alaska, most inhabiting the 33 communities located along some 11,000 miles of meandering shoreline. Most of the area is wild and unpopulated. Only three towns are connected to interior Alaska and Canada by road: Haines and Skagway to the north, and Hyder to the south. The state-owned ferry system serves many of the larger towns along the coast.

Because of its immense size, the Tongass National Forest is divided into three Administrative Areas, each with its own Forest Supervisor: the Chatham Area office is in Sitka, the Stikine Area office is in Petersburg, and the Ketchikan Area Office is in Ketchikan. Ranger District offices are located in Yakutat, Juneau, Hoonah, Sitka, Petersburg, Wrangell, Thorne Bay, Craig, and Ketchikan; National Monument offices are located in Juneau and Ketchikan. The Regional Office, headquarters of the Regional Forester, is also located in Juneau.

PUBLIC ISSUES

An extensive public involvement process began in 1987 to identify the aspects of Tongass management that were of greatest interest to residents of Southeast Alaska and others concerned about the Tongass. Some 600 responses were received, and were grouped into ten major issues. Those issues are summarized below.

Scenic Quality

WHAT AREAS OF THE TONGASS NATIONAL FOREST SHOULD BE MANAGED TO EMPHASIZE SCENIC RESOURCES?

Thousands of visitors to, and residents of, Southeast Alaska enjoy the outstanding scenery of the Tongass National Forest. Tourism has become a major industry, similar to commercial fishing and timber harvest in the number of people directly employed.

The challenge is maintaining growth opportunities for tourism and ensuring scenic quality given competing timber values.

Recreation

WHAT AREAS OF THE TONGASS SHOULD BE MANAGED TO EMPHASIZE RECREATION OPPORTUNITIES?

Outdoor recreation opportunities offered by the Tongass are important to the quality of life of Southeast Alaskans and many visitors. Many people have favorite places where they fish, hunt, beachcomb, hike, or just go to get away. Forest management has the potential to alter some of these recreation places, and either enhance or detract from what people now experience.

The challenge is maintaining high quality recreation opportunities and settings given competing timber values.

Fish Habitat

WHAT METHODS SHOULD BE USED TO PROTECT RESIDENT AND ANADROMOUS FISH HABITAT?

Most of the salmon caught in the waters of Southeast Alaska originate in streams and lakes within the Tongass National Forest. Streamside habitat provides important shelter, food, and spawning ground for the salmon. Changes in streamside habitat can alter a stream's ability to produce fish.

The challenge is ensuring the long-term productivity of riparian ecosystems for commercial, sport and subsistence fish resources, along with other uses including timber harvesting.

Wildlife Habitat

WHAT AMOUNT OF OLD-GROWTH AND UNDEVELOPED HABITAT SHOULD BE MANAGED FOR THE PROTECTION OF WILDLIFE?

The Tongass National Forest supports a wide variety of wildlife species, including vast colonies of seabirds, many marine mammals, and the largest populations of brown bears and bald eagles in the world. Alaskans, visitors and subsistence users engage in sport hunting of moose, brown and black bears, mountain goat, deer, and waterfowl. There is a growing demand for opportunities to watch and photograph wildlife. Many species of wildlife are associated with old-growth forests; but old-growth forests also contain much of the high-value timber resource.

The challenge is managing forested habitats for competing wildlife and timber uses.

Subsistence

WHAT SHOULD THE FOREST SERVICE DO TO CONTINUE PROVIDING SUBSISTENCE OPPORTUNITIES?

Some Southeast Alaska residents supplement their incomes by subsistence hunting, fishing, trapping, and gathering of other natural resources of the Tongass. Others, especially within the Native population, rely on subsistence not only for food, but as a lifestyle that preserves their customs and traditions. The primary concerns of subsistence users are abundance of the resources, and access to the resources. Abundance is tied in part to the existence of old-growth forests. Access is a mixed issue: some users like new access, while others do not like the increased competition for the resources that may result from easier access.

The challenge is providing for subsistence use while managing for other multiple resource uses.

Timber Harvest

WHAT AREAS OF THE TONGASS SHOULD BE MANAGED TO EMPHASIZE TIMBER HARVEST?

In the 1950's two long-term timber contracts were established in order to promote stable, year-round employment in Southeast Alaska. Congress assured a supply of timber when it passed the Alaska National Interest Lands Conservation Act in 1980, and provided for the availability of 4.5 billion board feet of timber each decade.

Considering shifts in public attitudes, and the economic needs of Southeast Alaska's communities, there are four challenges:

1. Where should timber harvest be allowed;
2. Which activities should be considered compatible, and which lands should be identified as suitable for timber management;
3. What is an appropriate, sustainable level of harvest; and
4. What is the relationship of the National Forest timber supply to timber employment in local communities?

Roads

WHAT ROAD SYSTEM SHOULD BE DEVELOPED IN THE TONGASS NATIONAL FOREST?

The land transportation system in Southeast Alaska has evolved almost entirely from the need to access areas for timber harvest. Roads also provide access for recreation, hunting, and subsistence uses. On the other hand, roads can adversely affect scenic quality, wildlife habitat, unroaded recreation, and other aspects of a natural environment.

The challenge is determining where to extend the road system while maintaining the remoteness characteristic of Southeast Alaska.

Minerals

WHAT AREAS AND ACCESSIBILITY SHOULD BE EMPHASIZED FOR EXPLO- RATION, DEVELOPMENT, AND PRODUCTION OF MINERAL RESOURCES?

The Tongass contains substantial mineral resources, from precious metals to minerals for industrial use. Mining activities have occurred for over one hundred years, and some mines are being reopened as mineral prices rise. New and renewed interest in mining could employ many people in Southeast Alaska. On the other hand, mineral development may change the character of the natural environment.

The challenge is resolving the conflict between society's need for non-renewable mineral resources and protection of the environment.

**Roadless
Areas**

**WHAT AREAS AND WHAT AMOUNT OF ROADLESS LANDS SHOULD BE
RECOMMENDED FOR WILDERNESS DESIGNATION OR OTHER TYPES OF
UNROADED MANAGEMENT?**

Approximately 5.4 million acres were added to the National Wilderness Preservation System on the Tongass in 1980 by the Alaska National Interest Lands Conservation Act. Some people would like to see additional land set aside as roadless or Wilderness, and a number of areas are now under consideration in several Congressional proposals. On the other hand, placing land in Wilderness or roadless status can preclude the development of surface and subsurface resources.

The challenge is determining the amount of roadless area to maintain for its ecologic, wildlife and recreation values, while also providing opportunities for mineral and timber resource developments important to Southeast Alaska's economy.

Local Economy

**WHAT WAYS SHOULD NATIONAL FOREST LANDS BE MANAGED TO PROVIDE
FOR THE LOCAL LIFESTYLES OF SOUTHEAST ALASKA COMMUNITIES?**

Employment and income generated by the government sector, timber, fishing, mining, and tourism industries is vital to the social and economic well-being of communities in Southeast. All of these types of employment are founded on the development or enjoyment of the resources of the Tongass National Forest. The positive increase in the development of one industry or lifestyle may negatively affect another industry or lifestyle. For example, maintaining current employment in the timber sector will require the development of more areas of the Forest, and that development may impact other resource activities.

The challenge is ensuring an adequate supply of resource opportunities that contribute to local community stability.

**Wild, Scenic
and Recreation
Rivers**

Since the public issues were originally identified in 1988, possible additions to the National Wild and Scenic Rivers System have become important nationally and to some people in Southeast Alaska. On the Tongass, 112 rivers have been identified as possessing outstandingly remarkable values. These rivers are tentatively eligible to be considered for addition to the Wild and Scenic Rivers System.

TRANSITION FROM THE CURRENT PLAN TO THE REVISION

Once the public issues were identified, it became clear that in order to address these issues, some changes were needed in the existing Tongass Plan. These changes include: updating the current Plan's goals and objectives; developing more detailed management prescriptions to replace the existing Land Use Designations (LUD's); updating and expanding on the existing standards and guidelines (which specify how projects and activities are to be carried out); reassessing the amount of suitable lands for timber management and the amount of timber to make available; and updating the Plan's monitoring and evaluation requirements.

LUD's and Management Prescriptions

The current Tongass Plan has four Land Use Designations (LUD's) to direct management of the Forest. A map of the existing Tongass Land Management Plan in your map packet shows and describes where the four LUD's are applied. The alternatives presented in this Summary use 21 specific management area prescriptions rather than the four LUD's. Each map of the alternatives defines the prescriptions and specifies where each would be applied.

Table 1 on the next page shows how the current Land Use Designations relate to the 21 proposed management area prescriptions.

How the Alternatives are Structured

Each alternative in the DEIS is presented in the same format. Each has a *theme, goals and objectives by resource, outputs and activities, management prescriptions, and standards and guidelines.*

In order to understand how these work together to guide land use decisions, let's look at a specific example. One aspect of Alternative B's theme is to emphasize tourism to help support the local economy.

- Figure 1 shows how this theme is used in setting the goals and objectives.
- Figure 1 also shows how the objectives are "*translated*" into amounts of recreation use and opportunities (outputs and activities).
- Finally, the figure shows which specific management area prescriptions to apply, and identifies the Forest-wide standards and guidelines to use when individual projects are considered.

TABLE 1
LAND USE DESIGNATIONS AND MANAGEMENT PRESCRIPTIONS

<i>1979 Tongass Plan Land Use Designation</i>	<i>Proposed Revision Management Area Prescription</i>
LUD I	Wilderness National Monument Wilderness National Monument Nonwilderness Research Natural Areas Primitive Recreation Minerals (on valid existing claims) Wild Rivers Scenic Rivers
LUD II	Research Natural Areas Primitive Recreation Old-Growth Habitat Beach Fringe and Estuary Enacted Municipal Watersheds Minerals Special Areas Wild Rivers Scenic Rivers Recreation Rivers
LUD III	Old-Growth Habitat Beach Fringe and Estuary Experimental Forest Scenic Viewshed Semi-Primitive Recreation Roaded Natural/Rural Recreation Visual-Timber Timber Production Minerals Stream and Lake Protection Scenic Rivers Recreation Rivers
LUD IV	Old-Growth Habitat Beach Fringe and Estuary Experimental Forest Roaded Natural/Rural Recreation Scenic Viewshed Visual-Timber Timber Production Minerals Stream and Lake Protection

FIGURE 1

ALTERNATIVE WAYS TO MANAGE THE FOREST

This section describes alternative ways that the Forest might be managed. The National Forest Management Act requires that each alternative be implementable, address major public issues and concerns, and be cost-effective. It also requires that one alternative continue the current management direction into the future (Alternative C).

Pending Legislation

Several bills that could affect the Tongass National Forest are currently under consideration by the U.S. Congress. House of Representatives Bill 987 (H.R. 987) passed in 1989, and the Senate is currently deliberating on a separate version of the bill. H.R. 987 would create 23 new Wilderness Areas totaling 1.8 million acres. The Senate Bill would provide for no timber harvest in 12 "Protected Areas" originally recommended in a compromise developed by a group of Southeast Alaska community and business leaders known as the Southeast Conference. Both bills also have many other provisions.

The 23 Wilderness Areas of House Bill H.R. 987 have been incorporated in Alternatives A, E, and E1. The "Protected Areas" proposed by the Southeast Conference (March 1989) have been considered in Alternatives B, F and F1. A revised Southeast Conference proposal (February 1990) has been considered in Alternatives G and G1. We did not try to specifically model any of the pending legislation.

The Alternatives

Alternative A emphasizes high-quality fish and wildlife habitat, wilderness and unroaded areas, wild and scenic rivers, scenic quality, subsistence use, and a wide range of recreation opportunities in a natural setting. It incorporates the 23 areas recommended for wilderness designation in House of Representatives Bill 987 (H.R. 987). Timber harvest and mining may occur at levels compatible with the amenity emphasis of this alternative.

Alternative B emphasizes resource uses that contribute to the local and regional economies of Southeast Alaska, such as timber harvesting, commercial fishing, mining and tourism. Non-market values (such as wildlife habitat or visual quality), roadless area opportunities, and wild and scenic rivers will be emphasized in selected areas. Opportunities for local residents to pursue traditional lifestyles, including subsistence use and recreation, will also be emphasized. This alternative incorporates the twelve protected areas recommended by the Southeast Conference proposal of March 1989.

Alternative C continues the land allocations, resource outputs and activities, and management direction of the current Tongass Land Management Plan (as approved in 1979 and amended in 1986). Timber harvest levels that contribute to maintaining local employment are emphasized, along with maintaining the variety of recreation opportunities and scenic quality currently available. Opportunities for local residents to pursue traditional lifestyles, including subsistence use and recreation, will continue.

Alternative D provides an economic timber supply from public lands to meet predicted demand, and existing mill capacity. Management of other resources will be done consistent with the timber supply emphasis, while meeting environmental standards. Other areas with low timber volumes will be managed for recreation, visual quality and other non-commodity resources. Areas in and around communities will be managed to emphasize recreation and related traditional uses, including subsistence.

Alternative E incorporates the 23 areas recommended for wilderness designation in House of Representatives Bill 987 (H.R. 987). All other areas would continue with the land allocations, resource outputs and activities, and management direction of the current Tongass Land Management Plan (as approved in 1979 and amended in 1986).

Alternative F manages the 12 protected areas recommended by the Southeast Conference (March 1989) and endorsed by the Governor of the State of Alaska for non-timber uses. All other areas would continue with the land allocations, resource outputs and activities, and management direction of the current Tongass Land Management Plan (as approved in 1979 and amended in 1986).

Alternative G manages portions of the 16 protected areas recommended in the revised Southeast Conference (February 1990) proposal for non-timber uses. All other areas would continue with the land allocations, resource outputs and activities, and management direction of the current Tongass Land Management Plan (as approved in 1979 and amended in 1986).

Variations on The Alternatives

Alternative E1. The goals and objectives of this alternative exactly parallel those of Alternative E with one exception. The objective for timber harvest of Alternative E1 is to provide an adequate timber supply to ensure the opportunity for both the Sitka and Ketchikan pulp mills to remain open. The objective is to provide an average annual allowable sale quantity of 378 million board feet the first decade. This amount approximates the USDA Forest Service's original estimate, using 1979 Tongass Plan data, of the effect of the 23 Wilderness Areas proposed in H.R. 987 on the current Plan.

Alternative F1. The goals and objectives of this alternative exactly parallel those of Alternative F with one exception. The objective for timber harvest of Alternative F1 is to provide an average annual allowable sale quantity of 420 million board feet the first decade. This amount approximates the original estimate, using 1979 Tongass Plan data, of the effect of the 12 protected areas (no harvest) on the current Plan.

Alternative G1. The goals and objectives of this alternative exactly parallel those of Alternative G with one exception. The objective for timber harvest of Alternative G1 is to provide an average annual allowable sale quantity of 430 million board feet the first decade. This amount approximates the original estimate, using 1979 Tongass Plan data, of the effect of the 16 areas of the revised Southeast Conference proposal on the current Plan.

A note about the alternatives: Where Alternatives E1, F1, and G1 are different from E, F, and G, they are listed separately in the figures and tables that follow.

COMPARISON OF ALTERNATIVES

Overall Comparisons

This section compares the seven alternatives and the three variations. The information presented here is intended to highlight the major differences between the alternatives, and to show how they address the public issues.

Each alternative map contains a bar graph of the amount of land in each management area. Management area allocations were combined into four groups based on similarities in their potential environmental effects to more easily view the comparison of alternatives. The groups are Wilderness, Natural Setting, Moderate Development, and Intensive Development. The management areas within each group are listed on the map legend; read through the prescriptions, and note that they are also grouped by color in order to help you identify them on the maps.

Figure 2 shows the amount of land allocated to each group. On a Forest-wide basis, all the alternatives assign the majority of Tongass National Forest acres to management areas which maintain the natural environment.

FIGURE 2

Some of the key comparisons discussed in this section are shown in Table 2. Take a moment to study the table; it will help your understanding of the remainder of this section.

TABLE 2
COMPARISON OF ALTERNATIVE OUTPUTS
(Average Annual Outputs/Effects Unless Otherwise Noted)

<i>Outputs/Effects (Unit of Measure)</i>	<i>Alternative A</i>	<i>Alternative B</i>	<i>Alternative C</i>	<i>Alternative D</i>	<i>Alternative E</i>	<i>Alternative F</i>	<i>Alternative G</i>
Designated Wilderness, and Roadless Lands Remaining (acres) after 10 years	15,470,000	14,881,000	14,836,000	14,593,000	15,269,000	14,951,000	14,947,000
after 50 years	14,943,000	13,443,000	13,303,000	12,747,000	14,407,000	13,567,000	13,571,000
Wild and Scenic Rivers # of rivers	112 rivers	67 rivers	0 rivers	28 rivers	0 rivers	0 rivers	0 rivers
total miles	1504 miles	926 miles	0 miles	424 miles	0 miles	0 miles	0 miles
Recommended Wilderness (acres) (also in roadless acres above)	1,800,000	0	0	0	1,800,000	0	0
Research Natural Areas (acres) outside Wilderness	67,684	106,799	69,038	35,302	37,934	68,998	63,342
inside Wilderness	174,761	116,042	116,042	116,042	116,042	116,042	116,042
Timber Harvest Areas with a Scenic Quality Emphasis (acres)	899,000	1,043,000	571,000	209,000	480,000	527,000	517,000
Recreation Allocations (acres) Primitive (outside Wilderness)	3,619,000	4,555,000	3,145,000	1,530,000	2,905,000	3,800,000	3,758,000
Semi-primitive	1,005,000	1,664,000	641,000	3,369,000	439,000	604,000	562,000
Roaded Natural/Rural	77,000	87,000	834,000	130,000	631,000	723,000	703,000
Allowable Sale Quantity (MMBF)	181	354	450	550	280	389	390
Suitable Forest Lands (acres)	536,000	1,101,000	1,200,000 ¹	1,454,300	717,000/	1,111,000/	1,112,000/
Annual Rate of Harvest (acres)	5,300	12,700	13,700	15,500	8,500	12,700	11,300
Present Net Value (dollars)	4,383,000,000	4,182,000,000	4,393,000,000	4,317,000,000	4,449,000,000	4,386,000,000	4,392,000,000
Forest Budget Level (dollars)	57,974,000	91,619,000	95,914,000	110,581,000	70,370,000	88,534,000	88,767,000

¹The current Tongass Plan has 1.75 million acres of suitable land scheduled. Reanalysis of current information indicates only 1.2 million acres of the suitable forest lands would be scheduled to attain the allowable sale quantity.

TABLE 2 (Continued)
COMPARISON OF ALTERNATIVE OUTPUTS
(Average Annual Outputs/Effects Unless Otherwise Noted)

Outputs/Effects (Unit of Measure)	Alternative E1	Alternative F1	Alternative G1
Designated Wilderness, and Roadless Lands Remaining (acres) after 10 years	14,968,000	14,889,000	14,873,000
after 50 years	13,641,000	13,435,000	13,398,000
Wild and Scenic Rivers # of rivers	0 rivers	0 rivers	0 rivers
total miles	0 miles	0 miles	0 miles
Recommended Wilderness (acres) (also in roadless acres above)	1,800,000	0	0
Research Natural Areas (acres) outside Wilderness	37,934	68,998	63,342
inside Wilderness	116,042	116,042	116,042
Timber Harvest Areas with a Scenic Quality Emphasis (acres)	480,000	527,000	517,000
Recreation Allocations (acres) Primitive (outside Wilderness)	2,905,000	3,800,000	3,758,000
Semi-primitive	439,000	604,000	562,000
Roaded Natural/Rural	631,000	723,000	703,000
Allowable Sale Quantity (MMBF)	378	420	430
Suitable Forest Lands (acres)	1,086,000	1,158,000	1,180,000
Annual Rate of Harvest (acres)	13,090	14,413	14,722
Present Net Value (dollars)	4,366,500,000	4,381,700,000	4,384,700,000
Forest Budget Level (dollars)	87,604,000	92,374,000	93,670,000

TABLE 2 (Continued)
COMPARISON OF ALTERNATIVE OUTPUTS
(Average Annual Outputs/Effects Unless Otherwise Noted)

<i>Outputs/Effects (Unit of Measure)</i>	<i>Alternative A</i>	<i>Alternative B</i>	<i>Alternative C</i>	<i>Alternative D</i>	<i>Alternative E/E₁</i>	<i>Alternative F/F₁</i>	<i>Alternative G/G₁</i>
Commercial Fishing Employment (Number of Jobs)	4,850	4,850	4,850	4,850	4,850	4,850	4,850
Timber Harvest Employment (Number of Jobs)							
National Forest	1,825	3,450	4,500	5,525	2,775/3,625	3,900/4,175	3,975/4,325
Other	825	825	825	825	825/825	825/825	825/825
Total	2,650	4,275	5,325	6,350	3,600/4,450	4,725/5,000	4,800/5,150
Recreation/Tourism Employment (Number of Jobs)	3,675	3,675	3,675	3,675	3,675	3,675	3,675
Mining and Mineral Development Employment (Number of Jobs)	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Sport Fishing Employment (Num- ber of Jobs)	1,450	1,450	1,450	1,450	1,450	1,450	1,450
Big Game Hunting Employment (Number of Jobs)	925	925	925	925	925	925	925
Total Employment (Number of Jobs)	14,650	16,275	17,325	18,350	15,600/16,450	16,725/17,000	16,800/17,150

TABLE 2 (Continued)
COMPARISON OF ALTERNATIVE OUTPUTS
(Average Annual Outputs/Effects Unless Otherwise Noted)

<i>Outputs/Effects (Unit of Measure)</i>	<i>Alternative A</i>	<i>Alternative B</i>	<i>Alternative C</i>	<i>Alternative D</i>	<i>Alternative E/E₁</i>	<i>Alternative F/F₁</i>	<i>Alternative G/G₁</i>
Commercial Fishing Income (Millions of Dollars)	135.8	135.8	135.8	135.8	135.8	135.8	135.8
Timber Harvest Income (Millions of Dollars)							
National Forest	60.2	113.9	148.5	182.3	91.6/119.6	128.7/137.8	131.2/142.7
Other	27.2	27.2	27.2	27.2	27.2/27.2	27.2/27.2	27.2/27.2
Total	87.4	141.1	175.7	209.5	118.8/146.8	155.9/165.0	158.4/169.9
Recreation/Tourism Income (Millions of Dollars)	84.5	84.5	84.5	84.5	84.5	84.5	84.5
Mining and Mineral Development Income (Millions of Dollars)	48.4	48.4	48.4	48.4	48.4	48.4	48.4
Sport Fishing Income (Millions of Dollars)	36.3	36.3	36.3	36.3	36.3	36.3	36.3
Big Game Hunting Income (Millions of Dollars)	21.3	21.3	21.3	21.3	21.3	21.3	21.3
Total Income (Millions of Dollars)	413.7	467.4	502.0	535.8	445.1/473.1	482.2/491.3	484.7/496.7

**COMPARISON
BY ISSUES**
Scenic
Quality

Management Areas in the Wilderness and Natural Setting prescription groupings do not generally allow land altering activities or non-natural developments that would affect scenic quality. Exceptions include fish habitat improvements and salvage logging under some prescriptions. Lands managed under the prescriptions in these groups would have no reductions in visual quality.

The Moderate Development group were specifically designed to address visual quality objectives. These prescriptions all allow for moderate amounts of timber harvest and other activities that change the natural setting, but only in ways that meet the visual objectives. They may be applied to areas such as those seen from the Alaska Marine Highway, or within or adjacent to recreation places, where visual quality and forest products are both important. Lands managed under the prescriptions in the Moderate Prescription group could have slight to moderate reductions in visual quality.

Table 3 ranks alternatives based on visual quality emphasis and the potential to maintain the natural appearance of the Forest.

TABLE 3
ALTERNATIVE COMPARISONS: VISUAL QUALITY EMPHASIS
Ranking of Alternatives based on prescriptions that maintain or emphasize Visual Quality¹

<div> <i>Greatest Emphasis</i> <-----> <i>Least Emphasis</i> </div>							
A	B	E	F	G	C	D	

¹Wilderness, Natural Setting, and Moderate Development management area groups.

Recreation

Management areas offer a wide variety of opportunities and settings for recreation. Those in the Wilderness and Natural Setting groups primarily offer primitive and semi-primitive opportunities in natural and unroaded settings, although some forms of motorized access are allowed (mainly by air or water). Management Areas in the Moderate Development group, in particular Roaded Natural/Rural Recreation, offer more modified settings where access is easier.

Not all of the land area within the above management areas is actually used for recreation purposes, primarily due to the difficulty of access and other geographic restrictions (steep slopes, icefields, etc.). Thus the analysis of Tongass recreation focused on "recreation places" where recreation use actually occurs.

Outside of Wilderness, three management areas are used to emphasize the different opportunities related to these recreation places and other areas with recreation potential. These are Primitive Recreation, Semi-primitive Recreation, and Roaded Natural/Rural Recreation.

Acres in the Wilderness group, plus acres in these three other prescriptions, are used to compare the alternatives by recreation opportunities. Table 4 lists the acres in all four categories by alternative. The alternatives are ranked by total acres. *Remember* that the mix of opportunities by alternative varies: those that offer fewer overall natural settings may offer better vehicle access to modified settings.

TABLE 4
ALTERNATIVE COMPARISONS: RECREATION EMPHASIS

<i>Alternatives (Ranked by total acres)</i>	<i>Wilderness, Primitive, Semi- primitive Prescription (acres)</i>	<i>Roaded Natural/ Rural Recreation (acres)</i>
A	11,912,774	77,118
B	11,689,046	85,600
E	10,631,856	631,139
F	9,873,964	722,741
D	10,369,457	129,784
G	9,789,843	703,476
C	9,255,472	833,770

Fish Habitat

Following a thorough analysis in the DEIS, no measurable effects on fisheries were identified as a result of implementing any of the alternatives. In addition, all of the alternatives will provide for habitat improvement projects which will lead to increases in future fish production.

**Wildlife
Habitat**

All prescriptions within the Wilderness and Natural Setting groups will protect and maintain the natural environments for wildlife species of the Tongass.

Wildlife-associated old growth is an important wildlife habitat type of the Tongass, and the type most subject to change by resource activities. Consequently, the total amount of productive old growth (currently 5.16 of the 8.81 million acres of old-growth forest), and the high-volume component of old growth, are good indicators to use in comparing alternatives. Table 5 shows the relative ranking of alternatives based on the amount of old-growth habitat remaining after 10, 50, and 150 years of management. Alternatives A, B, and E maintain the highest amounts of wildlife habitat using either indicator. Alternative D, which has the highest allowable level of intensive timber management and provides the least amount of old growth, is at the bottom of the list.

**TABLE 5
ALTERNATIVE COMPARISONS: OLD-GROWTH HABITAT**

All figures are in acres.

Alt.	<i>Total Productive Old-Growth Habitat</i>			<i>Higher-Volume Old-Growth Habitat</i>		
	<i>10 Years</i>	<i>50 Years</i>	<i>150 Years</i>	<i>10 Years</i>	<i>50 Years</i>	<i>150 Years</i>
A	5,122,000	4,912,000	4,813,000	548,000	496,000	458,000
B	5,061,000	4,570,000	4,256,000	545,000	452,000	419,000
E	5,089,000	4,758,000	4,598,000	552,000	434,000	414,000
E1	5,028,000	4,551,000	4,255,000	531,000	418,000	386,000
F	5,050,000	4,548,000	4,256,000	544,000	414,000	383,000
G	5,050,000	4,548,000	4,256,000	542,000	410,000	379,000
F1	5,015,000	4,502,000	4,186,000	528,000	407,000	376,000
G1	5,012,000	4,488,000	4,160,000	528,000	404,000	372,000
C	5,028,000	4,488,000	4,151,000	532,000	400,000	366,000
D	4,995,000	4,377,000	3,914,000	510,000	370,000	361,000

In 1954, there was an estimated 5,512,000 acres of Productive Old Growth and 919,700 acres of Higher Volume Old Growth remaining.

Subsistence

Subsistence was analyzed by looking at three factors: abundance and distribution of fish and wildlife, competition, and access. In general, although local variations are important, alternatives that best maintain or preserve the natural environment also maintain the most subsistence opportunities. The findings for abundance and distribution are shown in Table 6, which ranks alternatives on meeting the demand for subsistence use. Since Sitka black-tailed deer is the most important subsistence species (in terms of numbers used), it is used as the indicator. Under all alternatives there is the potential for a significant restriction on subsistence opportunities in the Chatham Administrative Area of the Forest, where abundance and distribution of brown bear, deer and marten could fall short of the expected demand even with no further resource development.

While no alternatives will restrict subsistence access, those with the highest level of new road development will provide the most new access for subsistence users. Conversely, more road access and development brings the potential for more competition. Effects from increased competition (from non-subsistence users) are likely to occur most in areas where abundance and distribution could fall short of expected demand.

TABLE 6

ALTERNATIVE COMPARISONS: EFFECTS ON SUBSISTENCE USE¹

Ranking of Alternatives Based on Potential Reductions in Abundance and Distribution of Sitka Black-tailed deer¹

<i>Least Effect</i> <-----> <i>Greatest Effect</i>							
A	E	B	G	F	C	D	

¹Abundance and Distribution is used as an indicator of the overall effects of the alternatives on subsistence use.

Timber Harvest

Four management prescriptions (Timber Production, Roaded Natural/Rural Recreation, Visual-Timber, and Scenic Viewshed) allow consideration of timber harvest. Within these areas, timber harvest will occur only on suitable (scheduled) lands. Table 7 lists the alternatives in order of the amount of productive timber land scheduled for harvest.

TABLE 7

ALTERNATIVE COMPARISONS: AVAILABLE AND SUITABLE TIMBERLANDS

All figures are in acres.

<i>Alternatives (Ranked by Total Acres)</i>	<i>Productive Forest Lands</i>	
	<i>Available</i>	<i>Suitable/Scheduled</i>
D	2,110,000	1,450,000
C	2,290,000	1,200,000 ¹
G1	2,160,000	1,110,000
G	2,160,000	1,110,000
F1	2,100,000	1,110,000
F	2,100,000	1,110,000
B	1,490,000	1,100,000
E1	1,920,000	1,090,000
E	1,920,000	720,000
A	1,290,000	540,000

¹ Suitable lands in the current Tongass Forest Plan as amended are 1.75 million acres. Current data and reanalysis indicates only 1.2 million acres would be scheduled to attain the 450 million acre average annual allowable sale quantity.

Forest-wide there are 3.05 million acres of available timber lands; however, the most actually available under any of the alternatives is 2.29 million (Alternative C). The suitable lands (those actually scheduled for timber harvest to meet an alternative's objectives) also roughly follow this pattern, but there are exceptions. Alternative D, which relies heavily on the Timber Production prescription and has the highest allowable sale quantity of any alternative, selects a higher percentage (69 percent) of available lands for harvest than most alternatives. Alternative B, which has fewer acres within which to meet long-term contract requirements, selects the highest percentage of available lands for harvest (74 percent).

Figure 3 shows that Forest-wide, less than ten percent of the Tongass National Forest would be scheduled for timber harvest under any alternative.

FIGURE 3

Note that in all alternatives except Alternative C, less than 30 percent of the area colored green on the alternative maps in the map packet would ever be harvested over the 150 year planning horizon. The average rate of harvest Forest-wide by alternative, and the average annual allowable sale quantity, are shown in Table 9. The ranking of alternatives is shown according to the rate of timber harvest.

TABLE 9
ALTERNATIVE COMPARISONS: ALLOWABLE SALE QUANTITY AND RATE OF HARVEST

<i>Alternative</i>	<i>1st Decade Average Annual</i>	
	<i>Allowable Sale Quantity (Million Board Feet)</i>	<i>Rate of Harvest (acres)</i>
D	550	18,500
C	450	15,400
G1	430	14,700
F1	420	14,400
G	390	13,400
F	389	13,400
E1	378	13,100
B	354	12,200
E	280	9,200
A	181	6,000

Roads

Table 10 ranks the alternatives in terms of estimated new road construction over the first five decades (1991-2040). The order corresponds to the amount of timber harvest, which is the primary activity requiring road construction, with the exception of Alternative B, which has relatively more road construction (see preceding discussion).

TABLE 10
COMPARISON OF ALTERNATIVES: NEW ROAD CONSTRUCTION

<i>Alternative</i>	<i>Average Annual New Road Construction (miles)</i>				
	<i>Decade</i>				
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D	293	278	52	55	63
C	234	225	52	55	63
G1	225	216	50	44	48
B	223	217	43	48	41
F1	221	212	50	43	48
G	207	201	48	40	45
F	206	202	49	40	45
E1	202	193	47	40	42
E	129	126	32	26	25
A	80	78	18	17	15

The opportunities for road connections to Canada and transportation and utility corridors are discussed in the Lands and Transportation sections in the DEIS. No allocations preclude such developments under any alternative.

Minerals

Minerals access is open under the majority of management area prescriptions, but withdrawal from new mineral entry is a part of the recommended Wilderness, Research Natural Area, and Wild River prescriptions, and may occur with some Special Areas. The recommended Wilderness prescriptions account for the majority of additional withdrawn lands. Table 11 ranks the alternatives by number of acres open to mineral entry.

TABLE 11
ALTERNATIVE COMPARISONS: OPEN TO MINERAL ENTRY
Ranking alternatives on amount of lands open to mineral entry

Greatest <-----> Least						
G	C	F	D	B	E	A

Roadless Areas

The majority of the Tongass National Forest is in a roadless condition, and will remain so under all alternatives. The prescriptions in the Wilderness and Natural Setting groups all maintain roadless characteristics. Due to lack of access or development potential, some areas within the other prescriptions will also remain roadless. Alternatives A and E recommend an additional 1.8 million acres of roadless areas to the National Wilderness Preservation System. Total roadless acres for each alternative are shown in Table 12.

TABLE 12
ALTERNATIVE COMPARISONS: ROADLESS AREAS
Ranking of alternatives based on roadless areas remaining after 50 years.

Alternatives	Roadless Areas (acres)
A	14,943,000
E	14,407,000
E1	13,641,000
F	13,567,000
G	13,571,000
B	13,443,000
F1	13,435,000
G1	13,398,000
C	13,303,000
D	12,747,000

Local Economy

Employment in Southeast Alaska related to National Forest lands and activities is not expected to change by alternative, except in the timber industry. (Other segments include commercial fishing, recreation and tourism, and mining.) Predicted timber employment is directly related to the timber supply. Table 13 shows total and timber-related employment by alternative.

TABLE 13
ALTERNATIVE COMPARISONS: SOUTHEAST ALASKA EMPLOYMENT
POTENTIAL

Potential employment levels related to the outputs associated with each alternative. Figures are in annual numbers of jobs for the first decade.

<i>Alternatives</i>	<i>Total Employment Potential</i>	<i>Timber Employment Potential</i>
D	18,350	5,525
C	17,325	4,500
G1	17,150	4,325
F1	17,000	4,175
G	16,800	3,975
F	16,725	3,900
E1	16,450	3,625
B	16,275	3,450
E	15,600	2,775
A	14,650	1,825

The Tongass National Forest provides 25 percent of its annual gross revenues (from timber sales, special use fees, and other revenues) to the State of Alaska. These funds are to be used for roads and schools. Gross receipts for the Tongass come almost entirely from timber sales, and are thus directly related to the timber harvest level. Table 9 can be used for the relative ranking of alternatives in providing payments to the State. Based on anticipated mid-market conditions, payments during the first decade are expected to range from a high of \$19,250,000 (Alternative D) to a low of \$6,775,000 (Alternative A).

A DIFFICULT CHOICE

Much of the preceding discussion of issues can be expressed in one basic question: "What amount of timber should be available (or what amount of old growth should be retained?), and where should the timber come from?" On one side of the question are the concerns over scenic quality, recreation settings, fish and wildlife habitat, old growth, subsistence use, roadless areas, Wilderness, and Wild and Scenic Rivers. On the other side is the concern over timber-related employment, and its relationship to the economies of Southeast Alaska's communities.

The concerns expressed have been addressed, and perhaps resolved, by one or more of the alternatives. The varying success of each of the alternatives in addressing the concerns has been the focus of the preceding issue discussions.

The areas of greatest resource competition on the Tongass are the old-growth forests. Current and future timber harvest will occur in old-growth areas, at least for several more decades. Since 1954, when harvest began at significant levels, the amount of old growth in the Tongass has steadily declined. While harvesting of old growth and promoting young, vigorous stands may produce the highest rates of timber growth, there is increasing awareness of other reasons for preserving old growth forests. Subsistence opportunities, scenic quality, recreation settings, and wildlife habitat are associated with the natural condition of the Forest's old growth. Continued timber harvest of almost any amount can only occur with additional reductions in old growth. (Reductions in old growth by alternative were displayed in Table 5).

Beginning in the 1950's, development of the timber industry created a significant number of jobs for the Southeast Alaskans, and has resulted in the growth and sometimes the establishment of many of the area's small communities. A decline in the current level of harvest opportunities from the Tongass will mean a loss of timber-related employment, and could affect some of the local communities including, but not limited to, Wrangell, Sitka, Ketchikan, and Haines.

When second-growth timber in the Forest begins to reach harvestable size, the need for old growth to sustain harvest levels will decrease. In approximately 150 years, each alternative will reach a point where no more old-growth forest is needed to sustain the desired timber supply. At that time, 71 percent (Alternative D) to 87 percent (Alternative A) of the 1954 amount of productive old growth would still remain.

To some, the amount of high-volume old growth is of greater importance than the total productive old growth. After 150 years, the amount of high-volume old growth remaining in relation to the 1954 level will range from 39 percent (Alternative D) to 50 percent (Alternative A).

But for the next several decades, timber harvest will be dependent on old-growth forest areas. Figure 4 shows the relationship between old-growth harvest and timber employment for the next decade. On the average, one annual timber job equates to about three acres of old growth harvested.

If Tongass management were to be distilled down to one difficult issue, it would be this: What is the appropriate balance between continued timber-related employment and the decline of old-growth forests?

FIGURE 4

SECTION THREE

YOUR TURN

Don't Forget The Maps!

Now that you have read the Summary and understand the range of alternatives in a conceptual way, spend some time studying the maps.

- How are the management prescriptions allocated for each of the alternatives?
- According to the bar graph, how much of each management prescription is present on each of the maps?
- How would your favorite areas be managed under each of the alternatives?

Your Comments

Do *YOU* have a preferred alternative? Do you like some aspects of one alternative, and some of another? What specific changes would you like to see in the alternative that most appeals to you?

To be most effective in your response, keep these few principles in mind:

- 1) Be as specific as possible.
- 2) Provide us with rationale for each comment.
- 3) Refer to specific locations on the maps.

We are interested in all points of view. This effort to obtain your comments is not a vote count; you may be the only person to express a certain good idea, and your personal knowledge of an issue or area may influence a final decision. We have provided a Response Form which you may find useful for making your comments, but feel free to write a personal letter or respond in some other way if you wish.

Send your comments to the following address:

**Forest Plan Revision Team
8465 Old Dalry Road
Juneau, Alaska 99801**

Public meetings will be held in communities in Southeast Alaska once the comment period officially begins. We will publicize the meetings and the beginning of the comment period widely.

When the comment period officially begins you will have 90 days to submit your comments to us.

**More
Information**

You may wish to refer to the full set of documents while preparing your comments. Copies are available at all libraries in Southeast Alaska, at the Forest Plan Revision Office, at all Tongass National Forest Offices in Southeast, and at all Regional Forester and Forest Supervisor Offices across the country.

If you have specific questions, or would like more information than is provided within the DEIS, call the Forest Plan Revision Office in Juneau at (907) 789-3567.

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