Historic, Archive Document

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

United States
Department of
Agriculture

Forest Service

Tongass
National
Forest
R10-MB-136

Shelter Cove

Final Environmental Impact Statement

Alaska Region
Ketchikan Area

Volume II: Maps, Comments on DEIS

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
RECORDS
CO./SERIALS BRANCH

JUL 15 '91

USDA
RECEIVED
JUL 15 1991

Final Environmental Impact Statement

Shelter Cove

U.S.D.A. – Forest Service
Alaska Region
Alaska

Lead Agency:

U.S.D.A. Forest Service
Tongass National Forest
Ketchikan Area
Federal Building
Ketchikan, Alaska 99901

Responsible Official:

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

For Further Information
Contact:

Steven T. Segovia
Ketchikan District Ranger
3031 Tongass
Ketchikan, Alaska 99901

Contents

NOTE: This document is to be used in conjunction with Volume 1 as a reference aid for referring to figures mentioned in the text.

Chapter 1 Maps	Figures 1-1 to 1-2
Chapter 2 Maps	Figures 2-1 to 2-5
.....	Log Transfer
.....	Facilities and Site
.....	Location Maps
.....	Figures 2-6 to 2-12
.....	Monitoring Reports
.....	Figures 2-13 to 2-14
Chapter 3 Maps	Figures 3-1 to 3-11
Chapter 4 Maps	Figures 4-1 to 4-25
Alternative Maps	Figures A2 to A6
Comments on DEIS	

Chapter 1 Maps

Figure 1-1

VICINITY MAP

Figure 1-2

VICINITY MAP

Figure 1-2

Chapter 2 Maps

ALTERNATIVE 2

Figure 2-1

ALTERNATIVE 3

Figure 2-2

ALTERNATIVE 4

LEGEND

☒ HARVEST UNITS

☒ SALTWATER
FRESHWATER

— PROPOSED ROADS

— PRIVATE BND

— VCU BND

Figure 2-3

ALTERNATIVE 5

LEGEND

☒ HARVEST UNITS

▨ SALTWATER
FRESHWATER

- PROPOSED ROADS

- PRIVATE BND

- VCU BND

Figure 2-4

ALTERNATIVE 6

LEGEND

- HARVEST UNITS
- SALTWATER
FRESHWATER
- PROPOSED ROADS
- PRIVATE BND
- VCU BND

Figure 2-5

Log Transfer Facilities and Site Location Maps

Log Transfer Sites Investigated

The first map indicates all new sites that were considered. Those that were eliminated did not meet pertinent siting guidelines and are indicated on the maps as investigated sites. The preferred sites were investigated and are proposed for use in the various alternatives considered in this document.

The next two maps refer to the individual existing and proposed (non-existing) log transfer sites that are planned for use in the alternatives in this document.

Figure 2-6

SHELTER COVE PROPOSED L.T.F.

	ALTERNATIVE					
	1	2	3	4	5	6
Used		X	X	X	X	X
Reconstruction						
SYSTEM TYPE						
Double A-Frame		X	X	X	X	X
Slide						
Float-Off						

Figure 2-7

HUME ISLAND EXISTING L.T.F.

	ALTERNATIVE					
	1	2	3	4	5	6
Used					X	X
Reconstruction						
	SYSTEM TYPE					
	Double A-Frame				X	X
	Slide					
	Float-Off					

Figure 2-8

Preliminary Reconnaissance Reports

These site diagrams relate to the Area L.T.F. Sites Map.

Site 1 — Shelter Cove

Operations

- The site appears to have adequate upland area.
- Favorable for A-frame system.
- Dry sort and storage is not available at the site. Dry sort and storage may possibly be located $\frac{1}{4}$ to $\frac{1}{2}$ mile from site.

Development

- Rock borrow is adjacent to the site.
- Good beachhead adjacent to site for equipment mobilization.
- Site requires moderate fill and rock excavation.

Access

- Access road would be about $\frac{1}{2}$ to $\frac{3}{4}$ mile long.
- Road will contain some minor segments with very steep grades.
- Site is adequate for a drive-through loop road.
- Approach to dump position is suitable.
- Access road will have a very heavy through-cut adjacent to the site. The cut will be about 100' long and 20-30' deep. This can serve as a rock source if it proves adequate.

Water Beach Conditions

- The site has adequate water depth.
- According to the navigational charts, Carroll Inlet has very good depth.
- Ample raft and booming area is available at the site.

Environmental

- The site appears to lie in a favorable area.
- Water depth indicates suitable flushing.
- Eagle Tree Atlas does not indicate the presence of any eagle trees.
- Site is protected from weather.

Recommendations

- The site appears to be adequate and should be considered further. Marine, archaeological, and economic impacts should be evaluated in more detail. Additionally, the area should be surveyed for eagle trees.

Figure 2-9

Site 2

Site 2 contained a 70-80' high ridge within the site. Development would be very difficult and expensive. This site was not given further consideration.

Figure 2-10

Site 3

Operations

- Site is of adequate size.
- Favorable for A-frame.
- Dry sort and storage would have to be accomplished within $\frac{1}{4}$ mile of the site. If done at the TTF, much rock excavation would be necessary to develop dry storage and sort.

Development

- Rock source is adjacent to the site.
- Good beachhead near the site for equipment mobilization.
- Site requires moderate fill and much rock excavation.

Access

- Access road would be about $\frac{3}{4}$ to 1 mile long.
- Site access road would have moderate grades and alignment.
- Site is excellent for a loop drive-through system.
- Approach to dump position is excellent.

Water Beach Conditions

- Site has adequate water depths for A-frame operations.
- Ample water maneuvering room for raft and booming operations.

Environmental

- Site is $\frac{1}{4}$ to $\frac{1}{2}$ mile from tideflat areas and about $\frac{1}{2}$ mile from any significant streams.
- Site is protected from weather.
- Eagle tree atlas does not indicate any eagle trees present on site.

Recommendations

- From an operational and development standpoint, this site appears to be superior to all other sites considered; however, access is extremely difficult for development. If marine, archaeological, and economic impacts are favorable, this site should be considered further. The site should be investigated for eagle trees as the West Carroll shoreline appears to contain a number of them.

Figure 2-11

Site 4

Operations

- Site is of adequate size.
- Dry sort and storage cannot be accommodated at the site. This would have to be developed about ¼ mile inland.
- A-frame or chain slide would be best suited to this site.

Development

- Site will require a fill 70-75' out from the vegetation line on the beach.
- Rock source is unknown. The fill adjacent to the site had no exposed rock to verify a source.
- Site has good beachhead at north edge of site for equipment mobilization.

Access

- Site access would have moderate grades near the site.
- Access road would be about 1 to 1¼ mile long.
- Large fill will accommodate drive-through loop. Excavated area can also provide part of the loop. Chain slide system would require heavy excavation for ingress and egress because the slide would not require a large fill, thus moving operations back into the uplands.

Water Beach Conditions

- The site would require the TTF face to be 70-75' from the vegetative line to reach sufficient water depth.
- Tidal action at the site appears to create a fast current. Log rafting would be located directly south of the site at an area with 40' of water depth.
- Ample water area to handle logs for rafting and booming.

Environmental

- The site is about ¼ mile from a tideflat area lying to the north. The navigational charts show that the channel has a deep pocket between Osten Island and the site. This may trap bark and prevent it from dispersing further out into Carroll Inlet.

Recommendations

- This site is an adequate site; however, the fill will be large. The site will require review from marine, archaeological, and economic standpoints.

VEGETATION
LINE

A

SHORELINE
13 ft. Tide

CRIB FACE

A

~ 150 ft

70 ft.

30 ft.

13 ft. Tide

SECTION A-A

SOUNDINGS: $\frac{\text{Rise}}{\text{Run}}$

$\frac{13}{20}$ End Crib Face

$\frac{15}{20}$ End Crib Face

- Not to Scale -

SITE 4 - WEST CARROLL

5-16-85

Figure 2-12

**Site 5 —
Salmonberry Site
Cape Fox, Inc.**

Operations

- The site is suitable for A-frame, chain slide, crane or derrick systems.
- Dry sort and storage area appears to be developable adjacent to the site.

Development

- Rock source availability is unknown.
- Site requires a large fill to reach water depth for all tidal operations.

Access

- Terrain appears to be flat to moderate, providing minimal roading problems.
- Good beachhead landing at the site for equipment mobilization.
- This site is on private land requiring rental, share cost, or other agreement.

Water Beach Conditions

- Full depth water is about 70–80' seaward from the vegetation line.
- Ample maneuvering room for rafting and booming.
- Area is protected from weather.

Environmental

- According to the Forest Service Eagle Atlas, two or three eagle trees are present at or adjacent to the site.
- The site is within ¼ mile of shallow tideflat beaches to the north and west of the site.

Recommendations

- An economic analysis should be conducted to determine share cost, lease, rental haul, and construction costs that would be applied to government use of the site. Additionally, the site should be investigated for archaeological and marine impact.

Impacts must be evaluated to determine if it will be necessary to conduct any special operations to accommodate eagle activity. Eagle trees are protected under Federal law.

Figure 2-13—Unit Monitoring Report

Unit Monitoring Report

Date _____ Unit _____ VCU# _____
 Camp _____ Road No. _____ Photo # _____
 Quad Map _____ T. _____ R. _____
 Unit Layout Date _____ Unit Harvest Date _____
 Sale Admin. By: _____ Monitored By: _____
 Stream Name _____ ADF&G # _____
 Stream Class - I. Anadromous II. Resident III. Water Quality
 Channel Type _____ Channel Width _____
 Length of Affected Area _____ Temp. Sensitive? ☐ Yes ☐ No
 Riparian Harvest _____ R. Bank _____ L. Bank _____ Both Banks _____

Standards & Guidelines	Implemented (%)	Effectiveness (%)	Comments
Directional Felling			
Split Yarding			
Full Suspension			
No Cut Zones			
Selective Harvest Zone			
Alluvial Fan S&G			
Off Channel/Unmapped			
Temperature Sen. S&G			
Sideslope Stability			
Windfirmness			
Other			

Discussion:

Figure 2-14—Road Monitoring Report

Road Monitoring Report

Date _____ Unit _____ VCU# _____
 Camp _____ Road No. _____ Photo # _____
 Quad Map _____ T. _____ R. _____
 Road No. _____ Structure Type/Size _____
 Road Layout Date _____ Road Construction Date _____
 COR _____ Monitored By: _____
 Stream _____ ADF&G # _____
 Stream Class - I. Anadromous II. Resident III. Water Quality
 Fish Species Present _____
 Channel Type _____ Channel Width _____ Substrate _____
 Gradient at Crossing: Up _____ Down _____ Velocity (CFS) _____
 Habitat Upstream _____
 Habitat Downstream _____

Standards & Guidelines	Implemented (%)	Effectiveness (%)	Comments
------------------------	-----------------	-------------------	----------

Fish Passage Provided			
Construction Timing			
Equip Stream Crossing			
Sediment Control			
Culvert Placement			
Culverts Installed Concurrent with Rocking			
Flow Constriction			
Seeding of Banks			
Other			

Discussion:

Chapter 3 Maps

INVENTORIED VISUAL QUALITY OBJECTIVES

Figure 3-1

INVENTORIED VISUAL QUALITY OBJECTIVES

- MAXIMUM MODIFICATION
- MODIFICATION
- PARTIAL RETENTION
- RETENTION

Scale 1:MILE

Figure 3-1

INVENTORIED VISUAL QUALITY OBJECTIVES INCLUDING POTENTIAL VIEWSHEDS

Figure 3-2

INVENTORIED VISUAL QUALITY OBJECTIVES INCLUDING POTENTIAL VIEWSHEDS

▨ MAXIMUM MODIFICATION

▩ MODIFICATION

▤ PARTIAL RETENTION

■ RETENTION

Scale 1:MILE

Figure 3-2

VQO Preservation

VC I Natural Condition

Predominately ecological changes.

VQO Retention

VC II Natural Appearing

Changes are not evident.

VQO Partial Retention

VC II Slightly Altered

Changes are noticed, but do not attract attention.

NATURAL CHARACTER DOMINATES

VQO Modification

VC IV Moderately Altered

Changes are easily noticed and attract attention.

VQO Maximum Modification

VC V. Heavily Altered

Changes are very strong and attract attention.

VQO Unacceptable Modification

VC VI Drastically Altered

Changes are in glaring contrast and disharmony with natural patterns.

ALTERED CHARACTER DOMINATES

Figure 3-3

EXISTING VISUAL CONDITION

▨ NATURAL CONDITION

▩ NATURAL APPEARING

Figure 3-4

EXISTING VISUAL CONDITION

Figure 3-4

IDENTIFIED VIEWSHEDS ANALYZED IN EIS

Figure 3 - 5

IDENTIFIED VIEWSHEDS ANALYZED IN EIS

Figure 3-5

ROS INVENTORY

Figure 3-6

ROS INVENTORY

- ROADED MODIFIED
- ROADED NATURAL
- SEMI-PRIMITIVE MOTORIZED
- SEMI-PRIMITIVE NON-MOTORIZED
- PRIMITIVE 1 OR 2

0 1 2 3 4 MI

SCALE IN MILES

Figure 3-6

RECREATION AREAS

Figure 3-7

RECREATION AREAS

Figure 3-7

EXISTING ROADS

Revillagigedo Island Project Area

Figure 3-8

LOG TRANSFER FACILITIES

Revillagigedo Island Project Area

Figure 3-9

MAJOR WATERSHEDS

Figure 3-10

MAJOR WATERSHEDS

Figure 3-10

Figure 3-11

MAJOR CHANNEL TYPES

Figure 3-11

Chapter 4 Maps

ALT. 2
Fig. 4-1

OUTLET OF SALT LAKEON CONTING ME

FIELD-OF-VIEW: 35mm CAMERA WITH 28.3mm LENS

ALT. 2

Fig. 4-2

VIEW DISTANCE = 13.9 INCHES

VIEW DISTANCE ~ 9.5 INCHES

ALT. 2

Fig. 4-3

NORTH SADDLE LAKES - LARGE LAKE LOOKING SOUTH

Unit 5

Unit 4

FIELD-OF-VIEW 35mm CAMERA with 21.5mm LENS

VIEW DISTANCE = 12.3 INCHES

ALT. 2

Fig. 4-4

N. SADDLE LAKES - N. END LARGE LAKE LOOKING S.

Unit 4

Unit 5

FIELD-OF-VIEW: 35mm CAMERA with 28 mm. LENS

140

145

150

155

160

165

170

175

180

185

190

195

200

VIEW DISTANCE - 12.8 INCHES

ALT. 3

Fig. 4-5

OUTLET OF SALT LAGOON LOOKING NE

Unit 37 Unit 36 Unit 40 Unit 39

FIELD-OF-VIEW - 35mm CAMERA with 28 mm LENS

ALT. 3

Fig. 4-6

VIEW DISTANCE = 13.9 INCHES

Unit 45

Unit 43

Unit 44

Unit 41

VIEW DISTANCE - 12.3 INCHES

ALT. 3

Fig. 4-7

N. SADDLE LAKES- N. END LARGE LAKE LOOKING S.

FIELD-OF-VIEW. 35mm CAMERA with 28.2mm LENS

VIEW DISTANCE - 1.5 INCHES

ALT. 3

Fig. 4-8

NORTH SHELLE LAKES -UPPER LAKE LOOKING SOUTH

Unit 16

Unit 15

Unit 14

FIELD-OF-VIEW 25mm CAMERA 1.1m 21 cm LENS

27 —

22 —

1' —

12 —

—

2 —

-3 —

-5 —

-11 —

-13 —

-18 —

VIEW DISTANCE = 11.9 INCHES

ALT. 4

Fig. 4-9

EAST OF SHELTER COVE- LOOKING NW

20 —

15 —

10 —

5 —

0 —

-5 —

-10 —

-15 —

-20 —

Unit 34

Unit 26

Unit 27

Unit 23

FIELD-OF-VIEW: 35mm CAMERA with 26.7mm LENS

VIEW DISTANCE - 11.9 INCHES

ALT. 4

Fig. 4-10

2.5 MI. N. OF ISLAND PT. LOOKING SW

22 —

17 —

12 —

7 —

2 —

-3 —

-8 —

-13 —

-18 —

Unit 7

Unit 6

Unit 5

FIELD-OF-VIEW: 35mm CAMERA with 25.7mm LENS

VIEW DISTANCE = 12.4 INCHES

ALT. 4

Fig. 4-11

OUTLET OF SALT LAGOON LOOKING NE

Unit 38

Unit 43

Unit 45

Unit 46

Unit 44

FIELD-OF-VIEW: 35mm CAMERA with 28.8mm LENS

VIEW DISTANCE = 12.8 INCHES

ALT. 5

Fig. 4-12

OUTLET OF SALT LAGOON LOOKING NE

FIELD-OF-VIEW: 35mm CAMERA with 28.2mm LENS

VIEW DISTANCE = 11.9 INCHES

ALT. 6

Fig. 4-13

EAST OF SHELTER COVE-- LOOKING NW

24 —

15 —

10 —

5 —

3 —

-3 —

-10 —

-15 —

-20 —

Unit 23

Unit 22

Unit 20

Unit 19

FIELD-OF-VIEW: 35mm CAMERA with 26.7mm LENS

VIEW DISTANCE = 11.9 INCHES

ALT. 6

Fig. 4-14

2.5 MI. N. OF ISLAND PT. LOOKING SW.

22 —

17 —

12 —

7 —

2 —

-3 —

-8 —

-13 —

-18 —

Unit 6

Unit 8

Unit 16

FIELD-OF-VIEW 35mm CAMERA with 26.7mm LENS

264

259

254

249

244

239

234

229

224

219

214

209

204

VIEW DISTANCE = 11.0 INCHES

ALT. 6

Fig. 4-15

OUTLET OF SELT LAGOON LOOKING NE

FIELD-OF-VIEW: .5mm. CAMERA WITH 29 mm. LENS.

91 —

11 —

10

1

!

9

—
—

24

59

114

519

— 30 —

— 3 —

—

—

Fig. 4-17

VIEW DISTANCE = 9.7 INCHES

ALT. 6

Fig. 4-18

NORTH SADDLE LAKES - LARGE LAKE LOOKING SOUTH

27 —

22 —

17 —

12 —

7 —

2 —

-3 —

-8 —

-13 —

-18 —

-23 —

Unit 20

Unit 21

FIELD-OF-VIEW 35mm CPHERA with 21.5mm LENS

23 —

18 —

13 —

8 —

3 —

-2 —

-7 —

-12 —

-17 —

N. SADDLE LAKES- N. END LARGE LAKE LOOKING S.

Unit 20

Unit 21

VIEW DISTANCE = 12.3 INCHES

ALT. 6

Fig. 4-19

FIELD-OF-VIEW: 35mm CAMERA WITH 28.0mm LENS

PROPOSED OLD GROWTH AREAS

Fig. 4-20

ALTERNATIVE 2

WILDLIFE OLD GROWTH

Fig. 4-21

ALTERNATIVE 3

WILDLIFE OLD GROWTH

Fig. 4-22

ALTERNATIVE 4

WILDLIFE OLD GROWTH

Fig. 4-23

ALTERNATIVE 5
WILDLIFE OLD GROWTH

Fig. 4-24

ALTERNATIVE 6

WILDLIFE OLD GROWTH

Fig. 4-25

Alternative Maps

ALTERNATIVE 2

LEGEND

	HARVEST UNITS
	OLD-GROWTH PRESCRIPTION
	FRESH WATER
	SALT WATER

Figure A2

ALTERNATIVE 2

Figure A2

ALTERNATIVE 3

LEGEND

	HARVEST UNITS
	OLD-GROWTH PRESCRIPTION
	FRESH WATER
	SALT WATER

Figure A3

ALTERNATIVE 3

Figure A3

ALTERNATIVE 4

LEGEND

	HARVEST UNITS
	OLD-GROWTH PRESCRIPTION
	FRESH WATER
	SALT WATER

Figure A4

ALTERNATIVE 4

Figure A4

ALTERNATIVE 5

LEGEND

	HARVEST UNITS
	OLD-GROWTH PRESCRIPTION
	FRESH WATER
	SALT WATER

Figure A5

ALTERNATIVE 5

Figure A5

ALTERNATIVE 6

LEGEND

	HARVEST UNITS
	OLD-GROWTH PRESCRIPTION
	FRESH WATER
	SALT WATER

Figure A6

ALTERNATIVE 6

LEGEND

- HARVEST UNITS
- OLD-GROWTH PRESCRIPTION
- FRESH WATER
- SALT WATER
- PROPOSED ROADS
- PRIVATE BND
- VCU BND

NORTH

SCALE 1 : 86,740

Figure A6

Comments on the Draft Environmental Impact Statement

KETCHIKAN GATEWAY BOROUGH

Planning Department

344 Front Street

Ketchikan, Alaska 99901

(907) 228-6610

January 9, 1991

USDA FOREST SERVICE KETCHIKAN DISTRICT RANGER DISTRICT RECEIVED	
JAN 10 '91	
RANGER	SSS
SSS	
TW/FIRE	DF
REC. LINES	
FISH WOLF	
SILVOCULTURE	
FACT/MTCR	
ENG	

USDA FOREST SERVICE
RECEIVED

JAN 10 1990

Steven T. Segovia
Ketchikan District Ranger
3031 Tongass
Ketchikan, Alaska 99901

Re: Shelter Cove DEIS, preliminary CZMP review.

State ID Number: AK901218-05J

Project Description

A draft Environmental Impact Statement has been prepared by the U.S. Forest Service to describe alternatives for the harvest of timber in and around Shelter Cove and George Inlet of the Tongass National Forest. The Forest Service proposes to harvest between 61.8 and 95.6 million board feet of timber during the next five years. The applicant is the U.S. Forest Service.

Findings

The Ketchikan District has reviewed the above referenced application, and finds that the proposed project is consistent with the Ketchikan District Coastal Management Program provided the following conditions are met:

- A. The applicant shall meet all applicable federal laws and regulations.
- B. The applicant shall meet all applicable state laws and regulations.

Supporting Data

The project is located in the Future Development Zone and is a permitted principal use in that zone.

This project is supported by the Ketchikan Gateway Borough Comprehensive Plan.

Steven T. Segovia
Page 2
January 9, 1991

Zoning Permit

The applicant is required to obtain a zoning permit from the Borough Planning Department prior to the construction of all structures.

Sincerely,

A handwritten signature in dark ink, appearing to read "Stephen G. Hanis", with a stylized flourish at the end.

Stephen G. Hanis
Assistant Planning Director

SGH/bjs

cc: Lorraine Marshall, Department of Governmental Coordination

**Letter from Stephen G. Hanis, Assistant Planning Director
Ketchikan Gateway Borough**

Response:

Thank you.

Forest Supervisor
January 30, 1991
Page 2

As a life long resident of the Ketchikan community, I send this letter to you with the breadth of feeling and concern that has lead me to be so active in the community over these many years, and I truly believe that the pulse of this community lies in support of Alternative 3, and in the development of the transportation/utility corridor from Lake Tyee and the Ketchikan area.

Sincerely,

CITY OF KETCHIKAN d/b/a
KETCHIKAN PUBLIC UTILITIES

Mayor Ted Ferry
City of Ketchikan

TWS:LLH

cc: Ralph Bartholomew, Ketchikan Gateway Borough Mayor

Letter From Ted Ferry, Mayor of the City of Ketchikan

Comment 1: (paraphrased)

I ask that the EIS acknowledge the potential crossing of a public utilities intertie and the potential need of a right-of-way and to make provision for this potentiality.

Response 1:

Roads planned in the Shelter Cove DEIS indicate several potential crossings of the Ketchikan Public Utility power transmission lines. Such crossings will be coordinated with Ketchikan Public Utilities during the design and construction phases.

In reviewing your concerns relating to power transmission corridors, I am assuming you are referring to areas outside the Shelter Cove project area. The transmission corridor is already in place and requires no additional right-of-way. From your statements, I believe you are relating to the Tyee intertie which runs from Swan Lake northward. This is not in the project area.

KETCHIKAN GATEWAY BOROUGH

344 Front Street
Ketchikan, Alaska 99901
(907) 225-6151

January 14, 1991

Stephen Ambrose
Acting Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

RE: 1950 - Shelter Cove Draft Environmental Impact
Statement, Alaska Region, Ketchikan Area

Dear Mr. Ambrose:

At the request of the Ketchikan Gateway Borough Assembly, I am forwarding this letter in response to the U.S. Forest Service request for comments and recommendations on the Shelter Cove Draft Environmental Impact Statement.

We would like to state what our principal community objectives are regarding this sale, and thereby explain our basis for supporting Alternative 3. In no priority order these objectives are:

- * The retention and continued viability of a principal economic base--the timber industry. Alternatives that provide jobs and community income were judged as more valuable than those not providing a reasonable level of timber harvest.
- * Access to and recreation within significant recreation areas. The Community Attitude Survey (for outdoor recreation) found a very great need for additional roaded recreation opportunities. Alternatives providing more recreational opportunities and that protect such resources through 'retainance areas' were judged more valuable than those not providing such areas and opportunity.

- * The ability to create a road system that can eventually be upgraded to an acceptable public access standard for an inter/intra island road. Alternatives that provided more such access and that could be integrated with an eventual inter-island road were judged more valuable than other alternatives.
- * The minimization of impact upon habitat resources, but within the context of meeting the previously stated objectives.

Based on these objectives, the Borough Assembly finds that Alternative 3, the Recreation/Visual Resource Emphasis alternative, as presented, to be adequate and supportable by the Ketchikan Gateway Borough as we attempt to meet community economic, access, and recreational needs.

Of primary concern to the Borough within this environmental impact statement is that the economic base provided by the timber industry to the community remain at a constant level. The timber industry continues to be a major source of employment within the Borough, employing roughly twenty percent (20%) of the total labor force with both direct and indirect employment. Any major shift towards less employment within the industry, or any reduction in available timber, will have a profound effect upon the local economy. The Ketchikan Gateway Borough Assembly supports the timber industry as a major source of community employment, and therefore recommends to the U.S. Forest Service that they continue to make available a reasonable level of timber harvest to this industry.

The Ketchikan Gateway Borough is located in the extreme southeast portion of the state, and maintains land holdings on three major islands. The Borough residents do not have a direct link to a road system for access off Revillagegido Island. Instead, the only direct linkages off the islands remain wholly with the air transport industry and the Alaska Marine Highway system. The Ketchikan Gateway Borough is specifically interested in the development of an inter-island and intra-island road system. The following access considerations are recommended:

- A. Mainline roads, for whichever alternative is developed, be developed in such a manner that they could be utilized as part of an intra- and/or inter-island road tie. } 1
- B. That all mainline sections of new logging roads be designed to provide horizontal control sufficient to meet USFS standards for a public access road with a minimum of a sixteen (16) foot width and a design speed of at least thirty (30) miles per hour and, preferably, 40-50 miles per hour. } 2

- C. That the design of all mainline sections of road strive for vertical control at no more than eight (8) percent. } 3
- D. During the construction of mainline road sections, it is desirable that an effective waste management system be implemented to effectively remove waste material from the site, or to bury waste material on site, in order to maintain a high visual quality along the principal road corridor. } 4
- E. That logging operations not clear cut up to the mainline roads, and that some vegetation remain to provide a visual barrier between the road and adjacent clear cut areas. } 5
- F. Provide access to important lakes and waterways that are accessible via the mainline roads to recreation sites, as depicted in the road/recreation configuration of Alternative 3. } 6
- G. Defer logging specifications for sites immediately adjacent to the Leask Lakes area until a Master Development Plan for the proposed land trade is completed by the Borough, this would allow for the coordination of harvest patterns within the two areas. } 7
- H. Defer harvesting and road construction of the west end of the study area (sites 49-51, VCU 748, alternative 3) until such time as the Alaska Department of Transportation and Public Facilities completes a corridor study for the construction of an inter-island road system. } 8
- I. As a matter of public policy, the Borough supports a road corridor through the LUD II (Naha) area as a possible linkage for the inter-island road network.

Under all alternatives it is recommended that all "retention areas" related to recreation purposes be maintained in their natural state. It is further recommended that if more timber harvesting is determined to be necessary than provided for under Alternative 3, that it be harvested from areas that will not have a direct affect on the lands retained for recreational purposes. Additionally, it is recommended that all logging operations be conducted in such a manner as to minimize the impact to significant habitat, while realizing the aforementioned timber, access, and recreational objectives. } 9

In addition, the Ketchikan Gateway Borough believes that adequate provisions should be made for sufficient right-of-way for electric transmission and major road corridors in the development of the Shelter Cove timber sale program. Major road corridors are any roads that will allow for 40-55 mile per hour traffic flow. This right-of-way should not be less than 200 feet and a joint use corridor (electric transmission and road) be established. } 10

Stephen Ambrose
Page 4
January 14, 1991

The Ketchikan Gateway Borough Assembly and I would like to thank you for this opportunity to comment on the Shelter Cove Draft Environmental Impact Statement. We will continue to follow the progress of this proposed sale, and in particular our requested revisions, with great interest. If we can provide any further comment, or clarify our present comments, please feel free to contact me at the above address.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ralph Bartholomew", written over a large, loopy circular flourish.

Ralph Bartholomew, Mayor
Ketchikan Gateway Borough

RB/SGH/bjs

Letter From Ralph Bartholomew, Mayor Ketchikan Gateway Borough

Comment 1: (paraphrased)

It is recommended that mainline roads, be developed so they could be used as part of an intra- and/or inter-island road tie.

Response 1:

The Shelter Cove DEIS addresses a timber sale project. A road tie to Ketchikan will require a separate environmental document addressing the inter-island tie. However, the road pattern proposed in the Shelter Cove project will accommodate a possible inter-island road tie. The main road from Shelter Cove to the west will be developed along a corridor that could later be upgraded into a main road tie.

Comment 2: (paraphrased)

It is recommended that mainline roads be designed for public access with a minimum of sixteen foot width and design speed of at least thirty miles per hour and, preferably, 40-50 miles per hour.

Response 2:

Initial construction of the main line road will be for timber harvest purposes. Thus, a single lane road would be built to accommodate such traffic. The mainline road from Shelter Cove to Salt Lagoon is planned to be built as a 16' wide, single lane road. This road will be built along a corridor that will facilitate upgrading to highway standards.

Comment 3: (paraphrased)

It is recommended that mainline roads strive for vertical control at no more than eight percent.

Response 3:

See response to Comment 2.

Comment 4: (paraphrased)

It is recommended that during construction of mainline roads that it is desirable to effectively remove waste material from the site to maintain a high visual quality along the principal road corridor.

Response 4:

Waste material will be disposed of according to the Visual Mitigation Measures contained in Appendix B.

Comment 5: (paraphrased)

It is recommended that clearcut logging not occur up to the mainline roads and that a visual barrier remain.

Response 5:

This practice is displayed for the majority of harvest units in Alternative 3. Where potential windthrow areas exist harvest was limited to one side of the road. Alternative 3 is the recreation alternative and potential recreation values are retained.

Comment 6: (paraphrased)

It is recommended that access be provided to important lakes, waterways and mainline roads access recreation sites.

Response 6:

The mainline road passes adjacent to North Saddle Lakes which provides access to the lakes. Additionally, a boat ramp in Shelter Cove accessing Carroll Inlet is planned. Walk-in access would be available to other lakes in the area.

Comment 7: (paraphrased)

It is recommended that logging be deferred immediately adjacent to Leask Lakes.

Response 7:

Alternatives 2, 4 and 5 respond to this issue.

Comment 8: (paraphrased)

It is recommended to defer harvesting and road construction of the west end of the study area (sites 49-51, VCU 748, Alternative 3).

Response 8:

Alternatives 2, 4 and 5 respond to this issue.

Comment 9: (paraphrased)

It is recommended that if more timber harvesting is necessary than provided for under Alternative 3, that it be harvested from areas that will not have a direct affect on the lands be retained for recreational purposes.

Response 9:

Additional harvest, as displayed in the Record of Decision, was obtained outside of areas withdrawn for recreation and wildlife.

Comment 10: (paraphrased)

It is recommended that adequate provisions be made for sufficient right-of-way for electric transmission and major road corridors. This right-of-way should not be less than 200 feet.

Response 10:

The power transmission corridor through the project area is in place. Thus, additional corridors are unnecessary. The Tyee inter tie runs from Swan Lake northward, and does not appear to be in the project area.

(3)
Klukwan Forest Products, Inc.

P.O. Box 34659 • Juneau, Alaska 99803-4659

(907) 789-7104 Fax: (907) 789-0675

January 25, 1991

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

Dear Mr. Ambrose:

On behalf of Klukwan Forest Products, Inc., its Board of Directors, its over 400 employees, its over 250 shareholders and all of their families, I would like to recommend Alternative 4 for the Preferred Alternative for the Shelter Cove DEIS. This alternative best protects other resources, such as Visual/Recreation, Fish/Water, and Soils/Water, while providing a supply of timber to the industry. Providing this supply is necessary to comply with the new Tongass Reform Act of 1991.

In this Act significant areas of forest land have been set aside and designated for single uses, such as wilderness, which of course does not allow any timber harvest whatsoever. This is in addition to those lands similarly designated in ANILCA.

Section of Alternative 4 is also necessary to comply with Section 105 (f) of the Tongass Timber Reform Act. That Section reads in part . . . } 1

"in order to assure the continuation of the Small Business Administration timber sale program, the Secretary shall seek to provide a supply of timber from the Tongass National Forest which meets the demand of those purchasers qualifying as 'small business concerns' under the Small Business Act as amended (15U.S.C. 631 et seq.)."

Klukwan Forest Products as a qualified small business concern must have a supply of timber in conformance with Section 105 (f).

Other benefits to the Ketchikan Area, as well as indirect benefits to all of Southeast Alaska, include the road corridor potential link up of Ketchikan to the outside. This unique opportunity must be preserved because federally designated wilderness lands preclude this opportunity in so many other locations throughout Southeast Alaska. Alternative 4 also creates opportunity for road dependant rural recreation. Therefore, while this is perhaps beyond the immediate planning } 2

scope, no road should be permanently blocked to retain this as a } ² Co
future option.

Alternatives 3 or 6 create some acceptable opportunities yet they } ³
simply fall short in meeting independent and small business
timber demand as required by the new law. Both do, however,
create the opportunity to interconnect the proposed Forest
Service road system with the main road.

Alternative 5 is totally unacceptable and runs contrary to public } ⁴
response to the Community Survey results regarding fish and
wildlife due to lack of road access. It would also block access
to other tracts of timber for future entries into the area.
Implementation of this would be downright deceitful and
underhanded.

Klukwan Forest Products supports an active timber industry, the
management and development of natural resources, increased
recreation and cultural opportunities, and growth of the
community of Ketchikan.

Sincerely,

Ronald R. Wolfe
Ronald R. Wolfe^{mm}
Chief Forester

RRW:mm

**Letter From Ronald R. Wolfe, Chief Forester,
Klukwan Forest Products, Inc.**

Comment 1: (paraphrased)

Selection of Alternative 4 is necessary to comply with Section 105(f) of the Tongass Timber Reform Act.

Response 1:

Section 105(f) of the Tongass Timber Reform Act requires only that the Forest Service seek to provide a supply of timber from the Tongass National Forest to small business concerns. This project addresses this concern. Section 105(f) does not require the Forest Service to select the "Maximum Timber Harvest Alternative" but that timber harvest be consistent in providing a sustained supply of renewable resources.

Comment 2: (paraphrased)

Other benefits to the Ketchikan Area, as well as indirect benefits to all of southeast Alaska, include the road corridor potential link up of Ketchikan to the outside. Therefore, while this is perhaps beyond the immediate planning scope, no road should be permanently blocked to retain this as a future option.

Response 2:

Roads addressed in the Shelter Cove plan would not preclude eventual link up or potential use in an intra-island road tie. The mainline road from Shelter Cove to the Salt Lagoon area will be located along a corridor that will accommodate eventual upgrading and linkage to an intra-island system.

Comment 3: (paraphrased)

Alternatives 3 or 6 create some acceptable opportunities yet they simply fall short in meeting independent and small business timber demand as required by the new law.

Response 3:

See response number 1.

Comment 4: (paraphrased)

Alternative 5 is totally unacceptable and runs contrary to public response to the community survey results regarding fish and wildlife due to lack of road access. It would also block access to other tracts of timber for future entries into the area.

Response 4:

Of the nine recreational values prioritized by the community, the first through third priorities dealt with fish and wildlife habitat protection. Roaded access to recreation was listed as a fourth priority. Alternative 5 protects the highest value fish and wildlife habitat, while proposing harvest of 67.1 million board feet of timber.

④

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

January 24, 1991

Dear Sir:

In reviewing the Shelter Cove Draft Environmental Impact Statement I can see that your agency has put many man hours into different philosophies of resource management. I believe from reading it that many people employed by the USFS should be commended.

I understand that there are six alternatives to choose from. There should be a choice of an alternative 7 termed "HARVEST EVERYTHING MERCHANTABLE". I believe this to be as valid an alternative as alternative 1 which is termed NO ACTION as the Shelter Cove area is to be managed under multiple-use. This is not to state that I am in favor of harvesting everything merchantable, though is to state that I believe that your agencies alternative 1 is such an extreme that in order to obtain a middle ground the totally opposite alternative should also be proposed. In future Draft Environmental Impact Statements I believe that a harvest everything alternative should be listed so that both extremities could be eliminated and the middle ground concentrated on. }

I believe that the Shelter Cove Area with its close proximity to Ketchikan is highly regarded by the citizens of Ketchikan. The Shelter Cove area is meant to be managed under the multiple-use principle and as such is intended to have harvesting of timber allowed. Now how much and from where is the question posed by your agency.

I strongly believe that the MAJORITY of citizens in Ketchikan favor roaded recreation "immediately" and this has been shown by a survey conducted by the Ketchikan Gateway Borough. In order to have this roaded recreation it is imperative that VCU 748 have roads established to the presently owned state land commonly referred to as Leask Lakes. These roads would allow multiple-use of a multiple-use area by a multiple variety of people. These roads are imperative for the use of this area by elderly, very young and handicapped citizens of Ketchikan. }

Received
1/24/91

As you are already aware the economy of Ketchikan is strongly based on the timber allowed for harvest by your agency. Some city operations would include LP's Ketchikan Pulp Company and Seley's. The economy of Ketchikan is also based on the fishing industry. With operations such as Silver Lining.

So how do you get what seems to be two competing natural resource users to agree on how to manage the natural resources of the Shelter Cove area for their benefit? A most perplexing problem indeed ---- or is it?

I believe that both the common timber cutter and the common fisherman who work outdoors want and NEED to use the resources for their livelihood. Though, these working people also wish to effect the resources as little as possible. In order that their children will also have the ability to use the resources.

I don't truly believe there is a wide gap of thought between the common fisherman and logger in natural resource issues. Though there is a wide gap of thought by lobbying interest who more often then not scream the loudest at and to your agency. Please keep in mind that the small fisherman and logger are the ones who are going to be affected by your decision on a day to day basis.

I have given the alternatives that are proposed by your agency careful and meticulous review. Although I don't believe any of them are perfect. I do believe that alternative 6 comes closest to what the common majority of people would like done in managing the resources of the Shelter Cove Area.

Why do I believe that the majority of citizens favor alternative 6 over the others? There are many reasons though I have only outlined a few that I feel are imperative for your upcoming decision.

1. I believe that the roads once accessed by the citizens of Ketchikan will provide for a "quality outdoor experience" by the majority of people. An expanded road system will allow people the freedom of being able to hunt and fish away from other people much more easily then what currently is allowed. As I stated previously I am writing about the common citizens, of which I'm one, the citizens who want to spend the day fishing not walking to go fishing. Nor am I writing about the citizens who own airplanes and large boats."

2. As wildlife is a major concern to people including myself I support alternative 6 over alternative 5 for it provides increased habitat acreage for black bears, bald eagles, river otters, and Vancouver Canadian Geese. Alternative 6 has an increase of 2% habitat effect on pine martin, blacktail deer, and hairy woodpeckers. I am questioning the affect on blacktail deer as current literature is indicating that these animals store up body fat for the winter months and harvesting timber will bring food down to a level in which they can easily achieve it. As evidenced by Prince of Wales Island. } 3
3. Fish management enhancements or improvements are much more easily accomplished under alternative 6 then under alternative 5. These fish enhancements or improvements are undoubtedly beneficial to the commercial fisheries of Alaska in the ability to increase fish numbers and consequently harvest rates. Which in turn increases revenue to the Ketchikan Area.
4. Alternative 6 provides for 70 timber related jobs. This equates to 20% more people employed in Ketchikan then under alternative 2, 3, & 5. In money this amounts to at least \$600,000.00 and would increase from there as these people would need to purchase goods from town (ie food, gas, etc.).
5. I believe that the added road access would increase the amount of time that the independent traveler would spend in the Ketchikan Area. This would also be beneficial to the merchants of the city as this traveler would be more likely to purchase goods. } 4
6. Alternative 6 builds less roads on highly erodible soils then alternative 5. As sediment can be a factor on aquatic populations alternative 6 would be better for fish and consequently people dependent on fish such as fishermen. } 5
7. Alternative 6 harvest less acreage in very high MMI areas then alternative 5.
8. Alternative 6 does not make any larger entries then 135 acres which is the same as alternative 5.
9. If the road is tied to Ketchikan. Citizens of Ketchikan will be allowed to gather firewood for their personal use.
10. Alternative 6 harvest less wetland associated timber then alternative 5. This is an important point as timber takes longer to establish itself in wetland areas. So evidently alternative 5 impacts the natural resources for a longer period of time then does alternative 6.

11. Alternative 6 will provide for a sustained yield of timber as the entry harvest only 10% of the totally available commercial timber within the Shelter Cove management area.

I believe with my "middle of the road" approach to management. The Shelter Cove area alternative 6 provides for the best interest of the MAJORITY of Ketchikan citizens.

Sincerely,

A handwritten signature in cursive script, appearing to read "Al Peterson".

Al Peterson

cc: Dave Fletcher

Letter From Al Peterson

Comment 1: (paraphrased)

It is recommended that there should be a choice of an Alternative 7 termed "HARVEST EVERYTHING MERCHANTABLE". I believe this to be as valid an alternative as Alternative 1 which is termed NO ACTION as the Shelter Cove Area is to be managed under multiple-use.

Response 1:

The Tongass Land Management Plan (TLMP), limits the amount of harvest in the first entry. To do otherwise would go contrary to this direction.

Comment 2: (paraphrased)

In order to have roaded recreation it is imperative that VCU 748 have roads established to the presently owned State land commonly referred to as Leask Lakes.

Response 2:

Alternatives 2, 3 and 6 propose roads to the state land boundary in the Leask Lakes area. The fact that the other alternatives do not propose roads to the state land boundary near Leask Lakes offers a reasonable range of alternatives to the public.

Comment 3: (paraphrased)

I am questioning the affect on black-tail deer as current literature is indicating that these animals store up body fat for the winter months and harvesting timber will bring food down to a level in which they can easily achieve it. As evidenced by Prince of Wales Island.

Response 3:

As stated in the EIS, timber harvest converts old growth into early successional shrub and forb stages. Clearcuts 0-15 years old provide abundant forage and improve the opportunity for more deer to enter the winter in good condition, but the lack of canopy cover, in clearcuts to intercept snow, results in making herbaceous forage unavailable during intermediate or deep snow winters. We who stated these facts, studied the deer on Prince of Wales Island.

Comment 4: (paraphrased)

It is recommended that added road access would increase the amount of time that the independent traveler would spend in the Ketchikan Area.

Response 4:

We agree. Given more miles of road to drive and more developed recreation opportunities it seems likely that the independent traveler would be likely to stay in the area longer.

Comment 5: (paraphrased)

It is recommended that alternative 6 builds less roads on highly erodible soils than Alternative 5. As sediment can be a factor on aquatic populations, Alternative 6 would be better for fish and consequently people dependent on fish such as fishermen.

Response 5:

We agree that Alternative 6 does build slightly less roads on soils with very high mass movement index; 0.4 miles compared to 1.2 miles (DEIS 4-3). But the total road miles on areas of high mass movement index is higher for Alternative 6 (15.2 miles) compared to Alternative 5 (14.2 miles). We disagree that Alternative 6 is better for fish habitat productivity.

As stated in the DEIS, Chapter 2, page 20; the greatest potential for adverse impacts to fish habitat results from potential mass movement and road erosion within the Salt Creek drainage. Alternative 5 has not units located within these sensitive areas, compared to five units with soil hazard areas above the productive salmon habitat in upper Salt Creek.

(5)

STATE OF ALASKA

STEVE COWPER, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

Division of Environmental Quality
Southeast Regional Office
P.O. Box 32420
Juneau, Alaska 99803

Phone: (907) 789-3151

January 15, 1991

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

WILSON FOREST SERVICE
RECEIVED
JAN 18 1990

RE: Shelter Cove Draft Environmental Impact Statement

The Shelter Cove independent sale plan will harvest between 26.3 to 95.6 million board feet of timber on the Ketchikan Ranger District. The 60,383-acre project is located on Revillagigedo Island, around the Shelter Cove and George Inlet area and is 18 air miles northeast of Ketchikan.

The Department has reviewed this document under the National Environmental Policy Act (NEPA), the Alaska Coastal Management Program (ACMP), review authorities and standards of the Alaska Forest Practices Act (FPA). Our comments relating to the project's consistency with ACMP are separated from our NEPA comments.

NEPA COMMENTS

Alternative 5 appears to be the most preferable in terms of maintaining water quality and preserving wildlife habitat in the area. In addition, Alternative 5 proposes no road building in VCU 742, which is designated as LUD II. One concern with this alternative, as well as with alternatives 4 and 6, is whether the LTF at Hume Island will be usable as is assumed in each case. The EIS lists two factors that could preclude the use of this LTF. The first is the possible presence of several eagle nesting sites in the vicinity. The second factor is the question of obtaining permission from the owners to use the site. Neither issue was resolved in the draft EIS. Finally, the Forest Service should seriously consider excluding road building and timber harvesting activities from areas identified as having very high MMI soils. For example, Alternative 5 proposes the building of 1.2 miles of road, and the harvesting of 33 acres of timber in areas with very high MMI soils. These areas should be excluded from proposed road building and timber harvesting activities, as the potential for landslides in such areas is high. } 1

Stream buffer requirements presented in Appendix B (the proposal for placing buffers around certain streams in each alternative) do not meet the requirements of the Tongass Timber Reform Act. Obviously, the draft EIS was produced before the legislation was passed. However, the final EIS should incorporate the new requirements. } 2

Stream buffer requirements presented in Appendix B (the proposal for placing buffers around certain streams in each alternative) do not meet the requirements of the Tongass Timber Reform Act. Obviously, the draft EIS was produced before the legislation was passed. However, the final EIS should incorporate the new requirements. } 3

A list of major watersheds is presented in Chapter 3, page 20. Watershed D83A was excluded from this list, despite the fact that it is anadromous fish habitat, and has timber harvesting activities scheduled in its vicinity in several of the alternatives. This watershed should be included in the final EIS. In addition, the fish production potential of watershed D83A should be included in the final EIS, if it was excluded from the draft EIS.

4

The monitoring plan identifies the most important subjects for research and monitoring on lands affected by timber harvest activities, but has two main deficiencies:

Feathering of boundaries (including stream buffers) should be a common practice in wind-prone areas, not just (apparently) a research item as proposed in the draft EIS. Feathering is an effective method for preventing blowdown at the boundaries of cutover areas.

Under "Fish Habitat," a proposal is made to sample 5-15% of the harvested units annually. A unit of measurement of "percent effective" is proposed. Two questions need to be answered. The first is: what is meant by "effective"? For example, "effective" could mean meeting state water quality standards and maintaining fish populations with no significant losses. It would be helpful to know, even in a general way, what and how specific parameters will be measured (e.g. quantity of sediments up and down stream from a harvest unit, and/or before and after harvesting at one point) in order to judge whether stream protection efforts are effective. The monitoring effort should also address the question of impacts of sediment loading in Class III streams that are upstream from fish habitat, and in Class II streams that are not tributary to Class I streams, and which are not buffered. The second question is temporal: for how long will the monitoring be done? Cumulative effects analysis needs to be done in order to ensure that fish habitat is not significantly impacted over the long term.

5

ACMP

The Department reviewed this document under the Alaska Statutes governing Forest Practices on State and Private Lands (Title 41) for the protection of water quality. Under section 41.17.098 the Department of Environmental Conservation is given due deference for water quality.

Log Transfer Sites

Volume II of the DEIS for Shelter Cove discusses the evaluation of LTF sites. The final selection of LTF sites should meet the criteria described within the document "Log Transfer Facility Siting, Construction, Operation and Monitoring/Reporting Guidelines" dated September 1985. Guidelines in this document serve as the basis on which agencies judge the ability of sites to meet water quality and habitat concerns. Since the issuance of this document, State and Federal agencies have refined LTF performance standards. The Environmental Protection Agency (EPA) has determined that LTFs should meet log entry velocities of 3 feet per second. This entry speed is achievable with the best available technology; LTFs should be designed to meet this standard. The Department of Environmental Conservation has also required that LTFs have a surface runoff plan, defined boundaries for the sort yard and LTF, and requires the disposal of woodwastes consistent with solid waste regulations under 18 AAC 60.

6

7

Water Quality Monitoring

The DEIS soil and water monitoring plan is inadequate, does not describe methods to determine water quality before, during, and after timber harvest and does not describe a process to allow modifications of harvest prescriptions in response to water quality conditions. The Alaska Forest Practices Act specifically states in AS 41.17.060 (b)(5) "significant adverse effects of soil erosion and mass wasting on water quality and fish habitat shall be prevented or minimized". To met this performance standard, the Forest Service must demonstrate that its forest practice Best Management Practices (BMPs) and Aquatic Habitat Management Units (AHMU) maintain State Water Quality Standards. 8

To assess whether AHMU and BMPs meet State Water Quality Standards, a method of monitoring BMP effectiveness must be part of the FEIS. The DEIS is deficient on this issue. The measurement of water quality in the DEIS is based on adherence to BMPs and AHMU practices. There is no existing research demonstrating that BMPs utilization in Southeast Alaska meets State Water Quality standards. To the contrary, Thorne Bay Ranger district issued a report (Prince of Wales Culvert Repair, State I.D. No. AK901003-04) on the review of 45 culverts for fish passage. A disturbingly high percentage of culverts failed to allowed fish passage due to improper culvert installation or maintenance. This report is an example of where BMPs failed to achieve the goal of water quality protection and fish passage. It is impossible using this or the proposed type of monitoring to predict and determine if Aquatic Habitat Management Unit (AHMU) prescriptions and Best Management Practices (BMP) meet State Water Quality Standards during and after timber harvest. The application of prescriptive practices should be validated with solid monitoring information.

The Forest Service has argued that monitoring is part of the forest wide plan (Tongass Land Management Plan) and is therefore not an issue for discussion within the DEIS document. The Forest Service is playing a shell game in defining where water quality will be monitored. In TLMP, monitoring plans call for analyzing data collected in conjunction with projects (see Appendix Vol. III, pg. H-17 #3). It does not give specific plans nor projects. We agree that monitoring should be part of Forest Service projects. We also believe that Shelter Cove more than qualifies as a project.

The Department of Environmental Conservation finds the DEIS consistent with ACMP if the following stipulations are followed. These stipulations are necessary for the protection of Water Quality (AS 41.17.060 (b)(5)).

SHELTER COVE WATERSHED MONITORING STIPULATIONS

- 1.) BMPs for road building and installation of culverts and bridges shall be monitored for effectiveness at meeting State Water Quality Standards. Turbidity and sedimentation must be measured using established sampling techniques. Monitoring should include both long and short term sampling.

- 2.) BMPs for timber harvest shall be measured for effectiveness at meeting State Water Quality Standards. Parameters to be considered are turbidity, sedimentation, and temperature. Monitoring should include both long and short term sampling.
- 3.) AHMUs for timber harvest shall be measured for effectiveness at meeting State Water Quality Standards. Parameters to be considered are turbidity, sedimentation, and temperature. Monitoring should include both long and short term sampling.

Thank you for allowing comment on this document.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jim Ferguson".

Jim Ferguson
Environmental Specialist

cc: Lorraine Marshall (DGC)
Walter Dortch (USFS)
Daryl McRoberts (ADNR)
Jack Gustafson (ADF&G)
Rick Reed (ADF&G)
Tamra Faris (NMFS)
Susan Cantor (USEPA)

Letter From Jim Ferguson, Environmental Specialist, State of Alaska

Comment 1: (paraphrased)

I am concerned with Alternative 5, as well as Alternatives 4 and 6, whether the LTF at Hume Island will be usable as is assumed in each case.

Response 1:

Use of the Hume Island LTF is dependent upon developing an equitable agreement with Cape Fox Corporation. If the site is not usable, or such an agreement could not be reached, all resource access would be accomplished via the Shelter Cove LTF. This is provided for in discussion in Chapter 4, pp.3 of the DEIS.

Comment 2: (paraphrased)

It is recommended that the Forest Service should seriously consider excluding road building and timber harvesting activities from areas identified as having very high MMI soils.

Response 2:

The Forest Service (FS) does what it can to avoid road building and timber harvesting activities in areas identified as having very high MMI soils.

It is noted in footnote 1 of Table 4-3 and on page 7 of Appendix B of the Draft Environmental Impact Statement (DEIS) that soils information used to compute this document is not 100% accurate for conditions on the ground. Mapping of soils is generally accurate for a given area, but not for every location in that area. Soils and slopes are not 100% homogeneous within a soil map unit. Assigning a very high mass movement designation to a map unit is often a worse case scenario that can protect some of the soil resource. The major areas of very steep slopes are noted, while the smaller areas of less steep slopes may not be identified. The inventory system is not able to identify the smaller areas of less steep slopes and benches within a map unit where the roads may be laid out or some of the timber may be harvested. This is not ignoring that activities will be done on very high MMI soils. The land in southeast Alaska occurs in such a pattern that it is difficult to avoid areas of very high MMI soils.

The information provided by the inventory system on high MMI soils is a red flag to alert us to potential problems. These areas are investigated by soil scientists with the FS prior to construction of roads or harvest of timber. Alternate areas are suggested if they are available. It is noted in the Soils/Water section for each of the action alternatives in Chapter 2 of the DEIS, that "High and very high mass movement index soils will be avoided, to the extent possible." Mitigation measures are applied if activities must be done on areas with very high MMI soils. These mitigation measures are applied to minimize possible adverse effects to timber harvest and road construction on soil productivity and water quality. Table 2-28 (pages 27 to 30) of the DEIS list mitigation measures. Item 3 discusses mitigation measures for activities for road construction on very high MMI soils. Item 4 discussed mitigation measures for activities for timber harvest on very high MMI soils.

Comment 3: (paraphrased)

I am concerned that stream buffer requirements presented in Appendix B do not meet the requirements of the Tongass Timber Reform Act.

Response 3:

The Aquatic Habitat Management Unit Harvest Standards and Guidelines for the Final EIS will be amended to be consistent with requirements in the Tongass Timber Reform Act.

Comment 4: (paraphrased)

I am concerned that Watershed D83A was excluded from a list of major watersheds presented in Chapter 3, page 20. This watershed should be included in the final EIS.

Response 4:

The table in Chapter 3, page 20 is in error. Salt Lagoon Creek, ADF&G #101-45-10400, was erroneously labeled as watershed D81C. It is actual watershed number D84A. Salt Lagoon Creek #2, ADF&G #101-45-10420 was erroneously labeled D84A, when in fact it is D83A.

Comment 5: (paraphrased)

Two questions need to be answered about a unit of measurement of "percent effective" is proposed. The first is: what is meant by "effective"? The second question is temporal: For how long will the monitoring be done?

Response 5:

The % effective can be answered by reviewing the revised Fish Habitat Monitoring Plan. The how measured column defines the effectiveness question. The when measured answers how long the monitoring will be done.

Comment 6: (paraphrased)

It is recommended that the final selection of LTF sites should meet the criteria described with the document "Log Transfer Facility Siting, Construction, Operation and Monitoring/Reporting Guidelines" dated September 1985.

Response 6:

Shelter Cove was selected and evaluated in accordance with the Log Transfer Facility Siting, Guidelines, dated 1985. The facility will be constructed and operated within the Operation and Monitoring/Reporting Guidelines. The Shelter Cove LTF evaluation is included in Appendix C of the DEIS.

Comment 7: (paraphrased)

The Environmental Protection Agency (EPA) has determined that LTFs should meet log entry velocities of 3 feet per second. This entry speed is achievable with the best available technology. It is recommended that LTFs should be designed to meet this standard and have a surface runoff plan.

Response 7:

The Shelter Cove site is designed for A-frame lift off or crane operations. These systems will provide the 3 foot per second log entry speed which exceeds the above mentioned siting guideline requirements. Surface run-off and other design features will be accomplished during the permitting process.

It was unknown to us that the Hume Island LTF was a short-term use facility. If we cannot gain access via Hume Island LTF for any reason, all Forest Service timber resources tributary to Hume Island LTF will be transported to the Shelter cove LTF.

Comment 8: (paraphrased)

I am concerned that the DEIS soil and water monitoring plan is inadequate, does not describe methods to determine water quality before, during, and after timber harvest and does not describe a process to allow modifications of harvest prescriptions in response to water quality conditions.

Response 8:

Tables 2-28 (pages 27 through 30) and 2-36 (pages 45 and 46) of the Draft EIS have been revised in the FEIS to include information to correct these deficiencies.

DEPARTMENT OF FISH AND GAME
 DIVISION OF FISHERIES REHABILITATION
 ENHANCEMENT AND DEVELOPMENT (FRED)
 2030 SEA LEVEL DRIVE, SUITE #205
 KETCHIKAN, AK 99901

(907) 225-9677
 RECEIVED

JAN 18 1991

January 16, 1991

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

Dear Forest Supervisor:

I have reviewed the Shelter Cove DEIS. Since I am personally not familiar with most of the area involved, I have relied on your information regarding the amount and quality of fish habitat and the expected impacts to the habitat from the various alternatives.

It is clear to me that Alternative 5 is the most reasonable, in that it will result in the least amount of degradation of natural habitat important to fish and wildlife, while allowing for timber harvest. Although you have planned for buffer zones adjacent to streams in harvest units - and a lot of thought has gone into planning for effective buffer zones - there is no way to insure against unexpected blowdown and the consequences to fish habitat. Therefore, protecting the Salt Creek watershed by leaving old growth intact is important to the coho salmon resource.

Your references to "good fish enhancement access" for alternatives 2, 3, 4, and 6 should not be a consideration on which to base a choice of alternative, and therefore should not appear on Table 2-27. Decisions to implement enhancement projects should be based on habitat and biological parameters, not human convenience and low cost. Fish pass construction, as you know, is entirely feasible in non-roaded areas (Old Franks, Margaret, etc.). Likewise, stating that Alternative 5 results in "limited fish enhancement" implies that this alternative does not score as high in this category, when in fact it would be best for the resource since it leaves more natural habitat and requires the least amount of mitigation.

USDA - FOREST SERVICE
 RECEIVED
 JAN 17 '91
 KETCHIKAN AREA
 TONGASS NATIONAL FOREST
 FS
 DES
 PER
 PAS
 AD
 T.M.
 ENG
 FGS X
 TAMS

*Steve
 Segovia*

When your harvest plans are finalized I will be glad to discuss a co-operative enhancement program with you, for colonization of native coho above any new fishpass. FRED Division's Beaver Falls Central Incubation Facility would be the logical place to incubate eggs for enhancement projects, and any political support you can lend in the coming months to help keep the facility operating will be appreciated.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carol Denton".

Carol Denton
Area Biologist
FRED Division

Letter From Carol Denton, Area Biologist, State of Alaska

Comment 1: (paraphrased)

It is recommended that references to "good fish enhancement access" for Alternatives 2, 3, 4, and 6 should not be a consideration on which to base a choice of alternative, and therefore should not appear on Table 2-27.

Response 1:

Table 2-27 is a comparison of alternatives. By having a road adjacent to the potential project site, costs for construction are considerably cheaper. Also, the Area has found that good road access facilitates the ability to find volunteers to help construct fishways.

Comment 2: (paraphrased)

I am concerned that stating that Alternative 5 results in "limited fish enhancement" implies that this alternative does not score as high in this category.

Response 2:

The table does over simplify the fish enhancement opportunities. The discussion of the effects of timber harvest on fish gives a more complete analysis. Alternative 5 would not include the Salt Creek falls in a Knutson-Vandenberg collection boundary. This source of monies have been used to fund construction of several fish passage facilities that the State has worked as partners with us. These are Dog Salmon, Rio Roberts, Margaret, and Big Lake. So the elimination of the Salt Creek falls from the collection boundary would limit enhancement opportunities compared to Alternatives 2, 3, 4, and 6.

(7)

DEPARTMENT OF NATURAL RESOURCES

SOUTHEAST REGION OFFICE
400 WILLOUGHBY AVE., 5th FLOOR
JUNEAU, ALASKA 99801
PHONE: (907) 465-2491

Steve Ambrose
Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, AK 99901

	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FEB							
MAR							
APR							
MAY							
JUN							
JUL							
AUG							
SEP							
OCT							
NOV							
DEC							

FEBRUARY 1968
RECEIVED

RECEIVED
 FEBRUARY 1968
 U.S. DEPT. OF JUSTICE
 FEDERAL BUREAU OF INVESTIGATION
 WASHINGTON, D.C.
 TELETYPE UNIT

Shelter
Cove
input

 printed on recycled paper by C.D.

**FEDERAL CONSISTENCY TO THE ACMP
OF TIMBER HARVEST ACTIVITIES**

Alaska's revised Forest Practice Act speaks specifically to the issue of Federal consistency of timber harvest activities. The following sections are identified as pertaining to Federal consistency.

AS 41.17.900

(b) For Federal land,

(1) the degree of resource protection may not be less than that established by this chapter for state land except that AS 41.17.119 establishes the minimum riparian standard;

(2) a timber harvest activity subject to this chapter shall satisfy the requirement to be consistent to the maximum extent practicable with the Alaska coastal zone management program if the federal land management plans, guidelines, and standards applicable to that timber harvest activity provide no less resource protection than the standards that are established in this chapter provide for state land except that

(A) AS 41.17.119 establishes the minimum riparian standards; and

(B) this paragraph does not apply to a timber harvest activity that requires a state or federal authorization under a provision of law other than this chapter.

AS 41.17.060 REGULATORY AND ADMINISTRATIVE STANDARDS.

(b) With respect to state, municipal, and private forest land the following standards apply:

(1) to the maximum extent possible, all applicable data and information of applicable disciplines shall be updated and used in making decisions relative to the management of forest resources;

(2) environmentally sensitive areas shall be recognized in the development of regulations and best management practices that are designed to implement nonpoint source pollution control measures authorized under this chapter;

(3) administration of forest land shall consider marketing conditions and other economic constraints affecting the forest land owner, timber owner, or the operator;

(4) to the fullest extent practicable, harvested forest land shall be reforested, naturally or artificially, so as to result in a sustained yield of merchantable timber from that land; if artificial planting is required, silviculturally acceptable seedlings must first be available for planting at an economically fair price in the state; and

(5) significant adverse effects of soil erosion and mass wasting on water quality and fish habitat shall be prevented or minimized.

(c) With respect to state and municipal forest land only, the following standards also apply:

(1) forest land shall be administered for the multiple use of the renewable and nonrenewable resources and for the sustained yield of the renewable resources of the land in the manner that best provides for the present needs and preserves the future options of the people of the state;

(2) a system of allocating predominant uses or values to particular units within a contiguous area of land shall reflect in reasonable proportion the various resources and values present in that area;

(3) to the extent its capacity permits, forest land shall be administered so as to provide for the continuation of businesses, activities, and lifestyles that are dependent upon or derived from forest resources;

(4) timber harvesting is limited to areas where data and information demonstrate that natural or artificial reforestation techniques will result in the production of a sustained yield of merchantable timber from that area;

(5) there may not be significant impairment of the productivity of the land and water with respect to renewable resources;

(6) allowance shall be made for scenic quality in or adjacent to areas of substantial importance to the tourism and recreation industry; and

(7) allowance shall be made for important fish and wildlife habitat.

AS 41.17.119 MINIMUM RIPARIAN STANDARDS FOR OTHER PUBLIC LAND. On other public land, harvest of timber may not occur

(1) within 100 feet from the shore or bank of an anadromous or high value resident fish water body that is located south of the Alaska Range;

(2) within 100 feet immediately adjacent to an anadromous or high value resident fish water body north of the Alaska Range unless the commissioner determines that adequate protection remains for the fish habitat.

When timber harvest activities are reviewed for federal consistency the above statutes are the sole basis for the consistency decision. As I see it there are three separate areas to address. First does this timber harvest activity require a state or federal authorization under a provision of law other than AS 41.17.900. If it does the consistency review for that activity (such as a LTF, or rafting area) will be outside the Forest Practice Act.

Second, If the Timber harvest activity includes riparian habitat, the standards of AS 41.17.119 must be applied. This standard requires that "harvest of timber may not occur (1) within 100 feet from the shore or bank of an anadromous or high value resident fish water body that is located south of the Alaska Range". This section does not speak to windfirmness, effectiveness, or any other attributes of a "buffer". It only requires that trees not be cut within 100 ft. of a fish creek.

High value resident fish means resident fish populations that are used for recreational, personal use, commercial, or subsistence purposes.

Third, does the federal land management plans, guidelines, and standards applicable to the activity provide on less resource protection than the standards established by the Forest Practice Act. Two issues appear to affect this standard. The issue of resolution. At what level does the federal action have to consider and protect items 41.17.060 (b) and (c). On the forest level, on a management area level, on a drainage level, on a timber sale level, or on each and every unit. Since the law specifically addresses federal land management plans, guidelines and standards it intends that the "no less resource protection" be applied at the level relevant to those plans, guidelines and standards. It is not meant to apply to individual units or even to timber sales. This seems appropriate since land is allocated amongst timber, habitat, etc. on a drainage or forest basis and does not need to again be allocated at the unit or timber sales level.

The second issue regarding "no less resource protection" is the issue of adequacy. Does the federal plans, guidelines and standards protect the resources as well as AS 41.17.060 (b) and (c). Only (c) (4) has a firm measurable standard "timber harvesting is limited to areas The other "standards" are in fact a list of guidelines requiring judgement decisions related to resource issues. As long as the federal agency has considered these issues through their planning process and NEPA reviews, and has made their best decision considering the factors involved, they have provided "no less resource protection".

If the above three areas comply then the federal timber harvesting activity complies with the Alaska coastal zone management program. Any other thoughts, comments, or requested stipulations regarding the activity should be addressed through the NEPA public review process.

**Letter From Daryl McRoberts, Assistant S.E. Regional Forester,
State of Alaska**

Comment 1: (paraphrased)

It is recommended to consider Alternative 6 as the preferred alternative in the final EIS. If another alternative is chosen, incorporate the lower road system around Salt Lake up to the State's boundary at Leask Lake.

Response 1:

The Shelter cove DEIS evaluates a timber sale proposal. Road links to Ketchikan are not within the scope of the project. Linking the Shelter Cove area to Ketchikan will require a separate environmental evaluation.

Comment 2: (paraphrased)

In order to be consistent, the buffers that are being left along anadromous or high value resident fish water bodies be at least 100 feet wide.

Response 2:

With the passage of TTRA, all Class I streams (anadromous and high value resident fish streams) will receive at least 100' no-cut leave areas (FEIS, Chapter 2).

Please rate the importance of the following....

- Maintaining the wildlife resource in potential outdoor recreation areas.
- Preservation of the fisheries resource for fresh-water sport fishing.
- Preservation of the fisheries resource for salt-water sport fishing.

Without road access to the project area and therefore, use by the general public, these become doubtful concerns to the larger community that would not have an alternate mode of travel.

We support the balance of resource use and protection presented in Alternatives 3 and 6. The recreation opportunities that would be created are coordinated well with the proposed timber harvest. The areas that would be retained for wildlife habitat and use appear to be substantial, to be able to support more than viable populations, and to create, in conjunction with future road access from town, hunting and fishing opportunities. The specific areas of old growth retention particularly in the western section of VCU 747 and the northeastern section of VCU 748 are well placed as our resource review for the land exchange indicates. We are curious that more emphasis was not given to VCU 753, as it appears to meet the primary deer winter range criteria as presented in several USFS documents and the deer habitat capability model. Alternative 5 appears to over emphasize old growth retention and to place large acreages in retention that appear to be of secondary importance for deer.

} 3
} 4

We believe that balanced resource development, particularly an active timber industry, is key to the growth of our community, to its economic health and to the creation of increased recreation and cultural opportunities. We encourage the Forest Service to continue multiple use development of forest resources on Revilla Island. There is a definite need for the associated opportunities that are created from resource development as has occurred on Prince of Wales Island.

Thank you for the opportunity to comment.

Sincerely,

DOUGLAS CAMPBELL

Douglas M. Campbell
Land and Resource Manager

**Letter From Douglas M. Campbell, Land and Resource Manager,
Cape Fox Corporation**

Comment 1: (paraphrased)

We cannot support Alternative 5 which effectively forecloses a road connection from Shelter Cove to Ketchikan.

Response 1:

The Shelter Cove DEIS was prepared to plan timber sales in the Shelter Cove Area. Consideration of a Shelter Cove - Ketchikan road would need to be planned under a separate environmental document. Alternative 5 defers road and harvest development in the upper Salt Lagoon Creek area until a link-up plan is undertaken. Thus, all road and harvest options are retained until a road link plan is developed.

Comment 2: (paraphrased)

If Alternative 5 were implemented, a road connection to Ketchikan through old-growth retention would, in our opinion, be a highly unlikely prospect. Timber would not be available to assist in funding of road construction.

Response 2:

The old-growth retention plan can be modified by a subsequent NEPA document.

Comment 3: (paraphrased)

We are curious that more emphasis was not given to VCU 753, as it appears to meet the primary deer winter range criteria as presented in several USFS documents and the deer habitat capability model.

Response 3:

It is anticipated that the land south and west of VCU 753 would not provide populations necessary for the recolonization of unoccupied habitat patches as the LUD II lands would be able to.

Comment 4: (paraphrased)

We are concerned that Alternative 5 appears to over emphasize old-growth retention and to place large acreages in retention that appear to be of secondary importance for deer.

Response 4:

Sitka black-tailed deer were not the only species taken into consideration when location the blocks of old-growth prescription. Today, when management encompasses a much broader spectrum of concerns, with more emphasis being placed on a broad-based ecosystem approach to management rather than a single species approach. Please see Chapter 4, section on Old-Growth Prescription for more details.

Alaska Airlines

Dec. 6, 1990

Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
KTN, AK 99901

USDA-FOREST SERVICE
RECEIVED
JAN 02 1990

Fletcher

Dear Forest Supervisor,
I have received the Shelter Cove Draft E.I.S. and would like to comment.

I am a resident of Upper George Inlet Subdivision. I spend much of my recreation and home life in and around the Shelter Cove Area (as described by the USFS document).

The Salt Lagoon and its tributaries are the major region of recreation for me. This region is most productive of deer, wolves, caribou, shrimp, salmon, etc. which explains why I use it for recreating. Any disruption of the area will impact my use as well as the use by others. ~~Alternative~~

Therefore, Alternative 5, I believe, represents the best balance of logging and protection of wildlife recreation. The Salt Lagoon is currently very accessible and needs no further road access.

In fact the E.I.S. states that chance of overharvest of the coho run would be highest in all but Alternatives 1 & 5. ~~The~~ Both alternatives 1 & 5

also would keep large blocks of old growth
resulting in ^{keeping the} wildlife corridor between the
lagoon and the Naha regions intact. The minimal
loss of ~~Fisheries~~ ^{ooho production} is also best addressed by alt. 5.
Alternative 5 also results in 0 acres harvest of
Subsistence Areas.

With regard to the Ketchikan area surveys
that have been recently conducted ~~on~~ recreation,
people want to protect saltwater species and wildlife
the most. A road access could possibly be
generated through the Leask Lakes and salt
lagoon/creek to access the Alternative 5 road system.
This would ~~also~~ accomplish the best balance for
the needs of this community and the
tional community in Upper George Inlet, by lessening impact
on those things most important to people,
Thank you.

Sincerely,

Robert D. Widness

Robert D. Widness

Box 7462

Bull Island, U.G.I.S.

Ketchikan, Alaska

99901

Letter From Robert D. Widness, Bell Island, U.G.I.S.

Response: We thank you.

Alaska Airlines

Dec. 6, 1990

Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, AK. 99901

Dear Forest Supervisor,
I have reviewed the Shelter Cove Draft Environmental Impact Statement, and would like to comment.

My Husband and I have a home in the Upper George Inlet Subdivision and spend most of our recreation time in the Salt Lagoon. This Area is extremely important, not only to us as residents, but also to water foul and wildlife. For these reasons I feel alternative 5 would be the best alternative for the Area.

Keeping the Visual and Environmental impacts of the Salt Lagoon, Creek and Lake to an absolute minimum is essential in maintaining the high recreational and habitat values that currently exist in the area.

Thank you for the opportunity to comment.

Very Sincerely,

Ann Widness

ANN WIDNESS

PO Box 7462

KETCHIKAN, AK.

99901

Letter from Ann Widness, Ketchikan, AK

Response: We thank you.

(11)

Alaska Loggers Association, Inc.

111 STEDMAN, SUITE 200
KETCHIKAN, ALASKA 99901-6599
Phone 907-225-6114
FAX 907-225-5920

January 21, 1991

Forest Supervisor
Tongass National Forest
Federal Building
Ketchikan, AK 99901

Dear Sir:

We have reviewed the Shelter Cove DEIS and have the following comments:

The Shelter Cove area is going to supply three major links that are very important to the people in the Ketchikan area. Development of the area will provide an immediate supply of timber for the forest products industry and eventually provide a transportation link and important recreational opportunities. To the extent possible, all of these resources should be maximized.

The forest products industry in Southeast has an annual raw material need of 565 MMFBM annually. If there is to be any opportunity for growth in our industry, which also constitutes economic and physical growth for the region, the timber sale program must have the potential to be larger than that. In order for the Forest Service to meet this need as required by Sec. 705 of the Tongass Timber Reform Act:

"...the Secretary shall, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the market demand from such forest for each planning cycle."

RECEIVED	
JAN 23 '91	
KETCHIKAN AREA	
TO	
BY	
DATE	
TIME	
INITIALS	
REMARKS	
X	

Forest Supervisor
January 21, 1991
Page 2

Timber sale programs will need to have more emphasis than they have in the past. We, therefore, recommend that the timber sale program in Alternative 4 (95.6 MMBF) be the preferred alternative.

There are important reasons for emphasizing timber in the early development of the area. It pays for the basic transportation system that will be required for future recreation development. By harvesting the area at this time, the clearcuts will have begun to heal by the time a road link is built to Ketchikan. } 1

Ketchikan is in a real bind for forest recreation opportunities. A road link to the Shelter Cove area will supply a much needed outlet as a place to drive to "get out of town". This will give some relief to the existing areas that are now accessable. We do not need roadless areas. There are plenty of those already available. A future road link to the Misty Fjords National Monument can take care of any future needs. } 2 } 3

The transportation system that will develop from this program is extremely important. It is important to the forest products industry because it will access future timber supplies. It begins the long-awaited program to link Ketchikan to the outside world by road. When the road system is finally tied to Ketchikan, it will provide a recreational outlet that is sorely needed. Recreational driving is one of the main recreational uses of national forest lands everywhere and the need is great in Ketchikan. We, therefore, recommend that the road system be a combination of Alternatives 4 and 6 and may even consider eventually linking the road system through the private land on the east side of George Inlet. } 4 } 5

Thank you for the opportunity to present our views.

Sincerely,

Larry B. Blasing

Larry B. Blasing
Administrative Assistant

**Letter From Larry B. Blasing, Administrative Asst.,
Alaska Loggers Assoc., Inc.**

Comment 1: (paraphrased)

There are important reasons for emphasizing timber in the early development of the area. It pays for the basic transportation system that will be required for future recreation development.

Response 1:

The Shelter Cove plan is intended to provide timber sales in the Shelter Cove area. The Shelter Cove - Ketchikan road link is not within the scope of this plan. However, all alternatives develop a mainline road that can become part of that link.

Other roads in the project area will support future sales.

It is expected that recreational use of the area will be low until a link to Ketchikan is developed. Development of that link will require a separate environmental assessment which will include a complete recreation assessment and implementation plan.

Comment 2: (paraphrased)

A road link to the Shelter Cove area will supply a much needed outlet as a place to drive to "get out of town".

Response 2:

See Response 1.

Comment 3: (paraphrased)

A future road link to the Misty Fjords National Monument can take care of any future needs.

Response 3:

See Response 1.

Comment 4: (paraphrased)

The transportation system that will develop from this program is extremely important to the forest products industry.

Response 4:

See Response 1.

Comment 5: (paraphrased)

The transportation system begins the long-awaited program to link Ketchikan to the outside world by road.

Response 5:

See Response 1.

January 21 1991

Eric Muench
228 Martin St.
P.O.Box 6811
Ketchikan, Alaska 99901

Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Bldg.
Ketchikan, Alaska 99901

RE: SHELTER COVE D.E.I.S.

Dear Sir,

Having studied your documents and talked to your well-informed people at the meeting I would like to comment on the choice before you.

I prefer Alternate 2 for the following reasons;

- 1) It offers the highest potential return to the government, which is important to me as a taxpayer. Also by creating better returns there is going to be less criticism in Congress of deficit sales and timber money loss. Untill other resources can be identified and charged up the additional costs that is incurred in their behalf during timber operations, economics should be a primary consideration. }
- 2) It offers access to the two identified fish pass potential sites.
- 3) It utilizes the least and smallest percentage of vol. class-4. It is poor management to depend heavily on low volume areas for timber production. They are almost always low sites. They will be economically impossible to do intensive silvicultural work on. They will take the longest time to reforest to a "natural" look. Management - wise they are a one-shot deal. }
- 4) There are no unacceptable impacts. 35 years of intensive clearcut logging, most of it under environmental guidelines less demanding than present practice, has not ruined permanently any fish streams in Southeast, with one possible exception, Most short-term impacts have been minor and unmeasureable against other natural phenomenon that affect fish runs.

In this generally "hinterland" area immediate views are not important. It will be years before the road connects through and clearcuts are not ugly anyway. We should not be ashamed of a good management practice. The Saddle Lakes recreational potentials are well protected by this alternate.

I would like to offer one revision to alternate 2 however. Units 30, 31, 32, and 33 in VCU 748, just above Leask Cove and east of Leask Creek on the ridge, have been identified as important deer wintering areas. They were known to recently retired and }

Received 1/25/91

very experienced wildlife biologist Bob Wood of the ADF&G and their heavy winter use has been confirmed this winter by aerial observation. This is a major winter destination for Leask Lakes area deer herd and some of it, particularly that just northeast of the mouth of Leask Creek may be "critical" winter range. I suggest those be dropped from entry and placed in retention. } 3 con

A few general observations:

- 1) Vol. I, Chapter 3, Recreation Demand;
A recent survey by the Ketchikan Gateway Borough indicated public willingness to use recreation areas within sight of clearcuts and to travel through clearcuts to get to them. This should be reflected in your list and should help inform your choices.
- 2) I believe the Hairy Woodpecker and Bald Eagle are not good indicator species. The Downy Woodpecker is too nearly alike to be easily distinguished in the field and the eagle will use any area with nest sites and open feeding ground. } 4
- 3) Subsistence is not an important consideration when the population entitled to such use is so small and so arbitrarily and discriminatorily chosen and when Saxman is a mere suburb of Ketchikan and Metlakatla has a large reservation to itself. } 5
- 4) The computer drawn maps and scenes in Vol II are hard to read. } 6
- 5) Your description of the "Hume Isl." (Salmonberry Point) LTF in Vol. II, Chapter 2, LTF sites discussion does not take INTO account that the thing already exists. Also there are 3, not 2 eagle trees there and they do not need to be disposed of and they have been used throughout the recent activity period. } 7
- 6) In Vol II, Chapter 3 maps, "EXISTING ROADS" is not up to date. The Cape Fox Corp can supply you with maps of recently built roads in the Salmonberry Creek, and Coon Cove areas. } 8
- 7) It is very important that you do not consider any additional cutting units in the Brown Mountain or Harriet Hunt Lake areas unless they are first exposed to the public in a separate document. These are presently of greater concern to more people in the Ketchikan area (due to accessibility) than most of the Shelter Cove area. } 9

In closing, thank you for your excellent public involvement efforts in this project and for this opportunity to comment.

Sincerely,

Eric Muench

Eric Muench

Letter From Eric Muench, Ketchikan, AK

Comment 1: (paraphrased)

It is recommended that until other resources can be identified and charged up, the additional costs that is incurred in their behalf during timber operations, economics should be primary consideration.

Response 1:

Economics is important, but not the only consideration in the decision making process. The economics of each alternative is displayed relative to one another, but to focus only on this issue would not meet the objectives of planning for multiple use/resource management.

Comment 2: (paraphrased)

It is poor management to depend heavily on low volume areas for timber production. They will be economically impossible to do intensive silvicultural work on.

Response 2:

The Tongass Land Management Plan (TLMP) gives direction to harvest in lower volume classes. We feel that silvicultural treatment will improve the capacity of these lower volume stands.

Comment 3: (paraphrased)

Units 30, 31, 32, and 33 in VCU 748, just above Leask Cove and east of Leask Creek on the ridge, have been identified as important deer wintering areas. They were known to recently retired and very experienced wildlife biologist Bob Wood of the ADF&G and their heavy winter use has been confirmed this winter by aerial observation. This is a major destination for Leask Lakes area deer herd and some of it, particularly that just northeast of the mouth of Leask Creek may be "critical" winter range. I suggest those be dropped from entry and placed in retention.

Response 3:

Alternatives 4, 5 and the Record of Decision reflect this concern.

Comment 4: (paraphrased)

I believe the Hairy Woodpecker and Bald Eagle are not good indicator species. The Downy Woodpecker is too nearly alike to be easily distinguished in the field and the eagle will use any area with nest sites and open feeding ground.

Response 4:

In 1985, the Forest Service, in cooperation with the Alaska Department of Fish and Game, U.S. Fish and Wildlife Service, and National Marine Fisheries Service, developed and implemented a process to identify species having the greatest potential to serve as MIS for the Alaska Region. The Hairy Woodpecker and Bald Eagle are designated as Management Indicator Species (MIS) for the Alaska Region of the Forest Service.

The Hairy Woodpecker is much larger than the Down Woodpecker and has a large bill and the outer tail feathers are entirely white. The Bald Eagle requires special habitats that are discussed in great detail in the Model (Suring et al. 1988d).

Comment 5: (paraphrased)

Subsistence is not an important consideration when the population entitled to such use is so small and so arbitrarily and discriminatorily chosen and when Saxman is a mere suburb of Ketchikan and Metlakatla has a large reservation to itself.

Response 5:

Subsistence rights are not determined by the size of the community.

Comment 6: (paraphrased)

I am concerned that the computer drawn maps and scenes in Vol II are hard to read.

Response 6:

We agree, and have attempted to resolve this in the FEIS.

Comment 7: (paraphrased)

Your description of the "Hume Isl." (Salmonberry Point) LTF in Vol. II, Chapter 2, LTF sites discussion does not take into account that the thing already exists. Also, there are 3, not 2 eagle trees there and they do not need to be disposed of and they have been used throughout the recent activity period.

Response 7:

Hume Island LTF is portrayed as existing on the Hume Island map, Vol. II, Chapter 2 - LTF Sites Investigated. Existing LTF is printed directly under the title "Hume Island".

Comment 8: (paraphrased)

In Vol II, Chapter 3 maps, "EXISTING ROADS" is not up to date.

Response 8:

At the time of this writing, Cape Fox Corp. was expanding their road system. The roads shown on the maps were those known at the time. The private roads of most interest to use were those that might provide access from National Forest lands to private log transfer facilities.

Comment 9: (paraphrased)

It is very important that you do not consider any additional cutting units in the Brown Mountain or Harriet Hunt Lake areas unless they are first exposed to the public in a separate document.

Response 9:

Harvest in these areas have not been considered in the Final EIS.

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

HABITAT DIVISION

STEVE COWPER, GOVERNOR

2030 SEA LEVEL DRIVE
SUITE 205
KETCHIKAN, ALASKA 99901-6064
PHONE: (907) 225-2027

January 18, 1991

Mr. Steven T. Segovia
Ketchikan Ranger District
3031 Tongass Avenue
Ketchikan, Alaska 99901

RECEIVED

JAN 22 1991

Re: Shelter Cove DEIS

Dear Steve:

Upon examination of the Shelter Cove DEIS, we were pleased to find such a well written and presented preliminary draft outlining possible management alternatives for southern Revilla Island. The quality of work in its preparation appears to be a significant improvement over some past sale plans, and local Forest Service staff is to be complimented for their efforts. However, certain proposals contained within the plan would be counter-productive to the protection of fish and wildlife and the public's use of such resources. Provided such options are omitted from the selected alternative, our staff would consider the Shelter Cove EIS an example of a job well-done.

GENERAL COMMENTS

The maps showing unit lay-outs in the draft are somewhat difficult to read and interpret. Logging unit numbers are oftentimes illegible. We recommend that an improved high-quality map of at least the preferred alternative be included in the Final EIS. } 1

Figures and maps throughout the DEIS are sometimes poorly and inconsistently labeled. Some tables need appropriate summary columns and rows. } 2

This draft was prepared before President Bush signed the Tongass Timber Reform Act on November 28, 1990. Stream protection guidelines need modification to meet prescribed minimum standards designated by Congress. Perhaps other things in the draft also need to be adjusted to meet Congressional intent or guidelines. } 3

A new state forest practices act was passed in 1990 which considerably upgraded fisheries habitat protection within the riparian zone. The Forest Service Standards and Guidelines and Mitigation Measures described in Chapter 2 of this document must be similarly upgraded to be consistent with these new state standards and the ACMP. Paragraph 2 of Chapter 1, page 7, (Coastal Zone Management) must also reflect that the Forest Service has likewise up-graded their standards to be consistent with Alaska's Coastal Management Program and the 1990 revisions to the Forest Resources and Practices Act.

We would like to review proposed road crossings and other instream activities in more detail. Mitigation measures to protect fishery resources affected by instream work need to be strengthened and given individual site-specific prescriptions. For example, the general May 15-August 15 timing window (page 35) proposed for instream activities is oftentimes not applicable for adequate protection of fisheries resources. Individual timing windows need to be described and implemented on a site-specific basis to assure consistency with our ACMP review.

The term "overmature" in reference to old-growth is obsolete, except perhaps if used in a strictly silvicultural context. This term should be defined in the glossary, and needs to be deleted in its general association with old-growth in the text of the FEIS.

We would disagree with the statement contained in Mr. Lunn's November 23, 1990 cover letter that, "the alternatives selected for the Shelter Cove DEIS reflect the New Perspective approach." If good decisions are made in the eventual selection of a preferred alternative, certain aspects of "New Perspectives" could be incorporated into a final plan. Even though the draft alternatives are clearly presented, it does not appear any of them are examples of a "New Perspectives" approach in their present form. How will future entries be handled, for example? This DEIS lacks a life-of-the-rotation plan, permanently designated wildlife retention, and a definitive cumulative effects analysis. Consequently, the alternatives presented look much like a typical timber sale, which will likely be followed by other future small timber sales in the same area, of which we know nothing about at the present time.

In an attempt to improve the clarity of this response, we have separated out many of our individual page-specific comments from the concepts to which they apply. Following the presentation of some of these main points are the more detailed page-specific comments pertaining to this DEIS (Enclosure A).

SALT LAGOON/LAKE UNITS

All alternatives, except for #1, propose what we consider unacceptable impacts to wildlife around the Salt Lagoon and the old growth block in this drainage. It is extremely important for the future of wildlife and biological diversity on southern Revilla Island that the old growth block located between this salt lagoon and the Naha remain in an unfragmented and unlogged condition. The identification of this area as particularly critical for permanent wildlife retention represents the collective thoughts and agreement of Forest Service and Alaska Department of Fish and Game biologists with decades of cumulative field experience in southern Southeast Alaska. } 11

The state-owned land around the saltchuck has been proposed as a Critical Wildlife Habitat Area. This should be mentioned in the final EIS. We have attached an informational sheet on wildlife resources within the saltchuck (Enclosure B). Even though a road may eventually pass through this drainage, it would definitely be counter-productive to wildlife in a "New Perspectives" approach to construct any roading in this drainage during this initial entry. We recommend units in this area be deleted from a final alternative selected in the Record of Decision. } 12 } 13

Alternative 5 comes the closest to meeting the objectives stated in the previous paragraph, but has at least three units which would adversely affect the integrity of the old growth block around the saltchuck. Although the unit numbers on the map are very difficult to read, it appears they are numbered 747-23, 747-24, and 747-25. These units are adjacent to riparian areas of major saltchuck tributaries, have generally southwest-facing aspects, and appear to be valuable as important wildlife habitat even if they were not a part of this critical block of old-growth. We would like to request that these units be deleted from the final alternative selected in the Record of Decision. We should also note that some of the units in and around the Saltchuck Creek/Lake drainage have significant potential conflicts with fisheries concerns. In particular, there are six or more units located on steep slopes and sensitive soils above the Saltchuck Creek/Lake coho spawning habitat. Roading throughout this drainage could also have a significant impact to the water quality in this presently unimpacted stream. Road building to and across the creek has additional adverse impacts because of the potential for the overharvest of sensitive summer-run coho stocks within the saltchuck and its main inlet stream. } 14 } 15

LEASK COVE UNITS

Extensive impacts around Leask Cove are also proposed in Alternatives 2, 3, 4, and 6. If left unlogged, Leask Cove is another area of exceptional wildlife/recreational values which will likely eventually be available to Ketchikan residents via the road system. The slopes of these proposed units have some of the highest known deer densities in the immediate Ketchikan area. The cutting of old growth here would result in a significant loss of deer winter range, and the loss of hunting and other recreational opportunities. Lacking a connective road system, it would seem premature to cause such disruptive impacts to this high quality wildlife habitat and recreational area at this time. If timber harvest is to occur here, it should follow the selection of a final connective roading alignment. This is currently being explored by ADOT/PF, but the results of their preliminary work will probably be unavailable until next year.

At present, there are no plans for having even a single roaded but unlogged drainage anywhere on Revilla Island. As the lands adjacent to the ridge above Leask Cove are currently undesignated state-owned lands, the option still exists for making this a very high-quality roaded recreational area available to the community. Unfortunately, the proposed Forest Service units in the Leask Cove area would be extremely incompatible with such an objective. We recommend the Forest Service take no action in the Leask Cove area until after ADOT/PF has studied a connective road alignment and ADNR has designated a use for the adjacent state-owned lands.

WILDLIFE

Objectives should be set for wildlife and other resources along with those for timber harvest. Wildlife objectives are necessary for adequate monitoring programs (see comment M&M-5) as well as for clearly displaying the tradeoffs necessary in any allocation of resources. In addition, development of wildlife objectives for the project area should include consideration of the demands and needs of all users, not only subsistence users. (See comment W-9 for ADF&G deer population objectives.)

The FEIS should mention that some of the unit lay-outs could result in the logging of natal denning habitat used by river otter. This impact appeared to be overlooked in the river otter assessment.

Wetland losses could be dealt with in a more informative and clearly descriptive manner. For example, what are the various categories or types of wetlands, and which type will experience the most impacts?

The monitoring and mitigation section regarding wildlife needs to be improved. Precommercial thinning and isolated "islands" in clearcuts, for example, are not known to be effective as mitigation. The wildlife monitoring plans should also be revised to incorporate objectives and important monitoring and management principles.

21

Although there may be sufficient deer for subsistence users at the present time, we are concerned with meeting recreational hunter demands. Any further loss of habitat will mean an even greater inability of the area to meet the demand of Ketchikan (non-subsistence) hunters. Restrictions to seasons and bag limits many occur as a result and Ketchikan hunters may be forced to hunt elsewhere. This should be clearly and explicitly discussed in the FEIS.

22

We agree with the DEIS that "Due to projections of future habitat reductions and projected demand increases...a restriction to subsistence users of deer, fish, black bear and furbearer species may potentially occur in the future." This is one reason why we feel it is essential to minimize wildlife impacts in an initial timber harvest entry, and why Alternative 5 should be the maximum allowable timber harvest unit dispersion which should occur under this EIS.

CUMULATIVE EFFECTS ANALYSIS

Although some portions of the DEIS relating to wildlife are quite good (especially the old-growth retention plan in Alt. 5), the cumulative effects analysis is not complete in any alternative. It is quite possible that cumulative impacts are significantly underestimated. The FEIS needs to consider, describe, and analyze all present impacts, and the likely future cumulative impacts within a geographical area. This proposed action should be analyzed in the context of what is occurring around it, as well as in the context of prior and succeeding actions. For example, this DEIS does not evaluate the impacts to wildlife of subsequent timber sales by the Forest Service, the location and effects of increased human access over time, or the intensive logging activities occurring on the adjacent privately-owned lands.

23

In a re-analysis of cumulative impacts, we should also, perhaps, consider expanding the analysis area. We suggest southern Revilla island is an appropriate area for cumulative impacts analysis; an area corresponding to Wildlife Analysis Areas 404, 405, 406, 407, and 408.

24

We raise this issue because neighboring prior timber sales and development have already caused impacts on wildlife in the south Revilla area. During the past five years, approximately 120 million board feet of timber was cut in several independent sales immediately across Carroll Inlet from Shelter Cove. Timber harvest on private land in the project area has been quite extensive. The effects on wildlife and wildlife users of these activities in combination with the effects of the proposed action may be quite significant. For instance, widespread habitat loss associated with timber harvest may result in limited hunting opportunities throughout the southern Revilla area. Hunters, trappers, and other wildlife users should also know what opportunities they have elsewhere as those in the project area become more limited. Proper assessment of cumulative impacts should include sales in surrounding areas as well as non-Forest Service sales within the project area.

In addition to present and future activities in areas surrounding the project area, we also need to know the likely location of all units, roads, and old growth retention as proposed at the end of the rotation. To meet this essential objective, it seems necessary to publish a proposed, or preliminary, "life-of-the-rotation" map depicting how the Forest Service envisions this planning area will appear in the year 2060. It is essential to have such a map in the FEIS showing all present and likely future units, roads, and retention (on lands of all ownership) so that cumulative impacts can be put into a more meaningful context. This would also help the public to better understand the potential cumulative impacts. In addition, it would provide a more realistic basis in working toward the development of a more accurate and quantitative cumulative effects analysis regarding future wildlife resources on southern Revilla Island.

ALTERNATIVES HARVESTED DISPROPORTIONATE TO
VOLUME CLASS OCCURRENCE

In recent Tongass Reform Legislation, Congress expressed an intent to discontinue the practice of cutting the best volume classes at a rate disproportionate to their occurrence on the Tongass. As shown in our attached tabular summary (Enclosure C), Volume Class 4 is under-utilized in all alternatives, while Volume Class 5 is over-harvested. Disproportionate harvesting of Volume Class 6 is proposed under Alternatives 2, 4, and 6 and that of Volume Class 7 under Alternative 3. Alternative 5, however, appears to come closest to harvesting in proportion to volume class occurrence. In addition to displaying harvest distribution by volume class as a **percent of total acres harvested** (as shown in Table 4-37, Ch. 4, Pg. 39), it would be beneficial to also display harvest distribution by

volume class as a percent of existing volume class acreage. This would present a more accurate description of proposed harvesting by volume class occurrence. } 27 cont.

ROADING WITHIN DESIGNATED LUD II LANDS

Another major concern with this DEIS is that Alternatives 2, 3, 4, and 6 propose road construction in a Congressionally designated LUD II area for the purpose of accessing timber.

A potential road link between Ketchikan and the project area, and the establishment of a suitable alignment for an inter-island road corridor was not examined in this planning effort. The DEIS states that, "This issue was not considered because it is felt that a separate environmental document would best address the many complex issues involved." We agree. TLMP also requires that roads into a LUD II area, "... will not be built except to serve authorized activities such as mining, power and water developments, aquaculture developments, transportation needs determined by the State of Alaska, and vital forest transportation system linkages." Roads cannot be built into a LUD II area for the purpose of achieving access to adjacent logging units as a part of a routine timber sale. } 28

There are several alternative routes which need to be evaluated with regards to a future transportation corridor or a "vital forest transportation system linkage," It is doubtful that more than one linkage transversing the Naha LUD II area could be justified as essential. With several potential alignments available, it should be recognized that proposed roading into a LUD II area and a connective transportation linkage should, therefore, not occupy more than one route through designated LUD II. } 29

It is not expected that the State of Alaska, Department of Transportation and Public Facilities, will be able to identify a preferred transportation corridor until sometime after completing scheduled preliminary assessments. It is our understanding the results of this work will not be available for about a year.

Consequently, it would be premature to build any roading into a LUD II area until all transportation alternatives have been addressed in a separate environmental document involving ADOT/PF as a lead participant. As such a document will not be available in draft form for a least a year, it appears that roading into the Naha LUD II area may not be a legal option if selected as an alternative under this particular EIS. } 30

SALMONBERRY CREEK LOG TRANSFER FACILITY

There are several problems with using the Salmonberry LTF located near Hume Island. We would suggest building the small section of connective road to these units so that timber from this area could be transferred to saltwater at Shelter Cove. } 31

The original intent in the permitting of this site was that it be temporary in nature. A main reason for this was its close proximity to eagle nest trees, which could preclude the successful nesting of one to three pairs of bald eagles at this location. We continue to believe that, with logging nearly completed, activities at this LTF need to be closed-out as soon as possible to mitigate continuing impacts to bald eagles.

The Sport Fish Division has also noted conflicts with the occupation of surface waters near Hume Island, and in 1988 ADF&G asked for the close-out of temporary logging activities near Hume Island within two years. Staff therefore anticipated no permit renewal and expected the cessation of activities at this LTF in the summer of 1991.

We feel that fish, wildlife, and public-use conflicts as a result of the Forest Service's proposed timber sale should be minimized by confining impacts to a single LTF located at Shelter Cove. This decision would hopefully allow problems with bald eagles and various user-groups to subside in the vicinity of Hume Island and Salmonberry Creek in the relatively near future.

RECOMMENDED REVISIONS TO ALTERNATIVE 3 (RECREATION)

Wildlife and outdoor recreation are directly linked. For both consumptive and non-consumptive users of wildlife resources there is an inseparable association between the abundance and diversity of wildlife and the quality of recreational experiences. Certain types of outdoor recreation, though are not particularly wildlife-related. Roading and logging can occur to promote these types of recreation, but proper planning should be used to locate such recreational developments away from sensitive wildlife habitats.

Our staff would disagree with the presentation of Alternative 3 as a recreational alternative. As presented, Alternative 3 does not promote recreation and is quite detrimental to wildlife. However, Alternative 3 could be modified so that it can accomplish recreational objectives without significantly } 32
} 33

impacting wildlife habitat. To accomplish this, all of the roading and cutting units in the Saltchuck drainage and the Leask Cove area should be omitted. A recreational/timber access road, however, could be extended from the other direction to provide immediate recreational benefits without significantly affecting sensitive wildlife habitats. This alternative road would go from the existing Harriet Hunt parking lot, around the north side of Harriet Hunt Lake, over the saddle located to the northeast of Harriet Hunt Lake, and north into Sections 34 and 27 along the Forest Service/State boundary ownership. Several logging units could be located in the east half of Sections 34 and 27 without affecting the Harriet Hunt viewshed. Also, as this road would go transversely through uncut old growth in an east-west direction, it would be virtually invisible from Harriet Hunt Lake. Approximately 3½ miles of new roading would be built, which would serve to greatly expand roaded recreational opportunities currently available to Ketchikan residents.

Our proposed units in T.73S., R.91E., S.27 and 34 could be patterned after the same principles presented in the Brown Mountain Sale EIS. Like Brown Mountain, these would be higher-elevation units with potentially low-value timber receipts. Wildlife impacts would be relatively minor and recreational monies could be used to partially fund roading costs. A new community firewood collection program and greatly increased recreational opportunities are obvious benefits from a sale in this area, as they were with Brown Mountain units, which were supported by ADF&G. This new roading would then access an area experiencing the best winter-time snow conditions available on the Ketchikan road system, and would be extremely beneficial to those interested in cross country skiing, sledding and snowmobiling. In the summer-time, this sale area would provide for feasible hiking access into the Leask Creek drainage, with roaded access becoming available to within only 1¼ mile of Leask Lake. Additionally, this route may also eventually be used as a portion of a future transportation linkage extending to the rest of the sale in Shelter Cove planning area. Forest Service roading engineers have preliminarily identified this option as the most direct, least costly, and most feasible corridor linkage alignment extending from the present road system.

ADVANTAGES OF ALTERNATIVE 5

We believe the selection of Alternative 5, with certain modifications, is the logical and most acceptable option in the event of an initial timber harvest entry into this planning area. This alternative has the following advantages:

- is the only action alternative which retains a suitable block of old-growth for the long-term maintenance of wildlife diversity and abundance.

- is the only action alternative which retains important travel corridors for wildlife between the Saltchuck, Naha, and Leask Lakes drainages.
- is the most compatible with possible future management of the George Inlet Saltchuck as a Critical Habitat Area.
- Maintains the Leask Cove area (if perhaps only temporarily) for its wildlife and recreational values.
- does not unacceptably road a designated LUD II prior the preparation of an adequate EIS for such an activity.
- is economically viable.
- with modification, would meet the requirements of the existing MOU regarding the protection of bald eagle nests.
- appears to be the only alternative that meets current VQOs.
- does not high-grade volume classes 6 and 7, and comes the closest to logging in relation to volume class occurrence.
- has the least impact to present and future subsistence activities.
- has the fewest number of bridges and major culverts with the lowest bridge/reconstruction costs.
- has the least amount of road construction in or near stream buffers.
- does not propose units located on steep soil areas above the Salt Lake coho spawning areas.
- does not create conflicts with a rare and sensitive summer coho run found in the Saltchuck drainage.
- has the fewest overall impacts to fisheries.
- if combined with roading and units into T.73S., R.91E., S. 27 and 34, it could provide immediate year-round recreational and firewood collection benefits to community residents.

SUMMARY

All action alternatives except Alternative 5 have significant conflicts with resources other than timber harvest. In order to adequately protect wildlife values, roading and units should be kept out of the Saltchuck/Lake basin and the Leask Cove area

during this planning phase. This old growth block is important for the maintenance of healthy wildlife populations on southern Revilla Island and is also needed for possible upcoming wildlife research. Units located on the steep sensitive soils above the Salt Lake coho spawning areas could also prove to be quite detrimental to fisheries concerns. Additionally, any roading into a designated LUD II area appears to be unacceptable under this EIS. The DEIS has recognized that a route identifying the alignment of a proposed road linkage needs to be addressed in a separate environmental document. Such planning effort is also required for roading into a LUD II area.

Therefore, selecting Alternative 5 of the DEIS appears to meet both timber harvest objectives and most short-term wildlife concerns. We recommend at least three units, though, be deleted from Alternative 5. However, as no alternatives provide for significant roaded recreational opportunities, we also recommend extending about 3½ miles of additional roading from the Harriet Hunt parking lot to access several units in a higher-elevation winter-time recreational area located in T.73S., R.91E., S.27 and 34. This roading would also promote hike-in recreational access to Leask Lake, located only 1¼ mile to the north. We feel this specific additional roading and logging could greatly increase real and immediate recreational attributes, which are currently lacking in the EIS for this planning area. The additional alternative units and roads we have proposed would significantly improve the community's present recreational options, while minimizing impacts to sensitive wildlife habitats in other locations.

If the selected alternative and Record of Decision can incorporate these suggestions, we would consider this a successful cooperative planning effort, which would set a very positive direction for future planning endeavors on Revilla Island.

Thank you for seeking our review of this DEIS. We extend our compliments for the hard work of the Forest Service staff in the preparation of this document.

Sincerely,

Jack Gustafson
Area Habitat Biologist

cc: Frank Rue
Rick Reed
Dave Anderson
Lorraine Marshall

3 Enclosures (10 pages)

DETAILED PAGE-SPECIFIC COMMENTS

Wildlife

W-1) We urge that wildlife habitat capability model outputs be used for the analyses for the Final EIS as suggested on page 4-53. We applaud the effort to use habitat capability estimates for MIS but believe the models will give more accurate estimates than the procedure that was used.

34

An imprecise examination of some model outputs for existing habitat capability shows deer habitat capability considerably lower than that given in the DEIS (table 6-66, pg. 4-73) -- 1,523 (all elevations) vs. 2,504 in DEIS. Other modeled species habitat capabilities appear to be considerably higher than those given in the DEIS (table 4-51, pg. 4-60): Marten 152 vs. 76 in DEIS; Black bear 109 vs. 7 in DEIS; and River otter 29 vs. 11 in DEIS. The habitat capability models should be used in the Final EIS to determine current habitat capability and habitat capability for all alternatives, and to show cumulative effects of alternatives over time to 2060.

35

W-2) It is good to see block size analysis employed for habitat capabilities for some MIS (Chapter 4). This is an important factor that is left out of current habitat capability models as they are currently run by computer. In lieu of using the patch or block size factors of the capability models, the DEIS block size analysis should be retained in the Final EIS as a complement to the model outputs.

W-3) We support the "effective block procedure" of old growth block designation as described in the section title "Old Growth Analysis 2" on page 4-56. Fragmenting of old growth blocks as described in "Old Growth Analysis 1" renders them useless for their purpose. Old growth retention should remain inviolate for the life of the rotation.

36

W-4) Criteria for wildlife old growth blocks are given in last paragraph of pg. 4-54. However, no criteria or description is given for what constitutes "recreation old growth" (page 4-56 and table 4-47). The implication is that it is different from wildlife old growth, but how? Unless a definition and criteria are given for "recreation old growth" the term is vague and misleading and should be dropped.

37

- W-5) The Cumulative Effects statements for all Management Indicator Species (Chapter 4) mention only the acres of that species' habitat that would be in old growth prescription at the end of the rotation. Acres of habitat do not tell a person much. All acres are not the same and the value of habitat varies widely. The analysis should be expanded to include how many animals that habitat will support at the end of the rotation; in other words, give the habitat capability for each species using the assumptions listed in paragraph one of the deer cumulative effects section. The analysis must also show (on a map) exactly where permanent old growth prescription will be located at the end of the rotation in order to be truly meaningful. } 38
- W-6) Page 4-58 says that for each MIS, effects analyses are discussed for the year 2060. However, we were unable to locate them in the DEIS. } 39
- W-7) Table 4-51, page 4-60; eliminate "Populations Estimates" from the title. Habitat capabilities and population estimates are different things and are not usually equivalent. Similarly, table 4-61 and discussion on hairy woodpeckers seems to deal with habitat capability rather than actual population. This should be clarified. } 40
- W-8) Page 4-61, Tables 4-52 and 4-53 show only effects of timber harvest on deer habitat quantity, not quality as stated by the DEIS. } 41
- W-9) Page 4-73, the analysis of the effects of the alternatives on use of Sitka black-tailed deer is inadequate and makes some wrong assumptions: } 42
- a) Hunter demand for deer in the DEIS is low. Hunter demand for deer in Wildlife Analysis Areas 406 and 407, which include the project area, was derived by ADF&G from responses to a 1987 ADF&G deer hunter survey. Results showed demand exceeds actual harvest somewhat and amounts to 99 deer in WAA 406 and 123 deer in WAA 407. } 43
- b) In table 6-66 (and table 2-26), the number of deer that habitat can support in 1990 (and consequently in 2000), is too large. Habitat capability model outputs should be used to get this figure. (See comment W-1 above.) Another column should be added to the table showing habitat capability in the year 2060 to show the effects of clearcuts aging into less productive second growth stands. } 44

c) In table 6-66, the DEIS derived the number of deer needed to meet demand in 1990 by assuming an annual harvest rate of 30%. This harvest rate is far too high and, consequently, the number of deer needed to meet demand is too low. ADF&G believes a sustainable annual harvest rate for a deer population at habitat capability is 10% (see Flynn and Suring, 1989, attached). At a harvest rate of 10%, the number of deer needed in WAA's 406 and 407 to meet current hunter demand is 990 and 1230 respectively. Habitat capability model outputs show the current habitat capability in all of WAA 406 to be 2473 deer, and in WAA 407 to be 1182 deer. From these figures it is apparent that hunter demand already exceeds the capability of the habitat in all of WAA 407 (which contains the majority of the project area). Although there may be sufficient deer for subsistence users, any further loss of habitat will mean an even greater inability of the area to meet the demand of all other hunters. Restrictions to seasons and bag limits may occur as a result and Ketchikan hunters may be forced to go elsewhere for the deer they want and need. This should be stated clearly and explicitly in the Final EIS discussion.

d) ADF&G deer population objectives for WAA's 406 and 407 from its Strategic Management Plan for deer (in prep.) are: WAA 406, 2,102 deer; WAA 407, 1,182 deer.

Mitigation and Monitoring

M&M-1) In table 2-29 pg. 2-30, Wildlife Mitigation Measures #1, precommercial thinning should be deleted. The improvement to wildlife habitat by thinning second growth has proved to be only negligible and is insignificant when compared to the loss of habitat through clearcut logging. In addition, there are serious doubts that such treatment is realistically possible on a large scale given the cost and manpower requirements. Until such time as measurable, positive, cost-effective benefits of second growth thinning are demonstrated, it is inappropriate to continue to present it as a mitigation measure.

M&M-2) pg. 2-31, #6. The features of this Access Management Plan that would make it beneficial for wildlife should be listed. An access management plan by itself is not wildlife mitigation.

M&M-3) pg. 2-31, #7. This wildlife mitigation measure has little foundation in current ecological application and is not known to be effective. However, assuming there is value

in leaving 3 to 5 acre windfirm islands within clearcuts, that value would be lost if the clearcuts were enlarged to make up for the timber left standing in the islands. For this measure to be useful for wildlife, the size of clearcuts must remain the same and the amount of timber cut must be reduced. For instance, if five five-acre islands are designed for a clearcut block of 100 acres, then only 75 acres of trees should actually be cut. If instead, 25 acres were cut along the side of the clearcut to make up for the timber lost to old-growth islands, the result would be a more fragmented and less valuable wildlife habitat. Better to leave the 25 acres of old-growth intact on the edge of the clearcut as part of a larger block of habitat than fragmented into mostly useless islands in the clearcut. 48

M&M-4) In Appendix B, Fish Mitigation Measures ---- For all alternatives, riparian prescriptions for buffer strips should be changed to comply with the Tongass Timber Reform Act (HR 987). Minimum 100' no cut buffers should be prescribed for all AHMU class I streams and class II streams which feed into I's. 49

M&M-5) Monitoring, pages 2-44, 2-45. The wildlife monitoring plan is inadequate. The plan emphasizes the measurement of wildlife mitigation measures. Although this is a useful type of monitoring, it generally fails to determine the actual utility of the wildlife mitigation measures. The one exception is the monitoring of bald eagle nesting activity. The bald eagle monitoring plan is well-designed, yet like the rest of the monitoring plan, no objectives are stated a priori. For example, the monitoring plan fails to state what will happen if the eagle monitoring plan detects a decrease in bald eagle nesting activity. This is a major flaw. 50

The monitoring plan should include:

a) wildlife population or time-trend objectives, particularly for management indicator species. 51

b) the design of surveys to sample time-trends of indicator populations that include monitoring before, during, and after project implementation. 52

c) the inclusion of mitigation measures that will be instituted should population indices fall below specified levels. 53

As stated, none of these important tenets of wildlife monitoring are included, hence the plan is inadequate.

Maps and Figures

M-1) A map displaying place names in the project area should be put at the beginning of the maps section. The lakes of the area, although referred to often in the DEIS text, are identified only on Fig. 3-7. It took some time to discover this key. Also, South Saddle Lake on Fig. 3-7 is different from the S. Saddle Lake on the USGS Ketchikan C-5 Quadrangle topographic map. This discrepancy should be rectified or explained to avoid confusion. Leask Cove, although referred to several times in the DEIS, is never identified on a map. } 54

M-2) Many of the harvest unit numbers on Figs. 2-1 through 2-5 and Alternative maps (Figs. A2-A6) are extremely difficult or impossible to make out. These should be made more readable. } 55

M-3) Major Channel Types, Fig. 3-11, are illegible. Topographic views in Figs. 4-2, 4-6, and 4-17 are not identified. } 56

M-4) We are happy to see old growth retention displayed on the same maps as proposed cutting units for alternatives. This makes review of alternatives much easier. Also needed, however, are maps showing the rest of operable forest land in the project area so that reviewers can see where future logging is likely to occur and thus have a visual reference of cumulative impacts. Remaining operable forest land should be displayed on the same map with old growth retention and cutting units. Such maps would be more readable if produced in color. } 57

Timber

T-1) Page 4-42, para. 4. A sentence should be added noting that the value of second growth trees and products is considerably less than the value of old growth trees and products. } 58

T-2) Page 4-42, para. 5. What is the basis for the statement that stands with volumes of 20-30 MBF/acre and those of 30-50 MBF/acre have the same future growth potential? Are you asserting they have the same site productivity index? } 59

T-3) Why does this DEIS in table 4-39 base growth/yield projections on current inventory volume rather than site productivity? Site productivity is used in most other yield projections used by the USFS including the TLMP Revision. Site productivity should be used here as well. } 60

- T-4) In tables 4-37 and 4-39, how are you determining acreage scheduled by volume class -- through stand exams or from timber type maps? Given the recognized difficulties with the accuracy of the current timber inventory, project level plans should all rely only on data from stand exams.

61

Roads

- R-1) Vol. I, Chapter 3, page 13: The 7.6 miles of Forest Development Roads are more than the total of 3 miles of usable and 3.8 miles of unusable roads.

62

Transfer Sites

- T-1) Vol. II, Chapter 2: All figures should be given numbers in this chapter. The DEIS shows 3 preferred sites (1, 5, and 7), but only 2 LTF site maps (1 and 5) are given. The profiles and site descriptions that follow are somewhat confusing, as all proposed sites except 5, 6, and 7 have individual profiles. The statement under site 5 that, "Impacts must be evaluated to determine if it will be necessary to dispose of any eagle trees," is quite confusing and should be reworded. We agree that site 6 is biologically unsuitable for continued log transfer (as explained in Vol. I), but think sites 5 and 7 should also be removed from the list of preferred sites.

63

PROPOSED
GEORGE INLET SALTCHUCK
CRITICAL HABITAT AREA

Nearly all species of wildlife found on Rivila Island occur at the George Inlet Saltchuck, but typically in higher concentrations than normal. Five streams supporting four species of salmon, and also steelhead, flow into the chuck, and comprise an important link in the food web of the area. There also used to be a large wintering concentration of herring occupying the waters in and near the chuck, though herring have not inhabited the area in large numbers since the 1970s. Very large concentrations (thousands) of mergansers and other diving ducks (goldeneye, bufflehead, etc.) were found in the area when large numbers of herring were present, with numbers in the hundreds during lesser herring densities. This saltchuck is particularly critical for its consistent use by wintering swans, except during short periods of icing. The chuck is an important waterfowl staging area, especially in the fall and is an important wintering area for mallards and Canada geese. Canada goose nesting is common, including nesting on the numerous nearby lakes. Young broods use the area for staging when they first start flying, with flocks congregating there in the fall. The area may be somewhat unique in its heavy usage by pintails and teal early in the fall (September 1).

The area is also important in other respects for subsistence, recreational, wildlife and natural values. Dungeness crab occupy the eelgrass beds in the chuck, and are utilized by local residents. Commercial shrimp are taken outside the entrance to the chuck, with both pot fishing for "spots" and pink shrimp trawling in the 50 fathom trench in upper George Inlet. The chuck has been a popular wolf trapping spot, along with trapping of other species of furbearers. The territories of two wolf packs overlap the chuck, with the area utilized by wolves year-round. The sedge meadows and grassflats are intensively used by black bears in the spring. The two major fish streams are heavily utilized by both bears and wolves during the summer and fall salmon runs. Population densities of land otters and mink are relatively high. Harbor seals use the area year round with particularly heavy winter concentrations that haul out on the ice. Deer hunting is also good in parts of the chuck, with harvest levels especially high during the late 1960s. An early run of coho (July 1), and runs of spring steelhead, and red, pink, and chum salmon provide an availability of adult anadromous fish in the area for many months of the year. The chuck's unique tidal flushing action, along with bathymetry, flow, circulation, and other physical characteristics of the area, contributes to overall biological fertility. The fish and wildlife species diversity and abundance found in the chuck are relatively rare, and are an extremely valuable resource. Special management considerations available under the Critical Habitat Area designation would help to assure the perpetuation of these values. The taking of wildlife however, is usually permitted in critical habitat areas, provided it is compatible with harvestable surplus concepts.

PROPORTION OF VOLUME CLASS HARVESTED BY ALTERNATIVE

ALTERNATIVE 2: 2,191 acres scheduled for harvest

TOTAL ACRES BY VOLUME CLASS
(ACRES SCHEDULED FOR HARVEST IN PARENTHESES)

VCU	VC 4	VC 5	VC 6	VC 7
746	3,649 (92)	4,431 (447)	336 (50)	0 (0)
747	3,745 (235)	5,194 (995)	731 (244)	114 (0)
748	3,145 (33)	3,265 (34)	158 (6)	265 (55)
25,033				
Total Acres	= 10,539 (360)	12,890 (1,476)	1,225 (300)	379 (55)
Percent of Acres	= 42% (16%)	51% (67%)	5% (14%)	2% (2%)
Percent of Existing Volume Class Acres to be Harvested	= 3%	11%	24%	14%

ALTERNATIVE 3: 2,231 acres scheduled for harvest

TOTAL ACRES BY VOLUME CLASS
(ACRES SCHEDULED FOR HARVEST IN PARENTHESES)

VCU	VC 4	VC 5	VC 6	VC 7
746	3,649 (196)	4,431 (484)	336 (10)	0 (0)
747	3,745 (375)	5,194 (935)	731 (91)	114 (3)
748	3,145 (31)	3,265 (25)	158 (0)	265 (81)
25,033				
Total Acres	= 10,539 (602)	12,890 (1,444)	1,225 (101)	379 (84)
Percent of Acres	= 42% (27%)	51% (65%)	5% (4%)	2% (4%)
Percent of Existing Volume Class Acres to be Harvested	= 6%	11%	8%	22%

ALTERNATIVE 4: 3,603 acres scheduled for harvest

TOTAL ACRES BY VOLUME CLASS
(ACRES SCHEDULED FOR HARVEST IN PARENTHESES)

VCU	VC 4		VC 5		VC 6		VC 7	
746	3,649	(489)	4,431	(910)	336	(65)	0	(0)
747	3,745	(304)	5,194	(954)	731	(221)	114	(1)
<u>753</u>	<u>2,703</u>	<u>(340)</u>	<u>1,636</u>	<u>(319)</u>	<u>0</u>	<u>(0)</u>	<u>0</u>	<u>(0)</u>
22,539								

Total Acres = 10,097 (1,133) 11,261 (2,183) 1,067 (286) 114 (1)

Percent of Acres = 45% (31%) 50% (61%) 5% (8%) .5% (.02%)

Percent of Existing
Volume Class Acres
to be Harvested = 11% 19% 27% .9%

ALTERNATIVE 5: 2,581 acres scheduled for harvest

TOTAL ACRES BY VOLUME CLASS
(ACRES SCHEDULED FOR HARVEST IN PARENTHESES)

VCU	VC 4		VC 5		VC 6		VC 7	
746	3,649	(262)	4,431	(757)	336	(0)	0	(0)
747	3,745	(236)	5,194	(565)	731	(34)	114	(0)
<u>753</u>	<u>2,703</u>	<u>(377)</u>	<u>1,636</u>	<u>(350)</u>	<u>0</u>	<u>(0)</u>	<u>0</u>	<u>(0)</u>
22,539								

Total Acres = 10,097 (875) 11,261 (1,672) 1,067 (34) 114 (0)

Percent of Acres = 45% (34%) 50% (65%) 5% (1%) .5% (0%)

Percent of Existing
Volume Class Acres
to be Harvested = 9% 15% 3% 0%

ALTERNATIVE 6: 3,060 acres scheduled for harvest

TOTAL ACRES BY VOLUME CLASS
(ACRES SCHEDULED FOR HARVEST IN PARENTHESES)

VCU	VC 4		VC 5		VC 6		VC 7	
746	3,649	(294)	4,431	(538)	336	(33)	0	(0)
747	3,745	(407)	5,194	(1,086)	731	(187)	114	(5)
748	3,145	(21)	3,265	(22)	158	(0)	265	(36)
753	2,703	(268)	1,636	(164)	0	(0)	0	(0)
29,213								
Total Acres	= 13,242 (990)		14,526 (1,810)		1,225 (220)		379 (41)	
Percent of Acres	= 45% (32%)		50% (59%)		4% (7%)		1% (1%)	
Percent of Existing Volume Class Acres to be Harvested	= 7%		12%		18%		11%	

Letter From Jack Gustafson, Area Habitat Biologist, State of Alaska

Comment 1: (paraphrased)

I am concerned that the maps showing unit lay-outs in the draft are somewhat difficult to read and interpret and the logging unit numbers are often times illegible.

Response 1:

We agree, and have attempted to resolve this in the Final EIS.

Comment 2: (paraphrased)

I am concerned that the figures and maps throughout the DEIS are sometimes poorly and inconsistently labeled.

Response 2:

We agree, and have attempted to resolve this in the Final EIS.

Comment 3: (paraphrased)

Stream protection guidelines need modification to meet prescribed minimum standards designated by Congress.

Response 3:

The stream protection standards and guidelines have been modified to meet the requirement established in the Tongass Timber Reform Act. See FEIS, Chapter, page 36.

Comment 4: (paraphrased)

A new State forest practices act was passed in 1990 which considerably upgraded fisheries habitat protection within the riparian zone. The Forest Service Standards and Guidelines and Mitigation Measures described in Chapter 2 of this document must be similarly upgraded to be consistent with these new State standards and the ACMP.

Response 4:

The modified fisheries standards and guidelines in Chapter 2 and the new Region 10 Forest Service Best Management Practices are consistent with the new State forest practices act.

Comment 5: (paraphrased)

Paragraph 2 of Chapter 1, page 7, (Coastal Zone Management) must also reflect that the Forest Service has likewise upgraded their standards to be consistent with Alaska's Coastal Management Program and the 1990 revisions to the Forest Resources and Practices Act.

Response 5:

See response number 4.

Comment 6: (paraphrased)

It is recommended that mitigation measures to protect fishery resources affected by in-stream work need to be strengthened and given individual site-specific prescriptions.

Response 6:

The Ketchikan Area implementation process will detail the site-specific prescriptions where in-stream work is required. The Forest Service plans to consult and notify with ADF&G on all in-stream work outside the normal May 15 to August 15 timing windows.

Comment 7: (paraphrased)

It is recommended that individual timing windows need to be described and implemented on a site-specific basis to assure consistency with our ACMP review.

Response 7:

The objective of the timing window is to prevent disturbance of anadromous fish adults, eggs, or fry.

The May 15 to August 15 timing window is the general window when anadromous adults, fry, or eggs are in the streams. If there is evidence of fish in the stream during the timing window, the objective of preventing a reduction in egg or fry survival still applies. Site-specific prescriptions will be designed to prevent impacts to egg, fry, or spawning adults (FEIS, Chapter 2, Page 35).

Comment 8: (paraphrased)

The term "overmature" in reference to old growth is obsolete. This term should be defined in the glossary.

Response 8:

The term is used in a silvicultural context and reflects the silvicultural concept that growth is offset by mortality. The term has been defined in the glossary.

Comment 9: (paraphrased)

I disagree with the statement "the alternatives selected for the Shelter Cove DEIS reflect the New Perspective approach".

Response 9:

The Action Alternatives utilize the new perspective concept of old-growth blocks, however, Alternative 5 represents this concept the best.

Comment 10: (paraphrased)

How will future entries be handled, for example? This DEIS lacks a life-of-the-rotation plan, permanently designated wildlife retention, and a definitive cumulative effects analysis.

Response 10:

Future entries and designated wildlife retention will be handled by separate NEPA documents. The FEIS displays the cumulative effects over the rotation.

Comment 11: (paraphrased)

All alternatives, except for #1, propose what we consider unacceptable impacts to wildlife around the Salt Lagoon and the old-growth block in this drainage.

Response 11:

We disagree. We feel that our analysis has taken the impacts to wildlife around Salt Lagoon and the old-growth blocks of that drainage into consideration. Alternative 5, for example, proposes only two units be harvested in the Salt Lagoon drainage.

Comment 12: (paraphrased)

The State-owned land around the saltchuck has been proposed as a Critical Wildlife Habitat Area. This Should be mentioned in the final EIS.

Response 12:

Your concern has been addressed in the FEIS.

Comment 13: (paraphrased)

It would definitely be counter-productive to wildlife in a "New Perspectives" approach to construct any roading around Salt Chuck drainage during this initial entry. We recommend units in this area be deleted from a final alternative selected in the Record of Decision.

Response 13:

Alternative 5 constructs roads only on the east side of Salt Lagoon and maintains the "New Perspectives" approach to management.

Comment 14: (paraphrased)

Alternative 5 comes the closest to meeting ADF&G objectives, but has at least three units which would adversely affect the integrity of the old-growth block around the saltchuck. Although the unit numbers on the map are very difficult to read, it appears they are numbered 747-23, 747-24, and 747-25. These units are adjacent to riparian areas of major saltchuck tributaries, have generally southwest-facing aspects, and appear to be valuable as important wildlife habitat even if they were not a part of this critical block of old growth. We would like to request that these units be deleted from the final alternative selected in the Record of Decision.

Response 14:

These areas you refer to have wildlife value. However, the ID Team felt the corridor from the NAHA was more valuable. With the implementation of the modified AHMU standards and guidelines, and the soil and water standards, we feel these areas will be protected.

Comment 15: (paraphrased)

Some of the units in and around the Saltchuck Creek/Lake drainage have significant potential conflicts with fisheries concerns. Roading throughout this drainage could also have a significant impact to the water quality in this presently unimpacted stream. Road building to and across the creek has additional adverse impacts because of the potential for the overharvest of sensitive summer-run coho stocks within the saltchuck and its main inlet stream.

Response 15:

We disagree. With implementation of modified AHMU standards and guidelines, and the soil and water standards, no significant long-term damage to fish habitat productivity will occur. The potential impacts of timber harvest within Salt Creek has been detailed in the comparison of alternatives, effects of timber harvest activities (DEIS, Chapter 2, Pages 19-20). This information will be used by the Forest Supervisor in making a decision on which of the seven alternatives, or another alternative, to select.

Comment 16: (paraphrased)

Extensive impacts around Leask Cove are also proposed in Alternatives 2, 3, 4, and 6. If left unlogged, Leask Cove is another area of exceptional wildlife/recreational values. Lacking a connective road system, it would seem premature to cause such disruptive impacts to this high quality wildlife habitat

and recreational area at this time. If timber harvest is to occur here, it should follow the selection of a final connective roading alignment.

Response 16:

Alternatives 2 and 5 reflect this concern.

Comment 17: (paraphrased)

As the lands adjacent to the ridge above Leask Cove are currently undesignated State-owned lands, the option still exists for making this a very high-quality roaded recreational area available to the community. Unfortunately, the proposed Forest Service units in the Leask Cove area would be extremely incompatible with such an objective. We recommend the Forest Service take no action in the Leask Cove area until after ADOT/PF has studied a connective road alignment and ADNR has designated a use for the adjacent State-owned lands.

Response 17:

Alternatives 2, 5, and the ROD reflect this concern.

Comment 18: (paraphrased)

Objectives should be set for wildlife and other resources along with those for timber harvest. Wildlife objectives are necessary for adequate monitoring programs as well as for clearly displaying the trade-offs necessary in any allocation of resources.

Response 18:

Page 4-64 of the DEIS stated "The Alaska Department of Fish and Game has designed a process to establish population objectives for deer based on human demand. The process is in its early stages and has not yielded estimates of desired harvest levels." To this date, Tongass Forest Leadership and Alaska Department of Fish and Game Leadership have not yet set population objectives.

Comment 19: (paraphrased)

The FEIS should mention that some of the unit lay-outs could result in the logging of natal denning habitat used by river otter.

Response 19:

Your concern has been addressed in the FEIS.

Comment 20: (paraphrased)

What are the various categories or types of wetlands, and which type will experience the most impacts?

Response 20:

Some information on wetlands is provided on page 3 of Chapter 3 of the DEIS. Table 3-2 of the draft shows that approximately 2/3 of the wetlands are forested. These lands generally have a tree cover. These trees, however, generally grow slower and are smaller in size though the same age of trees we generally think of as typical in southeast Alaska. This is because water is often just below the surface and within the rooting depth of the trees. These forests on wetlands are often not commercially or economically viable forests (i.e., production is less than 8,000 board feet per acre), or these wetlands support the lowest volume class of commercial timber (class 4, 8,000 to 20,000 board feet per acre). Muskegs comprise about 1/3 of the wetlands, and this water may be visible on the surface or apparent if one walks across the area. The vegetation usually does not include trees. Vegetation includes other life forms, such as mosses, sedges, grasses, and low shrubs.

Table 4-5 on page 5 of Chapter 4 of the DEIS shows that forested wetlands will be affected more than muskegs for the action alternatives. Tables 4-6 and 4-7 of the DEIS show that proposed activities for harvest are greater than proposed activities for road construction. Harvesting timber on forest wetlands will be done in areas of volume class 4 timber in the action alternatives.

Comment 21: (paraphrased)

The monitoring and mitigation section regarding wildlife needs to be improved. The wildlife monitoring plans should also be revised to incorporate objectives and important monitoring and management principles.

Response 21:

The monitoring and mitigation section of this document has been designed to monitor habitat conditions and monitor implementation.

Comment 22: (paraphrased)

Although there may be sufficient deer for subsistence users at the present time, we are concerned with meeting recreational hunter demands. Any further loss of habitat will mean an even greater inability of the area to meet the demand of Ketchikan (non-subsistence) hunters. Restrictions to seasons and bay limits may occur as a result and Ketchikan hunters may be forced to hunt elsewhere. This should be clearly and explicitly discussed in the FEIS.

Response 22:

Your concern has been addressed in the FEIS.

Comment 23: (paraphrased)

Although some portions of the DEIS relating to wildlife are quite good (especially the old-growth retention plan in Alternative 5), the cumulative effects analysis is not complete in any alternative. It is quite possible that cumulative impacts are significantly underestimated. The FEIS needs to consider, describe, and analyze all present impacts, and the likely future cumulative impacts within a geographical area. This proposed action should be analyzed in the context of what is occurring around it, as well as in the context of prior and succeeding actions. The DEIS does not evaluate the impacts to wildlife of subsequent timber sales by the Forest Service, the location and effects of increased human access over time, or the intensive logging activities occurring on the adjacent privately-owned lands.

Response 23:

Your concern has been addressed in the Subsistence section of the FEIS.

Comment 24: (paraphrased)

In a re-analysis of cumulative impacts, we should also, perhaps, consider expanding the analysis area. We suggest southern Revilla Island is an appropriate area for cumulative impacts analysis; an area corresponding to Wildlife Analysis Areas 404, 405, 406, 407, and 408.

Response 24:

Your concern has been addressed in the Subsistence section of the FEIS.

Comment 25: (paraphrased)

In addition to present and future activities in areas surrounding the project area, we also need to know the likely location of all units, roads, and old-growth retention as proposed at the end of the rotation.

To meet this essential objective, it seems necessary to publish a proposed, or preliminary, "life-of-the-rotation" map depicting how the Forest Service envisions this planning area will appear in the year 2060.

Response 25:

Exact locations of such activities will not be known until analyzed under subsequent NEPA documents. Effects of such activity is addressed the the cumulative effects section which assumes harvest of all operable Forest Service, State and private land in the project area.

Comment 26: (paraphrased)

We are concerned that Volume Class 4 is under-utilized in all alternatives, while Volume Class 5 is over-harvested. Disproportionate harvesting of Volume Class 6 is proposed under Alternatives 2, 4, and 6 and that of Volume Class 7 under Alternative 3.

Response 26:

Proportionality is measured by management area. In the Shelter Cove project two management areas are included, these are K35 and K39. All action alternatives, except Alternative 2 which was the economic alternative, do not harvest a disproportion in the higher volume classes. This analysis is displayed in the FEIS.

Comment 27: (paraphrased)

In addition to displaying harvest distribution by volume class as a percent of total acres harvested (as shown in Table 4-37, Ch. 4, Pg. 39), it would be beneficial to also display harvest distribution by volume class as a percent of existing volume class acreage.

Response 27:

This has been done in the FEIS in Chapter 4, Timber.

Comment 28: (paraphrased)

Roads cannot be built into a LUD II area for the purpose of achieving access to adjacent logging units as a part of a routine timber sale.

Response 28:

See Response 29.

Comment 29: (paraphrased)

There are several alternative routes which need to be evaluated with regards to a future transportation corridor or a "vital forest transportation system linkage". It is doubtful that more than one linkage transversing the Naha LUD II area could be justified as essential. With several potential alignments available, it should be recognized that proposed roading into a LUD II area and a connective transportation linkage should, therefore, not occupy more than one route through designated LUD II.

Response 29:

In your letter you discussed the viability of roading in the Naha LUD II area. Criteria concerning LUD II road development is reiterated for your convenience in the following discussions. These criteria are from the Tongass Land Management Plan, amended Winter 1985-89; USDA Forest Service, Alaska Region, Admin. Doc. Number 174, pp. 9.

"Roads will not be built except to serve authorized activities such as mining, power and water developments, aquaculture developments, transportation needs determined by the State of Alaska, and vital Forest Transportation system linkages. *+ "

Additional criteria is displayed in footnote 6 and is included as follows:

- ⁶⁺ Vital Forest Transportation system linkages refer to necessary additions to the permanent road network. Such linkages may be built through LUD II areas when either no other feasible land or water routes exist to access adjacent LUD III or IV areas or when it can be demonstrated that the routing through the LUD II area is clearly environmentally preferable and site-specific mitigation measures can be designed to minimize the impact of the road on the surrounding LUD II area. A clear need to build such linkages must be demonstrated through a comparative analysis of transportation alternatives during the NEPA process and must be approved by the Forest Supervisor, in consultation with the other Tongass Forest Supervisors.

A detailed analysis investigating roading the LUD III lands adjacent to LUD II lands was conducted and is in the administrative records at the Ketchikan Area Supervisor's Office. In summary, it was found that the roading along the border of the Naha LUD II area was environmentally preferable.

Comment 30: (paraphrased)

It appears that roading into the Naha LUD II area may not be a legal option if selected as an alternative under this particular EIS.

Response 30:

See Response 29.

Comment 31: (paraphrased)

There are several problems with using the Salmonberry LTF located near Hume Island. We would suggest building the small section of connective road to these units so that timber from this area could be transferred to saltwater at Shelter Cove.

Response 31:

Use of the Hume Island LTF is dependent upon developing an equitable agreement with Cape Fox Corporation. If the site is not usable, such an agreement could not be reached and all resource access would be accomplished via the Shelter Cove LTF. This is provided for in discussions in Chapter 4, pp. 33 of the DEIS.

Comment 32: (paraphrased)

As presented, Alternative 3 does not promote recreation and is quite detrimental to wildlife.

Response 32:

Alternative 3 has the lowest harvest of any of the action alternatives, has the smallest average harvest unit size and keeps development away for potential recreation sites. The harvest units are also widely dispersed which lends this alternative to a recreational theme.

Comment 33: (paraphrased)

Alternative 3 could be modified so that it can accomplish recreational objectives without significantly impacting wildlife habitat.

Response 33:

Your comment is important and the type we encourage to help us refine the draft into a final document that incorporates public comment.

Comment 34: (paraphrased)

We urge that wildlife habitat capability model outputs be used for the analyses for the Final EIS as suggested on page 4-53. We applaud the effort to use habitat capability estimates for MIS, but believe the models will give more accurate estimates than the procedure that was used.

Response 34:

Your concern has been addressed in the Subsistence portion of the FEIS.

Comment 35: (paraphrased)

An imprecise examination of some model outputs for existing habitat capability shows deer habitat capability considerably lower than that given in the DEIS (table 6-66, pg. 4-73) -- 1,523 (all elevations) vs. 2,504 in DEIS. Other modeled species habitat capabilities appear to be considerably higher than those given in the DEIS (table 4-51, pg. 4-60): Marten 152 vs. 76 in DEIS; Black bear 109 vs. 7 in DEIS; and River otter 39 vs. 11 in DEIS. The habitat capability models should be used in the Final EIS to determine current habitat capability and habitat capability for all alternatives, and to show cumulative effects of alternatives over time to 2060.

Response 35:

Possibly confusion occurred when comparing the Wildlife and Subsistence sections. Please note that the 2,504 figure for deer in the Subsistence section does not incorporate the block size effects which figure 1,327 in the Wildlife section does.

Comment 36: (paraphrased)

We support the "effective block procedure" of old-growth block designation as described in the section title "Old-growth Analysis 2" on page 4-56. Fragmenting of old-growth blocks as described in "Old-growth Analysis 1" renders them useless for their purpose. Old-growth retention should remain inviolate for the life of the rotation.

Response 36:

Wildlife retention areas established by this decision are not permanent. Retention designations will be re-evaluated as part of any future planning for this project area. That planning process will involve the identification of issues and concerns during the public involvement phase. Any modification to retention as part of future planning processes will adhere to the National Environmental Policy Act.

Comment 37: (paraphrased)

Criteria for wildlife old-growth blocks are given in last paragraph of pg. 4-54. However, no criteria or description is given for what constitutes "recreation old growth" (page 4-56 and table 4-47). The implication is that it is different from wildlife old growth, but how? Unless a definition and criteria are given for "recreation old growth" the term is vague and misleading and should be dropped.

Response 37:

The aspect of recreation old-growth prescription has been deleted from the FEIS.

Comment 38: (paraphrased)

The Cumulative Effects statements for all Management Indicator Species (Chapter 4) mention only the acres of that species' habitat that would be in old-growth prescription at the end of the rotation. Acres of habitat do not tell a person much. All acres are not the same and the value of habitat varies widely. The analysis should be expanded to include how many animals that habitat will support at the end of the rotation; in other words, give the habitat capability for each species using the assumptions listed in paragraph one of the deer cumulative effects section. The analysis must also show (on a map) exactly

where *permanent* old-growth prescription will be located at the end of the rotation in order to be truly meaningful.

Response 38:

The analysis for the cumulative effects assumes the retention by alternative through the rotation.

Comment 39: (paraphrased)

Page 4-58 says that for each MIS, effects analyses are discussed for the year 2060. However, we were unable to locate them in the DEIS.

Response 39:

General long-term effects were discussed in the Cumulative Effects section for each MIS.

Comment 40: (paraphrased)

Table 4-51, page 4-60; eliminate "Population Estimates" from the title. Habitat capabilities and population estimates are different things and are not usually equivalent. Similarly, table 4-61 and discussion on hairy woodpeckers seems to deal with habitat capability rather than actual population. This should be clarified.

Response 40:

Your concern has been addressed in the FEIS.

Comment 41: (paraphrased)

Page 4-61, Tables 4-52 and 4-53 show only effects of timber harvest on deer habitat quantity, not quality as stated by the DEIS.

Response 41:

The word "quality" has been deleted from the sentence.

Comment 42: (paraphrased)

Page 4-73, the analysis of the effects of the alternatives on use of Sitka black-tailed deer is inadequate and makes some wrong assumptions.

Response 42:

This has been addressed in the FEIS.

Comment 43: (paraphrased)

Hunter demand for deer in the DEIS is low. Hunter demand for deer in Wildlife analysis Areas 406 and 407, which include the project area, was derived by ADF&G from responses to a 1987 ADF&G deer hunter survey. Results showed demand exceeds actual harvest somewhat and amounts to 99 deer in WAA 406 and 123 deer in WAA 407.

Response 43:

This has been addressed in the FEIS.

Comment 44: (paraphrased)

In table 6-66 (and table 2-26), the number of deer that habitat can support in 1990 (and consequently in 2000), is too large. Habitat capability model outputs should be used to get this figure. Another volume should be added to the table showing habitat capability in the year 2060 to show the effects of clearcuts aging into less productive second-growth stands.

Response 44:

The tables you refer to have been updated.

Comment 45: (paraphrased)

In table 6-66, the DEIS derived the number of deer needed to meet demand in 1990 by assuming an annual harvest rate of 30 percent. This harvest rate is far too high and, consequently, the number of deer needed to meet demand is too low. ADF&G believes a sustainable annual harvest rate for a deer population at habitat capability is 10 percent. At a harvest rate of 10 percent, the number of deer needed in WAA's 406 and 407 to meet current hunter demand is 990 and 1230 respectively. Habitat capability model outputs show the current habitat capability in all of WAA 406 to be 2473 deer, and in WAA 407 to be 1182 deer. From these figures it is apparent that hunter demand already exceeds the capability of the habitat in all of WAA 407 (which contains the majority of the project area). Although there may be sufficient deer for subsistence users, any further loss of habitat will mean an even greater inability of the area to meet the demand of all other hunters. Restrictions to seasons and bag limits may occur as a result and Ketchikan Hunters may be forced to go elsewhere for the deer they want and need. This should be stated clearly and explicitly in the Final EIS discussion.

Response 45:

These concerns have been addressed in the FEIS.

Comment 46: (paraphrased)

In table 2-29, pg. 2-30, Wildlife Mitigation Measures #1, precommercial thinning should be deleted. The improvement to wildlife habitat by thinning second growth has proved to be only negligible and is insignificant when compared to the loss of habitat through clearcut logging. In addition, there are serious doubts that such treatment is realistically possible on a large scale given the cost and manpower requirements. Until such time as measurable, positive, cost-effective benefits of second-growth thinning are demonstrated, it is inappropriate to continue to present it as a mitigation measure.

Response 46:

Precommercial thinning is discussed in detail on page 2-134 of the 1989-94 Operating Period for the Ketchikan Pulp Company FEIS.

Comment 47: (paraphrased)

Page 2-31, #6. The features of this Access Management Plan that would make it beneficial for wildlife should be listed. An access management plan by itself is not wildlife mitigation.

Response 47:

It is expected that after timber harvest operations are complete, human access to the Shelter Cove road system will be very limited, because the project on an isolated road system.

Comment 48: (paraphrased)

Page 2-31, #7. This wildlife mitigation measure has little foundation in current ecological application and is not known to be effective. However, assuming there is value in leaving 3 to 5 acre windfirm islands within clearcuts, that value would be lost if the clearcuts were enlarged to make up for the timber left standing in the islands. For this measure to be useful for wildlife, the size of clearcuts must remain the same and the amount of timber cut must be reduced. For instance, if five five-acre islands are designed for a clearcut block of 100 acres, then only 75 acres of trees should actually be cut. If instead, 25 acres were cut along the side of the clearcut to make up for the timber lost to old-growth islands, the result would be a more fragmented and less valuable wildlife habitat. Better to leave the 25 acres of old growth intact on the edge of the clearcut as part of a larger block of habitat than fragmented into mostly useless islands in the clearcut.

Response 48:

Dr. Jerry Franklin presented a paper at the New Perspective Conference in Petersburg, Alaska in 1990. He recommended incorporating new knowledge at the stand level by trying "to maintain or recreate stands that have a higher level of structural diversity". One way to accomplish this would be to provide for large standing dead and down woody debris. He also recommended leaving green trees. This technique would provide a more structurally diverse stand in a lesser number of years than a solid clearcut would.

Comment 49: (paraphrased)

In Appendix B, Fish Mitigation Measures -- For all alternatives, riparian prescriptions buffer strips should be changed to comply with the Tongass Timber Reform Act (HR 987). Minimum 100' no-cut buffers should be prescribed for all AHMU class I streams and class II streams which feed into I's.

Response 49:

Appendix B, Fish Mitigation Measures, has been modified to comply with TTRA.

Comment 50: (paraphrased)

Pages 2-44 and 2-45, the wildlife monitoring plan is inadequate. The plan emphasizes the measurement of wildlife mitigation measures. Although this is a useful type of monitoring, it generally fails to determine the actual utility of the wildlife mitigation measures. The one exception is the monitoring of bald eagle nesting activity. The bald eagle monitoring plan is well-designed, yet like the rest of the monitoring plan, no objectives are stated a priority. The monitoring plan fails to state what will happen if the eagle monitoring plan detects a decrease in bald eagle nesting activity. This is a major flaw.

Response 50:

The Tongass Land Management Plan is currently working on addressing NFMA population trends monitoring in the revision. The intention of this monitoring plan was to monitor habitat conditions and monitor implementation.

Comment 51: (paraphrased)

The monitoring plan should include wildlife population or time-trend objectives, particularly for management indicator species.

Response 51:

The Tongass Land Management Plan is currently working on addressing NFMA population trends monitoring in the revision. The intention of this monitoring plan was to monitor habitat conditions and monitor implementation.

Comment 52: (paraphrased)

The monitoring plan should include the design of surveys to sample time-trends of indicator populations that include monitoring before, during, and after project implementation.

Response 52:

The Tongass Land Management Plan is currently working on addressing NFMA population trends monitoring in the revision. The intention of this monitoring plan was to monitor habitat conditions and monitor implementation.

Comment 53: (paraphrased)

The monitoring plan should include the inclusion of mitigation measures that will be instituted should population indices fall below specified levels.

Response 53:

The Tongass Land Management Plan is currently working on addressing NFMA population trends monitoring in the revision. The intention of this monitoring plan was to monitor habitat conditions and monitor implementation.

Comment 54: (paraphrased)

A map displaying place names in the project area should be put at the beginning of the maps section. The lakes of the area, although referred to often in the DEIS text, are identified only on Fig. 3-7. It took some time to discover this key. Also, South Saddle Lake on Fig. 3-7 is different from the S. Saddle Lake on the USGS Ketchikan C-5 Quadrangle topographic map. This discrepancy should be rectified or explained to avoid confusion. Leask Cove, although referred to several times in the DEIS, is never identified on a map.

Response 54:

We agree.

Comment 55: (paraphrased)

Many of the harvest unit numbers on Figs. 2-1 through 2-5 and Alternative maps (Figs. A2-A6) are extremely difficult or impossible to make out. These should be made more readable.

Response 55:

We agree.

Comment 56: (paraphrased)

Major Channel Types, Fig. 3-11, are illegible. Topographic views in Figs. 4-2, 4-6, and 4-17 are not identified.

Response 56:

We agree. Identification of views were hidden by graphics. Plots have been labeled.

Comment 57: (paraphrased)

We are happy to see old-growth retention displayed on the same maps as proposed cutting units for alternatives. This makes review of alternatives much easier. Also needed, however, are maps showing the rest of operable forest land in the project area so that reviewers can see where future logging is likely to occur and thus have a visual reference of cumulative impacts. Remaining operable forest land should be displayed on the same map with old-growth retention and cutting units. Such maps would be more readable if produced in color.

Response 57:

Thank you. Next time we will be sure to include a map displaying this. This type of map is available as part of the administrative record and was shown at numerous public meetings.

Comment 58: (paraphrased)

Page 4-42, para. 4 should have a sentence added noting that the value of second-growth trees and products is considerably less than the value of old-growth trees and products.

Response 58:

Over a 102 year rotation, it is felt that the value of second-growth trees and products, because of the reduction in defect, will compete with old-growth products.

Comment 59: (paraphrased)

Page 4-42, para. 5. What is the basis for the statement that stands with volumes of 20-30 MBF/acre and those of 30-50 MBF/acre have the same future growth potential. Are you asserting they have the same site productivity index?

Response 59:

For this analysis, yes. As we track timber harvest by volume class we will, through time, be able to ascertain a distinct site productivity index for these classes. We feel these are conservative estimates.

Comment 60: (paraphrased)

Why does this DEIS in table 4-39 base growth/yield projections on current inventory volume rather than site productivity? Site productivity is used in most other yield projections used by the USFS including the TLMP Revision. Site productivity should be used here as well.

Response 60:

Volume class is a measure of site productivity.

Comment 61: (paraphrased)

In tables 4-37 and 4-39, how are you determining acreage scheduled by volume class -- through stand exams or from timber type maps? Given the recognized difficulties with the accuracy of the current timber inventory, project level plans should all rely only on data from stand exams.

Response 61:

Stand exam data was used to determine volume by timber type.

Comment 62: (paraphrased)

In Vol. I, Chapter 3, page 13, the 7.6 miles of Forest Development Roads are more than the total of 3 miles of usable and 3.8 miles of usable roads.

Response 62:

This is a typographical error and has been corrected in the Final EIS.

Comment 63: (paraphrased)

In Vol. II, Chapter 2 all figures should be given numbers in this chapter. the DEIS shows 3 preferred sites (1, 5, and 7), but only 2 LTF site maps (1 and 5) are given. The profiles and site descriptions that follow are somewhat confusing, as all proposed sites except 5, 6, and 7 have individual profiles. The statement under site 5 that, "Impacts must be evaluated to determine if it will be necessary to dispose of any eagle trees," is quite confusing and should be reworded. We agree that site 6 is biologically unsuitable for continued log transfer (as explained in Vol. I), but think sites 5 and 7 should also be removed from the list of preferred sites.

Response 63:

Maps in Vol. II, Chapter 2 will be assigned figure numbers in the FEIS.

Figure 2-6 "Area L.T.F. Sites; George and Carroll Inlets" was portrayed twice which will be corrected.

Seven LTF sites were considered as all seven could potentially serve the project area. Only those proposed for use in the various alternatives were shown on individual site maps.

Simple plan and profile sketches were included with the preliminary reconnaissance reports. These simplistic sketches were to show a very general preliminary idea concerning possible L.T.F. configuration.

January 27, 1991

USDA-FOREST SERVICE
RECEIVED

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

FEB 04 1991

Dear Forest Supervisor:

I appreciate the opportunity to comment on the DEIS prepared by your staff for the Shelter Cove Project Area. Alternative 5 best reflects the New Perspective direction currently being implemented by the Forest Service with a few modifications. As reflected in this alternative, I applaud your efforts to begin looking at all the values of our national forest on an equal basis as dictated by the Tongass Reform Act.

Alternative 5 comes closest to addressing wildlife protection concerns and yet timber harvest levels are high enough to satisfy economic returns. This plan provides for effective old-growth retention blocks and ensures protection of unfragmented wildlife corridor to adjacent areas. The alternative 5 approach begins to address long standing environmental concerns about sustaining wildlife populations and biodiversity issues lacking in past timber harvest management. However, there are a few modifications to this proposal that I feel are essential in protecting the fisheries populations and ultimately the quality of recreation opportunities and other economic values other than timber in the Upper George Inlet Area. I would like to see the timber units on the tributaries to all creeks feeding into the Salt Lagoon removed from the timber harvest plan. There are about six units in question and I am unable to read the VCU numbers. These units are located near riparian areas of on Saltchuck Creek tributaries and some are on steep slopes. Negative impacts on coho spawning and rearing habitat poses a risk as soils may become unstable from clearcutting and road building over these creeks. I feel the value of the summer coho run known to local sportfish enthusiasts far exceeds the timber value they represent. In addition, the sportfishing charter business that uses the chuck during this run may be adversely impacted and must be given more of a priority if multiple use of this area is going to be realized. I concur with Mr. Lunn's statement in his cover letter accompanying the Shelter Cove DEIS that Alternative 5 "...would have less impact on Coho habitat because it harvests the least amount in watersheds most important to salmon." He also goes on to state that this alternative has the least amount of negative impact on the area's viewsheds. I am confused as to why Alternative 3 is considered the recreational alternative. Again referring to Mr. Lunn's cover letter, it appears this distinction was made because it includes a possible link up to the Ketchikan road system. He goes on to cite a recent

borough community survey that supports roaded access to recreational opportunities and a favorable response to recreating in or adjacent to logged areas. First of all, of the nine recreational values prioritized by this community, protection of fisheries habitat for saltwater fishing was number one in importance. The second and third priorities concerned protection of wildlife habitat and fisheries habitat for freshwater sportfishing. These are the very values emphasized in Alternative 5 and stated by Mr. Lunn in the preceding paragraph of his cover letter. Roaded access to recreation came in fourth and a willingness to recreate in or near a clearcut was low on the priority list. Also a word of caution, in using this survey question must be considered. Participants were not asked if given the choice between recreating in a logged area or old growth stand, which would they prefer. They were only asked how they felt about recreating in or near a clearcut

The fifth alternative is the only one that does not have roads entering the Lud II area designated in the Naha drainage. As I understand the law, roads cannot be built in Lud II areas for the express purpose of harvesting timber. It cannot be argued convincingly at this time that these roads would also serve as a potential transportation/utility road because ADOT/PF as not concluded their study on the best road route through this area. } 3

Alternative 5 best expresses the Tongass Reform Act intent on disallowing high grading the higher volume class timber in the Tongass National Forest. } 4

Lastly, I am requesting your staff to include the cumulative effects of logging for the entire southern portion on Revilla Island. This has been extensively logged in the past on private lands in this area. } 5

In conclusion, I strongly urge your to adopt Alternative 5 management plan for the Shelter Cove area with a few modifications I have outlined in my comments. It is the only choice other than alternative 1 that protects the extremely important wildlife and fisheries habitat and resources surrounding the George Inlet Saltchuck. This protection includes several important processes aimed at developing the New Perspective approach such as effective old-growth blocks, protection of recreational wildlife and fisheries resources and harvesting timber proportionate to volume class to name a few examples. I support you in continuing this new direction and addressing a true multiple use of our public lands.

Sincerely,

Meg Cartwright

P.O. Box 9506

Ketchikan, Alaska 99901

Letter From Meg Cartwright, Ketchikan, AK

Comment 1: (paraphrased)

I would like to see the timber units on the tributaries to all creeks feeding into the Salt Lagoon removed from the timber harvest plan. These units are located near riparian areas on Saltchuck Creek tributaries and some are on steep slopes.

Response 1:

It is felt that the standards and guidelines and mitigation measures will protect these areas.

Comment 2: (paraphrased)

I am confused as to why Alternative 3 is considered the recreational alternative.

Response 2:

Alternative 3 would harvest the least amount of timber, thus retaining old-growth values for recreation and wildlife. This alternative proposes the smallest average harvest unit size, 43 acres, thereby retaining visual quality. The alternative also disperses the harvest units.

Comment 3: (paraphrased)

The fifth alternative is the only one that does not have roads entering the LUD II area designated in the Naha drainage. As I understand the law, roads cannot be built in LUD II areas for the express purpose of harvesting timber. It cannot be argued convincingly at this time that these roads would also serve as a potential transportation/utility road because ADOT/PF has not concluded their study on the best road route through this area.

Response 3:

The Shelter Cove DEIS proposes a timber sale project. An intra-island road corridor will be addressed in a separate environmental study in the future. Access through LUD II lands are provided for in the Tongass Land Management Plan, amended 1985-86; USDA Forest Service, Alaska Region, Admin. Dec., Number 147, pp. 9.

Quotations concerning such access is as follows:

"Roads will not be built except to serve authorized activities such as mining, power and water developments, aquaculture developments, transportation needs determined by the State of Alaska, and vital Forest Transportation system linkages. ⁶⁺

Further qualifications are included in footnote 6 of the same:

⁶⁺

Vital Forest Transportation system linkages refer to necessary additions to the permanent road network. Such linkages may be built through LUD II areas when either no other feasible land or water routes exist to access adjacent LUD III or IV areas or when it can be demonstrated that the routing through the LUD II area is clearly environmentally preferable and and site-specific mitigation measures can be designed to minimize the impact of the road on the surrounding LUD II area. A clear need to build such linkages must be demonstrated through a comparative analysis of transportation alternatives during the NEPA process and must be approved by the Forest Supervisor, in consultation with the other Tongass Forest Supervisors.

A detailed analysis investigating roading the LUD III lands adjacent to LUD II lands was conducted and is in the administrative records at the Ketchikan Area Supervisor's Office. In summary, it was found to be environmentally preferable to road along and within the border of the Naha LUD II area.

Comment 4: (paraphrased)

Alternative 5 best expresses the Tongass Reform Act intent on disallowing high grading the higher volume class timber in the Tongass National Forest.

Response 4:

The portion of the act you refer to pertains to the Long Term sale contract with KPC. Proportionality is measured by management area. In the Shelter Cove project two management areas are included, these are K35 and K39. All alternatives, except alternative 2 which is the timber economic alternative and an objective of that alternative was to harvest high volume stands to improve economics, do not harvest a disproportion in the higher volume classes. This analysis is displayed in the FEIS.

Comment 5: (paraphrased)

I am requesting your staff to include the cumulative effects of logging for the entire southern portion on Revilla Island. This has been extensively logged in the past on private lands in this area.

Response 5:

This has been reflected in the FEIS.

(15)

KP Ketchikan Pulp Company

Post Office Box 6600
Ketchikan, Alaska 99901
907/225-2151

February 1, 1991

Mr. Steve Ambrose
Forest Supervisor
Ketchikan Area
Federal Building
Ketchikan, AK 99901

USDA - FOREST SERVICE KETCHIKAN AREA	
RECEIVED	
Feb 1, 91	
FOREST SUPERVISOR'S OFFICE	
FS	
DES	
PLN	WED X 7/4
ENG	
AD	
IM	
ENG	
FW	
MAWS	
BS	

Dear Steve:

Ketchikan Pulp Company (KPC) would like to comment on the Shelter Cove Draft Environmental Impact Statement.

There are a number of specific issues KPC would like to address.

- A. KPC supports alternative 4 in the DEIS. This alternative provides the most not only in terms of volume to harvest, but in recreational opportunities and access as well. Also with the decline in private timber harvest now beginning to accelerate, the volume made available under this alternative should be in great demand. Minor changes can be made to this alternative both to improve economics and to stay outside the Cape Fox Corporation proposed selections. 1
- B. Recreational opportunities are woefully undeveloped in this DEIS. All the primitive (i.e. remote) types of recreation can easily be practiced in the nearby 2.2 million acre Misty Fjords area. The Forest Service should concentrate on developed recreation (i.e. roaded) so that people in Ketchikan who have limited time or resources can have improved recreational opportunities. Those families with small children or handicapped family members need places to access woods, streams, lakes, etc. To leave most of the area in primitive recreational status denies recreational opportunities to a large segment of Ketchikan's population. 2 3
- C. The tone of the DEIS when comparing alternatives seems to indicate that more logging means more damage. It should be explained that mitigation measures are the same in all cases. 4

Mr. Steve Ambrose
February 1, 1991
Page 2

- D. Visual concerns should not get the high priority they presently receive in this DEIS. Visual concerns are very subjective and are much less important in a area of developed recreation. } 5
- E. KPC supports the concept of designing mainline roads in this DEIS to be adaptable to the proposed tie road to North Revilla and the mainland. It is this road more than anything else which will allow recreation, tourism, business and Ketchikan in general to grow.
- F. Preserving huge blocks of old growth timber in order to preserve species integrity is unnecessary when the study area has so much timber that is not proposed for harvest and is also adjacent to a 2.2 million acre roadless area. Animal populations are not harmed by the introduction of timber harvest, for example, Black Tail deer populations normally increase. Examples of this are Heceta and Prince of Wales Islands. Diversity of species will increase when portions of an area are managed for timber harvest. } 6
} 7
- G. Many of the mitigation methods talked about call for selective harvest. This could easily create unharvestable areas if great care isn't taken during unit design. Ground conditions should dictate where this is used and costly helicopter harvesting should not be considered due to its' limited availability and affordability. Please don't allow inexperienced people to make decisions at this point in your EIS and consequently, limit your options for timber harvest at a later date when the site specific layout is occurring. } 8
- H. KPC has some concerns with the stream mitigation measures. They are so complex that following them may be impossible. Several of the mitigation measures are so broadly written that they could easily be interpreted to prohibit harvest altogether. } 9

Some specific examples:

Page 32 #1-A--this could be interpreted to mean all class 3 streams must have a 25' buffer. That amount of protection is unwarranted. } 10

Page 33 #4--this calls for buffers on the buffers. This is totally unnecessary when the primary purpose is to create LOD in the stream. More to the point, the mandated } 11

Mr. Steve Ambrose
February 1, 1991
Page 2

buffers themselves should be managed
for wind firmness.

Page 33 #3-F--KPC feels this prescription is
neither feasible or safe and may violate
State OSHA regulations.

} 12

I. Does the DEIS specify whether a logging camp will be on
land or water? We support the option to use either as
a means to attract more timber sale bidders.

} 13

J. KPC's new sawmill at Ward Cove with a capacity of 60
MMBF/year has been left out of the DEIS review of
existing industry. This is a permanent mill and should
be included.

} 14

Ketchikan Pulp Company appreciates this opportunity to
comment and fully supports the effort to open up more of
Revilla Island.

Sincerely,

R. M. Ziesak

R. M. Ziesak
Planning Forester

:mk

cc: M. R. Pihl
O. J. Graham
R. D. Lewis
W. J. Begalka

Letter From R.M. Ziesak, Planning Forester, Ketchikan Pulp Company

Comment 1: (paraphrased)

KPC supports Alternative 4, but minor changes can be made to this alternative both to improve economics and to stay outside the Cape Fox Corporation proposed selections.

Response 1:

Other resources may preclude economics to meet the objective of planning for multiple/use resource management.

Comment 2: (paraphrased)

Recreational opportunities are woefully undeveloped in this DEIS.

Response 2:

The development of roaded recreation opportunities will be addressed under a separate NEPA document, if and when the area is linked to Ketchikan. Until that time, only potential recreation opportunities can be addressed.

Comment 3: (paraphrased)

The Forest Service should concentrate on developed recreation so that people in Ketchikan who have limited time or resources can have improved recreational opportunities.

Response 3:

We agree. However, the Shelter Cove project is on an isolated road system and without a link to town would be hard to justify the expense.

Comment 4: (paraphrased)

The tone of the DEIS when comparing alternatives seems to indicate that more logging means more damage. It should be explained that mitigation measures are the same in all cases.

Response 4:

Mitigation measures are the same, but not impacts.

Comment 5: (paraphrased)

Visual concerns should not get the high priority they presently receive in this DEIS. Visual concerns are very subjective and are much less important in an area of developed recreation.

Response 5:

The visual resource is of concern to the Forest Service and we have direction to manage this resource according to the standards and guidelines outlined in the Tongass Land Management Plan.

Comment 6: (paraphrased)

Preserving huge blocks of old-growth timber in order to preserve species integrity is unnecessary when the study area has so much timber that is not proposed for harvest and is also adjacent to a 2.2 million acre roadless area.

Response 6:

The contiguous landscape of Old-growth Retention, defined in Alternative 5 between the Naha LUD II and George Inlet, and nearly to Carroll Inlet, was carefully designed to assure dispersal of wildlife from the Naha LUD II to areas of intensive, traditional use of wildlife. The Naha is known to be a prime producer of many wildlife species, but successful dispersal from the Naha is necessary to maintain hunting and trapping opportunities elsewhere, as well as to recolonize habitats where the animals are lost. Without excellent biological corridors, some wildlife populations within the Naha are more likely to grow until they harm their food base there.

Comment 7: (paraphrased)

Animal populations are not harmed by the introduction of timber harvest. Black-tail deer populations normally increase. Examples of this are Heceta and Prince of Wales Islands. Diversity of species will increase when portions of an area are managed for timber harvest.

Response 7:

Deer habitat capability and deer populations in the project area will be affected by timber harvest. Clearcuts 0-15 (Yeo 1990) years old provide abundant forage and improve the opportunity for more deer to enter the winter in good conditions, but lack of canopy cover to intercept snow, thereby, making herbaceous forage unavailable during intermediate or deep-snow winters. In the long term, timber harvest converts old-growth stands into even-aged, closed canopy stands from 25 through 100 years. The closed-canopy stand intercept snow well and provides thermal cover, but eliminated preferred browse species and therefore, reduces habitat capability for deer.

Diversity of species will increase with the increase of forest fragmentation. Research shows that forest fragmentation results in an increased ratio of forest edge to forest interior and can have a strong negative affect on forest-interior species. As more edge habitat becomes available as a result of fragmentation, the edge-dwelling species invade the interior environment and become a major threat to the survival of the forest interior dwelling species. By maintaining large contiguous blocks of habitat, the forest interior dwelling species would realize less competition and predation from open-forest and edge species.

Comment 8: (paraphrased)

Many of the mitigation methods talked about call for selective harvest. this could easily create unharvestable areas if great care is not taken during unit design. Ground conditions should dictate where this is used and costly helicopter harvesting should not be considered due to its limited availability and affordability.

Response 8:

The selective harvest prescription will be determined on a site-specific unit implementation basis. Where clearcutting is determined to be the optimum harvest method given the site-specific circumstances, it will be applied.

Comment 9: (paraphrased)

KPC has some concerns with the stream mitigation measures. they are so complex that following them may be impossible. Several of the mitigation measures are so broadly written that they could easily be interpreted to prohibit harvest altogether.

Response 9:

The fisheries standards and guidelines are similar to those implemented in the KPC 1989-94 Long-Term Sale. These guidelines, though complex, have been successfully implemented in the 1989-94 Sale and we feel confident that they may also be successfully followed in Shelter Cove.

Comment 10: (paraphrased)

Page 32, #1-A could be interpreted to mean *all class 3* streams must have a 25' buffer. That amount of protection is unwarranted.

Response 10:

This applies to streams where stream stability is controlled by vegetation and not by bedrock. The majority of Class II streams are bedrock contained streams, so this mitigation would not apply to these streams.

Comment 11: (paraphrased)

Page 33, #4 calls for buffers on the buffers. This is totally unnecessary when the primary purpose is to create LOD in the stream. More to the point, the mandated buffers themselves should be managed for windfirmness.

Response 11:

We agree that one of the primary reasons for the "buffers" is maintenance of long-term sources of LOD. Other reasons for buffers is protection of small "unmapped" off channel habitat, protection of wildlife habitat, bank stability. Those other purposes could be affected by windthrow within buffers. The prescription will be applied site specifically.

Comment 12: (paraphrased)

Page 33 #3-F, KPC feels this prescription is neither feasible or safe and may violate State OSHA regulations.

Response 12:

We agree and are exploring this issue with OSHA.

Comment 13: (paraphrased)

Does the DEIS specify whether a logging camp will be on land or water? We support the option to use either as a means to attract more timber sale bidders.

Response 13:

The Shelter Cove DEIS does not preclude either land or water based camps. both were analyzed. See Vol. I, Chapter 4, page 36 of the DEIS.

Comment 14: (paraphrased)

KPC's new sawmill at Ward Cove with a capacity of 60 MMBF/year has been left out of the DEIS review of existing industry. This is a permanent mill and should be included.

Response 14:

Thank you.

FOREST SUPERVISER
KETCHIKAN, AREA
TONGASS NATIONAL FOREST
FEDERAL BUILDING
KETCHIKAN, ALASKA 99901

JANUARY 31, 1991
USDA-FOREST SERVICE
RECEIVED
FEB 04 1991

DEAR SIR:

I FEEL THAT ALTERNATIVE SIX IN THE SHELTER COVE DRAFT ENVIRONMENTAL IMPACT STATEMENT TO BE THE MOST VIABLE ALTERNATIVE OFFERED FOR SEVERAL REASONS:

1. IT WILL PROVIDE INCREASED HABITAT ACREAGE FOR WILDLIFE. } 1
2. IT WILL PROVIDE FOR TIMBER RELATED JOBS WHICH IS A DEFINITE PLUS TO THE REVENUE IN THE KETCHIKAN AREA.
3. I ALSO BELIEVE THE ROAD ACCESS IS ESSENTIAL TO THE RESIDENTS AND VISITORS OF KETCHIKAN. I SAY "ESSENTIAL" AND NOT "BENEFICIAL" BECAUSE I HAVE HAD THE ENVIABLE OPPORTUNITY TO RESIDE ON THE WHITERIVER AREA FOR MANY YEARS DURING WHICH TIME I SAW THE QUANTITY OF OF PEOPLE WHO WOULD DO JUST ABOUT ANYTHING TO "HAVE ANOTHER PLACE" TO SEE, FISH, HUNT, WALK, BIKE, RUN, SKI, OR DRIVE IN SPITE OF ALL THE "PRIVATE PROPERTY" SIGNS, "NO TRESSPASSING" SIGNS AND THE "NO HUNTING OR FISHING" SIGNS. STILL, IN SPITE OF SIGNS AND A WATCHMAN VERBALLY REINFORCING WHAT THEY HAVE ALREADY READ MANY WERE WILLING TO ARGUE. THESE AFORE MENTIONED INDIVIDUALS ARE ONLY A SMALL QUANTITY OF THOSE WHO WOULD RATHER DRIVE IF THE OPPORTUNITY WERE PRESENTED TO THEM AS ATTESTED BY THE NUMBER OF VEHICLES THAT COME DOWN THE ROAD WHEN THE GATE IS LEFT OPEN. HAVING LIVED IN KETCHIKAN VIRTUALLY ALL MY LIFE I KNOW THAT THIS TOWN-CITY HAS GROWN CONSIDERABLY IN THE PAST DECADE AS FAR AS POPULATION AND BUSINESS OPPORTUNITIES ARE CONCERNED BUT RECREATIONAL OPPORTUNITIES AND ROAD ACCESS HAS NOT MATCHED THIS GROWTH. I WOULD HOPE THAT ALL THESE THINGS WOULD BE CONSIDERED IN THE DECISION MAKING ON THIS ISSUE. } 2

Janice Updike
JANICE UPDIKE

Letter From Janice Updike

Comment 1: (paraphrased)

We feel that Alternative 6 will provide increased habitat acreage for wildlife.

Response 1:

We feel that our analysis show that Alternative 5 provides this acreage the best.

Comment 2: (paraphrased)

We are concerned that recreation opportunities and road access has not matched the growth of the population.

Response 2:

The roaded recreation opportunities for the residents and visitors of Ketchikan would increase if a road link from Ketchikan to the Shelter Cove project is built. Such issues will be addressed in a separate NEPA document.

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

HABITAT DIVISION

WALTER J. HICKEL, GOVERNOR

2030 SEA LEVEL DRIVE
SUITE 205
KETCHIKAN, ALASKA 99901-6064
PHONE: (907) 225-2027

January 23, 1991

Mr. Steven T. Segovia
Ketchikan Ranger District
3031 Tongass Avenue
Ketchikan, Alaska 99901

Re: Shelter Cove DEIS

Dear Steve:

In our Shelter Cove DEIS comments of January 18, 1991, we referenced a paper intended to accompany our response. This paper, "Harvest Rates of Sitka Black-Tailed Deer Populations in Southeast Alaska for Land-Use Planning" (enclosed) is the result of a joint Forest Service/Alaska Department of Fish and Game effort. It pertains to comment W-9c on page 3 of Enclosure A and should have been an attachment to our Shelter Cove DEIS comments, but was inadvertently omitted.

Briefly, this paper states that, "The results of the simulation modelling and other factors described previously indicate a harvest rate of 10% should be used in land-use and population management planning in southeast Alaska." Unfortunately, the Shelter Cove DEIS derived the number of deer needed to meet demand in 1990 by assuming an annual harvest rate of 30%. This harvest rate is far too high and, consequently, the number of deer needed to meet demand is too low. A sustainable annual harvest rate for a deer population at habitat capability is more realistically in the vicinity of 10%.

Based upon the enclosed ADF&G/USFS paper by Flynn and Suring, we would like to request that computations for the numbers of deer needed to meet demand in the years 1990, 2000, and 2060 be computed using the 10% figure in the Final EIS for Shelter Cove. Thank you for incorporating this into the final version of the EIS.

Received 515
1/25/91

Mr. Steven T. Segovia
Sincerely,

-2-

January 23, 1991

Jack Gustafson
Area Habitat Biologist

Attachment

cc: Frank Rue
Rick Reed
Dave Anderson
Lorraine Marshall

HARVEST RATES OF SITKA BLACK-TAILED DEER POPULATIONS IN SOUTHEAST ALASKA FOR LAND-USE PLANNING

Rodney W. Flynn, Alaska Department of Fish and Game, Division of Wildlife Conservation, Douglas, AK 99824

Lowell H. Suring, Alaska Region, USDA Forest Service, Juneau, AK 99801

Land managers need to evaluate the impact of land-use activities on the human harvests of Sitka black-tailed deer (*Odocoileus hemionus sitkensis*) in southeast Alaska. Also, population managers need the ability to estimate the number of deer required in a population to provide for human harvest objectives. A habitat capability model for deer in southeast Alaska has been developed to estimate the potential number of deer the habitat in a planning area can support (Suring *et al.* 1988). In addition, an understanding of sustainable harvest rates of a deer population is needed to determine whether a planning area with a given habitat capability can meet harvest objectives.

Because rates of increase or sustainable harvest rates for deer populations in southeast Alaska are not known, the selection of an appropriate rate for use in planning projects has been the topic of much discussion among management agencies. In this paper, we provide a rationale for a sustainable harvest rate for use in deer habitat and population management planning in southeast Alaska. The rationale draws on the theory and data provided in McCullough (1987) and our simulations of deer populations using a deterministic model with available data from southeast Alaska.

Caughley (1977) and McCullough (1987) provide a theoretical basis for deer population management. The theory assumes that deer recruitment is strongly density dependent, and potential yield for hunters is highly dependent on recruitment. Thus, high recruitment occurs at low population densities, and recruitment rates decline as density increases because of intraspecific competition for food. Likewise, hunter yield decreases as net recruitment decreases.

McCullough (1987) provides information on net recruitment rates for white-tailed deer depending on residual population size based on his research on the George Reserve population. Although similar data did not exist for mule or black-tailed deer, McCullough (1987) estimated net recruitment curves for

mule deer for comparative purposes using information reported in the literature from the Rocky Mountain area (primarily Robinette *et al.* 1977 and Connolly 1981). Net recruitment rates, or rates of population increase, can be used to estimate sustainable harvest rates. A population can be harvested at the same rate as the rate the population would increase in the absence of hunter harvesting (Caughley 1977).

Sustainable harvest rates are only part of the equation. The human population must be able to harvest deer with a certain level of success in order to meet harvest objectives. Generally, hunter success depends on population density (McCullough 1987). The average deer taken from a low population requires more effort compared with an average deer taken from a high population. As population density decreases, a greater hunter effort is needed to maintain a harvest objective. If hunter effort does not increase, the harvest will decrease until the population increases again. Generally, the public prefers that deer populations be maintained at high levels, so the time and effort required to locate a deer is not excessive.

D. Anderson, M. Kirchhoff, T. Paul, and J. Schoen provided critical reviews and contributed ideas to this paper.

TERMINOLOGY

The terminology of population biology can cause confusion. Caughley (1977) provides a good discussion of appropriate terminology and symbols for population increase; his terminology and symbols are used here. Caughley (1977) describes several measures of population increase. These measures can be expressed either in the finite (λ) or the exponential (r) form ($\lambda = e^r$), and are defined as follows:

- 1) Observed rate (λ), the observed change in population numbers. The observed rate is a general measure that may not be constant over time, the age distribution may not be constant over the period, and resources may not be superabundant;
- 2) Survival-fecundity rate (r_s or λ_s), the rate a population would increase with given schedules of survival and fecundity held constant;

3) Intrinsic rate (r_m or λ_m), the rate achieved by a population with a stable age distribution in the absence of crowding or resource shortage; and

4) Potential rate (r_p or λ_p), the rate a population would increase if a given agent of mortality was removed (e.g. hunting or predation).

In order to understand McCullough (1987) and concepts presented here, additional terms need clarification:

1) Residual population, the number of animals at the end of the biological year (i.e. before the birth pulse);

2) Recruitment, the number (or percentage) of young of the year alive at the beginning of the hunting season;

3) Net recruitment, the net increase in the size (or percentage increase) of the residual population at the beginning of the next hunting season (in contrast to young of the year);

4) Sustainable harvest (or yield), any level of harvest from a population that could be maintained in perpetuity under a given set of environmental conditions; and

5) Maximum sustainable harvest (or yield), the greatest sustainable harvest from a population under a given set of environmental conditions.

MCCULLOUGH'S YIELD CURVES

McCullough (1987) provides a potential yield curve for white-tailed and mule deer depending on residual population size. These curves can be used to predict the response of deer populations to various exploitation rates. Also, the curves can be used to estimate harvest rates that will sustain a given residual population size. Although these curves provide a useful theoretical framework, they provide a best case scenario because hunting is assumed to be the only cause of traumatic mortality. Thus, the impacts of predation or severe winter weather are not incorporated (McCullough 1979). Also, the reproductive rates assumed for mule deer are much higher than those measured for black-tailed deer from Vancouver Island (Thomas 1983) or southeast Alaska (Johnson 1987). McCullough (1987) assumed that the pregnancy rate for fawn females was 30% and yearling females were as productive as adults. He does not

provide the actual survival or productivity rates of adults. Johnson (1987) found no fawns pregnant and only 67% of the yearling females pregnant.

An interpolation of McCullough's yield curve indicates that the maximum sustainable yield for mule deer would be 27% of a residual population at 63% of carrying capacity (K). A residual population at 90% of K would provide a sustainable yield of 10%. If K = 100 deer, then a residual population at 63% K would yield a maximum sustained harvest of 17 deer, and a population at 90% K would provide a sustained yield of 9 deer.

POPULATION SIMULATIONS

In order to explore possible rates of increase for Sitka black-tailed deer in southeast Alaska, we simulated the growth of a hypothetical deer population using 4 different assumptions for age-specific mortality. Each of these simulations provided a value for r_s , expressed as the finite rate λ_s . The deterministic population model POP-II (Fossil Creek Software, Fort Collins, CO) running on a microcomputer was used for the simulations. This model allows the user to specify age-specific mortality rates for the summer and winter seasons, initial population sex and age composition, and birth rate. The specified birth rate must be applied to all age classes of females considered adults. Simulations were run for 25 years with a given set of parameters, sufficient time to generate a stable age distribution. The model outputs the sex and age composition of the population at 4 time steps during the biological year - after the birth pulse, prehunt, posthunt, and post winter.

Assumptions for all simulations

A birth rate of 150 fawns:100 adult does was used for each simulation. Females 2 years of age and older were considered adults. Because the model does not allow for age-specific birth rates, the same rate was used for all age classes of does considered to be reproductively mature. The birth rate used was based on fertility information gathered from 54 female deer collected during February 1985 in Hoonah Sound, Chichagof Island (Johnson 1987). This study found 2 of the 3 yearling does in the sample pregnant; none of 7 fawns in the sample were pregnant. The 46 mature does contained 71 fetuses (155 fetuses:100 does). Because of fetal mortality, fetal counts provide an estimate of maximum birth rate. The actual live-birth rate would be lower. Thomas (1983) found a fetal mortality rate of 3.3% in Columbian black-tailed deer (*Odocoileus hemionus columbianus*) on Vancouver Island. For these simulations, we assumed a fetal fawn mortality rate of 3.5%, leaving a live-birth rate of 150 fawns:100 adult does. Because deer fertility was found to be age

specific (Johnson 1987), the actual birth rate of a population will depend on the age-structure of the population. Also, fertility will probably decrease as a deer population approaches carrying capacity (McCullough 1987).

The sex composition of the initial adult population and the sex ratio at birth was assumed to be 50:50. Maximum longevity was set at 15 years, so all adults die after their 15th year.

Simulation I - No Fawn Or Adult Mortality

The finite rate of increase of the population under this scenario was 1.5. The fall population was composed of 100 fawns:100 does. This growth rate would never occur in the wild because many of the fawns and some adults would die during the year. This scenario establishes the maximum potential growth rate.

Simulation II - High Fawn Recruitment and High Adult Survival

For this scenario, the fawn mortality rates were set at 40% for summer and 10% for winter. The adult mortality rate was set at 6% for all age classes. This scenario yielded a finite rate of increase of 1.24. This rate of increase would seldom occur because the fawn recruitment rate is high and the adult mortality rate is low. This scenario generates an early fall deer population composed of 69 fawns:100 does. Although little information exists on deer sex and age composition, Johnson (1984) conducted 3 late-summer deer composition counts between 1978 and 1983. He recorded an average of 16% fawns, or an early fall population composed of 38 fawns:100 does (assuming a 50:50 adult sex ratio). Johnson (1984) never recorded fall fawn counts above 50 fawns:100 does. The rate of increase observed in this scenario probably represents the intrinsic rate of increase for Sitka black-tailed in southeast Alaska during mild winters; or the rate of increase that would be observed in the absence of crowding or resource shortage (i.e. density-dependent factors).

Simulation III - Moderately High Fawn Recruitment and High Adult Survival

For this scenario, the fawn mortality rates were set at 55% for summer and 10% for winter. The adult mortality rate was set at 6% for all age classes. This scenario yielded a finite rate of increase of 1.17, and a early fall population composed of 54 fawns:100 does. The fawn recruitment assumed in this

scenario is substantially greater than the 3-year average observed by Johnson (1984).

Simulation IV - Moderate Fawn Recruitment and High Adult Survival

For this scenario, the fawn mortality rates were set at 80% for summer and 10% for winter. The adult mortality rate was set at 6% for all age classes. This simulation yielded a finite rate of increase of 1.09. The scenario generated an early fall population composed of 38 fawns:100 does. This level of recruitment is near the 3-year average observed by Johnson (1984). This scenario probably reflects the dynamics of a deer population near carrying capacity in the northern portions of southeast Alaska during a year with moderate winter weather.

Simulation V - Moderate Fawn Recruitment, Low Fawn Winter Survival and Moderate Adult Survival

For this scenario, the fawn mortality rates were set at 75% for summer and 50% for winter. The adult mortality rate was set at 12% for all age classes, double the previous scenarios. This scenario yielded a finite rate of increase of 0.91, or a population decreasing at the rate of 9%. This scenario probably reflects the dynamics of a deer population near carrying capacity in the northern portions of southeast Alaska during a year with moderately severe winter weather. The early fall population was composed of 34 fawns:100 does, about the same composition as Simulation IV, and near the 3-year average observed by Johnson (1984). The over-winter survival rate for fawns and adults would be expected under moderately severe winter conditions.

DISCUSSION

The computer simulations produced results that were relatively consistent with the hypothetical yield curves of McCullough (1987). The computer simulations indicated that finite rates of increase for deer in southeast Alaska ranged from 0.91 to 1.24. Growth rates above 1.2 would occur only when fawn recruitment and adult survival are high (i.e. population numbers substantially below K and mild winter conditions). In high density populations near K with an older age structure, the finite rate of increase would be about 1.09, and perhaps lower. Moderately severe winters would cause deer populations to decrease at the rate of 10% or more.

McCullough (1987) predicted that a residual mule deer population at 90% of K would provide a sustainable harvest of about 10% and a residual population at 63% of K would produce a maximum sustained yield harvest rate of 27%. Because of lower productivity, the maximum sustained yield for Sitka black-tailed deer in southeast Alaska is probably less. The computer simulations indicated that for Sitka black-tailed deer a residual population near K would provide a sustainable harvest of about 9% and a residual population substantially below K might provide a sustainable harvest from 17-24%.

As populations approach carrying capacity, the finite growth rate will approach zero as density-dependent factors reduce productivity and survival. The deer habitat capabilities estimated by the habitat capability model developed for deer habitat and population planning in southeast Alaska (Suring *et al.* 1988) assumed the residual population to be about 90% of K. Thus, the habitat capabilities estimated by the model allows for a hunter yield from the population.

Because of other factors not included in the population simulations (e.g. crippling loss, predation, severe winter weather), a 10% harvest level is not overly conservative for use in long-term planning. Predation by wolves and bears may greatly reduce hunter yields. In portions of southeast Alaska occupied by wolves, the harvest rate or habitat capabilities should be reduced. The current model reduces habitat capability in areas with wolves (Suring *et al.* 1988). Because of crippling loss (deer wounded but not retrieved), all deer killed by hunters do not contribute to hunter harvest objectives. Connolly (1981) found reports of crippling loss in the literature to range from 8 to 92% of the reported hunter kill; the average of 13 studies was 38%. Thus, the actual hunter kill may be about 38% greater than the harvest realized by hunters. Currently, crippling loss is not directly incorporated into any model.

The size and potential yield of deer populations in southeast Alaska fluctuate yearly because of variation in winter severity. Typically, southeast Alaska receives abundant snowfall. Deep snow winters occur periodically, depending on location. Severe winter weather can cause large increases in natural mortality, reducing residual population size and rate of increase. During years with deep snow winters, the population growth rate would be less than 1.0 because of low fawn survival and high adult mortality. Thus, the same amount of hunter harvest during the following year would reduce the size of the residual population. Also, the management objective may be actual population growth for several years to restock ranges after severe winters.

Hunter success is likely to drop as deer density decreases. The public wants deer populations to be maintained at high levels near carrying capacity, so

hunter success rates are high and deer are observed frequently. High hunter success rates are especially important for subsistence hunters because they are hunting to provide food for their families.

The results of the simulation modelling and other factors described previously indicate that a harvest rate of 10% should be used in land-use and population management planning in southeast Alaska. This harvest rate is appropriate to use in conjunction with habitat capability estimates available from models developed for use in southeast Alaska. It is important to realize that the yield may be higher for some years and situations; for some years and situations the yield will be lower than 10%.

REFERENCES

- Caughley, G. 1977. Analysis of vertebrate populations. John Wiley & Sons, New York. 234pp.
- Connolly, G. 1981. Assessing populations. Pages 287-345 in C. Wallmo, ed. Mule and black-tailed deer of North America. Univ. Nebraska Press, Lincoln.
- Johnson, L. 1984. Unit 4 deer survey-inventory progress report. Pages 13-17 in A. Seward, ed. Annual report of survey-inventory activities. Part VI. Deer. Vol. XV. Alaska Dep. Fish and Game. Fed. Aid. in Wildl. Rest. Prog. Proj. W-22-3. Job. 2.0 Juneau. 23pp.
- _____. 1987. Reproductive potential of Sitka black-tailed deer in southeast Alaska. Alaska Dep. Fish and Game. Fed. Aid in Wildl. Rest. Final Report. Proj. W-22-4. Job 2.8R. Juneau. 29pp.
- McCullough, D. 1979. The George Reserve Deer Herd. Univ. Michigan Press, Ann Arbor. 271pp.
- _____. 1987. The theory and management of *Odocoileus* populations. Pages 535-549 in C. Wemmer, ed. Biology and management of the Cervidae. Smithsonian Inst. Press, Washington.
- Robinette, W., N. Hancock, and D. Jones. 1977. The Oak Creek mule deer herd in Utah. Resource Publication 77-15. Utah Div. of Wildlife, Salt Lake City, Utah.

Suring, L., G. DeGayner, R. Flynn, M. Kirchhoff, J. Martin, J. Schoen, and L. Shea. 1988. Habitat capability model for black-tailed deer in southeast Alaska: winter habitat. USDA Forest Service, unpublished. 25pp.

Thomas, D. 1983. Age-specific fertility of female Columbian black-tailed deer. J. Wildl. Manage. 47(2):501-506.

Letter Form Jack Gustafson Area Habitat Biologist ADF&G

Comment 1: (paraphrased)

The Shelter Cove DEIS derived the number of deer needed to meet Demand in 1990 by assuming an annual harvest rate of 30 percent. This harvest rate is far too high and, consequently, the number of deer needed to meet demand is too low. A sustainable annual harvest rate for deer populations at habitat capability is more realistically in the vicinity of 10 percent. Based upon ADF&S/USFS studies, we would like to request that computations for the numbers of deer needed to meet demand in the years 1990, 2000, and 2060 be computed using the 10 percent figure in the Final EIS for Shelter Cove.

Response 1:

Your concerns are reflected in the FEIS.

Alaska Energy Authority

A Public Corporation

February 6, 1991

Mr. J. Michael Lunn, Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Subject: Shelter Cove DEIS

Dear Mr. Lunn:

The Alaska Energy Authority has reviewed the Shelter Cove DEIS and offers the following comments.

Our concerns with respect to the Shelter Cove management unit relate to operation and maintenance of the Swan Lake hydroelectric project transmission line.

Our interests and the interests of the Ketchikan area rate payers might best be served by adopting the forest management alternative that could provide road access along the transmission line and, eventually, be linked with the existing Ketchikan road system. From this perspective alone, Alternative 4 would best accomplish this. The next best option, again solely from the perspective of transmission line operation and maintenance, would be Alternative 3.

Once an alternative is adopted and actual harvests are anticipated, we would appreciate the opportunity to work with you on detailed road layout in anticipation of improving access for maintenance of the transmission line.

Thank you for the opportunities to comment and please do not hesitate to contact me if you have any questions.

Sincerely,

Brent N. Petrie
Director of Agency Operations

TA:BNP:jd

cc: Stanley E. Sieczkowski, Alaska Energy Authority
Jim Lang, Alaska Energy Authority
Tom Stevenson, Ketchikan Public Utilities

State of Alaska
Walter J. Hickel, Governor
USDA—FOREST SERVICE
KETCHIKAN AREA
RECEIVED
FEB 11, 91

	INT	ACT	CHL	ONE
FS				
DES				
PLN				
PAS				
AO				
T.M.				
ENG				
F&W				
M&WS				
R&L				

Letter from Alaska Energy Authority

Comment 1: (paraphrased)

Our interests might best be served by adopting the forest management alternative that could provide road access along the transmission line and, eventually, be linked with the existing Ketchikan road system. Alternative 4 would best accomplish this. The next best option would be Alternative 3.

Response 1:

See Response 2.

Comment 2: (paraphrased)

Once an alternative is adopted and actual harvest are anticipated, we would appreciate the opportunity to work with you on detailed road layout in anticipation of improving access for maintenance of the transmission line.

Response 2:

Close coordination of power line maintenance and access during our road layout, design, and construction phase would be most welcome.

(19)
FEB 13 1991

REPLY TO
ATTN OF: WD-136

Steven T. Segovia
Ketchikan District Ranger
USDA - Forest Service
Tongass National Forest
3031 Tongass
Ketchikan, Alaska 99901

Dear Mr. Segovia:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and § 309 of the Clean Air Act, the Environmental Protection Agency we has reviewed the **Shelter Cove** Draft Environmental Impact Statement (draft EIS). This draft EIS evaluates alternatives to provide six timber harvest alternatives in the Shelter Cove area on the southern end of Revillagigedo Island north of Ketchikan in the Tongass National Forest. The alternatives range from 26.3 to 95.6 million board feet and cover 60,383 acres.

Based on our review, we have rated the draft EIS EC-2 (Environmental Concerns - Insufficient Information). Our main concern is the effect of the action alternatives on water quality and fisheries. Additional information is needed on standards and guidelines, monitoring, mitigation, log transfer facilities, and air quality. Our detailed comments are enclosed.

Thank you for the opportunity to review this draft EIS. We regret the delays in making our comments available. Please contact Wayne Elson at (206) 553-1463 if you have any questions about our comments.

Sincerely,

Ronald A. Lee, Chief
Environmental Evaluation Branch

Enclosure

cc: Drew Grant, ADEC
ADFG
NMFS

USDA FOREST SERVICE KETCHIKAN RANGER DISTRICT RECEIVED	
FEB 19 '91	
RANGER	
S.S.S.	
TM/FIRE/SILV	
REC / LANDS	
FISH / WLOF	
FAC / MTCE	
ENG	

cc: Ketchikan

DETAILED EPA COMMENTS ON THE SHELTER COVE DRAFT ENVIRONMENTAL IMPACT STATEMENT

Standards and Guidelines

Many of the Soil and Watershed, Wildlife, and Aquatic Habitat Management Units Timber Harvest Mitigation Measures have as an objective to "maintain" environmental quality. In instances where environmental conditions are already degraded this objective would be unacceptable. These objectives should be reworded to read "maintain or improve when degraded."

Monitoring

The monitoring plan is presented in Table 2-36. An introduction should be added that describes the feedback mechanism which uses the monitoring results to adjust standards and guidelines, best management practices, standard operating procedures, intensity of monitoring, and timber sale administration when adverse effects are first detected. Providing such a process for adjustment will ensure that mitigation will improve in the future and that unforeseen adverse effects are recognized and minimized.

The monitoring plan cites one of the items to be measured as "effectiveness of standards and guidelines" for aquatic habitat management. There are fifteen objectives listed in the standards and guidelines for aquatic habitat management. The *Objective* column (first of three) in Table 2-28, however, includes goals that are too general to describe levels of environmental quality that could be definitively measured, especially for a site specific project. One of the "Items to be Measured" under the first objective for aquatic habitat management, for example, is "Maintain streambank stability and lateral scouring (page 2-32)." What parameter will be measured to determine if this level of environmental quality has been achieved? As an objective it is acceptable, but it is not a meaningful "Items to be Measured." This question applies to all "Items to be Measured" in Table 2-36 which reference the standards and guidelines including fish habitat. If the standards and guidelines are to provide a meaningful reference in the monitoring plan, they need to be more specific.

Another concern is that the fifteen "Items to be Measured" implied for fish habitat could represent a rather ambitious effort even if only 5-15% of the units are evaluated. The costs for each item in the monitoring plan needs to be estimated and disclosed to insure that priority areas are covered and the plan is feasible.

Page 2-47 cites a "Unit Monitoring Report" as to how the "Effectiveness of standards and guidelines" will be measured. No further explanation is offered in the draft EIS. This needs to be explained in much more detail in order for the reviewer to determine the adequacy of the monitoring plan.

Mitigation

A comprehensive discussion of proposed mitigation for direct, indirect and cumulative impacts is required by the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA. The CEQ regulations indicate that an EIS should include the means to mitigate adverse environmental effects (40 CFR 1508.7) as well as disclose the effectiveness of the mitigation measures to minimize adverse effects.

Site specific details on the effectiveness of mitigation is appropriate for a site specific timber sale. The EIS should provide a quantitative (if possible) or qualitative description of mitigation effectiveness. Prior timber sales in the Tongass National Forest could be used as a basis for these discussions.] 6

Log Transfer Facilities

Several of the alternatives include construction of new log transfer facilities. We recommend that existing log transfer facilities be used where possible.] 7

Two publications are referenced to satisfy disclosure of effects from site bark deposition on page 4-34. A summary of bark deposition effects needs to be include in the final EIS.] 8

Air Quality

Prescribed burning is mentioned on page 3-18. It is unclear to what extent it is proposed. Additional information regarding the location and frequency of prescribed burning activities and the potential downwind air quality effects is needed. Particulate concentrations have been measured that exceed health standards up to three miles downwind of a prescribed burn. Any residences, recreational areas, or areas of expected human activity that could be affected by this activity should be presented in the draft EIS.] 9

A description of prescribed burning activity would provide useful information. Will slash be machine piled and burned? Will broadcast burning be conducted in the spring or fall? What are the likely effects to soils and large woody debris if units are burned during the fall? How many acres are planned to be burned?

The EIS should also complete an analysis of the effect of slash burning on air quality. The EIS should describe the meteorological conditions and existing air quality, using data applicable to the project site and appropriate for use in dispersion modeling. The air quality analysis should identify all activities and sources, from direct and indirect activities, that could emit air contaminants. Once emissions from the proposed action have been quantified, screening level dispersion modeling must be performed to determine whether there will be any adverse air quality effects. If the screening level analyses indicate that potential exceedences could exist, then reductions in particulates from burning activities or more sophisticated modeling may

be necessary. The air quality analysis must demonstrate that the proposed action will not cause or contribute to any violations of the National Ambient Air Quality Standards, that it will not cause the air quality to degrade by more than any applicable Class II Prevention of Significant Deterioration (PSD) increments, and it will not cause or contribute to visibility impairment.

Questions regarding the emissions inventory or regulatory requirements may be directed to Dave Bray in EPA's Air Programs Development Program at (206) 553-4253. Rob Wilson of our Air Monitoring and Analysis Section can be contacted (206) 553-1531 regarding specific meteorology and dispersion modeling considerations.

SUMMARY OF THE EPA RATING SYSTEM
FOR DRAFT ENVIRONMENTAL IMPACT STATEMENTS:
DEFINITIONS AND FOLLOW-UP ACTION *

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA intends to work with the lead agency to reduce these impacts.

EQ--Environmental Objections

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment

Letter from United States Environmental Protection Agency

Comment 1: (paraphrased)

Many of the mitigation measures have as an objective to "maintain" environmental quality. In instances where environmental conditions are already degraded this objective would be unacceptable. These objectives should be reworded to read, "maintain or improve when degraded."

Response 2:

With the case of the Shelter Cove project area, this is the first entry and there are no known instances where environmental conditions have been degraded due to past activity.

Comment 2: (paraphrased)

The monitoring plan is presented in Table 2-36. An introduction should be added that describes the feedback mechanism which uses the monitoring results to adjust standards and guidelines, best management practices, standard operating procedures, intensity of monitoring, and timber sale administration when adverse effects are first detected. Such a process for adjustment will ensure that mitigation will improve in the future and that unforeseen adverse effects are recognized and minimized.

Response 2:

We agree. All monitoring is collected and analyzed for need of change. The Ketchikan Area is presently evaluating additions to its unit harvest and road card system which will strengthen the existing "feed back" system.

Comment 3: (paraphrased)

The monitoring plan cites one of the items to be measured as "effectiveness of standards and guidelines" for aquatic habitat management. If the standards and guidelines are to provide a meaningful reference in the monitoring plan, they need to be more specific.

Response 3:

We agree. The Monitoring Plan has been rewritten FEIS, Chapter 2, pg. 47) to explain the items to be measured in determining the effectiveness of the fish habitat standards and guidelines.

Comment 4: (paraphrased)

The costs for each item in the monitoring plan needs to be estimated and disclosed to insure that priority areas are covered and the plan is feasible.

Response 4:

We agree and the Ketchikan Area is striving to meet this need through the budgeting process.

Comment 5: (paraphrased)

Page 2-47 cites a "Unit Monitoring Report". No further explanation is offered in the DEIS. This needs to be explained in more detail.

Response 5:

The fisheries monitoring plan has been rewritten to better explain the monitoring planned to determine the implementation effectiveness of the fisheries mitigation standards and guidelines. The monitoring report forms have also been included in the appendix.

Comment 6: (paraphrased)

Site specific details on the effectiveness of mitigation is appropriate for a site specific timber sale. The EIS should provide a quantitative (if possible) or qualitative description of mitigation effectiveness.

Response 6:

We have picked mitigation measures that have worked in the past. Through monitoring, we are able to update the measures to ensure they continue to achieve the desired results in the future.

Comment 7: (paraphrased)

Several of the alternatives include construction of new log transfer facilities. We recommend that existing log transfer facilities be used where possible.

Response 7:

All existing LTFs are privately owned and require joint use agreements. If equitable agreements cannot be made, a new LTF is required. Two of the existing sites are short-term use sites and may not be permitted for extended use. The White River LTF does not serve the Shelter Cove area.

Comment 8: (paraphrased)

Two publications are referenced to satisfy disclosure of effects from site bark deposition on page 4-34. A summary of bark deposition effects needs to be included in the final EIS.

Response 8:

This was a printing defect. The effects will be included in the Final EIS.

Comment 9: (paraphrased)

Prescribed burning is mentioned on page 3-18. It is unclear to what extent it is proposed.

Response 9:

No prescribed burning is planned on the project area.

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS AND OUTDOOR RECREATION

3601 C STREET
ANCHORAGE, ALASKA 99503
PHONE: (907) 561-2020

MAILING ADDRESS:
P.O. Box 107001
ANCHORAGE, ALASKA 99510-7001

January 22, 1991

File No.: 3130-1R USFS

Subject: Shelter Cove DEIS
AK901218-05J

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

Dear Sir:

The proposed action appears to be consistent with Ketchikan Gateway Borough Coastal Management Program standards for the protection and management of significant archaeological and historic cultural resources.

We appreciate your consideration of cultural resources and look forward to Section 106 consultation during project implementation.

Sincerely,

Judith E. Bittner

Judith E. Bittner
State Historic Preservation Officer

JEB:TAS:dw

cc: Lorraine Marshall, DGC, Juneau

U.S. FOREST SERVICE
NORTHMAN AREA
RECEIVED
JAN 28, 1961
FOREST SUPERVISOR'S OFFICE

**Letter From State of Alaska Department of Natural Resources
Division of Parks and Outdoor Recreation**

Response:

Thank you.

KETCHIKAN
VISITORS BUREAU

USDA - FOREST SERVICE KETCHIKAN AREA				
RECEIVED				
FEB 04, 91				
FOREST SUPERVISORS OFFICE				
	INT	ACT	REL	DATE
ES				
DES				
SEP				
AS				
CO				
MA				
ENG				
FSW				
MAWS				
BSL				

February 1, 1991

Mr. Steven Ambrose
Acting Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

In re: Shelter Cove Draft Environmental Impact Statement (DEIS)

Dear Mr. Ambrose:

After carefully reviewing the DEIS, I feel that Alternative 3 best reflects the incorporation of Ketchikan's needs and interests related to recreational and economical impacts on tourism. The New Perspectives approach of the DEIS is to be commended for its aim toward balancing timber production and environmental preservation.

Please be aware that this comment does not reflect a KVB Board recommendation as the DEIS was not presented to the Board due to time constraints. It will be on the agenda of our next Board meeting on February 19, 1991. Further comments coming out of that meeting will be forwarded to you.

Sincerely,
Ketchikan Visitors Bureau

Susan Wilcox
Executive Director

Letter From Ketchikan Visitors Bureau

Response:
Thank you.

February 1, 1991

Mr. Steve Ambrose
Forest Supervisor
Ketchikan Area
Federal Building
Ketchikan, AK 99901

U.S. FOREST SERVICE KETCHIKAN AREA		RECEIVED		Feb 1, 91		2499	
AD	AG	AL	AM	AN	AO	AP	AR
AS	AT	AW	AX	AY	AZ	BA	BB
BC	BD	BE	BF	BG	BH	BI	BJ
BK	BL	BM	BN	BO	BP	BQ	BR
BS	BT	BV	BW	BX	BY	BZ	CA
CB	CC	CD	CE	CF	CG	CH	CI
CJ	CK	CL	CM	CN	CO	CP	CQ
CR	CS	CT	CU	CV	CW	CX	CY
CZ	DA	DB	DC	DD	DE	DF	DG
DH	DI	DJ	DK	DL	DM	DN	DO
DP	DQ	DR	DS	DT	DU	DV	DW
DX	DY	DZ	EA	EB	EC	ED	EE
EF	EG	EH	EI	EJ	EK	EL	EM
EN	EO	EP	EQ	ER	ES	ET	EU
EV	EW	EX	EY	EZ	FA	FB	FC
FD	FE	FF	FG	FH	FI	FJ	FK
FL	FM	FN	FO	FP	FQ	FR	FS
FT	FU	FV	FW	FX	FY	FZ	GA
GB	GC	GD	GE	GF	GG	GH	GI
GJ	GK	GL	GM	GN	GO	GP	GQ
GR	GS	GT	GU	GV	GW	GX	GY
GZ	HA	HB	HC	HD	HE	HF	HG
HH	HI	HJ	HK	HL	HM	HN	HO
HP	HQ	HR	HS	HT	HU	HV	HW
HX	HY	HZ	IA	IB	IC	ID	IE
IF	IG	IH	II	IJ	IK	IL	IM
IN	IO	IP	IQ	IR	IS	IT	IU
IV	IV	IV	IV	IV	IV	IV	IV

Dear Steve:

The following are my comments on the Shelter Cove DEIS.

- A. I support alternative 4 in the DEIS. This alternative provides the most not only in terms of volume to harvest, but in recreational opportunities and access as well. With all the mandated land set asides on the Tongass, I feel it is important to aggressively manage the timber lands that are left. Minor changes can be made to enhance the economics and to stay outside the Cape Fox Corporation proposed selections. } 1
- B. Recreational opportunities are woefully undeveloped in this DEIS. All the primitive (i.e. remote) types of recreation can already be practiced in areas like Naha and Misty Fjords. There is no need to create further opportunities like these. Instead the Forest Service should concentrate on developed recreation (i.e. roaded) so that all people can have equal access. Not all of us have the time or money to fly in to a primitive area. We need areas that have recreational opportunities available on a drive to basis as this area will be when the tie road is connected. Those families with small children or handicapped family members also need places to access woods, streams, lakes, etc. To leave most of the area in primitive recreational status denies those same recreational opportunities to a large segment of Ketchikan's population. This is a problem on Revilla Island the Forest Service has long recognized and should take this opportunity to finally address. } 2
- C. Visual concerns should not get the high priority they presently receive in this DEIS. Carrying visual concerns to the extreme can destroy the economics of a timber sale, merely to preserve a view that arguably is repeated many times over on the road system. } 4
- D. I strongly support the concept of designing mainline roads in this DEIS to be adaptable to the proposed tie road to North Revilla and the mainland. It is this road more than anything else which will allow recreation, tourism, business and Ketchikan in general to grow. } 5
- E. Preserving huge blocks of old growth timber in order to preserve species integrity is unnecessary when the study area has so much timber that is not proposed for harvest. Animal populations are not harmed by the introduction of timber } 6

harvest, in fact, Black Tail deer populations ususally increase. Biodiversity is important to keep species healthy and adaptable. To trap them in pockets of old growth is to try micromanaging a species to the point of creating subspecies that will be impossible to protect from the real world. } 7

- F. It is important to point out that the intent of this document (such as total harvest volume for example) should be followed when laying out harvest units and not strictly adhereing to drawings or a map as the final say in unit location or configuration. The EIS says where a unit should go, but let ground conditions reflect how a unit should actually look. } 8
- G. Many of the mitigation methods talked about call for selective harvest. This could easily create unharvestable areas if great care isn't taken during unit design. Ground conditions should dictate where this is used and costly helicopter harvesting should not be the only option considered due to its' limited availability and affordability. } 9
- H. I also have concerns with the stream mitigation measures. They are so complex and unweildly that following them may be impossible. Several of the mitigation measures are so broadly written that they could easily be interpreted to prohibit harvest altogether. They need to be condensed into a clear, concise prescription that can be followed when unit layout is being done so that excess acres are not deleted from harvest because of conflicting guidelines. } 10

Some examples:

Page 32 #1-A--this could be interpreted to mean all streams must have a 25' buffer. That amount of protection is unwarranted. } 11

Page 33 #4--this calls for buffers on the buffers. Totally unnecessary when the primary purpose is to create LOD in the stream. More to the point, the mandated buffers themselves should be managed for wind firmness. } 12

I applaud this effort by the Forest Service to make more timber available to the growing timber industry here in southern Southeast Alaska. I appreciate this opportunity to comment and fully support the effort to open up more of Revilla Island.

Sincerely,

Roger M Ziesak

R. M. Ziesak
15033 N. Tongass
Ketchikan, AK 99901

Letter From R.M. Ziesak

Comment 1: (paraphrased)

I support alternative 4. This alternative provides the most timber volume and recreational opportunities. I feel it is important to aggressively manage the timber lands that are set aside for other resources. Minor changes can be made to Alternative 4 to enhance the economics and stay outside the Cape Fox selections.

Response 1:

Other resources may preclude economics to meet the objective of planning for multiple/use resource management.

Comment 2: (paraphrased)

Recreation opportunities are woefully undeveloped in this DEIS.

Response 2:

The development of roaded recreation opportunities will be addressed under a separate NEPA document, if and when the area is linked to Ketchikan. Until that time, only potential recreation opportunities can be addressed.

Comment 3: (paraphrased)

The Forest Service should concentrate on developed recreation (i.e. roaded) so that all people can have equal access.

Response 3:

We agree. However, the project area will be on an isolated road system. Developed recreation impossible under this document in that a road link to town is outside the scope. Should the project area be linked to town, developed recreation would be one issue addressed as part of that process.

Comment 4: (paraphrased)

Visual concerns should not get the high priority they receive in this DEIS.

Response 4:

The management of the visual resource is of high importance to the Forest Service.

Comment 5: (paraphrased)

I strongly support the concept of designing mainline roads in this DEIS to be adaptable to the proposed tie road to North Revilla and the mainland.

Response 5:

Portions of the transportation system that are potential mainline roads will be designed with this in mind.

Comment 6: (paraphrased)

Preserving huge blocks of old growth timber in order to preserve species integrity is unnecessary when the study area has so much timber that is not proposed for harvest.

Response 6:

The old-growth retention, defined in Alternative 5 was designed to assure dispersal of wildlife from the Naha LUD II to areas of traditional use of wildlife. Without biological corridors as designed, some wildlife populations within the Naha are more likely to grow until they harm their food base.

Comment 7:(paraphrased)

Animal populations are not harmed by the introduction of timber harvest, in fact, Black Tail deer populations usually increase.

Response 7:

This is true, but clearcuts 0-15 years old lack canopy cover to intercept snow, making forage unavailable during deep-snow winters. As these stands grow, the canopy closes and lack of sunlight eliminates browse species, thus reducing the habitat capability for deer.

Comment 8: (paraphrased)

It is important to point out that the intent of this document should be followed, and not strictly adhere to drawings or a map as the final say in unit location or configuration. Let ground conditions reflect how the unit should actually look.

Response 8:

We agree, but not at the expense of the standards and guidelines. The phase card system addresses your concerns.

Comment 9: (paraphrased)

Many of the mitigation methods talked about call for selective harvest. This could easily create unharvestable areas if great care isn't taken during design. Ground conditions should dictate where this is used and costly helicopter harvesting should not be the only option considered due to its' limited availability and affordability.

Response 9:

The selective harvest prescriptions will be determined on a site-specific unit implementation basis. Where clearcutting is determined to be the optimum harvest method given the site-specific circumstances, it will be applied.

Comment 10: (paraphrased)

I have concerns with the stream mitigation measures. They are so complex and unweildly that following them may be impossible.

Response 10:

The fisheries standards and guidelines are similar to those implemented in the KPC 1989-94 Long-Term Sale. These guidelines, though complex, have been successfully implemented. We feel confident they will also be successful in the Shelter Cove project.

Comment 11: (paraphrased)

Page 32 #1-A -- this could be interpreted to mean all streams must have a 25 foot buffer.

Response 11:

This applies to streams where stream stability is controlled by vegetation and not by bedrock. The majority of Class II streams are bedrock contained streams, so this mitigation would not apply to these streams.

Comment 12: (paraphrased)

Page 33 #4 -- this calls for buffers on the buffers. Totally unnecessary when the primary purpose is to create LOD in the stream.

Response 12:

We agree. The prescription will be applied site specifically.

Tongass Conservation Society
Box 3377
Ketchikan, AK 99901
February 1, 1991

Mr. Steve Ambrose, Acting Forest Supervisor
United States Forest Service
Federal Building
Ketchikan, AK 99901

Dear Steve,

Re: Shelter Cove DEIS

USDA - FOREST SERVICE KETCHIKAN AREA				
RECEIVED				
FEB 1, 91				
FOREST SUPERVISORS OFFICE				
	INT	ACT	REC	FILE
ES				
DES				
PLN		X		
PAW				
AD				
TM				
ENG				
PRW				
MAINS				
ESL				

The Tongass Conservation Society (TCS) found the Shelter Cove DEIS to be generally clearly written and presented, and obviously the product of a lot of hard work. We were encouraged by the Forest Supervisor's emphasis, in his introductory letter, upon a "New Perspectives" approach towards managing the forest, and particularly encouraged by the appearance of Alternative 5 as one of two preferred alternatives. We believe that Alternative 5 begins to capture the kind of management that Congress had in mind for the Tongass when it passed the Tongass Timber Reform Act (TTRA), and Alternative 5 is an alternative which, under certain circumstances, we could support.

Alternative 5 is the only potentially acceptable alternative because it is the only one that places significant values on resource considerations besides commodity timber. Alternative 3 does not raise or consider many of the issues that it should as a "recreational" alternative, and thus is "recreational" in only a superficial sense. In addition, all other action alternatives contain roading within the Naha LUD II for the sole purpose of timber harvest, which we believe is not "vital" and is thus inconsistent with its LUD II status.

It appears that as it presently stands, Alternative 5 wildlife old-growth retention in effective blocks will (i) encompass those portions of the project area that have the highest upland wildlife values, both for their own sake and because of their connections with other particularly important wildlife areas on the island, (ii) protect wildlife values that are high enough that they ought to take precedence over timber harvest in the areas in which they occur, and (iii) be likely to accomplish their task -- to assure viable populations and preserve biological diversity in the project area by preventing habitat fragmentation.

However, we are concerned that due to actions not covered by this DEIS, Alternative 5 promises more than it can deliver. The Forest Service's full plan of operations for the Shelter Cove area will undo most or all of the positive accomplishments of Alternative 5. The planned road link to Ketchikan, which will pass

through the most sensitive part of the project area and facilitate easy road access throughout the area, will significantly contribute to this overall resource degradation.

By failing to consider the full impacts of the actions planned for Shelter Cove, the Forest Service has fallen foul of National Environmental Protection Act (NEPA) requirements.

In several basic ways, we believe this DEIS is inconsistent with Council on Environmental Quality (CEQ) regulations for environmental impact statements. We also believe that it is inconsistent with some sections of TTRA, and is insufficient to satisfy its responsibilities under the Alaska National Interest Lands Conservation Act (ANILCA). Prominent among the deficiencies we find in this DEIS are its failure to identify a need for the action, depict cumulative effects, consider connected or cumulative actions as one action, provide for a sustained yield of all renewable resources, or adequately consider impacts to subsistence. We believe that the DEIS needs to be withdrawn, its deficiencies remedied, and a new DEIS presented for the Forest Service's plan of operations in Shelter Cove.

In the following pages, we (1) highlight the importance of the area for non-commodity timber values, (2) discuss the document's deficiencies with respect to NEPA, TTRA, and ANILCA, and (3) include general comments that we think the Forest Service should address.

I. Importance of the Area.

In entering the Shelter Cove area, the Forest Service is entering an area of great importance for its wildlife, fisheries, recreational, aesthetic, and tourism values. This importance is recognized by the Forest Service itself, by the Alaska Department of Fish and Game (ADFG), and by both agencies in collaboration. In particular, the portion of the project area encompassing lands around Upper George Inlet-Leask Cove-Salt Creek and especially the Salt Lagoon has been identified as one of the most important wildlife habitat areas on Revilla Island. For example:

1. The area around the Salt Lagoon has been proposed as a critical habitat area. "The fish and wildlife species diversity and abundance found in the chuck are relatively rare, and an extremely valuable resource." A variety of human uses of the Lagoon's wildlife resources are found in and around the Lagoon. (ADFG)

2. The DEIS acknowledges the importance of the area for wildlife in its description of the alternative most responsive to their needs -- Alternative 5.

"Alternative 5 protects the important biological values

in the Assessment Area by staying out of the north end of VCU 747, which is packed with prime wildlife and fish habitats: (1) travel corridors from Naha LUD II to VCUs 747, 746 and 748; (2) the largest contiguous block of old-growth habitat in the Shelter Cove Assessment Area, e.g., adequately large to support wildlife species that require very large blocks of habitat (goshawks, boreal owls, and perhaps necessary for pine marten); (3) this large contiguous block of old growth connects to the old growth within the Naha LUD II, thereby resulting in an old-growth block that better assures perpetuation of the forest-interior species over the long term; (4) prime deer and marten habitats; (5) priority 1 habitat in Forest Habitat Integration Program; and (6) and unusually high density of prime riparian habitats and prime anadromous fish habitat, which will be costly and very difficult to fully protect under the intensive roading and harvesting planned by most alternatives for the northern portion of VCU 747. In contrast, the remainder of the Assessment Area is removed from the old-growth habitat block, and has old-growth forest in blocks too small to support all wildlife species though they are still suitable for timber harvest." (DEIS, p.4-57-58.) Thus, the DEIS itself identifies this area as the most important section for wildlife within the project area, and of great significance to wildlife on a landscape basis.

3. ADFG and the Forest Service agree that this portion of the project area is of great importance to wildlife and the assurance of biodiversity: the design and location of the top-priority old-growth block connecting the Salt Lagoon and the Naha was developed as a collaborative effort between ADFG and the Forest Service.

4. Management Area K-39 (relevant VCUs 747 and 748) "contains most of the heavily used recreation areas around Ketchikan." (Tongass Land Management Plan (TLMP), 1985-86 Amendment, p.186.)

5. The foci of the two preferred alternatives, "Forest-Interior Species" and "Recreation/Visual Resources" are an implicit recognition of the importance of these values in the project area.

There are numerous other examples that could be cited -- among them the importance of the area's salt water sport fishery for its recreational and tourism values, and the personal use fishery at Leask Creek, both of which also highlight the area's important aesthetic values.

This area harbors an inordinately high concentration of wildlife, recreation, and other non-timber-commodity resources.

Impacts to these resources resulting from the Forest Service's plan of operations in this area will not be trivial. Rather, they will be substantial and important. They must be fully depicted in this DEIS, and they are not.

II. Inconsistencies with NEPA.

This DEIS improperly segments the Forest Service's plan of operations for the Shelter Cove area into several smaller actions, proposes to consider the effects of these actions separately, and in so doing, fails to consider connected or cumulative actions as a single action as required by Council on Environmental Quality (CEQ) regulations regarding environmental impact statements. It hides the cumulative impacts of all the actions planned for Shelter Cove, again in violation of the CEQ regulations. It fails to state adequately a need for the project or rigorously explore all reasonable alternatives.

1. Failure to consider connected and cumulative actions.

Under CEQ regulations, "connected actions" and "cumulative actions" are required to be considered together in a single EIS. See 40 C.F.R. 1508.25 (a)(1) (1984). "Connected actions" are defined as actions that:

"(i) Automatically trigger other actions which may require environmental impact statements.

(ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.

(iii) Are interdependent parts of a larger action and depend on the larger action for their justification." Id.

Cumulative actions are those actions,

"which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." Id.

This DEIS improperly fails to consider two actions that under these regulations are connected or cumulative to the action considered in this DEIS: (1) the proposed mainline road linkage between Ketchikan and the project area, and (2) subsequent planned entries into the project area for the purpose of timber harvest and other management activities.

(a) The mainline road linkage. In its original scope as the Revilla Plan, the road link from Ketchikan to the project area and from the project area to Canada supplied one of the major

rationales behind the plan's development and timber entry in the Shelter Cove project area. As described by the DEIS, in its original scope as the Revilla Plan,

"[t]he intent was to meet the public's demand for multiple use throughout Revilla Island. This objective was to have been accomplished by integrating timber sales and their associated road system with a road link to Ketchikan. However, management decided to delay the road link to the project area; therefore, this DEIS will describe alternatives for the harvest of timber in and around Shelter Cove and George Inlet areas of the Tongass National Forest." (Emphasis added.) (DEIS, p.1-1-2.)

Management decided to embark on a project precisely to create certain impacts throughout the project area and the island: i.e., to facilitate access and multiple use. Management has not abandoned this project, only delayed one part of it. Yet in this DEIS, it wants to consider separately the impacts of only half the project, and consider the impacts of the other half of the project, again separately, later on, thus masking and never considering the full impacts of the project as a whole. This is contrary to NEPA. (See Thomas v. Peterson, 753 F.2d 754 at 758, citing Alpine Lakes Protection Society v. Schlapfer, 518 F.2d 1089, 1090 (Ninth Cir. 1975)). The impacts of extensive road access and multiple use on a valuable and previously undeveloped area are greater than the sum of the impacts of each half of the project considered separately.

Interdependent actions. The two halves of the project are interdependent actions under the CEQ regulations, and must be considered together. The timber harvest roads planned in this DEIS have been specifically situated and designed to be upgradable to mainline standards in anticipation of their being connected by a road link to Ketchikan. Much of the recreational analysis presupposes a road link to Ketchikan (one of the preferred alternatives, the Recreational/Visual Resources alternative, assumes this link). In the Forest Service's informational meeting on 1-18-91 (informational meeting), prominently featured in the presentation on roading were the design criteria that would facilitate upgrading once a mainline link was established; the timber roads would then become main transportation links. So the road link to Ketchikan, although nominally delayed, continues to be connected to the project as described by the DEIS. Likewise, as presently conceived, there is no "link" to anything if a road to Ketchikan is advanced somewhere into the project area and cannot connect with roads to be developed through timber harvest. } 2 cont.

Automatic trigger. The presence of roading developed through timber harvest in one section of the project area will serve to trigger the building of the road link to Ketchikan. By providing completion of the first stage of the project as } 2 cont.

originally envisioned, other stages will follow in order to access the perceived "benefits" offered by the first stage. It is highly unlikely that, once roading penetrated much of the project area, the link making that roading available to Ketchikan would not be built. Under this standard as well, the road link to Ketchikan and the rest of the project are connected actions.

Cumulative actions. The mainline link to Ketchikan and the project as proposed in this DEIS will have cumulatively significant impacts. The link will permit direct access by road from a major population center throughout the roaded portion of the project area. Without either the access link to Ketchikan or the dispersion of possible destinations provided by the roading contemplated by this DEIS, the impacts of either one of these actions would be significantly less -- one would either not be able to access the area, or once accessing it would have essentially nowhere to go. But together, these actions will facilitate substantially increased human impacts on the project area and its wildlife, fisheries, recreational, and subsistence resources. } 26

These impacts are hinted at where the DEIS describes increased human harvesting of wildlife as a result of roading (DEIS 4-62-71, passim), impacts to fisheries through road access in its discussion of increased pressures on the "highly susceptible to angling and poaching" Salt Creek coho run (DEIS p.4-49), impacts to recreation (through increased competition for wildlife and other recreational resources (DEIS p.4-35), and impacts to subsistence (ANILCA finding, DEIS p.4-75). These kinds of impacts all depend on human access, and will be greatly magnified by the road access facilitated by both of these actions taken together.

Under relevant law, if "substantial questions" exist as to whether two actions will have significant cumulative effects, the actions must be evaluated in the same EIS. See Thomas v. Peterson, 753 F.2d 754 (1985) (citing Foundation for North American Wild Sheep v. United States Dept. of Agriculture, 681 F.2d 1172, 1178 (9th Cir. 1982); City and County of San Francisco v. United States, 615 F.2d 498, 500 (9th Cir. 1980).) At the very least, substantial questions exist here.

Under the CEQ regulations, the road link and the project activities covered by this DEIS are both "connected" and "cumulative" actions. They need to be covered in the same EIS. This DEIS needs to be withdrawn and a new DEIS issued that covers both of these actions.

(b) Subsequent planned entries into the project area for the purpose of timber harvest and other management activities.

Connected actions. The action considered here -- the first entry into the project area -- and subsequent planned entries into the area are connected actions under the CEQ regulations. The major connection mechanism among the actions is the establishment of roads.

Cannot or will not proceed unless other actions are taken previously or simultaneously. The timber harvest activities scheduled from the end of first entry forward are dependent on activities, namely roading associated with timber harvest, taking place in the first entry. It is common practice for roads established in the first entry to be used for accessing and removing timber in subsequent entries. If these roads had to be built in their entirety to access timber scheduled for harvest in subsequent entries, the additional road construction would substantially affect the economics of the operation, precluding it or necessitating changes. The location and timing of successive management activities will be affected by this entry. See Thomas v. Peterson, 753 F.2d 754 at 760. As a practical matter, subsequent planned entries in this project area would not proceed but for this first entry. Thus these actions are connected and their impacts must be evaluated in the same EIS.

Interdependent parts of a larger action. The plain fact is that there is a larger plan for timber harvest in the project area, of which this entry is only a part. The harvest schedule on p.4-45 reflects not only acres harvested in each time period, but also variations in this cut over time by alternative. Long-term cumulative impacts to soil resources (4-7-11), and to roading (4-23) have also been depicted. This is more than a rough estimate; it reflects a plan. The larger action, according to this harvest plan, is the harvest of all operable timber within the project area -- roughly 29,000 acres or 741mmbf (minus retention areas) by year 2060. This goal derives from timber harvest targets handed down from higher planning levels to the Ketchikan Ranger District for its independent sale program. This entry and subsequent entries are all part of the larger action of achieving that harvest goal, and are only justifiable in its light.

Automatic trigger. The Forest Service representation that a second entry could come in as little as five years, and the need to achieve the cumulative harvest target, indicate that when this entry is well established, another entry will automatically follow.

The entry described here, and subsequent entries contemplated by the Forest Service's plan of operations for Shelter Cove, meet all three criteria for connected actions established by the CEQ regulations (meeting just one would be sufficient to identify the actions as connected). Thus they must be considered in a single EIS.

Cumulative actions. Cumulative actions are those that have cumulatively significant impacts. Further entries into this area are planned. Cumulative impacts over the rotation to certain resources as a result of these actions are depicted in the DEIS: to the timber resource, pp.4-43-45; to soil resources (4-7-11); and to roading (4-23). The DEIS' own portrayal of these cumulative impacts means that the actions that caused them are cumulative actions and must be covered in the same EIS.

It is clear that other entries into the project area will follow this one. The Forest Service has scheduled further harvest, and acknowledged that subsequent entries might come within five years. The harvest schedule on DEIS p.4-45 contemplates the harvest of all operable timber within the project area (with the possible exception of some retention units) over the next 70 years. This level of cutting and conversion to second growth of negligible value as wildlife habitat will have a devastating impact on the wildlife resource, and on recreational resources to the extent that recreation is associated with old growth or wildlife. The cumulative impacts of the extensive roading system associated with this harvest plan on the previously unroaded Shelter Cove area will be very substantial, and are nowhere considered. The cumulative impacts of human access on subsistence and sport hunting will likely be severe, and are nowhere considered. There will be impacts to sport fishing from increased access. All of the impacts considered earlier in connection with the mainline link to Ketchikan will occur in connection with further roading for timber harvest. As discussed in that context, the DEIS implicitly recognizes these impacts, but does not analyze them. And these impacts will tend to increase at an accelerating rate as a higher percentage of old growth is harvested. For example, we state further on in these comments that we think the old-growth block proposed in Alternative 5 will do its job with respect to inner-forest species habitat and biodiversity -- for the activities depicted here. We are far less confident in its success by the end of the rotation, when all of the scheduled timber has been converted to second growth.

The action covered by this DEIS, and further planned timber harvest and other management activities in the project area have cumulatively significant impacts. These impacts are discussed in greater detail below under "Failure to depict cumulative impacts," "Wildlife issues," "Fisheries," and "Recreation." Under the CEQ regulations, these impacts must be considered in the same EIS. This DEIS needs to be withdrawn and a new DEIS needs to be issued covering all planned timber harvest and other management activities to the end of the rotation.

2. Failure adequately to depict cumulative impacts.

We are concerned about two kinds of cumulative impacts:

} 2 cont

those impacts to forest resources resulting from native corporation logging operations in both the near term presently covered by this DEIS and over the long term, and those resulting from timber harvest, road building, and other management activities on national forest land in both the near term and over the course of the rotation.

(i) Native corporation logging. The EIS recognizes that extensive harvesting of native corporation lands in the vicinity of upper George Inlet will have some visual impact on that area. However, no other impacts as a result of these harvest activities are noted. Deer winter range along George and Carroll Inlets has been lost. There have been extensive impacts to other wildlife species. There have also been disproportionate impacts to high volume timber stands. These impacts should be discussed, as they tend to make the area's remaining wildlife habitat and the old-growth blocks depicted in Alternative 5 all the more important.

2 cont.

The heavy visual impacts to the important Upper George Inlet recreational resource tend to make any further timber harvest visual impacts all the more important. On EIS page 3-11 the U. of Oregon recreational study concludes "Alaskans are quite sensitive to the natural qualities and aesthetics of the environment in which they pursue outdoor recreation." This suggests that the visual impacts to the Upper George Inlet area resulting under most action alternatives do have a cumulative impact which is greater than their impact alone. This cumulative impact should be noted for those action alternatives to which it applies. It would be a significant loss if this important recreational resource were diminished in value by surrounding it with timber harvest visual impacts.

2 cont.

(ii) Cumulative impacts over the rotation. Impacts to all resources in the project area should be depicted over the rotation. As noted above, impacts over the rotation are described only for soils, roads, and timber. They must be described for all other resources. The DEIS' depiction of impacts to wildlife, recreation, fisheries, and visual resources only to the end of the first entry is insufficient to describe the full impacts this project will have on the project area.

2 cont.

The Forest Service explained at the informational meeting that each successive EIS issued to cover a separate entry into the project area would consider the cumulative impacts resulting from that and all previous management activities in the area. But the Forest Service has made this precise argument before in Thomas v. Peterson, where it was squarely rejected by the Ninth Circuit.

"We believe that consideration of cumulative impacts after the [first action] has already been approved is insufficient to fulfill the mandate of NEPA. A central purpose of an EIS is to force the consideration of environmental impacts in the

decisionmaking process. [cites omitted.] That purpose requires that the NEPA process be integrated with agency planning "at the earliest possible time," 40 C.F.R. section 1501.2, and the purpose cannot be fully served if consideration of the cumulative effects of successive, interdependent steps is delayed until the first step has already been taken." (753 F.2d at 760.)

Forest Service activities planned for Shelter Cove will extensively transform the area. Activities taken in this period will facilitate activities taken in subsequent periods. The harvest schedule contained on page 4-45 portrays the harvest of 100% of the operable timber in the project area by year 2060. This means that at year 2060, all operable acreage will be in various stages of second-growth. This second growth will be of negligible value as wildlife habitat. Its value for recreation will also be greatly diminished, to the extent recreation is connected with old growth or wildlife. Moreover, areas designated for old-growth prescription in this EIS are protected only until the next EIS is issued -- perhaps only five years from now. There is no assurance that over the rotation, designated old-growth retention acreage will not be converted to second growth.

The extensive roading system that will accompany timber harvest operations will have extensive effects on the area. The effects of these roads, including the main link to Ketchikan, and the human access they provide must be described for all resources. It is insufficient for the Forest Service to say that the roading provided in this entry will have little effect absent the road link to Ketchikan, and that the effects of these roads once the road link is proposed will be covered in that EIS. Quoting Thomas v. Peterson, "[T]he consideration of cumulative impacts will serve little purpose if th[ese] road[s] ha[ve] already been built." (753 F.2d at 760.) And building the roads planned here tips the balance in favor of building the road link to Ketchikan. Id.

The cumulative impacts of roading for this action and the road link to Ketchikan -- and subsequent planned actions that will rely on roads built for this action -- must be considered before the actions occur -- now.

We believe that with the passage of the Tongass Timber Reform Act, Congress has given the Forest Service direction as to the importance of non-commodity resources on the Tongass. Impacts to non-commodity resources were precisely what Congress had in mind when it passed the act, and were very largely the driving force behind the act. Section 101 states that meeting new timber harvest targets shall be "to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources." (Emphasis added.) (TTRA Section 101.) Congressman Miller stated on the House floor that in passing Section 101 Congress intended the Forest Service to "provide for non-commodity

uses of forest resources for subsistence and recreation." Thus, Congress has directed that management of non-commodity resources is important, and that these resources must be provided for on a sustained yield basis. Not only does NEPA require the cumulative impacts to be revealed, but the impacts that have not been revealed in this DEIS are the precise ones Congress expressed concern for through TTRA. Finally, not only are these impacts not depicted here, they are depicted nowhere else.

The only length of rotation impacts considered in the DEIS are those to the timber resource: pp.4-43-45, to soil resources (4-7-11), and to roading (4-23). The length of rotation cumulative impacts to all resources must be depicted in this DEIS.

3. Failure adequately to state a need for the project.

The purpose and need for the project are not described with sufficient specificity. We believe that tiering to TLMP is insufficient. The direction and resource targets provided from TLMP and higher management levels are general -- the Forest Supervisor refines them into actual projects, and decides where timber harvest will occur. (Explanation at 1-18-91 informational meeting.) What is the need to harvest between 61.8-95.6mmbf of timber, and importantly, why should this timber come from the Shelter Cove project area? } 2 cont.

We believe that under TTRA, any such need will have to fully consider the presence of other important resource values in the project area and abide by the Congressional mandate to provide for their sustained yield.

Further, TTRA's amendment of ANILCA section 705(a) sets timber targets that are keyed to market demand. What is the market demand that justifies the timber harvest contemplated by this project, and by the harvest action currently covered by this DEIS? We believe the Forest Service must identify this demand.

4. Failure to rigorously explore all reasonable alternatives.

Our concern is that in the near term, there may be only two real alternatives presented in this DEIS, and in the long term there may be just one -- the Forest Service plan of operations, with no alternatives to it explored. } 3

Near term. With the exception of Alternative 5, all the action alternatives are defined by various aspects of timber harvest. The names attached to these alternatives are less important than the bases on which they were drawn. All action alternatives except Alternative 5 were drawn on the basis of timber harvest characteristics. Even Alternative 3, contrary to its name, was designed on the basis of timber harvest unit size, placement

and geographical dispersion -- nothing more inherently recreation-oriented. We discuss this further in general comments. We would like to see a true recreational alternative. But in the short term, the tendency is for there to be various timber harvest-based alternatives and one wildlife alternative.

Long term. The situation in the long term is far bleaker. Over the next 70 years, as timber harvest proceeds throughout the area and all operable timber is harvested, all of these alternatives will look very much the same. Thus, there is really only one alternative presented in the long term -- the plan of operations presented by the Forest Service. Under NEPA, the Forest Service must present all reasonable alternatives to this plan of operations -- rigorously researched so the differences among the alternatives are real, not merely cosmetic. The DEIS's evaluation that "[t]he cumulative effects resulting from timber harvest throughout the rotation are not expected to change relative to the effects of any of the action alternatives" (p.4-45) indicates that the alternatives are not meaningful ones.

III. Inconsistencies with TTRA.

As stated above, we believe that in TTRA Congress has given important new direction about how the forest should be managed. TTRA's intent was to protect non-commodity resources on the Tongass. This new direction should be reflected in the Forest Service's plan of operations in Shelter Cove. The Forest Service has said this DEIS will be amended to reflect TTRA, and we will be interested to see what steps the Forest Service takes in that direction. However, at this time there are two points that we wish to address:

1. Roading in the Naha. All the action alternatives except Alternative 5 build roads for the purpose of routine timber harvest in the congressionally mandated LUD II. We believe that such roading is inconsistent with TTRA and will appeal the adoption of any alternative that contains such roading. In order to be legal, such roading must be "vital." The very presence of Alternative 5, which does not contain such roading and yet which shows a positive mid-market conversion rate, and indeed is one of two preferred alternatives, demonstrates that such roading is not vital. Moreover, we do not believe that the term "vital forest link" is meant to apply to roads built for no other purpose than to access timber.

2. Sustained yield of all renewable resources. As discussed above, the plan of operations for Shelter Cove will not provide for the sustained yield of many non-commodity resources, including wildlife and recreation. Rather, in particular the wildlife resource will likely be decimated over the next 70 years. This is contrary to sustained yield as expressed in TTRA.

IV. Insufficiency of ANILCA finding.

The ANILCA finding (DEIS p.4-75-76), appears to contradict itself. P.4-75: } 5

"Due to projections of future habitat reductions and projected demand increases, which are independent of any action taken during this five-year period, a restriction to subsistence users of deer, fish, black bear and furbearer species may potentially occur in the future. As presented in the wildlife effects section, projected decrease in habitat capability over the long term assumes that timber harvest remains at levels currently scheduled in [TLMP]."

P.4-76:

"It has been projected in this analysis that no significant restriction to fish, Sitka black tailed deer, black bear or furbearers would potentially occur as a result of implementing long term management direction and future projected increase in demand for subsistence use of these species."

This discrepancy should be remedied. We do not agree that future habitat reductions are independent of any action taken during the period covered by the DEIS. Rather, such reductions will both include reductions in habitat occurring during this period and be facilitated by actions occurring in this period. Where timber will be harvested, and where roads will go in this entry, will have a significant effect on long term wildlife abundance within the area. The effects are cumulative. These effects must be analyzed in this EIS.

Long-term projections. Moreover, the long-term projections of impacts to wildlife populations and habitat referred to above have not been done. There have been no long-term projections made in this DEIS regarding wildlife presence, or subsistence or other hunter demand. These long-term impact projections must be done in order to satisfy ANILCA requirements regarding effects on subsistence. The EIS needs to delineate and analyze more clearly potential reductions to both subsistence and non-subsistence hunters.

Other lands and other alternatives. On p.4-75, the EIS asserts that there are no other lands that could be considered for the proposed action. Assuming the purpose of the action is that of producing 6-8mmbf of timber per year, there would appear to be many other areas in which this action could take place. Certain of the lands considered here are too valuable for other purposes to devote them to timber production. We find the argument that there is no place else to satisfy the timber harvest goals of this project unsupported, and indeed far-fetched. The EIS's representation concerning this point seems to be, "The project is taking place on

these lands, so there are no other lands on which it could take place." We don't think that this is the kind of reasoning ANILCA had in mind, and we don't agree with the conclusion. We think there are other lands where this action can take place.

Necessity, Consistent with Sound Management of Public Lands. There is insufficient foundation given for the determination made here (DEIS p.4-76). This must be more thoroughly explained. In what sense are the long term impacts that will result from the Forest Service's plan of operations in Shelter Cove consistent with sound management of public lands -- in light of the unusually high value and importance of the non-commodity resources in this particular area, and the mandate of TTRA to protect important non-commodity resources? We believe that the plan of action proposed here is not consistent with the sound management of public lands.

V. General Comments.

1. Public participation.

Only one day's notice was provided for the 1-18-91 public meeting. Although we are glad that the meeting was held, we do not think that this is sufficient notice. The meeting was sparsely attended, and at least two of our members who have devoted a great deal of energy to this issue were unable to attend due to prior commitments. We were relieved to hear that the prior informational meeting, held 1-10-91, which was by invitation only was actually intended to be a public meeting. Yet we note that the first meeting was not advertised at all and the second was given only one day's notice -- not a design that is likely to generate much public participation. On the positive side, since that time we have heard frequent radio reminders of the deadline for comments on this DEIS and where to submit them.

The 1-18-91 meeting was useful. However, contrary to its New Perspectives outlook, along with the District Ranger, the only resource personnel present from the Forest Service were foresters and engineers. There were no biologists, and no recreation specialists -- although the two preferred alternatives were titled Forest-Interior Species and Recreation/Visual Resources. As a result, the basic rationale behind Alternative 5 was poorly explained. Among the attendees was Ketchikan's Mayor, who will be responding to the EIS in his official capacity. It will be very difficult for him -- or anyone else -- to support any alternative whose rationale and objectives he does not understand. The relevant resource personnel should be present when an informational meeting is held -- so people's first impressions can be informed and fair ones.

Within their areas of expertise, the presenters were expert and informative. But we note that while maps of all the action

alternatives were supplied, no map of the no action alternative was brought.

Because this EIS started as the Revilla Island project, all pertinent public comments from that previous phase should be included in the record and thoroughly considered. We incorporate those comments by reference as an appendix to this response. Under NEPA, the Forest Service should also mail notice of any further public meetings on the project to all those who ask to receive such notice (perhaps to all who sign in), and also to all those who asked to be kept informed of developments in the Revilla Plan.

2. Distribution of harvest by volume class.

Table 4-37 depicts scheduled harvest by volume class occurrence and alternative. We understand that these figures may change in light of TTRA. But we are concerned with the accuracy of these figures, and ground truthing. Specifically, we are concerned that previous ground-truthing of aerial photo-derived designations of volume class have turned up significant discrepancies between what is thought to be on the ground and what is actually there. We understand that it is difficult to reliably designate homogenous volume classes in heterogenous stands. Nonetheless, unless the Forest Service knows where these high volume stands actually are, it will be difficult if not impossible to harvest according to the published schedule. The Forest Service needs to show that its analysis is accurate, particularly with respect to volume class 6 and 7 stands, and publish maps that represent this. 7

We also have some concerns about the 70-year time frame for this plan of operations. The EIS should make clear how this is acceptable in light of the 100-year rotation standard.

3. Recreation issues.

We believe that in this EIS, the treatment of recreational values within the project area is grossly inadequate; once again, we feel that contrary to congressional mandate, timber harvest is still leading the way in the development of forest management plans. 8

This is illustrated by the assumptions underlying the recreational analysis (DEIS p.3-8):

(i) The project area offers recreation opportunities usually found in a southeast Alaska primitive environment.

(ii) Quality outdoor recreation is assured by the provision of a diverse recreational opportunity spectrum (ROS).

(iii) Recreational opportunities are made available by supplying this diverse ROS, and a diversity of levels of recreational development.

Under these assumptions, the following logical path occurs:

(1) Quality equals diversity of ROS. (2) In a primitive southeast Alaska environment, diversity of ROS is provided by the development of roads. (3) Roads are made possible by timber harvest. (4) Therefore, timber harvest provides recreational opportunities. The more timber harvest, the more recreation.

This logic underlies recreational planning in this DEIS for all alternatives except Alternative 5.

But the reality contradicts these assumptions -- including assumption (i), which holds that the recreational opportunities present in the project area are typical, i.e., average. With a minuscule amount of timber harvest to date, M.A. K-39 "contains most of the heavily used recreation areas around Ketchikan." (TLMP, 1985-86 Amendment.) An abundance of high-quality recreational opportunities is presently available in the project area -- without timber harvest activities.

And the quality of this recreation would be significantly degraded by timber harvest.

"The strongest deterrents for visiting a desirable recreation area are new logging activities, new buildings, and new roads. All these activities represent a divergence from the natural environment."

(EIS p.3-10 (quoting a U. of Oregon survey).)

The problem with the assumptions is that they are too general to have much meaning in a specific instance; the hidden assumption of the ROS is that all recreational opportunities are of equal quality. This is clearly not the case. It is possible to degrade recreational quality as well as improve it.

This over-generalality could have been somewhat mitigated by the consideration the DEIS provides of specific opportunities for recreational development. Yet key recreation area changes (p. 4-20-21) are evaluated mainly by their general change in ROS rating as a result of roading and timber harvest. Among the alternatives, only a few differences in specific recreational development opportunities are noted. Timber harvest and its associated roading are improperly -- and ineffectively -- driving recreational considerations.

There is little justification to call Alternative 3 a

Recreational/Visual Resources alternative. In the evaluation of key recreation area changes (p.4-20-23), Alternative 3 is not mentioned once in a context beneficial to recreation. Its timber harvest units result in conspicuous impacts to the key viewsheds of Salt Lagoon (whose older harvest areas are starting to lose their visual dominance -- p.4-17), Leask Cove, Salt Creek (maximum modification), and Leask Lakes (maximum modification). There are also significant impacts to North Saddle Lakes. Thus, the alternative's claim to its title seems to rest primarily in the notion that dispersing harvest units over a broad area and the associated road building results in diversity of ROS and access to more potential recreational areas (yet these specific opportunities are no different from the ones available in most other alternatives).

In comparison, Alternative 5 has less visual impact to Salt Lagoon, none in Leask Cove, none in Salt Lake and Salt Creek, none in Leask Lake, and significantly less in the North Saddle Lakes system. Its ROS class acreage diversity is very similar to that of Alternative 3, it builds more roads and harvests more timber, yet because its timber harvest areas avoid the heavily used upper George Inlet-Salt Lagoon-Leask Cove areas, it preserves the most important recreational values available in the project area. Thus, Alternative 5 is far more a Recreational/Visual Resource alternative than is Alternative 3.

b. There are several basic elements missing from the recreational analysis:

(i) The baseline. There needs to be a thorough analysis of recreational resource presence and current recreational use within the project area. This baseline analysis ought to include information specific to the project area and show the kinds of activities undertaken, their relative frequency, their geographic distribution, their rarity of opportunity for Ketchikan residents, and their importance to Ketchikan residents.

(ii) Relationships between present recreation use, wildlife presence and habitat, roading, increased access to the area in general and to specific sites, timber harvest, future recreational demand, and tourism should be discussed. For example, presently high recreational values should not be degraded for the purpose of accessing other recreational opportunities of lesser value. New recreational opportunities should themselves not be degraded through the impacts of accessing them. Recreation and wildlife presence may be complementary or contradictory: greater access through roading allows for recreational driving and wildlife viewing, but also wildlife harvest and habitat degradation. Tourism may be affected by management activities. The DEIS mentions that there is an ongoing increase in independent visitors to the area, and that some increased use of the project area could

result, but this is not investigated. It should be.

(iii) The point of doing this analysis is to produce a plan that draws distinctions among the values inherent within the various sections of the project area and compares those values to similar values present outside the project area -- in order that informed and supportable land use decisions can be made. One such decision would be where timber harvest should and should not take place. Some of this area-specific information is present in various parts of the EIS -- but it has not been well integrated. Without such a picture of what values and potentials lie where within the project area, and how valuable they are more generally, other forest resource values will continue to trail timber commodity value in Forest Service planning. This is the case with all action alternatives except for Alternative 5. We note that in the informational meeting, it was explained that the Recreational/Visual Resources alternative was developed by shrinking the size of the timber harvest units and dispersing them -- not by independently analyzing recreational and visual resources.

(iv) In connection with the assessment of recreational resources, an economic analysis of their importance should be done. } 80

We are confident that the above assessment will show that within the project area, the highest recreational, wildlife, visual resource, fisheries, cultural, and tourism values all lie in the Upper George Inlet-Leask Cove-Salt Lagoon-Salt Creek area -- and that on a district-wide basis these values are not merely average, but are very high. We believe that particularly in combination, these values are so high that timber commodity value cannot compete. Moreover, timber harvest would degrade, not improve, each of these values. Thus, timber harvest should not occur in this section of the project area. Roaded access to this area should be carefully provided based on the ADOT/PF corridor study and a carefully drawn plan that manages the impacts of access to retain and optimize the high wildlife, recreation, visual, and tourist resources present in this particular part of the project area. Alternative 5, with some modification, is the only action alternative currently drawn that can meet these needs.

4. Economic evaluation.

In the financial analysis on p.4-41, the mid-market pond log values are defined as including the end product of pulp. But then utility-grade logs are not counted in the table 4-38 Financial Analysis Summary. This discrepancy should be addressed. We would like to see the socio-economic "5-year aggregate value" from p.4-42 listed by alternative and added to table 4-38 in order to give a better and more complete idea of economic impact on the community. The "Economic Impact in Terms of Jobs and Projected Income" (table } 9

2-24) should also be displayed in the p.4-40-42 Financial Analysis and Socio-Economic Effects" section.

We note that the only economic values that have been developed for the project are those associated with timber harvest. However, there are substantial economic values associated with recreation, fisheries, and tourism. We think these should be modeled as well. Economic value from non-consumptive uses of the project area has the advantage of being continuous (as long as the resource is conserved), and not occurring only once every rotation. With a constant positive economic flow, the resulting aggregate values may be very high, and may surpass timber commodity value.

5. Fisheries.

By far the most important fisheries values in the project area lie in the Upper George Inlet-Leask Cove-Salt Lagoon-Salt Creek area. The EIS recognizes this: Salt Creek's summer coho run is termed "important" and receives considerable attention; in addition, Leask Creek should be included as an important fish producer and the location of an important personal use fishery and included in the Major Watershed chart (p.20). Yet this relative importance is recognized only by Alternative 5. All other alternatives pursue their objectives in disregard of this comparative importance. 10

(i) Damage to Salt Creek. For example, in Alternative 3 "four harvest units are located on the sensitive soils above Salt Creek." The projected loss to coho production -- exclusive of road building effects -- is .07%. Yet Alternative 5, with no harvest units in the sensitive parts of the Salt Creek drainage, has a loss to coho spawning of .6% -- over ten times higher. (Either this is a mistake or the analysis is faulty. p.2-20.) Yet harvesting these Salt Creek units will require road building apparently in the stream buffer of what is recognized as the most important stream in the project area. The stream will have to be bridged. Potentials for stream buffer blowdown and siltation from roading are recognized but not quantified in the analysis. Potential overharvest of Salt Creek coho is noted due to this roading, camp effects, and low summertime flows. Such unmeasured effects suggest that impacts to Salt Creek may be underestimated at .07%. And these effects result from activities taking place only in this first entry. Nonetheless, all alternatives with the exception of Alternative 5 propose these harvest units. This appears to be overvaluing timber from those harvest units at the expense of fisheries. 11

(ii) Integrity of buffer zones; blowdown. In connection with the TTRA-mandated stream buffers, we urge that every attempt be made to provide windfirm buffer zones. Blowdown and salvage sales have in the past resulted in the deformation of management plans. Although blowdown is a fact of life, Congress' intent with 12

respect to non-commodity values makes the integrity of buffer zones even more important.

(iii) General impacts. We do not think that the mitigation of a fishway at Salt Creek is adequate to the general harm that will be done by timber harvest in this portion of the project area. Unquantified impacts suggest that such harm may be understated. Impacts to Leask Creek have not been considered, but should be -- as should impacts to the salt water sport and personal use fishery. 13

The salt water fishery has considerable economic and recreational value, which could be impacted by timber harvest activities in the Upper George Inlet vicinity. This economic value is likely to grow as commercial chartering continues to expand in the Ketchikan area. In 1985 there were 50 charter licenses owned by Ketchikanites; in 1990 there were 75 -- a growth of 50% in just five years. As the tourist industry continues to expand -- and tensions in the Persian Gulf have already increased this expansion -- sport fishing in upper George Inlet will have an expanding economic impact. If it is true that impacts to fisheries productivity are understated, then there will be declining productivity over the rotation. But also, recreational, personal use, and charter sport fishing popularity may all be affected by deteriorating visual quality associated with timber harvest, should more harvest units become visible from Upper George Inlet.

Impacts such as this are not considered in the finding of "no significant impact" to the fisheries resource. However, they are real, have economic value, and should be considered.

We believe that the finding of "no significant impacts" to fisheries resources is inaccurate. We think there have been significant impacts in the past, and that significant impacts in this area will continue in the future. We are prepared to live with impacts to fisheries from management activities -- but we think that good management and the TTRA endorsement of fully balanced multiple use would indicate that those impacts ought to be directed to the less-sensitive or important fisheries resources. In this case, we think that impacts to the sensitive, important, and valuable Salt Creek-Salt Chuck-upper George Inlet area should be avoided by avoiding management activities there. We are far less concerned, for example, with impacts to Nigelius Creek and mid-Carroll Inlet. The only alternative that accomplishes this purpose is Alternative 5.

6. Wildlife issues.

Earlier we discussed the high importance of this area, and particularly the Upper George Inlet-Leask Cove-Salt Lagoon-Salt Creek area, for wildlife. (See p.2, infra.) This area provides extremely rich wildlife and fish habitats, a critical linkage 14

between the Salt Lagoon and the Naha, and is of great importance in ensuring biological diversity in southern Revilla Island. This evaluation is agreed to by both the Forest Service and ADFG. This part of the project area is far more important for its wildlife values than for its commodity timber values. Alternative 5 is the only action alternative that responds adequately to this importance.

(i) Old growth blocks. We are encouraged to see the Forest Service embracing the concept of wildlife old growth blocks. We feel that this concept belongs in the New Perspectives approach -- in that, by providing untouched set-asides of particularly important forest habitat, and by strategically positioning those reserves across the landscape, the habitat needs of forest-dependent species and long-term biodiversity are much better served. We support the second method of designing those blocks listed in the DEIS, and congratulate the Forest Service in its adoption. 15

In such an approach, the size of blocks and their placement are critical. Old-growth blocks of small size do not contain the variety and abundance of habitat resources to accomplish their task of providing old-growth dependent species an environment with sufficient range, free of edge effects, and encroachment, competition or predation from displaced or more adaptable species; and an old-growth block surrounded by timber harvest does not well provide for the dispersion and in-migration that is important in protecting against localized extinctions. We agree with the EIS's assessment of the Alternative 5 old-growth block quoted earlier (See p.2, infra.) We think that its size and placement will enable it to actually do its job. It is of substantial size, and strategically placed between Upper George Inlet and particularly the Salt Lagoon, and the Naha roadless area. We are far less confident about Alternative 3, which contains 14 harvest units cut out of the old growth area between Upper George Inlet-Salt Lagoon and the Naha -- in direct contradiction to the connectivity that is one of the policy's major rationales. The roading proposed in connection with these harvest units will, when linked to the Ketchikan road system, further reduce this block's value by facilitating human access and predation. If an old-growth block policy is to be adopted, it should be implemented so that it will actually accomplish its task.

(ii) Importance of the area due to cumulative effects. The EIS notes that the cumulative effect of earlier timber harvest in the area is to make the head of George Inlet and the Salt Chuck even more important for wildlife. The old growth in this area "is important because of the direct access to old-growth from the salt water for Sitka black-tailed deer, raptors, Vancouver Canada geese, and marbled murrelets (White River, Coon Cove, and areas of Salt Lagoon have been logged.)" (EIS p.4-55.)

In our view, the Forest Service has done a good job of describing the wildlife status quo and the mechanisms that operate on it. But we see danger in the fact that no cumulative impacts analysis has been done for wildlife beyond the next 10 years. This analysis is insufficient. 16

The planned conversion over the next 70 years of all operable Shelter Cove old growth to second-growth status (with the exception of that old growth still in retention prescription) will have a devastating effect on wildlife populations by devastating their habitat. Most of these effects will be felt after the next 10 years, and will tend to increase at an accelerating rate as a greater proportion of habitat is converted to second growth. The nature and extent of these effects, which will be significantly influenced by actions taken now and plans drawn in connection with this first entry, have not been examined. As the cumulative effects analysis has not gone beyond 10 years, it is not clear that the old-growth prescription acreage contemplated by this EIS will adequately conserve wildlife over the rotation, as all the rest of the area is converted to second growth.

We believe that the effective old-growth block concept is the basis for an effective multiple-use wildlife conservation strategy. However, at the moment that seems to represent the entire strategy. Moreover, the old-growth blocks are not assured of existence in their proposed form beyond the next EIS. The Forest Service needs to show how it will conserve the wildlife resource over the rotation. It has not done so in this EIS.

Alternative 5 represents a New Perspectives approach. No other alternative does. If an old-growth block policy is established, it should not immediately be decimated for the sake of timber commodity value. We agree with the EIS's assessment of the advantages of Alternative 5: it is an advantage that timber harvest stay out of the northern end of VCU 747, and instead take place in an area which is not of such high habitat value.

This is not an extraordinary approach. It is simple, logical, and represents good planning practice. In contrast, planning timber harvests in areas that are extremely high in wildlife values, while at the same time trying to maintain those very high values, is convoluted, illogical, and may not be consistent with multiple use as envisioned by TTRA.

7. Cultural values.

We applaud the Forest Service's conscientious search for, and protective posture towards, cultural sites in its management plans, including Shelter Cove. We think that some of these sites may have educational and tourism value; and we further suspect that the Upper George Inlet area may be a particularly likely section of the 17

project area to find such cultural resources -- another argument for orienting management of this section around non-timber values. The archeological sites at Leask Cove should figure into management planning, and should probably be mentioned in this DEIS.

8. Special areas.

The Salt Lagoon ought to be recognized as a special area. Such lagoons are rare; the diversity and abundance of resources the George Inlet lagoon supports makes it an ecological focal point; and its tidal hydraulic gradient may have recreational and tourist value. It may be valuable for research as well. Swans, a designated sensitive species, winter in the Salt Lagoon and need special management considerations. } 18

A second area that should be considered for special area status is that area of national forest bordering the eastern edge of the state land north of Leask Cove, and running northward to the point where that state border nearly touches the "boot" of the Naha. This would encompass at least the northern two of the three harvest units scheduled in that area by several alternatives. This land, when combined with contiguous land on the state-owned side of the boarder, constitutes what may be the largest contiguous stand of volume class 7 timber remaining in the Ketchikan Ranger District. The stand comprises roughly 250 acres, and is depicted on a Forest Service timber type map. It would be unwise to dispose of this stand through cutting before considering it for its other values, for wildlife, recreation and tourism. If the Leask Lake tract becomes a state park, it may be important to have preserved this stand for its recreation and tourism values.

9. ADOT/PF corridor study; roading in general. Because the Shelter Cove area, and particularly VCUs 748 and the north end of 747 are so rich in wildlife and other environmental resources, roading through the area should be accomplished carefully, and with a particularly clear plan of objectives. Redundancy should be avoided. No roading should take place in VCUs 748, the north end of 747 or the north end of 746 until the ADOT/PF mainline corridor study is completed. The reason for this is that (a) within this part of the project area, roading will have a magnified impact due to the high wildlife, visual and recreational values of the area, (b) these values are important and must be conserved, and (c) any plan for conserving them that is formulated or implemented before the results of the roading study are known will likely be confounded by the location of the road corridor, and valuable resources will be lost. Once the location of the road corridor is known, the utilization of all forest values -- timber and non-timber alike -- can be planned for and can proceed efficiently and without wastage. The location of the corridor should be known before other utilization plans are drawn. } 19

Cumulative impacts must be considered to meet NEPA requirements, and failing to evaluate the transportation corridor as an impact in a sensitive area is a major omission of Alternatives 2,3,4, and 6. The placement of logging units in the Leask and Salt Lagoon drainages is unacceptable without an EIS covering the corridor.

10. Conclusion.

We think that the Forest Service has achieved something substantial in Alternative 5. We think that this represents a useful model for other New Perspectives alternatives. We extend praise for this accomplishment, for the effort that went into this document, and for the presentation that resulted.

In the context of a plan of operations that ensured the long-term viability of Alternative 5, that depicted long-term impacts to all non-commodity resources and ensured their sustained yield, we would support that alternative, with some provisos such as the relocation of harvest units 747-23, 24, and 25. The cornerstone of such a plan should be the commitment of the Upper George Inlet-Leask Cove-Salt Lagoon-Salt Creek area to wildlife habitat and careful recreational use, the maintenance of the Alternative 5 old-growth block between Salt Lagoon and the Naha, and the road link to Ketchikan based on the ADOT/PF study. 20

We urge the Forest Service to produce such a plan. As it stands, this DEIS is inconsistent with NEPA regulations and must be remedied.

We thank the Forest Service for considering these comments.

*Prepared for Tongass Conservation Society by
David Katz*

cc: SEACC

Letter from Tongass Conservation Society

Comment 1: (paraphrased)

We have concerns regarding the importance for non-commodity timber values in particular, the portion of the project area encompassing lands around Upper George Inlet-Leask Cove-Salt Creek and especially the Salt Lagoon has been identified as one of the most important wildlife habitat areas on Revilla Island.

Response 1:

We agree, and have developed standards and guidelines to mitigate the environmental impacts and a monitoring plan which will give us "feed back" information regarding impacts to these non-commodity values. The selection of Alternative 5 minimizes harvest in high value habitat areas, establishes large contiguous blocks of old growth, and protects potential recreation sites.

Comment 2: (paraphrased)

We feel the DEIS has inconsistencies with NEPA in that it: 1) Fails to consider connected and cumulative actions, 2) fails to adequately depict cumulative impacts from Native Corporation harvest and harvest of remaining operable Forest Service land, 3) fails to state a need for the project.

Response 2:

Connective actions are defined in 40 C.F.R. 1508.25 (a)(1) (1984), as actions that:

- (i) automatically trigger other actions which may require environmental impact statements.
- (ii) cannot or will not proceed unless other actions are taken previously or simultaneously.
- (iii) are interdependent parts of a larger action and depend on the larger action for their justification.

Shelter Cove passes all these texts. The project does not automatically trigger any other action by the Forest Service. The project stands on its own, and requires no previous or simultaneous action for it to proceed. It is not part of or subordinate to any other larger action.

Thomas v Peterson is cited in support of the contention that the Forest Service must address the road link with Ketchikan. In this case plaintiffs prevailed on their contention that the Forest Service could not separate the analysis of the construction of a timber access road from the impacts of the timber harvest tributary to the road. This case would apply to Shelter Cove if the Forest Service had split the analysis of the project by assessing only the impacts of road construction in one EIS, and the impacts of timber harvest in a subsequent EIS. The Shelter Cove project in no way *triggers* the construction of a link with Ketchikan. That action is dependent on a variety of factors including other agencies, land disposition, availability of State funding etc., all of which are beyond the control of the Forest Service.

The Forest Service agrees that the cumulative effects analysis in the DEIS could be strengthened and has done so in the FEIS. The cumulative analysis in the FEIS assumes harvest of all operable Forest Service lands within the project area and the impact such harvest would have on all resources.

The Forest Service agrees that connection of the project to Ketchikan via a road link will alter the cumulative effects analysis effect on subsistence use in particular. Effects on subsistence and other resources will have to be addressed when such a link is contemplated.

The FEIS contains the analysis of the cumulative impacts from Native Corporation harvest and harvest of remaining operable Forest Service land.

All the impacts described in Chapter 4 portray the expected impacts of the proposed harvest in combination with past harvest or any other development activity within these selected viewsheds. For example, in Alternative 2 and 3, the impacts described for the Leask Cove area displays the impact (or proposed harvest), how it adds to the impact from the harvest that occurred in the 1960's plus the transmission line, and then describes the overall impact. As is noted, Chapter 3 mentions the significant impact of Native harvest in the overall upper George Inlet area. However, the specific viewshed analyzed in this area (Leask Cove) the Native harvest does not come directly into play when analyzing the overall impacts.

In the ROD, no harvest is proposed on the slopes above Leask Cove.

The estimated visual impacts in the year 2060 are described in the FEIS. This is based on the amount of the viewshed proposed for this first planning period, an estimate of harvest levels in subsequent periods and the amount of acres in wildlife old-growth prescription in these viewsheds.

TTRA requires the Forest Service to provide for sustained yield of all renewable resources. The Multiple-Use Sustained Yield Act of 1960 (16 U.S.C. 528) Section 4, establishes that "some land will be used for less than all of the resources." Clearly, this must be so as timber harvest must result in some diminishment of species dependant on old-growth. The Tongass Land Management Plan, as amended in 1986, evaluates and prescribes various activities (via land-use designations) for the forest as a *whole* that ensure the requirements of Multiple-Use Sustained Yield Act are met over the Forest as a whole. Congress clearly intended in TTRA that sustainable levels of timber harvest are to continue on the Tongass National Forest.

The Tongass Land Management Plan established Land Use Designations. The Shelter Cove project area is comprised of two such areas, LUD III and LUD IV. LUD III 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. The LUD IV provides for intensive resource use and development where emphasis is primarily on commodity or market resources.

The Shelter Cove project is needed to maintain an independent timber sale program and is located outside of the Long Term Sale contract area. This project will provide 14% of the expected market demand for the next 5 years within the Ketchikan and Stikine Area of the Tongass National Forest.

Comment 3: (paraphrased)

The Forest Service failed to explore all reasonable alternatives. In the near term, "with the exception of Alternative 5, all the action alternatives are defined by various aspects of timber harvest." In the long term "there is really only 1 alternative presented in the long-term – the plan of operations by the Forest Service."

Response 3:

Short term: The Forest Service selection of Alternative 5 addresses this point. Long-term: Effects of harvest subsequent to that authorized in the Shelter Cove FEIS will be fully subject to NEPA requirements. Nothing in the FEIS "automatically" triggers future harvest nor obviates the requirement to address its impact. Any subsequent entry for timber harvest within the Shelter Cove Project Area will be subject to all the laws and regulations which regulate Forest Service Management activities.

Comment 4: (paraphrased)

We feel the DEIS has inconsistencies with TTRA with regards to: 1) roading in the Naha, and 2) sustained yield of all renewable resources.

Response 4:

The selection of Alternative 5 which does not authorize road construction in the Naha LUD II area addresses this point.

See response to comment number 2 regarding the issue of sustained yield.

Comment 5: (paraphrased)

We feel the DEIS is insufficient of ANILCA finding, and it appears to contradict itself.

Response 5:

This discrepancy has been remedied.

Your concerns regarding long-term projections have been addressed in the FEIS in the wildlife section of the FEIS.

The Tongass Land Management Plan authorizes harvest of timber from LUD III and LUD IV lands. The LUD III harvest levels displayed in the ROD are well within this direction to manage for a variety of uses.

Your concern regarding sound management of public land has been addressed in the FEIS.

Comment 6: (paraphrased)

We feel that sufficient notice was not given regarding public participation.

Response 6:

A complete analysis of the public participation process is given in length in the FEIS, Chapter 1, under the Public Involvement section. The public comment period was extended beyond what is required by law. Many, many public meetings were held between the DEIS and the FEIS. Again, a listing of these can be found in the FEIS.

Comment 7: (paraphrased)

We have concerns regarding the distribution of harvest by volume class, and the 100-year rotation standard.

Response 7:

The volume class information was used together with stand exam data to give us reliable estimates for each volume class. Where the volume class stands are located can be found in the administrative record in the GIS information system. The first harvest for this area was in the 1960's and was located along the beach fringe and the head of George Inlet. This date is used as the starting point for the rotation.

Comment 8: (paraphrased)

We believe the treatment of recreational values are grossly inadequate. Several basic elements are missing from the analysis these are: 1) Baseline data, 2) Relationships between present recreation use, wildlife presence and habitat, roading, increased access to the recreational demand, and tourism should be discussed and 3) an economic analysis of recreational importance should be done.

Response 8:

The Recreation Opportunity Spectrum (ROS) has been used by the Forest Service and other agencies, for years, to inventory outdoor recreation environments and experience opportunities. The ROS is not designed to rate the quality of an individuals experience, since the quality of an experience varies greatly from person to person. The ROS assumes that a quality outdoor recreation experience is best assured through providing a diverse set of recreational opportunities.

Recreation opportunities can be expressed in terms of three basic parts: the activities, the setting, and the experience. As stated in the DEIS, the project area offers recreation opportunities usually found in southeast Alaska primitive environment. Those recreation activities currently provided for include picnicking, camping, hunting, salt and freshwater fishing, hiking, boating, nature study, photography, and many others. By providing different kinds of recreational settings and accommodating different types and styles of recreational use, we hope to provide people the opportunity for various kinds of experiences.

The added recreation opportunities referred to in the DEIS are potential opportunities. Currently, the project area is accessible by boat or air travel which may not change with the completion of the project. The consequences of increased access to the project area should be evaluated at the time the access is made available.

We agree that the area of highest recreational, wildlife, etc. values probably are found in the Upper George Inlet-Leask Cove-Salt Lagoon Salt Creek area. These areas have values associated with them from salt water access and roaded access. The preferred alternative preserves any potential recreation site and sets aside large blocks of timber for wildlife. Stream protection reflects the current TTRA mandate. We do not have base line data with which to do an economic comparison with the timber resource, however, we feel that protection of these areas is important and our selection of Alternative 5 as the preferred alternative reflects this.

Comment 9:

In the financial analysis, the mid-market pond log values are defined as including the end product of pulp. But utility-grade logs are not counted in the financial analysis summary. This discrepancy should be addressed.

Response 9: (paraphrased)

These values include utility-grade logs. The final products in this analysis are not confined to pulp, but include lumber and cants of hemlock and spruce.

Comment 10:(paraphrased)

We feel that the Leask Creek watershed should be included in the table on page 30, chapter 3 as an important fish producer. Only Alternative 5 recognizes the importance.

Response 10:

You are correct. We have included this stream on the above mentioned table. Leask Creek was recognized for its importance in Alternative 5 which is the alternative selected in the ROD. The information on Leask Creek was not included as no direct impact from land management on National Forest Service land occurs with any of the action alternatives. For comparison purposes, the amount of habitat contained in Leask Creek has been included in the above mentioned Table. At this time, no changes in Leask Creek habitat or anadromous fish populations are expected.

Comment 11:(paraphrased)

We are concerned with the sensitive soils above Salt Creek and the projected loss to coho production. There appears to be a mistake or problems with the analysis on page 2-20. There appears to be overvaluing timber from those harvest units at the expense of fisheries.

Response 11:

The reduction in coho habitat is projected for the whole planning area rather than just the Salt Creek drainage. The reduction of long term coho habitat capability was based on removing some trees within

the large organic debris (an important factor in the formation of juvenile coho over winter habitat) in some of the less critical stream reaches. Examples of this would be 25 wide buffer zones on small streams (less than 15 feet wide) that are not highly dependent on adjacent trees to form ponds the juvenile coho's use during the winter. Our modeling showed a small reduction in the habitat capability in these streams. Also, the figures listed for Alternative 3 on page xxi is in error. It should have been 0.9% (DEIS Chapter 4, page 51). The relative difference between the two alternatives is null (0.9 for Alternative 3 and 0.7 for Alternative 5).

Finally, since the implementation of TTRRA, anadromous stream buffer requirements will apply to Shelter Cove units, the buffers are expanded to include all the large organic debris recruitment area, and thus the modeling effects no longer apply. There is a 100 feet minimum on all anadromous streams.

Comment 12:(paraphrased)

We urge that every attempt be made to provide windfirm buffer zones.

Response 12:

Your concern is well founded and we will do our utmost to insure windfirm buffer zones.

Comment 13: (paraphrased)

We do not think the mitigation of a fishway at Salt Creek is adequate to the general harm that will be done by timber harvest in this portion of the project area. Impacts of Leask Creek have not been considered, but should be.

Response 13:

We feel the mitigation will be effective. See response 9 and 10 regarding impacts to Leask Creek.

Comment 14: (paraphrased)

We feel the area of Upper George Inlet-Leask Cove-Salt Salt-Creek are of high importance. Alternative 5 is the only action alternative that responds adequately to this importance.

Response 14:

Alternative 5 is the alternative selected in the ROD.

Comment 15: (paraphrased)

We are encouraged to see the Forest Service embracing the concept of old growth blocks. We are confident about Alternative 5, but less so with Alternative 3. The roading proposed in Alternative 3 will, when linked to Ketchikan, further reduce this block's value by facilitating human access and predation. If an old-growth block policy is to be adopted, it should be implemented so that it will actually accomplish its task.

Response 15:

Our task in developing and EIS is to offer a reasonable range of alternatives. Roding through the old-growth block as displayed in Alternative 3 does just this. The Forest Service manages multiple resources, not just wildlife. The road as displayed in Alternative 3 accesses other resources, in this case timber and potential recreation access to Salt Lakes.

Comment 16: (paraphrased)

We see danger in the fact that no cumulative impacts have been done for wildlife beyond the next 10 years. This analysis is insufficient.

Response 16:

We agree. This has been corrected in the FEIS.

Comment 17: (paraphrased)

We applaud the Forest Service's conscientious search for, and protective posture towards, cultural sites.

Response 17:

Thank you.

Comment 18:(paraphrased)

The Salt Lagoon ought to be recognized as a special area as well as that portion of national forest bordering the eastern edge of the state land north of Leask Cove, and running northward to the Naha.

Response 18:

This is a subject that must be addressed in the TLMP revision. Make your views known to the TLMP team.

Comment 19:(paraphrased)

Any roading in VCU's 748 and the north end of 747, because of their rich wildlife values, should not be implemented before the results of the roading study are known so valuable resources will not be lost.

Response 19:

Shelter Cove precludes no road option. Roads that access timber near Naha would be needed in *any* case to access suitable and operable commercial forest land.

Comment 20:(paraphrased)

In the context of a plan of operation that ensured the long-term viability of Alternative 5, that depicted long-term impacts to all non-commodity resources and ensured their sustained yield, we would support that alternative, with some provisions such as the relocation of harvest units 747-23, 24, and 25 and road link to Ketchikan based on the ADOT/PF study.

Response 20:

Thank you. We selected Alternative 5.

[illegible]

re: Shelter Cove DEIS

After attending a public informational meeting and reviewing the Shelter Cove DEIS I would like to make these comments:

I am extremely pleased to see the preparation of Alternative 5, which looks to me like it could actually accomplish sustained yield of ALL the forest resources without dominance of any one over another. Unfortunately, since the plan does not extend its analysis of impacts through the rotation it is not possible to say whether any alternative, even alternative 5, will be successful at accomplishing this goal at the end of the rotation.

I am disappointed by the lack of a true recreational alternative. This is especially disappointing for an area that has already been identified as having extremely high recreational value and potential. Alternative 3 is not a "recreational alternative". It is a moderate timber harvest alternative with a couple of added design parameters which do not maximize, and may even harm recreational uses. The public was told at the informational meeting on the 17th of January that the design parameters to make it a recreational alternative were: less visible clearcuts, and maximize roaded access. Given the economics of forestry (that road construction is a major cost of harvesting timber), and looking at past forest plans, AS LONG AS WE LACK THE EXTENSION OF THIS PLAN THROUGH THE ROTATION, we can only assume that this "recreational" alternative will look the same as any "timber alternative" by the end of the rotation. I strongly disagree with the idea that what the public wants for "recreation" are more roads to drive on, when all those roads do is go through clearcuts and end in clearcuts. Roads in and of themselves are not recreation. Recreation is having a place to go to, and roads are simply a means to get there. Without seeing the end of rotation consequences, a road could just as easily DESTROY the recreational opportunities as access them.

Roading into the Naha is inexcusable for timber harvest. Even if it were determined that the best mainland link is through the Naha and that arterial road was already built, those little haul roads through the Naha would still be inexcusable.

Removing the roading alternatives to Ketchikan from the plan has done no one any great service, and has possibly hidden numerous impacts of the proposed action. It is probably the largest single item on the minds of the borough assembly and the city council in their support of any alternative, and likely so for a large number of the public. Yet, the removal of that part of the plan removes our tools to analyze the DEIS in that light. } 6

I am extremely disappointed in the effort that was taken to communicate this plan to a select section of the public (public meeting with telephone invitations only to a select group on Jan 17th 1991). At the time of that meeting the deadline for comments on the plan were the 21st of January, so clearly there was no intention of having an informational meeting with the general public. Ignoring people who have dedicated their personal time to comment on this plan in the past, and then inviting a new set of people for a personal briefing sends a very bad message to the public. It sends the message that you do not want to tell them what you know, and you do not want to hear what they have to say. I cannot believe that is anyone's intent, yet as long as you fail to communicate with people who have previously expressed interest, that is the message that you are sending. } 7

It is with great regret that I have included so many negative comments about this plan. Actually I am very excited about the positive aspects of this plan. I DO believe that there is an acceptable multiple use plan here which considers ALL renewable resources in the shelter cove planning area. This DEIS contains the basis, with some serious additions, for a plan that: includes the road up the island, that indicates impacts through the whole alternative, that protects fish and wildlife resources, enhances recreational opportunities for Ketchikan residents and visitors, and supports a long term sustainable timber harvest. I am sure that it can be done, I will do all I can to help make it happen, and I hope that the USFS feels the same. } 8

Sincerely yours,
Bill Rotecki

Bill Rotecki

Letter from Bill Rotecki

Comment 1:(paraphrased)

I am extremely pleased to see the preparation of Alternative 5, it looks like it accomplishes all the forest resource yields without dominance of any one resource over another.

Response 1:

Thank you.

Comment 2:(paraphrased)

Unfortunately, since the plan does not extend its analysis of impacts through the rotation it is not possible to say whether any alternative, even Alternative 5, will be successful at accomplishing this goal at the end of the rotation.

Response 2:

The FEIS displays the cumulative effects through the rotation.

Comment 3: (paraphrased)

I am disappointed by the lack of a true recreational alternative. This is especially disappointing for an area that has already been identified as having extremely high recreational value and potential.

Response 3:

You are not alone on this point. The need for recreational opportunity is essential. During the public comment, a road off of Harriet Hunt was proposed for access to the Leask Lakes area. We feel this has merit, and hope to do the analysis under a separate NEPA document. As for Shelter Cove, potential recreation sites are protected in the preferred alternative.

Comment 4: (paraphrased)

I strongly disagree with the idea that the public wants for 'recreation' are more roads to drive on, when all those roads do is go through clearcuts and end in clearcuts. A road could just as easily DESTROY the recreational opportunities as access them.

Response 4:

The main routes in the preferred alternative (from Shelter Cove and around Saddle Lakes to Salt Lagoon) are not exclusively associated with timber harvest, though harvest of timber will pay for the construction of the majority of roads within the project area. Care was taken during planning that potential recreational sites be protected.

Comment 5: (paraphrased)

Roading into the Naha is inexcusable for timber harvest.

Response 5:

This roading is not reflected in the FEIS.

Comment 6: (paraphrased)

Removing the roading alternatives has done no one any great service, and has possibly hidden numerous impacts. Roding is probably the largest single item on the minds of the borough assembly and the city council in their support of any alternative, and likely so for a large number of the public.

Response 6:

We agree. These issues will be addressed after the corridor study is completed.

Comment 7: (paraphrased)

Meetings were made by telephone invitations only to a select group on January 17th.

Response 7:

This was not our intent, and we know not to try this again. We wanted a representative 'sample' of opinion in the community. Additional meetings were scheduled and the comment period was extended to deal with this concern

Comment 8: (paraphrased)

I do believe that there is an acceptable multiple use plan here which considers ALL renewable resources in the Shelter Cove planning area.

Response 8:

We believe Alternative 5 does this.

kind of stuff. It appears that the forest service is viewing what's out there now as a blank slate which really doesn't have much of interest or value to the public until we "spend" part of the resource to produce some cash flow.

Alternative 1 should be seriously considered. At the end of 5 years, under this option, we the people of the U.S. would have

1. valuable timber.
2. valuable wildlife habitat.
3. valuable forest (helping to cleanse the air, etc.)
4. a rare tourist attraction.

Alternative 1 is like having a high interest savings account which can be used while it appreciates in value.

Page v--Regarding planning for forest use:

After attending a public information meeting, I was left with the conclusion that no long term management plan has been developed for this area. It is inconceivable to me that the forest service could plan harvests during the coming 5 year period without having a larger picture of the next 100 to 500 years. It is almost impossible for the public to figure out the environmental consequences because there appears to be no plan past 5 years. Options being considered seem to include :

1. cut most of the operable timber in this area during the next 5 years. (If that's the case, then the proposed economic benefit of 65-75 jobs annually for 5 years (pg. 42) works out to about 3 jobs a year if this area of the forest were managed as a renewable resource).

2. cut lots of the harvestable timber in the next 5 years but leave some old growth retention areas but hope to harvest them after the 5 years.

If no long term (minimum 100 year) management and harvest plan has been developed, then no harvesting should occur. "We'll cut this stuff now and go somewhere else later" is too general. It's time to say specifically where and when harvest will occur or else stop harvesting and figure out what there is and how to manage it on a sustainable yield basis.

4. Alternative 3 should not be called a Recreation/Visual alternative. A proper recreation alternative should be added--one in which the high value of the uncut forest is acknowledged. Ideally, roads would be put to limited recreational areas with no logging at all occurring. Realistically, roads would be put in with the specific purpose of getting to high value recreation areas (uncut) and these roads might be paid for by limited timber harvests.

Chapter 4, pg. 42:

Socio-economic benefits of Alternatives 2-5 are vastly overstated. Could you have an objective person look at those figures again in relation to other figures in the document? There's some things that don't match up. Start with the wages and federal tax amounts (total of approx. 17,000,000,). Add in profits and expenses (other than wages)--some amount of millions (10 to 20??).

All that money's coming from somewhere--presumably from selling off the trees. Does that mean the trees harvested in the next 5 years from this area are worth upwards of \$ 30,000,000 ?.

Also, the statement, "Alternative 1, which does not schedule harvest activity, would not provide the benefits described above" should be changed to indicate that while the economic benefit may not occur during the 5 yr. period, at the end of the 5 yr. period the economic value of the area would be millions of dollars higher

than in Alternative 2-6. Plus add the economic benefits from people actually being able to drive to an uncut area of the National Forest (if the road from Ketchikan goes in).

Pg. 42--The words "forest users" should be changed to tree farmers, Japanese timber executives, or loggers. The idea that cutting old growth in this area close to Ketchikan is socially or economically beneficial to "forest users" in the long term is not true. Turning the area into a tree farm certainly is the economic choice for tree-farmers, pulp investors, etc. but not the socio-economically beneficial choice of all forest users. } 6

Fisheries, wildlife, cultural, subsistence: } 7

Please maintain all existing language in the document regarding the extreme value of these resources.

Salt Lagoon, Upper George Inlet:
Protect please.

Thank you to all who worked on this document.

Sincerely,

Margaret Clabby

Margaret Clabby
P.O. Box 5736
Ketchikan AK 99901

Letter from Margaret Clabby

Comment 1:(paraphrased)

The Shelter Cove and George Inlet areas are extremely valuable areas for the citizens of Ketchikan.

Response 1:

We agree.

Comment 2: (paraphrased)

I object to a recent public survey being misused to imply that Ketchikan residents want to recreate in logging areas. Please consider managing the Shelter Cove/George Inlet area in a manner which provides for high quality forest recreation and not low quality Sunday drives through logged areas.

Response 2:

We do not feel we misused the study you refer to. We feel that the preferred alternative retains potential recreation sites. There is logging associated, yes, but logging provides the roads for access to recreation areas.

Comment 3: (paraphrased)

Alternative 1 is vastly under-represented in this document. It is extremely difficult to make sense of the effects of Alternative 2-6 without seeing Alternative 1.

Response 3:

Alternative 1 is displayed throughout Chapter 4 of the document. Chapter 3 displays what the affected environment is and gives an indepth analysis of what exists now. Your point regarding a map showing the project site as is, is a fine idea. This map was displayed at numerous public meetings and we appreciate you bringing it to our attention.

Comment 4: (paraphrased)

Regarding planning for forest use: I was left with the conclusion that no long term management plan has been developed for this area. It is almost impossible for the public to figure out the environmental consequences because there appears to be no plan past 5 years.

Response 4:

The Shelter Cove FEIS has a life of about 5 years, this is because management if an area is not static. For example, the resource inventory of area may be improved, management direction may change and public interest may change. Because of these types of changes we feel that planning site specific activities should not be carried out too far into the future. However, the cumulative effect of an individual project is projected out. In the Shelter Cove project area, the cumulative effects were carried out to the year 2060. Any future project will require public involvement and a new NEPA document so management will reflect the concerns of the public and reflect current management direction.

Comment 5: (paraphrased)

Alternative 3 should not be called a Recreation/Visual alternative.

Also, the statement, "Alternative 1, which does not schedule harvest activity would not provide the benefits described above" should be changed to indicate what the economic benefits may not occur during the 5 yr. etc.

Response 5:

The ID Team felt the Alternative 3 offered many recreational opportunities. Because of the smaller, widely dispersed harvest units, the visual resources are emphasized.

The economic benefits you refer to are benefits from the harvest of trees and those benefits associated with the forest industry.

Comment 6: (paraphrased)

The words "forest users" should be changed to tree farmers, Japanese timber executives, or loggers.

Response 6:

There are many users of the forest. The ones you mentioned are but a few. The Forest Service manages for multiple resource use. This being the case, not all resources or activities can always use the same portion of land. What we do is to develop our plans using an interdisciplinary approach, so we can protect areas of concern and direct our management activities to do so.

Comment 7: (paraphrased)

Fisheries, wildlife, cultural, subsistence: Please maintain all existing language in the document regarding the extreme value of these resources.

Response 7:

Thank you. We will.

Steve Ambrose, Forest Supervisor
Shelter Cove Sale EIS Team
Tongass National Forest

UNITED STATES FOREST SERVICE
KETCHIKAN AREA
RECEIVED

Feb 1, 91

FOREST SUPERVISORS OFFICE	
DATE	TIME
11/17	11:17
11/18	11:18
11/19	11:19
11/20	11:20
11/21	11:21
11/22	11:22
11/23	11:23
11/24	11:24
11/25	11:25
11/26	11:26
11/27	11:27
11/28	11:28
11/29	11:29
11/30	11:30

Dear Steve,

While you individually have heard many of my comments, I wish to express my views on the Shelter Cove DEIS for the record. First, though, I think that the team that worked on this EIS has made very commendable progress in making document that is understandable and offers a much wider range of perspective than the USFS has entertained in the past. Alternative 5 as presented in the document, indeed, shows the beginnings of a "New Perspective"! I am pleased to see it taken seriously and hope to see future DEIS's present even wider perspectives. 1

My first and most important criticism of this DEIS is that it is being presented before studies of the roading alternatives for Revilla Island have been completed by the Borough, State and the Forest Service. The DEIS makes no claim to this, but it is plainly at the forefront of public concerns for the Shelter Cove Area, and you will be getting a large amount of comment from this perspective. In order to do a legal EIS on this project I suggest that you go back and address the road as thoroughly as you have done other issues. The Forest Service should revive something like the Revilla plan to address this issue and other issues that fall between the cracks in TLMP and sale EIS's. The Two step process is not adequate for the public involvement in planning forest land use policies. It is two giant steps backwards, as far as I can see. 2

Another objection is that the DEIS makes no mention of long term plans and effects. In the public meetings, the planners indicated that this is only the first of several entries into the Shelter Cove Area. This is not mentioned in the DEIS and it is very important to me to see what will happen to the Shelter Cove area throughout the rotation. Since your foresters made this plan based on the assumption that you would enter the area again, according to NEPA this must be addressed in the EIS along with cumulative impacts. 3

As for the various alternatives; I find the alts. 2,4 and 6 to be the same old single-use management of the forest for the extraction of timber. These are only alternatives that vary the amount of effort going into hiding and disguising the fact that you are ignoring all other resource values. Alternative 3 is the Roading Alternative. It is designed to please those who want a road as soon as possible and as long as possible. This is not a recreation alternative. It makes no pretense of offering people recreation opportunity. The presentation of this option is very misleading and does not conform to NEPA guidelines. The basic underlying assumption that this road system will be connected to Ketchikan's, is skirted. And the issues of that connection and how different options fit into it, were talked about to the small groups at the informational meetings but are not available in the DEIS. It is plain that the road crossing through the LUD II lands of the Naha watershed is just a dangling carrot to interest people in a connection. The amount of acreage accessed by that leg of the road is quite small, yet because of the failure of the DEIS to provide an analysis of the road options, you will be getting lots of input based on speculation and not on any data. I strongly object to building that section of road now. The timber value is 4

not sufficient to warrant the road. The wildlife and habitat values are high enough to make that road have a significant impact and there is no justification to build that section of road to connect to the Ketchikan road system until such time as the roading alternatives have been thoroughly explored.

There is no explanation of why this area must be cut, nor of why the old-growth retention blocks as laid out in Alternative 5 are cut in every other alternative except 1. If the plan is to come in with several more entries during the rotation, and the retention is to stay retention, why must this retention be cut now in any of the alternatives? The same question needs to be addressed for alternative 5. Further, in talking with you and District Ranger, Segovia last night, it was obvious that you did not want these retention blocks or any other areas designated as non-harvest areas. Yet these blocks must come out of the timber base if they are actually to be retained. I find it very disturbing that you are still arguing for the flexibility to cut retention, despite USFS abuses of the past. I want to see these areas retained as old growth, not just saved until the next entry. I also would like to see the units #23, 24 and 25 removed from Alternative 5. These are objectionably placed and will detract from future recreational value and use of the area. } 5

For me this area is very important. As a boater, hiker and camper in the Ketchikan area, I visit Upper George Inlet regularly. We often see bear, deer, otter and waterfowl there. I care very strongly about the wildlife values of the Salt Lagoon and that watershed. As caretakers at Harriet Hunt Lake my wife and I frequently saw wolves. These are values which are not compatible with logging the old growth areas in that watershed. I shudder at the damage already done by the native corporations. You have a mandate to manage the forest for sustained yield of all resources. I think that few would brag about the great management of the Tongass up to this point. Please put things into a "Totally New Perspective" and do what congress asked you to do. } 6

Thank you for listening. I eagerly await your responses to my concerns.

Sincerely,

Eric Hummel

PO Box 5736

Ketchikan, AK 99901

Letter from Eric Hummel

Comment 1: (paraphrased)

Alternative 5 as presented indeed shows the beginnings of a "New Perspective". I am pleased to see it taken seriously and hope to see future DEIS's presented even wider perspectives.

Response 1:

Thank you.

Comment 2: (paraphrased)

My first and most important criticism of this DEIS is that it is being presented before studies of the roading alternatives for Revilla Island have been completed by the Borough. In order to do a legal EIS on this project I suggest that you go back and address the road.

Response 2:

No options are precluded in the ROD.

Comment 3: (paraphrased)

Another objection is that the DEIS makes no mention of long term plans and effects. According to NEPA this must be addressed in the EIS along with cumulative impacts.

Response 3:

This concern is reflected in the FEIS.

Comment 4: (paraphrased)

I strongly object to building the section of road now. The timber value is not sufficient to warrant the road. The wildlife values are high enough to make the road have a significant impact.

Response 4:

The road in the ROD does not preclude any options currently under study. Impact to wildlife, fish and visual resources are minimized by unit placement.

Comment 5: (paraphrased)

There is no explanation of why this area must be cut, nor of why the old-growth retention blocks as laid out in Alternative 5 are cut in every other alternative except 1.

Response 5;

This is done in the FEIS.

Comment 6. (paraphrased)

I want to see these areas retained as old growth, not just saved until the next entry. I also would like to see the units #23, 24 and 25 removed from Alternative 5.

Response 6:

The cumulative effects displayed in Chapter 4 retain the old growth blocks through the rotation. Any change in retention will require public involvement and a new NEPA document.

We feel that units 23, 24 and 25 will be protected by the mitigation measures prescribed.

OFFICE OF THE MAYOR
KETCHIKAN GATEWAY BOROUGH

344 FRONT STREET
 KETCHIKAN, ALASKA 99901
 (907) 228-6605

January 18, 1991

Mr. Steven T. Segovia
 Ketchikan District Ranger
 3031 Tongass Ave.
 Ketchikan, AK 99901

Re: Shelter Cove DEIS

Dear Steve:

With reference to our conversation the other evening concerning the preferred alternative of a road and transmission line corridor in this DEIS, I am enclosing a letter from the Ketchikan Public Utilities where they justify a wide corridor for access and maintenance.

In line with your past Revilla road studies, it is absolutely essential that you reserve the corridor all the way through to the access point of the Tye Lake power. }

Even if we could start construction on the proposed intertie immediately, Ketchikan will be pushing to the limit the Swan Lake production by the time we could draw the surplus power from Tye.

Thank you for your consideration.

Sincerely,

Ralph M. Bartholomew, Mayor

xc: Forest Service Supervisor, Ketchikan
 Mike Barton, Regional Director USFS

LENA FOREST SERVICE KETCHIKAN RANGER DISTRICT RECEIVED	
JAN 22 '91	
PAID	3.5
S.S.S.	
TW FIRE	
REC/LAND	
FISH/WILF	
SILVICULT	
FAC/INTRE	
ENR

2930 TONGASS AVENUE

MUNICIPALLY OWNED
ELECTRIC TELEPHONE WATER

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 11
To R. Bartholomew	From Clerk's	
Co.	Co.	
Dept.	Phone # 228-6665	
Fax # 5-9727	Fax # 225-7282	

TELEPHONE 907-225-7282
FAX 907-225-7282

January 16, 1991

Mayor Ralph Bartholomew and the Borough Assembly
c/o Borough Manager David Crow
344 Front Street
Ketchikan, Alaska 99901

The Honorable Ralph Bartholomew:

Late last year the Assembly authorized the expenditure of \$100,000 to fund the feasibility of constructing a road access from central Ketchikan to transverse the island to the east toward Behm Canal to coincide with the development of an electrical intertie between the Swan Lake Hydroelectric facility to the Lake Tyee Hydroelectric Facility operated by the Thomas Bay Power Authority belonging to Petersburg and Wrangell.

The Alaska Energy Authority has commissioned the engineering firm of R.W. Beck to prepare an economic feasibility study for this potential intertie. I am enclosing a copy of that report for your review. To assist you in your review, I am also enclosing my comments as a result of my review of the document.

YOUR ASSISTANCE IS NEEDED NOW, EITHER IN THE FORM OF A JOINT RESOLUTION WITH THE KETCHIKAN CITY COUNCIL OR IN A MANNER YOU DEEM APPROPRIATE TO ACCOMPLISH THE FOLLOWING:

1. Reroute the transmission line to an area most engaging to facilitate a road corridor that would coincide with the transmission line. This would allow access to the transmission line and provide the right-of-way for a future road to be built in the same right-of-way.
2. Provide for a right of way that is at least 200-500 feet in width.
3. Allow or authorize AEA to restudy the projected transmission line to provide data on rerouting the transmission line to include a transportation corridor and the cost of such a route, which would be most advantageous to allow for a transportation/utility corridor.

I cannot offer to fund this Rerouting Study insomuch that the funds pledged to do that work would come from the \$100,000 authorized by the Borough Assembly, and therefore it would be appropriate to have that offer come from the Borough Assembly.

Honorable Ralph Bartholomew and Borough Assembly
January 16, 1991
Page 2

Thank you for your consideration in this matter.

Best regards,

KETCHIKAN PUBLIC UTILITIES

A handwritten signature in black ink, appearing to read "Thomas W. Stevenson". The signature is fluid and cursive, with the first name "Thomas" being more prominent.

Thomas W. Stevenson
General Manager

TWS:LLH

Enclosures

cc: Mayor & City Council
Brent Petrie, AEA

Letter from Ralph M. Bartholomew, Mayor of Ketchikan Gateway Borough

Comment: (paraphrased)

In line with your past Revilla road studies, it is absolutely essential that you reserve the corridor all the way through to the access point of the Tyee Lake power.

Response:

In reviewing your concerns relating to power transmission corridors, I am assuming you are referring to areas outside the Shelter Cove project area. The transmission corridor is already in place and requires no additional right-of-way. From your statement, I believe you are relating to the Tyee intertie which runs from Swan Lake northward. This is not in the project area.

KETCHIKAN GATEWAY BOROUGH

344 Front Street
Ketchikan, Alaska 99901

USDA - FOREST SERVICE (907) 225-6151 KETCHIKAN AREA				
RECEIVED				
FEB 15, 91				
FOREST SUPERVISORS OFFICE				
	INT	ACT	INFO	DATE
ES				
FES				
PLAN	WA	X		4/12
EAS				
SO				
TM				
ENG				
F&W				
M&WS				
R&L				

February 15, 1991

Stephen Ambrose
Acting Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, AK 99901

Subject: 1950 Shelter Cove Draft Environmental Impact Statement
(Alternative 7)

Dear Mr. Ambrose:

The Ketchikan Gateway Borough has previously commented on the Shelter Cove Draft Environmental Impact Statement, and has supported the alternative described as Alternative 3. We believed that alternative provided the best match between the objectives expressed in the Environmental Impact Statement and the community values that were listed in our correspondence of January 14, 1991. In that letter we stipulated that the primary objectives of the Borough, as related to this Environmental Impact Statement included:

- * The retention and continued viability of a principal economic base--the timber industry.
- * Access to and use of significant recreation areas.
- * The ability to create a road system that can eventually be upgraded to an acceptable public access standard for an inter/intra island road.
- * The minimization of impact upon habitat resources, but within the context of meeting the previously stated objectives.

Based upon these objectives, the Borough determined that Alternative 3, the "Recreation/Visual Resource Emphasis Alternative" was the most reasonable, viable alternative to meet the aforementioned objectives.

Since that time, staff of the Forest Service have developed a new alternative described as "Alternative 7". In this alternative wood gathering areas, involving areas of timber sale and harvest, were stipulated for Lake Harriet Hunt and the Brown Mountain area. In addition, within the study area of the Environmental Impact Statement proper, this alternative provided for the retention of old growth forest in the area immediately east of the LUD 2 area. The effect of the retention of the old growth timber is, as described by the Forest Service personnel, to essentially eliminate about two miles of access road that would be developed to main line public access standards, and to eliminate access to certain lakes that were considered by the Borough to be important for recreational purposes. As you are aware, the Borough, as well as the City of Ketchikan, strongly support the need for an inter/intra island road, and particularly the concept of the inclusion for the eventual development of such a facility, to the extent practical, within the context of the Shelter Cove timber sale area.

The borough objects to the inclusion of the two areas outside the Shelter Cove EIS boundary. Specifically, we believe that the inclusion of the Harriet Hunt area at this time would be inappropriate since there is insufficient data with which to evaluate the environmental effects of this area in the Environmental Impact Statement, because the process to this date has not carefully considered these areas, and because the development of a road to the north of Lake Harriet Hunt would be inappropriate given the possibility of a state park in that area and the ongoing negotiations between the State and the Cape Fox Corporation regarding a land exchange. }

The Borough believes, and we were assured that the option described as Alternative 3, was a viable approach to timber sale/harvest within the Shelter Cove area. We continue to support this alternative. This alternative most effectively meets the needs of roaded access, recreational opportunity, and the creation of a more comprehensive roaded system than would be provided under the other alternatives.

The Ketchikan Gateway Borough believes that the U.S. Forest Service decision regarding these timber sales within the Shelter Cove area are absolutely essential in their configuration and function to the creation of roaded access and to the establishment of access to recreational areas. We have hoped, and continue to hope, that the Forest Service will support widely held community objectives related to recreation and roaded access and would work in a cooperative fashion to support those community objectives in its timber sale program through the selection of Alternative 3.

The Borough is not opposed to the minimization or reduction of harvest areas in the road corridor accessing the western part of the timber sale area, but feels that the roaded system created in this area is important to the development of access to recreational

Stephen Ambrose
Page 3
February 15, 1991

facilities and to other important uses of this area. We trust that the Forest Service will continue to support community objectives in its timber sale program.

Sincerely,

A handwritten signature in cursive script, appearing to read "David G. Crow".

David G. Crow
Borough Manager

DGC/BGP/bjs

Letter From David G. Crow Borough Manager, Ketchikan Gateway Borough

Comment: (paraphrased)

The borough objects to the inclusion of the two areas outside the Shelter Cove EIS boundary. Specifically, we believe that the inclusion of Harriet Hunt area at this time would be inappropriate since there is insufficient data with which to evaluate the environmental effects of this area in the EIS.

Response:

The area you mention is within the Shelter Cove project area. However, the harvest units were not displayed in the DEIS and as a result, will not appear in the FEIS. The project we feel is a valid one and we are considering it. This project would be handled under a separate NEPA document to allow for public input.

The State appreciates the additional analysis efforts undertaken and many of the concerns that the Forest Service has considered in the development of Alternative 7. It is clear that several

alternatives have been favored by different interests in both the State and the Ketchikan area. ~~We generally support and favor many of the concepts put forth in alternative 7, including;~~

- ensuring an economically viable timber sale;
- deferring all timber harvest road construction requirements through the Naha LUD II management area;
- maintenance of important old-growth wildlife habitat
- maintaining a range of management options over the rotation;
- efforts to incorporate public comment into the DEIS.

However we have some concerns regarding other aspects of Alternative 7 if it were designated the preferred alternative. We suggest ~~Alternative 7 form the basis of a modified preferred~~ alternative analysis and strongly urge your consideration of additional specific elements to this alternative.

Importantly, the State recommends that Alternative 7 be modified to emphasize roaded recreational opportunities in the Salt Lake area. ~~This recommendation is clearly supported by the mix of important fish and wildlife habitat values, high recreational values and strong community support for roaded recreational access to the Salt lake area, proximity to Ketchikan, well planned access opportunities to adjacent State lands at George Inlet, and moderate timber values.~~ To accomplish a roaded recreational emphasis in this area we encourage the Forest Service to consider at a minimum;

- 1) additional analysis to provide roaded recreational access to this area, amortizing road costs, either wholly or in part, by increasing timber harvest in other locations within the project area;
- 2) more closely approximate harvest unit access to units 41, 42, 43, and 44 as displayed in Alternative 3, while minimizing timber harvest objectives in this area to fully compliment the roaded recreational emphasis.

Alternative 7 lacks sufficient access alternatives analysis to defer harvest units 44, 45, 46, 47, 48, 49, 50 and 51 as displayed in Alternative 3. The State understands that decisions to defer these units in the Alternative 7 analysis reflect, in large part, specific restrictions for timber harvest related road development in designated LUD II areas and expressed fish and wildlife habitat concerns in the upper George Inlet area. The State recommends that additional access analysis be undertaken to reliably assess non LUD II road access requirements to the above named harvest units or to a substitute viable harvest regime in this area. ~~This analysis should additionally include access opportunities from the existing Ketchikan road system.~~ Such an eastward alignment, although complicated by on-going land exchange considerations, would compliment the community of Ketchikan's support for immediate roaded recreational access. The objective of the recommended additional analysis should be to emphasize eventual roaded

recreation opportunities for the Ketchikan area supported by a dispersed harvest regime that compliments this objective.

The State has identified the following principal concerns/issues in the review of the DEIS and each of the alternatives presented, including alternative 7. Our comments here will attempt to identify the potential problem areas and recommend improvements to the alternatives analysis in the development of a preferred alternative and FEIS;

* Support timber industry needs by providing an economically viable timber supply to the independent timber sale program. At a minimum, the State supports timber harvest objectives which derive a positive "mid-market" conversion rate and a sustainable, economically viable timber supply to the independent timber sale program over the life of the planning cycle. Our review of the DEIS concludes that the timber sale economics show a positive conversion rate for all management alternatives except Alternative 4. A comparative conversion rate should be displayed for Alternative 7 when it is finalized.

* Defer alternative timber harvest road access requirements in the Naha Land Use Designation II (LUD II) Management Area. Road access requirements for harvest units displayed in Alternatives 2, 3, 4, and 6 encroach on the Naha LUD II management area. The Naha LUD II area is one of twelve LUD II areas recently authorized in Title II of the Tongass Timber Reform Act. The State has raised the issue of management activities in legislatively enacted LUD II areas to the Forest Service (Grogan to Barton, Jan. 3, 1991) and the need for the development of Standards and Guidelines governing management of these protected areas to augment the relatively limited administrative guidance of the original TLMP. The State recommends deferral of road access to harvest units which require LUD II access. As stated previously, in support of modifications to Alternative 7, additional analysis is recommended for non LUD II road access to harvest units displayed in Alternative 3. The State further recommends that in the event the analysis dictates deferral of harvest units in this area, additional alternatives analysis be undertaken to identify equivalent replacement volume (approximately 6 mmbf) within the planning area. This volume could be derived through additional dispersed units or, where achievable, increased average unit size over the project area. } 3

The State's recommendation to defer road construction activities to support timber harvest alternatives is a clearly separable issue from other authorized management activities within LUD II management areas. LUD II management areas as described in the Tongass National Forest Land Management Plan, completed March 1979, and amended Winter 1985-1986, provide that these areas be managed

March 12, 1991

primarily in a roadless condition except that roads may be built to serve authorized activities and provide forest transportation linkages. Water and power developments, mining, mineral leasing, and motorized and non-motorized recreation activities would be permitted. No commercial timber harvesting would be permitted. The State wholly supports transportation concepts which require LUD II access where regional transportation planning objectives and sound engineering analysis dictate such alignments and all feasible and prudent alternatives have been taken into consideration.

* The State recommends an alternative analysis with community roaded recreational emphasis for the Upper George Inlet, Saddle Lakes and the Salt Lake area. The preferred alternative should compliment the community of Ketchikan's strong support and expressed need for additional road access, enhanced opportunities for future roaded access to major recreational features (Salt Lakes, N. Saddle Lakes) in the project area, and the protection of important fish and wildlife habitat. A community values and needs survey of Ketchikan residents (Ketchikan Community Survey, McDowell Group, September 1990) supports this recommendation. 4

* Management objectives of the preferred alternative should be designed to emphasize roaded recreational access, while minimizing adverse habitat effects in the Upper George Inlet, Saddle Lakes, and the Salt Lake area. While we agree that localized habitat values for these areas (Blocks A, C and D, respectively) rank relatively high as displayed in the project area analysis (Old-Growth Areas Ranked by Wildlife Species, Table 4-45), ~~the DEIS lacks justification that the extensive blocks of contiguous old-growth retention as presently displayed in Alternatives 5 and 7 are necessary to meet the NEPA and NFMA objectives.~~ In certain cases such blocks may be significant in the maintenance and enhancement of deer populations and to achieve wildlife management goals. ~~However this conclusion is not supported by the alternatives analysis presented in the DEIS and further analysis is recommended.~~ 5 6

The recent legislative designation of the adjacent Naha LUD II area signifies heightened public support for the maintenance of the Naha area in protective status. The State is on record in support of this permanent designation. The newly authorized management area comprises approximately 31,794 acres of national forest system lands protected in perpetuity from timber harvest. Our review concludes that the Naha LUD II designation permanently removes approximately 19,329 acres of commercial forest land and an estimated 436 million board feet (inventory volume) of timber from the operable timber base. The Naha LUD II management area designation should be clearly displayed on all maps accompanying the FEIS.]*

Mr. Steve Ambrose

5

March 8, 1991

* Additional analysis is recommended to enhance immediate roaded recreational opportunities within the project area. The DEIS and many of the State's recommendations describe management alternatives which provide future roaded recreational opportunities, as a result of project road construction originating at Shelter Cove. ~~As noted on Page 2, additional analysis should consider extensions of the existing Ketchikan road system within the project area to support immediate, well-planned roaded recreational needs.~~ } 8

* ~~The FEIS and preferred alternative analysis should incorporate the fishery protection provisions as per Section 103 of the Tongass Timber Reform Act.~~ Stream buffer requirements presented in Appendix B do not meet the fishery protection provisions of the Tongass Timber Reform Act. Recent TLMP amendments authorizing forest-wide implementation of this specific provision became effective February 4, 1991. } 9

Thank you for this extended comment opportunity. If you have any questions feel free to contact me or Steve Jacoby at 465-3562.

Sincerely,

Paul C. Rusanowski, PhD.
Director

cc: Jim McAllister, DNR
Daryl McRoberts, DNR
Rick Reed, DFG
Jack Gustafson, DFG
Dick Stokes, DEC
Jim Ferguson, DEC
Mike McKinnon, DOT
Charles Gasparsk, DOT
Andy Peckovich, DNR
Judith Bittner, DNR
Steve Segovia, Ketchikan Ranger District
Bruce Phelps, Ketchikan Gateway Borough
The Honorable Lloyd Jones
The Honorable Robin L. Taylor
Lorraine Marshall, DGC
Steve Jacoby, DGC

**Letter from Paul C. Rusanowski, Director, Division of Governmental Coordination
State of Alaska**

Comment 1: (paraphrased)

The State recommends that Alternative 7 be modified to emphasize roaded recreation opportunities in the Salt Lake area.

Response 1:

This has been reflected in the ROD.

Comment 2: (paraphrased)

The State recommends that additional access analysis be undertaken to reliably access non LUD II road access requirements to the above named harvest units or to a substitute viable harvest regime in this area. This analysis should additionally include access opportunities from the existing Ketchikan road system.

Response 2:

Access analysis has been undertaken for this area. We feel some roading can be reduced, but not all. The environmentally preferred location still requires some encroachment into the LUD II. We feel additional access from the existing Ketchikan road system is important. We feel such an undertaking should allow for ample public input and a separate NEPA document to address the issues and concerns.

Comment 3: (paraphrased)

The State recommends deferral of road access to harvest units which require LUD II access to harvest units and that analysis be undertaken to identify equivalent replacement volume.

Response 3:

The ROD does not harvest units which require LUD II access. We have identified replacement volume outside old-growth prescription areas by increasing unit size.

Comment 4: (paraphrased)

The State recommends an alternative analysis with community roaded recreation emphasis for the Upper George Inlet, Saddle Lakes and the Salt Lake area.

Response 4:

These comments have been reflected in the ROD.

Comment 5: (paraphrased)

Management objectives of the preferred alternative should be designed to emphasize roaded recreational access, while minimizing adverse habitat effects in the Upper George Inlet, Saddle Lakes, and the Salt Lake area.

Response 5:

This has been done in the ROD.

Comment 6: (paraphrased)

The DEIS lacks justification that the extensive blocks of contiguous old growth retention as presently displayed are necessary to meet the NEPA and NFMA objectives. In certain cases such blocks may be significant in the maintenance and enhancement of deer populations and to achieve wildlife management goals. However, this conclusion is not supported by the alternatives analysis presented in the DEIS and further analysis is recommended.

Response 6:

NEPA requires that we display a reasonable range of alternatives, we feel we have done this. You are correct in stating that additional analysis is required and we have attempted to do so in the FEIS. We will be monitoring the old growth blocks during implementation and through time. This "feed back" information will give us additional insight into the effectiveness for future projects.

Comment 7: (paraphrased)

The Naha LUD II management area designation should be clearly displayed on all maps accompanying the FEIS.

Response 7:

We agree.

Comment 8: (paraphrased)

As noted on page 2, additional analysis should consider extensions of the existing Ketchikan road system within the project area to support immediate, well-planned roaded recreation needs.

Response 8:

See response 2.

Comment 9: (paraphrases)

The FEIS and preferred alternative analysis should incorporate the fishery protection provisions as per Section 103 of the Tongass Timber Reform Act.

Response 9:

This has been done.

KETCHIKAN GATEWAY BOROUGH

Planning Department

344 Front Street

Ketchikan, Alaska 99901

(907) 228-6610

March 20, 1991

Stephen Ambrose
Acting Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Subject: 1950 Shelter Cove Draft Environmental Impact Statement
(Alternatives 3 and 7)

Dear Mr. Ambrose:

This correspondence is meant to update the Ketchikan Gateway Borough position regarding the Draft Environmental Impact Statement for Shelter Cove, and specifically to further amplify on our support for Alternative 3. Again, we believe that this alternative provides the best match between the objectives expressed in the Environmental Impact Statement and the community values that were listed in our correspondence of January 14, 1991. However, since that time we have had the opportunity to listen to discussions involving Alternative 7 at the local, state, and federal levels. We believe there are certain advantages that are presented in Alternative 7 that can be included within a modified Alternative 3, and there are certain issues raised in Alternative 7 regarding habitat that may also be incorporated within Alternative 3.

Specifically, the timber harvest areas identified on the southeastern part of the peninsula, generally including harvest units 9 through 13 and units 39 through 49 can be effectively included, we believe, in Alternative 3. The effect of this action would be to increase the timber harvest levels of this Alternative, thereby meeting the economic development goal of the community as well as providing compensating areas of timber harvest for areas of timber harvest that may be eliminated or reduced in other areas of the proposed sale area.

The Alaska Department of Fish and Game has emphasized the need for continuous, large blocks of old growth timber within the area of Salt Lakes and Salt Creek. The Borough does not find support within the Environmental Impact Statement for this extent of "necessary" retention of old growth forest within VCU747.

Received 3/21/91 (D.F.)

Nonetheless, partly to accommodate their stated concerns, and as a means of providing a compromise to our position, the Borough would agree to the elimination of timber harvest areas 24, 25, and 26 in VCU747 and the reduction and reconfiguration of timber harvest areas 42, 43, 44, and 45 in VCU747 of Alternative 3. The latter areas are generally adjacent to Salt Lakes and to Salt Creek. We believe that the elimination of these areas, combined with the inclusion of other areas in the southeastern portion of the peninsula, will provide requisite timber harvest levels and ensure adequate habitat protection.

Nonetheless, it is critical that the mainline road which is part of Alternative 3 that accesses the area immediately north of the Salt Chuck and the areas adjacent to Salt Lakes and Salt Creek be retained, as envisioned in Alternative 3. Access to these areas is critical in terms of meeting the Borough's roaded recreational objectives.

Finally, the Borough recognized the apparent need for the Forest Service to eliminate timber harvest areas 46, 47, and 48 within VCU742, which is within portions of the Naha primitive area.

We believe that these comments should help the Forest Service to develop a "mixed alternative" that combines the best features of Alternatives 3 and Alternative 7. We feel that these comments are generally consistent with the recommendations expressed in the State position as described in the Department of Community and Regional Affairs correspondence dated March 11, 1991.

The opportunity to comment on the Environmental Impact Statement is appreciated, and we hope that this most recent statement by the Borough on this matter will help clarify both our position as well as provide some flexibility to the Forest Service in its crafting of the final alternative. Although our previous correspondence on this matter remains valid, the information provided herein will both retain our previous position as well as provide opportunities for Forest Service refinements that reflect timber harvest, roaded recreation, and habitat protection concerns raised by community residents, the Borough, as well as by agencies of the State.

Sincerely,

Ralph M. Bartholomew, Mayor

RMB/BGP/bjs

Letter from Ralph M. Bartholomew, Mayor, Ketchikan Gateway Borough

Comment: (paraphrased)

We believe that these comments should help the Forest Service to develop a "mixed alternative" that combines the best features of Alternative 3 and Alternative 7.

Response:

Your comments have been reflected in the ROD.

22

Kec 3/20
Ketchikan
Alaska
LH/LS

KETCHIKAN GATEWAY BOROUGH

Planning Department

344 Front Street

Ketchikan, Alaska 99901

(907) 228-6610

March 20, 1991

Stephen Ambrose
Acting Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Subject: 1950 Shelter Cove Draft Environmental Impact Statement
(Alternatives 3 and 7)

Dear Mr. Ambrose:

This correspondence is meant to update the Ketchikan Gateway Borough position regarding the Draft Environmental Impact Statement for Shelter Cove, and specifically to further amplify on our support for Alternative 3. Again, we believe that this alternative provides the best match between the objectives expressed in the Environmental Impact Statement and the community values that were listed in our correspondence of January 14, 1991. However, since that time we have had the opportunity to listen to discussions involving Alternative 7 at the local, state, and federal levels. We believe there are certain advantages that are presented in Alternative 7 that can be included within a modified Alternative 3, and there are certain issues raised in Alternative 7 regarding habitat that may also be incorporated within Alternative 3.

Specifically, the timber harvest areas identified on the southeastern part of the peninsula, generally including harvest units 9 through 13 and units 39 through 49 can be effectively included, we believe, in Alternative 3. The effect of this action would be to increase the timber harvest levels of this Alternative, thereby meeting the economic development goal of the community as well as providing compensating areas of timber harvest for areas of timber harvest that may be eliminated or reduced in other areas of the proposed sale area.

The Alaska Department of Fish and Game has emphasized the need for continuous, large blocks of old growth timber within the area of Salt Lakes and Salt Creek. The Borough does not find support within the Environmental Impact Statement for this extent of "necessary" retention of old growth forest within VCU747.

Received 3/24/91 (D.F.)

Nonetheless, partly to accommodate their stated concerns, and as a means of providing a compromise to our position, the Borough would agree to the elimination of timber harvest areas 24, 25, and 26 in VCU747 and the reduction and reconfiguration of timber harvest areas 42, 43, 44, and 45 in VCU747 of Alternative 3. The latter areas are generally adjacent to Salt Lakes and to Salt Creek. We believe that the elimination of these areas, combined with the inclusion of other areas in the southeastern portion of the peninsula, will provide requisite timber harvest levels and ensure adequate habitat protection.

Nonetheless, it is critical that the mainline road which is part of Alternative 3 that accesses the area immediately north of the Salt Chuck and the areas adjacent to Salt Lakes and Salt Creek be retained, as envisioned in Alternative 3. Access to these areas is critical in terms of meeting the Borough's roaded recreational objectives.

Finally, the Borough recognized the apparent need for the Forest Service to eliminate timber harvest areas 46, 47, and 48 within VCU742, which is within portions of the Naha primitive area.

We believe that these comments should help the Forest Service to develop a "mixed alternative" that combines the best features of Alternatives 3 and Alternative 7. We feel that these comments are generally consistent with the recommendations expressed in the State position as described in the Department of Community and Regional Affairs correspondence dated March 11, 1991. } i

The opportunity to comment on the Environmental Impact Statement is appreciated, and we hope that this most recent statement by the Borough on this matter will help clarify both our position as well as provide some flexibility to the Forest Service in its crafting of the final alternative. Although our previous correspondence on this matter remains valid, the information provided herein will both retain our previous position as well as provide opportunities for Forest Service refinements that reflect timber harvest, roaded recreation, and habitat protection concerns raised by community residents, the Borough, as well as by agencies of the State.

Correspondence from the Borough Mayor on this matter will be forthcoming this Friday; however, this correspondence is provided to ensure the Forest Services' understanding of our position in the event that there are immediate discussions on the selection of a referred alternative. Mr. Bartholomew's letter will reflect the issues raised in this correspondence.

Sincerely,

Bruce Phelps

Bruce Phelps, AICP
Planning Director

BGP/bjs

Letter from Bruce Phelps, Planning Director, Ketchikan Gateway Borough

Comment:(paraphrased)

We believe that these comments should help the Forest Service to develop a "mixed alternative" that combines the best features of Alternative 3 and Alternative 7.

Response:

Your comments have been reflected in the ROD.

KETCHIKAN PUBLIC UTILITIES

2930 TONGASS AVENUE

KETCHIKAN, ALASKA 99901

USDA - FOREST SERVICE
KETCHIKAN AREA
TELEPHONE 907-225-1000
FAX 907-225-1888

RECEIVED

FEB 22 1991

FOREST SUPERVISORS OFFICE	
ES	
DPS	
PLN	
EVS	
AC	
LM	
ENG	
FSW	
MAWS	
R&I	

February 22, 1991

MUNICIPALLY OWNED
ELECTRIC TELEPHONE WATER

Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Attention: Mr. Stephen Ambrose
Acting Forest Supervisor
Ketchikan Area

Subject: 1950 Shelter Cove Draft Environmental Impact Statement, Alaska Region,
Ketchikan Area

Dear Mr. Ambrose:

Ketchikan Public Utilities would like to express its support for Alternative 3 of the Shelter Cove Draft Environmental Impact Statement. This alternative offers the most acceptable balance necessary to meet the objectives of the Environmental Impact Statement and community goals of recreational opportunity, a more developed road system and better access than provided under other alternatives.

We are acutely aware that the Environmental Impact Statement will impact to a large degree the proposed electric transmission line from Lake Tyee to Swan Lake and the adjacent road corridor. We support a major road corridor that would allow for easy access to the proposed transmission line, enhance access to and use of recreation areas and the continuing viability of the timber industry. } i

Ketchikan Public Utilities agrees with the City of Ketchikan and the Ketchikan Gateway Borough that Alternative 3, the Recreation/Visual Resource Emphasis alternative is the best and we hereby lend our support to it. We would like to thank you for this opportunity to comment on the Shelter Cove Draft Environmental Impact Statement. If you desire any further comments or input, please contact me.

Best regards,

KETCHIKAN PUBLIC UTILITIES

Richard / Corbin for
Thomas W. Stevenson
General Manager

RJC:TWS:LLH

Letter from Thomas W. Stevenson, General Manager, KPU

Comment (paraphrased)

We support a major road corridor that would allow easy access to the proposed transmission line from Lake Tyee to Swan Lake.

Response:

Roads planned in the Shelter Cove DEIS indicate several crossing of the KPU power transmission lines. Such crossings will be coordinated with KPU during the design and construction phases.

In reviewing your concerns relating to power transmission corridors, I am assuming you are referring to areas outside the Shelter Cove project area. The transmission corridor is already in place and requires no additional right-of-way. From your statements, I believe you are relating to the Tyee intertie which runs from Swan Lake northward. This is not in the project area.

KETCHIKAN PUBLIC UTILITIES

2930 TONGASS AVENUE

KETCHIKAN, ALASKA 99901

TELEPHONE 907-225-1000
FAX 907-225-1888

February 22, 1991

MUNICIPALLY OWNED
ELECTRIC TELEPHONE WATER

Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Attention: Mr. Stephen Ambrose
Acting Forest Supervisor
Ketchikan Area

Subject: 1950 Shelter Cove Draft Environmental Impact Statement, Alaska Region,
Ketchikan Area

Dear Mr. Ambrose:

The City of Ketchikan wishes to express its continued support of Alternative 3 as the best alternative to the 1950 Shelter Cove Draft Environmental Impact Statement. Our comments and recommendations to the U.S. Forest Service request for such regarding this follow the community objectives that have been previously identified. } i

1. The importance of a sound economic base of which the timber industry is a principal entity. We consider alternatives that provide jobs and community income impact the quality of life that we are constantly trying to improve.
2. The creation of a road system that will be or can be upgraded to an acceptable public access standard for an inter/intra island road. Alternatives that provided for such access and that could be integrated with an eventual inter-island road were judged more valuable than other alternatives.
3. The Community Attitude Survey (for outdoor recreation) found a great need for additional roaded recreational opportunities and access to them makes this alternative more valuable than those that do not provide for such.
4. An environmental awareness of the pristine wilderness that we live and work in and the minimization of the impact upon habitat resources while accomplishing other previously stated objectives.

The Ketchikan City Council and I would like to thank you for this opportunity to comment on the Shelter Cove Draft Environmental Impact Statement. We continue to follow the

Mr. Stephen Ambrose
February 22, 1991
Page 2

progress of this project and with great interest. If there is anything further that we can provide you with, please contact me.

Sincerely,

CITY OF KETCHIKAN d/b/a
KETCHIKAN PUBLIC UTILITIES

Ted Ferry, Mayor

TWS:LLH

Letter from Ted Ferry, Mayor, City of Ketchikan

Comment:

The City of Ketchikan wishes to express its continued support of Alternative 3 as the best alternative to the Shelter Cove DEIS.

Response:

Your comments are appreciated.

RECORD OF DECISION MAP

- HARVEST UNIT ALTERNATIVE
- OLD GROWTH RETENTION AREA
- LAKES OR PONDS
- SALTWATER

- AHMU-CLASS 1 STREAM
- AHMU-CLASS 2 STREAM
- AHMU-CLASS 3 STREAM
- STREAM BUFFER BORDER
- ROADS
- PRIVATE LANDS BORDER

PROJECTION: STATEPLANE SCALE: 1"=1000'