Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

2SD11
.0522

Reserve

United States
Department of
Agriculture

Forest Service

Alaska Region
Report
Number 113

Draft Environmental Impact Statement

Withdrawal Request under FLPMA Section 204 (c) for National Lands in Alaska August 29, 1980

COVER SHEET

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Title: Withdrawal Request under FLPMA Section 204(c) for National Forest lands in Alaska.

Responsible Agency:
Forest Service
U.S. Department of Agriculture
P.O. Box 2417
Washington, D.C. 20013

Responsible Official: Boo Bergland, Secretary
U.S. Department of Agriculture, Forest Service

For further information contact: Jim Pierce
Interdisciplinary Team Leader
Alaska Region
P.O. Box 1628
Juneau, Alaska 99802
(907) 586-7484

ABSTRACT

This Draft Environmental Impact Statement describes the decision of the Secretary of Agriculture through the Secretary of The Interior for a proposed withdrawal under Section 204(c) of PL 94-579 Federal Land Policy and Management Act of 1976 for National Forest lands in Alaska. It describes a range of three alternatives with various time options considered in identifying the Proposed Action. The anticipated effects to the Region's present programs and the 12 points of analysis as required by Section 204(c) are presented. The rationale for the proposed action is described.

Compelling reasons of national policy have lead to a reduced time frame of thirty (30) days for response to this draft Environmental Impact Statement. The last day to respond under 40 CFR 1506.10(d) is Monday, September 29, 1980.

TABLE OF CONTENTS

	<u>Page</u>
Summary.	1
I. Introduction	5
A. Nature of Decision to be Made.	5
B. Relationship to Major Public Issues and Management Concerns	5
Energy and Minerals.	5
Wilderness	6
Community Stability.	7
Social Well-Being.	8
C. Statement of Proposed Action	8
D. Permits, Licenses, Entitlements.	9
E. Public Involvement	9
Energy and Minerals.	9
National Monuments	10
Wild and Scenic River Designation.	11
Wilderness	12
Wilderness Management and Access	12
Wilderness Economics and Research.	13
Community Stability and Social Well-Being.	13
Affiliation of Respondents	14
Geographic Origin.	15
II. Affected Environment.	15
A. Physical Overview.	15
Physiographic Regions.	15
Vegetation Ecosystems.	15
Climate.	16
B. Social Overview.	16
Population	16

	<u>Page</u>
C. Resources	.18
Recreation	.18
Cultural Resources	.19
Visual Resources	.20
Wilderness and Special Areas	.21
Wildlife	.22
Fisheries	.24
Timber	.26
Minerals Management	.40
Soil and Water Resources	.43
Transportation	.44
Energy	.45
III. Evaluation Criteria	45
IV. Alternatives Considered	46
A. Variables Described	46
B. Alternatives Evaluated	47
C. Discussion of Options Dismissed from Further Analysis	48
D. Mitigation Measures, Management and Monitoring Requirements .	48
V. Effects of Implementation	49
A. Physical and Biological Effects	50
Recreation	50
Fish and Wildlife	52
Timber	53
Minerals and Energy	56
Wilderness	59
Soil and Water	61
B. Socio-Economic Effects	61
VI. Evaluation of Alternatives	64
A. IDT Application of Evaluation Criteria	64
B. Consistency Statement	66
VII. Identification of Preferred Alternative	66

VIII. Consultation with Others.	.67
A. Relationship to Regional Plan Scoping Process.	.67
B. Initial FLPMA Draft Environmental Statement.	.67
C. DES Mailing List.	68
Letter to the Chief	71
Acronyms.	74
Glossary.	76
IX. Index.	80
X. Appendices	
Appendix 1 - References	
Appendix 2 - IDT Experience Statements	
Appendix 3	
Part A - 204(c), LUD I	
Part B - 204(c), LUDs II, III, IV	
Appendix 4 - FLPMA 204(c) Report Staff Experience Statements	
Appendix 5 - Mining and Minerals Policy Act of 1970	

TABLES

A	Alaska's Population by Region	17
B	Population Growth with Projections to 1990.	17
C	Sizes of Lands Recommended for Wilderness	22
D	Potential Yield Distrioution on Tongass National Forest Land and Allowaole Sale Quantity Determination.	29
E	Standard Land Use Classification for Timber Management-- Tongass National Forest.	30
F	Standard Land Use Classification for Timber Management-- Cnugach National Forest.	31
G	Offered and Actual Amounts of Timoer Harvested.	32
H	Annual Potential Yield Statement.	32
I	Area of Commercial Forest Land by Stand-Size Class and Major Survey Unit	33
J	Land Areas in Alaska, By Major Class of Land and Survey Unit. . .	34
K	Area of Commercial Forest Land by Major Forest Type, Dominant Species, and Major Survey Unit	35
L	Net Volume of Sawtimoer on Commercial Forest Land, By Stand-Size Classes and Region	35
M	Existing Contracts.	36
N	Alaska's Sawtimber and Pulp Production, 1960-1974	36
O	Distrioution of 450 MMBF to Areas Within the Tongass National Forest, Based on Individual Area Calculations.	37
P	Net Volume of Growing Stock and Sawtimoer on Commercial Forest Land, by Ownership Classes and oy Softwoods and Hardwoods. . . .	38
Q	Net Volume of Sawtimber on Commercial Forest Land, by Species, Diameter Class, and Region	39
R	Tne Role of Nonfuel Minerals in the U. S. Economy	42

United States Department of Agriculture
Forest Services
P.O. Box 1628
Juneau, Alaska 99802

ERRATA

Please be aware of the following correction to the response process in the Draft Environmental Impact Statement on withdrawal request under the Federal Land Policy Management Act (FLPMA), Section 204(c), for National Lands in Alaska: The last day to respond under 40 CFR 1506.10(d) is Monday, October 6, 1980.

John A. Sandor, Regional Forester for the National Forest System in Alaska, established an Interdisciplinary Team (IDT) to address the withdrawal issue as a part of the Regional Plan, in November 1979. Following the review of public response to the issues and decisions criteria established for the Regional Plan the Forest Service decided to separate the withdrawal issue and treat it through its own planning and decision making process; hence this Environmental Impact Statement.

The following Alternatives have been analyzed in this statement:

Alternative 1: Current Situation (No Change Alternative).

Alternative 2: Proposed two-year withdrawals on all of the presently segregated areas.

Alternative 3: Proposed 5- and 20-year withdrawals on only those lands which are recommended under FLPMA 204(b)(1), and also included in RARE II recommending Wilderness and Further Study. Specific boundary adjustments to excise areas known to be highly mineralized were also considered.

Alternative 4: Proposed 5- and 20-year withdrawals on all of the presently segregated areas.

The following evaluation criteria were applied to the alternatives:

A. Provide for coordinated land management on the National Forests and adjacent Native, State and municipal lands.

B. Provide continuity among national, regional and local programs to ensure effective management of the Region.

C. Provide opportunities for developing utility and transportation modes that best meet the land management goals as well as the needs of the people.

D. Provide for a variety of dispersed recreation on lands with significant fish, wildlife, scientific, scenic, historic, or other recreational qualities.

E. Provide for stability and diversity in the local and regional economy.

F. Assist Alaska communities and residents in meeting their diverse resource and land use needs.

G. Manage the National Forests of Alaska to accommodate the lifestyles and well-being of Alaska residents and communities while being responsive to national goals and concerns.

H. Foster and encourage private enterprise in the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, in accordance with the Mining and Minerals Policy Act of 1970.

I. Provide for the protection of unique wildland values in aid of legislation establishing a wilderness system for the National Forests of Alaska.

The Interdisciplinary Team applied the evaluation criteria to the alternatives and makes the following recommendation:

All lands listed in both the Section 204(b)(1) segregation order and which lands are also listed in Secretary Bergland's RARE II Environmental Impact Statement decision as recommended for Wilderness and Further Study be withdrawn through December 31, 1985, under Section 204(c) of the Federal Land Policy and Management Act. The recommendation includes a boundary change in South Prince of Wales to excise an area of 8,000 acres known to be highly mineralized. It is the opinion of the IDT that this option will best meet the stated intent of the withdrawal (to aid in legislation), while maintaining, to the greatest extent possible, the commitments made in the prior land and resource management planning efforts.

Accordingly, the preferred alternative is Alternative 3, with a 5-year withdrawal period.

The 12 points of analysis as required by FLPMA for each of the areas in question are included in Chapter X of this Statement. Together, these reports constitute the data base supporting this Statement.

Public involvement for this Statement will be through formal hearings, as required by FLPMA, and through written response. Hearings are scheduled for Ketchikan, Sitka, Juneau, and Anchorage in mid-September 1980. A final Environmental Impact Statement will then be written and released in October 1980. The final decision will be implemented on or before December 5, 1980.

Summary of Units and Acreages

	(Acres)
Chugach NF	
College Fiord	847,000
Neillie Juan	696,000
Prince William Sound	500,000
Seward NRA	1,214,000
Copper River	1,538,000
Tonki Cape	42,000
Devil Paw	55,000
	<u>4,892,000</u>

Tongass NF	
South Baranof	305,000
South Prince of Wales	89,000*
Karta	39,000
Coronation, Warren & Maurelle Is.	35,000
Etolin Island	91,000
Tebenkof	65,000
Petersburg Creek	27,000
Boundary Spires	296,000
Endicott River	103,000
Tracy Arm - Fords Terror	678,000
West Chichagof	227,000
Russell Fiord	307,000
Stikine - LeConte	443,000
	<u>2,705,000</u>

TOTAL: 7,597,000 Acres

*TLMP LUD I is 97,000 acres, but the 204(c) report recommends withdrawal of 89,000 acres.

I. INTRODUCTION

A. Nature of Decision to be Made

National Forest lands in Alaska was a topic addressed by the 95th Congress. The Administration's proposal, the House-passed H.R. 39, and the Senate Committee on Energy and Natural Resources' substitute for H.R. 39 all contained such special land classification proposals. The 95th Congress adjourned without completing action on the national interest land legislation in Alaska and the decision was therefore made to apply for a withdrawal under Section 204(b)(1) of the Federal Land Policy and Management Act (FLPMA). On November 28, 1978, the U.S.D.A. filed an application for the withdrawal of 25 separate areas (11.2 million acres) on National Forest land in Alaska. The withdrawal applied to location and entry under the general mining laws and from location and entry under Section 6 of the Alaska Statehood Act, subject to existing rights. The initial application was further corrected by a letter on December 1, 1978. The notice of this application was published in the Federal Register on December 5, 1978 by the Secretary of the Interior. Upon publication, the land was segregated from operation of the public laws to the extent specified in the notice. Unless further action is taken by the Secretary of the Interior on the request for the formal two-year withdrawal, the temporary segregation will expire on December 5, 1980.

The Presidential withdrawal of the 1.1 million-acre Admiralty Island National Monument and 2.28 million acre Misty Fiord National Monument will remain in effect, as the establishment order for those Monuments included provisions for their permanent withdrawal.

Congress did not reach agreement on the Alaska lands legislation in 1979, and pressing international and domestic issues may prevent action in 1980. With the 204(b)(1) segregation due to expire December 5, 1980, it is therefore appropriate to proceed as authorized by FLPMA and seek continued protection for some or all of the lands covered by the initial segregation order. Variables in the decision include which lands should be withdrawn and for what period of time.

B. Relationship to Major Public Issues and Management Concerns

The following related FLPMA issues developed as a result of public response to an "Issues and Concerns" brochure released as a part of the Regional Plan process. (Regional planning provides for resolution of regional issues and provides program coordination for National Forest System, State and Private Forestry and Research programs.)

Energy and Minerals

Issue: What role do Forest Service programs have in meeting the needs for mineral and energy development in Alaska?

Situation: Alaska's National Forests have potential supplies of minerals, coal, petroleum, and hydroelectric and thermal sites for energy production. Exploration and development activities are expected to increase due to the current emphasis on domestic energy production. Some elements of this issue are:

- Critical areas on National Forest lands to be recommended to the Secretary of the Interior for withdrawal from entry. Currently, 11,209,000 acres of land on the Chugach and Tongass National Forests have been segregated from entry. This segregation order will expire on December 5, 1980. Further action on those lands ranging from permitted entry to withdrawal of two, three or 20 years under the Federal Land Policy and Management Act will be recommended in the Regional Plan.

- Forest Service policies to foster the development of energy and mineral resources.

- The level of Forest Service assistance to the small miner in light of controls on exploration.

- Insuring that access and residue sites related to mineral exploration and development are developed in an environmentally acceptable manner.

- Effects of energy development on air and water quality, visual quality, fish and wildlife habitat, and timber production.

- Application of research findings on the effects of exploration and development on other resources.

- Relationship of electric production facilities, transmission lines, coal slurry lines, and pipelines to highway corridors.

- Effects of fuel shortages on recreation use patterns.

- The need for hydroelectric sites to meet rural community energy demands.

Wilderness

Issue: What is the role of the Forest Service in Alaska in meeting demands for wilderness?

Situation: A major Wilderness planning effort was recently completed through the Roadless Area Review and Evaluation (RARE II). As a result of RARE II and previous recommendations, a National Forest acreage of 6,170,300 has been recommended in Alaska for Wilderness. In addition, 1,389,000 acres of Public Domain lands immediately adjacent to

National Forest lands was included. Under the RARE II recommendation, 7,559,900 acres would therefore be administered by the Forest Service.

In addition to those lands recommended for Wilderness, RARE II also identified 2,806,200 acres of roadless area for "further planning." This would include consideration of all uses as well as wilderness. Of the current roadless supply, 7,516,000 acres were recommended for non-wilderness allocation and use.

The following are some management concerns regarding wilderness management:

- The extent that representative cross sections of diverse plant and animal communities will be selection criteria for wilderness areas.

- Forest Service recommendations to Congress on policy for boat and plane access and public facilities within wilderness areas.

- The economic role of wilderness.

- Standards and guidelines to provide wilderness experiences while protecting wilderness values.

- The role of private enterprise in wilderness areas for tours, adjacent resorts, etc.

- Research to determine wilderness demands and types and values of experiences.

Community Stability

Issue: What is the long-term role of the Forest Service in Alaska in supplying resource outputs that meet demands and support local economies?

Situation: The amount and mixture of National Forest outputs (such as habitat improvement, timber, and recreation) should be set based on an analysis that ensures maximum efficiency in meeting public demands. Forest Service programs which result from this analysis can influence economic stability, employment patterns and the mix of industries. National resource needs determined through national planning process (RPA) must be balanced in terms of regional needs and effects on various National Forest users.

Some elements relating to this issue are:

- In Alaska, the economic resource base is expanding from a timber-fisheries emphasis to include tourism and energy development.

-The methods used to assign economic values to amenity outputs.

-Balancing economic development with public preference and local lifestyles.

Social Well-Being

Issue: To what extent and by which means can Forest Service management activities contribute to the overall social well-being of Alaskan residents?

Situation: Perhaps nowhere else in the National Forest System do forest management policies affect a region and its communities to the extent they do on the Tongass and Chugach National Forests. (A community is generally defined as a discrete human settlement that will be sustained for the foreseeable future.) Forest Service management actions have considerable influence on the social vitality and quality of life of residents near Alaskan National Forests. Elements of social life of importance to Alaskan residents include:

-Lifestyles. Alaskan lifestyles are characterized by specific community economies (such as fishing, logging, or mining), remoteness, reliance on natural resources for subsistence, and strong orientation to the out-of-doors for employment and recreation.

-Social and economic stability. Past fluctuations in natural resource supply and demand have resulted in variable social conditions. Social and economic stability (as indicated by such things as diversity of the economic base, stable employment patterns, moderate as opposed to extreme population changes, etc.) is an increasingly important consideration of Alaska residents.

-The richness of Alaska's historical, cultural, and archeological resources helps define Alaska's unique social environment. Cultural resource management includes: protection from disturbance or destruction resulting from Forest Service activities, vandalism or theft, or natural elements; the interpretation of cultural values to the public and the scientific community; and inventory and nomination to the National Register of Historic Places.

C. Statement of Proposed Action

The USDA Forest Service is recommending that a Section 204(c) FLPMA withdrawal be made by the Secretary of the Interior. The withdrawal will be of all National Forest lands in Alaska which are currently under Section 204(b)(1) and Section 204(e) and also which lands are listed in the (USDA) Secretary Bergland's RARE II designation for Wilderness and further study through Decemoer 31, 1985. (Section 240(c) Report is in Chapter X, Appendix 3, Part B.)

D. Permits, Licenses, Entitlements

No permits, licenses or other entitlements are needed to implement the proposal.

E. PUBLIC INVOLVEMENT

The following is a summary of public response to the FLPMA and related issues presented earlier (as part of the Regional Plan):

Energy and Minerals

<u>Respondent Affiliation</u>	<u>Number of Inputs</u>
State elected official	1
Native Organization	1
Nonmotorized recreation	5
Environmental group	5
Industry	4
State government	1
Individuals	<u>27</u>
TOTAL	44

<u>Geographic Origin</u>	<u>Number of Inputs</u>
Outside Alaska	15
Alaska	<u>29</u>
TOTAL	44

Withdrawals were addressed in this section of the issues document. However, the wording was vague and many publics didn't address that issue as part of this broader one. Basically, the issues addressed under this generic heading included energy efficient management suggestions, development or protection of mineral rich areas, and withdrawals.

Generally, both individuals and industry responses noted that the withdrawal issue wasn't made apparent to the public. They felt that the 204(b) withdrawals should not be converted to 204(c) withdrawals.

On the other hand, individuals, environmental groups, and nonmotorized recreation groups recommended that if Congress doesn't act on wilderness recommendations, all of the 204(b) withdrawals should be declared National Monuments to protect them in the interim.

On energy related issues, many respondents felt that the Forest Service should encourage the public to use energy efficient recreation rather

than consumptive types (i.e. sailboats rather than motorboats, hiking rather than driving, etc.). Some respondents also suggested that the Forest Service should favor alternatives that are most energy efficient in management. This will also be noted in the discussion on decision criteria in this report.

A Native corporation favored establishing a policy toward hydro power development on National Forest land. Nonmotorized recreation groups and individuals favored development of geothermal power for local areas as long as it is compatible with other uses. The State and industry responses noted that energy from wood is expensive and major efforts in that direction should be preceded by long term planning.

In mineral exploration, some individuals noted that miners should be freed from Forest Service regulatory constraints. Other development responses favored exploration of those areas with high mineral outputs or those areas with access to tidewater. The Native corporation response favored the notion that nationally critical resources be given more emphasis in the plan and that the Forest Service not create unfair competition with private industry by issuing free use permits for minerals such as sand and gravel.

Several respondents noted that restoration plans for mined areas are needed and that any access and exploration be done in an environmentally safe manner.

One respondent noted that mineral inventories currently are based on local standards and feel that any inventory and classification of the value of areas should be based on nationally accepted and used standards.

National Monuments

The Southeast Alaska Conservation Council proposed a list of 13 National Monuments to be created from the 204(b) withdrawals. Some respondents commented on these, but in general, most selected from those and added others rather than endorsing the entire list.

Thirty-three respondents commented on National Monument designation. These included individuals, industry, environmental groups, and nonmotorized recreation groups.

Industry and environmental groups agreed that the public should be made more aware of the fact that the Regional Plan will be dealing with the withdrawal issue and that recommendation of National Monuments could be an option. Over 25 of those respondents noted that all withdrawals should be made into National Monuments. A list of proposed monuments and numbers supporting each follows.

Two respondents noted that the plan should address Admiralty Island and Misty Fiords National Monuments also. Some respondents said that the information to the public should outline differences between various withdrawal and protection categories.

<u>National Monuments</u>	<u>Inputs Supporting</u>
Yakutat	17
Endicott	17
Mansfield Peninsula	13
Idaho Inlet-Mud Bay	15
West Chichagof-Yakobi	20
S. Baranof Island	16
Tebenkof Bay	17
Rocky Pass	16
Petersburg Creek-Duncan Canal	15
Coronation/Warren/Maurelle Is.	15
Karta	16
S. Prince of Wales Island	16
S. Etoline Island	16
Tracy Arm-Fords Terror	17
Stikine LeConte	16
Copper River Delta	10
Nellie Juan	4
W. Prince William Sound	5

Reasons for support of monuments generally were that these areas needed protection now before development ruins their pristine qualities. Also the need to protect habitat was mentioned, particularly in reference to the Copper River Delta. Respondents also mentioned that outstanding values could be protected but at the same time, recreation and aquaculture development would be permitted. (It should be noted that the Forest Service lacks authority to establish National Monuments and is not considering them as an option in this Environmental Statement or in Regional planning.)

Wild and Scenic River Designation

Proposals for these areas were generally made by those who opposed transportation corridors from tidewater to the Interior over the Coast Range in Southeast Alaska. Reasons given for support were to protect the esthetic and recreational values of the corridors.

<u>Rivers</u>	<u>Inputs Supporting</u>
Unuk	16
Stikine	16
Alsek	17
Copper River Delta	1
Tatshenshini	1
Taku	2

Wilderness

Seventy-four respondents commented on wilderness related topics. Twenty-three were from outside Alaska. Fifty-three were individuals with the remainder of the responses from industry, environmental groups, motorized recreation groups, nonmotorized recreation groups and Native American groups.

Many of these comments displayed confusion over distinctions between wilderness, withdrawals, National Monuments, and the role the Regional Plan will play in any of those allocations. As a result, many comments on allocative related topics could be coded under a variety of issues. To reflect public opinion on these issues, the categories of wilderness, energy and minerals, and National Monuments should be examined.

General wilderness-related comments were made by a number of respondents reflecting views of individuals, industry, and environmental organizations. Several merely supported the wilderness concept while two respondents noted that the Forest Service attitude toward wilderness seems skewed toward development. Divergent opinions on wilderness were recorded by individuals. Some felt that wilderness limits uses while nonwilderness doesn't. In support of this reasoning, two respondents said that de facto wilderness in Alaska was a better choice than Congressional wilderness as it doesn't limit uses - particularly those related to subsistence lifestyles.

Other respondents commented on the irreversible nature of development on wilderness characteristics.

Industry respondents felt that the wilderness allocation issue and any others that affect the land base should be deferred until it is resolved by Congress. Another industry comment noted concern over the large areas of wilderness proposals in Alaska that are largely unexplored for energy and resource potential. They think setbacks before exploration are premature.

Responses from environmental organizations and individuals voiced support for the Alternative "W" RARE II recommendations on the Chugach National Forest.

Wilderness Management and Access

Thirty-one respondents had comments relating to wilderness management issues--including access. Industry, individuals, environmental organizations, and Native American corporations supported the use of fisheries enhancement, aquaculture, public use cabins, and access for

boats and planes within Alaskan wilderness areas. Most thought the public should be involved in setting wilderness management guidelines.

Three respondents thought no access and no improvements should be allowed in wilderness while three voiced the concept of access zoning.

Wilderness Economics and Research

The need for studies on the economic values of wilderness which take into account amenity values, tourism, guiding and wilderness recreation activities, and the impact on timber supplies were noted by responses from individuals, industry, environmental organizations, and nonmotorized recreation groups.

Other studies needed are the impacts of development on wilderness dependent wildlife, the impact of development on land and water, the carrying capacities of wilderness, the relation of wilderness size to use patterns, and the social needs associated with wilderness.

Five individuals noted that wilderness should maintain and preserve cross-sections of plant and animal communities. One respondent cautioned that care should be used in defining diversity as whole land masses do not need to be withdrawn from use to protect diverse plant and animal communities.

<u>Proposed Wilderness Areas</u>	<u>Number of Inputs</u>
W. Chichagof-Yakooi	2
Yakutat Forelands	1
Copper River Delta	4
Prince William Sound	4

Community Stability and Social Well-being

Although there are distinct differences between these two issues, respondents generally perceived them as too interrelated to make real distinctions in their comments. Therefore, we will address them together in this analysis.

Twenty-seven respondents addressed these issues with six from outside Alaska. Nineteen were individuals with the rest distributed among the State, industry, nonmotorized recreation groups and Native American groups.

Opinions on this issue generally reflect a desire by all respondent categories to maintain a stable community system with compatible lifestyles in the dependent communities of Southeast Alaska. Several respondents noted that the dependence upon the National Forests for

lifestyle and stability considerations were far less in Southcentral Alaska than in Southeast.

Industry respondents noted that timber harvests need to be held to traditional levels to maintain employment. Individuals agree with this hypothesis. Some individuals and groups, however, feel that timber harvesting and its resulting employment need not be the only means of maintaining stability in populations. Some noted that tourism and other less extractive industries based on traditional rather than introduced industries, would be less environmentally degrading. The Native American corporations noted that local, private landowners should be preferred to provide commodity and amenity resources in keeping with local preference and lifestyle.

Some respondents noted that it is up to local communities to find other means of keeping the community stable. These respondents called attention to the seasonal nature of logging employment and pointed out the impact on unemployment payments and lack of a stable workforce in those communities.

The State called attention to the effects of Forest Service activities and management decisions on settlement patterns in or on adjacent lands. They urged cooperative planning when this occurs to forestall the demand on the State for additional services beyond already established communities.

<u>Affiliation of Respondents</u>	<u>Number of Inputs</u>
Anonymous	6
Individual	103
Local Government	1
State Government	2
Federal Government	1
Industry/Development Organization or Industry	6
Environmental Organization	8
Academic	0
Motorized Recreation Organization or Industry	2
Nonmotorized Recreation Organization or Industry	8
Native American Corporation	4
Advocacy Organization	1
Local Elected Official	0
State Elected Official	1
National Elected Official	<u>0</u>
Total Respondents	143

<u>Geographic Origin</u>	<u>Number of Inputs</u>
Southeast Alaska	48
Southcentral Alaska	29
Other Alaska	<u>11</u>
Total Alaska	88
Outside Alaska	45
Unknown Origin	<u>10</u>
Total Respondents	143

II. AFFECTED ENVIRONMENT

A. Physical Overview

Physiographic Regions

Alaska's major physiographic divisions are the Pacific Mountain System, the Central Highland Basin, and the Arctic Lowland.

All National Forest lands in Alaska lie within the Pacific Mountain physiographic region, a continuation of the coastal mountain system of western Canada and the United States. The Pacific Mountain System consists of two parallel arcs. The larger, northern arc includes the Coastal Mountains between Southeast Alaska and Canada, the Alaska Range, the Aleutian Range, and the Aleutian Islands. The southern arc consists of the island mountains of Southeast Alaska, the Fairweather Range, the St. Elias Mountains, and the Chugach-Kenai Mountains. Between the two arcs is a trough containing the canals and straits of Southeast Alaska, the Copper River lowlands, the Cook Inlet-Susitna lowlands, and Shelikoff Strait called "Inside Passage." The Chugach National Forest lies between the Chugach Mountains and the Gulf of Alaska and among the Kenai Mountains to Afognak Island. The Tongass National Forest encompasses the mountainous Alexander Archipelago between the Coastal Range and the Pacific Ocean.

Vegetation Ecosystems

Vegetative systems are determined by diverse climatic and physiographic factors. There have been eleven vegetative systems identified in Alaska. They are hemlock-spruce forest; spruce-oak forest; black-spruce forest; muskeg; alder thickets; cottonsedge tundra; watersedge tundra; dryas meadow and barren; Aleutian meadow; Aleutian heath and barren; and ice fields.

Related to those vegetative systems are Alaska's seven major ecoregions. These ecoregions are identified as Arctic tundra; Brooks Range; Bering tundra; Yukon parkland; Alaska-Aleutian Range; Coastal trough; and Pacific forest.

Climate

Alaska is broken into four major climate zones. The Seward Peninsula and everything north of the Brooks Range are known as the Arctic Zone. North of Anchorage lies the Interior Zone; the Copper River, Chugach Mountains, Bristol Bay, and coastal regions of western Alaska are called collectively the Interior Zone. The southeast, south coast, and southwestern islands are of the Maritime Zone.

B. Social Overview

Population

Table A and Table B indicate the relative population growth of various regions of Alaska during the period from 1880-1970. Since the end of World War II, population has increased substantially in the Southeast and Southcentral regions in close proximity to Alaska's National Forests.

Reliable information regarding the age structure, sex profiles, and racial composition of Alaska's population is difficult to ascertain. The most recent information is that derived from the 1970 census and reproduced in Alaska Population Overview, a publication developed by the Alaska Department of Labor in 1979.

The 1970 data indicates that Alaska's age/sex composition is more similar to the United States profile as a whole despite the fact that the median age (23 in Alaska, 28 in the United States as a whole) is younger, and the male population of Alaska (54 percent) is greater than the female population.

The Native population (Indians, Eskimos, and Aleuts) comprises 17 percent of Alaska's total population. Three Indian tribes (Tlingit, Haida, and Tsimshians) inhabit Southeast Alaska. The Athabaskan Indians live primarily in the Interior of Alaska. Eskimos dwell along the coast of mainland Alaska from the Bering Sea and Arctic coastlines to Prince William Sound in Southcentral Alaska. Aleuts generally live on the western most third of the Alaskan Peninsula and on islands in or near the Aleutian Chain.

A

ALASKA'S POPULATION BY REGION 1880-1977

Year	Total Alaska	Southeast	Southcentral	Southwest	Interior	Northwest
1880	31 426	7 748	4 352	13 914	2 568	4 844
1890	32 052	8 038	6 112	12 071	2 333	3 498
1900	63 592	14 350	10 000	13 000	5 600	20 642
1910	64 358	15 216	12 900	12 049	13 064	11 127
1920	55 036	17 402	11 173	11 541	7 964	6 956
1930	59 278	19 304	11 880	12 118	8 246	7 730
1940	72 524	25 241	14 881	12 846	10 345	9 211
1950	128 643	28 203	50 093	17 715	23 008	9 624
1960	226 167	35 403	108 851	21 001	49 128	11 784
1970	300 382	42 565	162 001	26 491	56 479	12 848
1971	312 930	43 349	174 609	26 650	54 977	13 345
1972	324 281	44 772	182 954	26 765	56 797	12 993
1973	330 365	43 417	188 698	29 040	56 593	12 617
1974	351 159	50 232	194 569	28 165	63 151	15 042
1975	404 634	50 438	229 492	28 428	78 614	17 662
1976	413 289	51 112	244 056	28 488	68 572	21 041
1977	411 211	53 162	252 836	26 512	58 208	20 493

Source: Alaska Department of Labor.

B

Population growth with projections to 1990: State, Southcentral and Southeast Alaska 1965-1995

Year	Population			Years	Average Annual Growth		
	State	Southcentral	Southeast		State	Southcentral	Southeast
1965	265,192	132,572	-	-	-	-	-
1975	404,634	229,492	49,957	1965-1975	5.3%	7.3%	-
1976	413,289	240,661	51,172	1975-1976	2.1%	4.8%	2.4%
1978	416,400	240,200	53,800	1975-1978	1.0%	1.6%	2.6%
1980	585,600	236,600 (1) 245,500 (2)	63,150 (3) 67,290 (5)	1975-1980	8.9%	.6% 1.4%	5.3% -1.4% 6.9%
1985	-	265,000 (1) 314,200 (2)	-	1975-1985		1.5% 3.7%	-
1990	-	298,700 (1) 423,400 (2)	69,579 (3) 75,895 (5)	1975-1990		2.0% 5.6%	2.6% -1.0% 3.5%
1995	-	334,500 542,000	78,624 (3) 89,177 (5)	1975-1995		2.3% 6.8%	2.9% -1.0% 3.9%

1. Low development option Southcentral Region.
2. High development option Southcentral Region.
3. Base projection Southeast Region.
4. Base projection Southcentral Region.
5. High projection Southeast Region.

Sources: Alaska Population Overview.

Regional and Local Dimensions, Socio-economic Overview, TLMP

C. Resources

Recreation

Recreation activities can generally be described as either dispersed or developed. Chapter V provides specific examples of these two types of recreation. The key distinction of developed recreation activities is facility development which tends to concentrate use. In the absence of facilities, use often tends to spread out over larger geographic areas, creating a dispersed recreation situation. Examples of dispersed recreation opportunities include hiking, boating, cross-country skiing, primitive camping, sightseeing, hunting and fishing. Developed recreation includes opportunities associated with developed campgrounds, ski resorts, picnic areas, visitor centers. Recreation opportunities are often intermixed and complementary. Developed sites serve as a departure point for dispersed uses such as hiking, cross-country skiing, and fishing.

Under the current situation, approximately 18 percent (2,746,000 acres) of the Tongass Forest has been allocated primarily to roadless recreation and wildlife values (LUD II). This includes existing and potential primitive and semi-primitive recreation opportunities. Another 35 percent (5,400,000 acres) is being proposed for wilderness (LUD I) and has capability for some primitive recreation opportunities, although carrying capacity is lower than LUD II. Approximately 47 percent (7,045,000 acres) allocated to LUD III and LUD IV have a wide range of recreation opportunity capabilities across the total spectrum from primitive to semi-urban.

Many recreation opportunities within LUD's III and IV areas will be associated with roads constructed primarily for timber harvest. However, there are many smaller areas scattered throughout associated with noncommercial timber areas, as well as alpine areas presenting roadless or primitive type recreation opportunities. Developments in this area are not expected to impact adjacent saltwater recreation semi-primitive experience capability significantly except for visual impacts, to some degree, depending on topography and distance factors; mining and utility corridors and associated roads are expected to have some undetermined potential for conflict.

Approximately 1,663,000 acres are proposed for wilderness by the Administration within the roughly four and a half million acre Chugach National Forest. Another 2,806,200 acres have been identified in the Roadless Area Review and Evaluation (RARE II) for further planning for a variety of wilderness and nonwilderness uses. Approximately 247,000 acres of roadless area are proposed for nonwilderness under the RARE II recommendation offering a broader array of recreation opportunity experiences.

It is estimated that the Interior includes over 300 million acres of defacto wilderness. A large portion of that will probably be allocated to National Parks, Wildlife Refuges and Ranges, Wild and Scenic Rivers and National Forests through pending d-2 legislation. Much of the Interior will retain primitive to semi-primitive recreation values. A significant selection by the State is expected, possibly resulting in a wider range of recreation opportunities. A smaller percentage has been selected by Native corporations which will serve to reduce capability for public recreation opportunities (12% of the State). A portion of the Interior will be retained under the Bureau of Land Management.

The Interior is expected to receive the largest impact from access roads and other development associated with gas, oil, mining and, to a smaller extent, timber. Experience opportunities will shift from primitive to semi-primitive or toward the developed end of the recreation spectrum in those areas.

Cultural Resources

Some 1,500 historic and prehistoric cultural resources (historic and archeological sites) are known to exist in the Alaska Region. These known cultural resources vary widely in age, from 10,000-year-old sites of groups who may have been the original inhabitants of Southeast Alaska, to installations constructed during World War II for defense purposes. The resource is highly varied, including Native camps, villages, and petroglyphs; Russian occupation period redoubts, churches, villages, manufacturing sites, American mines, homesteads, fur farms, logging machinery, oil wells and refineries.

The wide variety and diversity of the Native cultural resources in the Region provide the data base for determining and interpreting their cultural history and ancestral roots. Archeological studies have already shown that the largest inhabitants of Southeast Alaska were present 10,000 years ago and used tool types which can be traced at least back into Interior Alaska. The historic period non-Native sites can provide rare, valuable insights into the life styles, techniques, processes, and economics of the early mining, fisheries, lumber and fur farming industries.

The present program emphasizes identification and protection of the resource in advance of ground disturbing activities. An anticipated 153 new cultural resources will be located per year for the next ten years. The rate will increase as our ability to predict likely locations or recognize early types of archeological sites improves.

National Register nominations (required by Executive Order) are expected to progress at the rate of 10-25 per year.

There are, at present, eight properties listed on the National Register of Historic Places. Two additional sites have been determined eligible by the Keeper of the National Register.

I. Sites on the National Register of Historic Places:

A. Chugach National Forest

1. Palugvik Site
2. Chilkat Oil Refinery
3. Hirsney Mine
4. Alaska Railroad Tunnel No. 1
5. Bering Expedition Landing Site

B. Tongass National Forest

1. Storehouse No. 3 (Ketchikan)
2. Fort Durham (in part Chatham)
3. Skagway Historic District and White Pass (in part Chatham)

Visual Resource

A striking feature of the Alaska Region is its marine setting which is associated with most of the Tongass and a large portion of the Chugach Forest. For example, the 1,000 mile long "Inside Passage," one of the best known waterways in North America, runs through the Tongass. The Prince William Sound inland marine area offers a similar, relatively protected zone for viewing outstanding scenic features of that area. The Kenai Peninsula on the Chugach offers the most visual variety of National Forest land in Alaska. Other extremely scenic areas of a slightly different character are the Copper River Delta and Afognak Island, both on the Chugach. The Chugach overall appears to have a higher inherent capability to sustain high quality landscapes. It is estimated that approximately 50-70% of the Chugach has high capability and only 5-10% is of low capability. The Tongass Forest and associated areas, i.e. Glacier Bay, are estimated to contain landscapes of 20-30% providing high quality scenery and 10-15% of relative low capability. These estimates were based on a rough evaluation of the percentage of land in each of the "variety classes" inventoried for establishing the Region's visual quality objectives.

The Interior, involving State and Private Forestry programs, also includes a variety of scenic resources more oriented to large river systems and mountain ranges except for area on the Bering Sea, Bristol Bay and Arctic Ocean. Capability for high scenic quality is very significant as the bulk of the Interior is undisturbed and in natural state. Viewing the Interior in total, there is tremendous variety which is a measure of scenic quality. Data for the Interior is not available

to rate quality but it is estimated that considerable area can be found in both the low quality (extensive flat tundra) and high quality extremes (Mt. McKinley).

Existing management direction recognizes inventory visual quality objectives as the upper limits of visual constraints. After consideration of other values it is estimated existing management direction may allow for some reduction in visual quality over the next 30 years, or 15-30% of LUDs III and IV on the Tongass, and approximately 5-8% on the Chugach. The Tongass reduction in LUD's III and IV would be offset to some extent by the much higher visual quality required in LUD I and LUD II areas. These are very rough projections based upon relatively little available data at this time.

Of the total Tongass acreage, 3,400,019 acres of commercial forest land is LUD III and IV, of which approximately 231,634 acres are managed under an extended rotation of 200 years for visual resource reasons. Some additional visual resource protection is provided because approximately 33 percent (unregulated total) will not be harvested because of hazardous soils, small islands, inoperable areas, some areas around communities, wildlife "retention" areas. Some of these "unregulated" areas coincide with important visually sensitive areas such as the wildlife retention areas (280,287 acres).

Wilderness and Special Areas

Although there currently are no formally designated wilderness areas on National Forest lands in Alaska, nearly 97 % of the land in Southcentral Alaska is roadless and much of it possesses wilderness qualities.

Of the 15.4 million acres of National Forest lands in Southeast Alaska, approximately 13 million (84%) are yet unroaded and undeveloped and therefore eligible for consideration as part of the Wilderness Preservation System.

The wilderness values as assigned through the National RARE II process show the average rating score to be very high, indicating the value of Alaska National Forest lands for wilderness suitability. The Forest Service, through the recent RARE II, has recommended to Congress that of the total current roadless supply the following designations be made: 6,170,300 acres to wilderness; 2,806,200 acres to be studied further for a variety of, uses including wilderness; and 7,516,100 acres for non-wilderness uses.

C

Size of lands recommended for wilderness from

Area name	Existing national forest lands	Other Federal lands	Total Federal lands
	<i>Thousand acres</i>		
Alaska Region	6,170.3	1,389.6	7,559.9
Chugach National Forest	770.0	893.0	1,663.0
College Fjord	171.0	612.0	783.0
Nellie Juan	478.0	281.0	759.0
Devilpaw	57.0	—	57.0
Tonki Cape	64.0	—	64.0
Tongass National Forest	5,400.3	496.6	5,896.9
Russell Fjord	295.0	37.0	332.0
Admiralty Island	921.0	—	921.0
West Chichagof-Yakobi	227.0	—	227.0
Stikine-LeConte	275.5	144.8	420.3
Tracy Arm-Ford's Terror	506.6	149.6	656.2
Boundary Spires	128.3	165.2	293.5
Misty Fjords	2,285.0	—	2,285.0
Endicott River	103.0	—	103.0
Petersburg Creek	27.0	—	27.0
South Baranof	305.0	—	305.0
Tebenkof	65.0	—	65.0
Coronation Islands	19.1	—	19.1
Warren Island	11.4	—	11.4
Maurelle Island	4.4	—	4.4
Karta	39.0	—	39.0
Etolin Island	91.0	—	91.0
Prince of Wales Island	97.0	—	97.0

Wildlife

Wildlife resources are important to Alaska providing subsistence, recreation, commercial, aesthetic and ecological values. Many wildlife species are relatively abundant in Alaska, compared to the rest of the Nation. Populations include such important species as Dall sheep, mountain goat, brown bear, polar bear, black bear, moose, caribou, black-tailed deer, wolves, wolverines, many other fur-bearers, eagles, waterfowl, as well as a wide variety of non-game birds and small animals. Sea mammals such as harbour seals, sea lions, walrus, sea otter, killer whales, humpback whales and Dall porpoises frequent the coastal waters.

In all, some 53 species of mammals, 269 species of birds, and seven species of amphibians are found in Southeast Alaska, due to the great diversity of habitat. Populations and distribution of game animals vary widely depending upon conditions of habitat, severity of weather and the degree of predation.

Approximately 4,000 breeding pairs of bald eagles inhabit Southeast Alaska, accounting for 80 percent of Alaska's northern bald eagle population.

Estimates of abundance of some of the most important animals in Southeast, as made by ADF&G for 1979 follow:

Tongass National Forest

Alaska Brown Bear	4,770
Black Bear	9,950
Black-tailed Deer	141,700
Moose	2,300
Mountain Goat	5,800
Wolverine	525
Wolf	724

The Southcentral area provides some of Alaska's most significant wildlife habitat due to its high productivity and accessibility to the largest segment of Alaska's human population.

Habitats for estimated millions of migratory waterfowl, shorebirds, and sea birds is found within this area. These include the Susitna River lowlands, the Chickaloon Flats, Copper River Delta, Controller Bay, Icy Bay coastal lowlands, Portage Flats and the Kenai-Swanson River areas. They provide resting, feeding, and staging areas for hundreds of species of migrant waterfowl and other birdlife; they also provide key nesting and rearing habitat for about 170,000 ducks, geese, and swans including the entire known population of approximately 30,000 dusky Canada geese. Trumpeter Swans breed throughout the Susitna lowlands, Kenai, Copper Delta, and coastal lowlands to Icy Bay. Their fall flight of 1,300 to 1,400 is a major portion of the known North American population.

Estimates of abundance of some of the more important animals on the Chugach National Forest, as made by the ADF&G, follow:

Chugach National Forest

Alaska Brown Bear	600
Black Bear	3700
Black-tailed Deer	9200
Caribou	350
Dall Sheep	1000
Elk	750
Moose	2150
Mountain Goat	2700
Wolverine	1000
Wolf	100

Fisneries

In the early days of the Alaskan commercial salmon fishery most salmon were used for subsistence and the supply exceeded the demand. About 1860 this situation changed with the development of canning processes. By 1900 the salmon fishery was a rapidly growing, highly competitive industry. The commercial harvest increased with increased fishing pressure until the period 1930-1940 when all-time peaks of 100 million fish were reached. Since then the trend has been downhill. The annual catch first leveled at around 40 million in the early nineteen sixties and then increased to an average of 52 million in the next ten years.

The State-wide salmon catch from 1970-1979 follows:

<u>Season</u>	<u>No. Fish</u>
1970	68.5
1971	47.5
1972	32.0
1973	22.3
1974	21.8
1975	26.2
1976	44.4
1977	50.8
1978	80.2
1979	86.4

Of the salmon harvested in the State commercial fishery in 1977, that portion of the catch produced on National Forest lands was roughly \$38 million for the Tongass and \$11.8 million for the Chugach, a total value of close to \$50 million. Because of year-to-year fluctuations in abundance some years will be better, some worse.

In Southeast there are about 120,000 acres of fish bearing lakes and 23,000 miles of streams. On the Chugach National Forest portion of Southcentral there are about 70,000 acres of lakes and 8,000 miles of streams.

Sport Fishery

During the last 20-30 years, a significant sport fishery has developed in Southeast and Southcentral as well as in the rest of the State. Since statewide sport fishing license sales have increased at the rate of 7.4% per year.

In 1977 Recreation Visitor Days (RVD's) for sport fishing on the Tongass National Forest were 144,429^{1/} and for the Chugach National Forest 275,627. These 420,056 RVD's were valued at about \$8 million. The present supply of sport fish in the Region then supplies 420,000 visitor days.

The short term objective of ADF&G is to increase the number of sport fish in Southeast by 125,000 and for the long term by 185,000. For Prince William Sound, the short term goal is 40,000 and the long term goal is 67,000 sport fish, which represents increases of 48% and 67.5%, respectively.

Capability of the many varied ecosystems in Interior Alaska to produce sport and commercial fish and fish for subsistence users is significant.

^{1/} Statewide Harvest Study, Alaska Department of Fish and Game - Volume 20, by Michael J. Mills

The commercial and subsistence salmon harvest for the Arctic-Yukon-Kuskokwim Region, 1960-1971, follows:

Year	Commercial Catch	Subsistence Catch	Total Catch	Percentage Subsistence
1960	84,707	356,524	441,231	80.3
1961	316,901	645,732	962,633	67.1
1962	628,250	656,364	1,284,614	51.1
1963	445,482	660,855	1,106,337	59.7
1964	410,845	811,969	1,222,814	66.4
1965	265,577	845,747	1,111,324	76.1
1966	369,016	537,502	902,518	59.3
1967	391,177	682,138	1,073,315	63.6
1968	640,760	596,132	1,236,892	48.2
1969	772,659	592,328	1,364,987	43.4
1970	1,005,089	668,434	1,673,523	39.9
1971	869,760	470,787	1,340,547	35.1

SOURCE: Alaska Department of Fish and Game, annual area management reports.

Sport fishing for steelhead, pike, grayling, and lake trout has increased with the popularity of river floats and increased number of visitors. Although various means of fish habitat enhancement are amenable to use in the Interior, such programs have not been carried out on a large scale.

Timber

Changing landownership and allocation patterns have affected the usefulness of some of the existing information. Ownership and allocation patterns are still oscillating. It is, therefore, impossible at this time for the Forest Service to completely analyze and enumerate the total existing situations. Where no further detailed data was available, information presented in The Forest Ecosystem of Southeast Alaska, 1975 (9, Timber Inventory, Harvesting, and Trends, USDA FS General Technical Report PNW-34, 57 pages, illus. Pacific Northwest Forest and Range Experiment Station, Portland, Oregon) by O. Keith Hutchinson, et al., was used.

The total land area of Alaska is about 365.5 million acres. This is about 16% of the total area in the United States. There is also another 10 million acres of lakes and streams. According to Hutchinson, "Alaska has 16% of the forest land in the United States, or 119 million acres. This is as much forest land as is found in the States of Montana, Washington, Oregon, and California combined. But the average quality of forest land in Alaska is below that of the other states mentioned. Only 28.2 million acres is considered commercial; that is, capable of producing a minimum of 20 cubic feet of industrial wood per acre annually. Oregon alone has nearly as many acres of commercial forest land."

Southeast Alaska includes all land from Yakutat Bay to Dixon Entrance, a total of 24,148,000 acres. Of the five million acres, about half is normally operable. (See table.)

The Tongass National Forest contains 15,189,193 acres of which 5,331,577 is CFL. (CFL by definition is land capable of producing 20 cubic feet per acre per year.) With nondeclining yield constraints the biological potential yield on the Tongass the next 100 years is 1114 MMBM. The long-range, sustained yield for all the National Forest land would be 1,385 MMBM.

Southern Alaska includes coastal lands from the Bering Glacier on the east to Kodiak Island on the southwest. The total land area is 8,778,000 acres, of which 2,046,000 acres are forested. There are only 865 acres of commercial forest land. The area is predominately sawtimber, of which 82% is old-growth (150 years old or more). The major species are Sitka spruce and hemlock (western and mountain). No total potential yield has ever been calculated for this total area.

With nondeclining yield constraints, the biological potential yield on the Chugach National Forest for the next 100 years, is 135 MMBM.

The long-range sustained yield (LRSY) for all the National Forest land would be 210 MMBM. This cannot be realized until about 100 years have passed with nondeclining harvest.

The annual Potential Yield Statement, Commercial Forest Land - Volume Summary shows the yield that could be achieved on a nondeclining evenflow basis if all standard, special, and marginal timber lands were economically available for harvest as needed. The potential yield would be 68 MMBM and the LRSY would be about 105 MMBM.

The forested portion of the Interior (which is basically territory north of the latitude of Anchorage) has 105.8 million acres of forest land, of which 22.5 million acres is productive. This means land producing, or capable of producing, 20 cubic feet of wood per acre per year. Most of

tnis lies in river valley bottoms and well-drained, south-facing slopes. The species are predominately white spruce, with mixtures of paper birch, river bottom stands of cottonwood or balsam poplar and some black spruce. Productive forests are comparable to those at similar latitudes in Sioeria, Canada and Scandinavia, as well as those in the Lake States (the north central region of the United States such as Michigan, Minnesota, and Wisconsin).

The following tables (D through Q) express forest research in timber management.

D POTENTIAL YIELD DISTRIBUTION ON TONGASS NATIONAL FOREST LAND
and
Allowable Sale Quantity Determination

Annual
Potential Yield
MMBM

1,114 — —

Total

Admiralty
122

Misty Fiords
54 MMBM

Other LUD I

LUD II's

Unregulated

(Detailed breakdown to be worked out)

Retention

497 — —

Marginal
116MM

Special
69 MM

Standard
Special
Marginal

Potential Yield MMBM	Avail- ability %	ASQ MMBM
312	100	312
69	100	69
116	10	12
<u>497</u>		<u>393</u>

Standard
312 MM

E

STANDARD LAND USE CLASSIFICATION FOR TIMBER MANAGEMENT

F

STANDARD LAND USE CLASSIFICATION
FOR TIMBER MANAGEMENT

CHUGACH NATIONAL FOREST

G

Offered and actual amounts of timber harvested

Fiscal Year	Volume made available	MM bm	Volume harvested
1973/74	395		593
1974/75	430		561
1975/76	710		469
1976/77	555		449
1977/78	555		465
1978/79	557		430
1979/80	563 (Planned amount)		--
1980/81	536 (Planned amount)		--

H

Annual Potential Yield Statement Commercial Forest Land - Volume Summary

Administrative National Forest	Sawtimber				Total MBF
	Standard MBF	Special MBF	Marginal MBF	Unreg- ulated MBF	
Stikine Area	60,500	20,100	46,400	0	127,000
Chatham Area	83,800	25,600	34,200	0	143,600
Chugach NF ^{1/}	16,329	16,913	35,380	0	68,622
Ketchikan Area	167,700	23,300	35,400	0	226,400
Region 10 TOTAL	328,329	85,913	151,380	0	565,622
Report-Total	328,329	85,913	151,380	0	565,622

^{1/}Chugach data should be considered the high range passable. Data will be revised when Land Management Plan now being developed is completed in _____ 1981.

Area of commercial forest land by stand-size class and major
survey unit, Alaska
(Thousand acres)

Stand-size class	Total Alaska	Coastal			Interior
		Total	Southeast	Chugach	
Sawtimber stands:					
Old-growth	4,852	4,852	4,238	614	--
Young-growth	7,266	379	242	137	6,887 ¹
Total	12,118	5,231	4,480	751	6,887
<hr/>					
Poetimber stands	8,873	199	139	60	8,674
<hr/>					
Sapling and seedling stands	6,065	259	208	51	5,806
Nonstocked areas	1,162	60	57	3	1,102
Total	28,218 ²	5,749	4,884	865	22,469

¹ Sawtimber stands of the interior were not classified as old- or young-growth.

² Productive-reserved lands not included.

J

Land areas in Alaska, by major class of land and survey unit
(Thousand acres)

Survey unit	Total land area	Forest land				Nonforest
		Total	Commercial	Productive-reserved	Unproductive	
COASTAL						
Southeast:						
Juneau	3,833	1,653	815	6	832	2,180
Sitka	2,433	1,740	541	--	1,199	693
Petersburg	3,287	2,357	1,029	--	1,328	930
Ketchikan	5,566	4,256	1,951	8	2,297	1,310
Yakutat	796	315	276	--	39	481
Haines-Gustavus	924	226	79	1	146	698
Glacier Bay	2,022	359	--	179	180	1,663
Yakataga	3,292	243	174	--	69	3,049
Public domain	1,995	52	19	--	33	1,943
Total southeast	24,148	11,201	4,884	194	6,123	12,947
Chugachi						
Cordova	3,036	1,177	335	--	842	1,859
Kenai	1,259	266	190	--	76	993
Afognak ¹	567	354	276	--	78	213
Kodiak ²	2,575	81	47	--	34	2,494
Public domain	1,341	168	17	--	151	1,173
Total Chugach	8,778	2,046	865	--	1,181	6,732
INTERIOR						
Interior:						
Susitna	16,490	4,292	2,023	--	2,269	12,198
Kenai	5,665	2,070	1,481	--	589	3,595
Tanana-Fairbanks	20,266	12,989	3,555	6	9,428	7,277
Upper Tanona	13,633	6,746	1,272	--	5,474	6,887
Cooper River	16,424	4,431	1,060	--	3,371	11,993
Upper Yukon	36,929	22,557	4,945	--	17,612	14,372
Lower Yukon	44,976	30,005	4,232	--	25,773	14,971
Kuskokwim	26,564	14,662	2,594	--	12,068	11,902
Bristol Bay	12,877	2,741	704	--	2,037	10,136
Norton Sound	31,113	5,311	603	--	4,708	25,802
Total	224,937	105,804	22,469	6	83,329	119,133
Unsurveyed area	107,618	--	--	--	--	107,618
Total Interior	332,555	105,804	22,469	6	83,329	226,751
Total Alaska	365,481	119,051	28,218	200	90,633	246,430

¹ Includes Afognak, Raspberry, Shuyak, and Marmot Islands.

² Includes Kodiak and adjacent islands.

K

Area of commercial forest land by major forest type, dominant species, and major survey unit, Alaska (Thousand acres)

Major type by dominant species	Total Alaska	Coastal			Interior
		Total	Southeast	Chugach	
Hemlock-Sitka spruces					
Sitka spruce	960	960	636	324	--
Western hemlock	2,682	2,682	2,682	--	--
Mixed hemlock/spruce	1,545	1,545	1,049	496	--
Cedar	319	319	319	--	--
Total	5,506	5,506	4,686	820	--
Spruce-fir:					
White spruce	12,806	--	--	--	12,806
Aspen-birch:					
Quaking aspen	2,407	--	--	--	2,407
Paper birch	5,140	18	--	18	5,122
Total	7,547	18	--	18	7,529
Hardwoods:					
Cottonwood	2,149	15	--	15	2,134
Mixed hardwoods	210	210	198	12	--
Total	2,359	225	198	27	2,134
Total all types	28,218 ¹	5,749	4,884	865	22,469

¹ Productive-reserved lands not included.

L

Net volume of sawtimber on commercial forest land, by stand-size classes and region, Alaska (Million board feet)¹

Stand-size class	Total Alaska	Coastal			Interior
		Total	Southeast	Chugach	
Sawtimber stands:					
Old growth	(²)	173,827	157,764	16,063	(²)
Young growth	(²)	10,043	7,495	2,548	(²)
Total sawtimber	206,400	183,870	165,259	18,611	22,530
Poletimber stands	8,866	709	562	147	8,157
Sapling and seedling stands	92	49	10	39	43
Nonstocked areas	156	69	69	--	87
Total	215,514	184,697	165,900	18,797	30,817
Percent	100.0	--	77.0	8.7	14.3

¹ International 1/4-inch rule.

² Sawtimber stands in Interior Alaska were not broken down into old-growth and young-growth classifications.

M

<u>Existing Contracts</u>				Contract	Timber
Sale Name	Contract Date	Expiration Date	MMBM	Volume	Volume
				MMBF	Remaining 1/1/80 MMB
Ketchikan Pulp Co. (KPC)	7/26/51	6/30/2004		8250.0	4441.5
Pacific Northern Timber Co. (PNT)	6/09/54	12/31/1981		693.1	138.4
Alaska Lumber and Pulp Co. (ALP)	1/25/56	6/30/2011		4974.7	3282.0
Perenosa	7/29/68	8/03/1984		221.0	211.0

N

ALASKA'S SAWTIMBER AND PULP PRODUCTION, 1960-1974

Year	National Forest*	State**	Other**
MFB (Scribner DC Log Scale)			
1960	351,109	210	14,181
1965	404,498	24,161	3,241
1970	560,975	53,568	41,640
1972	550,520	50,590	27,900
1974	576,810	51,241	29,730

* All coastal forest areas.

** The principal cut is from coastal forest areas.

O

Distribution of 450 MMBF to Areas Within the Tongass
National Forest, Based on Individual Area Calculations

	Stikine	Programed Harvest Ketchikan	Chatham	TOTAL
	Volume in (MMBF)	Scaled Volume ^{7/}		
Initially Economical Volume ^{1/}	63	159	64	286
Less Off-Admiralty ANCSA Selection ^{2/}	--	---	15	
Economically Viable Volume	63	159	49	271
Additional Investment \$11.7				
LUD III Preroad ^{3/}	22	41	43	106
Precommercial Thinning ^{4/} (Acres of Precommercial Thinning)	9 (1670)	16 (2960)	9 (1670)	34 (6300)
Marginal Preroad ^{5/}	6	6	9	21
Marginal Preroad ^{6/}	(1)	(1)	(1)	(3)
Adv. Logging Technique ^{6/}	8	5	5	18
Adv. Logging Technique	(3)	(3)	(2)	(8)

^{1/} LUD IV Std. and Spec. plus 10 percent of all marginal in LUD IV.

^{2/} Volume estimated to be removed from proposed Off-Admiralty Island
land selections--presently assumes it will come from Chatham Area.
If it does not, adjustments will be needed.

^{3/} LUD III Std. and Spec. plus 10 percent of all marginal in LUD III.

^{4/} May vary later as program continues--presently is based on annual
average as shown in parentheses.

^{5/} Includes low volume areas needing advance roading to make a sale
feasible. Volume in parentheses is the 10 percent of low volume
marginal material included in "economically viable" lines above
and should be part of sale plans. Logging of areas requiring multi-
span skyline, balloon, and helicopters. Volume in parentheses is
the 10 percent of technological marginal included in "economically
viable" lines above and must also be included in sale plans.

^{7/} Volumes do not include any utility log volumes. Parentheses are
non-add items for total volume.

P

Net volume of growing stock and sawtimber on commercial forest land, by ownership classes and by softwoods and hardwoods, Alaska

Ownership class	All species	Coastal		Interior ¹	
		Softwoods	Hardwoods	Softwoods	Hardwoods
----- <u>Million cubic feet</u> -----					
Growing stock:					
National Forest	32,867	32,592	275	0	0
Other public	16,903	2,630	22	9,164	5,087
Forest industry	--	--	--	--	--
Former and misc. private	186	184	2	--	--
All ownerships	49,956	35,406	299	9,164	5,087
----- <u>Million board feet, International 1/4-inch rule</u> -----					
Sawtimber:					
National Forest	169,988	168,815	1,173	0	0
Other public	44,563	13,650	96	--	--
Forest industry	--	--	--	--	--
Farmer and misc. private	963	957	6	--	--
All ownerships	215,514	183,422	1,275	24,949	5,868

¹ No ownership breakdown available beyond National Forest ownership.

Q

Net volume of sawtimber on commercial forest land, by species,
diameter class, and region, Alaska
(Million board feet)

Survey unit and species	All classes	Diameter class (inches at breast height)			
		11-20	21-30	31-40	41+
Southeast:					
Sitka spruce	54,198	8,474	13,875	12,655	19,194
Western hemlock	101,483	31,288	40,022	22,415	7,758
Other softwoods	8,999	3,367	3,434	1,495	703
Hardwoods	1,220	741	400	79	--
Total	165,900	43,870	57,731	36,644	27,655
Chugach:					
Sitka spruce	13,350	5,235	4,848	2,519	748
Western hemlock ²	5,378	2,440	2,070	767	101
Other softwoods	14	13	1	--	--
Hardwoods	55	39	12	4	--
Total	18,797	7,727	6,931	3,290	849
Total:					
Sitka spruce	67,548	13,709	18,723	15,174	19,942
Western hemlock	106,240	33,179	42,020	23,182	7,859
Other softwood	9,634	3,929	3,507	1,495	703
Hardwoods	1,275	780	412	83	--
Total coastal (all species)	184,697	51,597	64,662	39,934	28,504
Interior:					
White spruce and other softwoods	24,949	23,281	1,668	--	--
Paper birch	2,422	2,422	--	--	--
Balsam poplar	2,642	2,228	414	--	--
Quaking aspen	804	804	--	--	--
Total interior	30,817	28,735	2,082	--	--
Total Alaska (all species)	215,514	80,332 ³	66,744	39,934	28,504

¹ International 1/4-inch rule.

² Includes mountain hemlock.

³ Includes 7,151 million board feet of softwoods in the 10-inch class (Chugach, 190 million; and interior, 6,961 million bd. ft.).

Minerals Management

While intensive modern exploration of the National Forests of Alaska has been limited, not only by high costs, but by extensive segregation and withdrawal of lands from the mining laws as well, the potential for new discoveries remains high. The recent discoveries by Noranda and U. S. Borax are examples of the mineral potential in Southeast Alaska alone. The estimated gross value of these two deposits is in excess of 11 billion dollars. Not all known minerals can be considered strategic or critical. Some are, however, and nearly all could play a significant role in reducing this country's dependency on foreign sources.

Listed below are minerals known to exist on the Tongass and Chugach National Forests, and percent of that mineral imported to the United States in 1977 (source: 1978 Mining Annual Review: The United States; John Davis Morgan, Jr., E.M., Ph.D., Bureau of Mines).

Cobalt	97%
Platinum Group metals	92%
Chromium	89%
Asbestos	85%
Nickel	70%
Gold	60%
Zinc	58%
Silver	42%
Barium	40%
Tungsten	38%
Gypsum	35%
Iron Ore	33%
Copper	17%
Lead	14%

(Source: 1978 Mining Annual Review: The United States. John Davis Morgan, Jr., E.M., Ph.D., Bureau of Mines)

The volume of some of these known deposits was further described in the July 1980 Alaska Miner: "A 63 million pound proven reserve of cobalt metal contained within four deposits in the southeastern panhandle--Brady Glacier, Yakobi Island, Mirror Harbor, and Funtler Bay--amounts to about three years of annual U. S. cobalt consumption. . ." "Proven and inferred reserves of 938,000 oz. of platinum-group metals at Good News Bay, Brady Glacier, Yakobi Island, and Salt Chuck, amount to about six months at present rates of U. S. consumption. Except for the Stillwater Complex in Montana, Alaska has the largest economic reserves of the platinum-group metals in the U. S. . ." "Ninety-eight and one-half percent of Alaska's cobalt reserves (equivalent to one-sixth of U. S. reserve base), 99.4 percent of Alaska's nickel reserve (equivalent to one-fifth of the U. S. reserve base), and 50 percent of Alaska's

platinum-group metal reserves (one-fourth of the nation's known economic platinum reserves) are located either in Glacier Bay National Monument or section 204 withdrawals in the Tongass National Forest (West Chichagof-Yakobi Wilderness Proposal)."

Applying current market prices to the above-referenced 63 million pound cobalt reserves gives a gross value of 1.6 billion dollars in cobalt alone.

The Projected National Demand for some of these same minerals is significant:

	5-year average <u>1971-1975</u>	<u>1985</u>
Cobalt	7,282 metric tons	10,778 metric tons
Platinum Group	1,659M troy oz.	2,442M troy oz.
Chromium	1,149M metric tons	1,238M metric tons
Nickel	160.5M metric tons	210.5M metric tons
Zinc	1,159.8M metric tons	1,600M metric tons
Copper	1,886.0M metric tons	2,610M metric tons
Iron Ore	85.4M metric tons	106M metric tons

(Source: World Demands for Raw Materials in 1985 and 2000; Wilfred Malenbaum, Professor of Economics, University of Pennsylvania.)

On the national level, nonfuel minerals and their roles in maintaining our standard of living, both directly and indirectly, are frequently misunderstood. One has but to look around in the home or work place to see how dependent each individual is on the products of the minerals industry. Such dependency is difficult to depict geographically. However, the role of nonfuel minerals in the United States economy can be displayed as shown in diagram R.

While the mineral resources of the Alaska National Forests are not now contributing to the national minerals market, nor has the full extent of the minerals resource been identified, the potential for significant new discoveries and development of known deposits is clear. Prudent management would seem to be self-reliance. The social and economic well-being of Alaska as well as the nation is considered by many to be dependent on such expansion. Accordingly, these known and potential values must receive full consideration in the land allocation and classification process.

Political instability in many mineral exporting countries requires expansion of domestic supplies wherever feasible. The social and economic well-being of Alaska as well as the nation is considered by many to be dependent on such expansion.

THE ROLE OF NONFUEL MINERALS IN THE U.S. ECONOMY

(ESTIMATED VALUES FOR 1979)*

*DEC. 12, 1979—BASED ON STATISTICS FOR
FIRST 9 MONTHS OF 1979 ONLY.

BUREAU OF MINES, U.S. DEPARTMENT OF THE INTERIOR
(based in part on U.S. Department of Commerce data)

Soil and Water Resources

Soil and water resources are vital to the productivity and quality of all other forest resources. The forest ecosystem, tree growth, wildlife and fish habitat, agricultural potential and recreation opportunities are all tied to soil and water quality and quantity.

Mineral soils in Southeast Alaska share a common origin of being developed on recently glaciated landscapes and in transported sedimentary glacial materials. Likewise organic soils have formed on these same landscapes by the preservation of plant residues. High precipitation and a cool climate limit vegetative production primarily to forest plants. Agricultural crops as a result have a low potential use in Southeast with about 5,000 acres having some potential for farm crops. At the present state of knowledge, forests and the associated plants are the most productive use of mineral soils. The primary uses of organic soils are wildlife habitat and corridors. Mining of peat for fuel and garden use has been studied out is insignificant at present. Forest growth on organic soils is quite limited because of excess water.

Mineral soils of Southcentral as in Southeast have developed on recently glaciated landscapes and in transported sedimentary mineral materials. Organic soils, while present, are not as abundant as in Southeast because of less precipitation and steeper topography.

Mineral soils of the Interior areas are developing on both glaciated and unglaciated landscapes. Loess, a windblown sediment, occurs on both landscapes, while undifferentiated deposits occur on the unglaciated areas. Permafrost, mostly discontinuous south of the Brooks Range, cool temperatures, and very low precipitation are the chief limiting factors to vegetative production. The mineral soils in general are quite fertile, but the climatic factors have a dominating influence on productivity. When cleared of forest vegetation, the depth of permafrost increases, making many of the soils suitable for agriculture production of grain and grazing.

Organic soils occur over large areas of the Interior. Ranging from one foot to 20-30 feet in thickness, organic soils are affected by permafrost similar to mineral soils. Organic soils generally do not support large and commercially valuable forests. Wildlife habitat is, however, often very high in value. Mining of organic soils has recently become important in planning for Alaska's energy program.

Many organic soils have the potential for use as a fuel in an expanded energy program. The Alaska Department of Commerce and Economic Development, Division of Energy is currently studying the use of organic

soil as a fuel source for power plants of Interior villages. While organic soils have potential for different uses, they will very likely be classified as wetlands (Executive Order 11990). This will require special consideration be given prior to any use.

Transportation

The Forest Service plans, designs, and constructs transportation systems to support various resource activities and provide access for management, use and protection of national forest lands. The State of Alaska has primary responsibility for planning, project development, design, and construction of regional highways and air facilities, as delegated by the Federal Highway Administration and the Federal Aviation Administration.

The Forest Service maintains about 1,730 miles of a road system in Alaska. During each calendar year, about 200 miles of system roads and 50 miles of temporary roads are built for timber access in the Tongass National Forest. Most of the mileage will be constructed by timber purchasers as part of their operations. These system facility costs will be allowed through purchaser credits. Construction of about 12 miles of timber access roads and several permanent bridges are finished through public work contracts each year. All current timber sales include permanent roads as part of contractual agreements. This provides the Forest Service with the needed contractual control to meet environmental and resource requirements.

The transportation system includes other facilities, such as terminal sites, airfields, docks, and vessel-mooring structures. Unlike many other national forests, the various resources and publics cannot be adequately served solely by a land-based system. The topography and geography dictate the need for a comprehensive multimodal system.

In addition to the road, air, and port facilities directly concerned with the management of forest resources, the Forest Service has a responsibility to actively participate in the planning, project development, design, and construction of regional highways and airport facilities to be constructed on land managed by the Forest Service. These facilities, although not primarily dedicated to land management, will serve this function to a large degree. Their effects on other resources, economics, and future maintenance must be given full consideration. Technical assistance to private forest land owners includes transportation planning and standards, as well as erosion control.

Current policy with respect to transportation corridors is to examine the natural corridors identified by the Alaska Department of Transportation and Public Facilities during forest planning. The corridors are considered as a scarce resource by the State, but present substantial impacts on wildlife, fisheries, visual, and other resource values. Some

of the corridors in which the State has expressed an interest would involve the construction of roadway through lands currently classified as LUD I. The Stikine and Unuk River corridors are in this classification in the results of the Tongass Land Management Plan (TLMP).

Energy

The order segregating the affected lands had no effect on energy sources with the exception of uranium. Uranium is a locatable mineral under 30 USC Chapter 2, and as such cannot be claimed on the segregated lands. Energy sources such as hydroelectric, coal, gas, and oil are not affected by the segregation order, as they are included in 30 USC, Chapter 3 dealing with leasable.

III. EVALUATION CRITERIA

Evaluation criteria are established as a part of the decision process. They are the base line from which all alternatives are evaluated. The following evaluation criteria have been established for use in this Environmental Statement. The criteria are quite similar to those used in the recent Tongass Land Management Plan.

A. Provide for coordinated land management on the National Forests and adjacent Native, State and municipal lands.

B. Provide continuity among national, regional and local programs.

C. Provide opportunities for developing utility and transportation modes that best meet the land management goals as well as the needs of the people.

D. Provide for a variety of dispersed recreation on lands with significant fish, wildlife, scientific, scenic, historic, or other recreational qualities.

E. Provide for stability and diversity in the local and regional economy.

F. Assist Alaska communities and residents in meeting their diverse resource and land use needs.

G. Manage the National Forests of Alaska to accommodate the lifestyles and well-being of Alaska residents and communities while being responsive to national goals and concerns.

H. Foster and encourage private enterprise in the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, in accordance with the Mining and Minerals Policy Act of 1970.

I. Provide for the protection of unique wildland values in aid of legislation establishing a wilderness system for the National Forests of Alaska.

IV. ALTERNATIVES CONSIDERED

The variables to be considered in selecting Alternatives to be analyzed in this draft environmental statement are:

The length of time to be specified in the FLPMA Section 204(c) recommendation.

Which of the land areas listed in the 204(b)(1) segregation order should be further recommended for withdrawal under 204(c).

A. Variables Described

Time

1. Time options available under FLPMA range from zero to twenty years. The present situation is the zero option because the current segregation order will expire on December 5, 1980. This option must, under NEPA Regulations, be considered in this Statement. The twenty year option is also being considered as it provides the maximum time variable under FLPMA.

2. The original order (204(b)(1)) could be acted upon, providing a withdrawal for two years.

3. The NFMA suggests that major Forest level land and resource management issues be analyzed and resolved through the forest planning processes prescribed in that act. The time frame for completion of these plans on National Forests in Alaska is December 31, 1985. This five-year option is also compatible with the next RPA cycle at the national and regional levels.

No additional time options have been identified as being significant to the resolution of the FLPMA issue.

Land Area

1. The primary purpose for the 204(c) recommendation was stated in the Segregation Order: aid in legislation for Wilderness. The present situation is that all land areas listed in 204(o)(1) are considered.

2. The nationwide RARE II Environmental Statement recommended Wilderness classification for 15 areas on the Tongass National Forest and two areas on the Chugach National Forest.

3. The same RARE II decision recommended nineteen areas on the Chugach for further study for Wilderness classification through the Forest Land and Resource Management planning process. No further study areas were recommended on the Tongass National Forest.

4. The option of not seeking withdrawals for any of the land areas at issue has the same effect as the time option described in A.1., above. However, it must be noted here that some of the lands currently withdrawn may be of prime importance in meeting the national demand for minerals and energy sources. The elimination of these areas is an important consideration in this Draft Statement.

B. Alternatives Evaluated

The following Alternatives have been analyzed in this statement:

Alternative 1: Current Situation.

Alternative 2: Proposed Two-year Withdrawals on all of the presently segregated areas.

Alternative 3: Proposed 5- and 20-year withdrawals on only those lands which are recommended under FLPMA 204(b)(1), and also included in RARE II recommending Wilderness and Further Study. Area boundary modifications in some areas to recognize highly mineralized deposits is also a consideration.

Alternative 4: Proposed 5- and 20-year Withdrawals on All FLPMA Areas. Area boundary modifications in some areas to recognize highly mineralized deposits is also a consideration.

In all alternatives Admiralty and Misty Fiords will remain withdrawn, based upon the Presidential Establishment Order requirements.

C. Discussion of Options Dismissed from Further Analysis

1. Individual area analysis of program effects.

Individual areas are evaluated according to the 12-point requirements of FLPMA. The results of this analysis are included in the Appendix to this Statement. Further evaluation of each of these areas for their individual Regional program effects would require separate environmental statements for each area at issue. This option would not be responsive to the existing time frames for resolving the FLPMA issue.

2. The zero time frame for RARE II (wilderness and further study) lands was dismissed because it fails to meet the stated purpose of providing time in aid of legislation. NOTE: The same statement could be made for the zero time frame for all FLPMA land option. However, because this is the current (no change) situation, it must be considered in this Statement, and is referred to as Alternative 1, Current Situation.

D. Mitigation Measures, Management and Monitoring Requirements

1. Twenty year and December 31, 1985, Alternatives will have the same requirements except for the planned duration and are, therefore, described together as follows.

a. Management Requirements

(1) Continue present administrative policy precluding all development activities in the areas subject to the withdrawal period and subject to prior rights. These measures are expected to ensure the protection of wildland values pending Congressional action on Wilderness. The letter of Thomas Nelson, Deputy Chief, reviewing FLPMA withdrawals to John McGuire, Chief, follows Chapter III, Consultation with Others.

(2) Further Study Areas on the Chugach National Forest, as described in the RARE II Environmental Statement, will be evaluated for Wilderness recommendations through the present Chugach Forest Land and Resource Management Plan process. Lands found to be most suitable for non-Wilderness classifications will include recommendations for Section 204(c) expiration as a part of the Forest Plan Environmental Statement.

b. Monitoring Requirements

Subject to existing valid rights, all new forest project work maps and plans will be reviewed for consistency with the attached FLPMA maps. Any such project found to overlap the FLPMA areas will be discontinued.

c. Mitigation Measures

The Region will seek to make commensurate reductions in annual timber resource targets through the time frame of the respective alternative, or until future land management plans mitigate these impacts through reallocating the Forest resources.

2. No Change Alternative

a. Management Standards and Monitoring Requirements for this alternative have been defined in the Tongass Land Management Plan (February 1979) and the Southeast Area Guide (April 1977). The policies established in these Guides were extended to include the Chugach National Forest by action of Regional Forester Sandor. Selected references of these documents are included in the appendix to this Statement.

d. Mitigation Measures

The current administrative policy precluding development activities will continue on all Alaska National Forest lands listed in the RARE II Environmental Statement for Wilderness and further study. Mineral activities and State selection could proceed after December 5, 1980. Those lands not covered by the RARE II decision (LUD's II, III, IV on the Tongass National Forest) will be managed according to the prescriptions established in the Tongass Land Management Plan.

V. Effects of Implementation

As noted in Chapter IV, four alternatives have been developed for analysis. Alternative 1 is the current situation. This allows all FLPMA areas to revert to the wilderness, further planning, or nonwilderness status for which they have been recommended under the RARE II program (which includes the Tongass National Forest Land Management Plan). Alternative 3 recommends that the Secretary of Interior withdraw from mineral entry and State selection those areas recommended in RARE II for wilderness and further planning. This environmental impact statement evaluates this alternative from the standpoint of withdrawing areas for a period of five years and for a period of twenty years. Alternative 4 is similar to Alternative 3 with one major difference. Instead of recommending withdrawals for just those areas proposed for wilderness and further planning, it recommends withdrawal of all the currently segregated FLPMA areas, including those proposed for nonwilderness under RARE II. This alternative will be evaluated from the standpoint of two, five, and twenty-year withdrawals. Alternative 2 is the same as Alternative 4 except that it evaluates the all FLPMA land option for a two-year period.

A variety of highly localized effects of varying duration and magnitude have been identified in Chapter X's 204(c) report, which analyzes the proposed withdrawals on an area-by-area basis. Readers are referred to that report for a more detailed site-specific analysis. From a region-wide, programmatic perspective, however, few significant effects have been identified for any alternative. One major exception involves the irretrievable loss of timber volume from lands recommended for nonwilderness uses on the Tongass National Forest and their associated economic effects on local communities. Although FLPMA withdrawals are bound to affect mineral exploration, and to a lesser extent, recreation and tourism, the lack of minerals and recreation data allows for minimal analysis and tentative conclusions at best.

A. Physical and Biological Effects

Recreation

Current Situation

Within Alaska, outdoor recreation use is expected to rapidly increase due to changing socio-economic variables (population, income, economic growth), increasing recognition that some recreational opportunities exist on Alaska's National Forest lands that are in short supply elsewhere in the United States (such as wildlands, high scenic quality, abundant fish and wildlife populations) promotional efforts of special interest groups and national publicity over d-2 legislation.

There is a tremendous potential for a wide spectrum of recreation opportunities on National Forest lands in the Alaska Region, but the remote location and small resident population make it difficult to tell how much use actually takes place. There is abundant literature describing the unique recreation and scenic resources, but little reliable information about the use of these resources. Data from different resources is often contradictory or outdated and often extrapolated from baseline information which is sometimes questionable. Forest Service estimates of visitor use of developed and dispersed areas are obtained through the RIM System. Because of the diverse and often unobservable use over such large areas, many of these figures are estimates at best. Although relatively good information is available about some uses (Forest Service cabins, for example), literally no firm data exists about some other dispersed recreation activities.

Preliminary analysis indicates that the demand for various recreation opportunities would not exceed the supply before year 2000+. However, because recreation includes a wide spectrum of opportunities, from primitive to semi-urban, it is probable that some parts of the spectrum

may not meet the demand in the foreseeable future. For example, in Southeast Alaska, a primitive experience is already in short supply in many saltwater shoreline areas.

Adjacent to many coastal communities demand has exceeded supply of recreation opportunities associated with semi-primitive roads, for quality hunting experiences and semi-primitive camping. The high cost of road construction makes the extension of road systems for recreation alone unlikely. Timber, mineral, hydroelectric development or other commercial needs will extend roads from many communities that will also provide associated recreation activities. Since most of the land around communities is now in State, Native, and other private ownership, increased dispersed recreation use is expected on adjacent National Forest lands and decrease developed recreation options, particularly around communities in coastal Alaska.

The capability for a wide variety of recreation opportunities on the Chugach Forest is significant. Allocations which give some measure of capability are yet undetermined, but large acreages are expected to emphasize recreation and wilderness values.

The IDT has concluded that the two-year, all FLPMA option will not have demonstrable effects on the recreation, visual, or cultural resources or ability of the Forest Service to provide outputs. Under the 20-year withdrawal option in Alternative 3 (all FLPMA) a primitive recreation experience will be retained on roughly 450,000 acres which would otherwise shift to a semi-primitive or roaded recreation experience as influenced by timber harvest or other resource uses. This involves LUD III and LUD IV areas associated with the Yakutat, Mansfield Peninsula, Petersburg Creek-Duncan Canal, Idaho Inlet-Mud Bay, and Endicott River units. Effects would largely be confined to local use of these areas such as the use of Duncan Canal by the Petersburg population.

The RARE II 20-year option will have an undetermined effect on visual resource quality in Southeast Alaska because of a reduced land base for meeting other resource commitments. This alternative may constitute an adverse effect on certain cultural resources particularly above ground structure remains, to the extent that any withdrawn areas may be managed for wilderness values.

Forest Service policy concerning cultural resources in Wilderness is to allow their gradual disappearance through natural processes. Interpretation, rehabilitation, reconstruction, or stabilization are not allowed, except in those cases where an existing structure is required for administrative use. Selection of a 20-year withdrawal option will require compliance with cultural resource strategy and regulations. This will entail identification of cultural resources eligible for listing in

the National Register of Historic Places and consultations with the State Historic Preservation Officer and Advisory Council for Historic Preservation to determine acceptable procedures to mitigate or avoid adverse effects.

Fish and Wildlife

a. If all the withdrawals are allowed to expire on December 5, 1980, management for Fish and Wildlife will follow the existing Regional Program. The primary mission of Wildlife Habitat Management is to provide productive habitat, with emphasis on threatened and endangered species and habitat enhancement. The program includes activities necessary to protect, administer, and develop National Forest System wildlife habitats, assist non-Federal land managers through cooperative forestry programs, and develop new knowledge through research on the environmental requirements of wildlife and attainable management alternatives under these requirements.

The following assumptions are made concerning future wildlife supply and demands:

- Both consumptive and non-consumptive wildlife use will substantially increase to the year 1990 in response to population growth, increased tourism and overall greater affluence. Non-consumptive use will grow and represent a change in public value.

- Increased commodity use from forests and other lands will lead to greater wildlife impacts. Community expansion and other permanent developments may further reduce the extent and quality of wildlife habitat.

- Growing population will increase hunting pressure on all game species, requiring more restrictive regulations.

- Expanded road systems will provide greater access for all uses of wildlife, creating problems of increased man-caused pressures on wildlife and distribution of hunting pressure.

Habitat protection and natural stream improvement alone may not provide an adequate basis for the restoration of salmon fisheries in Southeast Alaska. Natural spawning and freshwater nursery grounds are only partially utilized as a result of the current depression of natural stocks. The potential exists through means of artificial recruitment to increase the supply of salmon for the fishery and build up depleted natural populations.

b. The two-year FLPMA option and the RARE II five-year option will not appreciably differ from the current situation in the effects on the fish and wildlife resources of the FLPMA areas. In the view of the IDT, existing regional standards and guidelines contain sufficient direction to ensure protection and enhancement of the fish and wildlife resources, and to meet fish and wildlife program objectives, under all alternatives.

c. The 20-year all FLPMA option would contain both pluses and minuses in terms of managing fish and wildlife resources. On the minus side there would be:

1. No fish and wildlife habitat enhancement projects that involve structural developments. This would greatly reduce the opportunity to meet projected demand for the resource and lessen opportunities for the Forest Service to meet Regional targets.

2. Lands adjacent to withdrawn areas are likely to be developed providing increased access for sportsmen and may suffer the effects of overuse. This could be a problem because it will be unplanned for, as opposed to the RARE II option which provides for an integrated land management pattern as determined through the Tongass Land Management Plan.

On the plus side for fish and wildlife:

1. Any land management activity has the potential of damaging wildlife habitat no matter how good the protective measures taken. If the lands are kept in withdrawal status, there will be fewer man-caused alterations or man-caused damage.

2. "Pristine" condition streams and woods provide a certain type of experience to consumptive and non-consumptive users of the resource. This type of experience cannot be duplicated in areas where land alterations are permitted.

Timber

Chapter II provides background information and tables for the timber resource. The allowable timber harvesting volume from Alaska's National Forests depends on several variables. These include the productivity of the forest, current logging technology, such practices as fertilization and thinning, and the interrelationship with other forest resources and the environment.

Historical average annual harvest of 520 MMBM in Southeast Alaska has supported approximately 3,000 people in the timber/pulp industry. Assuming that National Forest and Native harvests are at least 520 MMBM annually, total employment is projected to increase from about 3,000 to 3,400 people.

Native land managers are expected to harvest their lands at an annual harvest of 225 to 400 MMBF. The impact of Native harvests on the employment and markets served by National Forest supplies will depend on the consumption needs of foreign markets, purchase prices, processing costs and the amount of timber supplies made available.

It can be assumed that Native round log exports will displace some of the existing cant marketplace, since the final market of each is often the same. The greatest expected displacement is in the manufacture of hemlock round logs.

The Tongass harvest is based on the selected alternative as shown in the Tongass Land Management Plan final environmental statement released in March 1979. The 450 MMBM is based on the assumption that an additional \$11.7 million a year will be appropriated by Congress for advanced roading and timber stand improvements (training of at least 6,300 acres a year) in regenerated stands.

Relative to Southeast Alaska, Southcentral Alaska has a relatively low volume of economically operable timber. With the Chugach National Forest, 750,000 acres are classified as commercial with more than half, 423,000 acres, in the marginal timber component. The annual sustained yield is estimated at 72.8 MMBF.

Forestry employment, per se, is minor within the total Southcentral economy. Projected employment to the year 2020 ranges from 385 people to 585 people depending on the overall economic growth in the Southcentral area. The low estimate assumes current levels of harvest in 1990 while the high estimate assumes an annual timber yield of 1,102 MMBF.

In general, Japanese markets will be the primary determinant for supply offerings. Consequently, future supplies and yields are most likely to remain at current levels to the year 1990.

The major effects associated with the withdrawal of commercial forest land under the all FLPMA alternative (2-, 5-, 20-year options) will result from the inability to harvest timber from areas which are programmed for timber harvest activities. This situation primarily affects nonwilderness (LUD's III and IV) on six areas of the Tongass National Forest. These areas are:

AREA	ACRES OF OPERABLE COMMERCIAL FOREST LAND (LUD III, IV)	AMOUNT OF BOARD FEET PER YEAR
Russel Fiord - Yakutat Foreland	78 thousand	16.4 million
West Chichagof - Yakobi Island	46 "	7.5 "
Mansfield Peninsula	32 "	6.7 "
Peterburg Creek - Duncan Canal	21 "	4.6 "
Idaho Inlet - Mud Bay	12 "	2.5 "
Edicott River	<u>1.3</u> "	<u>0.3</u> "
TOTAL:	190.3 thousand	38.0 million

There is a total of 190.3 thousand acres of operable commercial forest land involved in the nonwilderness portions of the FLPMA Areas on the Tongass National Forest. These units represent approximately 38 million board feet per year of harvestable timber which will be foregone if those Areas are withdrawn. This volume is significant unto itself, but more importantly, it is part of the balance that was reached in the TLMP planning process. The TLMP process was designed to provide for wilderness and other amenity values while maintaining a forest-wide timber harvest of 450 million board feet per year, the volume determined necessary to maintain the established timber industry and the social and economic stability of Southeast Alaska.

Withdrawal of these areas for 2 and 5 years will adversely affect this balance and reduce the flow of timber by 76 million board feet (38 million board feet for two years) and 190 million respectively. This volume could be made up at some point during the life of the Tongass Plan (which must be redone by 1985). The 2-year option and volume might be made up without major land allocation.

Withdrawals of 20-year duration, however, represent an irretrievable loss of timber volume of such magnitude that it would require one or more of the following actions: (a) renegotiation of the long-term timber sales currently under contract; (b) require major departures from sustained yield management of the timber resources of the Tongass National Forest; or (c) a reduction in the Region's independent timber sale program.

Minerals

Chapter II describes the known minerals situation and the general deposit locations within the areas covered in this statement. Appendix 3, Parts A and B, relates specifically to each area and the known minerals that have been discovered in each. Potential for new discoveries based upon claim analysis and area comparison is also addressed.

At present, this Nation is dependent upon foreign sources for various minerals to meet its domestic and industrial demands. Ninety-seven percent (97%) of the cobalt and 92% of the platinum group metals used are imported from foreign sources. The present national objective is to become less dependent upon foreign sources in meeting present and future mineral needs.

Significant known deposits of cobalt and minerals of the platinum group are located in the Glacier Bay National Monument area which has been withdrawn and at the present cannot contribute toward meeting the national objective. There are other significant sources of these minerals located within the present 204 withdrawal area that could contribute toward meeting the national objective. Estimates have been made that six months of the national demand for cobalt and three years for the platinum group metals could be supplied from these areas.

Asbestos, chromium, nickel, gold and zinc are also heavily imported to meet national demand. All of these metals are present in the areas currently withdrawn.

The predicted effects of the various alternatives are based upon probability maps constructed and utilized in the recent Tongass Land Management Plan and upon data currently being studied in the Chugach National Forest Land Management Plan.

The RARE II 5- and 20-year options would withdraw the following areas:

	<u>High</u>	<u>Mineralization</u> <u>Moderate</u>	<u>Low</u>
<u>Chugach National Forest</u>			
College Fiord		X	
Nellie Juan		X	
Prince William Sound		X	
Seward NRA		X	
Copper River		X	
Tonki Cape			X
Devil Paw			X
<u>Tongass National Forest</u>			
South Baranof			X
South Prince of Wales	X		
Karta		X	
Coronation, Warren, and Maurelle Islands			X
Etolin Island			X
Tebenkof			X
Petersourg Creek			X
Boundary Spires			X
Endicott River			X
Tracy Arm-Fords Terror		X	
West Chichagof	X		
Russell Fiord			X
Stikine-LaConte			X

(High indicates known significant mineral activity; Moderate indicates some known activity; Low indicates an absence of known mineral activity)

To determine the possibility of excising the highly mineralized areas from the current withdrawal order, the IDT reviewed existing data for those lands. That possibility was obfuscated by the quantity of highly dispersed, known claims which those areas possessed. However, South Prince of Wales was found to have a somewhat concentrated pattern of claims along an existing RARE II boundary. The IDT therefore recommends an area of approximately 8,000 acres be made available for mineral location and entry. The following map and description is included in the appendicized Section 204(c) recommendation.

FINAL

The 8,000 acres left open for entry would continue to be managed as all LUD I's on the Tongass, that is, for its wilderness values. Since there are no communities within this area, nor is it suitable for community development or expansion, it is unlikely that the State would select any portion of this area. Further, it is even less likely that any such selection, if made, would meet the selection criteria of the Statehood Act.

In addition to its potential impact on wilderness values in South Prince of Wales, the recommendation may influence wildlife values. Wildlife values in the area are no more and no less than in other parts of Prince of Wales Island. Fisheries values in this southern part of Prince of Wales Island are high for four species of Pacific salmon, trout and char. The reason for the high fishing value is the large number of streams and lakes forming spawning and rearing areas for salmonids. Estuarine values are also high. These areas are extensive in the south end (see USGS Dixon Entrance C-1). They are ideal for juvenile salmonids migrating from freshwater to the sea.

The designated area does not, however, encompass any great part of the south end proposed for wilderness withdrawal. The stream running into Hunter Bay is a good salmon stream and possibly the most likely to be affected, if mining activity actually occurs.

The dispersal pattern of the other areas (listed above) known to be highly mineralized is such that wilderness values would be jeopardized without continued withdrawal. This alternative would allow the existing withdrawal to expire on December 5, 1980, on the following areas:

	<u>Mineralization</u>
West Chichagof-Yakobi Island	high
Petersburg Creek-Duncan Canal	high
Idaho Inlet-Mud Bay	low
Keku Strait (Rocky Pass)	low
Endicott River	moderate
Mansfield Peninsula	high
Tracy Arm-Fords Terror	high
Yakutat Foreland	moderate

The IDT felt the high timber values and/or critical access characteristics of the areas above which do not contain known highly mineralized deposits justify allowing the current order to expire.

The FLPMA Alternatives (2, 4) would continue existing withdrawals on all of the above areas for a period of two, five, or twenty years. These are the least desirable options, from the minerals resource perspective.

Wilderness

Admiralty Island National Monument and Misty Fiords National Monument were created from the Tongass National Forest by Presidential Proclamation on December 1, 1978. In recognition of their high natural resource, cultural, and scientific values, the Secretary of Agriculture has recommended that both National Monuments be classified as wilderness.

Nation-wide, wilderness areas have not included substantial mineral, commercial timber, potential developed recreation sites, trail heads, or water resource developments. A current objective in establishing wilderness areas is to provide a variety of plant and animal communities representative of the region. In Alaska this will result in commercial forest lands and economically viable mineral deposits being included in wilderness proposals.

The Forest Service in Alaska has taken many actions over the years to recognize and protect outstanding natural features occurring on National Forest lands. The following areas have been given a special classification to assure this recognition and protection.

- Portage Glacier Recreation Area (8,600 acres)
- Mendennall Glacier Recreation Area (5,660 acres)
- Ward Lake Recreation Area (160 acres)
- Limestone Inlet Natural Area (6,432 acres)
- Old Tom Natural Area (4,727 acres)
- Pack Creek Research Natural Area (5,800 acres) (now part of Admiralty Island National Monument).
- Walker Cove-Rudyerd Bay Scenic Area (93,540 acres) (now part of Misty Fiords National Monument)
- Tracy Arm-Ford's Terror Scenic Area (283,000 acres)
- Cape Fanshaw Natural Area (600 acres)
- Admiralty Lakes Recreation Area (11,000 acres) (now part of Admiralty Island National Monument)
- New Eddystone Rock Geological Area (11 acres)
- Fish Creek Recreational Area (8,710 acres)
- Dog Island Natural Area (744 acres)
- Young's Bay Experimental Forest on Admiralty Island
- Pack Creek Bear Preserve (now part of Admiralty Island National Monument)
- Seymour Eagle Management Area

The major differences between the alternatives regarding their impact on the wilderness resource is that mineral exploration will be allowed in areas recommended for wilderness status until December 31, 1983, if they are not withdrawn under FLPMA. That will only allow two more years of exploration in areas classified as wilderness before the restrictions imposed by the Wilderness Act of 1964 take effect. If any of the options under Alternatives 3 or 4 are selected, the affected lands would be withdrawn and mineral entry would be precluded in those areas, thus protecting the wilderness resource from possible degradation by mineral and energy development.

It is important to re-emphasize that claims filed previous to the withdrawals are considered valid, existing rights. Mineral development on valid, existing claims can take place after an environmental impact statement with full public involvement is approved by the responsible official. Consequently, it must be remembered that withdrawal from mineral entry will not mean that existing valid claims will not be developed, but rather that new claims (and their subsequent development) will not be allowed.

Soil and Water

The IDT has concluded that existing regional soil and water program standards and guidelines are sufficient to maintain and enhance the quality of the soil and water resources under all alternatives.

SOCIO-ECONOMIC EFFECTS

Several economic variables are affected by the FLPMA alternatives. They are employment, gross income and community stability. Community stability is measured in limited terms of employment and population shifts.

Between the alternatives, trade-offs essentially revolve around preserving Congressional options to designate areas for Wilderness or special management, versus the development of the resource base providing employment. Specific to National Forests, the principle trade-off is between the annual timber volume needed to maintain historic employment levels and the supporting land base given other resource considerations. Significant indirect impacts can be anticipated if "fixed" timber harvest targets are derived from a diminishing land base. Impacts are basically more intensive management and resource impacts over smaller land areas.

Mining and tourism could be significantly impacted by two of the FLPMA alternatives. However, given the existing data, detailed analyses are not feasible. For minerals, no in-place-value data is available to predict where and when such developments may occur. Some information is available on the extent of exploration activities and the number of existing claims. Many of these claims have not been validated and thus only imply some degree of mineral potential. Consequently, mineral impacts are discussed in terms of opportunities maintained or precluded for development.

The economic significance of primitive and wilderness areas is not well developed. On National Forests, "preserved areas" provide a wide spectrum of uses, ranging from viewing landscapes aboard cruise ships to wilderness backpacking. Evaluating this total spectrum is difficult as saltwater and land related activities are often integrated and wilderness use is often incidental to other uses such as travel. Thus, like

minerals, the effects of FLPMA alternatives on "tourism" will be discussed in terms of opportunities maintained or foregone. It should be noted that FLPMA alternatives are designed to preserve Congressional options per se and not to create defacto Wilderness. Consequently, additional costs and benefits in excess of those estimated in the RARE II process should be considered incidental and limited to the duration of the various withdrawal time frames.

The significance of FLPMA alternatives on National Forest lands will be the planned allowable timber harvest and resulting timber industry employment. The magnitude of these effects will be largely dependent on future resource management policies and perhaps more important, Native timber harvests. Native timber policies are particularly significant, assuming harvest rates exceed the calculated long term sustained yield for similar National Forest lands. These policies are to maximize returns and increase timber production. This puts an important time dimension on joint Federal, State and private forest management if long term industry employment is to be maintained. It is logical to assume that timber demands will be shifted from private lands to public lands in 20 to 40 years.

Alternative 1: Current Situation

The segregation of all FLPMA areas will expire December 5, 1980. The effects of the expiration are essentially those described in the Tongass Land Management Plan and in RARE II documents. All areas would become available to mineral development and the planned long term timber harvest would be 460 MMBF annually. Timber management would not be conducted on LUD I and LUD II areas designated in the Tongass Forest Land Management Plan nor areas recommended for Wilderness and Wilderness Study on the Chugach National Forest. Historic timber industry employment would be maintained and perhaps increased with the addition of Native harvests.

Timber harvests on National Forest lands from 1970 through 1979 ranged from approximately 422 MMBF to 565 MMBF annually. The average annual timber harvest from 1970 to 1976 was 524 MMBF per year and from 1970 through 1979 439 MMBF per year. Resulting direct employment in logging, marine cargo, log transport, cant/pulp processing and construction is estimated at 2450 to 3500 jobs. Average annual gross income, adjusted for inflation in 1980 dollars, is estimated at \$210mm annually. However, it is important to note that planned harvests do not necessarily ensure employment levels. Market fluctuations are the major control and accounts for a 60% MMBF backlog associated with long term timber sales.

If the segregation order expires, no new withdrawals recommended, and timber harvests average 460 MMBF annually, the estimated timber industry employment is 2670 to 3040 jobs annually. Annual gross industry income

is estimated at \$200mm annually. If Native harvests average 225 to 250 MMBF per year, an additional 600 to 675 jobs in logging could result plus another 90 to 140 jobs in pulp processing. This assumes about 3/4's of the Native timoer harvested is exported as round logs and low quality logs are sold locally for pulp. Total employment generated by ooth National Forest and Native narvests are projected at 3300 to 3700 direct joos plus an additional 4900 to 5100 induced joos throughout the "State's" economy. Total gross income generated economy-wide is estimated at \$790mm annually. Total employment and gross income figures are perhaps somewhat overstated as the Hemlock cant market is expected to decline. Hemlock logs suitable for cants will probably be processed for pulp or chips and would logically displace low quality Native logs in local markets.

Restated, mineral development would be permitted on all FLPMA areas after December 5, 1980. At present, no planned mineral developments are known. Should development occur it could preclude some timber harvests on affected commercial lands, but the impact to long term sustained yields is judged negligible. More important are conflicts between mineral and wilderness values in areas recommended for Wilderness or further study. Tourism would have the least degree of protection in terms of preserving primitive characteristics until Congress resolves the d-2 lands issue.

Alternative 2 : Proposed Two-year Withdrawals on All FLPMA Areas

The original FLPMA segregation order provided the option to recommend two year withdrawals on all areas. If implemented no impacts are anticipated in terms of long term sustain timber yields. The annual planned timber harvest would be 460 MMBF and would be sufficient to maintain current employment levels. Opportunities for mineral development would be precluded until 1983. Withdrawn areas would be managed for wilderness values similar to those prescribed for LUD I lands on the Tongass National Forest.

Alternative 3:

Proposed 5- and 20-year withdrawals on only those lands recommended under (FLMPA) 204 (b)(1), and RARE II recommended Wilderness and Further Study.

The most significant difference between this alternative and the "current situation" is that mineral entry would be precluded on proposed wilderness and further study areas. An annual timoer harvest of 460 MMBF is planned from the National Forests and would be supplemented by Native harvests of 225 to 250 MMBF annually. Historic timoer industry employment levels would be maintained or exceeded. Should the withdrawals expire and the d-2 lands issue not be resolved, these areas would be re-evaluated in terms of all resource demands during the next Forest planning update (a 10-year cycle, starting in 1985).

Alternative 4: Proposed 5- and 20-year Withdrawals on All FLPMA Areas:

With either 5- or 20-year withdrawals, the land base would be reduced to support an annual harvest of 460 MMBF given current resource policies. The maximum potential loss is associated with 20-year withdrawals and is estimated at 38 MMBF annually over a 20-year period. This translated into a loss of 220 industry jobs and \$16.5mm in gross annual income. Induced employment and gross income lost throughout the rest of State's economy are estimated at 270 jobs and \$26.4mm annually. The impacts to local economies on the Tongass National Forest will be concentrated on the Chatham Area 33.7 MMBF/year and on the Stikine Area 4.3 MMBF/year. The minimum expected loss corresponds to the 5-year withdrawals. This would result in a volume loss of 4 to 5 MMBF annually after 1985. This translates into a loss of 30 industry jobs and 35 additional induced jobs annually. It is assumed that Native timber demand would generate upwards of 690 to 815 industry jobs and 1700 induced jobs. Employment losses could be mitigated through the following National Forest resource policy changes.

- Redesignating areas currently not used in timber harvest calculations such as LUD II areas on the Tongass National Forest.

- Relax other resource considerations on the land base currently under timber management.

- Schedule a timber harvest departure of 5 to 38 MMBF after 1985 or the year 2000 respectively. Departures are deviations over and above the term even flow yields.

Options not considered to mitigate employment losses are additional timber investments in thinning, pre-roading and technically marginal lands. This is due to unacceptable risks of economic feasibility and environmental damage.

The largest potential effect of 5- and 20-year withdrawals is on mineral developments. Both exploration and mining would be prohibited for the withdrawal period. However, the greatest degree of protection would be afforded in terms of preserving wilderness values.

VI. EVALUATION OF ALTERNATIVES

A. IDT Application of Evaluation Criteria

The Regional Interdisciplinary Team (IDT) applied the evaluation criteria from Chapter III to the alternatives. A nominal ranking system was used to record IDT members evaluation of each criterion, by alternative.

The individual scores were then summarized to provide the overall rating for each alternative. The following narrative summarizes the findings of the IDT.

1. Coordinated land management criterion.

The RARE II lands for five years was viewed as being the most desirable alternative, followed by the present situation, all FLPMA lands for two years, all FLPMA lands for five years, RARE II lands for 20 years, and all FLPMA lands for 20 years.

2. Program continuity criterion.

The RARE II lands for five years alternative was determined to be the best solution. The RARE II-20 year, present situation, all FLPMA for two and five years were evaluated as having about the same effect on current programs. The all FLPMA for 20 years was viewed as being the least desirable solution.

3. Utility corridor and transportation criterion.

The present situation was viewed as being the best alternative. The RARE II-five year option and all FLPMA-two year option were judged to be equal in effect and more desirable than the remaining alternatives. The all FLPMA-20 year option was evaluated as being the least desirable.

4. Variety of dispersed recreation.

The RARE II-five-year option was viewed as being the best alternative for providing a variety of dispersed recreation. The present situation and all FLPMA-five-year options were evaluated as the next best solutions. The all FLPMA-20-year option was determined to be the least desirable alternative.

5. Providing stability--economic diversity.

The present situation was evaluated as the best solution. RARE II-five-year option and all FLPMA-two year option were the next best solutions. The all FLPMA-20-year option was judged to be the least desirable option.

6. Assisting Alaska communities and residents in meeting diverse resource and land use needs.

The present situation was evaluated as the best alternative. The FLPMA-two and five year options closely followed the RARE II-five year option as being the next most desirable. The all FLPMA-20 year option and the RARE II-20 year option were the least desirable alternatives.

7. Lifestyles.

The RARE II-five year option was evaluated as the best alternative. The present situation, all FLPMA-two and five year options were equally ranked as the next best solution. The all FLPMA-20-year option was viewed as the least desirable alternative.

8. Minerals.

The present situation was clearly the most desirable alternative, followed by the all FLPMA-2-year option. The RARE II-five year alternative and all FLPMA-five year option were judged next best, respectively. The FLPMA-20 year option was viewed as being least desirable.

9. Aid in legislation.

The 20 and 5 year FLPMA and RARE II-5 and 20 year alternatives were evaluated as providing the maximum options for Congressional consideration. The present situation was judged as failing to meet this criterion and therefore is not considered to be a desirable alternative.

When viewing the 10 criteria, in summary, the RARE II-5 year alternative was evaluated as being best. The FLPMA-2 and 5 year options provided the next best solution, respectively. The 20 year RARE II and FLPMA alternatives were least desirable. It should be noted that when the Regional Plan IDT evaluated the FLPMA options against the decision criteria established for that process, similar results were obtained. The IDT therefore recommends the RARE II-5 year option as the preferred alternative.

B. Consistency Statement

Rationale for the IDT Preferred Alternative

The primary reason for selecting this alternative was its evaluation against the criteria established in Chapter III. This alternative preserves options for Congressional evaluation while maximizing commitments made in the recent Tongass Land Management Plan, RARE II, and Resource Planning Act program targets for Alaska.

VII. IDENTIFICATION OF PREFERRED ALTERNATIVE

Alternative 3, with a withdrawal period of five years, as recommended by the Interdisciplinary Team, is the preferred alternative.

VIII. CONSULTATION WITH OTHERS

A. Relationship to Regional Plan Scoping Process

The FLPMA issue was included as a part of the Regional Plan process, as discussed earlier in this document. The following agencies and organizations responded to that document:

City of Wrangell
State/Federal A-95 Coordinator
Director of Research, Alaska Department of Natural Resources
Environmental Protection Agency
ARCO
Schnaebel Mill
Alaska Lumber & Pulp
Louisiana Pacific - Ketchikan
Women in Timber
U.S. Borax
Sierra Club
Alaska Conservation Society
Southeast Alaska Conservation Council
Wilderness Study Committee
Alaska Center for the Environment
Glacier Guides
Wilderness - Alaska/Mexico
Federation of Western Outdoor Clubs
Alaska Discovery
Alaska Alpine Club
SOBEK Expeditions
Alaska Wilderness Sailing Safaris
Chugach Natives
Choggiung
Doyon
Shee-Atika
Nationwide National Forest Planning Clearinghouse
Governor Jay Hammond, State of Alaska

B. The initial FLPMA Draft Environmental Impact Statement process was outlined to the following:

State of Alaska

Department of Environmental Conservation
Department of Natural Resources
Department of Health and Social Services
Department of Fish and Game
Department of Commerce and Economic Development
Governor's Office - State Clearinghouse
National Marine Fisheries Service

C. The Draft Environmental Statement will be mailed to the Region's Land Management Planning mailing list of approximately 4,400 individuals, organizations and agencies. The following is a listing of Federal and State agencies which will be receiving a copy of this document:

Mrs. Lee McAnerney
Commissioner
Dept. of Community & Reg. Affairs
Pouch B
Juneau, AK 99811

Alaska Dept. of Env. Conservation
Mackay Building, Room 1206
338 Denali Street
Anchorage, AK 99501

Thomas W. Trent
Regional Supervisor
Habitat Protection Sect., ADFG
333 Raspberry Road
Anchorage, AK 99502

William C. Gasaway
Alaska Dept. of Fish & Game
1300 College Road
Fairbanks, AK 99701

Michael C.T. Smith
Alaska Dept. of Natural Resources
Division of Lands
323 East 4th Avenue
Anchorage, AK 99501

Mr. H.D. Scougal
Deputy Commissioner
Div. of Design and Construction
Box 1467
Juneau, AK 99802

Roger F. Blackett
Alaska Dept. of Fish & Game
FRED Division
P.O. Box 686
Kodiak, AK 99615

Dr. Marshall Lind
Commissioner
Alaska Dept. of Education
Pouch F
Juneau, AK 99811

Mr. Don Siedelman
Alaska Dept. of Fish & Game
Support Building
Juneau, AK 99801

Douglas L. Lowery
Regional Environmental Supervisor
Dept. of Env. Conservation
P.O. Box 1601
Fairbanks, AK 99707

Public Communications Section
Alaska Dept. of Fish & Game
Support Building
Juneau, AK 99801

Alaska Dept. of Natural Resources
Division of Lands
Forest Management Officer
323 East 4th Avenue
Anchorage, AK 99501

Mr. Keith Miller
Commissioner
Alaska Transportation Commission
338 Denali Street
Anchorage, AK 99501

Alan Mark Hanna
Dept. of Transportation & Public
Facilities
Box 507
Valdez, AK 99686

Director
Alaska Div. of Policy Development
& Planning
Pouch AD
Juneau, AK 99811

Mr. Robert E. Leresche
Commissioner
Alaska Dept. of Natural Resources
Pouch M
Juneau, AK 99811

Joseph F. Desmidt, Jr.
Div. of Forest, Land & Water
Box 1130
Soldotna, AK 99669

Colonel George Robertson
District Engineer of Alaska
U.S. Army Corps of Engineers
P.O. Box 7002
Anchorage, AK 99510

Mr. Joseph H. Fitzgerald
Commissioner
Fed./St. Land Use Planning Comm.
Lindberg Lake Road
Seeley Lake, MT 59868

Mr. Austing Post
U.S. Geological Survey
1201 Pacific Avenue S., Suite 850
Tacoma, WA 98402

Rear Admiral John B. Hayes
Commander
Seventeenth Coast Guard District
P.O. Box 3-5000
Juneau, AK 99802

Ms. Celia M. Hunter
President
Wilderness Society
1901 Pennsylvania Avenue N.W.
Washington, D.C. 20006

Stephen Reeve
Chief of Planning & Classification
Alaska Division of Lands
323 East 4th Avenue
Anchorage, AK 99501

Chip Dinneslien
Director
Alaska Division of Parks
619 Warehouse Avenue, Suite 210
Anchorage, AK 99510

Frank Austin, Program Analyst
Dept. of Transportation
Fed. Aviation Admin.-Alaska District
P.O. Box 14
Anchorage, AK 99513

Mr. Robert Hartig
Natural Resources Commission
U.S. Chamber of Commerce
717 "K" Street
Anchorage, AK 99501

U.S. Department of Energy
605 West 4th Avenue
Anchorage, AK 99501

Mr. Phil Holdsworth
Commissioner
Fed./St. Land Use Planning Comm.
326 4th Street, Apt. 1009
Juneau, AK 99801

Robert Kistner, Director
Anchorage District Office, ITA
U.S. Department of Commerce
623 6th Avenue, Room 412
Anchorage, AK 99501

Mr. Ivan E. Rezek
OEDP Chairman
Box 315
Sitka, AK 99835

Mr. Harry L. Rietze
Director
National Marine Fisheries Service
P.O. Box 1668
Juneau, AK 99802

Mr. David Hayes
Bureau of Indian Affairs
P.O. Box 2554
Juneau, AK 99803

Mr. Earl May
District Sanitarian
State Office Building 203
Ketchikan, AK 99901

Mr. Charles Meacham
Director
International Fisheries
Pouch A
Juneau, AK 99811

Mr. Edmund Orbeck, Commissioner
Alaska Department of Labor
Box 1149
Juneau, AK 99801

Ms. Mary Sangster
U.S. Fish & Wildlife Service
1011 Tudor Road
Anchorage, AK 99503

Mr. Michael Whitenead
Governor's Office
State of Alaska
Policy Development and Planning
State/Federal Coordinator
Pouch AD
Juneau, AK 99811

Internal Revenue Service
ATTN: Forester S M/S: 107
915 - 2nd Avenue, Room 2266
Seattle, WA 98174

Mr. Arthur Mason
U.S. Small Business Administration
Region X
710 Second Avenue
Seattle, WA 98104

Ken R. Manthey
Alaska Dept. of Fish & Game
Box 141
Kodiak, AK 99615

Robert O. Robertson
Parks & Recreation
Pouch 6-650
Anchorage, AK 99502

Paul Novak
Project Leader for Land Use
Alaska Dept. of Fish & Game
415 Main Street
Ketchikan, AK 99901

Press Secretary to the Governor
State of Alaska
Pouch A
Juneau, AK 99811

Mr. Thomas K. Williams
Commissioner
Alaska Department of Revenue
Pouch S
Juneau, AK 99811

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

WO

REPLY TO: 2760 Withdrawals, Lands Uses

MAY 17 1979

SUBJECT: Withdrawals in Alaska, Management Policy

TO: John R. McGuire,
Chief

Further definition of policy is needed to reflect the uses that were intended to be permitted on the 11.2 million acres of National Forest land in Alaska on which the Department filed application for withdrawal under provisions of Sec. 204(b) of FLPMA. Announcements made concerning this were more general than specific in content. As a result, resource management decisions in the withdrawal areas have been delayed. Therefore, we recommend the policy expressed in the enclosed paper be adopted for interim management direction for the withdrawal areas.

OK
JRM
5/18/79

The policy is based upon the Notice of Proposed Withdrawal and other key pronouncements: The Notice of Proposed Withdrawal of Lands, signed December 1, 1978, and published December 5, 1978, segregates the land from the operation of the public land laws including location and entry under the general mining laws, and selection, location, and entry under Sec. 6 of the Alaska Statehood Act, subject to valid existing rights.

It was announced in the U.S.D.A. News bulletin, December 19, 1978, that the Department of Agriculture had asked that the 11 million acres be protected by withdrawal from any new mining claims, mineral leasing, or state and private land selections. It was emphasized that valid existing rights, such as valid mining claims and prior State and Native land selections, would be honored. Also that sport hunting, fishing, boating, camping, cabin use, and air access in the areas were to continue where established.

In Remarks of Rupert Cutler on Alaska at White House Briefing, Friday, December 1, 1978, it states that "In order to protect these areas, and other areas the House and Senate were considering for wilderness, Secretary Bergland has requested Secretary Andrus to withdraw approximately 11.2 million acres of the Tongass and Chugach National Forests from mineral entry and other developments for 2 years, so that the 96th Congress could consider the matter." This seemed to imply that this withdrawal

-2-

would be more restrictive than in most withdrawals. The phrase "and other developments" in particular has caused considerable concern by our Alaska Region over what was intended. The enclosed policy statement would clarify the uses or developments that will be restricted.

We recommend that the policy expressed in the enclosed be adopted. If you concur, please sign the approval block and we will expedite implementation.

A handwritten signature in cursive script, reading "Thomas C. Nelson".

THOMAS C. NELSON
DEPUTY CHIEF

Enclosure

Sec. 204(b) of FLPMA Withdrawals in Alaska

The Department of Agriculture filed an application for withdrawal of a substantial acreage of National Forest land in Alaska under authority of Sec. 204(b)(1) of the Federal Land Policy and Management Act. Notice of this was published in the Federal Register December 5, 1978. Upon publication of this notice the land was segregated from operation of the public land laws to the extent specified in the notice. The segregative effect of the application will terminate upon expiration of two years from the date of the notice. The purpose of this action was to preserve the options of Congress on the withdrawn lands.

The withdrawals include the National Forest lands addressed during the 95th Congress in the Alaska National Interest Lands Conservation Act. This included wilderness and other special areas in the Administration proposal, House-passed H.R. 39 and the Senate Committee on Energy and Natural Resources substitute for H.R. 39. Some 11.2 million acres were involved and included Admiralty Island and Misty Fiord, both proclaimed National Monuments in December of 1978.

The effect of this action was to withdraw these lands from further location, entry or selection under the operation of the public land laws, including, but not limited to, the mining laws (30 U.S.C. Chapter 2) and Sec. 6 of the Alaska Statehood Act of 1958 (72 STAT. 339). This withdrawal has no effect on valid existing rights.

Beyond the limitations of the Sec. 204(b)(1) withdrawal, but equally important in preserving congressional options, are the administrative limitations placed on other activities within these areas. These limitations are governed by management standards applicable to the classification for which each area is being considered. For example, those roadless areas being considered for wilderness and/or wilderness study by the administration or Congress will be managed so as not to impair the present wilderness character. No activities will be permitted that would disqualify them from further wilderness consideration. The management limitations do not constrain valid existing rights, e.g., access to private inholdings, mineral claims filed prior to the withdrawal, valid existing rights under current 5-year cutting plans under existing contracts, and planned and financed fish hatcheries. Exceptions not considered valid rights require compliance with NEPA and approval of the administration. Also, the Admiralty Island and Misty Fiords National Monuments will be managed to protect their unique ecosystems, and scientific and cultural values in their present status. Reference the Federal Register Notice for management policy of National Monuments.

ACRONYMS

ADF&G	Alaska Department of Fish and Game
ADNR	Alaska Department of Natural Resources
ANCSA	Alaska Native Claims Settlement Act
ASQ	Allowable Sale Quantity
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CFL	Commercial Forest Land
FIP	Forest Incentives Program
FLPMA	Federal Land Policy Management Act
IDT	Interdisciplinary Team
IPM	Integrated Pest Management
KV	Knutson-Vandenberg Act
LRSY	Long-range Sustained Yield
LUD	Land Use Designation
MARS	Management Attainment Reporting System
MMBF	million feet board measure
NECPA	National Energy Conservation Policy Act
NMFS	National Marine Fisheries Service
PNW	Pacific Northwest (Forest & Range Experiment Station)
RARE	Roadless Area Review and Evaluation
RIM	Recreation Information Management
RMA	Resources Management Act
ROG	Recreation Opportunity Guide
ROP	Recreation Opportunity Planning
ROS	Recreation Opportunity Spectrum
SCS	Soil Conservation Service
S&PF	State and Private Forestry
T&E	Threatened and Endangered
TLMP	Tongass Land Management Plan
TMIS	Timber Management Information System
USDA	United States Department of Agriculture

VCU	Value Comparison Units
YACC	Young Adult Conservation Corps
YCC	Youth Conservation Corps

GLOSSARY

allocation	The committing of a given area of land to one or more kinds of management, along with related manpower and capital requirements, to provide the public with differing land use opportunities.
allocation constraints	Any factors that limit the consideration of a given land area to less than the full set of land management options that are basically suitable for application thereon.
capacity	The potential ability of a resource to produce goods or services on the basis of the maximum possible outputs for a given type and of future, alternative site or resource management inputs.
compatibility	The degree to which any two land management options conflict in respect to their purposes or in respect to how the eventual uses they are directed at will alter land characteristics.
consumptive use	Those uses of resources that reduce the supply, such as logging and mining.
developed recreation	Outdoor activities that utilize facilities, such as camp and picnic grounds, resorts, recreation cabins, and ski areas.
dispersed recreation	Scattered, individual outdoor recreation activities normally not identified with developed facilities or areas of group concentration.
forestry	The science, the art, and the practice of managing and using for human benefit the natural resources that occur on and in association with forest lands.
geomorphic (landforms)	Modifications of the earth's surficial form caused by physical or chemical means, e.g. volcanic activity, erosion, sedimentation.

goal	A concise statement of an organization's tasks. A goal is normally expressed as a broad, general statement, is usually not quantifiable, and is timeless in that it usually has no specific date by which it is to be completed. Often, it is expected that a "goal" could never be completely achieved. The "goal" is the principal statement from which objectives must be developed.
land types	Visually identifiable unit areas resulting from homogenous geomorphic and climatic processes and having defined patterns of soil and vegetative potentials.
Land Use Designation (LUD)	A method of classifying or zoning lands according to a combination of various uses and use intensities. Uses or activities are grouped to define, together with a set of coordinating policies, an essentially compatible combination of management activities.
<u>Mineral Definitions:</u>	
Critical Material	A material that is vital to the national defense, the main source of which is within the continental limits of the United States, and which may not be produced in quality and in quantity sufficient to meet requirements.
Critical Minerals	Minerals essential to the national defense, the procurement of which in war, while difficult, are less serious than those of strategic minerals because they can be either domestically produced or obtained in more adequate quantities or are less essential, but for which some degree of conservation and distribution control is necessary.
Essential Minerals	A mineral essential to national defense for which no great difficulty of procurement during war is anticipated, but which requires constant surveillance because future developments may necessitate reclassification as strategic or critical.
Strategic Minerals	Minerals essential to the national defense for the supply of which, during war, we are wholly or in part dependent upon sources outside the continental limits of the United States, and for which strict measures controlling conservation and distribution are necessary.

non-consumptive use	Those uses of resources that do not reduce the supply, such as many types of recreation.
objective	A statement of planned results to be achieved within a stated time period. The results are designed to achieve the desired state or process represented by the goal. An objective is measurable and implies precise timed steps to be taken and resources to be used which, together, represent the basis for defining and controlling the work to be done.
permafrost	Permanently frozen subsoil.
primitive (areas)	Those backcountry types of wildlands which show no obvious evidence of permanent human uses and in which people are only transitory visitors.
retention factor	The amount of commercial forest land removed from the timber base to protect other resource values. These factors are allowances available to draw upon when meeting other resource needs and are not fixed policies to be rigidly applied by the IDT or Forest Supervisors.
RPA - "Resources Planning Act"	The Forest and Rangeland Renewable Resources Planning Act of 1974. This act directs the Secretary of Agriculture to develop a long range program for the Nation's renewable resources that will assure an adequate supply of forest and range resources in the future while maintaining the integrity and quality of the environment.
RVD - Recreation Visitor Day	The use of an area for a total of 12 person hours by one or more people, either continuously or spread over several visits.
subsistence	Local and personal use of natural resources such as trees, fish, and wildlife to provide or obtain necessities of life, i.e. food, clothing, shelter.

Value Comparison
Units (VCU's)

Units of land that facilitate the comparison of the full range of resource values (commodity and amenity) for allocative purposes. In this planning approach, these units will normally be small watersheds or subdrainages of larger watersheds averaging approximately 5,000 acres in size. A number of different land types will normally be contained in each VCU.

Wilderness

Those units of the National Wilderness Preservation System located within the National Forest System designated by Act of Congress. Wilderness is recognized as a distinct resource by the Congress in the Wilderness act, section 2(c) of which defines this resource:

"A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

IX. INDEX

Acronyms -- 74

Alaska, State of -- 67, 74

Department of Commerce and Economic Development

Department of Fish and Game

Department of Natural Resources

Department of Environmental Conservation

Department of Health and Social Services

Governor's Office

Alternative 1 -- 2, 47, 56, 60, 64, 65, 68

Alternative 2 -- 2, 47, 55, 56, 63, 64, 65, 68

Alternative 3 -- 2, 47, 55, 58, 64, 65, 70

Alternative 4 -- 2, 47, 55, 58, 64, 65, 70

Bureau of Land Management -- 15

Chief's Letter -- 71

Climate -- 16

Community Profile -- 9

Community Stability -- 7, 61-64

Consultation with Others -- 67

Agencies -- 67

Public Involvement -- 5

Criteria -- 36

Cultural -- 19

Economic Analysis -- 64

Alternative 1 -- 62

Alternative 2 -- 63

Alternative 3 -- 63

Alternative 4 -- 64

Effects of Implementation -- 49

Employment -- 62

Energy -- 5, 9, 45

Evaluation of Alternatives -- 64

Evaluation Criteria -- 45

Fish -- 24, 52
 Sport Fishery -- 25

Geography -- 12

Glossary -- 76, 79

Interdisciplinary Team -- Appendix 2

Individual Area Analysis of Program Effects -- 48

Issues -- 5
 Minerals and Energy -- 5
 Wilderness -- 6
 Social Well-Being -- 8
 Community Stability -- 7

Land Area -- 47

Land Use Designation -- See LUD's I, II, III and IV

LUD I -- 18, 21

LUD II -- 18, 21

LUD III -- 18, 21

LUD IV -- 18, 21

Minerals -- 5, 9, 40, 56

Mining and Minerals Policy Act -- 3, Appendix 5

Mineral Activity Evaluation -- 57

National Monuments -- 10

National Forest Lands -- 60

National Register Nominations -- 16

National Register Sites -- 20

Options Dismissed from Further Analysis -- 48

Population -- 16, 17

Preferred Alternative -- 66

Public Involvement -- 5

RARE II (see Roadless Area Review and Evaluation)

Recreation -- 18, 50

Resources -- 18

Relationship to other Forest Service Plans

Roadless Areas Review and Evaluation -- 2, 3

Rivers (Wild and Scenic) -- 11

Salmon harvest -- 24

Silviculture

Social Well-Being -- 8

Soils and Water -- 43
 Effects on -- 61

Sustained Yield -- 27

Timber -- 26, 53
 Yield Calculations -- 28

Time -- 46

Tongass Land Management Plan (TLMP)

Transportation -- 44

Value Comparison Units (VCU's) -- 45

Variables in Alternatives (See Time and Land Area)

Vegetation -- 15

Visual Resource -- 20

VCUs (see Value Comparison Units)

Water -- 43

Effects on -- 61

Wilderness -- 6, 12, 18, 59

Wildlife -- 22

Demand -- 50, 51

Zero Time Frame -- 48

REFERENCES

Alaska Department of Commerce and Development, Division of Economic Enterprise, 1976.

Timber and Fishing in Southeast Alaska: Current challenges to full employment. Department of Commerce and Economic Development; Juneau, Alaska, 13 pp. illus.

Alaska Department of Fish and Game, 1977.

Alaska salmon fisheries plan, provisional draft. State of Alaska. Department of Fish and Game, Juneau, Alaska.

Alaska Department of Fish and Game, 1980.

Preliminary Forecasts and Projections for 1980 Alaska Salmon Fisheries. Alaska Department of Fish and Game; Juneau, Alaska. Informational Leaflet No. 183.

Alaska Department of Fish and Game.

Alaska Wildlife Management Plan, A Public proposal for the Management of Alaska's Wildlife. State of Alaska; Juneau, Alaska. Project W-17-R.

Department of Natural Resources, 1976.

Alaska Outdoor Recreation Plan 1976-80. Division of Parks; State of Alaska; Juneau, Alaska.

Alaska, 1980.

Comprehensive Salmon Plan for Southeast Alaska, Phase 1. Joint Southeast Alaska Regional Planning Teams. Juneau, Alaska. Review Draft.

Alaska Dept. of Labor, 1979.

Alaska Population Overview. State of Alaska, Juneau, Alaska. 54 pp. illus.

Araoic, E.L., A. F. Garbarro and W. G. Workman, 1979.

Chugach Land Management Plan: Supply and Demand Assessment for Resources of the Chugach National Forest. Forest Service, Juneau, Alaska.

Balding, G.O., 1976.

Water availability, quality and use in Alaska. USDI Geological Survey open file report 76-513. 236 pp. illus.

Butcher, W.R., N.K. Whittlesby, and J.F. Orsborn, 1972.

Economic value of water in a systems context. Report to the National Water Commission. NTIS, Springfield, Virginia (PB 210357).

Clark Roger and Rovert Lucas, 1978.

The Forest Ecosystems of Southeast Alaska, Outdoor Recreation and Scenic Resources. USDA Forest Service. PNWFRES. Portland, Oregon. Technical Report PNW-66.

Countryman, David W. and S.E. Jungst, 1978.

Socio-economic variables that may effect wilderness use in southeast Alaska. A consulting report, unpublished. 57 pp. illus.

Dwyer, J.F., J.R. Kelly, and M.D. Bowes, 1977.

Improved procedures for estimating the contribution of recreation to national economic development. Report No. 128. Water Resources Center, University of Illinois at Uroana-Champaign.

Dyrland, Richard D., 1973.

Resource capability system: basic economic concepts and procedures. Division of Watershed Management, USDA Forest Service.

Forest Service, 1977.

Forest statistics of the U.S., 1977. Review draft - all data subject to revision. USDA, Forest Service, Washington, D.C.

Forest Service, 1979.

Alternative program directions 1981-2030. Review draft. USDA Forest Service, Washington, D.C.

Forest Service, 1980.

An assessment of the Forest and range land situation in the United States. USDA Forest Service, Wasnington, D.C. FS-345.

Forest Service, 1978.

RARE II Alaska Supplement to Draft Environmental Statement. Roadless area review and evaluation. USDA, Forest Service, Juneau, Alaska. Series No. R-10-26. 87 pp. illus.

Forest Service, 1977.

Coefficient to Convert Acre Equivalents to Recreation Visitor Days (RVD) of Fishing, Hunting and Wildlife viewing. Memo to regional Forester from Director of Wildlife Management. Forest Service, Washington, D.C., file no. 2630-12/9/79.

Forest Service, 1978.

Tongass Land Management Plan. Draft Environmental Statement. USDA, Forest Service, Juneau, Alaska. Series NO. R-10-29. 199 pp illus.

Forest Service, 1978.

Resources program and assessment physical and biological effect indicators for 1980 RPA program update, unpublished. USDA, Forest Service, Juneau, Alaska. 23 pp. illus.

Forest Service, 1978.

USDA Forest Service Environmental Statement, for the Chugach Moose - Fire Management Program. Forest Service, Anchorage, Alaska.

Forest Service, 1976.

Logging and Fish Habitat. USDA Forest Service, Alaska Department of Fish and Game, Alaska Department of Natural Resources. Juneau, Alaska.

Forest Service, 1980.

Bird Population Responses to Clearcutting in the Tongass National Forest of Southeast Alaska. USDA Forest Service, Juneau, Alaska. Report No. 71.

Forest Service, 1975.

Preliminary Central Interior Area Guide. Alaska Planning Team. Forest Service, Anchorage, Alaska.

Forest Service, 1975.

Preliminary Yukon-Porcupine Area Guide. Alaska Planning Team. Forest Service, Anchorage, Alaska.

Forest Service, 1976.

Tongass Area Guide. Forest Service, Juneau, Alaska.

Glass, Ronald J., 1978.

Tongass Land Management Plan, an assessment of the demand-supply situation for southeast Alaska timber working report. USDA, Forest Service, Juneau, Alaska. TLMP 7, 54 pp, illus.

Hendee, J.C., G.H. Stankey and R.C. Lucas, 1978.

Wilderness Management. USDA Forest Service. Washington, D.C. Publication 1365.

Hutchinson, O.K. and V.J. LaBau, 1975.

The Forest Ecosystem of Southeast Alaska, 9. Timber Inventory Harvesting Marketing and Trends. Forest Service PNWFRES, Portland, Oregon. Technical Report PNW-34.

- Institute of Social and Economic Research, 1978.
National demand for developed recreation and tourism in southeast Alaska. An overview, USDA, Forest Service, Alaska. 30 pp.
- Jungst, Steven E.
Wilderness use projection; the state of available techniques; progress report No. 1. Department of Forestry, Iowa State University; Ames, Iowa. 18 pp.
- Krutilla, J.V., and A.C. Fisher, 1975.
The economics of natural environments. Baltimore: The Johns Hopkins University Press.
- Lundeen, J.L., 1977.
The use of digital simulation models to predict the effects of vegetation cover change on streamflow and downstream water use. Ph.D. dissertation. Stanford University.
- Mills, M.J.
Annual Performance Report for Alaska Statewide Sport Fish Harvest Studies. Alaska Department of Fish and Game. Juneau, Alaska. Study S.W.-1-A.
- Miller and Associates, 1979.
An Analysis of Selected Elements of the Alaskan Salmon Resource Development Program. A Report to the Aquaculture Policy Study Group of the Alaska Legislature. Juneau, Alaska.
- Moncur, J.E.T., 1971.
A program planning approach to valuation of water in alternative uses. Ph.D. dissertation. Washington State University, Pullman.
- Rogers, George W., 1978.
An assessment of recreational and subsistence demands in southeastern Alaska. Institute of Social and Economic Research--University of Alaska. USDA, Forest Service, Juneau, Alaska. 12 pp.
- Rogers, George W. and Glass, Ronald J., 1978.
The supply-demand situation for southeastern Alaska salmon. Institute of Social and Economic Research, University of Alaska; USDA, Forest Service, Juneau, Alaska. 24 pp.

- Rogers, George W. and Hart, B., 1978.
Tongass Land Management plan. Socio-economic working report. USDA, Forest Service, Juneau, Alaska. TLMP 1. 77 pp. illus.
- Schmiege, Donald C., A.E. Helmer and D.M. Bishop, 1974.
The Forest Ecosystem of Southeast Alaska. Pacific Northwest Forest and Range Experiment Station. Portland, Oregon. Technical Report PNW-28.
- Scorn, John W., O.C. Wallmo and Matthew D. Kirchoff, 1979.
Seasonal Distribution and Habitat Use by Sitka Black-tailed Deer in Southeastern Alaska. Alaska Department of Fish and Game, Juneau, Alaska.
- Scott, Michael J., 1978.
Southcentral Alaska's economy and population, 1965-2025. A base study and projection report of the economic task force. Southcentral Alaska water resources study (level B) to the Alaska Water Study Committee. University of Alaska, Fairbanks, Alaska. 108 pp.
- Thompson, Dorothy H., 1978.
The Wilderness Act, an overview. Institute of Social and Economic Research, University of Alaska; Fairbanks, Alaska. 26 pp.
- University of Alaska, 1978.
Resources of the C ; some economic considerations report for the U.S. Forest Service. University of Alaska, Fairbanks, Alaska. 82 pp.
- University of Alaska, 1978.
National Demand for Developed Recreation and Tourism in Southeast Alaska, an Overview. Institute of Social and Economic Research, Anchorage, Alaska.
- U.S. Department of Commerce, 1977.
Consumer Income, Household Money Income in 1975, by Housing tenure and residence, for the United States, Regions, Divisions, and States, (spring 1976 survey of income and education.) Department of Commerce, Bureau of Census, Washington D.C., Series P-60, No. 128. 171 pp, illus.
- USDA, 1978.
Current Situation Overview, southcentral Alaska. USDA, Forest Service, Juneau, Alaska. 60 pp, illus.

Zasada, John C., R.A. Werner, K. Van Cleve, J.A. McQueen, and E. Nyland, 1977.

Forest biology and management in high-latitude North American forests. Symposium proceedings, USDA, Forest Service, Fairbanks, Alaska.

Interdisciplinary Team

The Interdisciplinary Team (IDT) responsible for the preparation of this Draft Environmental Statement is listed alphabetically below.

DIPPOLD, Ron

Education:

B.S. Forestry, 1958 - State University of New York
Graduate studies: Statistics - State University of New York
Public Administration - University of Alaska

Work Experience:

1 year	Forester - Prineville RD, Ochoco NF
3 years	Photo and Air Intelligence - U.S. Navy
2 years	Assistant District Ranger - Big Summit RD, Ochoco NF
8 years	Research Forester - Pacific Northwest Forest and Range Experiment Station, Juneau
4 years	Branch Chief for Forest Inventory - Alaska Region, Juneau
4 years	Timber Management Planner - Alaska Region, Juneau

ESTEP, Eldon

Education:

B.S. Forest Management, 1951 - North Carolina State College
M.S. Forest Products, 1961 - University of Washington

Work Experience:

3 years	Assistant District Ranger - Boise NF
5 years	Forest Products Research - Pacific Northwest Forest and Range Experiment Station, Portland
2 years	State and Private Forestry - Forest products utilization, Washington, D.C.
3 years	Assistant Director, Research Planning and Application - Pacific Northwest Station

GROSS, Ed

Education:

B.S. Soil Science, 1965 - University of Wisconsin
M.S. Soil Science/Botany, 1968 - University of Minnesota
Ph.D. Soil Science/Geology, 1973 - University of Minnesota

Work Experience:

3 years Soil Survey (Scientist) - Douglas County, Minnesota
3 years Soil Survey - Anoka County, Minnesota
1 year Assistant Professor-Soil Science - Florida A & M
University, Tallahassee, Florida
2 years Soil Scientist - Monongahela NF, Elkins, West Virginia
3 years Regional Soil Scientist - Alaska Region, Juneau

HAYS, Hank

Education:

B.S. Forestry, 1950 - Purdue University

Work Experience:

1 year Forester - Weyerhaeuser
2 years Timber Inventory - Wenatchee and Olympic NF
4 years District Timber Staff - Ketchikan
4 years District Ranger - Ketchikan RD, Tongass NF
8 years District Ranger - Flathead RD, Flathead NF
4 years Planning Officer - Chatham Area, Tongass NF
1 year Alaska Planning Team - Alaska Region
3 years Group Leader for Area Planning and Development - State and
Private Forestry, Anchorage

HOLMES, Rob

Education:

B.A. Math, 1964 - University of Washington
M.A. Math, Computer Science, 1972 - University of Denver

Work Experience:

2 years Programmer/Analyst - Martin Marietta Aerospace
1 year Systems Analyst - Systems Consultants Inc.
3 years Computer Specialist - Chatham Area, Tongass NF
2 years Computer Systems Analyst - Alaska Region, Juneau

MEHRKENS, Joseph R.

Education:

B.S. Forest Hydrology, 1970 - University of Minnesota
M.S. Economic and Systems Analysis, 1975 - Michigan State University

Work Experience:

5 years Hydrologist - State and Private Forestry, St. Paul
3 years Forest Hydrologist - Stikine Area, Tongass NF
1 year Staff Hydrologist - Alaska Region, Juneau
1 year Regional Economist - Alaska Region, Juneau

MUEN, Teresa C.

Education:

AbJ Journalism and Marketing, 1973 - University of Georgia

Work Experience:

1 year Office of Information - Atlanta Region (USDA, FS)
3 years Public Information Officer - Chattahoochee Oconee NF
1.5 years Group Leader, Public Involvement and Mass Media - Alaska
Region, Juneau

MUTH, Robert M.

Education:

B.A. History, 1974 - University of Washington
M.A. Public Administration, 1976 - University of Washington
Ph.D. Candidate, Management and Social Sciences of Natural Resources,
Present time - University of Washington

Work Experience:

7 years Social Science Aid/Research Technician - Forest Service
Wildland Recreation Research Project, Seattle, Washington
1 year Social Impact Assessment Coordinator-RARE II - Washington
Office
1 year Regional Social Scientist - Alaska Region, Juneau

PIERCE, Jim

Education:

A.A. Science, 1963 - College of San Mateo
B.S. Forest Engineering, 1966 - Oregon State University

Work Experience:

1 year Transportation Planning - Barlow RD, Mt. Hood NF
4 years Timber Management - Oakridge RD, Willomette NF
2 years Logging Systems Specialist - Ochoco NF
1 year Land Management Planning Staff - Ochoco NF
2 years Land Management Planning Staff - Umpque NF
3 years District Ranger - Clachamas RD, Mt. Hood NF
Presently Regional Plan Team Leader - Alaska Region, Juneau

SCOTT, Steve

Education:

B.S. Forestry, 1958 - Utah State University

Work Experience:

4 years Forester - Targhea NF
1 year Assistant District Ranger - Challis NF
4 years District Ranger - Humbolt NF
2 years District Ranger - Teton NF
5 years District Ranger - Wasatch NF
1 year Forester (lands) - Alaska Region, Juneau

SHERIDAN, Walt

Education:

B.A. Music Education, 1968 - Florida State
Graduate studies: Forestry - University of Georgia

Work Experience:

1 year Administrative Assistant - Forest Service, Florida
1 year Contract Specialist - Forest Service, Florida
1 year Business Management Assistant - SE Forest and Range
Experiment Station
1 year Administrative Officer - Ketchikan Area, Tongass NF
1 year Management Analyst - Forest Service, Juneau
2 years Administrative Officer - Chugach NF
2 years Program Planning & Budget - Forest Service, Juneau

SHERIDAN, Bill

Education:

B.S. Zoology and Fisheries, 1947 - University of Washington
Graduate studies: Zoology and Fisheries - University of Washington

Work Experience:

10 years Fisheries Research Institute - University of Washington
2 years Director of Kodiak Research Center and Kitoi Bay Research
Station - Alaska Department of Fish and Game
18 years Regional Fisheries Biologist - Alaska Region, Juneau

VAUGHN, Ken

Education:

B.S. Civil Engineering, 1966 - South Dakota School of Mines and
Technology
M.S. Civil Engineering, 1972 - South Dakota State University
Predoctoral Studies; Environmental Engineering

Work Experience:

4 years Research and Development Engineer - Water Department, City
of Sioux Falls
1 year FWPCA Trainee - South Dakota State University
1 year Teaching Assistant - South Dakota State University
3 years Environmental Engineer - Lolo NF
2 years Assistant Forest Engineer - Lolo NF
2 years District/Area Engineer - Missoula-Seely Lake Area, Lolo NF
Registered Professional Engineer, State of Montana

WOOD, Ron

Education:

B.S. Landscape Architecture, 1959 - Michigan State University

Work Experience:

2 years Designer - private firms
1 year Landscape Architect - Military
1 year Recreation Site Planner - National Park Service, Regional
Office, Richmond, Virginia
2 years Recreation Site Planning - Alaska Region, Juneau
2 years Forest Landscape Architect - Chugach NF, Anchorage
4 years Forest Landscape Architect - Monongahela NF
Liaison Officer (Highland Scenic Highway)
Recreation Planner
11 years Regional Landscape Architect - Alaska Region, Juneau

USDA FOREST SERVICE

RECOMMENDATION FOR ALASKA LAND WITHDRAWALS

SECTION 204(c) OF FLPMA (P.L. 94-579)

7.8 MILLION ACRES OF THE TONGASS AND CHUGACH NATIONAL FORESTS

Prepared by the USDA Forest Service, Region 10

Regional Forester _____

Chief _____

TABLE OF CONTENTS

	<u>Page</u>
Foreword	i
Introduction	1
Summary of Units and Acreages.	5
Copper River Delta	6
Tonki Cape	15
Devil Paw.	21
South Baranof.	27
South Prince of Wales Island	34
Karta.	41
Coronation, Warren, and Maurelle Islands	48
Etolin Island.	54
Teoenkof Bay	60
Petersourg Creek	66
Boundary Spires.	72
Endicott River	78
Tracy Arm-Fords Terror	83
West Chichagof-Yakooi Islands.	90
Russell Fiord.	99
Stikine LeConte.	107

FOREWORD

On November 28, 1978, the U.S. Department of Agriculture filed an application, serial number AA-23139, which was corrected by the letter of December 1, 1978, for the withdrawal of 11.2 million acres of National Forest land in Alaska, from locations and entry under the general mining laws, 30 U.S.C. Chap. 2; and from selection, location, and entry under Section 6 of the Alaska Statehood Act, 72 Stat. 339, subject to valid existing rights.

The 11.2 million acres consisted of 25 separate areas and included the Misty Fiord and Admiralty Island National Monuments which had also been withdrawn by the President at the same time that he made the monument proclamations on December 1, 1978.

All of the areas involved had been proposed for special classification. During the 95th Congress the Administration's proposal, the House passed H.R. 39, and the Senate Committee on Energy and Natural Resources substitute for H.R. 39, all contained special land classification proposals involving National Forest lands in Alaska. Since the 95th Congress adjourned without completing action on the Alaska national interest land legislation, the decision was made to apply for a withdrawal under Section 204(o)(1) of the Federal Land Policy and Management Act (FLPMA) to protect the scenic, historic, scientific and/or primitive attributes of the area, and in aid of possible legislation.

Notice of this application was published in the Federal Register on December 5, 1978. Upon publication, the land was segregated from operation of the public laws to the extent specified in the notice. The segregative effect of the application will terminate on December 5, 1980, 2 years from the date of the notice. The Presidential withdrawal of the one (1) million acre Admiralty Island National Monument and 2.1 million acre Misty Fiord National Monument will remain in effect; extension of those withdrawals under Section 202(c) of FLPMA will not be addressed in this report.

Congress did not reach agreement on the Alaska lands legislation in 1979, and pressing international and domestic issues may prevent action in 1980. With the 204(b)(1) segregation due to expire December 5, 1980, it is therefore appropriate to proceed as authorized by FLPMA and seek continued protection of the key units of the original withdrawal identified through the land management planning process and the RARE II effort.

Subsection 204(c)(2) of the FLPMA of 1976 specifies in 12 points the information which the Secretary of the Interior must provide the appropriate Congressional committees whenever he makes a withdrawal of

land under Subsection 204(c) or (e) of that Act. As required by Subsection 204(c)(2), the following report responds to the 12 points, and describes the need for and impacts of these withdrawals.

Although the withdrawal authority in FLPMA is limited to protection from settlement, sale, location, or entry on Federal land, it is assumed for the purposes of this report that other activities and uses inconsistent with protection of the scenic, historic, scientific and/or primitive attributes of these areas would also be precluded.

INTRODUCTION

A. Withdrawal Authority

The authority for these permanent withdrawals is found in Section 204(c) of FLPMA.

B. Length of Withdrawals

The Section 204(c) withdrawals which are the subject of this report are effective as of the date set forth in the Public Land Order and shall last until December 31, 1985, unless, 1) Congress nullifies the withdrawals by passage of an act of Congress; 2) Congress enacts a current resolution of disapproval within 90 days after the effective date of the withdrawals; or 3) they are revoked by the Secretary of Interior with the consent of the Secretary of Agriculture.

This expiration date is based upon completion of the next Resources Planning Act cycle, at which time the Tongass and Chugach Land Management Plans will be reviewed and updated. Such timing will provide the Administration and Congress options for classification throughout the withdrawal period as well as at the end of that period.

C. Other Withdrawals

The permanent withdrawal orders which are the subject of this report state that the withdrawals are in addition to existing withdrawals. These withdrawals would have no effect on the reserved status of the underlying National Forest lands or on other withdrawals for other agency use.

D. Consultation Held or Planned

This report is being prepared as part of the Alaska National Forests Regional Plan required by Section 6 of the National Forest Management Act (NFMA). In addition to the public involvement required by the NFMA, hearings will begin about August 1, 1980, on these withdrawals to assure compliance with FLPMA.

E. Land Management Planning Relationships

The withdrawals addressed in this report are limited to those areas of the Tongass National Forest assigned LUD I classification in the 1979 Tongass Land Management Planning (TLMP) project, and to that part of the original 204 (b)(1) Chugach National Forest withdrawals designated for "Wilderness Recommendation," Administration endorsed wilderness, or "Further Planning" during the 1979 Roadless Area Review and Evaluation (RARE II).

Both of these projects involved intensive and extensive resource evaluation, local, State, and Federal agency involvement, and widespread public involvement. The decisions reached and confirmed in the final TLMP EIS, dated March 12, 1979, were approved by Secretary of Agriculture Bergland and constitute the Administration's position on these allocations. Because the TLMP provided the necessary information, no "Further Planning" was necessary for determination of additional wilderness and non-wilderness classifications on the Tongass National Forests. TLMP then was applied to the Tongass for RARE II purposes.

The LUD I areas, the subject of this report, are comparable to the "Wilderness Recommendation" allocations of RARE II. As noted in the "Tongass Land Management Plan Summary," the LUD I is described as follows:

An area to be recommended for wilderness designation. Designation I is applied to undeveloped lands providing opportunities for solitude and primitive types of recreation and containing unaltered habitats for plant and animal species which provide outstanding opportunities for additions to the National Wilderness Preservation System.

The areas so designated are those on the Tongass National Forest having the combination of the least impact from human activity and the highest wilderness attributes, and accordingly, are the most qualified for addition to the wilderness system. As determined by TLMP, the adverse impact of such classification on the economic stability and social well-being of southeast Alaska is acceptable and will at least in part be compensated for by the expected increase in tourism and recreation resulting from this expansion of the wilderness system.

Since the Chugach National Forest Land Management Plan was not complete at the conclusion of RARE II, nor is it today, the nationally used terminology applies and the areas withdrawn under 204(c) are "Wilderness Recommendation" areas, "Further Planning" areas, and "administratively endorsed wilderness proposals" previously withdrawn under 204(b)(1) of FLPMA.

As on the Tongass LUD I's, the "Wilderness Recommendation" areas and administratively endorsed wilderness proposals are those that have been determined suitable for and worthy of addition to the wilderness system. The further planning allocations on the Chugach applied to roadless areas to be considered for all uses, including wilderness, during development of land and resource management plans or other specific project plans meeting NEPA requirements. The Chugach Land Management Plan will be reviewed and updated at the time of the next Resource Planning Act program re-evaluation. This effort will be completed by December 31, 1985. The term of the withdrawals on these lands is tied to the

completion date of that effort. If appropriate, individual areas can be withdrawn for longer periods at that time. In the meantime, this 204(c) withdrawal remains the same as the 1978, 204(b) segregation described in the Federal Register.

F. Report Organization

Following a brief description of the area, each report presents the 12-point information in the order found in FLPMA. Each point, however, is not repeated verbatim in the reports; rather, abbreviated headings precede each of the 12 points and are displayed below.

(1) a clear explanation of the proposed use of the land involved which led to the withdrawal;	(1) Proposed Use
(2) an inventory and evaluation of the current natural resource uses and values of the site and adjacent public and nonpublic land and how it appears they will be affected by the proposed use, including particularly aspects of use that might cause degradation of the environment, and also the economic impact of the change in use on individuals, local communities, and the Nation;	(2) Natural Resource Use and Value
(3) an identification of present users of the land involved, and how they will be affected by the proposed use;	(3) Present Users
(4) an analysis of the manner in which existing and potential resource users are incompatible with or in conflict with the proposed use, together with a statement of provisions to be made for continuation or termination of existing uses, including an economic analysis of such continuation or termination;	(4) Proposed Use Conflicts
(5) an analysis of the manner in which such lands will be used in relation to the specific requirements for the proposed use;	(5) Specific Use Requirements

(6) a statement as to whether any suitable alternative sites are available (including cost estimates) for the proposed use or for uses such a withdrawal would displace;	(6) Suitable Alternative
(7) a statement of consultation which has been or will be had with other Federal departments and agencies, with regional, State, and local government bodies, and with other appropriate individuals and groups;	(7) Consultation
(8) a statement indicating the effect of the proposed uses, if any, on State and local government interests and the regional economy;	(8) Effect on State and Local Governments
(9) a statement of the expected length of time needed for the withdrawal;	(9) Term of Withdrawal
(10) the time and place of hearings and of other public involvement concerning such withdrawal;	(10) Public Involvement
(11) the place where the records on the withdrawal can be examined by interested parties; and	(11) Location of Records
(12) a report prepared by a qualified mining engineer, engineering geologist, or geologist which shall include but not be limited to information on: general geology, known mineral deposits, past and present mineral production, mining claims, mineral leases, evaluation of future mineral potential, present and potential market demands.	(12) Geology Report

G. Acreage Sources

On the Chugach National Forest, the acreages referred to in this report are those found in the November 28, 1978, Environmental Assessment Report. These have not been verified to date and may change upon review. In the meantime, the withdrawals are as described in the Federal Register and depicted on the 204(b)(1) Chugach National Forest withdrawal map dated July 1979. These withdrawals included unreserved public domain proposed for addition to the National Forest.

On the Tongass National Forest, 6.4 million acres was segregated under Section 204(b)(1). Not addressed in this report are the 3.1 million acres now in National Monument status. Only those areas classified as LUD I in the Tongass Land Management Plan (TLMP) are proposed for 204(c) withdrawal, and total million acres. As is the case on the Chugach National Forest, unreserved public domain proposed for addition to the National Forest System is also included in the 204(c) withdrawal. A display of the LUD I areas withdrawn is found on the Tongass National Forest Land Management Plan map dated February 1979.

Summary of Units and Acreages

	(Acres)
<u>Chugach NF</u>	
College Fiord	847,000
Nellie Juan	696,000
Prince William Sound	500,000
Seward NRA	1,214,000
Copper River	1,538,000
Tonki Cape	42,000
Devil Paw	55,000
	<hr/> 4,892,000
 <u>Tongass NF</u>	
South Baranof	305,000
South Prince of Wales	89,000*
Karta	39,000
Coronation, Warren & Maurelle Is.	35,000
Etolin Island	91,000
Tebenkof	65,000
Petersburg Creek	27,000
Boundary Spires	296,000
Endicott River	103,000
Tracy Arm - Fords Terror	678,000
West Chichagof	227,000
Russell Fiord	307,000
Stikine - LeConte	443,000
	<hr/> 2,705,000
 TOTAL:	 7,597,000 Acres

*TLMP LUD I is 97,000 acres, but the 204(c) report recommends withdrawal of 89,000 acres.

FLPMA
204(c) REPORT

COPPER RIVER DELTA

SIZE: 1,598,000 acres (includes water area)

LOCATION: 120 miles east of Anchorage, Alaska

MANAGEMENT AREA: 016, 017, 018

RARE II DESIGNATION: Further Planning

COPPER RIVER DELTADescription

This unit is located on the mainland about 120 miles east of Anchorage, Alaska, on the Gulf of Alaska. The RARE II process designated this area as "Further Planning."

The 204(b) withdrawal described 1.538 million acres which includes both fresh and salt water acreage. Only about 598 000 acres are actual land area.

The town of Cordova is within this unit. Access to Cordova is currently by boat or plane. A road beginning at Cordova extends 13 miles to the airport and continues another 14 miles to the Copper River bridge. This bridge collapsed during the 1964 earthquake and has not been rebuilt. The State of Alaska had considered extending the road up the Copper River to connect with an interior highway leading to Anchorage and other interior cities. Nine additional miles of road are within this unit.

The State of Alaska and Native corporations have made selections in the Cordova area.

The area offers an interesting contrast of land forms and vegetation. Approaching from seaward, low barren or grass covered sandbars are first encountered. On the mainland, intensive flat terrain is found in the Copper, Marten, and Bering River drainages. The flats, composed of glacial silt, rise gradually from a few feet to about 200 feet. The area is cut by numerous glacial streams and tidal flats. Although most of this land is too wet for any site development, there still remains a large amount of well-drained acreage which could be developed.

Grass flats are extensive at the head of the larger bays that give way to tree vegetation as the elevation rises. At elevations above approximately 1,000 feet, the character of the land changes to an alpine setting of scattered vegetation, rock, glaciers, and snow fields. Glaciers are a dominant aspect of the higher elevation slopes and include Scott, Sherman, and Bering Glaciers.

The wetlands of the Copper River Delta represent one of the most important waterfowl breeding, resting, and feeding grounds in Alaska.

204(c) 12 Points1. Proposed Use

Consistent with the purpose of the 204(b) withdrawal and the RARE II "Further Planning" designation, the proposed use of this area has yet to

be decided. Portions of this unit contain scenic, historic, scientific, wildlife and/or primitive attributes that warrant protection. Although people have utilized the area in a variety of ways, the evidence of such use is minimal over much of the area. The status quo should be maintained until Congress has made a decision on its classification and management or until the Chugach Land Management Plan, through the NEPA process, considers its values and subsequently allocates its use.

2. Natural Resource Use and Value

Recreation

This unit has outstanding scenic features. Hundreds of clear, blue lakes are located in this area as well as several spectacular glaciers. Unfortunately, most of these areas are in locations so remote from existing communities and travel routes that they are seldom visited.

Sheridan Glacier, near Cordova, has great potential for becoming a popular sightseeing attraction. A high knob situated directly in front of the glacier gives an excellent view of not only the face of the glacier but also about eight miles of its extent. From here one also looks down onto Sherman Glacier and can view a vast extent of the Copper River flats and the Gulf of Alaska.

The large and varied game population provides a major attraction for hunters and photographers. The Copper River Delta represents one of the most important waterfowl breeding, resting, and feeding grounds in Alaska. An entire subspecies of Canada goose and several hundred of the rare trumpeter swans utilize this area for their breeding grounds in addition to large numbers of ducks and shore birds.

Black-tail deer provide the most popular big game hunting. Deer receive fairly heavy hunting pressure from the local people and provide high hunter success. There are also large numbers of brown bear, black bear, and mountain goat in this area. Hunting pressure for these animals is mostly of local origin and is relatively light. All three species are apparently maintaining stable populations.

Originally there were no moose in the Cordova area but in 1950 the local chapter of the Isaac Walton League, in cooperation with the Fish and Wildlife Service, succeeded in establishing a few moose in the Copper River flats. Since then the herd has gradually increased in size to a point where a limited harvest is permitted.

Most small game hunting takes place in the vicinity of Cordova and is done by local residents. Snowshoe rabbits and grouse are the most frequently hunted game.

The Forest Service has four public use cabins and one campground. Use is typically by Cordova residents.

Wildlife and Fish

The area contains a wide variety of fish and wildlife habitat. The Copper River wetlands are a vast, remote, and generally inaccessible area of marsh, shrubland, forest, and associated sand dunes, tidal flats, estuary, and offshore barrier islands along the Gulf of Alaska.

Wildlife are presently the major renewable resource of the Copper River wetlands. Since 1962, a large portion of it (332,000 acres) has been designated as a special wildlife management area under a cooperative agreement among the Forest Service, the Alaska Department of Fish and Game, the Alaska Division of Lands, and the U.S. Fish and Wildlife Service (USDI). A special trumpeter swan management area (21,000 acres) has been established by the Forest Service in the Bering River wetlands.

Many species of waterfowl, shore birds, and other birds use the delta as a stopover or staging area during both spring and fall migrations, or for nesting during the summer. Alaska brown bear and moose (the latter an introduced species) are resident along with many smaller mammals. Four species of Pacific salmon either migrate up the rivers crossing the delta or spawn in their tributaries; other fish inhabit the waters of the rivers, ponds, and estuaries.

The Copper River Delta region has known deposits of coal and oil, and the lower slopes of the Chugach Mountains to the north are a potential source of wood or mineral products. Development of these resources could have profound effects on the habitat of many wildlife species. Oil spills from tankers or offshore oil wells in the Gulf of Alaska may represent future hazards to wildlife habitat in the delta area.

The delta area is so large, remote, and inaccessible that it is de facto wilderness, regardless of its administrative designation. For this reason, until recent years the level of Forest Service management was largely custodial with emphasis on research and study activities. New techniques designed to improve and maintain the habitat are now being applied on these lands.

In 1964 one of the most severe earthquakes ever recorded in North America occurred in the Gulf Coast region of Alaska. The epicenter of the 1964 earthquake was about 80 miles northwest of the mouth of the Copper River. The Copper

River Delta was in the region of uplift. The approximate range in heights of the uplift on the delta were 6 to 13 feet. Numerous wildlife studies are underway that include the observation and analysis of the effect of uplift on wildlife habitat.

The withdrawal and "Further Planning" designation of this unit is consistent with the protection and use of the wilderness values as well as fish and wildlife habitat values.

Timber

There are about 112,000 acres of commercial forest land within this unit. Much of this would not be operable because of slope, access, soil, and other factors. Typically, the timber production potential is low. During the preparation of the Chugach Land Management Plan the timber value and production potential will be assessed and analyzed against other resource values present. Perpetuation of the wildlife resource would be a prime consideration. Subsistence use of the timber resource has been and will remain a valid use of the forest in this area.

Minerals

Lode deposits containing copper, gold, and occasionally silver have been identified in the Orca Group. Gold occurs in folded, quartz veined and brecciated graywacke located near the McKinley Lake pluton. Copper deposits have been located in areas of sheared slate, limestone and greenstone north of Cordova and on Ibeck Creek.

Gold placers have been identified on beaches west of Katalla and on barrier islands south of the Copper River (Reimnitz, 1976).

The Copper-Bering River region is well known for its oil, gas, and coal resources. The first producing oil field in Alaska was located at Katalla. The Katalla field produced 154,000 barrels of oil during the 1902 to 1933 period from depths of 550-2350 feet (D.G.G.S., 1976). Much of the area was covered by Federal oil and gas leases until 1978. Three patents have been issued for land associated with oil and gas development.

The full oil and gas potential of the Katalla area has not been assessed. Donald Blasko of the U.S. Bureau of Mines has informed the Forest Service that additional work will be performed during their 5-year mineral evaluation of roadless areas on the Chugach National Forest. Efforts will include examining the oil shale characteristics of the Katalla Formation and evaluating natural gases to determine if they can produce natural gas liquids.

The Bering River coal field, located between Martin River Glacier and the Bering River, contains an estimated 3.6 billion tons of coal to a depth of 1,000 feet (Sanders, 1975). Much of the area has been prospected, claimed, or leased, and about 2,000 tons of coal have been produced. Watts, Griffis, and McQuat, a geological consulting agency based in Toronto, Canada, reported that 33 million tons of strippable coal occur in the Carbon Ridge area. The complex geology, high costs of access, and

restrictive environmental and regulatory policies, however, have prevented development of the resource.

Other deposits of oil, gas, and coal in southcentral Alaska and elsewhere appear to be more feasible to develop in the near future.

In summary, the potential metallic mineral production is considered medium high. The potential for gas, oil, and coal development is high. During the preparation of the Chugach Land Management Plan, these potential resource values will be assessed and analyzed against other resource values. Withdrawal of this area from mineral entry pending completion of the Chugach Land Management Plan or Congressional action would delay, but not otherwise adversely affect, the utilization of these resources.

3. Present Users

Recreation is an important use of the area. But the remoteness of many areas preclude visitation by large numbers of people as compared to the Kenai Peninsula. It was estimated that 29,700 recreation visitor days were spent last year in the withdrawn area. Motorboat and aircraft provide access to unroaded areas. Mineral prospecting on a limited basis is being carried out but data on the extent of this prospecting are not available. Existing valid claims would not be affected by the proposed uses. Within the proposed withdrawal the Forest Service maintains four recreation cabins for public use. A potential of six cabin sites have been identified within the proposed withdrawal area.

Hunting and fishing are important uses of much of the area. The Copper River Highway which bisects the western portion of this area provides access for big game hunting. Fifteen licensed guides and outfitters use the Copper River Delta area for hunting, fishing, and other recreation activities. The Copper River Delta is one of the primary wetland breeding grounds in the State for populations of ducks, geese, whistling, and trumpeter swans. Bird watching and hunting is rapidly increasing in popularity.

The commercial forest land in this withdrawal area is included in the Chugach National Forest timber harvest schedule. A withdrawal will preclude harvesting. Thus the total amount of timber available for commercial use will be reduced for the period of the withdrawal.

There are also a number of special use permit holders and private landowners who use the resources of this area. There has been logging and prospecting in the recent past and so those employed in those industries have used this area. Local citizens from Cordova also use the natural resources of this area for subsistence food gathering.

Future timber harvest and prospecting for minerals would not be permitted during a continued withdrawal; all other present uses would be allowed until such time as Congress gives specific management direction or until the Chugach Land Management Plan is completed.

4. Proposed Use Conflicts

Prior to classification as "Further Planning" during the RARE II process, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, wildlife, historic, scientific, and/or primitive attributes were proposed and some planned. The State of Alaska made selections near Cordova. These were approved by the Forest Service. Since applications for these selections were received prior to the 204(b) withdrawal, we assume these are valid existing rights. Other community development centers may be proposed in the future. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal. All potential uses will be given full consideration during the preparation of the Chugach Land Management Plan. The impacts of the delay on proposed activities is considered acceptable in view of the values present within this unit.

There are a number of special use permits in the area. These would not be in conflict with the withdrawal and would not be terminated. However, if upon classification as wilderness, Congress makes no special provisions for such uses, the permits could be terminated or put on tenure at that time.

5. Specific Use Requirements

This unit was designated for "Further Planning" during the RARE II process. It has known wilderness and wildlife values as well as possibly significant mineral potential. All resource values will be analyzed during the preparation of the Chugach Land Management Plan, and foreseeable conflicts resolved. The 204(c) withdrawal is consistent with this purpose.

6. Suitable Alternatives

As noted above, final land allocation of the land and its uses has not been made. It has not been determined what uses will be displaced. The availability of suitable alternative sites will be fully analyzed during the preparation of the Chugach Land Management Plan. The availability of suitable alternative sites would in fact be of prime importance in determining the final land allocation.

7. Consultation

The RARE II process required extensive public involvement which was documented in the EIS. The current "Further Planning" classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Additional public input will be received during the Chugach land use management planning process as well as the Regional planning effort. Hearings are planned to meet specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Copper River unit was classified as "Further Planning" during the RARE II process, and this decision was made after intensive involvement of State and local governments, the adverse impacts of a continued 5-year withdrawal would be minimal insofar as commodities go. The timber potential in this unit is relatively low and would not contribute to the current local and regional economy. If the wilderness and wildlife values subsequently indicate this area for wilderness classification, a positive effect on the local and regional economy is anticipated through increased tourist and recreational visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chugach National Forest
2221 E. Northern Lights Boulevard
Anchorage, Alaska 99504

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

This section of the Forest spans two geologic provinces. The areas west of the Copper River, north of the Martin River, and the Ragged Mountains consist of interbedded marine clastic and mafic volcanic rocks belonging to the Orca Group, locally cut by granitic plutons collectively characteristic of the Chugach Mountain Geosyncline province. Younger rocks exposed in the Katalla-Bering River region belong to the Gulf of Alaska Tertiary province deposited in the Yataga Geosyncline, and consist mostly of interbedded shallow water, hydrocarbon bearing, and marine and nonmarine clastic sediments.

The geological substrate of the western Copper River subarea is of Holocene-Recent origin (about 10,000 BP). Near the mountains, glacial outwash plains, and river floodplains the material is gravelly to rocky. The borders of the Copper River and the many islands in the estuary and river channel are sandy, as are the offshore barrier islands. The substrate of the tidal flats and the marshlands is predominantly fine grained (silty), horizontally bedded material. Substrates in the upper Copper River subarea are predominantly coarse grained, alluvial, or aeolian materials (Reimnitz and Marshall, 1971).

FLPMA
204(c) REPORT

TONKI CAPE

SIZE: 42,000 acres

LOCATION: Afognak Island, 35 miles north of Kodiak, Alaska

MANAGEMENT AREA: 019

RARE II DESIGNATION: Recommended wilderness

TONKI CAPEDescription

This unit of 42,000 acres is on the east side of Afognak Island about 35 air miles north of Kodiak, Alaska. Access is by boat or air.

About one-half of the land area on Afognak Island consists of rolling lowlands covered with mature stands of Sitka spruce. Understory vegetation consists of devils club, salmonberry, alder, ferns, and mosses. Along many of the stream courses and at elevations above 800 feet the vegetative cover is composed of a mixture of grasses, forbs, and brush.

The uplands, while steep, are not necessarily rugged. The lowlands are dotted by numerous ponds and lakes.

Coves and sheltered anchorages are limited. The climate is moderate, but cool by most standards. January temperatures average 30°F; July temperatures average 54°F.

A major portion of Afognak Island has been selected by Native corporations under terms of the Alaska Native Claims Settlement Act.

This unit has a "Wilderness Recommendation" classification as a result of the RARE II process.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with RARE II "Wilderness Recommendation" classification, the proposed use of this 42,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Tonki Cape unit has the same wide range of resources found throughout most of southcentral Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility, and wild character. These resources and their current use are described on below.

Recreation

Hunting and fishing is the primary recreation use of this unit.

Besides Alaska brown bear, which grow to record size here, Afognak has the only elk herds in Alaska. Roosevelt elk, which were introduced to the island from Washington's Olympic Peninsula in 1929, now number over 750 animals from the original transfer of eight. Habitat conditions are so favorable that these elk have grown to be some of the largest in the world, weighing more than a thousand pounds, field dressed. Other game found on the island are deer, rabbits, fox, grouse, ptarmigan, and waterfowl.

Trout and salmon fishing opportunities rate as excellent in several lakes and streams.

The inaccessibility and remoteness of the area limits use for other recreation purposes.

Recreational activities will not be adversely impacted by the withdrawal or proposed use.

Wildlife and Fish

Wildlife and fish values are relatively high on this unit. Big game species include bear, elk, deer, a wide variety of furbearers, and small game. Fish species include pink, silver, chum, and king salmon, as well as Dolly Varden, steelhead, and rainbow trout.

Limited habitat improvement opportunities are present although no formal surveys have been conducted to identify any specific projects or locations.

The withdrawal and proposed use of this area is consistent with the protection and use of both the fish and wildlife and their habitat.

Timber

Although there are about 9,500 acres of commercial forest land in this management unit, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination and other factors, the area was identified during the RARE II process to be recommended as and managed for wilderness. Timber value for all recommended wilderness areas was considered and the cumulative affect on historic harvest levels was considered acceptable. The value of timber in this unit is not considered critical to the economy of the region.

Minerals

Afognak Island is largely unexplored but does contain two known occurrences of gold-quartz veins. Limited quantities of gold was produced prior to World War II, but no known mining activity has taken place since then. The area is believed to be geologically favorable for the occurrence of tungsten, copper, and chromite. The history of mining and prospecting in this area, however, is of such low quantity that it is reasonable to conclude that the low opportunity to prospect and mine in the future will have virtually no impact on the economy of the region.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or adversely impact individuals, local communities, or the Nation.

3. Present Users

As described in point 2, the primary users of this unit are hunters and fishermen, and before the 204(b) withdrawal, a few prospectors. Except for the prospectors, there will be no affect on other users. In fact, this withdrawal will enhance the experience of other users by preserving the area as nearly total wilderness.

4. Proposed Use Conflicts

Prior to the classification as a "Wilderness Recommendation" in the RARE II process, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive values, were proposed or planned. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and wilderness recommendations. The impacts of loss of these proposed activities was considered acceptable during the RARE II evaluation.

5. Specific Use Requirements

This area is a wilderness recommendation area. After classification, an appropriate wilderness plan will be prepared. Fish habitat improvement project opportunities are present and if proposed would be compatible with wilderness management. This use is compatible with the requirements of wilderness management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although like other areas in many respects, it has its own character and no similar area can be found among the islands in the Gulf of Alaska.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community development.

7. Consultation

The RARE II process required extensive public involvement which was documented in the EIS. The current "Wilderness Recommendation" classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Additional public input will be received during the Chugach land use management planning process as well as the Regional planning effort. Hearings are planned to meet specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Tonki Cape unit was classified as "Wilderness Recommendation" during the RARE II process, and this decision was made after intensive involvement of State and local governments, the adverse impacts of a continued 5-year withdrawal would be minimal insofar as commodities go. The timber potential in this unit is relatively low and does not contribute to the current local and regional economy. If classified wilderness, a positive effect on the local and regional economy is anticipated through increased tourist and recreational visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chugach National Forest
2221 E. Northern Lights Boulevard
Anchorage, Alaska 99504

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Afognak Island consists of two distinctive belts of northeasterly striking rocks separated by the Border Ranges Fault. The section northwest of the fault is composed of Upper Paleozoic and Mesozoic metasediments locally intruded by Jurassic granitic plutons. The remainder of the island is underlain by Upper Cretaceous to lower tertiary metasediments of the Valdez Group.

FLPMA
204(c) REPORT

DEVIL PAW

SIZE: 55,000 acres

LOCATION: 40 airmiles north of Kodiak, Alaska

MANAGEMENT AREA: 020

RARE II DESIGNATION: Recommended Wilderness

DEVIL PAWDescription

This unit of 55,000 acres is on the north side of Afognak Island about 40 air miles north of Kodiak, Alaska. Access is by boat or air.

About one-half of the land area on Afognak Island consists of rolling lowlands covered with mature stands of Sitka spruce. Understory vegetation consists of devils club, salmonberry, alder, ferns, and mosses. Along many of the stream courses and at elevations above 800 feet the vegetative cover is composed of a mixture of grasses, forbs, and brush.

The uplands, while steep, are not necessarily rugged. The lowlands are dotted by numerous ponds and lakes.

Coves and sheltered anchorages are limited. The climate is moderate, but cool by most standards. January temperatures average 30°F; July temperatures average 54°F.

A major portion of Afognak Island has been selected by Native corporations under terms of the Alaska Native Claims Settlement Act.

This unit has a "Wilderness Recommendation" classification as a result of the RARE II process.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with RARE II "Wilderness Recommendation" classification, the proposed use of this 55,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Devil Paw unit has the same wide range of resources found throughout most of southcentral Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility, and wild character. These resources and their current use are described on the next page.

Recreation

Hunting and fishing is the primary recreation use of this unit.

Besides Alaska brown bear, which grow to record size here, Afognak has the only elk herds in Alaska. Roosevelt elk, which were introduced to the island from Washington's Olympic Peninsula in 1929, now number over 750 animals from the original transfer of eight. Habitat conditions are so favorable that these elk have grown to be some of the largest in the world, weighing more than a thousand pounds, field dressed. Other game found on the island are deer, rabbits, fox, grouse, ptarmigan, and waterfowl.

Trout and salmon fishing opportunities rate as outstanding in several lakes and streams.

The inaccessibility and remoteness of the area limits use for other recreation purposes.

Recreational activities will not be adversely impacted by the withdrawal or proposed use.

Wildlife and Fish

Wildlife and fish values are relatively high on this unit. Big game species include bear, elk, deer, a wide variety of furbearers, and small game. Fish species include pink, silver, chum, and king salmon, as well as Dolly Varden, steelhead, and rainbow trout.

Limited habitat improvement opportunities are present although no formal surveys have been conducted to identify any specific projects or locations.

The withdrawal and proposed use of this area is consistent with the protection and use of both the fish and wildlife and their habitat.

Timber

Although there are about 30,900 acres of commercial forest land in this 55,000 acre management unit, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination and other factors, the area was identified during the RARE II process to be recommended as and managed for wilderness. Timber value for all recommended wilderness areas was considered and the cumulative affect on historic harvest levels was considered acceptable. The value of timber in this unit is not considered critical to the economy of the region.

Minerals

Afognak Island is largely unexplored but does contain two known occurrences of gold-quartz veins. Limited quantities of gold was produced prior to World War II, but no known mining activity has taken place since then. The area is believed to be geologically favorable for the occurrence of tungsten, copper, and chromite. The history of mining and prospecting in this area, however, is of such low quantity that it is reasonable to conclude that the low opportunity to prospect and mine in the future will have virtually no impact on the economy of the region.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or adversely impact individuals, local communities, or the Nation.

3. Present Users

As described in point 2, the primary users of this unit are hunters and fishermen, and before the 204(b) withdrawal, a few prospectors. Except for the prospectors, there will be no affect on other users. In fact, this withdrawal will enhance the experience of other users by preserving the area as nearly total wilderness.

4. Proposed Use Conflicts

Prior to the classification as a "Wilderness Recommendation" in the RARE II process, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive values, were proposed or planned. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and wilderness recommendations. The impacts of loss of these proposed activities was considered acceptable during the RARE II evaluation.

5. Specific Use Requirements

This area is a wilderness recommendation area. After classification, an appropriate wilderness plan will be prepared. Fish habitat improvement project opportunities are present and if proposed would be compatible with wilderness management. This use is compatible with the requirements of wilderness management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although like other areas in many respects, it has its own character and no similar area can be found among the islands in the Gulf of Alaska.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community development.

7. Consultation

The RARE II process required extensive public involvement which was documented in the EIS. The current "Wilderness Recommendation" classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Additional public input will be received during the Chugach land use management planning process as well as the Regional planning effort. Hearings are planned to meet specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Devil Paw unit was classified as "Wilderness Recommendation" during the RARE II process, and this decision was made after intensive involvement of State and local governments, the adverse impacts of a continued 5-year withdrawal would be minimal insofar as commodities go. The timber potential in this unit is relatively low and does not contribute to the current local and regional economy. If classified wilderness, a positive effect on the local and regional economy is anticipated through increased tourist and recreational visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chugach National Forest
2221 E. Northern Lights Boulevard
Anchorage, Alaska 99504

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Afognak Island consists of two distinctive belts of northeasterly striking rocks separated by the Border Ranges Fault. The section northwest of the fault is composed of Upper Paleozoic and Mesozoic metasediments locally intruded by Jurassic granitic plutons. The remainder of the island is underlain by Upper Cretaceous to lower tertiary metasediments of the Valdez Group.

FLPMA
204(c) REPORT

SOUTH BARANOF

SIZE: 314,000 acres

LOCATION: South Baranof Island

MANAGEMENT AREA: TLMP, C-49

LAND USE DESIGNATION, TLMP: LUD I

SOUTH BARANOFDescription

Baranof Island, on which the subject area is situated, is located in the northern portion of the Alexander Archipelago, a long string of islands that make up the island portion of southeastern Alaska. Baranof Island is joined with Admiralty and Chichagof Islands as the Admiralty, Baranof, Chichagof, physiographic region. This unit is approximately 314,000 acres in size.

South Baranof is an area of high mountains rising at sea level to approximately 4,000 feet elevation within 2 or 3 miles from the beach. The highest point in the area is Mt. Ada, elevation 4,528 feet. A large percentage of the higher elevations are covered with permanent snowfields and innumerable active glaciers. Valleys are typically glaciated U-shaped, and contain many cirques and hanging valley lakes, with waterfalls near the coast. These valleys contained glaciers extending to the coast during the most recent period of glaciation. Most of the valleys empty into the head of deep fiords which extend several miles inland from the outside coast. Generally, timberline is approximately 2,000 feet above sea level. Portions of the subject area receive some of the highest rainfall in southeastern Alaska. A weather station located at Little Port Walter on the east coast of Baranof Island immediately south of the subject area has recorded yearly precipitation of well over 200 inches a year, mostly in the form of rain. It is management unit C-49 on the TLMP map.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 314,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The South Baranof unit has the same wide range of resources found throughout most of southeast Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility, and wild

character, particularly on the Gulf of Alaska side. These resources and their current use are described below.

Recreation

This area receives moderate deer and goat hunting pressure by Sitka residents and also offshore commercial fishermen who hole up in the many sheltered bays and coves along the west and east coasts. The west coast of the area is cut by offshore islands and inland piercing fiords. Sheltered waterways provide small boat access from Sitka as far south as Necker Bay; from this point southward, boat travel requires negotiating exposed outside waters. There are five public recreation cabins located on alpine lakes accessible by float plane only.

High coastal mountains and deep fiords penetrating into the island land mass contrasting with the open Pacific Ocean provide the most unique quality of this area.

Wildlife and Fish

Brown bear, Sitka black-tailed deer, furbearers, land and shore birds, and bald eagles inhabit the area. Many species of waterfowl migrate along the coastline of the unit with a few species nesting in the estuarine and stream course wetland areas.

Some of Baranof's major steelhead producing lakes and streams are found in this unit. Coho, sockeye, pink and chum salmon, cutthroat and rainbow trout, and Dolly Varden char occur in some of the lakes and streams. Salmon escapement is estimated at as much as 150,000. The most notable shellfish and marine fish species are Dungeness and Tanner crab, shrimp, herring, and halibut.

Sport, commercial, and estuarine fishery values are rated high by considering number of species, abundance, habitat condition, sport and commercial fisheries, and several other special values which are associated with certain watersheds.

Most use of the fishery resource is commercial although the lakes in the unit support a good trout and char fishery and are popular with local Sitka residents.

Timber

Although there are 49,921 acres of commercial forest land, with some 13,833 acres operable in this unit by today's standards, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness.

Since only LUD I classified areas are withdrawn, and the cumulative effects of LUD I on historic harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

This unit is included in the Alaska Lumber and Pulp Company long-term timber sale contract. For the reason described above, however, no harvest activities are planned in this area.

Minerals

The history of mining and prospecting in this area is of such low quantity that one cannot but conclude that loss of opportunity to prospect and mine in the future will have no significant impact on the economy of southeast Alaska.

Those claimants who have held on to their claims over the years by doing only necessary assessment work, and not aggressively developing their discoveries, will now find that their claims may be determined invalid. Validity is determined by analysis of the production costs versus the value of the mineral. If the mine cannot be operated at a profit, the claim is not valid. This, then, is an adverse impact on a few individuals; but, the economic impact would generally be minor even at the community level. Prospectors with valid claims would be permitted to develop their deposits.

In summary, this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

As described under point 2 of the 12 points, the primary users of the South Baranof unit are commercial fishermen, sport fishermen, hunters, beachcombers, and before withdrawal under 204(b), a few prospectors. Except for prospectors, there will be no effect on the other users listed above. In fact, this withdrawal will enhance the experience of these users by preserving the status quo; that being a state of nearly total wilderness.

One exception does exist. The Tlingit-Haida Central Council, a Native group administering the funds paid to the Natives of southeast Alaska for the taking of the Tongass National Forest, have applied for and received a permit for installation of a fish hatchery in Sandy Bay on the west coast of this unit. The permit was issued in 1977 prior to the completion of TLMP or the 204(b) withdrawal. To date no work has been done on the ground except preliminary engineering. Although this project

may be considered inconsistent with the LUD I classification of the area, the permit should be considered a valid existing right. Upon formal classification of a wilderness for this area, an enclave should be provided to permit completion of this project under terms of their permit. With this provision, no adverse impact on this user group is anticipated.

4. Proposed Use Conflicts

As described in point 3 above, the only anticipated conflict lies with the hatchery permit in Sandy Bay. The 204(c) withdrawal action itself will have no impact on this project since it was authorized prior to the 204(b) withdrawal.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible to the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this unit is relatively low and, in any case, more strategic locations for power sources do exist in the Panhandle.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the South Baranof unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this area were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chatham Area, Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Southeastern Alaska is a subprovince of the Western Cordillera Tectonic belt. The principle features of this province are the Coast Range Batholith and the outlining subsidiary intrusives. The batholith is complex consisting of a variety of igneous rocks of various ages.

Marine sediments and volcanics deposited in Paleozoic and Mesozoic eugeosynclines on the western side of the orogenic belt formed thick

sequences totaling possibly 50,000 feet. The oldest dated rocks are Ordovician and Early Silurian (Bres, Loney, and Muffler, 1966).

The South Baranof area is largely early Cretaceous and late Jurassic slates, graywacke, conglomerate, and limestone intruded by a large granitic batholith of Cretaceous age (Southeast Alaska Profiles).

Chromite occurs on Baranof Island in several serpentinized ultra mafic masses in contact with metamorphosed sedimentary and volcanic rocks. The largest lode is at Red Bluff Bay, where chromite bearing rocks underlie a 1 1/2 square mile area north and east of the bay and crop out on several small islands. Of the eight deposits known to exist at Red Bluff Bay, five contain a total of 570+ tons of material averaging more than 40% chromite. The other three deposits aggregate 29,000 + tons of rock carrying 18% to 35% chromite.

There could be potential for the development and commercial utilization of geothermal energy resources within this area; however, no assessment has been made at the present time. There are over 40 active volcanoes and many thermal springs in Alaska, but, no specific projects have been suggested to date for generating electric power at geothermal sites in Alaska. No thermal springs are known to exist within this unit.

FLPMA
204(c) REPORT

SOUTH PRINCE OF WALES ISLAND

SIZE: 97,000 acres

LOCATION: Prince of Wales Island

MANAGEMENT AREA: TLMP, K-27

LAND USE DESIGNATION, TLMP: LUD I

FINAL SECTION 204 (b) WITHDRAWALS

ALASKA - CANAD
TOPOGRAPHIC SER

This unit is a LUD I of 97,000 acres as prescribed by TLMP. The LUD boundary and the 204(b)(1) application originally described included a substantial number of uranium claims, quite possibly covering an extension of the Bokan Mountain deposit, that was overlooked at the time of the recommended withdrawal. Due to the energy related nature of these claims, this report proposes a modification of the boundary to recognize the mineral values of this Area. If classified under the Wilderness Act as proposed by TLMP, the entire 97,000 acre South Prince of Wales unit will be withdrawn from entry under the mining laws. The 8,000 acres deleted from the 204(b)(1) segregation should remain open for exploration at least until the statutory withdrawal date of December 31, 1983. By that date, the extent and value of the deposits should be known and valid discoveries, if any, established.

The 8,000 acres left open for entry would continue to be managed as all LUD I's on the Tongass, that is, for its wilderness values. Since there are no communities within this area, nor is it suitable for community development or expansion, it is unlikely that the State would select any portion of this area. Further, it is even less likely that any such selection, if made, would meet the selection criteria of the Statehood Act.

SOUTH PRINCE OF WALESDescription

The unit is at the southern tip of Prince of Wales Island approximately 40 air miles southwest of Ketchikan, Alaska. It lies to the east of Cordova Bay in the area known as Dixon Entrance.

Diversity of landforms contribute to its unique character.

The southern Barrier Islands are in Cordova Bay on the west side and near the south end of the unit. The group is composed of about 75 small islands and innumerable smaller rocks. The islands range in size from a few acres to over 500 acres. They are open to the south, and ocean storms sweep in with unbroken force. The trees are stunted and wind formed.

The ocean influenced tidal community provides these islands with an outstanding recreation attraction. Abalone, giant barnacles, clams, large mussels, octopus, sea urchins, sea anemones, and starfish are some of the more common life forms found in the rich tidal zone. Sea otter have been transplanted to the area and are doing well. The Alaska Department of Fish and Game reports this unit as one of the better sea otter habitats in southeast Alaska. Other wildlife common to the unit are the sea birds and sea mammals.

Terrain on the main island is of quite different character. The southeastern part is low elevation undulating topography broken by numerous streams, lakes, bays, and wetlands. Klakas Inlet in contrast is a 12-mile long arm of Cordova Bay. It is 1/2 to 3/4 mile wide with the land mass rising sharply from sea level to one or two thousand feet.

Vegetation on the unit is highly variable due to the highly variable character of the unit.

The area is 97,000 acres in size.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 97,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a

decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The South Prince of Wales unit has the same wide range of resources found throughout most of southeast Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility, and wild character, particularly in the area near the open sea at Dixon Entrance. These resources and their current use are described below.

Recreation

Recreation use of the unit is very light. Access is by float plane and boat. Small boat access is typically limited to the summer months because open waters in Dixon Entrance can be hazardous. Commercial fishermen use the many bays and coves as shelter during rough weather and go ashore occasionally for a break from the fishing routine.

Wildlife and Fish

Wildlife values are rated relatively high in this unit. Black bear, Sitka black-tailed deer, furbearers, land and shore birds, and bald eagles inhabit the area. Many species of waterfowl migrate along the coastline of the unit with a few species nesting in the estuarine and stream course wetland areas.

Coho, sockeye, pink and chum salmon, cutthroat and rainbow trout, and Dolly Varden char occur in some of the lakes and streams. The most notable shellfish and marine fish species are Dungeness and Tanner crab, shrimp, herring, and halibut.

Sport, commercial, and estuarine fishery values are rated high by considering number of species, abundance, habitat condition, sport and commercial fisheries, and several other special values which are associated with certain watersheds.

Most use of the fishery resource is commercial although the lakes in the unit support a good trout and char fishery.

The area shows a high potential for fish enhancement. Presently, about 2,520 acres of lake rearing improvement has been identified.

Timber

Although there are 97,000 acres of commercial forest land with some 11,600 acres operable in this unit by today's standards, the values

associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Since only LUD I classification areas are withdrawn, and the cumulative effects of LUD I on historic harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

Minerals

Lode deposits consisting of quartz veins containing irregular bunches of magnetite, chalcopyrite, and pyrite were discovered near Tah and Hunter Bays. Some exploration work has been done but is insufficient to determine size and grade. Some claims have been located for uranium near the eastern boundary of this withdrawal. The Bokan mine on Bokan Mountain outside of the unit to the northeast has produced approximately 100,000 tons of U_3O_8 ore averaging about 0.8%.

Prospectors over the years have located several hundred mining claims in this unit. Those claimants who have held on to their claims over the years by doing only necessary assessment work, and not aggressively developing their discoveries, will now find that their claims may be determined invalid. Validity is determined by analysis of the production costs versus the value of the mineral. If the mine cannot be operated at a profit, the claim is not valid. This, then, is an adverse impact on a few individuals; but, the economic impact would generally be minor even at the community level. Prospectors with valid claims would be permitted to develop their deposits.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

As described under point 2 of the 12 points, the primary users of the South Prince of Wales unit are commercial fishermen, with lesser use by sport fishermen, hunters, beachcombers, and before withdrawal under 204(b), a few prospectors. Except for prospectors, there will be no effect on the other users listed above. In fact, this withdrawal will enhance the experience of these users by preserving the status quo; that being a state of nearly total wilderness.

4. Proposed Use Conflicts

Prior to classification as LUD I in TLMP, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive attributes were proposed and some planned. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and proposed wilderness classification. The impact of loss of these proposed activities was considered acceptable in development of TLMP when LUD I classification was agreed upon.

Should commercial quantities of uranium exist on any of the many claims in this area, this proposed use could severely conflict with mineral extraction.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible with the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the South Prince of Wales unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this and other LUD I areas were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Ketchikan Area, Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Southeastern Alaska is a subprovince of the Western Cordillera Tectonic Belt. The principle features of the province are the Coast Range Batholith and the outlying subsidiary intrusives. The batholite is complex consisting of a variety of igneous rocks of various ages.

Marine segments and volcanics deposited in Paleozoic and Mesozoic euogeosynclines on the western side of the orogenic belt formed thick sequences totaling possibly 50,000 feet. The oldest dated rocks are Ordovician and Early Silurian (Bres, Loney, and Muffler, 1966).

Deformation and plutonic activity during the Nevadan orogeny have regionally metamorphosed the rocks and created many large-scale faults with lateral movements to more than 50 miles. A conspicuous north-trending linear fault pattern can be seen in many fiords and straits. A number of fault zones contain mineral deposits (Twenhoffel and Sainsbury, 1958). A large vertical fault apparently has controlled the development of the South Arm of Kendrick Bay. Both primary and secondary joints are common. Primary joints, interpreted as being the result of rapid cooling, have localized many of the pegmatite dikes in granite.

Metamorphism on the west side of the Coast Range Batholith has created gneisses which grade westward into the schists, phyllites, and less metamorphosed rocks on the islands of southeastern Alaska. The strike of most of the bedded rocks and the general grain of the major structures is northeastward.

Southeastern Alaska's lode mining has yielded 6.2 million ounces of gold, 3.3 million ounces of silver, 37 million pounds of copper, 48.3 million pounds of lead, 111 thousand pounds of zinc, and 14 thousand pounds of platinum group metals, mainly palladium. Other ores and potential ores are antimony, barite, garnet, iron, molybdenum, titanium, nickel, and tungsten.

In the Bokan Mountain area, copper and gold deposits were staked during the early 1890's at several localities between McLean Arm and Mallard Bay. The Polson and Ichis copper and gold prospects are just south of McLean Arm, 9 miles southeast of the Ross-Adams mine. Ores there are localized in quartz-calcite-barite veins in a series of fault zones. Pyrite, chalcopyrite, hematite, chrysocolla, and traces of bornite and gold have been found. Gold was once produced from auriferous pyrite at the Nelson and Tift mine, a mile west of the mouth of McLean Arm. The ore formed a small lens in calcareous rock that has since been mined out.

Iron claims have been staked in the southern part of Prince of Wales Island where magnetite occurs with hornblende concentrations in diorite and pyroxenite.

FLPMA
204(c) REPORT

KARTA

SIZE: 49,000 acres

LOCATION: Prince of Wales Island

MANAGEMENT AREA: TLMP, K-16

LAND USE DESIGNATION, TLMP: LUD I

KARTADescription

This unit is located at the head of Kassan Bay, 35 air miles northwest of Ketchikan, Alaska. It is on the east side and near the center of Prince of Wales Island.

Salmon Lake, in the center of the unit, dominates the aspect and receives the waters from McGilvery and Andersen Creeks, and numerous smaller streams. The terrain is relatively steep except for the valley stringers adjacent to the two major streams. The area is circled by peaks and ridges rising to elevations of 2,000 to 3,800 feet.

The unit is about 49,000 acres in size.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 49,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Karta unit has much the same wide range of resources found throughout most of southeast Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility and wild character.

About 7,000 acres around Salmon Lake, Little Salmon Lake (Karta Lake), and the Karta River are subject to power withdrawals PSC 192 and PP 243. No power development is anticipated here, and the 1972 Alaska Power Administration report recommended revocation of PP 243 and that portion of PSC 192 affecting Karta River.

Near Karta Bay 1,540 acres has recently been conveyed to Native corporations under the provisions of the Alaska Native Claims Settlement Act.

The resources and their current use are described below:

Recreation

The Forest Service maintains for public use four cabins in this unit with a recorded 2800-visitor days use. The lower cabin at Karta River is open to use year-round and receives the heaviest use for any public recreation cabin in the Ketchikan area. The unit in general, however, has a May through October season. The Alaska Department of Fish and Game has designated Karta River as one of four streams in the Ketchikan area possessing outstanding fishing opportunities. Sports fishing is the major attraction in this unit, but hunting and trapping opportunities are present.

Wildlife and Fish

Wildlife species native to Prince of Wales Island occur in Karta. Big game species include blacktail deer, black bear, and wolf. There is an abundant supply of furbearers which includes beaver, otter, marten, mink, and weasel. The Vancouver variety of the Canada goose lives year-round in the area. Trumpeter swans are known to winter on major lakes and streams.

As listed by the U.S. Fish and Wildlife Service, there are no threatened or endangered species in Karta.

The Karta unit contains several productive fish streams. The Karta River is an excellent system, producing all species of Pacific salmon except kings, and all species of trout and char native to the area. It is nationally known for its steelhead fishing. Average annual salmon escapement from the Karta River was 75,600 between 1963 and 1975. Numbers ranged from 6,000 to 272,000. Lakes in the Karta unit are also important as sport fish producers. Salmon and Karta Lakes provide excellent fishing for cutthroat trout and Dolly Varden char. They are also utilized as sockeye salmon rearing areas. Karta River is an important subsistence fishery for sockeye salmon.

The unit has a high potential for salmonoid enhancement and one project has been proposed by the State of Alaska.

Timber

Of the 49,000 acres within this unit, 18,454 acres are considered as operable commercial forest land by today's standards. The values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Since only LUD I classified areas are withdrawn, and the cumulative effects of LUD I on historic harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

This unit is included in the Ketchikan Pulp Company's long-term timber sale contract. For the reasons described above, however, no harvest activities are planned in this area.

Minerals

There are about 35 mining claims in the area. In general they occur within or along borders of the igneous intrusions. Most are located south of the Karta River- Anderson Creek area. Precious metals appear to be the object of most claims. Deposits of iron and copper minerals are widespread in the area, although much of it appears not of economic importance. All known mineral deposits of any consequence have claims filed on them. In T. 72 S., R. 83 E., there are about 72 claims, and in T. 73 S., R. 84 E., there are seven claims. Most claims are probably for gold.

The most notable mine in the area is the Flagstaff Mine on the northeast slope of Granite Mountain about 4 miles southwest of Karta Bay. The mine is on a gold-quartz vein, discovered in 1900. The Flagstaff Mining Company constructed a 2-mile truck road from Karta Lake up Flagstaff Creek to an elevation of 510 feet where the mining camp was located, and a 20-ton capacity mill erected. The main tunnel was at the 1400-foot elevation, and a considerable tonnage of ore was mined and sent to the mill over the 1800-foot aerial tramway. The mine ceased operation in 1941.

There is no mineral production in this unit at the present time.

Those claimants who have held on to their claims over the years by doing only necessary assessment work, and not aggressively developing their discoveries, will now find that their claims may be determined invalid. Validity is determined by analysis of the production costs versus the value of the mineral. If the mine cannot be operated at a profit, the claim is not valid. This, then, is an adverse impact on a few individuals, but the economic impact would generally be minor even at the community level. Prospectors with valid claims would be permitted to develop their deposits.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

Present users of the unit are typically sports fishermen who fish the lakes and streams, general recreationists visiting the area for its

scenic and historic mining value, and hunters. There are also mineral claimants doing assessment work, and prospectors prior to segregation.

Except for prospectors, there will be no affect on the other users listed above. In fact, this withdrawal will enhance the experience of most users by preserving the status quo; that being a state of nearly total wilderness.

4. Proposed Use Conflicts

Prior to classification as LUD I in TLMP, timber harvest, mineral location, hydro development, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive attributes were proposed and some planned. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and proposed wilderness classification. The impact of loss of these proposed activities was considered acceptable in development of TLMP when LUD I classification was agreed upon.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible to the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this unit is relatively low and, in any case, more strategic locations for power sources do exist in the Panhandle.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the

involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Karta unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this area were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9 Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Ketchikan Area, Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

The bedrock of the Karta is a complex mixture of volcanic, metamorphic, and sedimentary formations. Some of these are conglomerates, beccia, graywacke andesite, and slate (Condon, 1961, and Sainsbury, 1961). These have been intruded in places by bodies of diorite and other dioritic rocks. The differing rock types, faulting, and glaciation have influenced some internal and surface drainage features. Glacial landforms now dominate the area, although the more resistant igneous intrusions remain more prominent than the softer sedimentary and metamorphic formations.

Karta contains some of the better prospects for mineral extraction on the Tongass National Forest. These conditions were generated by igneous intrusions mainly in the eastern and southern portions of the unit. Faulting and brecciation that accompanied the intrusive action resulted in faults and shear zones which became channels for ore bearing solutions. These now contain mineral deposits.

Geologic contact zones in Karta have been prospected for a number of years. The first recorded geologic investigations were done in 1901, 1904, and 1905. Mining started about 1906 on the nearby Kasaan Peninsula, and some mines have operated within the Karta River drainage. Most notable is the old Flagstaff Mine near Flagstaff Creek (mentioned earlier). There are other gold-quartz veins on Granite Mountain.

According to available information, there are about 35 mining claims in the unit. They are for both precious and metallic materials and are primarily found in the southern half of the unit. Potential for nonmetallics and fossil fuels is low. According to the Tongass Land Management Plan, the Karta area rates high in mineral value.

There could be potential for the development and commercial utilization of geothermal energy resources within this area, however, no assessment has been made at the present time. There are over 40 active volcanoes and many thermal springs in Alaska, however, no specific projects have been suggested to date for generating electric power at geothermal sites in Alaska. No thermal springs are known to exist within this unit.

FLPMA
204(c) REPORT

CORONATION, WARREN, AND MAURELLE ISLANDS

SIZE: 34,000 acres

LOCATION: Northwest of Prince of Wales Island

MANAGEMENT AREA: TLMP, K-12

LAND USE DESIGNATION, TLMP: LUD I

Coronation, Warren, and Maurelle IslandsDescription

This is a group of islands exposed to the winds, surf, and drift of the North Pacific Ocean. The islands and their size are listed below.

Coronation Island	19,122 acres
Warren Island	11,353 acres
Maurelle Islands	4,424 acres

These islands are located about 100 miles northwest of Ketchikan, Alaska.

These are ocean-oriented islands with many beautiful ocean capes, cliffs, and large, sandy, drift covered beaches. Wind formed trees in exposed areas are reminders of the strength of ocean storms. There are many protected coves and passages on the leeward side of the islands, but the outer shorelines offer little refuge. The ocean capes, cliffs, and drift covered beaches present a distinctive wind and water-swept character that is not duplicated on the inside.

Coronation and Warren Islands are prominent features as they rise to nearly 2,000 feet elevation; Maurelle Islands are a group of nearly 30 islands rising less than 400 feet above sea level. In and about this group of islands are numerous rocky shoals adding interest to the view and hazards to boat travelers.

Native burial caves are located in the cliff areas of these islands.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 34,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The islands in this unit have the same wide range of resources found throughout most of southeast Alaska. The recreation and wilderness

attributes of the area are enhanced by its inaccessibility, and wild character, particularly on the Gulf of Alaska side. These resources and their current use are described below.

Recreation

Due to its remoteness, this unit receives very little recreation use. Weather conditions from winter storms in the Gulf of Alaska with associated low visibility and wind conditions limits access to the period of late May to early October.

The more accessible beaches are popular beachcombing areas. Commercial fishing on adjacent outside waters is heavy and the islands are occasionally used by commercial fishermen as a diversion from the routine of work, and as a source of freshwater.

Old trapper and mining cabins occasionally used by recreationists may be found along the islands' coasts. The Alaska Department of Fish and Game has a cabin in Egg Harbor on Coronation Island used for administrative purposes.

Wildlife and Fish

Big game animals are deer, black bear, and wolf. Sea mammals inhabit the waters offshore with seals and sea lions making use of the rocks and shorelines. The cliffs and rocks are important sea bird nesting and resting areas. There are numerous fish producing streams that are significant when considered in total.

Wildlife values of these islands is rated as moderate when compared to other areas of southeast Alaska. Sports and commercial fishing values are rated as moderate to low.

No wildlife or fish enhancement opportunities have been identified.

Utilization of the wildlife and sport fishing resource is low. Commercial fishing values are typical of the adjacent waters in the Gulf of Alaska.

Timber

Although there are 34,000 acres of commercial forest land with some 3,880 acres operable in this unit by today's standards, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Since only LUD I classification areas are withdrawn, and the cumulative effects of LUD I on historic harvest levels was considered

acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

Minerals

Mineral values of the unit are considered moderate.

Lodes containing copper, zinc, and lead were discovered in 1900 where the ore occurred in fault zones in limestone or marble. One hundred (100) tons of ore was shipped to a smelter and apparently this mined out the deposit. Some exploration work occurred in 1976 without success. There are no known active mining claims in this area.

Those claimants who have held on to their claims over the years by doing only necessary assessment work, and not aggressively developing their discoveries, will now find that their claims may be determined invalid. Validity is determined by analysis of the production costs versus the value of the mineral. If the mine cannot be operated at a profit, the claim is not valid. This, then, is an adverse impact on a few individuals; but, the economic impact would generally be minor even at the community level. Prospectors with valid claims would be permitted to develop their deposits.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

Present users of this area consist of a few sport hunters and fishermen who fish outside waters and periodically take refuge in the sheltered inlets and bays; recreationists who visit the area to hike, photograph, and enjoy the scenery, and miners doing mineral assessment work.

Under authorization of a special use permit, the Alaska Department of Fish and Game maintains a cabin for administrative purposes.

Future timber harvest and prospecting for minerals would not be permitted during a continued withdrawal; all other present uses would be allowed until such time as Congress gives specific management direction.

4. Proposed Use Conflicts

Prior to classification as LUD I in TLMP, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive attributes were proposed and some planned. These and similar uses

inconsistent with the purposes noted above are clearly in conflict with the withdrawal and proposed wilderness classification. The impact of loss of these proposed activities was considered acceptable in development of TLMP when LUD I classification was agreed upon.

There is one special use permit in the area. This would not be in conflict with the withdrawal and would not be terminated. However, if upon classification as wilderness, Congress makes no special provisions for such uses, the permit could be terminated or put on tenure at that time.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects may be possible but must be compatible with wilderness management direction. This use is compatible with the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Coronation, Warren, and Maurelle unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be

minimal insofar as commodities go. The determination was made at that time that the timber resources on this and other LUD I areas were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Ketchikan Area, Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Geology and mineralization of the area is not well known. The unit is within a formation generally considered to be highly favorable to metallic and related nonmetallic deposits. Little work has been done specifically on the unit to quantify mineralization. It has known deposits of copper, lead, and zinc that are apparently not economically minable. Outside the unit within 50 miles are known deposits of molybdenum, gold, silver, and cobalt. Two known geothermal sites are within 40 miles of the Maurelle Islands.

FLPMA
204(c) REPORT

ETOLIN ISLAND

SIZE: 82,000 acres

LOCATION: Northeast of Prince of Wales Island

MANAGEMENT AREA: TLMP

LAND USE DESIGNATION, TLMP: LUD I

ETOLIN ISLANDDescription

The area is located on the southern end of Etolin Island on the Tongass National Forest about 50 miles north and slightly west of Ketchikan, Alaska. The major land mass of the withdrawal is Etolin Island and several smaller islands. The area has numerous bays and passes which subdivide the area. This unit is approximately 82,000 acres in size. Etolin Island is an interior island adjacent to Clarence Strait, a major waterway in southeast Alaska. To the west is Prince of Wales Island and then the sea. To the east is Wrangell Island and the Cleveland Peninsula (mainland).

Vegetation cover is typical of southeast Alaska with the hemlock-spruce forests at sea level blending into alpine at the 1,500 foot level. The area has numerous higher elevation lakes and a sizable alpine area on the northern end of the withdrawal area. Topography beginning at sea level is relatively flat rising gradually to about 400 feet where it then rises sharply to numerous ridges and peaks of 2,500 to 3,000 feet elevation.

204(c)(2) 12 Points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 82,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Etolin Island unit has the same wide range of resources found throughout most of southeast Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility, and wild character. The contrast between the unit's relatively flat lower elevation with abrupt rising slopes in the background provides additional character to the unit. The resources and their current use are described below.

Recreation

Recreation use of the area is very low. The unit is situated midway between Wrangell and Ketchikan, Alaska, with access by boat or aircraft. Weather conditions typically limit use to the summer months. Commercial fishermen occasionally put ashore to break the routine of fishing. Deer hunting is currently closed due to low deer numbers. Hunting for other species is sporadic due to the convenience of hunting areas closer to population centers.

Wildlife and Fish

Wildlife values are considered moderate when compared with other areas in southeast Alaska. Black bear, Sitka black-tailed deer, furbearers, land and shore birds, and bald eagles inhabit the area. Many species of waterfowl migrate along the coastline of the unit with a few species nesting in the estuarine and stream course wetland areas.

Coho, sockeye, pink and chum salmon, cutthroat and rainbow trout, and Dolly Varden char occur in some of the lakes and streams. The most notable shellfish and marine fish species are Dungeness and Tanner crab, shrimp, herring, and halibut.

There are existing fish passage structures in the area and more are proposed. Opportunities exist for improving the lake habitat by such activities as lake fertilization and modification of lake outlets.

Sport, commercial, and estuarine fishery values are rated moderately high by considering number of species, abundance, habitat condition, sport and commercial fisheries, and several other special values which are associated with certain watersheds.

Most use of the fishery resource in adjacent waters is commercial although the lakes in the unit support a good trout and char fishery. The sports fishery resource is used very little because of the remoteness of the unit.

Timber

Although there are 24,000 acres of operable commercial forest land in this unit, by today's standards, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Since only LUD I classification areas are withdrawn, and the cumulative effects of LUD I on historic harvest levels were considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

Minerals

One known mineral claim is within the area. The geology report, point 12, describes in detail the mineralization of this unit. However, the history of mining and prospecting in this area is of such low quantity that one cannot but conclude that loss of opportunity to prospect and mine in the future will have virtually no impact on the economy of southeast Alaska.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, adversely impact individuals, local communities, or the Nation.

3. Present Users

The primary users of the Etolin Island unit are commercial fishermen. Lesser use of the area is by sport fishermen, hunters, beachcombers, and before withdrawal under 204(b), a few prospectors. Except for prospectors, there will be no effect on the other users listed above. In fact, this withdrawal will enhance the experience of these users by preserving the status quo; that being a state of nearly total wilderness.

4. Proposed Use Conflicts

Prior to classification as LUD I in TLMP, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive attributes were proposed and some planned. The State of Alaska made a selection at McHenry Anchorage. This was disapproved by the Forest Service; other community development centers may be proposed in the future. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and proposed wilderness classification. The impact of loss of these proposed activities was considered acceptable in development of TLMP when LUD I classification was agreed upon.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible with the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this unit is relatively low and, in any case, more strategic locations for power sources do exist in the Panhandle.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Etolin Island unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this and other LUD I areas were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Stikine Area, Tongass National Forest
P.O. Box 309
Petersburg, Alaska 99833

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

This unit has one known mining claim. The geologic formation is rated as highly favorable for metallic and related nonmetallic minerals. No records are available specifically for this area to indicate sufficient quantities and qualities of minerals to prove economic value.

Although the unit does not have deposits known to be of economic value, it is within the Petersburg mining district which has produced 25,000 ounces of gold and some silver. Known, but not economically proven, deposits of copper, lead, chromite, platinum, and molybdenite are also within the Petersburg mining district.

There could be potential for the development and commercial utilization of geothermal energy resources within this area, however, no assessment has been made at the present time. There are over 40 active volcanoes and many thermal springs in Alaska, however, no specific projects have been suggested to date for generating electric power at geothermal sites in Alaska. No thermal springs are known to exist within this unit.

FLPMA
204(c) REPORT

TEBENKOF BAY

SIZE: 65,000 acres

LOCATION:

MANAGEMENT AREA: TLMP

LAND USE DESIGNATION, TLMP: LUD I

TEBENKOF BAYDescription

The Tebenkof area is located almost in the center of the Tongass National Forest on the west side of Kuiu Island approximately 50 miles west of Petersburg, Alaska. The boundary is along the central divide of Kuiu Island and includes all of the watersheds which drain westward into Elena, Petrof, and Theitis Bays which are subdivisions of the larger entity called Tebenkof Bay. Chatham Strait is located westward of Tebenkof Bay. The land area of this unit is approximately 65,000 acres.

The bays are dotted with both large and small islands with peninsulas and points extending out of the major land mass of Kuiu Island.

Vegetative cover is typical of southeast Alaska with the hemlock-spruce forests at sea level blending into alpine at the 1,500 foot elevation level. The area has muskegs, small lakes, and an abundance of small and large creeks draining the area.

204(c)(2) 12 Points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 65,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Tebenkof Bay unit has the same wide range of resources found throughout most of southeast Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility, and wild character. These resources and their current use are described below.

Recreation

The remoteness of the area limits recreation use. Weather conditions restrict use predominantly to the summer months. The area receives light hunting use primarily for black bear and waterfowl. Deer numbers are down so the area is currently closed to deer hunting.

The area provides numerous safe anchorages for small boats traversing Chatham Strait as well as for recreationists using the unit.

Wildlife and Fish

Black bear, Sitka black-tailed deer, furbearers, land and shore birds, and bald eagles inhabit the area. Many species of waterfowl migrate along the coastline of the unit with a few species nesting in the estuarine and stream course wetland areas. Black bear and waterfowl are the predominant species utilized.

Coho, sockeye, pink and chum salmon, cutthroat and rainbow trout, and Dolly Varden char occur in some of the lakes and streams. The most notable shellfish and marine fish species are Dungeness and Tanner crab, shrimp, herring, and halibut. Some opportunities exist for the improvement of salmon habitat.

Sport, commercial, and estuarine fishery values are rated moderately high by considering number of species, abundance, habitat condition, sport and commercial fisheries, and several other special values which are associated with certain watersheds.

Most use of the fishery resource is commercial although the lakes in the unit support a good sport fishery. The remoteness to centers of population limits sports fishing activity, however.

Timber

Although there are 64,528 acres of commercial forest land with some 21,958 acres operable in this unit by today's standards, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness.

Since only LUD I classification areas are withdrawn, and the cumulative effect of LUD I's on historic harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

Minerals

No mining claims are known to exist in this unit although some prospecting may have occurred. The geology report, point 12, describes in more detail the mineralization of this unit. However, the history of mining and prospecting in this area is of such low quantity that one cannot but conclude that loss of opportunity to prospect and mine in the future will have virtually no impact on the economy of southeast Alaska.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, adversely impact individuals, local communities, or the Nation.

3. Present Users

As described under point 2 of the 12 points, the primary users of the Tebenkof unit are commercial fishermen, with lesser use by sport fishermen and hunters, and before withdrawal under 204(b), a few prospectors. Except for prospectors, there will be no effect on the other users listed above. In fact, this withdrawal will enhance the experience of these users by preserving the status quo; that being a state of nearly total wilderness.

Additional users within this unit are the owner of a private cabin and users of a freshwater transmission supply line in Gedney Harbor. Both of these users are authorized by Forest Service special use permits. The waterline was built and typically used by commercial fishing boats for replenishment of freshwater supplies. These users will not be affected by the proposed use.

4. Proposed Use Conflicts

Existing and potential resource uses are not incompatible or in conflict with the proposed use.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible to the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this unit is relatively low and, in any case, more strategic locations for power sources do exist in southeast Alaska.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Tebenkof unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this area were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Stikine Area, Tongass National Forest
P.O. Box 309
Petersburg, Alaska 99833

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

No known mining claims are within this unit. Rock types generally found in this area do not contain precious metals, nonmetallics, base metals, or fossil fuels. However, there are indications that a part of the unit near Elena Bay may contain mineral deposits of insufficient quantity and quality to be economically valuable.

There could be potential for the development and commercial utilization of geothermal energy resources within this area, however, no assessment has been made at the present time. There are over 40 active volcanoes and many thermal springs in Alaska, however, no specific projects have been suggested to date for generating electric power at geothermal sites in Alaska.

FLPMA
204(c) REPORT
PETERSBURG CREEK

SIZE: 27,300 acres

LOCATION: West of Petersburg

MANAGEMENT AREA: TLMP, S-15

LAND USE DESIGNATION, TLMP: LUD I

PETERSBURG CREEKDescription

This unit of 27,300 acres is northwest of and immediately adjacent to the city of Petersburg on the Lindenberg Peninsula of Kupreanof Island in southeast Alaska. This is an "interior" island being about 75 miles towards the mainland, and sheltered by other large islands from the open sea of the Gulf of Alaska.

This unit includes the entire Petersburg Creek drainage. The landscape is a typical U-shaped valley with the typical hemlock-spruce forests on the hillsides. Valley walls are steep in some areas and rock outcroppings are visible. Petersburg Creek is the major drainage with its headwaters being Petersburg Lake. The lake and creek with its fishery resource are the main recreational attractions of the area. A trail along the creek provides access into the area.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 27,300 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Petersburg Creek unit has the same wide range of resources found throughout most of southeast Alaska. These resources and their current use are described below.

Recreation

The area, due to its close proximity to Petersburg, receives heavy recreation use. The full range of use includes hunting, stream and lake fishing, berry-picking, hiking, and general scenic, and outdoor enjoyment.

One Forest Service administered public recreation cabin is located at Petersburg Lake. No other Forest Service recreation developments are present or planned.

There are three privately owned recreation cabins authorized under special use permits.

The recreation resource will not be adversely impacted by the withdrawal or proposed use.

Wildlife and Fish

This unit supports moderate numbers of black bear, deer, furbearers, and other species of wildlife typical of southeast Alaska.

Fishing is one of the most important resources of Petersburg Lake and Creek; these waters support abundant numbers of the five major salmon species, and Dolly Varden and cutthroat trout. Heavy use of this resource gives it added value.

The withdrawal and proposed wilderness use of this area is consistent with the protection and use of both fish and wildlife and their habitat.

Timber

Although there are 27,300 acres of forest land within this unit, only 6,635 acres are considered to be operable commercial forest land. The values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Accordingly, this volume of timber is not considered critical to the economy of southeast Alaska.

Minerals

No mineral claims are known to exist in this unit. The geology report, point 12, describes in more detail the mineralization of this area. However, the history of mining and prospecting in this area is of such low quantity that one cannot but conclude that loss of opportunity to prospect and mine in the future will have virtually no impact on the economy of southeast Alaska.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, adversely impact individuals, local communities, or the Nation.

3. Present Users

Present users of this area are typically local sports fishermen, hunters, subsistence food gathers and general recreationists. Before the withdrawal under 204(b) a few prospectors undoubtedly worked the area.

Except for prospectors, there will be no effect on the other users listed above. In fact, this withdrawal will enhance the experience of these users by preserving the status quo; that being a state of nearly total wilderness.

4. Proposed Use Conflicts

Prior to classification as LUD I in TLMP, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive attributes were proposed and some planned. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and proposed wilderness classification. The impact of loss of these proposed activities was considered acceptable in development of TLMP when LUD I classification was agreed upon.

No conflict with State selections is anticipated. The State has selected and the Forest Service approved what appears to be adequate acreage for the Petersburg area. The State of Alaska has not indicated that they are interested in further selections nor do we expect any.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible with the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this unit is relatively low and, in any case, more strategic locations for power sources do exist in the Panhandle.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for

that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Petersburg Creek unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this and other LUD I areas were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Stikine Area, Tongass National Forest
P.O. Box 309
Petersburg, Alaska 99833

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Although there are no known claims in this area, it lies within a geologic formation that is highly favorable for metallic and related nonmetallic deposits. Within 25 miles of the unit there are known deposits of copper, lead, zinc, gold, silver, platinum, borite, fluorite, and marble.

FLPMA
204(c) REPORT

BOUNDARY SPIRES

SIZE: 296,000 acres

LOCATION: Mainland, 40 miles north of Petersburg, Alaska

MANAGEMENT AREA: TLMP, SO-3

LAND USE DESIGNATION, TLMP: LUD I

BOUNDARY SPIRESDescription

The Boundary Spires unit (TLMP #SO-3) is located on the southeast mainland of Alaska approximately 90 miles southeast of Juneau and 40 miles north of Petersburg. It is bounded on the north by the Tracy Arm-Fords Terror unit and on the south by the Stikine-LeConte unit. The unit consists of rugged topography with elevations ranging from sea level at Thomas Bay to 9,000 feet at Devils Thumb on the southeast border of the unit.

Alpine type vegetation, massive snow fields, and glaciers comprise an estimated 85 percent of the unit.

Access into the unit is by float plane to the major lakes, helicopter, and water access to Thomas Bay.

The unit is approximately 296,000 acres and includes 126,000 acres of public domain land also withdrawn under 204(b). This is a part of the Kates Needle proposed addition to the Tongass National Forest.

204(c) 12 Points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal and with its LUD I designation, the proposed use of this 296,000 acre unit is wilderness management in which the scenic, historic, scientific, and/or primitive attributes are protected. Although people have utilized this area in a variety of ways, the evidence of such activity is minimal and the status quo should be maintained until Congress has made a decision on its classification and management. This withdrawal precludes only further State selection and mining claims location.

2. Natural Resource Use and Value

The Boundary Spires unit has massive snow fields and glaciers making land access extremely difficult. This lack of access has contributed greatly in keeping the unit wild in character and well known to very few people. Its recreation and wilderness attributes make it a favorable challenge to penetrate by foot travel. Resources associated with this unit are described on the next page.

Thomas Bay has been identified as an area having potential fish enhancement possibilities. Spawning channels and upwelling ground water sites have been identified. The extent of this improvement project has not been totally explored.

A 1,120 acre power withdrawal was made in Scenery Creek on December 2, 1929. The 204(c) withdrawal would not affect the power withdrawal.

Recreation

Approximately 85 percent of the Boundary Spires unit is snow fields, rocks, and glaciers. Recreational activities consist of rock climbing, sightseeing, goat hunting, and fishing. Of the recreational activities described, goat hunting attracts the bulk of the use.

Scenery Creek, located near the southern boundary of the unit is one of the six most logical access routes into the Stikine-LeConte wilderness area.

These recreational activities will not be adversely impacted by the withdrawal or proposed use.

Wildlife and Fish

Boundary Spires supports a population of mountain goats, a limited population of bear along major streams, and furbearers which are found generally along the beach and major streams. Ptarmigan are found in the alpine vegetation areas and bald eagles have been observed in Thomas Bay. Sport hunting for mountain goat has been the major recreational use on the unit.

The withdrawal and proposed wilderness use of this unit is consistent with protection of the fish and wildlife resources.

Timber

The Boundary Spires unit has approximately 400 acres of commercial forest land. This is located only on the shoreline near Thomas Bay. Considering the low value and volume of the timber resource, the loss of the opportunity to utilize that resource is considered acceptable.

Minerals

There are no known claims in the Boundary Spires unit. Since the unit consists predominantly of snow fields, rocks, and glaciers, very little prospecting has been done except along the shores of Thomas Bay. The withdrawal and proposed wilderness use of this unit would have no known adverse impact on the mineral resource.

3. Present Users

Present users consist of sport hunters and a few fishermen who fish the lakes and major streams. A limited number of rock climbers use the area as well as glacial explorers.

There are no special use permits in the area.

All of the known present uses of the unit would be permitted to continue.

4. Proposed Use Conflicts

There are no known conflicts that would occur with the resources that have been analyzed on the unit. Mineral possibilities that could occur beneath the snow fields and in the alpine reaches of this unit are unknown, however, any conflicts under the existing conditions are remote.

5. Specific Use Requirements

The unit is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness plan are to be prepared. The planned use of the land and the specific requirements of the proposed use are one and the same.

6. Suitable Alternatives

This unit provides a unique wilderness experience. It has features in the snow fields, rock formations, and glaciers that occur on few areas to this degree in southeast Alaska. The hydroelectric power potential of this unit is relatively low and more strategic locations for power sources do exist in southeast Alaska. State selections and mining activity displaced may be accommodated in more appropriate alternative areas.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Boundary Spires unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. If the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Stikine Area, Tongass National Forest
P.O. Box 309
Petersburg, Alaska 99833

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

The Boundary Spires area comprises the mainland of southeastern Alaska from the international boundary westward to a point east of the headland of Port Houghton; thence southwest along the hydrographic ridge to a point near Mt. Grant; thence southerly to a junction with the north boundary of the Stikine-LeConte area.

The distribution of the coast formations is in wide extensive belts, all striking in a general northwest-southeast direction with relatively steep dips. These beds in turn have been intruded by igneous rocks, essentially of granite, diorite, and gabbro which have caused displacement and metamorphism.

The main mountain mass within the area is composed of a light grey eruptive rock. This rock in general is a granodiorite or quartz diorite of coarse crystalline texture. Southwest of this coast range intrusive are gneissoid rocks and highly metamorphic schists, interstratified with narrow belts of marble. Adjacent to these and bordering the coast are argillaceous slates, more or less carbonaceous, including limestone, and these again are followed by more or less extensive belts of greenstones.

FLPMA
204(c) REPORT

ENDICOTT RIVER

SIZE: 110,000 acres

LOCATION: Chilkat Peninsula

MANAGEMENT AREA: TLMP, C-16

LAND USE DESIGNATION, TLMP: LUD I

ENDICOTT RIVERDescription

The Endicott River unit is situated on the Chilkat Peninsula approximately 45 miles northwest of Juneau and 30 miles south of Haines, Alaska. The western portion of the unit bounds Glacier Bay National Monument for approximately 40 miles and is accessible from the Endicott drainage via a 900-foot pass. This unit is approximately 110,000 acres in size and covers the upper two-thirds of the Endicott River drainage.

The Endicott River drainage intersects the Chilkat Range which extends southward as a portion of the Alsek Range system. The drainage is a large glacial river canyon with relatively common terrain. Much of the upper drainage is dominated by small trees and brush.

The Endicott River watershed is within the National Weather Service Maritime Zone. Based on Juneau reporting station data, its mean annual precipitation is 92 inches with highest precipitation in the fall months (September-November) and lowest through the early spring months (April-June). It is in Management Unit C-16 on the TLMP map.

204(c)(2) 12 Points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 110,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Endicott River unit is representative of the coast range resources found throughout southeast Alaska.

The wilderness attributes of the area are enhanced by its inaccessibility and wild character particularly in the upper reaches of the drainage. Resources within the area are described below.

Recreation

This portion of the Endicott River drainage receives light recreation use due primarily to rugged topography, lack of developed trails, and extreme weather conditions. Elevations range from near sea level to 5,280 feet near Mt. Young located in the northwest portion of the unit. A few hunters use the area for black and brown bear and mountain goat hunting. The upper reaches are above timber line and glaciers are present near the common boundary with Glacier Bay National Monument. The monument can also be accessed through Endicott Pass which is approximately 900 feet in elevation. Present access to the unit is by boat to the confluence of Endicott River and Lynn Canal, then by foot to the unit.

Wildlife and Fish

The Endicott River supports black and brown bear, mountain goat, and a limited number of moose. Bald eagles use the area along the river during various times of the year. Deer are present, however, the population fluctuates due to deep snow on their winter range. The Endicott River also support chum, coho, and pink salmon.

Timber

Although there are 2,166 acres of commercial forest with 1,320 acres in the unit considered operable by today's standards, the values associated with timber harvest were determined to be secondary to the preservation of the existing wilderness values. Based upon that determination the unit was classified in TLMP as LUD I to be recommended and managed for wilderness. Since only LUD I classification areas are withdrawn and the cumulative effect of LUD I's on historical harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

Minerals

The geology report, point 12, also describes the mineralization of this unit. However, the history of mining and prospecting in this area is of such low quantity that one cannot but conclude that loss of opportunity to prospect and mine in the future will have virtually no impact on the economy of southeast Alaska.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, adversely impact individuals, local communities, or the Nation.

3. Present Users

As described in point 2 of the 12 points, the primary users of the unit are a few bear and goat hunters. There were a few prospectors that prospected in the upper reaches of the Endicott River drainage before the 204(b) withdrawal, however, due to the severe climate and rugged terrain, access was extremely difficult. This activity was curtailed with the withdrawal. Other users will not be affected.

Since 1929 the Endicott River has been withdrawn by USGS as a potential power site for possible future development.

4. Proposed Use Conflicts

Existing and potential uses are not incompatible or in conflict with the proposed use.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan and a Wilderness Area plan are to be prepared. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this unit is relatively low and, in any case, more strategic locations for power sources do exist in the Panhandle.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Endicott River unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this area were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chatham Area, Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Northwest-trending belts of Paleozoic and Mesozoic sedimentary and volcanic rocks underlie the Alsek Ranges.

The upper portion (approximately two-thirds of the unit) of the Endicott River drainage is located in a geologic region that is not considered favorable for metallic and nonmetallic mineral deposits, while the lower third of the drainage has claims located and is considered favorable for mineral and non-mineral deposits. There are patented claims adjacent to the unit near Lynn Canal.

FLPMA
204(c) REPORT

TRACY ARM-FORDS TERROR

SIZE: 654,000 acres

LOCATION: 50 Miles South Southeast of Juneau, Alaska

MANAGEMENT AREA: TLMP, C-11

LAND USE DESIGNATION, TLMP: LUD I

TRACY ARM-FORDS TERRORDescription

The Tracy Arm-Fords Terror unit is located on the mainland approximately 50 miles southeast of Juneau and 70 miles north of Petersburg, Alaska. The unit is approximately 654,000 acres in size including 148,000 acres of adjacent public domain. Located within this unit is the Tracy Arm-Fords Terror Scenic Area.

Tracy Arm-Fords Terror contains mountains that rise from the edge of two deep fiords that penetrate 30 miles inland from the coastline. At the head of these fiords are active tidewater glaciers, which continuously calve icebergs. During the summer, both fiords have considerable floating ice ranging from the size of a three-story building to hand-size pieces. During the most recent glaciated period these two fiords were filled with active glaciers.

The temperature variation between the mouth of each fiord and the head end at the glacier face is dramatic. At times a 15 degree drop in temperature can be expected. Vertical cliffs rise to heights of up to 4000 feet from the water's edge. Higher elevations have permanent snow fields and glacial icecaps.

The majority of the area is rugged snow and glacier-capped mountains and steep valley walls where glacial retreat has occurred. Typical spruce-hemlock rain forest occurs on the lower slopes of the mountains. Timberline is approximately 1500 feet elevation. Mountain goat, bear, and a few Sitka black-tail deer inhabit the area. There are a few muskeg areas which are dominated by sedges, grass, and sphagnum moss. Approximately 75 percent of the unit is considered as having vegetative types associated with an alpine region. Twenty percent of the land area is covered by glaciers and snow fields.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD 1 designation, the proposed use of this 654,000 acre unit is wilmland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Tracy Arm-Fords Terror unit has a wide variety of resources as found throughout southeast Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility and wild character. The scenic grandeur of the two large fiords and active glaciers, accessible via the fiords, attract many sightseers from the Juneau area as well as from other parts of the United States. The resources and current use of the unit are described in further detail below.

Recreation

A moderate traffic of medium to larger sized vessels, many out of Juneau (50 miles north), visit Tracy Arm and Fords Terror for the primary purpose of viewing the tidewater glaciers. It has become a primary stopping place for large tour ships traveling through southeast Alaska.

Sport hunting and fishing occur with commercial fishing not as important. Both sport and commercial vessels take shelter during times of inclement weather in selected coves within this area. Spring bear hunts by private individuals and commercial guides are common.

Due to the extremely rugged topography within this unit, recreational use is limited almost exclusively to boating via the two major fiords. Saltwater fishing, bear hunting, photography, and sightseeing are the major recreational uses. There are no developed recreational facilities within the unit, and recreationists normally stay aboard their boats while pursuing the mentioned uses.

Wildlife and Fish

Mountain goat, wolverines, furbearers, black and brown bear and a few Sitka black-tail deer inhabit the uplands. Bald eagles and shore birds inhabit the coastal areas. Seals, whales, and sealions can be observed at times in the fiords, usually in the lower reaches, however, seals can be observed near the glaciers at the head of each arm.

There is little sport or commercial fishing in Tracy Arm, Fords Terror or Endicott Arm. Bays, coves, and estuarine areas are considered excellent as rearing sites for anadromous fish as well as shellfish and herring. The occurrence of ice limits commercial fishing.

The withdrawal and proposed TLMP wilderness classification of this unit is consistent with the protection and use of both fish and wildlife and their habitat.

Timber

There are 23,608 acres of commercial forest land on this unit; 22,174 acres are considered operable using today's standards. Commercial timber species, like most of southeast Alaska, consist of spruce and hemlock located along valley bottoms and up to approximately the 1000 to 1500 foot elevation level. Values associated with timber harvest were determined to be secondary to the preservation of the existing wilderness values and the unit was classified in TLMP as LUD I to be recommended for and managed for its wilderness values. Since only LUD I classification areas are withdrawn, and the cumulative affect of LUD I's on historic harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

Minerals

Known deposits of copper, zinc, and lead have been located in this unit adjacent to Tracy Arm and near the terminus of Sumdum Glacier. Of the known claims, 11 have been patented and considered active at the present time. Several mining companies have done core drilling in their blocks of claims in the areas mentioned. Prospectors over the years have located claims that produced 25,000 ounces of gold and silver. A few claimants who have held on to their claims over the years by doing only necessary assessment work, and not aggressively developing their discoveries, will now find that their claims may be determined invalid. This 204(c) withdrawal, like the 204(b) withdrawal, will adversely affect individuals and corporations to the extent that if they are unable to prove validity as of December 5, 1978, they will not now be able to do so. Under the withdrawal, no further exploration is permitted unless exploration prior to December 5, 1980, exposes sufficient minerals to establish claim validity. Validity is determined by analysis of the production costs versus the value of the mineral. If the mine cannot be operated at a profit, the claim is not valid. This, then, is an adverse impact on a few individuals; but, the economic impact would generally be minor even at the community level. Prospectors with valid claims would be permitted to develop their deposits.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

Present users of the Tracy Arm-Fords Terror unit are composed of sightseers, sport hunters, fishermen, and prospectors. The majority of the uses occur in the area immediately adjacent to the two major fiords referred to earlier. Residents from nearby communities visit the area

for sightseeing purposes and use the protected coves for shelter during periods of inclement weather during the fishing and hunting seasons.

Further timber harvesting and prospecting for minerals would not be permitted during a continued withdrawal period, however, all other present uses would be allowed until such time as Congress gives specific management direction.

There are two areas of private land near the Tracy Arm-Fords Terror unit; 590 acres on Chuck River and 102 acres near Sumdum Bay. The Chuck River private landowner maintains a small commercial resort and uses the Tracy Arm-Fords Terror fiords as side trips principally for sightseeing. Withdrawal or wilderness classification of the unit would be of economic value to this operation.

There has been interest expressed by the local Juneau government to construct a recreation complex in or near this unit. This would consist of docks, fuel storage, and handling facilities. The withdrawal would have a positive affect upon this proposal.

4. Proposed Use Conflicts

On May 14, 1979, a power withdrawal was granted in the area. The withdrawal would have no affect upon this withdrawal.

Due to the extremely rugged topography, float ice in the fiords, and distance from major population centers, the unit has received light use to date. Prospecting for possible mineral deposits has been active. It is anticipated that some conflict between prospecting and the restrictions that exist in the withdrawal will occur.

There is a timber sale proposed in Gilbert Bay, just north of this unit. The most environmentally sound location for the camp and log transfer site is in Williams Cove located within the 204(b) withdrawal. The modification of the 204(b) boundary to the LUD I [204(c)] boundary permits development in Williams Cove and protection of the environmentally sensitive Gilbert Bay.

5. Specific Use Requirements

The area is proposed as a wilderness area LUD I in TLMP and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience due to the close proximity of glaciers and the rugged character of the topography. No similar area can be found in southeast Alaska.

Hydroelectric power potential of this unit is relatively low although it is strategically located for such a purpose.

State selections would be precluded within the withdrawal. This impact would be minimal and viable alternatives exist for such purposes.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Tracy Arm-Fords Terror unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this area were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chatham Area, Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

The Tracy Arm-Fords Terror area comprises the mainland of southeastern Alaska from the international boundary westward to tidewater and from the hydrographic ridge north of Tracy Arm to the ridge south of Endicott Arm.

The distribution of the coast formations is in wide extensive belts, all striking in a general northwest-southeast direction with relatively steep dips. These beds in turn have been intruded by igneous rocks, essentially of granite, diorite, and gabbro which have caused displacement and metamorphism.

The main mountain mass within the area is composed of a light grey eruptive rock. This rock in general is a granodiorite or quartz diorite of coarse crystalline texture. Southwest of this coast range intrusive are gniessoid rocks and highly metamorphic schists, interstratified with narrow belts of marble. Adjacent to these and bordering the coast are argillaceous slates, more or less carbonaceous, including limestone, and these again are followed by more or less extensive belts of greenstones.

FLPMA
204(c) REPORT

WEST CHICHAGOF/YAKOBI ISLANDS

SIZE: 227,000 acres

LOCATION: 30 miles northwest of Sitka, Alaska

MANAGEMENT AREA: TLMP, C-38

LAND USE DESIGNATION, TLMP: LUD I

WEST CHICHAGOF-YAKOBIDescription

West Chichagof and Yakobi Islands are within the Alexander Archipelago; a long string of islands extending from Dixon Entrance to the Canadian border north of Lynn Canal.

West Chichagof-Yakobi supports, in relative abundance, nearly all major land types and associated ecosystems characteristic of southeast Alaska; some of which are uncommon to the region as a whole. Most dramatic is the 65 mile-long stretch of rugged Pacific coastline extending from Salisbury Sound to Cape Bingham and characterized by exposed offshore islands and rugged, rocky highlands. Behind the stout headlands, barrier islands, rocks, and reefs of the outer coast, lie the quiet waters of the inside passage, honeycombed with bays, inlets, and lagoons. Rising abruptly from the ocean is the mountainous backbone of the area, a satellite of the great coast range batholith. Peaks rise to 3,600 feet, often from water's edge.

Continental and alpine glaciation has played the major role in shaping the mountainous coastal zone which is characterized by drowned glacial valleys (fiords), aretes, cirques, and lakes. Most of the northern landforms have been heavily ice scoured, leaving only a thin mantle of glacial till plastered to upland slopes. Vast lowland areas have been scoured to bedrock. Notable groupings of wave-cut erosional features are found along the coast.

The maritime climate of West Chichagof-Yakobi is typically cool and moist with relatively narrow temperature variations associated in part with the moderating influence of the Gulf of Alaska. Mean yearly temperatures average 45°F, accompanied by a high percentage of overcast days (+75%), frequent rain showers, and occasional periods of strong winds (30-100 miles per hour). Data indicates that the western coast experiences slightly warmer and wetter average weather than Sitka to the southeast.

This area was covered by volcanic ash from Mt. Edgecumbe eruptions approximately 9,000 years ago. While these soils are productive, they are susceptible to mass wasting; drainage is often poor and muskegs and alpine bogs predominate. Vegetation appears to be dominantly that of coniferous tree cover with about one-third of the area capable of supporting commercial timber. Approximately 50% is in muskeg or scrub. Estuarine areas represent 1%, with the remainder, alpine.

Western hemlock and Sitka spruce are the most important commercial species. Some Alaska cedar attains commercial size but generally grows in scatterings on the less productive sites. Lodgepole pine is also

restricted to poor sites and rarely attains commercial size. Portions of the outer coast, particularly the offshore islands, support distinctive savanna glades under open spruce cover.

Understory vegetation is primarily that of salmonberry, blueberry, huckleberry, rusty menziesia, and devil's club, often forming dense thickets under the open forest canopy.

Estuarine and offshore ocean waters sampled by the National Marine Fisheries Service appear less productive than waters farther south along the coast. However, outside waters from Klag Bay to the Myriad Islands show reasonably good productivity of small abalone and red snapper, ling cod, sculpin, and greenling.

204(c) 12 Points

1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal and with its LUD I designation, the proposed use of this 227,000 acre unit is wilderness management in which the scenic, historic, scientific, and/or primitive attributes are protected. Although people have utilized this area in a variety of ways, the evidence of such activity is minimal and the status quo should be maintained until Congress has made a decision on its classification and management. This withdrawal precludes only further State selection and mining claims location.

2. Natural Resource Use and Value

There are nine current special use permits. Two are residence permits at Green Top Harbor on Yakobi Island, in effect since 1951. There are four cabin permits issued to private individuals and an ADF&G observatory permit. In addition, there are heavily used Forest Service recreation cabins at Goulding Lake and White Sulphur Springs. A third Forest Service cabin is located at Suloia Lake. There are several Coast Guard navigational beacons on the islands. The withdrawal does not affect the status or use of these occupancies.

At present, the major income producing activities on West Chichagof-Yakobi are recreation, tour boats and guiding, offshore fishing, hunting, and mineral exploration. Recreation expenditures appear to be approximately \$90,000 annually. One mining company has spent over \$1,500,000 primarily in the period 1972-75.

Scattered throughout the area are evidences of past uses; among these ruins are an old mining town and various mining sites, cabins and abandoned fur farms.

Proposals for fisheries enhancement include proposed fish passages at Goulding Lakes, Flat Cove, and in the Goon Dip River system. In addition, the National Marine Fisheries Service has identified suitable sites for fish hatcheries with a capability to handle 40-60 million eggs a year. These are Suloia, Didrickson, Goulding, and Surge Lakes, and Lake Elfendahl and Lake Leo.

Seven locations, with a total horsepower capacity of 19,350, have been proposed as potential waterpower projects. These are located at Rust, Didrickson, Goulding, and Suloia Lakes, and Porcupine Creek and Falls Creek.

A few scattered tracts of private land exist; largely mineral patents. Most of these have been unoccupied for years and the present withdrawal would have no adverse impact on the land or its owners. There are a number of identified historical sites in this unit. Those sites applied for by Native corporations and determined valid will be conveyed to them for cemetery and historical site purposes only. Those sites not selected will be protected under Federal law. These uses are not inconsistent with the proposed use. Further descriptions of the current use and value are listed below.

Recreation

For the most part, recreational use of West Chichagof and Yakobi Islands is confined to protected west coast passages, and to some extent the quiet waters of Lisianski Inlet and Lisianski Strait. The outer coast of Yakobi Island receives relatively light use due primarily to its exposed access open to unpredictable weather extremes. The interior highlands are beginning, however, to receive increased use by hikers ranging inland from the myriad of protected anchorages that dot the perimeter of both West Chichagof and Yakobi. Key recreational use areas oriented toward beachcombing, scuba diving, hiking, exploring, sport crabbing, boating, kayaking, and hunting are concentrated along the east and west coasts of West Chichagof with only minor recreational endeavors reaching north to Yakobi Island.

On both West Chichagof and Yakobi Islands, recreation facilities are scant. Several guide cabins in the Klag Bay area support significant hunter use in the spring and fall. White Sulphur Springs and attendant Forest Service bathhouse and cabin in Islas Bay receive intensive use by recreationists and fishermen from throughout the northern half of the Tongass. Aside from these facilities and the Forest Service cabin at Goulding Lake, little more in terms of recreation facilities exists. Most recreationists are content to use small craft as "home base," occasionally supplemented by tent camps.

These recreational activities will not be adversely impacted by the withdrawal or proposed use.

Wildlife and Fish

West Chichagof-Yakobi supports excellent populations of brown bear, deer, and furbearers. Highest deer densities are found along the west coast. Black River, Ford Arm, Falcon Arm, and many smaller streams support high densities of bear. Furbearers are abundant throughout most of the area and include marten, mink, weasel, land otter, red squirrel, flying squirrel, and beaver.

The area is remarkable for its use by migrant waterfowl. Thousands of ducks, geese, swans, and shore birds seek this area for feeding and resting during migration periods. The Vancouver Canada goose, a resident species, is known to nest here. Peregrin falcon have been reported. Bald eagles are found throughout West Chichagof-Yakobi unit.

The area is also known for its populations of marine mammals. The Fish and Wildlife Service has successfully reestablished sea otter at Surge and Khaz Bays wher the greatest concentrations in the Chatham Area are now located. There are outstanding sea lion rookeries found at White Sisters Islands, Cape Cross, and Cape Bingham. Seal inhabit most of the coastline.

West Chichagof-Yakobi is rated excellent for coho, chum, pin, cutthroat, Dolly Varden, rainbow/steelhead trout. The most notable shellfish and marine fish species are Dungeness, Tanner and King crab, shrimp, herring, smelt, nd halibut. Many other nongame species of marine fish and shellfish occur in the estuaries that have significant consumptive or nonconsumptive uses.

Fisheries is one of the most important wildlife resources of the area. Four species of salmon are found in the lakes and streams. While most streams are short and originate in relatively small watersheds, the larger systems include Black River and Surge Lake. Streams and lakes rated excellent for trout include Waterfall Cove, Klag Bay, Goulding, Black River, Takanis Lake, Surge Lake, Suloia Lake, and Hoktaheen Lake.

The withdrawal and proposed wilderness use of this area is consistent with the protection and use of both the fish and wildlife and their habitat.

Timber

Although there are 70,000 acres of commercial forest land in this 226,879 acre management unit, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Since only LUD I classification areas are withdrawn, and the cumulative affect of LUD I's

on historic harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska. This unit is included in the Alaska Lumber and Pulp Company timber sale contract. However, for the reasons described above, no harvest activities are planned in this area.

Minerals

A belt trending north-northwest through the western portion of Chichagof Island has produced nearly a million ounces of gold as well as some silver. Production was primarily from the Hirst-Chichagof Mine and the Chichagof Mine, although small amounts of gold were recovered from other mines, primarily the Apex-El Nido, Alaska Chichagof, and Cobol Mines. There is no recorded production from any mine in the district since about 1945.

A large body of norite and concentrated sulfides (nickel-copper bearing) exist on Yakobi Island. The major deposit is on the east side of the island at Bohemia Basin--outside this unit--but some deposits of uncertain size are on the west side of the island. In addition, several deposits of norite occur near Mirror Harbor on the west coast of Chichagof Island.

Prospectors over the years have located some several hundred mining claims in this unit largely based on gold values. Those claimants who have held on to their claims over the years by doing only necessary assessment work, and not aggressively developing their discoveries, will now find that their claims may be determined invalid. Validity is determined by analysis of the production costs versus the value of the mineral. If the mine cannot be operated at a profit, the claim is not valid. This, then, is an adverse impact on a few individuals; but, the economic impact would generally be minor even at the community level. Prospectors with valid claims would be permitted to develop their deposits.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

Present users of this area consist of sport hunters and fishermen who fish outside waters and periodically take refuge in the sheltered inlets and bays; recreationists from surrounding communities who visit the area to hike, photograph and enjoy the scenery; tourists (kayakers, canoeists, birdwatchers, and sightseers), and outfitters and guides who bring their clients to visit west Chichagof.

There are also a number of special use permit holders and private landowners who use the resources of this area. There has been logging and prospecting in the recent past and so those employed in those industries have used this area. Local citizens from surrounding communities also use the natural resources of this area for subsistence food gathering.

Future timber harvest and prospecting for minerals would not be permitted during a continued withdrawal; all other present uses would be allowed until such time as Congress gives specific management direction.

4. Proposed Use Conflicts

Prior to classification as LUD I in TLMP, timber harvest, mineral location, hydro development, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive attributes were proposed and some planned. The State of Alaska made selections at Lake Anna and Goulding Harbor. These were disapproved by the Forest Service; other community development centers may be proposed in the future. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and proposed wilderness classification. The impact of loss of these proposed activities was considered acceptable in development of TLMP when LUD I classification was agreed upon.

There are a number of special use permits in the area. These would not be in conflict with the withdrawal and would not be terminated. However, if upon classification as wilderness, Congress makes no special provisions for such uses, the permits could be terminated or put on tenure at that time.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible with the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitabe Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this unit is relatively low and, in any case, more strategic locations for power sources do exist in the Panhandle.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the West Chichagof-Yakobi unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this land other LUD I areas were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chatham Area, Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology

West Chichagof and Yakobi Islands are underlain almost entirely by highly crystallized rocks of Mesozoic and Paleozoic age, and by extensive bodies of igneous rocks that are dominantly dioritic in composition. Within this area the regional trend of the rocks is northwest, parallel to the axis of an anticlinorium that involves most of the bedded rocks in the north end of southeastern Alaska (Buddington and Chapin, 1929). The thick succession of rocks of Mesozoic age that crops out in the southwestern part represents the eastern flank of a geosyncline to the west of the anticlinorium. These rocks of Mesozoic age consist mainly of greenstone, slate, schist, and graywacke. The anticlinorial core lies to the east on the eastern part of Chichagof Island and in the central part of the Glacier Bay area. The exposed rocks are dominantly limestone and argillite. The only rocks believed to be of Paleozoic age are now highly crystallized sedimentary rocks that crop out as isolated bodies within the diorite.

The main period of intrusion probably took place during the later part of the Cretaceous time. The dioritic body itself consists of multiple injections of magma which were dioritic in composition. Probably the intrusions were related to the major structures in the area. The magma was widely intruded into the Coast Range of Alaska and Canada and occurs as an elongate tongue which extends as far south as southern Baranof Island (Rossman, Darwin, U.S.G.S., Bull. 1058E, 1959).

FLPMA
204(c) REPORT

RUSSELL FIORD

SIZE: 307,000 Acres

LOCATION: 10 miles east of Yakutat

MANAGEMENT AREA: TLMP, C-52

LAND USE DESIGNATION, TLMP: LUD I

RUSSELL FIORDDescription

The Russell Fiord area is located approximately 20 miles northeast of Yakutat, Alaska. This area contains 295,000 acres of Federal lands administered by the Forest Service and 12,000 acres of public domain lands that are proposed for National Forest addition located at the head of Nunatak Fiord located on the eastern boundary of the area.

Yakutat Bay borders the area on the west; Russell Fiord and the Forest boundary form the north border. The eastern boundary runs approximately north-south from Cascading Glacier to Harlequin Lake. The southern boundary is irregular, running from Harlequin Lake to Yakutat Bay at Eleanor Cove.

Elevation within this area varies from sea level at Yakutat Bay to approximately 4,400 feet at Mt. Hendrickson near Russell Fiord. The northern portion of the area is primarily glacier covered and the southern portion is muskeg, swamp, and small pot holes and lakes. Russell Fiord bisects the area north and south.

The Situk River heads within the area at Situk Lake lies just outside this unit. The Situk River is excellent fishing from both the commercial standpoint as well as sports fishing. Many Yakutat residents depend upon salmon fishing with set nets at the mouth of the Situk River as their primary source of income.

Vegetation is quite variable within the area. Commercial forests are found along the southern boundary. Principal species are western hemlock and sitka spruce. Noncommercial tree species consisting of cottonwood and willow are found along the creek bottoms and swampy portions of the area.

Russell Fiord exhibits unusual scenic beauty and is high in scientific interest for its record of catastrophic geological events. The Yakutat region is considered one of the most active seismic areas of the United States. One area near Yakutat shows uplift of 14.3 meters, the greatest uplift ever measured for an earthquake sequence. Earthquakes of magnitude 8.5-8.6 (Richter scale) have occurred, some of them caused by movement along fault lines. Of particular interest is the Hubbard Glacier located at the entrance to Russell Fiord. This body of ice threatens to block Russell Fiord, diverting water flows southward into old river channels on the Yakutat forelands.

Big game species present are resident moose, brown bear, deer, black bear (including the blue color phase), goats, and wolves make up the big game

species. In addition, excellent waterfowl nesting and hunting grounds are found here. Bald eagle nesting concentrations are found in the unit. Seal are also found at Russell Fiord.

Furbearers are found in abundance along the major streams and are trapped by a few of the local residents of Yakutat.

Fish species include salmon, steelhead, Dolly Varden, and cutthroat and rainbow trout. Northern pike have been discovered in lakes on the forelands, the only known natural populations west of the Coast Range.

Both State and Native land selections are proposed and some have reached interim conveyance in the general vicinity of Yakutat.

204(c) 12 Points

1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal and with its LUD I designation, the proposed use of this 307,000 acre unit is wilderness management in which the scenic, historic, scientific, and/or primitive attributes are protected. Although people have utilized this area in a variety of ways, the evidence of such activity is minimal and the status quo should be maintained until Congress has made a decision on its classification and management. This withdrawal precludes only further State selection and mining claims location.

2. Natural Resource Use and Value

There are existing Forest Service special use permits in the Russell Fiord unit. A Forest Service recreation cabin is located at Situk Lake and this cabin is heavily used during the fishing and hunting seasons.

Forest Highway #10 is adjacent to this unit for approximately 10 miles. This highway begins at Yakutat and terminates at the Dangerous River about 35 miles southeast of Yakutat.

Major income activities associated with the Russell Fiord unit are commercial fishing, professional outfitters and guides who serve moose and goat hunters, air service providing access into the unit, and trapping. Many of the local residents use the area for subsistence hunting, fishing, and trapping.

The following proposals have been presented for resource development and use of the area:

Aquaculture sites. Due to the high water table that exists in many areas, there are a number of short streams that originate and run to

saltwater. It is economically feasible and possible to develop aquaculture sites in this area.

The Forestry Sciences Laboratory has proposed a Pike Lake Research Natural Area. Northern pike are found in a few lakes located in the unit.

Additional recreation cabins and trails have been proposed for access and to provide some degree of safety for recreationists who will use the area.

Timber harvesting has been proposed in the spruce-hemlock stands located in the area.

Permit applications have been received for facilities that would be constructed and used to accommodate packer-guide operations in the unit.

Recreation

Present recreational uses center around hunting and fishing activities. Access into the unit is via air or foot travel. Forest Highway #10, as described previously, provides an access route to within reasonable hiking distance to a small portion of the unit; however, due to the lack of trails the unit for the most part is unused.

Trails and recreation cabins have been proposed for access and some degree of safety and shelter in the Russell Fiord vicinity.

There are no developed campgrounds in or adjacent to the area.

Hunting and fishing are the primary recreational opportunities that attract most recreationists to the area. The Situk, at various times of the year contain most species of salmon found in Alaska. Opportunities exist for additional trails and cabins for the recreationists that use this area. Big game hunting (moose, goat, and bear) provide recreational opportunities in the area.

Sightseeing opportunities exist and this use is increasing. Access to the area is difficult and at the present quite an undertaking.

Wildlife and Fish

The area is superlative for its habitat diversity which results in the presence of both wide species variety and high concentrations of wildlife. Large populations of brown bear, black bear (including the blue color phase), goat, wolf, and furbearers are found in the area. Although some blue color phase black bear are found elsewhere in the Tongass, Yakutat supports the major population. Among the furbearing species are marten, mink, beaver, weasel, wolverine, coyote, lynx, and snowshoe hare.

Moose populations, low in recent years, are being restored. Range and habitat are such that the moose population is expected to reach former levels within the next few years.

The area supports hair seal and sea lion at the mouths of the major rivers and in Russell Fiord proper. Shore bird variety and numbers are extremely high during migration periods and swans nest at various locations. There is also a very high concentration of nesting song birds.

Base data used in the preparation of the TLMP rated the streams and lakes within the area for sport, commercial, and estuarine fishery values. Generally, the area rated low in sports fish, low in commercial fish, and medium in estuarine values. This rating was based on number of species, habitat condition, sport and commercial fisheries, and several other special values associated with the watershed.

Timber

Although there is commercial forest land in this area, the values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Since only LUD I classification areas are withdrawn, and the cumulative affect of LUD I's on historic harvest levels was considered acceptable, the volume of timber in this area is not considered critical to the economy of southeast Alaska.

Minerals

Base data used in the TLMP evaluated the mineral resource potential, number of claims, and the minerals associated with the Russell Fiord area. The area was rated low for mineral potential; no existing claims present; and gold was the primary mineral sought. In general, this portion of the area was considered to be unfavorable for metallic and related nonmetallic deposits.

Although little exploration has been done in the area, the most promising potential for several minerals appear to be on the beaches and elevated beach terraces near Yakutat Bay.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

Present use was discussed under items 1 and 2.

Users consist of commercial fishermen, packers, guides, sport fishermen, hunters, hikers, beach combers, river floaters, prospectors, and general sightseers.

Prospecting would not be permitted during a continued withdrawal, however, all other present users would be permitted until such time as Congress gives specific management direction.

4. Proposed Use Conflicts

Prospecting for mineral deposits would not be permitted under a continued withdrawal, however, the loss of this activity was considered acceptable in the development of TLMP when LUD I classification was agreed upon. Although wilderness classification does not necessarily preclude claim staking until 1984, increased environmental constraints usually discourage prospectors.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. Fishery wildlife habitat improvement projects are also planned but must be compatible with wilderness management direction. This use is compatible with the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The impact of the withdrawal alternative would be minimal.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Russell Fiord Area was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this and other LUD I units were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of Withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chatham Area, Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

The mountains north and south of Russell Fiord are composed largely of graywacke, slate, and minor conglomerates deposited from Jurassic to Cretaceous periods.

South of the south side of the fiord and trending to the east at the head of the fiord is a large glacial moraine which effectively dams the fiord (Southeast Alaska Profile).

Yakutat Bay was a highway for early prospectors on their way to the goldfields of the Alsek Valley. One route was over the Nunatak Glacier; another was to the head of Russell Fiord, then overland to a glacier leading back to the Alsek. As a result there was much staking of claims, but no discoveries of important mineral deposits were made. Petroleum, coal, platinum, and gold were the minerals sought. The beaches in the fiord showed some gold but it was rarely in paying quantities (Brook, Alfred, U.S.G.S., Bull. 314, 1906).

FLPMA
204(c) REPORT

STIKINE-LECONTE

SIZE: 443,000 acres

LOCATION: Mainland, 25 miles southwest of Petersburg, Alaska

MANAGEMENT AREA: TLMP, S34

LAND USE DESIGNATION, TLMP: LUD I

STIKINE-LECONTEDescription

This 443,000 acre unit is on the mainland 25 miles southwest across Fredrick Sound from Petersburg, Alaska, and includes 143,000 acres of public domain. This is part of the Kates Needle proposed addition to the National Forest.

The dominant features of this area are the Stikine River and the LeConte Glacier. The LeConte Glacier flows into LeConte Bay, north of the Stikine River. The glacier completely dominates the landscape in this area. The icebergs litter LeConte Bay making safe boat passage almost impossible within the bay. The icebergs flow into Frederick Sound. Within this area, forest vegetation is limited except in areas adjacent or close to Frederick Sound.

The Stikine River is a major drainage which is located south of the LeConte Glacier area. It is a declared international waterway and is one of the few access corridors from saltwater into the interior of Canada. Vegetation along saltwater is typical of the southeast hemlock-spruce rain forest, but before reaching the Canadian border the rain decreases and the vegetation changes to cottonwood with interior type vegetation characteristics.

The status of the Stikine River as an international waterway is not affected.

204(c)(2) 12 points1. Proposed Use

Consistent with the purposes of the 204(b)(1) withdrawal, and with its LUD I designation, the proposed use of this 443,000 acre unit is wildland, primitive management in which the scenic, historic, scientific and/or primitive attributes are protected. Most of the area is relatively untouched by humans and should remain so until Congress has made a decision on its classification and management. In addition to the 204(c) withdrawal, this area will be managed as wilderness as prescribed in the Wilderness Act and in Forest Service policy until other direction is given by Congress.

2. Natural Resource Use and Value

The Stikine-LeConte unit has the same wide range of resources found throughout most of southeast Alaska. The recreation and wilderness attributes of the area are enhanced by its inaccessibility, wild

character, and prominent glaciers and ice caps. These resources and their current use are described on the next page.

Recreation

The major use of this unit is recreational. The LeConte Glacier area gets sporadic use from recreationists viewing the glacier from tour boats or airplanes. Some goat and waterfowl hunting does take place. The Stikine River drainage, however, receives far heavier use and the recreational resources are more fully used.

The major mode of access is by small boat but some access is by float plane.

The Stikine River area has two hot springs areas along the river, one of which is heavily used by recreationists.

Because of the tremendous variation in resources within the area, many government and privately sponsored trips are made into the areas for resource investigations and analyses.

Below is a listing of permits currently in effect for the area:

<u>Use</u>	<u>Number of Permits</u>
Communication repeater	1
Public recreation cabins	12
Public picnic grounds	1
Private recreation cabins	14
Private tent platforms	7
Stream Gauging station with cabin	2

Wildlife and Fish

The area, particularly the Stikine River drainage, has long been recognized as an important fish and wildlife area. Besides salmon, trout are also within the drainage. Big game animals include moose, goats, and wolves. The Stikine Flats is an important waterfowl area.

The saltwater tideflats of the Stikine River encompassing nearly 10,000 acres are currently classified as a game management area under Regulation U-36. There is a cooperative management agreement among the Forest Service, the Alaska Department of Fish and Game (ADF&G), and the Alaska Department of Natural Resources for the resources in this area. This classification would not be affected by this withdrawal.

Timber

The timber resource of this withdrawal is predominantly along the saltwater and the Stikine River. The stands are of commercial size and value. Except for a few saltwater areas, however, most of the timber is inaccessible and has very low developmental possibilities.

Of the 443,000 acres within this unit, only about 1,400 acres are operable commercial forest land. The values associated with timber harvest were determined to be secondary to the preservation of the wilderness values. Based on that determination the area was classified in TLMP as LUD I to be recommended as and managed for wilderness. Since only LUD I classification areas are withdrawn, and the cumulative affect of LUD I's on historic harvest levels was considered acceptable, the volume of timber in this unit is not considered critical to the economy of southeast Alaska.

Minerals

The south half of the unit is considered to be favorable to metallic and related nonmetallic deposits. A large block of claims has been staked in this area but the extent of the value is not known. No mineral production has taken place which may indicate that mineral values are not sufficient for economic extraction.

The Stikine River area does have a potential for geothermal development, but more research and investigation would have to be done to determine feasibility for development.

Those claimants who have held on to their claims over the years by doing only necessary assessment work, and not aggressively developing their discoveries, will now find that their claims may be determined invalid. Validity is determined by analysis of the production costs versus the value of the mineral. If the mine cannot be operated at a profit, the claim is not valid. This then, is an adverse impact on a few individuals; but, the economic impact would generally be minor even at the community level. Prospectors with valid claims would be permitted to develop their deposits.

In summary, nothing about this withdrawal action nor the use of the area as proposed would either degrade the environment or, as determined by the 1979 TLMP Final EIS and Plan, unreasonably impact individuals, local communities, or the Nation.

3. Present Users

There are nine separate parcels of private land in the Stikine River near the saltwater influence area. These parcels were all patented between

1913 and 1950 and amount to 1,062 acres. They were predominantly homesteads but now only receive occasional use from the owners who live in the nearby towns.

There are also a number of special use permit holders who use the resources of this area. There has been prospecting in the recent past. Local citizens from Petersburg also use the natural resources of this area for subsistence food gathering. The glaciers attract viewers from outside the area.

Future timber harvest, prospecting for minerals, and State selection would not be permitted during a continued withdrawal; all other present uses would be allowed until such time as Congress gives specific management direction.

4. Proposed Use Conflicts

Prior to classification as LUD I in TLMP, timber harvest, mineral location, and other activities inconsistent with the effort to protect and preserve the scenic, historic, scientific, and/or primitive attributes were proposed and some planned. The State of Alaska made a selection at LeConte. This was disapproved by the Forest Service; other community development centers may be proposed in the future. These and similar uses inconsistent with the purposes noted above are clearly in conflict with the withdrawal and proposed wilderness classification. The impact of loss of these proposed activities was considered acceptable in development of TLMP when LUD I classification was agreed upon.

There are a number of special use permits in the area. These would not be in conflict with the withdrawal and would not be terminated. However, if upon classification as wilderness, Congress makes no special provisions for such uses, the permits could be terminated or put on tenure at that time.

5. Specific Use Requirements

The area is proposed as a wilderness area (LUD I) and a recreation opportunity inventory and plan, and a wilderness area plan are to be prepared. This use is compatible with the requirements of wilderness area management found in the Wilderness Act and in Forest Service policy. The 204(c) withdrawal is not inconsistent with this purpose.

6. Suitable Alternatives

This area provides a unique wilderness experience, although, like other areas in many respects, it has its unique aspects and no similar area can be found in southeast Alaska. The hydroelectric power potential of this

unit is relatively low and, in any case, more strategic locations for power sources do exist in the Panhandle.

State selection would be precluded by this withdrawal. This impact would be minimal and many viable alternatives exist for community expansion and development.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD I classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since the Stikine-LeConte unit was classified as LUD I during the TLMP process, and this decision was made after intensive involvement of State and local governments, the adverse impact would be minimal insofar as commodities go. The determination was made at that time that the timber resources on this and other LUD I areas were not necessary to sustain the current local and regional economy. On the other hand, if the system of wilderness areas, of which this is one, is formally classified by Congress, a positive effect on the local and regional economy is anticipated through increased tourist and recreation visits.

9. Term of withdrawal

This area was withdrawn until December 31, 1985. By that time, it will have been either classified wilderness by Congress and the withdrawal modified or extended, or addressed in the next RPA effort at which time the Forest land management plans will be reviewed and updated.

10. Public Involvement

This information is covered both in the Introduction and under point 7, Consultation, above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Stikine Area, Tongass National Forest
P.O. Box 309
Petersburg, Alaska 99833

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

The Stikine-LeConte area comprises the mainland of southeast Alaska from the international boundary westward to tidewater. The north boundary follows a hydrographic ridge beginning near Horn Mountain thence southeastward and northeastward to the boundary marker at Castle Mountain. The south boundary follows the hydrographic ridge beginning at tidewater near Garnet Ridge thence eastward to the boundary marker at Mt. Cote.

The distribution of the coast formations is in wide extensive belts, all striking in a general northwest-southeast direction with relatively steep dips. These beds in turn have been intruded by igneous rocks, essentially of granite, diorite, and gabbro which have caused displacement and metamorphism.

The main mountain mass within the area is composed of a light grey eruptive rock. This rock in general is a granidiorite or quartz diorite of coarse crystalline texture. Southwest of this coast range intrusive are gniessoid rocks and highly metamorphic schists, interstratified with narrow belts of marble. Adjacent to these and bordering the coast are argillaceous slates, more or less carbonaceous, including limestone, and these again are followed by more or less extensive belts of greenstones.

Glaciers and the ice cap covers the eastern part of the area.

APPENDIX 3, PART B

12 points of analysis for 204(B)(1) lands

NOT being recommended for withdrawal
under Section 204(c) of FLPMA (PL 94-579)

TABLE OF CONTENTS

	<u>Page</u>
Forward.	i
Introduction	1
West Chichagof-Yakobi.	2
Duncan Canal	7
Idaho Inlet-Mud Bay.	12
Keku Strait (Rocky Pass)	18
Endicott River	24
Mansfield Peninsula.	28
Tracy Arm-Fords Terror	34
Yakutat Forelands.	39

FORWARD

This report addresses portions of the Tongass National Forest that were analyzed in the Tongass Land Management Plan (TLMP) and classified as Land Use Designations (LUDs) II, III, and IV in the plan. Permitted use by LUD is addressed in the Introduction of this report. Each area addressed was withdrawn on December 1, 1978, and published in the Federal Register on December 5, 1978, and June 8, 1979. This withdrawal was for two years and will expire on December 5, 1980.

Areas addressed in this report are not being recommended for continued withdrawal past the December 5, 1980, termination date, and this recommendation is based upon a 12 point assessment that follows.

These areas were allocated to the appropriate land use designation in the development of the Tongass Land Management Plan (TLMP). TLMP allocations were the result of extensive local and national public involvement, an analysis of the social and economic impact of various alternatives and further analysis of ways and means to meet long-term and small business timber sale commitments. As described in the following 12 point analysis information, the timber volumes on the LUD III and IV areas and the access provisions of the LUD II areas are critical to the 450 MM annual allowable harvest provisions of TLMP.

INTRODUCTION

This report covers areas that are not being recommended for continued withdrawal following the December 5, 1980, expiration date. These areas are classified as Land Use Designations (LUDs) II, III, and IV in the Tongass Land Management Plan (TLMP). A brief description of the forest management practice permitted in LUD II, III, and IV classifications follows:

LUD II

These lands are to be managed in a roadless state to retain their wildland character, but this would permit wildlife and fish habitat improvement and primitive recreational facility development. This designation will exclude:

- (1) Roads, except for specifically authorized uses.
- (2) Timber harvesting, except for controlling insect infestations or to protect other resource values.
- (3) Major concentrated recreational facilities.

LUD III

These lands will be managed for a variety of uses. The emphasis is on managing for uses and activities in a compatible and complementary manner to provide the greatest combination of benefits. These areas have either high use or high amenity values in conjunction with high commodity values. Allowances in calculated potential timber yield have been made to meet multiple objectives. These lands may include concentrated recreational developments.

LUD IV

Opportunities will be provided for intensive resource use and development where emphasis is primarily on commodity or market resources. Allowances in calculated potential timber yield have been made to provide for protection of physical and biological productivity.

West Chichagof-Yakobi
12 Point Analysis

Size: Approximately 193,000 acres

Location: 30 miles northwest of Sitka, Alaska

Management Area: TLMP - All or portions of C-25, C-35, and C-39

Land Use Designation, TLMP: LUD III and LUD IV

WEST CHICHAGOF-YAKOBI

Description

This area is located approximately 30 miles northwest of Sitka, Alaska, on Chichagof and Yakobi Islands. The area is approximately 193,000 acres in size and was classified during the TLMP process as LUD III and IV. It contains all or portions of Management Areas C-25, C-35 and C-39. It includes the eastern portion of Yakobi Island and that portion between Lisianski Inlet and the north arm of Hoonah Sound at the head of Peril Straits. Timber types are spruce and hemlock with scattered muskeg area with grass, forbs, and stunted conifers. There is private land within the area namely in Lisianski Inlet.

12 Points1. Proposed Use

The area was classified through the TLMP process as LUD III and IV. LUD III and IV permit a variety of uses including timber harvest, mining, gas and oil exploration and development, recreation, fishing and hunting. With the exception of gas and oil, these activities have occurred in the area.

2. Natural Resource Use and Value

For an overview of the adjacent area see West Chichagof-Yakobi Appendix I 204(c) report.

Recreation

Access into this area is via plane or boat and this contributes to the existing light recreation use in the area. Lisianski Inlet and Strait provides for boat access into the area. Open sea near the mouth of the Inlet and Strait is subject to changeable water and weather conditions which can make boat travel hazardous. There are no Forest Service recreation cabins in the area. Hunting (brown bear and deer) occurs in the area. Commercial fishing occurs in the Strait and Inlet and along the coast line.

Wildlife and Fish

See Appendix I 204(c) West Chichagof-Yakobi for wildlife and fish detail.

Timber

There are some 46,000 acres of operable commercial forest land in this unit. As a component of the LUD complex upon which the flow of commodity

and market resources is dependent this unit contributes 7.5 MM board feet to the annual commercial timber harvest of the Tongass National Forest. Although not a significant volume by itself, it is part of the balance that was reached in the TLMP designed to maximize amenity and wilderness values while maintaining the established industry and the social and economic stability of Southeast Alaska. Withdrawals of this unit would adversely effect this balance and reduce the flow of timber in direct proportion to the annual yield within this unit.

Minerals

Gold, silver, lead, zinc, copper and nickle have been produced from lode claims in this area. For an overview of the mineral situation on the adjacent areas refer to Appendix I 204(c) for the West Chichagof-Yakobi Area. These claims are inactive at this time.

Ushk Bay has 160 mineral claims which involve approximately 1200 acres. These claims were filed in 1974.

North Suloia Bay has 11 claims which involve approximately 220 acres. These claims were filed in 1967 and are active now.

Yakobi Island has a block of 331 claims which were filed in 1972 and are active at this time. Lisionski Bay has 100 claims which were filed in early 1970 and for the most part are active at the present time.

In summary, there are approximately 540 claims on the area which have been filed during the past 10 years. These claims vary in activity from year to year. A withdrawal would have a serious impact upon the mineral resource in this area.

3. Present Users

There are a number of Forest Service special use permits within the area. There is private land within the area. Fishermen fish the streams, rivers and bays and a few people trap the area during the fall and winter months. Logging has occurred in the area. Beach combing is a use that is increasing. Brown bear and Sitka deer are hunted during the fall. For an overview on this subject for adjacent areas see Appendix I.204(c) for West Chichagof-Yakobi Area.

4. Proposed Use Conflict

Should this unit be withdrawn under section 204(c) it would conflict with timber harvest as allocated through the TLMP for LUD III and IV management areas. It would also preclude exploration and developing of the mineral resource in an area having medium to high potential for mineral location and possible development. This unit also has a high

potential for hydroelectric power development which would be allowed under a withdrawal. State land selections would not be allowed under a withdrawal.

5. Specific Use Requirement

This unit was designated through the TLMP process as LUD III and IV. Areas designated as LUD III and IV allow a variety of uses such as timber harvesting, mineral prospecting, location and development, hunting and fishing. Each activity is managed under various laws, regulations and guides and contribute substantially to the social and economic wellbeing of southeast Alaska. A withdrawal of the area under section 204(c) would preclude this area from contributing its designated portion of resources in reaching the desired planned level.

6. Suitable Alternative

Other areas in the Tongass are as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal. See Appendix I 204(c) report. As a LUD III and IV management unit, it is a part of the LUD III and IV complex from which the commodity and market resources of the Tongass must come to meet the social and economic needs of southeast Alaska. Any reduction of the LUD III and IV acreage will have a direct adverse effect on the flow of commodity and market resources upon which the economy of the area is dependent. Therefore, no suitable alternative areas can be considered available for this unit's land use designation.

7. Consultation

See Appendix I of the 204(c) report for West Chichagof-Yakobi.

8. Effects on State and Local Governments

This unit was classified as LUD III and IV through the TLMP process and this decision was made after intensive involvement of State and local governments. The adverse impact upon withdrawal of this unit would be significant.

9. Term of Withdrawal

Through the TLMP process this unit was classified as LUD III and IV. Withdrawal under 204(c) is not recommended.

10. Public Involvement

See Appendix I of the 204(c) West Chichagof-Yakobi.

11. Location of Records

See Appendix I of the 204(c) West Chichagof-Yakobi.

12. Geology

See Appendix I of the 204(c) West Chichagof-Yakobi.

Duncan Canal
12 Point Analysis

Size: Approximately 163,000 acres

Location: 10 miles west of Petersburg, Alaska

Management Area: TLMP, S-13, S-14, and a portion of S-10

Land Use Designation: LUD II, III, and IV

DUNCAN CANAL

Description

This 163,000 acre unit is located approximately 10 miles west of Petersburg, Alaska on Kupreanof Island in Southeast Alaska. This is an "interior" island being about 75 miles towards the mainland and sheltered by other large islands from the Gulf of Alaska. The unit composes most of the drainages into Duncan Canal and includes Towers Arm and Castle River. The landscape is a typical U-shaped valley with Hemlock-Spruce forest and muskeg on sites having poor drainage. This unit includes all or portions of S-10, S-13, and S-14. Primary access into the area is via boat or float plane.

12 Points1. Proposed Use

There have been timber harvesting activities on this area in past years. The TLMP has designated the area as LUD II, III and IV. A portion of the area was designated in the TLMP process as LUD I and this area has been recommended as wilderness and as stated in Appendix I a plan will be prepared for management. The LUD II portion was determined as the best alternative for management of a portion of the area and that portion borders the LUD I area on the west. The LUD III and IV portions would be managed for all resources and specific management direction is described in the TLMP.

2. Natural Resource Use and ValueRecreation

There are Forest Service cabins and special use permits within the area. Waterfowl hunting is quite popular along with fishing and hunting of big game species. The area is used quite extensively by local residents of Petersburg due to the protected water access route. Float planes are also used to access the area. Beachcombing is becoming popular in the area as is sightseeing and with Duncan Canal a major migration route for waterfowl birdwatching activities are increasing.

Wildlife and Fish

This unit supports moderate populations of black bear, deer, furbearers and other species of wildlife typical of southeast Alaska. There are streams within the area that support moderate numbers of Dolly Varden and cutthroat trout. Salmon sport fishing is popular in Duncan Canal for five major salmon species. Waterfowl are present in abundant numbers at various times of the year and the area is quite popular for both duck and goose hunting.

Eustarine resources were rated as high for this area.

Timber

There are approximately 21,000 acres of operable commercial forest land in this unit classified as LUD III and IV by the TLMP as a component of the LUD complex upon which the flow of commodity and market resources is dependent these units contribute 4.6 MM board feet of the annual harvest of the Tongass National Forest. This volume is significant unto itself and it is also a part of the balance that was reached in the TLMP designated to maximize amenity and wilderness values while maintaining the established industry and the social and economic stability of southeast Alaska. Withdrawal of this unit would adversely effect the overall balance and reduce the flow of timber in direct proportion to the annual yield within the unit.

Minerals

There are 33 claims located in the area. Gold, silver, lead, copper, zinc and barium are the minerals generally associated with the mining activities. During 1978 the Amoco Mineral Company filed several large blocks of claims not included in the numbers above. The minerals sought are believed to be copper, zinc, silver, and gold.

In general there has been considerable exploration on the area during the past years. A withdrawal under 204(c) would preclude further mineral exploration of the mineral resources.

3. Present Users

Present users were described partially under item 2 of this section; however, hunting, fishing, sightseeing and mining comprise the activities of most users. There are Forest Service recreational cabins present and special use permits on the area. Commercial fishermen use the coves as a refuge from rough winters during inclement weather.

4. Proposed Use Conflict

Portions of this area through the TLMP process were designated as LUD III and IV. This designation would allow timber harvest and mining prospecting and location to occur. A withdrawal under 204(c) would preclude these activities.

5. Specific Use Requirements

This unit was designated as LUD II, III, and IV in the TLMP and a withdrawal under 204(c) is not consistent with the purpose of this designation.

6. Suitable Alternatives

Other areas in the Tongass are as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal--see Appendix I. This management unit consists of LUDs II, III, and IV and is an integral part of the overall LUD complex from which the commodity and market resources of the Tongass must come to meet the social and economic needs of southeast Alaska. Any significant reduction of the LUDs II, III and IV acreage will have a direct adverse effect on the flow of commodity and market resources upon which the economy of the area is dependent; therefore, no suitable alternative areas can be considered available for this unit's land use designation.

7. Consultation

See Appendix I of the 204(c) report for the Petersburg River report.

8. Effects on State and Local Governments

This unit was classified as LUD II, III and IV through the TLMP process and this decision was made after intensive involvement of State and local governments. The adverse impact upon these various governments by a withdrawal of this area under 204(c) would be significant.

9. Term of Withdrawal

Through the TLMP process this unit was classified as LUDs II, III and IV. Withdrawal under 204(c) is not recommended.

10. Public Involvement

See Appendix I of the 204(c) Petersburg River report.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Stikine Area, Tongass National Forest
P.O. Box 309
Petersburg, Alaska 99833

Regional Forester
U.S.D.A. Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

The Duncan Canal area is generally underlain by sedimentary clastic rocks, calcarous, and volcanic rocks of Devonian age. These formations are part of the Duncan anticlinorium that strikes southeast from the northwest end of Kupreanof Island east of Cape Bendel along Duncan Canal and across the central part of Zarembo Island. Along the core of this anticlinorium the beds are folded into several anticlines and synclines. Duncan Canal is eroded along the crest of a closely folded anticline and pillow lava and andisitic tuff and breccia are exposed in a synclinal trough that lies along a line from Castle Islands through Deception Cove on Woewodski Island.

Idaho Inlet-Mud Bay
12 Point Analysis

Size: Approximately 109,000 acres

Location: 40 miles northwest of Sitka, Alaska

Management Area: TLMP - C-26 and C-27

Land Use Designation Areas: LUD II and LUD III

IDAHO INLET-MUD BAY

Description

Idaho Inlet-Mud Bay area is located on the northwest part of Chichagof Island and is approximately 40 miles north of Sitka, Alaska. This area includes Trail River and its tributaries and the Mud Bay River drainage north from Otter Lake. The western boundary bisects the Indian Peninsula and encompasses the Idaho Inlet drainage. Idaho Inlet drainage has very steep ridges that rise to approximately 3000 feet in elevation and the inlet itself extends approximately 10 miles inland. The southern boundary is defined by the ridge that divides the drainages to the south into Tenakee Inlet, Port Frederick region. This area contains approximately 109,000 acres of lands administered by the Forest Service. The average annual precipitation in this area ranges from 100 to 180 inches per year. The average annual temperature is approximately 43° F.

Vegetation is predominately dense Sitka spruce and Western Hemlock timber stands. About 20% of the area is muskeg which is composed of sphagnum moss, grasses, sedges, and stunted conifers. About one third of the area is alpine which consists of forbs, sedges, grasses and shrub-like trees.

12 Points1. Proposed Use

In 1975, the Idaho Inlet-Mud Bay area was proposed by SEAC to be managed as a wilderness or roadless area managed primarily for recreation purposes. The Tongass Land Management Plan (TLMP) has classified the area as Land Use Designation (LUD) II and III. With the western portion as II, the eastern portion III. Uses within these LUD areas are described in the introduction of this report.

2. Natural Resource Use and Value

This area has a wide variety of resources as found throughout southeast Alaska. It is used extensively by residents of Hoonah, Pelican, and to a limited degree by residents of Sitka and Juneau for hunting, fishing, sightseeing, and trapping. The area was used for fox farms, timber harvest, exploration and mining in past years. It was scheduled to contribute significantly in supply timber volumes to meet the timber volume requirements of the timber sale under contract to Alaska Lumber and Pulp located in Sitka, Alaska.

Recreation

A trail between Idaho Inlet and Tenakee Inlet has been proposed to become a part of a trail loop system with Port Frederick. A recreation cabin has been proposed in Mud Bay. There are no existing Forest Service recreation cabins in the area at this time.

Sport fishing in the inland lakes within the area is a popular recreation activity. There are no Forest Service recreation cabins within the unit boundaries; however, a proposal has been made to construct a cabin primarily for bird watching and hunting. Beach combing, clamming and other shore related recreational opportunities exist and are being pursued. An excellent view of Glacier Bay can be obtained from observation points in this area.

Wildlife and Fish

There is abundant wildlife in the Idaho Inlet-Mud Bay area. Particularly heavy concentrations of brown bear and waterfowl are present in Mud Bay. The estuary in Mud Bay is used by geese, ducks and shorebirds continually in the spring and fall and is known as one of the best waterfowl resting areas in southeast Alaska. The tidal flat at the head of Idaho Inlet as well as Trail River and Marble Creek are intensively used in spring by brown bear.

Mud Bay River supports extensive populations of Dolly Varden char, cutthroat trout, as well as pink, coho, chum, and sockeye salmon and possibly steelhead. Mud Bay supports dungeness, king, and tanner crab, which are fished commercially.

The fisheries task force working report (TLMP) rates Idaho Inlet as high quality for sport fishing and very high for commercial fishing. Estuarine habitat throughout the area is very valuable, especially for waterfowl habitat and as a spring feeding area for brown bear.

Timber

There are approximately 12,000 acres of operable commercial forest land in this unit. As a component of the LUD complex upon which the flow of commodity and market resources is dependent, these units contribute 2.5 MM board feet of the annual harvest of the Tongass National Forest. This volume is significant unto itself and is also a part of the balance that was reached in the TLMP designed to maximize amenity and wilderness values while maintaining the established industry and the social and economic stability of southeast Alaska. This was to assist in fulfilling a portion of the timber volume associated with the long term timber sale contract with Alaska Lumber and Pulp. Withdrawals of this unit would adversely effect this overall balance and reduce the flow of timber in direct proportion to the annual yield within the unit.

Minerals

The dominant rocktypes are diorites and quartz-diorites which have intruded into the metamorphics of the east side of Idaho Inlet. The Northern Mud Bay region is predominately greywackes, argillites, and

conglomerates. The contacts are intrusive and along faults. The valley bottoms are alluvial deposits.

Joseph A. Nava of the Institute of Arctic Biology in Fairbanks reported to the FS in 1974 of having spotted a hot spring on the slopes west of Neka River and about three miles upstream from Neka Bay. Another hot spring is reported at the head of Mud Bay, but its existence has never been confirmed.

Potential for geothermal resources is unknown at present. There are no mining claims within the withdrawal area. There is a claim just southeast of the boundary, about two miles east of Otter Lake, named "Neka Bay #1". copper and iron were located there.

Future potential for mineral production is unknown, so no evaluation of economic impacts of withdrawal can be made.

3. Present Users

Present users of this area consist of sport hunters and fishermen who fish the lake and streams. Commercial fishermen fishing the Icy Straits area use the bays and inlets for shelter during periods of inclement weather. Hunters searching for brown bear use Idaho Inlet and Mud Bay. Recreationists from surrounding communities visit the area to beachcomb, sightsee and photograph wildlife. Local residents from surrounding communities also use the natural resources of this area for subsistence food gathering.

4. Proposed Use Conflicts

This area was classified in TLMP as LUD II and III. Areas classified as LUD II will remain in a roadless state to maintain their unroaded character, however, areas classified as LUD III will be managed for a variety of uses including harvesting of timber, mining, hunting and fishing, etc. Access roads will be needed in the LUD III area for a variety of purposes. Under a withdrawal timber harvest would be precluded.

5. Specific Use Requirement

This unit was designated as LUD II and III through the TLMP process and withdrawal under 204(c) is not consistent with this designation.

6. Suitable Alternative

Other areas in the Tongass are as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal.

See Appendix I. As a LUD II and III management unit, it is a part of the LUD II and III complex from which the commodity and market resources of the Tongass must come to meet the social and economic needs of southeast Alaska. Any reduction of the LUD II and III acreage will have a direct adverse effect on the flow of commodity and market resources upon which the economy of the area is dependent. Therefore, no suitable alternative areas can be considered available for this unit's land use designation.

7. Consultation

The land allocations that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for the TLMP. The current LUD II and III classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local, and Federal Government interests.

Further public input will be received during the Regional planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effects on State and Local Governments

This unit was classified as LUD II and III through the TLMP process and this decision was made after intensive involvement of State and local governments. The adverse impact upon withdrawal of this unit would be significant.

9. Term of Withdrawal

Through the TLMP process this unit was classified as LUD II and III. Withdrawal under 204(c) is not recommended.

10. Public Involvement

This information was covered under item 7 above.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chatham Area, Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Idaho Inlet-Mud Bay is underlain almost entirely by highly crystalized rocks of Mesozoic and Paleozoic age and by extensive bodies of igneous rocks that are dominately dioritic in composition. Within this area the regional trend of the rocks is northwest.

The main period of intrusion probably took place during the latter part of the Cretaceous time. The dioritic body itself consists of multiple injections of magma which were dioritic in composition. Probably the intrusions were related to the major structures of the area. The magma was widely intruded into the Coast Range of Alaska and Canada and occurs as an elongated tongue which extends as far south as southern Baranof Island.

Keku Strait (Rocky Pass)
12 Point Analysis

Size: Approximately 82,000 acres

Location: 30 miles west of Petersburg, Alaska

Management Area: TLMP S--12

Land Use Designation: LUD II

KEKU STRAIT (ROCKY PASS)

Description

Rocky Pass is a narrow water passage separating Kupreanof and Kuiu Islands on the Tongass National Forest in southeast Alaska. Its name is derived from the numerous rocky shoals and islands which make passage by vessels larger than commercial fishin boats impractical. It is located approximately 10 miles south of the village of Kake and 30 miles west of Petersburg, Alaska.

The withdrawal area encompasses the major view areas on Kuiu and Kupreanof Islands as seen from boats traversing the passage. It extends from Keku Strait on the north to Three Mile Arm on the south. The east boundry is the only one of the area that does not follow watershed divides.

The area has long been recognized as an important wildlife area because of its unique shoreline characteristics and its use by both resident and migratory waterfowl and mammals.

The scenic quality is high but the area offers no particularly unique or special distinguishing scenic or scientific features.

Vegetative cover is typical of southeast Alaska with the hemlock-spruce forest throughout the landscape interspersed with muskegs. Numerous large and small streams drain into Rocky Pass from both the Kupreanof and Kuiu Island areas.

The total area encompassed by this withdrawal is 82,000 acres.

All of the public land within the management area is classified as National Forest administered by the U.S. Department of Agriculture, Forest Service. All tidelands belong to the State of Alaska.

The State of Alaska has applied for 602 acres of land on High Island within this withdrawn area under provisions of the Statehood Act. The selection was approved by the Forest Service on January 11, 1979. Title to the land will be given to the State after the appropriate surveys take place.

Under the Alaska Native Claims Settlement Act of 1971, the Sealaska Native Corporation has applied for patent to one historic village site encompassing 11 acres on the northern entrance of Rocky Pass near Dakaneek Bay. No action has been taken since this was applied for on December 12, 1975.

12 Points1. Proposed Use

This area was classified in the TLMP process as LUD II to be managed in a roadless state to retain its wilderness character. This classification would permit wildlife and fish habitat improvement and primitive recreational development. This designation would exclude roads except for specifically authorized uses, and timber harvest except for controlling insect infestations or to protect other resource values. No major recreational facilities would be developed.

2. Natural Resource Use and ValuesRecreation

Recreation use is centered along the waterway and at two Forest Service administered public recreation cabins at Devil's Elbow and Big John Bay. These are used predominately for migratory waterfowl hunting. Deer hunting also was significant until closure of the hunting season in 1972 because of low numbers. This deer hunting closure is still in effect.

Subsistence use, berrypicking, and fishing occur within this area but these activities would be more prevalent the closer one gets to Kake.

Recreation use is relatively light since no roads are in the area. Access is by float plane or boat. On both Kuiu and Kupreanof Islands roads are within hiking distance of the unit boundaries and thus facilitates some use along the fringe of the unit.

Water access is limited to small boats due to the rocky and shallow nature of the Rocky Pass channel.

Wildlife and Fish

The relatively sheltered nature of Rocky Pass with its many islands and intertidal flats provides an excellent quantity, quality and variety of habitats for both resident and migratory waterfowl and mammals. Relatively little harvest of the game species takes place because of the remoteness of the area from population centers.

The adjacent saltwaters rate high for both sports and commercial fishing.

Black bear, Sitka black-tailed deer, numerous furbearing species, shore birds and bald eagles inhabit the area. The area has been closed to deer hunting since 1972 because of low deer numbers.

Timber

Timber values are moderate in this area and timber harvest is not planned. Of the 82,000 acres in the area, about 18,400 acres are considered operable commercial forest lands.

Minerals

No mining claims are known to be present in this area. The extent of intensive mineral exploration is unknown. This area is within the Kupreanof mining district that is known to have gold, silver, and traces of platinum, lead, copper, zinc and barium.

3. Present Users

Present users of the area include a relatively few sport hunters and fishermen and others pursuing general outdoor enjoyment activities. Both sport and commercial fishermen using small boats use the waters of Rocky Pass for salmon and crab fishing.

4. Proposed Use Conflicts

This area was classified through the TLMP process as LUD II. As such, it would be managed to retain its wilderness character. Typically, timber harvest or roads construction would not be routinely allowed but could take place for specific purposes with specific authorization in order to protect other resource values. Such uses, as unlikely or infrequent as they might be, would be precluded by a withdrawal.

State land selection, if the State desired to expand to other islands adjacent to High Island, would be precluded by a withdrawal.

5. Specific Use Requirements

As a LUD II area, the possibility exists for very limited timber harvest and road construction. Mineral entry and State land selection are also possible. These potential uses are not consistent with the management direction under a withdrawal classification.

6. Suitable Alternatives

Other areas on the Tongass are as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal.

This unit, because of its moderate topography, has a potential to provide low impact road access to adjacent LUD IV areas that are to be managed

for intensive resource use. Alternative routes for access are available but their use would result in significantly greater impacts on the land.

7. Consultation

The land allocation that occurred during the TLMP process required extensive public involvement which was documented in the EIS prepared for that plan. The current LUD II classification was a result of the involvement of many individuals, organizations, agencies, corporations, and State, local and federal government interests. Further public input will be received during the Regional Planning process, and in August hearings are planned to meet the specific requirements of FLPMA.

8. Effect on State and Local Governments

Since this area was classified as LUD II during the TLMP process and this decision was made after intensive involvement of State and local governments, the adverse impact on State and local interests would be substantial.

9. Term of Withdrawal

Through the TLMP process this unit was classified as a LUD II and withdrawal under 294(c) is not recommended.

10. Public Involvement

This information is covered in both the introduction and under item 7 above.

11. Location of Records

Records may be found at the following locations.

Forest Supervisor
Stikine Area, Tongass National Forest
P.O. Box 309
Petersburg, Alaska 99833

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

Keku Straits are generally underlain by a series of volcanic rocks ranging from Pliocene through Miocene age. At the north end of the

area several intrusions are exposed. These consist of basic rocks mainly diorete, gabbro and norite. (Geological Map of Southeast Alaska).

Intensive geological studies, specific to the area, have not been made and/or more detailed information is not known or not available.

ENDICOTT RIVER
12 Point Analysis

SIZE: Approximately 14,000 acres

LOCATION: Chilkat Peninsula

MANAGEMENT AREA: TLMP, C-16 (Eastern portion of VCU 105C)

LAND USE DESIGNATION, TLMP: LUD III

ENDICOTT RIVER

Description

This area is adjacent to the Endicott River area (LUD I) which was described and discussed in Appendix I. It has been classified as LUD III in the Tongass Land Management Plan (TLMP). The area is bounded by Lynn Canal on the east and the Endicott River area (LUD I) on the west. It is approximately 14,000 acres in size. There is no private land within or immediately adjacent to this area.

12 Points1. Proposed Use

This area was classified in the TLMP process as LUD III. LUD IIIs permit a variety of uses including timber harvest, mining, recreation, fishing, and hunting. A road has been proposed through this area to access resources within and adjacent to it. There has been mineral exploration and location in this area during the past years although none are active at the present time.

2. Natural Resource Use and ValuesRecreation

This resource is described in 204(c) Appendix I; however, it should be noted that a possible land access route to Glacier Bay National Monument exists through this unit. Trail access from Lynn Canal through the unit and on to Glacier Bay is possible. Present lack of access restricts public use of this area.

Wildlife and Fish

An estuarine area at the mouth of the Endicott River provides habitat for waterfowl and tidal life. Nesting sites for eagles are found along the lower reaches of the Endicott River. The Endicott River in this area has been rated as high for its contribution to the commercial fishing industry. For further details, refer to Appendix I Endicott River 204(c) report.

Timber

There are approximately 900 acres of operable commercial forest land in this unit classified as LUD III by the TLMP as a component of the LUD complex upon which the flow of commodity and market resources is dependent. This unit contributes 0.3 MM board feet of the annual harvest

of the Tongass National Forest. This volume is significant unto itself and it is also a part of the balance that was reached in the TLMP designated to maximize amenity and wilderness values while maintaining the established industry and the social and economic stability of southeast Alaska. Withdrawal of this unit would adversely effect the overall balance and reduce the flow of timber in direct proportion to the annual yield within the unit.

Minerals

This unit is located in a geologic region that is highly favorable for metallic and related nonmetallic deposits. Minerals that have been recorded are gold, silver, and lead. Claims that have been located in the area are not active at the present time. For a more detailed analysis of the mineral situation adjacent to the unit, refer to Appendix I, Endicott River area.

3. Present Users

Refer to Appendix I, Endicott River area 204(c) report.

4. Proposed Use Conflicts

If this unit is withdrawn under section 204(c), it would conflict with and preclude access to and from the LUD III unit south of the Endicott River as well as any possibility of a road terminus at the Endicott River which could provide access to a trailhead for a overland trail to the Glacier Bay National Monument and to the Endicott River LUD I proposed wilderness area. Without such access, the Endicott River proposed wilderness becomes for all practical purposes inaccessible. With the exposed shoreline of Lynn Canal and total lack of anchorage along that shore the area could be used and enjoyed only by a few who risk aircraft landings on the beach or leave boats anchored in exposed and generally unacceptable conditions. The LUD III prescription would permit exercise of the Haines, Endicott River road option plus the harvest of timber in adjacent LUD IIIs as prescribed in TLMP.

5. Specific Use Requirements

This unit was designated as LUD III in the TLMP and a withdrawal under 204(c) is not consistent with purpose.

6. Suitable Alternatives

Other areas in the Tongass are as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal. See Appendix I. As an LUD III management unit, it is a part of the LUD III complex from which the commodity and market resources of the Tongass

must come to meet the social and economic needs of southeast Alaska. Any reduction of the LUD III acreage will have an adverse affect on the flow of commodity and market resoures upon which the economy of the area is dependent. Therefore, no suitable alternative areas can be considered available for this unit's land use designation.

7. Consultation

See Appendix I of the 204(c) report for the Endicott River area.

8. Effect on State and Local Governments

This unit was classified as LUD III through the TLMP process and this decision was made after intensive involvement of State and local governments. The adverse impact upon withdrawal of this unit would be significant.

9. Term of Withdrawal

Through the TLMP process this unit was classified as LUD III. Withdrawal under 204(c) is not recommended.

10. Public Involvement

See Appendix I of the 204(c) Endicott River report.

11. Location of Records

See Appendix I of the 204(c) Endicott River report.

12. Geology

See Appendix I of the 204(c) Endicott River report.

Mansfield Peninsula
12 Point Analysis

Size: Approximately 87,000 acres

Location: Northern portion of Admiralty Island

Management Area: TLMP - C-21

Land Use Designation: LUD III

MANSFIELD PENINSULA

Description

Mansfield Peninsula is located on the northern tip of Admiralty Island approximately 10 miles west of Juneau, Alaska. The area is approximately 87,000 acres in size.

The Peninsula has a relatively regular coastline, interrupted by several significant waterways and bays. Beginning at the southern portion of the west coast is Hawk Inlet, a narrow waterway which clearly delineates the Peninsula from the remainder of the island. Midway up the western coast is Funter Bay with several extremely small coastal islands. Along the eastern coastline of the Peninsula, Barlow Cove extends from Point Retreat into the Peninsula approximately 5 miles. Finally, Young Bay is defined by the southeastern shoreline of the Peninsula and the Point Young northern coastline of Admiralty Island.

The western coastline of the Peninsula lies within a rain-shadow. Thus, while Point Retreat, at the northern tip of the Peninsula, reports annual precipitation of 79 inches and an average annual temperature of 42.20 F, the Funter Bay area is notably drier and colder. Funter Bay experiences annual precipitation of 40-50 inches.

The Peninsula includes one area, south of Funter Bay, which reaches an elevation of 3000 feet at Robert Barron Peak. The remainder of the Peninsula is relatively low elevation, general forest zone with characteristically rolling country and extensive muskeg and scrub timber.

Mansfield Peninsula is an area of relatively low-lying topography with vegetation types and animal species typical of scrub forest and muskeg terrain. Characteristic vegetation includes lodgepole pine, mountain hemlock, and Alaska cedar. The surface vegetation of the muskegs includes sedges, grasses, and sphagnum moss.

In the past, the Mansfield Peninsula included several developed areas. Today the Funter Bay Mine and other developed mining sites are abandoned and in a state of collapse; the Hawk Inlet Cannery has burned with no known plans to rebuild. Remaining is the single settlement at Funter Bay where occupational use is combined with hunting and fishing activities.

The Coast Guard maintains navigational beacons along the shoreline; there is an unmanned lighthouse at Point Retreat, on the northern tip of the Peninsula. There is no road system.

Thus, except for recreational users, the primary current activity on the Peninsula is minerals exploration.

Aside from Mansfield Peninsula's proximity to Juneau and its subsequent recreational popularity there are few apparent unique attractions. The Peninsula is typical of much of the low, rolling, and somewhat block landscapes of southeast Alaska. Several prominent old growth forest stands exist within low scrubby muskeg regions. Perhaps the most interesting features of the Peninsula are its deep protected bays and its scenic island complex above Barlow Cove and Point Retreat, the site of a now abandoned light station.

12 Points

Recreation

There are 15 special-use permits currently issued on the Peninsula, all but one for recreation residences and cabins. Five are at Funter Bay (including one non-recreation residence permit); 2 are at Barlow Cove; 4 are on Bear Creek; and the remaining permits are located individually at Pt. Symonds, Piling Point, and Hawk Inlet. There are no Forest Service public recreation cabins on the Peninsula.

The Mansfield Peninsula is perhaps the most popular boating, fishing, and hunting area in easy reach of Juneau recreationists. Funter Bay and Hawk Inlet on the west coast of the Peninsula are popular destination anchorages and afford consistently good opportunities for fall hunting. They also provide convenient transient anchorate for Juneau boaters traveling to and from Glacier Bay. The eastern waters of the Peninsula are extremely popular for sport fishing and pleasure boating. Fall hunting, primarily for deer, is popular from Barlow Cove to Admiralty Cove.

Recreation facilities on Mansfield Peninsula are oriented to a few private cabins scattered throughtout the Peninsula and small picnic areas. Most recreationists use their boats or tents as overnight facilities.

Wildlife and Fish

Because of its prime habitat, the Mansfield Peninsula is supportive of excellent deer populations. Waterfowl populations are rated good and are found at the heads of most bays with the head of Hawk Inlet the most well-populated location.

Estimated salmon escapement on Mansfield Peninsula is 55,000; trout and char escapement, 2,000. These estimates, for use only as approximate comparison, indicate low fishery values when compared to Admiralty Island.

Timber

There are 32,000 acres of operable commercial forest land in this unit. As a component of the LUD III complex upon which the flow of commodity and market resources is dependent. These units contribute 6.7 MM board feet of the annual harvest of the Tongass National Forest. This volume is significant unto itself and it is also a part of the balance that was reached in the TLMP designated to maximize amenity and wilderness values while maintaining the established industry and the social and economic stability of southeast Alaska. This was to assist in fulfilling a portion of the timber volume associated with the long term timber sale contract with Alaska Lumber and Pulp Company. Withdrawal of this unit would adversely effect the overall balance and reduce the flow of timber in direct proportion to the annual yield within the unit.

Minerals

This unit is located within a geologic region that is highly favorable for metallic and related non-metallic deposits. There are approximately 350 claims located in the area, 64 of which are patented. The area of high density of claims is about midway down the Peninsula and the minerals claimed are gold, silver, copper, lead, nickel and cobalt.

3. Present Users

Present users of the Mansfield Peninsula area are miners, hunters and fishermen, sightseers, beachcombers and hikers that have limited time and use the area due to its proximity to Juneau.

4. Proposed Use Conflicts

Mineral exploration and possible development would not be consistent with section 204(c) withdrawal. The area is within a zone of known mineral potential and this is evident by the number of claims present.

Timber harvest would not be consistent with section 204(c) withdrawal. Portions of this unit are heavily timbered and through the TLMP process the entire area was designated as a LUD III which would permit timber harvest and a variety of other resource uses.

5. Specific Use Requirements

This unit was designated as LUD III in the TLMP and a withdrawal under 204(c) is not consistent with that classification.

6. Suitable Alternative

Other areas in the Tongass are as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal. See Appendix I. As a LUD III management unit, it is a part of the LUD III complex from which the commodity and market resources of the Tongass must come to meet the social and economic needs of southeast Alaska. Any reduction of the LUD III acreage will have a direct adverse effect on the flow of commodity and market resources upon which the economy of the area is dependent. Therefore, no suitable alternative areas can be considered available for this unit's land use designation.

7. Consultation

See Appendix I of the 204(c) report for this subject area.

8. Effects on State and Local Governments

This unit was classified as LUD III through the TLMP process and this decision was made after intensive involvement of State and local governments. The adverse impact upon withdrawal of this unit would be significant.

9. Term of Withdrawal

Through the TLMP process this unit was classified as LUD III. Withdrawal under 204(c) is not recommended.

10. Public Involvement

See Appendix I of the 204(c) for public involvement.

11. Location of Records

Records may be found at the following locations:

Forest Supervisor
Chatham Area, Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Regional Forester
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802

12. Geology Report

The Juneau synclinorium which borders the coast range batholith on the west is a huge down-warping trough, the axis of which extends along Lynn Canal, Stephens Passage, and Seymour Canal. The western limb includes rock formations along the eastern half of Admiralty Island.

Immediately adjoining the synclinorium to the west is the Funter anticline, a local structure, the nose of which is shown by a marker unit of marble found on the southeastern side of Funter Bay. The marker bed pitches southeast at a low angle and is traceable to a point near Point Retreat. The Retreat group, a metamorphosed rock strata of interlayered sericite schist, green schist, slate, and graywacke at least 6000 feet thick overlies the marble. A pluton of quartz-diorite borders and perhaps underlies the group.

Southeast of the bay and on the western slope of Robert Barron Peak, a basic sill variously described as an olivine diabase dike; a basic sill; and as a gabbro has been intruded into the Retreat group of rocks. The sill is mineralized with sulfides of nickel and copper (Henry Jones; report of Admiralty Alaska Gold Mining Co., 1961).

Tracy Arm-Fords Terror
12 Point Analysis

Size: Approximately 24,000 Acres

Location: 50 Miles Southeast of Juneau, Alaska

Management Area: TLMP, C-12

Land Use Designation, TLMP: LUD II

Tracy Arm-Fords TerrorDescription

This portion of the Tracy Arm-Fords Terror area is located on the mainland approximately 50 miles southeast of Juneau, Alaska. This unit is approximately 24,000 acres in size and it was designated as LUD II in TLMP and is located in the Holkham Bay area with an extension along Tracy and Endicott arms. Portions of the unit are heavily forested with hemlock and spruce. Establishment of a marina and recreation use site is currently being considered for use as an entry point for the Tracy Arm-Fords Terror proposed wilderness area. For an oversight of the adjacent area refer to the Tracy Arm-Fords Terror section in Appendix I of the 204(c) report.

B. 12 Points1. Proposed Uses

The area has been designated through the TLMP as a LUD II area which is defined in the introduction of this appendix. In general, this LUD II designation would allow roads only under very specific conditions and these are described in the TLMP. A timber sale (Gilbert Bay) has been proposed for the LUD III area directly north of this area. One proposed access from the sale area to saltwater is through a portion of this area to Williams Cove. An EIS is in the preparation stage at this time to analyze the impact the sale and related activity would have on this area.

A proposed marina and recreation site has been proposed for a portion of this unit as a jumping-off place for recreationists using the proposed Tracy Arm-Fords Terror wilderness. Due to the distance from Juneau and Petersburg to the proposed wilderness and the fuel capacity of most recreation boats, bringing enough fuel to safely make the trip and return is a problem. A marina to adequately handle fuel and possibly supplies for the recreationist has been suggested and this is currently being studied for feasibility.

Access to this area is by boat or airplane and the primary recreation opportunity available is hunting, fishing, sightseeing, and some beachcombing.

There are mining claims within and adjacent to the area. These claims are active at the present time. There are approximately 100 acres of private land in the area.

There are proposed State and Native land selections located in the area near the confluence of Tracy Arm and Endicott Inlet.

2. Natural Resource Use and Values

Recreation

The area is used primarily by hunters, fishermen, sightseers, and beachcombers. It serves as a gateway for access to the Tracy Arm-Fords Terror proposed wilderness area. Most recreationists reach the area via boats, however, some aircraft are also used to a limited degree. For a more detailed review of the recreation resource on adjacent areas see Appendix I 204(c) report for the Tracy Arm-Fords Terror area.

There are no Forest Service recreation cabins in the area, however, there are a few abandoned trapper cabins. These cabins are in various states of disrepair.

Wildlife and Fish

Mountain goat, wolverine, furbearers, black and brown bear, and a few Sitka black-tailed deer are found in the area. Bald eagles and shore birds are found near the coastal areas. Seals, whales, and sealions are found in the area at certain times of the year. The bays and coves of the area are considered as excellent rearing sites for anadromous fish as well as for shellfish, and herring. The occurrence of floating ice limits commercial fishing.

Timber

There is operable commercial forest land in this unit. The values associated with timber harvest were determined to be secondary to the associated recreation values. Based upon that determination, the area was classified in TLMP as LUD II and will be managed in a roadless condition. This unit was included in the Ketchikan Pulp Company's long-term timber sale contract. Due to the LUD II classification only limited timber activity is planned in this area.

Minerals

There are approximately 50 mining claims located within the area. Minerals claimed are gold, silver, and lead. Significant exploration activity has occurred in the area during the past several years. The area was rated as being a moderate to high mineral potential area for mineral occurrence.

Placid Oil Company's mineral exploration activities have been in progress in this area for several years. A group of claims near Williams Cove have been staked and patented.

3. Present Users

This topic has been discussed under item 1 above, and for a general overview for the area see Appendix I 204(c) for Tracy Arm-Fords Terror area.

4. Proposed Use Conflicts

Mining location and development would not be permitted under a 204(c) withdrawal. The area has been rated between moderate and high for mineral probability. There has been a past history of active mineral exploration by various individuals and companies seeking commercial mineral deposits and this is still occurring.

Proposed State selections are located in the area. These would not be permitted under a 204(c) withdrawal.

5. Specific Use Requirements

This unit was designated as LUD II in the TLMP which allows various activities to occur. A withdrawal under 204(c) is not consistent with this purpose.

6. Suitable Alternatives

Other areas in the Tongass area as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal (see Appendix I). As a LUD II management unit it contributes significantly to the complex from which the commodity and market resources of the Tongass must come to meet the social and economic needs of southeast Alaska. A reduction of the LUD II acreage will have a direct adverse effect on the flow of commodity and market resources upon which the economy of the area is dependent. Therefore, no suitable alternative area can be considered available for this unit's land use designation.

7. Consultation

See Appendix I of the 204(c) report for the Tracy Arm-Forts Terror area.

8. Effect on State and Local Governments

This unit was classified as LUD II through the TLMP process and this decision was made after intensive involvement of State and local government. The adverse impact upon withdrawal of this unit would be significant.

9. Term of Withdrawal

Through the TLMP process this unit was classified as LUD II. Withdrawal under 204(c) is not recommended.

10. Public Involvement

See Appendix I of the 204(c) Tracy Arm-Fords Terror report.

11. Location of Records

See Appendix I of the 204(c) Tracy Arm-Fords Terror report.

12. Geology

See Appendix I of the 204(c) Tracy Arm-Fords Terror report.

YAKUTAT FORELANDS 12 Point Analysis

SIZE: Approximately 319,000 acres

LOCATION: 20 miles Southeast of Yakutat, Alaska

MANAGEMENT AREA: TLMP, C-53, C-58, C-59 and Portions of C-57
and C-60

LAND USE DESIGNATION, TLMP: LUD II, III, IV

YAKUTAT FORELAND

Description

This portion of the Yakutat Foreland area begins approximately 20 miles south of Yakutat, Alaska, at the Dangerous River and progresses south to the Alsek River. It is bounded on the west by the Gulf of Alaska and on the east by the existing National Forest boundary. Also included is that portion of the proposed National Forest addition of public domain land at Harlequin Lake. It encompasses all or part of the following Forest Management Areas (see TLMP): C-53, C-57, C-58, C-59, and C-60. This area is approximately 319,000 acres which is administered by the Forest Service.

The area is commonly referred to as the "Yakutat Forelands" and the geography is relatively flat. The Yakutat forelands extend from the base of the Saint Elias Mountains westward to the Gulf of Alaska, and from the town of Yakutat to the Alsek River. The area varies in width from 16 miles to approximately 4 miles. Land forms consist of unconsolidated material which has been swept down from the mountains to form large alluvial deposits and extensive sand and gravel flood plains. Sand dunes parallel the beach. These dunes were formed by wave and wind action which continues today causing shifts in the location of river outlets into the Gulf as well as relocation of the rivers themselves at the lower elevations.

Commercial fishing using set nets along the Alsek, Akwe, and Italio rivers is one activity that occurs when the salmon are running from the Gulf into the rivers to spawn.

The area contains a substantial moose population. During the past years a short (3-5 day) moose hunting season has been allowed in the area. There are six Forest Service recreation cabins present within the area which are utilized primarily by hunters and sport fishermen. Each cabin has a bush air strip nearby that serves land based aircraft providing access into the area from Yakutat.

Vegetation is predominantly Sitka spruce and hemlock. Muskeg comprises a portion of the area and the vegetative composition is composed of sphagnum moss, grasses, sedges, and stunted conifers. Muskeg is found in areas having a high water table and poor drainage. There are active glaciers adjacent to the area and float ice is common in the upper reaches of the Alsek and Dangerous rivers. Harlequin Lake is accessible by vehicle and this lake contains numerous icebergs which originate from the Yakutat Glacier located at the upper end of the lake.

12 Points1. Proposed Use

The Tongass Land Management Plan assessed the resource capabilities of this area and designated this area as LUD II, III, and IV. The area is approximately 319,000 acres. LUD II comprises approximately 40 percent; LUD III 48 percent; and LUD IV approximately 12 percent. The area is used by commercial fishermen, fish buyers, fish processors, and commercial packers and guides for fishing and hunting. Some 100 to 200 fish camps are found in the area from the Situk River to the Alsek River at the height of the gill net season.

Forest Highway #10 extends from Yakutat to the Dangerous River (approximately 35 miles). This road and the bridge across the Dangerous River were constructed primarily to access the timber resources of the area. See point 2 for further description of the use and value of the timber resource.

If this area is withdrawn under 204(c) timber harvest, mineral and oil, and other development activities would not be permitted. The impacts of such an exclusion are discussed in point 2.

2. Natural Resource Use and Values

There are Forest Service special use permits in the area. These permits authorize a variety of uses, namely fish camps, fish processing plants, packer-guide camps and operations, trapper cabins, and bush air strips utilized in the movement of cargo and people. Claims for gold have been worked along the beaches near the Alsek River. Many miles of service roads exist in the lower portion of the area and these roads are used by packers and guides as well as commercial fishermen to gain access to this area. A commercial timber sale program has been recommended for the area near the Dangerous River. River float trips are becoming a popular activity on the Alsek River. River-running expeditions are advertised in the lower 48 States and these expeditions begin on the Tatshenshini River and terminate at the mouth of the Alsek River at Dry Bay. Moose and bear hunting are popular activities and all Forest Service cabins are reserved and occupied during these seasons. Sport fishing in the Itallo and Akwe rivers have increased during the past few years. Many fishermen fly into Yakutat via commercial airline then charter local pilots to fly from Yakutat to air strips in the area for fishing and hunting purposes.

Recreation

There are no developed campgrounds in the area; however, many recreationists, using backpacking equipment, camp on gravel bars on the Italo and Alsek Rivers for fishing and sightseeing purposes.

Additional cabins, trails, and air strips have been proposed for the area to provide access and a degree of safety to the recreationist from unpredictable weather situations.

The recreation experience would perhaps be enhanced by a withdrawal that would preclude timber harvest, State selection, oil and mineral development, or other multiple use activities, however, the recreation resource as well as wildlife, fisheries, and others are provided maximum protection by laws, regulations, and by provisions in the Southeast Area Guide and TLMP during any development projects. The LUD II and III areas in particular are protected by extremely limiting prescriptions designed to protect other resources. No withdrawal does not mean loss of other resources.

Timber

There are 78,000 acres of operable commercial forest land in this unit. As a component of the LUD III and IV complex upon which the flow of commodity and market reserves is dependent. This unit contributes 16.4 MM board feet of annual harvest of the Tongass. This volume is significant unto itself and it is also a part of the balance that was reached in the TLMP designated to maximise amenity and wilderness values. While maintaining the established industry and the social and economic stability of Southeast Alaska. Withdrawal of this unit would adversely effect the overall balance and reduce the flow of timber in direct proportion to the annual yield within the unit.

Wildlife and Fisheries

The area is superlative for its habitat diversity which results in the presence both of wide species variety and of high concentrations of wildlife. Large populations of brown bear, black bear (including the blue color phase), goat, wolf, and furbearers are found in the area. Although some blue color phase black bears are found elsewhere in the Tongass National Forest, Yakutat supports the major population. Among the furbearing species are martin, mink, beaver, weasel, wolverine, coyote, lynx, and snowshoe hare. Moose are also present and a moose season has been offered the hunter during the past few years.

The area supports hair seal and sea lion at the mouths of the major rivers. Shore bird variety and numbers are extremely high during migration periods, and swans nest at various locations. There is also a high concentration of nesting song birds.

Base data used in the preparation of TLMP rated the streams and lakes within the area for sport, commercial, and estuarine fishery values. Generally the area rated high in these categories. The rating was based upon numbers of species, habitat condition, sport and commercial fisheries, and other values associated with the watershed.

Minerals

Portions of the area have petroleum leases by one or more oil companies or interest groups. To date no economically feasible petroleum reserves have been reported, however, the potential appears to exist and off-shore exploration has occurred.

Numerous small anomalous concentrations of many metals have been reported in the area, however, there appears to be limited economic significance at the present.

The Gulf of Alaska petroleum province is a bow-shaped lowland and foothill belt in which sedimentary rocks of the tertiary age are exposed, or are inferred to underlie lowland areas covered by consolidated deposits. The province borders the Gulf of Alaska from the Copper River Delta 300 miles southeastward to Icy Point in Glacier Bay National Monument, and extends inland 2 to 4 miles to the southern front of the Chugach and St. Elias Mountains. The area of the province, excluding the known exposures of granitic basement rocks with it, is about 5,200 square miles. Approximately 55,000 acres of the Brabazon Range-Deception Hills fall into this petroleum province. These areas are along the eastern and southern boundaries of the area.

In summary, the potential for oil, gas, and mineral development does exist within the area. A withdrawal would preclude development of these resources.

3. Present Users

Present use and users were discussed under items 1 and 2 and in the Russell Fiord portion of Appendix I. Sports fishing, commercial fishing and associated activities, trapping of furbearers, prospecting for mineral and oil and gas, hunting and associated activities compose the user of the Yakutat area. The area is a source for house logs, firewood, poles, and other associated timber related resource activities. A withdrawal would exclude access development for further expansion of many of these resource activities.

4. Proposed Use Conflict

The community of Yakutat is extremely dependent upon the resources either directly associated with the area or dependent upon it for a portion of their life cycle (salmon, etc.). A withdrawal could perhaps benefit or enhance the recreation experience of some users. Timber harvest, mineral, gas and oil exploration and development, and State selection would not be permitted by a withdrawal and this would prevent further expansion of these resources. These resources are offered maximum protection under laws, regulations, and provisions in the Southeast Area Guide and the TLMP during any development project. The lack of a withdrawal does not mean the loss of the resources from development activities.

Should oil or gas be found during future exploration operations Yakutat and many portions of this unit could be heavily impacted by employees associated with the development. These people will use this area for the Recreational opportunities that either exist or could be made available.

6. Suitable Alternatives

Other areas in the Tongass are as suitable for withdrawal as this unit and generally have been identified as LUD I and proposed for withdrawal. See Appendix I. As LUD II, III and IV management units, this area is a part of the LUD II, III and IV complex from which the commodity and market resources of the Tongass must come to meet the social and economic needs of southeast Alaska. Any reduction of the LUD II, III and IV acreage will have an adverse affect on the flow of commodity and market resoures upon which the economy of the area is dependent. Therefore, no suitable alternative areas can be considered available for this unit's land use designation.

7. Consultation

The land allocation that resulted from the TLMP process required intensive public involvement and this is documented in the EIS prepared for that plan. The classification of the various LUDs resulted from input from many individuals, organizations, agencies, corporations, and State, local and Federal Government interests. Further public input will be received during the development of the 204(c) EIS process.

8. Effect on State and Local Governments

This subject was discussed partially under item 4. In summary, the determination was made through the TLMP process to classify portions of the area as LUD II, III, and IV. This action provides for various levels

of resource development in the LUD II, III and IV, and assists in sustaining local and regional economies, and in meeting TLMP allocation commitments.

9. Term of Withdrawal

Based upon the resource involved and the analysis presented in this report, a withdrawal under 204(c) is not being recommended for this area.

10. Public Involvement

Information on this subject is contained in point 7 and under Appendix I 204(c) report for the Russell Fiord area.

11. Location of Records

This information is described in Appendix I of the 204(c) proposal for the Russell Fiord area.

12. Geology Report

The Yakutat area is about 70 miles long parallel to the coast and extends from five to twenty miles back from it. The most prominent feature of this coast is the steep fronted range of mountains which extends in a nearly unbroken line from Yakutat Bay to the Alsek River and beyond. This coastal range is comparatively low, averaging 3,000 to 4,000 feet in elevation; but back of it rise serrate snowy ranges of greater altitude. Within the mountain front the valleys are filled with ice, so that the region is essentially an ice plateau which is relatively level in the interior but descends about its edges in the form of protruding glacial lobes.

The front range is separated from the ocean by a coastal plane which varies from six to fifteen miles in width. This foreland is without notable relief, except for a few low hills close to the base of the mountains and a few sand dunes near the coast. The area is underlain by vast deposits of sand and gravel apparently deposited as moraines or by uplift which exposed the coastal plain. Subsequent stream action has smoothed the area to its present forms (Brooks, Alfred H. and others, U.S.G.S. Bulletin 314, 1906).

FLPMA 204(c) REPORT STAFF
EXPERIENCE STATEMENTS

The persons involved in preparing the 204(c) report are listed alphabetically below.

COTIRELL, Dave

Education:

B.S. Forestry, 1965 - Humboldt State
M.S. Forestry, 1966 - Yale University

Work Experience:

1966 to Present - USDA Forest Service
Seward Rec.
Sitka Sale Administration - Timber
Wrangell Sale Layout - Timber
Cordova - Timber Management and Recreation

HINES, Judy

Work Experience:

5 years Budget and Finance Officer - Tongass National Forest and
Flathead National Forest
4 years Administrative Officer and member of Chugach Land
Management Planning Team - Chugach National Forest

KIRSCHENMEN, Jim

Education:

B.S. Landscape Architecture, 1966

Work Experience:

1 year Landscape Architect - Shasto - Trinity National Forest
3 years Landscape Architect - Inyo National Forest
5 years Forest Planning Team - El Dorado National Forest
2 years Monument Ranger - Misty Fiord National Monument

KNIGHT, Charlie

Education:

B.S. Conservation Educator - University of Wisconsin
Graduate work in Soils Science - University of Missouri

Work Experience:

Instructor - College of Agronomy
2 years U. S. Army
6 years USDA Forest Service - Regions 1, 9, 4
6 years USDA Forest Service - Region 10, Sitka Area

MITCHELL, Ben

Education:

B.S. Civil Engineering - Lamar State College of Technology
Graduate work in Logging Engineering - Oregon State University

Work Experience:

8 years USDA Forest Service - Region 1
13 years USDA Forest Service - Region 10

MOULTON, wesley G.

Education:

Engineer of Mines Degree, 1938 - Colorado School of Mines

Work Experience

1 year Miner-Shaftman - United Gold Mines Corporation, Cripple Creek, Colorado
2 years Engineer-Surveyor - Cresson Consolidated Gold Mines and United Gold Mines
1 year Shift Foreman - Cresson Consolidated Gold Mines
4 years U. S. Army
5 years Mine Superintendent - Cresson Consolidated Gold Mines, Cripple Creek, Colorado
2 years Self-employed mining lead, zinc, copper, gold, silver, and uranium
3 years Mine Superintendent - Consolidated Uranium Corporation - uranium mining at Temple Mountain, Utah, and tungsten at Austen, Nevada

2 years	Exploration Manager - Minerales Jeanette de Cuba, Santiago de Cuba (manganese)
2 years	Mine Superintendent - Kerr McGee Corporation, Grants, New Mexico
3 years	Mine Superintendent - Phillips Petroleum Company, Grants, New Mexico
17 years	Mineral Examiner - USDA Forest Service - Regions 5 and 10

SCOTT, Steve

Education:

B.S. Forestry, 1958 - Utah State University

Work Experience:

4 years	Forester - Targhea NF
2 years	Assistant District Ranger - Challis NF
6 years	District Ranger - Humbolt NF
2 years	District Ranger - Teton NF
6 years	District Ranger - Wasatch NF
2 years	Forester (lands) - Alaska Region, Juneau

WILLIAMSON, Ray

Education:

Degree in Forestry, 1958 - Washington State University

Work Experience:

6 years	TMA, Other Resource Assistant, Assistant Ranger - USDA Forest Service, Region 6
14 years	District Ranger - USDA Forest Service, Region 6 - Washington and Oregon
2 years	Program Manager - USDA Forest Service, Recreation Lands and Minerals - Chatham Area, Region 10
1 year	USDA Forest Service, Region 10 - Lands, Minerals and Watershed - PP&B & Alaska NC - Easements Management

APPENDIX 5

MINING AND MINERALS POLICY ACT OF 1970

Mining and Minerals Policy Act of 1970

- **Act of December 31, 1970 (84 Stat. 1876; 30 U.S.C. 21a)**

Sec. 1. This Act may be cited as the Mining and Minerals Policy Act of 1970.

Sec. 2. The Congress declares that it is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in (1) the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, (2) the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs, (3) mining, mineral, and metallurgical research, including the use and recycling of scrap to promote the wise and efficient use of our natural and reclaimable mineral resources, and (4) the study and development of methods for the disposal, control, and reclamation of mineral waste products, and the reclamation of mined land, so as to lessen any adverse impact of mineral extraction and processing upon the physical environment that may result from mining or mineral activities.

For the purpose of this Act "minerals" shall include all minerals and mineral fuels including oil, gas, coal, oil shale and uranium.

It shall be the responsibility of the Secretary of the Interior to carry out this policy when exercising his authority under such programs as may be authorized by law other than this Act. For this purpose the Secretary of the Interior shall include in his annual report to the Congress a report on the state of the domestic mining, minerals, and mineral reclamation industries, including a statement of the trend in utilization and depletion of these resources, together with such recommendations for legislative programs as may be necessary to implement the policy of this Act.

ia

IA

. P

a5D11
. 4522

ional Forest

MANAGEMENT ACT OF 1976 RECOMMENDATIONS

LAND USE DESIGNATIONS - LUD's

LUD I

These lands will be recommended for the inclusion in the National Wilderness Preservation System. This designation may permit established air and boat access. It permits hunting and fishing, minerals exploration activities, recreational use, and scientific study. This designation will generally exclude:

- (1) Timber harvesting
- (2) New comfort and convenience recreation facilities
- (3) Motorized vehicle use, except as permitted under Wilderness Plans
- (4) Aquaculture facilities except for hand clearing of streams
- (5) Mining exploration after December 31, 1983
- (6) Water projects unless authorized by the President
- (7) Roads
- (8) Manipulation of vegetation

LUD II

These lands are to be managed in a roadless state to retain their wildland character,

TONGASS National Forest

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 SECTION 204(C) WITHDRAWAL RECOMMENDATIONS

LAND USE DESIGNATIONS - LUD's

LUD I

These lands will be recommended for the inclusion in the National Wilderness Preservation System. This designation may permit established air and boat access. It permits hunting and fishing, minerals exploration activities, recreational use, and scientific study. This designation will generally exclude:

- (1) Timber harvesting
- (2) New comfort and convenience recreation facilities
- (3) Motorized vehicle use, except as permitted under Wilderness Plans
- (4) Aquaculture facilities except for hand clearing of streams
- (5) Mining exploration after December 31, 1983
- (6) Water projects unless authorized by the President
- (7) Roads
- (8) Manipulation of vegetation

LUD II

These lands are to be managed in a roadless state to retain their wildland character, but would permit wildlife and fish habitat improvement and primitive recreational facility development. This designation will exclude:

- (1) Roads, except for specifically authorized uses
- (2) Timber harvesting, except for controlling insect infestations or to protect other resource values
- (3) Major concentrated recreation facilities

LUD III

These lands will be managed for a variety of uses. The emphasis is on managing for uses and activities in a compatible and complementary manner to provide the greatest combination of benefits. These areas have either high use or high amenity values in conjunction with high commodity values. Allowances in calculated potential timber yield have been made to meet multiple objectives. These lands may include concentrated recreation developments.

LUD IV

Opportunities will be provided for intensive resource use and development where emphasis is primarily on commodity or market resources. Allowances in calculated potential timber yield have been made to provide for protection of physical and biological productivity.

NON-NATIONAL FOREST LANDS

State Land Selections

Native Land Selections

Administration Wilderness Area Extensions in proposed National Forest additions.

WEST
CHICAGO-
YAKOBI

SCALE IN MILES
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Lands which have been segregated from the general land laws on the Tongass National Forest are shown on this map. The Land Use Designations (LUD) have been shown on the segregated areas as well as the Value Comparison Units (VCU) to allow better reference to the Tongass Land Management Plan (TLMP).

The allocation summary shown below is specific to the lands included within the segregation order. The basis of comparison is to the total land area of the Tongass National Forest expressed within each of the Forest Areas. Boundaries of the segregated areas were mapped based on the description published in the Federal Register. Acreages shown are based on those developed for value comparison units for the Tongass Land Management Plan. The number of value comparison units shown is the total number of whole and partial units contained within the segregated lands boundaries.

ALLOCATION SUMMARY

GEOGRAPHIC AREA	LUD I	LUD II	LUD III	LUD IV	PROPOSED NATIONAL FOREST
CHATHAM AREA	2,295,000 acres	258,000 acres	332,000 acres	185,000 acres	537,000 acres
% OF AREA (6,905,000 acres)	33.2 %	3.7 %	4.8 %	2.7 %	
NUMBER OF VCU's	102	18	26	17	
STIKINE AREA	517,000 acres	109,000 acres	59,000 acres	79,000 acres	264,000 acres
% OF AREA (3,200,000 acres)	16.6 %	3.5 %	1.9 %	2.5 %	
NUMBER OF VCU's	24	5	2	14	
KETCHIKAN AREA	2,451,000 acres	6,000 acres	2,000 acres	2,000 acres	
% OF AREA (5,163,000 acres)	48 %	nil %	nil %	nil %	
NUMBER OF VCU's	110	2	1	2	
TONGASS NATIONAL FOREST	5,263,000 acres	369,000 acres	393,000 acres	266,000 acres	801,000 acres
% OF FOREST (5,169,000 acres)	34.7 %	2.4 %	2.4 %	1.8 %	
NUMBER OF VCU's *	236	25	29	33	

* TOTAL NUMBER OF VCU's EXCLUDING THOSE SELECTED BY NATIVE GROUPS UNDER THE ANSCA

TONGASS *Nat*

FEDERAL LAND POLICY AND MAN SECTION 204(C) WITHDRAWAL

segregation orders include both National Forest and Public Domain Lands recommended for inclusion in the National Wilderness System as a result of the RARE II process.

These Lands within the boundaries of the segregation orders include National Forest Lands recommended for further study as a result of the RARE II process.

These lands within the boundaries of the segregation orders include the National Forest Lands recommended for full range of resource management activities and are not recommended for either wilderness or further study.

Lands in non-Federal ownership. Land holdings less than 640 acres are not shown. The Lands shown in this designation have been taken from the Chugach National Forest Land Management Plan Maps. Because the process of land selections under the Alaska Statehood Act and the Alaskan Native Claims Settlement Act is ongoing, some variation in non-Federal land holdings from those shown is expected.

ator Projection
merican Datum

45-

60°

15'

30°

Jape
Suckling

21 S

20 S

19 S

18 S

17 S

16 S

15 S

14 S

13 S

95011
4532

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R. MAX PETERSON, CHIEF

CHUGACH NATIONAL FOREST ALASKA

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976
SECTION 204(C) WITHDRAWAL RECOMMENDATIONS

AUGUST 1980

Scale 1 inch = 10 miles

LEGEND

— National Forest Boundary	— Forest Supervisor's Headquarters
— Park Military Reservation or Game Refuge Boundary	— Forest Service Office
— All Weather Road	— House, Cabin or Other Building
— Primitive Road	— Title Flats
— Trail	— Glacier
— Railroad	— Non-National Forest Land

NOTE: Some non-Federal lands within the Chugach National Forest boundary may not be shown due to existing changes of ownership as a result of State action and the Alaska Native Claims Settlement Act.

TOWNSHIP AND RANGE LINE CLASSIFICATION

Unsurveyed (Bureau of Land Management or State of Alaska Possession)

NOTE: LAND KEY SOURCE IS U.S.G.S. TOPOGRAPHIC QUADRANGLE

© GPO 1980 889-324

The lands shown in the legend below have been segregated from the general land laws on the Chugach National Forest. Boundaries on the segregated areas were mapped based on the descriptions published in the Federal Register.

- These Lands within the boundaries of the segregation orders include both National Forest and Public Domain Lands recommended for inclusion in the National Wilderness System as a result of the RARE II process.
- These Lands within the boundaries of the segregation orders include National Forest Lands recommended for further study as a result of the RARE II process.
- These Lands within the boundaries of the segregation orders include the National Forest Lands recommended for full range of resource management activities and are not recommended for either wilderness or further study.
- Lands in non-Federal ownership. Land holdings less than 640 acres are not shown. The Lands shown in this designation have been taken from the Chugach National Forest Land Management Plan Maps. Because the process of land selections under the Alaska Statehood Act and the Alaskan Native Claims Settlement Act is ongoing, some variation in non-Federal land holdings from those shown is expected.

Compiled by U.S.D.A. Forest Service Region 10
Fairbanks, Alaska 1980. Source Maps U.S.G.S.
Topographic Series, Scale 1:250,000

Universal Transverse Mercator Projection
1927 North American Datum
411707

95011
- 4522

SHO122123 DIPT 2112PM

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R. MAX PETERSON, CHIEF

CHUGACH NATIONAL FOREST
ALASKA

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976
SECTION 204(C) WITHDRAWAL RECOMMENDATIONS

AUGUST 1980

Scale 1 Inch = 8 Miles

LEGEND

	National Forest Boundary		Forest Supervisor's Headquarters
	Park, Military Reservation or Game Refuge Boundary		Forest Service Office
	All Weather Road		House, Cabin or Other Building
	Primitive Road		Tide Flats
	Trail		Glacier
	Railroad		Non National Forest Land

NOTE: Some non-Forest land within the Chugach National Forest Boundary may not be shown due to impending changes of ownership as a result of State selection and the Alaska Native Claims Settlement Act.

TOWNSHIP AND RANGE LINE CLASSIFICATION

Unsurveyed, (Bureau of Land Management or State of Alaska Protraction)

NOTE: LAND NET SOURCE IS U.S.G.S. TOPOGRAPHIC QUADRANGLES.

☆ GPO 1980 699-324

The lands shown in the legend below have been segregated from the general land laws on the Chugach National Forest. Boundries on the segregated areas were mapped based on the descriptions published in the Federal Register.

These Lands within the boundaries of the

ARCTIC OCEAN

PT. BARROW

CANADA

YUKON

FAIRBANKS

ANCHORAGE

CHUGACH
NATIONAL
FOREST

TONGASS
NATIONAL
FOREST

JUNEAU

SITKA
KETCHIKAN

BERING
SEA

Bristol
Bay

KODIAK
I.

ST
LAWRENCE
I.

NOME