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United States
Department of
Agriculture

Forest Service

Tongass
National Forest

R10 - MB-332

October 1996



Upper Carroll Timber Sale

Final Environmental Impact Statement

Volume III: Appendix L



United States
Department of
Agriculture



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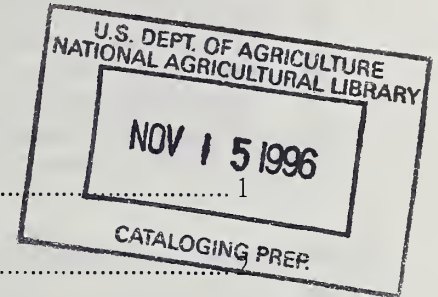
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EVC	Existing/Expected Visual Condition
FEIS	Final Environmental Impact Statement
FSH	Forest Service Handbook
FSM	Forest Service Manual
GIS	Geographic Information System
IDT	Interdisciplinary Team
KPC	Ketchikan Pulp Company
KV	Knutsen-Vandenberg Act
LTF	Log Transfer Facility
LUD	Land Use Designation
LWD	Large Woody Debris (same as LOD)
MBF	One Thousand Board Feet
MELP	Multi-Entry Layout Process
MIS	Management Indicator Species
MM	Maximum Modification
MMBF	One Million Board Feet
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
P	Primitive
PR	Partial Retention
R	Retention
RM	Roaded Modified
RN	Roaded Natural
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
SHPO	State Historic Preservation Officer
SPM	Semi-Primitive Motorized
SPNM	Semi-Primitive Nonmotorized
TLMP	Tongass Land Management Plan
TRUCS	Tongass Resource Use Cooperative Survey
TTRA	Tongass Timber Reform Act
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFWS	United States Fish and Wildlife Service
VCU	Value Comparison Unit
VQO	Visual Quality Objective
WAA	Wildlife Analysis Area

Acknowledgments

Front cover: By Cindy Ross Barber, 1992. The design illustrates the range of interconnected issues addressed in the EIS.

Response to Public Comments

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Response To Public Comments

Introduction

The USDA Forest Service, Tongass National Forest, Ketchikan Area, received a total of 382 written and oral comments on the Upper Carroll Draft Environmental Impact Statement. The Interdisciplinary Team thoroughly and objectively read and analyzed every response and categorized each expressed issue or concern. The identified issues were then sub-divided or grouped as appropriate to 1) facilitate response and 2) facilitate review of the full range of issues and responses by the Deciding Officer, other Federal and State Agencies, and the general public. Due to the exceptionally voluminous comments received, the comments have been summarized, rather than included in their entirety, in compliance with 40 CFR 1503.4(5)(b). Copies of all letters and a certified transcript of subsistence testimonies are included in the Upper Carroll Planning Record.

Use of public comments is not a vote counting process; all comments were carefully considered in the preparation of the Final EIS (FEIS). All issues and document-specific comments are responded to in this appendix. Alternatives have been modified based on the issues and concerns derived from the public comments; and additional discussion and expanded analyses has been done in the FEIS to address public concerns.

The format for discussing the Forest Service Response to Public comments in this appendix is as follows:

1. Statement of the main issue or comment, with a brief summary of the range of comments;
2. Statement of relevant sub-issue or sub-topic;
3. List of organizations or individuals who addressed the issue by code number;
4. Examples of specific statements from the written responses or subsistence hearings that reflect the full range of public input on the issue;
5. Forest Service response.

The Forest Service response provides an overview of Forest Service policy or direction regarding the issue, discusses how the issue has been addressed, and directs the reader to the appropriate section of the FEIS for a more complete discussion.

L Appendix

List of Commenters

The following list includes all individuals, organizations, and agencies that the U.S. Forest Service received comments from during the 45 day comment period following the publication of the Upper Carroll Draft Environmental Impact Statement. Each comment received was given an individual letter number which is listed in the following table next to the name of the commenter. Comments were grouped by issues addressed. This document includes the U.S. Forest Service response to the issues addressed in public comment. Above each response is a list of letters and comments received on that particular issue. A copy of each letter is included at the end of this appendix.

Letters Received from Individuals, Organizations, and Agencies

Letter #	Last Name	First Name	City	State	Organization
12	Amundson	Diana	Ketchikan	AK	A-K Tug & Barge Inc.
50	Amundson	Peter	Ketchikan	AK	A-K Tug & Barge Inc.
43	Ballard	Ernesta	Ketchikan	AK	Ketchikan Chamber of Commerce
58	Baskett	Antone	Ketchikan	AK	
11	Bennett	Jill L.	Ward Cove	AK	
5	Canterbury	Jackie	Ketchikan	AK	
9	Carlton	Mayor Jim	Ketchikan	AK	Ketchikan Gateway Borough
30	Clabby	Margaret	Ketchikan	AK	
31	Clabby	Margaret	Ketchikan	AK	
53	Cleman	Mike	Ketchikan	AK	Campbell Towing Company
15	Cook	H.R.	Ketchikan	AK	
49	Craig	Tom	Ketchikan	AK	
17	Freitag	Gary	Ketchikan	AK	SSRAA
24	Garza	Corrine	Ketchikan	AK	Ketchikan Indian Corporation (letter received 1/18/95 as part of gov't to gov't coordination)
2	Gates	Paul	Anchorage	AK	U.S. Dept. of the Interior
14	Gossman	Lloyd	Ketchikan	AK	Ty-Matt Inc. and AK Ship & Dry Dock
16	Gravel	Deborah	Ketchikan	AK	
10	Gustafson	Jack	Ketchikan	AK	Alaska Dept. of Fish and Game
18	Gutleber	Richard J.	Anchorage	AK	U.S. Army Engineer District
1	Hanley	Kevin	Juneau	AK	Alaska Dept. of Environmental Conservation
8	Hays	Hank	Bainbridge Is.	WA	
44	Hendricks	Bill and Joanna	Ketchikan	AK	
61	Hendricks	Ray, III			
27	LaPerriere	Marcel & Connie	Ketchikan	AK	Glacier Grotto
19	Lewis	Cecelia L.	Ketchikan	AK	
4	Lindekugel	Buck	Juneau	AK	SEACC
56	Lisac	Jennifer L.	Ketchikan	AK	
42	Magyar	John A.	Ketchikan	AK	Ketchikan Public Utilities
59	Meck	Jacqueline R.	Ketchikan	AK	
48	Meske	Sandra	Ward Cove	AK	
51	Meske	Sandra	Ketchikan	AK	American Agri-Women
52	Meske	Sandra	Ketchikan	AK	Alaska Women in Timber
47	Miller	Kathy	Ketchikan	AK	Miller Inc.
60	Montgomery	Katie	Ketchikan	AK	
32	Myren	Richard	Juneau	AK	
45	Nicholson	Kent P.	Ketchikan	AK	Ketchikan Pulp Company
46	Olivadoti	Troy	Ketchikan	AK	
3	Parkin	Richard B.	Seattle	WA	Environmental Protection Agency - Region 10
28	Pitcher	Gerald, Cheri, & Kim	Thorne Bay	AK	Alaska Families in Timber

6	Rabung	Sam	Neets Bay	AK	Neets Bay Hatchery Manager
62	Rodger	Jeffrey L. & Kathleen I.	Ketchikan	AK	
22	Romine	Bruce	Ward Cove	AK	
20	Romine	Linda	Ward Cove	AK	
21	Sallee	Mike	Ketchikan	AK	
25	Shoaf	Bill	Ketchikan	AK	
26	Shull	Delmar L.	Ward Cove	AK	
13	Smith	Tracy	Ketchikan	AK	Tongass Conservation Society
23	Swiger	Stuart & K. A.	Ketchikan	AK	
54	Tanino	Roy	Ketchikan	AK	
7	Thomas	Carol	Ketchikan	AK	
29	Timothy	Jackie	Juneau	AK	State of Alaska - DGC
57	Wladyka	Curtis	Ketchikan	AK	
55	Zadina	Lauri L.	Ketchikan	AK	

Subsistence Hearings

The following individuals testified at the U.S. Forest Service subsistence hearings held February 22, 1996 at Cape Fox Lodge and February 23, 1996 in Saxman, Alaska.

Comment #	Last Name	First Name	City	State	Organization
36	Canterbury	Jackie	Ketchikan	AK	
37	Carlton	Mayor Jim	Ketchikan	AK	Ketchikan Gateway Borough
33	Carnes	George A.	Ketchikan	AK	Ketchikan Indian Corp.—Deer Mtn. Fish Hatchery
40	Clabby	Margaret	Ketchikan	AK	
35	Freitag	Gary	Ketchikan	AK	SSRAA
34	Hope	Gerry	Ketchikan	AK	Ketchikan Indian Corp.
41	Hummel	Eric	Ketchikan	AK	
38	Jacksyn	Richard	Ketchikan	AK	Ketchikan Indian Corp.
39	Rabung	Sam	Neets Bay	AK	Neets Bay Hatchery

Form Letter 1

A number of comments in the form of form letters were received during the comment period. Quite a few of the letters did not include addresses and/or the name of the commenter was in script and was illegible. An attempt was made to secure addresses for letters that included a legible signature. In order to reduce the bulk of this document, only one example of each form letter has been printed in this document. The letter number used for Form Letter 1 will be FL1. Individual letter numbers were not given to comments received as form letters. An example of each form letter is located at the back of this document.

Letter #	Code	Last Name	First Name	City	State
FL1	89	Bennett	Lonnie		
FL1	67	Berglund	Joe	Ketchikan	AK
FL1	66	Booth	Edward W.	Metlakatla	AK
FL1	93	Cadiente	Jhun	Ketchikan	AK
FL1	90	Campbell	Chris	Ketchikan	AK
FL1	91	Cannon	Robert, Jr.	Ketchikan	AK
FL1	92	Cedar	Greg R.		
FL1	69	Cook	Rod	Ketchikan	AK
FL1	73	Cress	Charles C., III	Ketchikan	AK
FL1	70	Dale	Ralph S.	Ketchikan	AK

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FL1	71	Davis	Garrett R.	Ketchikan	AK
FL1	94	Diggins	Norm	Ketchikan	AK
FL1	95	Dillon	Sharon	Ketchikan	AK
FL1	72	Guthrie	Chris E.	Ketchikan	AK
FL1	96	Hendrickson	Jeffrey A.	Ketchikan	AK
FL1	97	Henry	Ronnie		
FL1	99	Hofstedt	Steven	Ward Cove	AK
FL1	74	Holmes	George	Ketchikan	AK
FL1	98	Huff	Mark	Ward Cove	AK
FL1	65	Illegible		Ketchikan	AK
FL1	68	Illegible		Ward Cove	AK
FL1	100	Illegible			
FL1	106	Illegible			
FL1	109	Illegible			
FL1	110	Illegible			
FL1	112	Illegible			
FL1	114	Illegible			
FL1	75	Illegible		Ward Cove	AK
FL1	79	Illegible		Metlakatla	AK
FL1	88	Illegible			
FL1	76	Kiander	Andy	Ketchikan	AK
FL1	77	Lindberg	Ronald E.	Ketchikan	AK
FL1	101	Lynch	Gregory	Ketchikan	AK
FL1	78	Malone	Kenneth G.	Ketchikan	AK
FL1	80	Martin	Elton L.	Metlakatla	AK
FL1	81	McElroy	Phillip	Ketchikan	AK
FL1	102	McGilton	Harold, Sr.	Metlakatla	AK
FL1	103	Milton	Marvin	Metlakatla	AK
FL1	104	Neumeyer	Dean	Ketchikan	AK
FL1	105	Ohashi	George	Ketchikan	AK
FL1	84	Preston	Carlyle	Ketchikan	AK
FL1	107	Purdy	Scott	Ketchikan	AK
FL1	108	Rhine	Don	Ketchikan	AK
FL1	82	Smith	Alana	Ketchikan	AK
FL1	83	Stockli	Rodney L.	Ketchikan	AK
FL1	85	Trout	Tammy	Ketchikan	AK
FL1	86	Wallace	Bill	Ketchikan	AK
FL1	111	Wallace	Maria	Ward Cove	AK
FL1	87	Walters	Paul	Ketchikan	AK
FL1	113	Wolfe	Dennis	Ward Cove	AK

Form Letter 2

The letter number used for Form Letter 2 will be FL2. Individual letter numbers were not given to comments received as form letters. An example of Form Letter 2 is located at the back of this document.

Letter #	Code	Last Name	First Name	City	State
FL2	133	Amundson	Eric	Ketchikan	AK
FL2	134	Amundson	Kirk	Ketchikan	AK
FL2	135	Amundson	Leif	Ketchikan	AK
FL2	115	Benson	Daniel	Ketchikan	AK
FL2	118	Blubaum	John E.	Thorne Bay	AK
FL2	117	Blubaum	Lynda M.	Ketchikan	AK

FL2	116	Boak	Jeff	Ketchikan	AK
FL2	119	Bohrer	Richard	Ward Cove	AK
FL2	164	Cadiante	Jhun	Ketchikan	AK
FL2	137	Cannon	Robert, Jr.	Ketchikan	AK
FL2	120	Carl	Joseph R.	Ketchikan	AK
FL2	141	Cefstrom	Cheryl	Ketchikan	AK
FL2	124	Cress	Charles C., III	Ketchikan	AK
FL2	121	Daggett	Eric L.	Ward Cove	AK
FL2	122	Davis	Garrett R.	Ketchikan	AK
FL2	139	Diggins	Norm	Ketchikan	AK
FL2	140	DuVal		Ketchikan	AK
FL2	168	Fox	Dalton	Ketchikan	AK
FL2	158	Gruwell	Jim, Jr.		
FL2	142	Guerra	Charles and Shelley	Ketchikan	AK
FL2	143	Harsh	Robert Harsh		
FL2	165	Hendrickson	Jeffrey A.	Ketchikan	AK
FL2	123	Hendrickson	Wayne D.	Ketchikan	AK
FL2	144	Hildebrandt	G.E.	Ward Cove	AK
FL2	145	Hofstedt	Steven	Ward Cove	AK
FL2	125	Hull	Robert D.	Ward Cove	AK
FL2	127	Illegible		Ward Cove	AK
FL2	130	Illegible		Ward Cove	AK
FL2	136	Illegible			
FL2	159	Illegible			
FL2	161	Illegible			
FL2	162	Illegible			
FL2	163	Illegible			
FL2	166	Illegible			
FL2	167	Illegible			
FL2	169	Illegible			
FL2	170	Illegible			
FL2	172	Illegible			
FL2	173	Illegible			
FL2	174	Illegible			
FL2	146	Kile	Larry	Metlakatla	AK
FL2	147	Linton	Ramona	Ketchikan	AK
FL2	126	Malone	Mark J.	Ketchikan	AK
FL2	147	Martinez	Marguerite	Metlakatla	AK
FL2	148	McMahan	Kathy	Ketchikan	AK
FL2	149	Miller	Doug	Ketchikan	AK
FL2	150	Morgan	Jim		
FL2	151	Neumeyer	Dean	Ketchikan	AK
FL2	171	Oman	Robert G.		
FL2	128	Preusser	Ronald and Robin	Ketchikan	AK
FL2	152	Quick	Elaine and Ronald	Ketchikan	AK
FL2	153	Rhine	Don	Ketchikan	AK
FL2	160	Scoshie	John R.	Ketchikan	AK
FL2	129	Seludo	Herman F.	Ketchikan	AK
FL2	154	Stout	Charles W.	Ward Cove	AK
FL2	155	Visitacion	Rolando		
FL2	132	Wallace	Bill	Ketchikan	AK
FL2	156	Walters	Philip J.	Ketchikan	AK
FL2	157	Wolfe	Dennis	Ward Cove	AK
FL2	131	Young	Marla	Ketchikan	AK

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Form Letter 3

The letter number used for Form Letter 3 will be FL3. Individual letter numbers were not given to comments received as form letters. An example of Form Letter 3 is located at the back of this document.

Letter #	Code	Last Name	First Name	City	State
FL3	211	Baze	W.D.		
FL3	175	Blubaum	John E.	Thorne Bay	AK
FL3	176	Blubaum	John E.	Thorne Bay	AK
FL3	226	Brendible	William, Jr.	Metlakatla	AK
FL3	212	Cadiente	Jhun	Ketchikan	AK
FL3	194	Cannon	Robert, Jr.	Ketchikan	AK
FL3	177	Carl	Mark E.	Ketchikan	AK
FL3	230	Cedar	Greg R.		
FL3	178	Cefstrom	Cheryl	Ketchikan	AK
FL3	202	Coleman	Cliff W.		
FL3	179	Cooper	Jeremy	Ward Cove	AK
FL3	181	Cress	Charles C., III	Ketchikan	AK
FL3	182	Davis	Garrett R.	Ketchikan	AK
FL3	227	Diggins	Norm	Ketchikan	AK
FL3	220	Dundas	Vincent, Sr.	Metlakatla	AK
FL3	183	Dyakanoff	David	Ketchikan	AK
FL3	221	Faucett	Perry, Jr.	Metlakatla	AK
FL3	209	Hendrickson	Jeffrey A.	Ketchikan	AK
FL4	229	Hofstedt	Steven	Ward Cove	AK
FL3	224	Holmes	George	Ketchikan	AK
FL3	180	Illegible		Ketchikan	AK
FL3	184	Illegible		Metlakatla	AK
FL3	185	Illegible		Metlakatla	AK
FL3	188	Illegible		Metlakatla	AK
FL3	199	Illegible			
FL3	200	Illegible			
FL3	204	Illegible			
FL3	205	Illegible			
FL3	206	Illegible			
FL3	207	Illegible			
FL3	213	Illegible			
FL3	214	Illegible			
FL3	216	Illegible			
FL3	218	Illegible			
FL3	219	Illegible			
FL3	225	Illegible			
FL3	228	Illegible			
FL3	186	Izatt	Rob	Ward Cove	AK
FL3	187	Jarmoski	Jack	Ketchikan	AK
FL3	223	Johnson	Sammy	Metlakatla	AK
FL3	191	Kraft	Dick	Ketchikan	AK
FL3	195	Linton	James F.	Ketchikan	AK
FL3	189	Malone	Kenneth	Ketchikan	AK
FL3	190	McElroy	Phillip	Ketchikan	AK
FL3	196	Neumeyer	Dean	Ketchikan	AK
FL3	201	Reno	R.O.		
FL3	208	Rhine	Don	Ketchikan	AK

FL3	217	Romero	Phil	Ketchikan	AK
FL3	203	Sathoff	Kirk	Ward Cove	AK
FL3	210	Stout	Charles W.	Ward Cove	AK
FL3	192	Taylor	Robert J.	Ward Cove	AK
FL3	222	Thompson	Don	Ketchikan	AK
FL3	197	Turner	Bryan	Ward Cove	AK
FL3	198	Vandiver	John	Ketchikan	AK
FL3	193	Wallace	Bill	Ketchikan	AK
FL3	215	Wolfe	Dennis	Ward Cove	AK

Form Letter 4

The letter number used for Form Letter 4 will be FL4. Individual letter numbers were not given to comments received as form letters. An example of Form Letter 4 is located at the back of this document.

Letter #	Code	Last Name	First Name	City	State
FL4	232	Blubaum	John E.	Thorne Bay	AK
FL4	231	Blubaum	Lynda M.	Ketchikan	AK
FL3	263	Cadiente	Jhun	Ketchikan	AK
FL4	276	Cannon	Robert, Jr.	Ketchikan	AK
FL4	281	Cedar	Greg R.		
FL4	234	Cefstrom	Cheryl	Ketchikan	AK
FL4	235	Claggett	Cliff	Metlakatla	AK
FL4	236	Cress	Charles C., III	Ketchikan	AK
FL4	237	Davis	Garrett R.	Ketchikan	AK
FL4	272	Davis	Mike		
FL4	277	Diggins	Norm	Ketchikan	AK
FL4	238	Gazzaway	Kenneth	Metlakatla	AK
FL4	239	Gram	Gerald	Metlakatla	AK
FL4	253	Hendrickson	Jeffrey A.	Ketchikan	AK
FL4	275	Hofstedt	Steven	Ward Cove	AK
FL4	258	Holm	Patrick	Ketchikan	AK
FL4	273	Holmes	George	Ketchikan	AK
FL4	279	Huff, Mark	Mark	Ward Cove	AK
FL4	233	Illegible		Metlakatla	AK
FL4	240	Illegible		Ketchikan	AK
FL4	239	Illegible			
FL4	259	Illegible			
FL4	260	Illegible			
FL4	262	Illegible			
FL4	264	Illegible			
FL4	265	Illegible			
FL4	266	Illegible		Ketchikan	AK
FL4	267	Illegible			
FL4	271	Illegible			
FL4	245	Jametski	Bruce	Metlakatla	AK
FL4	274	Kasinger	Ronnie	Ketchikan	AK
FL4	278	Kostrometinoff		Metlakatla	AK
FL4	261	Lawrence	Charles	Ketchikan	AK
FL4	242	Malone	Lana	Ketchikan	AK
FL4	241	Marcil	Stan	Metlakatla	AK
FL4	243	McElroy	Phillip	Ketchikan	AK
FL4	270	Mills	R.	Metlakatla	AK

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FL4	244	Moseley	Stan	Metlakatla	AK
FL4	257	Nelson	Hyrum	Ketchikan	AK
FL4	251	Neumeyer	Dean	Ketchikan	AK
FL4	268	Newkirk	Frank	Ketchikan	AK
FL4	269	Olsen	Roger D.	Ketchikan	AK
FL4	252	Rhine	Don	Ketchikan	AK
FL4	246	Schleusner	Tim L.	Metlakatla	AK
FL4	247	Talerico	Frank	Ketchikan	AK
FL4	248	Taylor	Robert J.	Ward Cove	AK
FL4	255	Trout	Tom		
FL4	280	Warren	Art		
FL4	256	Winsenberg	Eric		
FL4	254	Wolfe	Dennis	Ward Cove	AK
FL4	250	Yliniemi	Michael K.	Metlakatla	AK

Form Letter 5

The letter number used for Form Letter 5 will be FL5. Individual letter numbers were not given to comments received as form letters. An example of Form Letter 5 is located at the back of this document.

Letter #	Code	Last Name	First Name	City	State
FL5	283	Baskett	Billie	Ketchikan	AK
FL5	333	Blandov	Keith	Metlakatla	AK
FL5	285	Blubaum	John E.	Thorne Bay	AK
FL5	320	Brendible	Henry	Metlakatla	AK
FL5	339	Bryan	Gary	Metlakatla	AK
FL5	304	Bueza	Bernardo	Ketchikan	AK
FL5	311	Cadiente	Jhun	Ketchikan	AK
FL5	330	Cannon	Robert, Jr.	Ketchikan	AK
FL5	332	Cedar	Greg R.		
FL5	288	Cefstrom	Cheryl	Ketchikan	AK
FL5	321	Cook	Margie	Ketchikan	AK
FL5	286	Cress	Charles C., III	Ketchikan	AK
FL5	287	Davis	Garrett R.	Ketchikan	AK
FL5	336	Diggins	Norm	Ketchikan	AK
FL5	315	Dundas	Dan, Jr.	Metlakatla	AK
FL5	329	Dundas	Martin	Metlakatla	AK
FL5	305	Hendrickson	Jeffrey A.	Ketchikan	AK
FL5	331	Hofstedt	Steven	Ward Cove	AK
FL5	322	Holmes	George	Ketchikan	AK
FL5	289	Howell	Gary	Ketchikan	AK
FL5	317	Huxtable	Sharon	Ward Cove	AK
FL5	282	Illegible		Ward Cove	AK
FL5	284	Illegible		Ketchikan	AK
FL5	298	Illegible			
FL5	301	Illegible			
FL5	302	Illegible			
FL5	309	Illegible			
FL5	310	Illegible			
FL5	312	Illegible			
FL5	314	Illegible			
FL5	316	Illegible			
FL5	318	Illegible			

FL5	319	Illegible			
FL5	326	Illegible			
FL5	328	Illegible			
FL5	334	Illegible			
FL5	337	Illegible			
FL5	338	Illegible			
FL5	290	Malone	Michelle	Ketchikan	AK
FL5	324	McCollum	Dennis	Ketchikan	AK
FL5	291	McConnell	Connie	Ketchikan	AK
FL5	292	McElroy	Phillip	Ketchikan	AK
FL5	335	Meck	Robert	Ketchikan	AK
FL5	293	Mollenhauer	Wesley	Ketchikan	AK
FL5	299	Neumeyer	Dean	Ketchikan	AK
FL5	323	Newkirk	Sue		
FL5	325	Quick	Elaine and Ronald	Ketchikan	AK
FL5	303	Rhine	Don	Ketchikan	AK
FL5	307	Rodriguez	Michael	Ketchikan	AK
FL5	308	Sathoff	Kirk	Ward Cove	AK
FL5	300	Stanker	Tim		
FL5	327	Steinberg	David	Metlakatla	AK
FL5	294	Stout	Charles W.	Ward Cove	AK
FL5	295	Taylor	Robert J.	Ward Cove	AK
FL5	306	Visitacion	Colleen		
FL5	296	Wallace	Bill	Ketchikan	AK
FL5	297	White	Sandra	Ketchikan	AK
FL5	313	Wolfe	Dennis	Ward Cove	AK

Form Letter 6

The letter number used for Form Letter 6 will be FL6. Individual letter numbers were not given to comments received as form letters. An example of Form Letter 6 is located at the back of this document.

Letter #	Code	Last Name	First Name	City	State
FL6					
FL6	378	Andersen	Cliff, Sr.	Metlakatla	AK
FL6	352	Blandov	Michael	Metlakatla	AK
FL6	341	Blubaum	Lynda M.	Ketchikan	AK
FL6	374	Cadiente	Jhun	Ketchikan	AK
FL6	355	Cannon	Robert, Jr.	Ketchikan	AK
FL6	357	Cedar	Greg R.		
FL6	356	Cefstrom	Cheryl	Ketchikan	AK
FL6	342	Collins	J.E.	Ketchikan	AK
FL6	343	Cress	Charles C., III	Ketchikan	AK
FL6	344	Davis	Garrett R.	Ketchikan	AK
FL6	353	Diggins	Norm	Ketchikan	AK
FL6	383	Dundas	Delbert	Metlakatla	AK
FL6	367	Hendrickson	Jeffrey A.	Ketchikan	AK
FL6	381	Hildebrandt	Amelia	Ward Cove	AK
FL6	358	Hofstedt	Steven	Ward Cove	AK
FL6	340	Illegible		Ketchikan	AK
FL6	359	Illegible			
FL6	360	Illegible			
FL6	361	Illegible			
FL6	362	Illegible			

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FL6	363	Illegible			
FL6	365	Illegible			
FL6	366	Illegible			
FL6	369	Illegible			
FL6	370	Illegible			
FL6	371	Illegible			
FL6	372	Illegible			
FL6	373	Illegible			
FL6	376	Illegible			
FL6	377	Illegible			
FL6	380	Illegible			
FL6	382	Illegible			
FL6	384	Illegible			
FL6	345	Malone	Kenneth G.	Ketchikan	AK
FL6	346	McElroy	Phillip	Ketchikan	AK
FL6	354	Milligrock	Jackie	Metlakatla	AK
FL6	350	Neumeyer	Dean	Ketchikan	AK
FL6	347	Preusser	Robin	Ketchikan	AK
FL6	375	Reece	James C.		
FL6	368	Rhine	Don	Ketchikan	AK
FL6	379	Sixbey	Peter R.	Metlakatla	AK
FL6	364	Stulken	Dennis	Ketchikan	AK
FL6	348	Taylor	Robert J.	Ward Cove	AK
FL6	349	Wallace	Bill	Ketchikan	AK
FL6	351	Welk	Heidi	Ketchikan	AK

Response To Public Comments

Issue 1: Cost Effectiveness of Timber Harvest Operations

Issue 1A: Units should be larger or smaller.

Letters and Comments on this Subject Include:

1, 27

Examples Included:

Of particular concern is the fact that 71% of the total unit acreage within S5 occurs on high mass movement index (MMI 3) soils. Compounding this concern is the proposed harvest of adjacent Units 4, 5, and 86, which will result in a combined clearcut totalling 193.3 acres in size. This is the largest contiguous clearcut of all the alternatives. #1

Forest Service Response:

The average unit size per alternative in the DEIS, as noted, ranged from 28.5 to 29.4 acres. The average unit size per alternative in the FEIS is approximately within the same range. Economic issues and resource protection issues when harvesting larger units were thoroughly explored during alternative development. There are many complex issues associated with the selection of settings that make up harvest units. Meeting Forest Plan Standards and Guidelines, addressing the needs of other resources, and working with the constraints imposed by prior harvests are all factors which limit unit size. The maximum created opening size permitted in the western hemlock-Sitka spruce forest type is 100 acres [36 CFR CH11 Sec 219.27 (d) (2)], except where larger openings are permitted, or where larger units produce a more desirable combination of public benefits [36 CFR CH11 Sec 219.27 (d) (i) and (ii)]. In most alternatives there are instances where individual units are combined to create contiguous openings greater than 100 acres (See page 3-172, Upper Carroll DEIS, Appendix B, and Issue 2U for additional information).

Issue 1B: Windthrow analysis should be more site specific.

Letters and Comments on this Subject Include:

1, 21

Examples Included:

Other than the windthrow risk areas identified in Figure 3-16, no site-specific information is provided regarding what, if any, mitigation measures are prescribed to minimize the potential for blowdown within the project areas as a whole and, more specifically, within and adjacent to those units (areas) identified in Figure 3-16 as having high and very high risks of windthrow. #1

Forest Service Response:

Windthrow has occurred in most of the major drainages throughout the Project Area. Table 3-59 "Traits of Windfirm Stands and Traits of Stands Susceptible to Windthrow" attempts to predict potential *windthrow* based on general stand characteristics. *Windthrow* is generally unpredictable on a site or time period specific basis. This is due to varying weather patterns and storm intensities. Only general stand conditions identified in Table 3-59 can be used to identify *windfall* trends or risk factors associated with certain timber stands over the life of their rotation.

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Initial project photo analysis located many of the larger patches of *windfall*. Subsequent field reconnaissance of planned harvest units confirmed these areas of *windthrown* timber and identified many more smaller patches of *windthrow*. This information was used to make adjustments to unit boundaries with the intent of providing additional resource protection by way of modifying unit boundaries to resist additional *windfall* damage (Project Planning Record, 1996).

Issue 1C: Harvest within estuary buffers should be dropped.

Letters and Comments on this Subject Include:

1

Examples Included:

As depicted on the unit card maps, significant portions of Units 35 and 126 overlap the estuary buffers of Upper Carroll Inlet and Shelter Cove, respectively. #1

Forest Service Response:

Unit 35 and 126 boundary locations have been adjusted and no longer include portions of estuary buffer. Units 33 and 34 were dropped from the unit pool. Unit 32 and 39 boundaries have also been adjusted even though they have not been selected by any of the project alternatives.

Issue 1D: Construction costs are excessive (roads, bridges, & LTFs) for the volume harvested.

Letters and Comments on this Subject Include:

1, 2, 5, 31

Examples Included:

Under Alternative 5, approximately 3 miles of road construction is proposed between VCUs 744 and 737 to access only one unit (#92) in the upper Neets Creek drainage. This appears to be excessive and unnecessary for this timber sale. #1

Road density for this project is very high in terms of volume of timber harvested. #5

Forest Service Response:

The Forest Service plans road systems to provide for long term access at the least cost, while also taking into consideration resource protection and public safety. The number of LTFs, total road miles, and the amount of full bench road construction all heavily influence overall construction costs. Each has been minimized to the extent practicable. Forest Service Handbook 2509.22, Soil and Water Conservation, (BMP 14.7) states, "when topographic and drainage conditions allow, design Forest roads with a balanced cut/fill to reduce the amount of excavation and size of fills, except on areas requiring end haul for stability reasons. Under special circumstances, full-bench cuts with end haul may be required." Proposed Upper Carroll road locations were designed to minimize full bench construction to the extent practicable. The actual determination of whether full-bench/endhaul or other expensive road construction techniques are essential is made during project implementation and not during the NEPA process. After road locations are established and reviewed, the route is surveyed and the survey data is used to design the road for construction. During the road design phase, decisions on what construction techniques are necessary to meet all requirements is made on a case-by-case basis. Factors influencing whether or not full bench construction is to be utilized are: ground slope, proximity to streams, soil type, and applicable BMPs.

The range of alternatives are designed to fully explore the issue of economics which include accessing isolated units. It must be pointed out that sometimes there are other considerations or forest uses that drive the decision making process in accessing an isolated unit. For example, the additional road maybe used after timber harvest for recreational purposes. However, in this case, the access of isolated Unit 92 could not be justified and was dropped from the alternative.

Issue 1E: Alternatives to clearcutting.

Letters and Comments on this Subject Include:

2, 10, 13, 21, 27

Examples Included:

However, the USFS is proposing to apply the shelterwood method to only a few units, and dropped other alternative methods from consideration. #2

Forest Service Response:

The selection of clearcutting as the primary method of timber harvest for the Upper Carroll Project Area was evaluated and is consistent with the Chief of the Forest Service's direction to reduce the amount of clearcutting on National Forest lands (June 4, 1992 letter to Regional Foresters and Station Directors). For a discussion of how the Upper Carroll Project Area addresses the seven points contained in the Chief's letter, see the Timber and Vegetation section of Chapter 3. Clearcutting remains the most widely used method of timber harvest for this project and is based on recommendations developed by a certified silviculturist to ensure adequate regeneration and stocking levels. Other silvicultural treatments within the FEIS include shelterwood harvest to enhance regeneration of Alaska yellow cedar and wildlife islands to promote structural within-stand diversity.

Issue 1F: Insect epidemics will increase due to timber harvest.

Letters and Comments on this Subject Include:

2

Examples Included:

One can assume forest pest outbreaks will increase as the forest landscape changes, insect-eating birds decline, and man-induced forest ecosystems are altered. #2

Theoretically, as more forest is clearcut exposing additional buffer trees to wind and radiant energy, drier conditions may evolve (p. 3-169). As more trees per acre are regenerated in these areas, additional water is transported from the ground to the tree through its root system, thus creating a drier condition within the stand. #2

Forest Service Response:

The Forest Service disagrees with the premise that there will be forest pest outbreaks caused by proposed management activities located in the Upper Carroll Project Area. The string of stated assumptions are out of context with the extent or scale of proposed Upper Carroll management activities. This is especially true when past harvesting activities located on the Ketchikan Area (or the Tongass National Forest) are reviewed for any evidence of insect infestation after timber harvest (personal conversation with Pat Tierney, Reforestation Forester, Thorne Bay Ranger District and Bill Nightingale, Planning Forester/Silviculturist, Ketchikan Ranger District). For example, past management practices favored larger or more extensive clearcuts, and as a result, there has been little or no documented evidence of increased insect activity. The average size of today's clearcut within the Upper Carroll Project Area is approximately 30 acres.

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It should also be pointed out that large scale changes in climatic conditions, such as the drought that affected the west coast between 1985 and 1990, cause insect infestations and epidemics. This is due to a prolonged (2 or more years) lack of moisture which places trees located in these regions (large geographic areas) under severe stress.

The reference to page 3-169 of the Upper Carroll DEIS is taken out of context. While it is true that clearcutting temporarily raises soil temperatures, the overall intent of the paragraph was to point out that soil productivity is heightened due to the increase of decomposition of raw humus and the recycling of nutrients, particularly nitrogen, as a result of more light (increase in soil temperature) reaching the forest floor.

Natural regeneration of past clearcuts has always been very successful on the Ketchikan Area. After 5 or more years, there are commonly 5000 or more tree seedlings found per acre by Forest Service regeneration surveys. If the amount of moisture (less rainfall) were to become a limiting factor, then the assertion of dryer conditions, thus clearcutting areas becoming prone to insect infestation, would manifest into dead and dying trees as the site compensated for the newer, dryer conditions. There is no evidence of this occurring on the Ketchikan Area.

Issue 1G: Regeneration concerns on wetlands/low volume stands.

Letters and Comments on this Subject Include:

2

Examples Included:

We suggest the Final EIS include information, including the rate of growth on hydric soils, to support the notion that forested wetlands are capable of regenerating on a sustainable yield basis. #2

Forest Service Response:

The National Forest Management Act (NFMA) of 1976 requires the Forest Service to ensure that all harvested stands are fully stocked with appropriate species within five growing seasons of harvest. Harvest on areas with low site quality and poor regeneration potential were dropped or minimized. Certain low volume stands, especially those having northern and eastern exposures above 1,500 feet elevation will be challenging to regenerate naturally. Some of these harvest units are prescribed for shelterwood harvest to help establish regeneration on difficult sites. All harvested areas will be monitored to determine if artificial regeneration (planting) will be necessary. (See Chapter 3, Silviculture and Timber, Silviculture, Regeneration).

Clearcutting can favor the establishment of Sitka spruce, by destroying advance hemlock regeneration and creating seed beds that are more favorable for post-logging reproduction of spruce. Yellow cedar, like western redcedar, is classified as an intolerant species and as such, is less shade tolerant than either hemlock or spruce. Cedar reproduction can also benefit from the openings created by clearcutting if an adequate seed source is present or artificial regeneration occurs. For a more in depth explanation, also see Chapter 3, Silviculture and Timber, Silviculture Systems, Even-aged Systems.

Issue 1H: Economic models (IPASS vs IMPLAN).

Letters and Comments on this Subject Include:

3

Examples Included:

The jobs figures seem to lump direct and indirect but are not real clear about just what the "indirect" includes. Also, I have been unable to find out whether the job figures include sawmill and pulpmill and other processing jobs or not. #3

Forest Service Response:

The economic model IMPLAN replaces the economic model IPASS and is used for the Upper Carroll FEIS. IMPLAN, like other regional economic input-output models, serves as a proxy for the actual economic structure of a region. The foremost assumption of an input-output model, such as IMPLAN, is that the production function of local industries remains constant over time. Therefore, the ratio of employment to output is held constant, allowing for derivation of changes in direct employment based on estimates of changes in total industry output. Due to increased efficiency in the timber industry over the past few years, the share of labor as a production input is less. To represent as realistically as possible all potential economic impacts, the IMPLAN model has been adjusted accordingly. It now incorporates employment and output information that is more representative of current industry structure. Refer to Upper Carroll FEIS, Chapter 3, page 216.

Issue 1I: Proportionality/Inaccurate TIMTYP maps.

Letters and Comments on this Subject Include:

4, 10, 13, 25, 31, 36

Examples Included:

In determining proportionality, the Forest Service must use timber volume, not acres, and volume must be determined based on an accurate methodology rather than the TIMTYP database. #4

2056 acres of the suitable forest land has already been harvested in the project area (Chap 3, page 178). It is likely that these areas were high-volume stands, possibly volume class 6 and 7. These areas should be taken into consideration when determining the proportion of high volume stands to consider for harvest. #13

Forest Service Response:

Proportionality was calculated for the Upper Carroll DEIS using the only approved procedure available at that time. The methodology is described in Forest Handbook Supplement No. 2409.18-93-3, dated August 15, 1993. The Forest Service notes that while the court found fault with the method, negotiations are ongoing to reach a settlement with the plaintiffs regarding the methodology. Until agreement is reached on an updated methodology, proportionality will be calculated for ongoing EIS projects using the current Forest Handbook procedures. Improved methodologies may be used to calculate proportionality when they become available. The FEIS includes calculation of proportionality using a volume-based transition method that adjusts for inaccuracies in the 1993 handbook method.

Direction contained in Forest Handbook Supplement No. 2409.18-93-3, dated August 15, 1993 was followed in the EIS projection of this project's compliance with the Tongass Timber Reform Act (TTRA) proportionality requirement. The proportionality for Management Area K32 is 8.82 and 5.39 for K35. While the Forest Handbook Supplement requires that each proposed alternative (DEIS and FEIS) meet proportionality requirements, the final determination of proportionality is based upon the harvested, as opposed to the planned, configurations of the units. It should also be noted that proportionality only applies to the KPC Long Term Sale Contract. Volume sold under the Independent Program does not count towards

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proportionality calculations. Each of the project's action alternatives was determined to meet the proportionality requirement of TTRA, using both the 1993 handbook and transition methods.

Issue 1J: Falldown analysis is inadequate.

Letters and Comments on this Subject Include:

4, 10, 13, 21, 25, 31

Examples Included:

...yet every analysis in this document fails to carry forward the effects of falldown by reducing the amount of timber expected to be logged. #25

Recent admittance by the Forest Service of falldown levels as high as 30% make the available volume analysis even more suspect. #13

Forest Service Response:

The DEIS estimate of 42 percent of hard falldown is based on initial photo analysis within the Logging and Transportation Plan analysis and field reconnaissance which identified suitability factors such as very high MMI soils, low site index, and TTRA stream buffers. These identified suitability factors were used to modify the initial DEIS Suitability (Operable) Component with the final FEIS falldown acreage subsequently subtracted from the project tentative suitable base (see Upper Carroll FEIS, Chapter 3, Silviculture and Timber).

Due to intensive aerial photo analysis and field reconnaissance during the NEPA process leading to the FEIS, very little hard falldown is expected to occur between the issuing of the ROD and the final harvesting phase of the proposed Upper Carroll Project Area. The adjacent North Revilla Project Area experienced less than 10 percent hard falldown during the layout phase of the project (Table 7, Hassler/Shrimp-Klu Unit Change Analysis). The North Revilla Project received less intensive field reconnaissance, than the Upper Carroll Project, during the NEPA process.

Issue 1K: Don't harvest high value habitat areas.

Letters and Comments on this Subject Include:

4, 10, 13, 31, 36

Examples Included:

...prohibiting logging and road building in volume class 6 and 7 old-growth forest occurring below 800 feet in elevation, # 4

Low-elevation, high volume stands are rare in the Tongass. Many wildlife species heavily use these productive areas. # 13

Forest Service Response:

Harvest is excluded from or avoids important high value habitat areas such as beach fringe areas (500 foot beach fringe buffers have been implemented), areas around identified eagle nests (330 foot buffers with blasting restrictions within a one-half mile radius during critical nesting periods), riparian floodplains, estuary buffers (1000 foot buffers), etc. These issues within the broader issue of high value habitat areas were part of the formulation of all alternatives and were tracked through the FEIS for analysis of possible impacts.

Issue 1L: Helicopter logging should be limited to that which is economically feasible and where conventional cable yarding systems will not work.**Letters and Comments on this Subject Include:**

5, 10

Examples Included:

In this FEIS, helicopter logging would be especially appropriate where units are located at the end of proposed roads (consider road building costs) and where many Class III stream crossings are within the units or are crossed for access. #10

Forest Service Response:

During the Multi-entry Layout Plan (MELP) process for the Upper Carroll Project Area, harvest units were planned within all the normal, difficult, and isolated components of potential timber harvest areas, as scheduled by the Forest Plan (TLMP 1979, as amended). The MELP for the Upper Carroll Project Area was specifically designed to utilize the least expensive yarding system that will meet all Forest Plan Standards and Guidelines, for both safety and resource protection. Helicopter yarding systems were recommended for two general situations: (1) it did not appear feasible to construct access roads to cable log the unit, or (2) while road access was technically feasible, the anticipated effects of road construction and cable-based logging, in combination with economic factors, did not meet project objectives, BMPs, or Standards and Guidelines. The FEIS presents an alternative (Alternative #3) in which very little helicopter yarding is proposed, and discloses the effects of helicopter logging in other alternatives. See Chapter 3, Silviculture and Timber, Potential Unit Pool and Logging Systems.

Issue 1M: Display operable CFL in EIS.**Letters and Comments on this Subject Include:**

10

Examples Included:

The FEIS should clearly depict on a map all the operable and available CFL which could be cut over the rotation so that this may be evaluated by the reviewers. #10

Forest Service Response:

Your comment is noted and a map has been added. The Upper Carroll DEIS, page 3-186, Figure 3-17, Forest Land Classifications, displays how the land within the Project Area has been classified. Of the 45,232 acres within the proposed Project Area, 16,588 acres (37%) have been classified as Noncommercial, 6,940 acres (15%) classified as Nonforested, and 21,706 acres (48%) have been classified as Commercial Forest Land (CFL). The further breakdown of classifications within CFL include 1,064 acres (5%) of Management Prescriptions, 10,255 acres (47%) of Physically Withdrawn, and 10,387 acres (48%) of Suitable Lands for timber harvest.

Page 3-187 of the Upper Carroll DEIS, Figure 3-18, Components of Commercial Forest Land, further classifies Suitable Lands for timber harvest with 8,151 acres (79%) classified as Operable, 1,391 acres (13%) classified as Second-growth, and 845 acres (8%) classified as Encumbered.

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Issue 1N: Definition of Forest Land is inappropriate.

Letters and Comments on this Subject Include:

10, 12

Examples Included:

One of the primary concepts emerging from FS EISs which tends to confuse the public in their understanding of forestry issues originates in the way the FS defines "forest land." #10

Forest Service Response:

Definitions such as Forested and Nonforested Lands described within the Upper Carroll DEIS, were taken from the Tongass Land Management Plan (TLMP), 1979, as amended, which were in turn taken from the National Forest Management Act of 1976. These standardized definitions are used nationally by the Forest Service to describe publicly owned lands.

Issue 1O: Timber sale economics.

Letters and Comments on this Subject Include:

25, 43, 47, 50, 51, 52, 53, 56, 62, FL1, FL2

Examples Included:

I would like to see the Forest Service provide the most economical timber possible to the timber industry. #50

Forest Service Response:

It is Forest Service policy to offer all timber purchasers economically viable timber sales. The NFMA process set requirements of economic efficiency for Forest Management proposals in Region 10, where the Forest Service performs a mid-market assessment of timber economic conditions present at the time of the Notice of Intent (August 28, 1994). It should be pointed out that the Forest Service decision making process is not solely based on economic values but looks at the broader picture of a balanced resource base. The results of the mid-market assessment for the DEIS show that some alternatives have a positive net stumpage, which indicate that timber sales arising from these alternatives will operate under a positive market condition most of the time. Other alternatives have a negative mid-market value which indicate that they would yield only base rates. Base rates are the minimum amount that the Forest Service will accept for stumpage, regardless of how deficit the sale appraises.

Individual timber offerings will be cruised and appraised using site specific timber conditions and up-to-date costs and values.

Issue 1P: Value added processing.**Letters and Comments on this Subject Include:**

13, 31, 40

Examples Included:

TCS believes that the Forest Service should support and facilitate changes in the timber industry to increase the level of processing done locally through value-added processing. # 13

Forest Service Response:

Your response has been noted. All timber sold under this project can be used for value added projects. To specify value added processing is beyond the scope of the Upper Carroll Project. Reallocation of timber harvest is a function of the Tongass Land Management Plan Revision process.

Issue 1Q: Suitable versus operable lands.**Letters and Comments on this Subject Include:**

25

Examples Included:

The graphics on PP 3-186 and 187 are helpful, but they make the mistake of equating suitable lands with operable lands. #25

Forest Service Response:

The Forest Service assumes that the concern is that all lands within the suitable category are listed as operable and therefore available for timber harvest. The Suitable and Operable Components of Commercial Forest Land Classification are broad based sub-classifications before falldown factors are applied. For a more detailed discussion on falldown, see the Forest Service response for Issues 1J and 1M.

Issue 1R: TSPIRS analysis.**Letters and Comments on this Subject Include:**

25

Examples Included:

I think that it is grossly unprofessional to quote 1988 - 1990 TSPIRS reports (pp 3-215) and omit more current reports which show the truly deficit nature of Tongass logging. I want to see the TSPIRS analysis for several reasons... #25

Forest Service Response:

The Social and Economic section of Chapter 3 display of TSPIRS reports has been updated (Planning Record, 1996). This data is provided for informational purposes only and is not used in the PNV analysis. The Forest Service rationale for not providing a TSPIRS analysis is provided in the Upper Carroll FEIS in Chapter 3, Socio-economic Environment, Returns to

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the Federal Treasury. The PNV analysis for Upper Carroll Project Alternatives was performed as directed by FSH 2409.18—Sale Preparation Handbook, WO Amendment 2409.18-95-1, 2, 3, and 4, and further described in R-10 Supplement No. 2409.18-93-3.

Further Forest Service rationale for not providing a TSPIRS analysis is also furnished from a Central Prince of Wales FEIS Planning Record Document which states:

"TSPIRS was designed to be run on an annual basis at the National Forest level for the entire timber program and the expenses and costs are amortized (written off) over the length of the rotation (100 years). This is particularly hard to do on a project by project basis, especially for roads. In addition, TSPIRS counts all of the expenses associated with a timber sale, including the NEPA prep work, inventories, etc. these expenses are put into a sale or growth activity pool and a percentage is charged off each year based upon how much volume is harvested and how much is remaining under contract. Again, trying to come up with this percentage write-off (which is quite a bit each year) is very difficult to do on a project-by-project basis. A better method to use on project economic analysis is a cash flow analysis which you covered very well with the mid-market analysis and current stumpage appraisal" (R. Zaborske, Regional Office Memo Dated June 14, 1993, Upper Carroll Planning Record, 1996).

Issue 1S: Unit change and expansion.

Letters and Comments on this Subject Include:

25

Examples Included:

Even now 'unit change analysis' are being subterfuged to hide unit expansion acres. #25

Forest Service Response:

The Forest Service disagrees with your assertion that "Unit Change Analysis are being subterfuged to hide unit expansion acres". Current direction (Clarification Letter dated April 4, 1994, Forest Supervisor) directs all District Rangers to notify the State of Alaska of any unit modifications that exceed a 10 acre net change. This direction was given in response to the State of Alaska and Forest Service Agreement regarding the Central Prince of Wales Project. Further direction is given (Net Acre Change Direction Letter, Ketchikan Area Forest Supervisor to Management Team, March 4, 1994) on the calculation, documentation, and display of net acre changes to timber harvest units. In response to management direction, the Ketchikan Ranger District developed the Unit Change Analysis document.

The Unit Change Analysis uses three different "Modification Categories" to describe changes to ROD units in terms of how they relate to environmental impacts as described by the FEIS. Modification Category 1 describes changes resulting from mapping imprecisions and do not represent material changes to ROD intent. Modification Category 2 describes modifications that are required to meet specified standards and guidelines in the ROD and TLMP. Modification Category 3 describes changes not related to standards and guidelines, or for the most part, changes occurring from adjustments to logging systems design to improve overall resource protection. To characterize the three different Modification Categories as "unit expansion" is grossly misleading. If ROD units were not "fine-tuned" by Forest Service Layout Crews to meet additional, identified, on-the-ground resource requirements, or to make adjustments to ensure economically viable (logical) setting boundaries, then they would be fostering irresponsible management of National Forest System lands.

Unit Change Analysis for all Offered Long-term Timber Sales are on file at the Ketchikan Ranger District. Cumulative unit change calculations for the entire North Revilla Project Area is displayed in the KHS (Klu/Hassler/Shrimp) Offer Area Unit Change Analysis, Table 7. The Upper Carroll FEIS uses this analysis as reference in portions of the document.

Issue 1T: Second-growth management inadequately addressed.**Letters and Comments on this Subject Include:**

21, 27, 31, 40

Examples Included:

We were originally told that the rotation would be 50 years, so the second growth trees should be plenty big enough now to grind into pulp. Remember the long term contract is for a pulp mill, not a saw mill. Also remember KPC claims that the regeneration is twice what the old growth is, so it shouldn't be a problem to get the majority of the fiber needed from second growth. #27

Forest Service Response:

Current Forest Service policy (TLMP as amended, 1979) on stand rotation is 95 percent of Cumulative Mean Annual Increment of a given timber stand. This means that rotation can vary by site index from 100 to 130 years. The Alaska Region has developed a Silviculture Inventory System (SIS) to aid in tracking and planning of second-growth management priorities and prescriptions. These future opportunities were identified in Chapter 3, Appendix H and I of the DEIS and the FEIS. Potential second-growth management opportunities to benefit other resource values have been identified in Chapter 3 of the FEIS (see Chapter 3, Silviculture).

Old-growth harvesting will continue to be the primary source of timber for the coming 50-75 years. Though old-growth harvest will decline over time, some old-growth harvest is anticipated over the entire planning horizon (150 years). Premium grades of timber are, and will continue to be available through primary (independent timber sales) and secondary markets. The supply of premium grades will decline over time, as faster growing/shorter rotation second growth provides higher yields but lower proportion of premium grades.

Issue 1U: Specific comments on the Upper Carroll DEIS.**Comments Include:**

According to the unit card for Unit 52, a "wind-firm slope break buffer" will be retained along the Class III V-notch which forms the unit's northern boundary. However, given its orientation to prevailing storm winds, and the fact that this unit is identified in Figure 3-16 as having a high to very high windthrow risk, this buffer will be highly susceptible to blowing down into the stream that it was intended to protect. #1

Forest Service Response:

See Forest Service Response for Issue 1B. The Upper Carroll FEIS has a variable slope break buffer located along the northern unit boundary of Unit 52 approximately 200' (horizontal distance) from the Class III V-notch at the closest point. The Forest Service disagrees that the northern unit boundary has a very high windthrow risk because the boundary is located behind a lee ridge which shelters the northern unit boundary from prevailing winds. This unit configuration currently meets AFHA Standards And Guidelines.

Comments Include:

Chapter 2, page 31, paragraph 2, last sentence: alternative 5 would harvest 412 acres, not 394. #2

Forest Service Response:

Your comment has been noted.

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Comments Included:

Several tables in this section (Economic and Socioeconomic Analysis) refer to Marks (1995) and Matson (1995). These references are not contained in the reference section of the EIS. We recommend that they be included in the final EIS. #3

Forest Service Response:

Marks and Matson are Upper Carroll Project Area IDT members that performed analysis and calculations for the different tables found within both the DEIS and FEIS. They are referenced as the source for the different tables.

Comments Include:

Present Net Value would be defined as the difference between the discounted benefits and discounted costs associated with the alternatives. #3

Forest Service Response:

In the Upper Carroll DEIS, Chapter 3, page 220, last paragraph, second sentence, reads: "The PNV represents the economic efficiency of each alternative or the difference between discounted benefits and discounted costs".

Comments Include:

Pg. 348 discusses "energy requirements and conservation potential of alternatives". This section should include a more accurate representation of the actual fuel uses that will occur as a result of the various alternatives...Specifically, the largest fuel use should be accurately represented--that which will occur when the recipient for whom this sale is designed...If they (KPC) process half a million board feet a day (which is somewhere in the ballpark) then the correct fuel consumption for alt. 2, 3, 4, and 5 should add on at least an extra 126 gallons per MBF. #31

Forest Service Response:

The intent of Table 3-145, Page 349, Chapter 3 is to *estimate* direct and indirect effects of each alternative's fuel consumption for comparative purposes between the range of alternatives. The estimated fuel consumption for timber harvest activities is based on consumption per MBF of sawlog volume which is projected from several assumptions presented on Page 348, Chapter 3. It should be pointed out that while most fuel consumption can be tracked or calculated and projected for direct uses (in this case uses attributed to timber harvest, road construction, or road reconstruction), most indirect fuel consumption can only be estimated. Furthermore, volume released under this FEIS may go towards the Independent Sale Program or may not be released at all which precludes the assumption that "the largest fuel use should be accurately represented--that which will occur when the recipient for whom this sale is designed (KPC)".

Comments Include:

On pp 5 of the Summary there is the statement that the Polk Inlet project will be the first long-term contract offering outside the primary sale area. #25

Forest Service Response:

The FEIS clarifies and corrects this statement (see Chapter 1).

Comments Include:

I call your attention to unit 737-93 which proposes to yard timber through both sides of a fish buffer with a running skyline system. Please drop the portion of the unit across the stream. #25

Forest Service Response:

Unit 93 has been modified to delete the portion of unit SW (across) the buffered stream.

Comments Include:

...the Ketchikan Indian Corporation supports aerial logging only, opposing any road building in the Carroll Inlet, Swan Lake, Lake Tyee area. #34

Forest Service Response:

Alternative E in the Upper Carroll DEIS was originally developed as a project alternative but Eliminated from Detailed Study (see Upper Carroll DEIS, page 2-11, Alternative E, Helicopter Logging Alternative) due to poor economic returns and not meeting the project's stated purpose and need volume objective. Due to public comment, Alternative E has been modified and brought forward in the Upper Carroll FEIS as Alternative 7. Alternative 7 is modified by including the reconstruction of existing roads and LTFs only to permit the selection of additional units which help enable the alternative to better meet the project's stated purpose and need volume objective as well as striking a balance between all resources by presenting additional viable options. This alternative is fully analyzed (including economics) and compared against the range of alternatives in the Upper Carroll FEIS.

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Issue 2. Fish Habitat and Water Quality

Issue 2A. Water quality and fish habitat in the west fork of Carroll Creek.

Letters and Comments on this Subject Include:

1, 3, 13

Examples Included:

This analysis suggests that management activity in sub-basins S4 and S5 (west fork of Carroll Creek) have the highest potential for adversely affecting fish habitat. #1

Sub-basins S4 and S5 (west fork of Carroll Creek) within the Carroll River watershed are identified in Appendix F as having the highest sediment transfer potential in the watershed (posing a high potential risk to water quality and fish habitat), yet road construction and harvest activities are proposed for both areas. #3

Forest Service Response:

The Forest Service agrees and has deferred timber harvest and road construction activities in Sub-basin S5 in the Record of Decision (ROD). Carroll Creek is recognized as an important source of fisheries on Revillagigedo Island. The Carroll Creek watershed, including the west fork, is located within Value Comparison Unit (VCU) 744. All of VCU 744 has been designated by the Tongass National Forest Land Management Plan as Land Use Designation (LUD) IV. LUD IV areas are designated to provide opportunities for intensive resource use and development where emphasis is primarily on commodity or market resources.

The development of alternatives addresses specific issues which may arise during the project planning process. In this process the Interdisciplinary Team (IDT), which developed the Upper Carroll Project, recognized the fisheries and water quality values of the west fork. The issue of protecting these values was addressed by the development of Alternatives 3 and 4 in the Draft Environmental Impact Statement (DEIS) for Upper Carroll. These alternatives propose no resource development in this sub-watershed. Alternatives 2 and 5 will maintain fish habitat and water quality in the west fork by implementing proven Best Management Practices (BMPs) (for further information see response to issues 2B, 2C, 2D, and 2E).

Issue 2B., D. Road construction and stream crossings will negatively affect water quality.

Letters and Comments on this Subject Include:

1, 2, 13, 31, 33, 36, 38, 40, 49

Examples Included:

We believe that roads presently proposed to be constructed within riparian buffer areas conflict with the intended goals of protecting water quality and fish habitat and recommend that alternative alignments (which avoid these areas) be identified. #3

Carroll Creek and Neets Creek are both important for fisheries and water quality should be protected in these drainages by minimizing the amount of road construction and harvest activities which could affect these streams and their tributaries. #13

Forest Service Response:

An interdisciplinary process has evaluated the watersheds in the Upper Carroll Project Area and estimated the response of soil and water resources to proposed transportation alternatives and activities. In the identification of significant issues, the importance and value of fisheries and water quality in Carroll and Neets were recognized. To address these issues, Project alternatives were developed which minimized or deferred timber management activities in the west fork of Carroll Creek and the Neets Creek watershed. Additional evaluation has been made using the most current soil and water resource surveys, site specific information, and on-the-ground review. The Upper Carroll FEIS identifies specific mitigation measures (see Unit and Road Card—Appendix K) recommended to protect soil and water resources and discloses expected effectiveness. The decision by the Responsible Official identifies the Selected Alternative and mitigation that will be used. Road Management Objectives document the intent for the future management of the roads. The subsequent contract will include provisions to meet water quality, soil, and other resource protection requirements as directed by the line officer's decision.

Mitigation measures are site-specific management activities to reduce the adverse impacts of timber harvest, road construction, or other development activities. The Upper Carroll Project uses unit and road cards to display appropriate mitigation measures which will be applied on a site-specific basis (See the Unit and Road Cards— Appendix K for unit specific mitigation measures).

Mitigation measures are applied following inventory and analysis of land management proposals. Mitigation measures generally require several resource specialists to assess on-site potential for impacts. Field data is collected to help predict impacts and identify mitigation measures. The data is analyzed to identify site-specific specifications designed to protect the resources. Factors which affect mitigation design vary from site to site. The extent and kind of impact are also variable. No single mitigation measure, method, or technique is best for all circumstances.

Additional information on units which will require buffer strips has been added to the front of Appendix K, Unit and Road Cards. Units near streams are listed and buffer prescriptions described. In addition, the Mitigation Measures Common to All Action Alternatives section in Chapter 2 discusses the stream buffering that will be done. Although permitted under TTRA, no yarding is planned across TTRA mandated buffer strips, and timber will be directionally felled away from stream buffers.

Road construction on very high mass movement index soils is avoided whenever possible. FSH 2509.22—Soil and Water Conservation Handbook R10 Amendment 2509.22-91-1 describes timber management and transportation planning to assure soil and water resource considerations. BMP 13.5, Protection of Potentially Unstable Areas, is designed to protect potentially unstable areas and avoid landslides. BMP 14.2, Location of Transportation Facilities, states that "roads, trails and LTFs will be located to avoid unstable, sensitive or fragile areas to the extent possible."

Issue 2C. Timber harvest and road construction on high and very high MMI soils.**Letters and Comments on this Subject Include:**

1, 10 13, 16, 31

Examples Included:

Of particular concern is the fact that 71 percent of the total unit acreage within S5 occurs on high mass movement index (MMI 3) soils. #1

The EIS is confusing and inconsistent on this subject in that, apparently, harvesting might not occur on MMI 4 soils, despite the fact that Tables 2-2, 2-8, and 3-8, and elsewhere in the document, including the unit cards, indicate that it will. #1

Forest Service Response:

There are four levels of soil mass movement index identified in the Project Area, very high, high, moderate, and low. Very high mass movement index soils are classified as unsuitable for timber production. High mass movement index soils are

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presently classified as suitable forest lands. During the environmental analysis, the interdisciplinary team identified unstable areas using input (Soil Resource Inventory Maps, Geology Maps, Slope Maps) provided by various resource staffs. If management activities cannot be designed without causing long-term effects on soil and water resources they will be recommended for reclassification as unsuitable forest lands. The interdisciplinary team has disclosed the risk and potential impact of slope failure in the FEIS.

Road construction on very high mass movement index soils is avoided whenever possible. FSH 2509.22—Soil and Water Conservation Handbook R10 Amendment 2509.22-91-1 describes timber management and transportation planning to assure soil and water resource considerations. BMP 13.5, Protection of Potentially Unstable Areas, is designed to protect potentially unstable areas and avoid landslides. BMP 14.2, Location of Transportation Facilities, states that "roads, trails and LTFs will be located to avoid unstable, sensitive or fragile areas to the extent possible."

Mitigation measures are site-specific management activities to reduce the adverse impacts of timber harvest, road construction, or other development activities. The Upper Carroll Project uses unit and road cards to display appropriate mitigation measures which will be applied on a site-specific basis (See the Unit and Road Cards—Appendix K for unit specific mitigation measures).

Mitigation measures are applied following inventory and analysis of land management proposals. Mitigation measures generally require several resource specialists to assess on-site potential for impacts. Field data is collected to help predict impacts and identify mitigation measures. The data is analyzed to identify site-specific specifications designed to protect the resources. Factors which affect mitigation design vary from site to site. The extent and kind of impact are also variable. No single mitigation measure, method, or technique is best for all circumstances.

Recommendations identified on units cards in the Upper Carroll DEIS are based mainly upon reconnaissance of the proposed harvest units. Additional information obtained in reconnaissance since the DEIS was published has been incorporated into more site-specific recommendations in the Upper Carroll FEIS. Information obtained during sale layout will be incorporated into harvest unit design.

Some confusion arises from the use of two different levels of information in the development of the Upper Carroll DEIS. Project level analysis displayed in Tables 2-2, 2-8, and 3-8 of the DEIS, and the *Physical Description* displayed in the Upper Carroll DEIS Unit Card Data were derived from the Ketchikan Area's Common Land Unit (CLU) inventory data. The CLU was derived primarily from Ketchikan Area Soil Resource Inventory data. The Ketchikan Area Soil Resource Inventory is broad level resource inventory designed to be used as a Forest level planning tool and has proven to be unsuitable for project and site specific level planning. The level of information it displays can prove to be erroneous and misleading at the project level. This requires that project level planning, such as the Upper Carroll EIS, utilize project specific resource inventory information. In the Upper Carroll DEIS, the project inventory information was displayed in the *Input* sections of the Unit Cards—Appendix K. This information, gathered on-site in the project planning process, often does not agree with the information derived from the CLU inventory data. This project level information has been used in the Upper Carroll DEIS to design harvest units, roads, stream crossings, mitigation measures, and monitoring needs. This information will also be used to the extent possible to analyze the environmental effects of alternatives. As the DEIS states "*On-site analysis by soil scientist has reclassified these soils as MMI=2 or MMI=3.*" in many cases

Issue 2E. Mitigation practices for stream crossings.**Letters and Comments on this Subject Include:**

2

Examples Included:

A narrative description is also needed to describe the potential degradation of downstream water quality and mitigative measures which will be implemented at each individual stream crossing and high hazard soil area. #10

Forest Service Response:

Mitigation measures are site-specific management activities to reduce the adverse impacts of timber harvest, road construction, or other development activities. The Upper Carroll Project uses unit and road cards to display appropriate mitigation measures which will be applied on a site-specific basis (See the Unit and Road Cards— Appendix K for unit specific mitigation measures).

Mitigation measures are applied following inventory and analysis of land management proposals. Mitigation measures generally require several resource specialists to assess on-site potential for impacts. Field data is collected to help predict impacts and identify mitigation measures. The data is analyzed to identify site-specific specifications designed to protect the aquatic resources. Factors which affect mitigation design vary from site to site. The extent and kind of impact are also variable. No single mitigation measure, method, or technique is best for all circumstances.

Recommendations identified on unit and road cards in the Upper Carroll DEIS are based mainly upon reconnaissance of the proposed harvest units and road locations. Additional information obtained in reconnaissance since the DEIS was issued has been incorporated into more site-specific recommendations in the Upper Carroll FEIS. Information obtained during sale layout will be incorporated into harvest unit design.

Additional information on units which will require buffer strips has been added to the front of Appendix K, Unit and Road Cards. Units near streams are listed and buffer prescriptions described. In addition, the Mitigation Measures Common to All Action Alternatives section in Chapter 2 discusses the stream buffering that will be done. Although permitted under TTRA, no yarding is planned across TTRA mandated buffer strips, and timber will be directionally felled away from stream buffers.

The seasonal timing of in-stream construction operations are prescribed as a resource protection requirement for Class I streams. Timing is recommended on some Class II and even Class III streams when construction activities may directly affect downstream fisheries. Timing recommendations are based upon site-specific and downstream impacts to fish spawning, egg presence, fry emergence, and migration of smolt. The dates for the general windows represent a period during which in-stream work may be conducted. Final timing and construction windows are determined from a review of the site and stream specific information.

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Issue 2F. Utilize AFHA findings.

Letters and Comments on this Subject Include:

2, 4, 10

Examples Included:

We believe the Final EIS should include the recommendations contained in AFHA, or acknowledge the shortcomings of BMPs in the impacts analysis. #2

A USFS-prepared summary of the Anadromous Fish Habitat Assessment Report (Pacific Northwest Research Station, January, 1996) recommends "increased protection of headwater area, steep slope, high hazard soils, Class III and smaller streams." This study found inadequate protection of Class III streams on the Tongass. Based on similar practices in place for 20 years in the Pacific Northwest, a decline in habitat and consequent risk to the viability of fish stocks is predicted. The FEIS and ROD needs to consider increased measures of protection. #10

Forest Service Response:

The Upper Carroll project implements the recommendations applicable to project-level planning presented in the Anadromous Fish Habitat Assessment (AFHA) of January 1995. Examples of implementing these recommendations include the following:

1. During field reconnaissance, areas with steep slopes, high hazard soils, and Class III streams were identified and evaluated for risk of adverse impacts on headwater channels. BMPs listed on the individual unit and road cards were prescribed to reduce the risk of on-site erosion and delivery of sediment to a stream channel.
2. Site-specific stream-side buffers are provided for floodplain and confined alluvial channels. Harvest units adjacent to Class I and II stream channels were investigated by project fisheries biologists to determine the extent and type of buffer necessary to assure protection of any small, off-channel streams associated with floodplains and to provide a long term source of woody debris. After further analysis, some stream-side buffers have been expanded in the FEIS to encompass adjacent riparian soils and fens.
3. Increased monitoring on implementation and effectiveness of procedures for anadromous fish habitat protection are included in the FEIS. These procedures include cross-sectional transects established in Carroll Creek to monitor changes in channel morphology over time; thermographs installed to monitor stream temperature; and plans to conduct a Road Condition Survey two, five, and ten years after road construction to identify maintenance concerns.
4. Watershed-level analyses were completed for the Neets Bay and Upper Carroll watersheds. Additional site-specific analysis is included in the FEIS that addresses the potential delivery of sediment from Class III to Class I and II streams. The intent of this site-specific analysis is to determine where increased protection of headwater areas is required to minimize long-term downstream impacts to fish habitat.
5. Fish habitats and communities were inventoried and characterized with Basin-wide Stream Surveys in the Upper Carroll and Neets Bay watersheds. This ground-verified data was incorporated in the Geographic Information System (GIS) database and used for project-level planning.
6. Classification of streams draining intermittent and ephemeral channels will apply to the Upper Carroll Project Area as outlined by the Regional Forester in a letter dated November 21, 1995. The letter provides a definition of Tongass Timber Reform Act language of "... flows directly into..." and clarifies stream classification definitions of Class I, II, III, and adds new Class IV and non-stream categories.

The remaining 8 recommendations are beyond the scope of this project and are being addressed in the Tongass Land Management (TLMP) Revision or by the Tongass Forest Supervisors and the Regional Director of Wildlife, Fisheries, Ecology, and Watershed.

Issue 2G. Watershed map for third order and larger watersheds should be included in EIS.

Letters and Comments on this Subject Include:

2, 10

Examples Included:

We suggest the Final EIS more clearly discuss watersheds and provide a listing and a map delineating them within the project area. #2

Forest Service Response:

A more detailed discussion of watersheds within the Upper Carroll Project Area has been included in the FEIS. An 8½ x 11 inch map which delineates the third order or larger watersheds within the Project Area has also been included.

Issue 2H. Risk ratings in watershed analysis.

Letters and Comments on this Subject Include:

2, 3, 17

Examples Included:

Based on the risk of debris slides within the Carroll River sub-basins S4, S5, and S9, and the medium-to-long term storage potential of the downstream low-gradient depositional channels (R4 and R6), we believe harvest in these sub-basins may pose unacceptably high risks to fisheries dependent on downstream habitat. #2

Forest Service Response:

We agree that there is some risk associated with the Selected Alternative, however the Selected Alternative defers timber management activity in the highest risk Sub-basin, S5. The Sediment Transport Index and Sediment Deposition Index described in the Watershed Report—Appendix F of the Upper Carroll DEIS, are quantitative measures of watershed morphology and disturbance which help to identify and rank areas according to potential for sediment production and deposition. They do not provide yield estimates, sediment discharge estimates, route sediment, nor identify impact thresholds; but they do indicate the location and potential significance of sediment sources and depositional areas within the watershed based on measured characteristics known to correlate with sediment transport and deposition. It is important to note that these are *relative* rankings of areas *within* a watershed, not absolute levels of sediment production nor risk. The levels of risk described in this report are *relative within* the Carroll and Neets Creek watersheds. This does not necessarily translate into an unacceptable level of risk for the line officer making the decision.

Evaluation of land management alternatives requires an assessment cost and probable resource effects in addition to a comparison with established issues. Cost-risk analysis is a process for evaluating alternative land management plans with respect to cost, potential resource value effects, and the probability of treatment success. The Upper Carroll Interdisciplinary Team (IDT) has developed a range of alternatives for the line officer making the decision. A "no action" alternative is useful to show the potential effects and costs of not implementing a land management plan. The IDT has provided information on

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the estimated probability of each alternative's ability to successfully minimize the effects of the proposed project upon fisheries dependent downstream habitat. The IDT has documented their estimates of on-site and off-site resource value losses for each alternative in Chapter 3 of the FEIS.

It is the responsibility of the line officer making the decision to evaluate each alternative's ability to address the issues and meet the objectives of the land management plan. The Record of Decision (ROD) describes the rationale for the decision about which alternative best addresses the issues, accomplishes project goals and is least costly. Most alternatives have less than 100 percent probability of success due to such factors as weather, economic conditions, size of the project, access, personnel availability, and time year. The line officer making the decision evaluates the risk and makes an informed decision, based in part, upon that risk.

At this point in time, these components are not available in any greater detail for the Ketchikan Area than are displayed and utilized in the Upper Carroll DEIS.

Issue 2I. Neets Creek should be classified as anadromous habitat.

Letters and Comments on this Subject Include:

2

Examples Included:

We believe the Final EIS should reflect that anadromous fish habitat exists in the Neets Creek watershed. The Neets Bay watershed supports no anadromous fish due to a migration barrier in the lower reach, but does contain anadromous fish habitat. #2

Forest Service Response:

The Forest Service acknowledges that anadromous fish habitat exists in the Neets Creek Watershed. Even though the system has been barriered by SSRAA, Neets Creek is afforded Class I status in both the DEIS and the FEIS. In a letter dated Nov 11, 1995 the Regional Forester outlines a comprehensive classification system in response to recommendations in the Anadromous Fish Habitat Assessment Report. This improved classification system defines Class I as follows:

Streams with anadromous or adfluvial fish habitat; or high quality resident fish waters listed in Appendix 68.1, Region 10 Aquatic Habitat Management Handbook (FSH 2609.24), June 1986; or habitat above fish migration barriers known to provide reasonable enhancement opportunities for anadromous fish.

Under this definition, Neets Creek is designated Class I on the basis of existing adfluvial fish habitat and the potential for reasonable enhancement opportunities for anadromous fish.

Issues 2J.,R. The Southern Southeast Regional Aquaculture Association (SSRAA) fish hatchery at Neets Bay could be negatively impacted by proposed timber harvest.

Letters and Comments on this Subject Include:

2, 16, 17, 25, 33, 35, 38, 39

Examples Included:

I am convinced that activity in the Bluff Lake drainage would increase sediment loads in the hatchery water supply which would be detrimental, and potentially devastating, to hatchery production,... #6

...we have objected to any entry or road building that has the potential to influence the water supply of the hatchery located at Neets Bay. #17

Forest Service Response:

The Selected Alternative defers timber management activity in the Neets Creek watershed. The development of alternatives addresses specific issues which may arise during the project planning process. The issue of potential impacts of the proposed Upper Carroll Project upon SSRAA operation is addressed in the FEIS through the development of Alternative 3, which minimizes development in the Neets Creek watershed. The Upper Carroll FEIS includes a watershed analysis which assesses the risk of sediment transfer in the Neets Creek watershed. In all alternatives beneficial uses, including fish propagation, of area waters will be protected by the application, operation, and monitoring of Best Management Practices (BMPs). See responses to issues 2B, 2C, 2E, 2M, and Unit and Road Cards—Appendix K for site-specific BMPs.

The SSRAA fish hatchery at Neets Bay is operated under a Special Use Permit from the Tongass National Forest. The Special Use area, including the hatchery site and the area immediately around Bluff Lake has been excluded from timber harvest in this plan. The rest of the Neets Creek drainage, contained in VCU 737, is designated as Land Use Designation (LUD) IV by the Tongass National Forest Land Management Plan. LUD IV areas are designated to provide opportunities for intensive resource use and development where emphasis is primarily on commodity or market resources. As such, those lands which are suitable and available for timber production in the Neets Creek valley have been evaluated in the Upper Carroll Project Plan in a manner which is compatible and complimentary with other uses.

Issue 2K. Fish habitat restoration and improvement opportunities should be addressed.

Letters and Comments on this Subject Include:

2, 7

Examples Included:

We suggest that the Final EIS address measures to restore the Neets watershed, improve water quality, improve fish habitat, and reduce or eliminate the sedimentation problems that persist from previous and proposed timber harvesting and road building activities. #2

It would be good to open habitat (fish) above the existing barrier if overall the Forest Service wishes to impact existing habitat. #7

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Forest Service Response:

Fish habitat improvement opportunities have been identified in the Carroll Creek watershed. A plan to construct a fish ladder and introduce Chinook salmon, and possibly coho, to that part of the watershed above the barrier falls was developed in 1983. This plan was never implemented as the costs of the project were significantly greater than the projected benefits. No other fish habitat improvement opportunities have been identified in the Upper Carroll Project Area.

No water quality improvement needs have been identified within the Upper Carroll Project Area, including the Neets and Carroll Creek watersheds. Public comment has stated that "*sedimentation problems*" occur within these watersheds, yet no documentation or supporting evidence has been presented, nor is the Forest Service aware of any such evidence. Watershed inventories conducted prior to the planning of this project have not identified any significant sediment sources beyond natural sources, nor proposed any measures to restore these watersheds. Watershed restoration opportunities and needs are documented in the Ketchikan Ranger District's *Watershed Improvement Needs Inventory (WINI)*.

Issue 2L. Fish habitat capability will decrease.

Letters and Comments on this Subject Include:

2, 32, 33

Examples Included:

We believe the Final EIS should reexamine fishery effects, considering current habitat degradation, cumulative effects of past and proposed harvest activities, the limitations of the habitat capability models, and the known limitations of BMPs, and revise this finding. #2

I note that the draft-EIS reports habitat damage on pages 58-3 and 72-3, and the loss of productivity in coho salmon and char on pages 62-2, 62-3, 73-3. This is a step in the right direction. It is telling the truth for a change but I fear you are still also continuing to tell the lie about pink salmon on pages 62-3 and 73-3. #32

Forest Service Response:

Timber harvest has a potential to decrease fisheries production through such negative effects as sedimentation (loss of spawning gravels), oxygen depletion, temperature change, and loss of large woody debris. The Forest Service has developed an aggressive policy to minimize these negative effects through such beneficial practices as limiting the size of units and their location, designing roads away from streams and observing legislated minimum 100-foot width stream buffers, timing road construction activities in salmonid streams to correspond to least damaging periods, use of Riparian Management Areas (RMAs), avoiding harvest activities on very high mass movement soils, implementing BMPs, and monitoring (also see responses to issues 2B, 2D, 2M, 2P).

The habitat capability models in the DEIS are used to assist in the evaluation of effects of current and proposed land management activities on fish habitats and populations. The model estimates for pink salmon capability are based on estimates of available spawning habitat. Unlike the coho and Dolly Varden char habitat capability estimates, the pink salmon model estimates are not influenced by prescribed logging activities. Therefore, the effects of past and proposed management activities on pink salmon are not quantitatively evaluated with the current habitat capability model. A discussion on the limitations of the habitat capability models is included in the FEIS.

Issue 2M. Monitoring of BMPs is needed to conclude they are effective.

Letters and Comments on this Subject Include

3, 4

Examples Included:

We agree fully with BMP 11.6 (Soil and Water Conservation Handbook, FSH 2509.22) that "monitoring is an essential part of all BMPs as well as the overall BMP process." Consequently we are pleased to see the proposal to conduct two water quality-related effectiveness monitoring studies as part of this project. #3

The Forest Service should disclose the monitoring information it has collected to show that its BMPs are implemented and effective in eliminating damage to water quality and fish spawning and rearing habitat. #4

Forest Service Response:

The Tongass National Forest has just released its *Annual Monitoring and Evaluation Report* for Fiscal Year 1995. This document reports that "Significant progress has been made toward accomplishing effectiveness monitoring objectives outline(d) by the 1992 Memorandum of Agreement between the Forest Service and the Alaska State Department of Environmental Conservation." This report documents the BMP implementation monitoring results for the Ketchikan Administrative Area. These results indicate that BMPs were fully implemented more than 90 percent of the time, and that in almost all cases an attempt was made to implement BMPs to some degree. In April of 1994, the three Tongass Forest Supervisors signed a joint BMP effectiveness monitoring strategy that identified five key issues: riparian buffer effectiveness in protecting fish habitat and water quality, effectiveness of Class III stream protection measures in minimizing stream bank erosion, and the relation of soil mass movement rates with roads and harvest units.

The Clean Water Act (Sections 208 and 319) recognized the need for control strategies for non-point source pollution. To provide environmental protection and improvement emphasis for water and soil resources and water-related beneficial uses, the National Non-point Source Policy (December 12, 1984), the Forest Service Nonpoint Strategy (January 29, 1985), and the USDA Nonpoint Source Water Quality Policy (December 5, 1986) were developed. Best Management Practices (BMPs) were recognized as the primary control mechanisms for non-point sources of pollution on National Forest System lands. This perspective is supported by the Environmental Protection Agency (EPA) in their guidance, "Nonpoint Source Controls and Water Quality Standards" (August 19, 1987).

Use of BMPs is a means to ensure protection of resources and uses, while achieving multiple use objectives. Application of BMPs represents state-of-the-art technology for non-point source pollution control. The reasonable implementation, application, and monitoring of BMPs, in effect, achieves compliance with the intent of the Clean Water Act, State water quality standards and consistency with the State's non-point source program. The EPA Water Quality Standards Handbook, Chapter 2, states: "Proper installation, operation, and maintenance of State approved BMPs are presumed to meet a landowner's or manager's obligation for compliance with applicable water quality standards. If subsequent evaluation indicates that approved and properly installed BMPs are not achieving water quality standards, the State should take steps to: (1) revise the BMPs, (2) evaluate and, if appropriate, revise water quality standards (designated beneficial uses and water quality criteria), or both."

Best Management Practices (BMPs) are designed to meet and maintain State water quality standards. The Forest Service cooperatively works with the Alaska Department of Environmental Conservation (DEC) under a Memorandum of Understanding (MOU) relative to BMP implementation and effectiveness. BMPs are the primary tool on the Tongass National Forest to mitigate the effects of logging activities on water quality. This project is consistent with the State of Alaska's antidegradation policy and will maintain and protect existing instream water uses and the level of water necessary to protect the existing uses.

L Appendix

The Forest Service maintains that reasonable implementation, application, and monitoring of BMPs in effect achieves compliance with the intent of the Clean Water Act and State water quality standards (R10 Amendment 2509.22-91-1). The Forest Service position is that timber harvest and road construction activities controlled by BMPs and monitored for effectiveness will not exceed State water quality standards and will not violate Federal antidegradation policy. (See response to Issue 2C) Continued monitoring and evaluation of BMPs will assure that water quality standards are being met. The monitoring plan has been rewritten and strengthened in the FEIS for the Upper Carroll Project Area (see Chapter 2).

Monitoring of the implementation and effectiveness of water quality and fish habitat protection measures is planned and described in the Upper Carroll FEIS Chapter 2. Readers interested in project monitoring should read this part of the document. Monitoring will include an evaluation of implementation of BMPs for the protection of water quality and implementation and effectiveness of stream buffers to protect water quality and stream habitat. Not all project parameters will be monitored.

This plan includes site-specific implementation and effectiveness monitoring of selected mitigation and protection measures. This section describes monitoring objectives, desired results, measurements, thresholds, corrective action, responsible staff, record of results, annual cost, and personnel needs. Monitoring is also conducted on the Forest Plan level, providing the public, the Regional Forester, and Ketchikan Area managers with information on the progress and results of implementing the Forest Plan. The FEIS displays and describes the mitigation/monitoring feedback loop.

The Ketchikan Area is in the process of developing a BMP effectiveness monitoring plan. The list of possible monitoring activities on this project is long and of necessity is limited to those of highest priority. Although there will be overlap between monitoring requirements of the project plans and the Forest Plan, no single project monitoring plan is expected to address all of the questions identified in the Forest Plan.

Implementation of mitigation measures will be monitored during and after project implementation. Implementation monitoring will be conducted on a variety of mitigation measures, including TTRA stream buffers, other stream buffers, slope stabilization and erosion control, eagle nest buffers, wildlife snags, Stellar Sea Lion habitat, Trumpeter Swan wintering area, beach fringes, estuary fringes, and riparian habitat.

The effectiveness of mitigation measures is evaluated by effectiveness monitoring proposed in the FEIS, Chapter 2. Effectiveness monitoring seeks answers about the effectiveness of design features or mitigation measures in protecting natural resources and their beneficial uses. Proposed effectiveness monitoring for all alternatives includes the monitoring of timber, visual quality, roads, log transfer facilities, water quality, fish habitat, wildlife, cultural resources, and cave resources. Results of effectiveness monitoring are evaluated and, if need be, practices are adjusted and refined to better meet the management objectives.

Issue 2N. Antidegradation policy.

Letters and Comments on this Subject Include:

3

Examples Included:

An antidegradation analysis, as specified in the Antidegradation Policy [40 CFR 131.12], should be included in the final EIS. #3

Forest Service Response:

The Upper Carroll DEIS includes an antidegradation analysis, as specified in the Antidegradation Policy [40 CFR 131.12]

Issue 2O. Water quality baseline information is needed.

Letters and Comments on this Subject Include:

3

Examples Included:

Monitor for suspended sediments and the accumulation of fine sediments in gravels in selected sub-basins/reaches both before and after project implementation. #3

Forest Service Response:

The Forest Service is in the process of collecting base line water quality data available for waters within the Upper Carroll Project Area. Baseline water quality data is also available for adjacent areas, including the Orchard Creek system.

The Ketchikan Ranger District is currently conducting water quality and stream channel morphology monitoring in sub-basin S5 and reach R4 of the Carroll Creek watershed. Water quality parameters being monitored include water temperature, turbidity and channel substrate composition.

Issue 2P. Protect SSRAA brood stock - Chum salmon in Carroll Creek.

Letters and Comments on this Subject Include:

7, 13, 33, 35

Examples Included:

Carroll Creek and Neets Creek are both important for fisheries and water quality should be protected in these drainages by minimizing the amount of road construction and harvest activities which could affect these streams and their tributaries. The Carroll Creek salmon provide an important wild genetic stock for local hatcheries. #13

Summer chum runs there are unique in Southeast Alaska, and it's also the basis of SSRAA's brood stock. #33

Forest Service Response:

The Forest Service recognizes the importance of the unique summer chum run as a basis for SSRAA's brood stock. In order to ensure protection of anadromous habitat, a no-cut buffer has been applied to the floodplain, riparian soils, and associated wetland fens. This buffer is in excess of 300 feet along the mainstem and the first main tributary to the east that is frequented by chum salmon.

Resource specialists worked with the engineers to locate roads in areas that will minimize effects on the aquatic resource. In addition, District fish biologists walked the proposed roads in the Project Area and provided site specific timing and passage recommendations for all stream crossings. The seasonal timing of in-stream construction operations are most often prescribed as a resource protection requirement for Class I streams. Timing may also be recommended on Class II and sometimes Class III streams. Timing recommendations are based on the site-specific and downstream impacts to fish spawning, egg presence, fry emergence, and smolt migration (BMP 14.64). The objective of providing fish passage is to not interrupt the natural migration of anadromous and resident salmonids. The incorporation of fish passage facilities at stream crossings should be based on assessments of the life-cycle requirements of fish species, of habitat quality, and the accessibility of sites to fish (also see responses to issues 2A, 2E, and 2Q).

L Appendix

Issue 2Q. King salmon run in Carroll Creek should be listed as threatened or endangered.

Letters and Comments on this Subject Include:

7

Examples Included:

The island run of King Salmon make this a unique stock and thus should be treated carefully. This would make them one of two Alaska Island King Salmon runs, a most special species or stock. I would think that this would quality them for threatened species at the least. Is there proper safeguards to protect this run? #7

Forest Service Response:

Three chinook salmon stocks are currently found in island drainages in Southeast Alaska: King Salmon River and Wheeler Creek on Admiralty Island, and Carroll Creek on Revillagigedo Island. To date, there is no documentation to support that the king salmon run in Carroll Creek is indigenous. Chinook were first introduced in 1961 with stocks from Soos Creek (Green River) in Washington State. SSRAA started releases of pen-reared chinook in 1987 (hatched at Whitman, imprinted at Carroll). Their permit from the Alaska Department of Fish and Game (ADF&G) states they must try to capture all returns. The intent of this stipulation is to prevent chinook from straying into Carroll River and competing for habitat with the native summer run of chum.

The US Fish and Wildlife Service and the National Marine Fisheries Service are responsible for designating species as threatened and endangered. With the exception of Snake River king salmon that may be present in saltwater, the Forest Service is primarily concerned with the chum, pink, coho, and steelhead stocks native to Carroll Creek. Threatened and endangered species are further discussed in Chapter 3 of the FEIS.

In order to provide protection for the anadromous fish habitat in Carroll Creek, resource specialists have designated sites requiring mitigation measures, such as TTRA buffers and BMPs directed by Forest Standards and Guidelines. Resource specialists were also given the authority to recommend additional site-specific mitigation measures. These measures include extending TTRA buffers to include adjacent floodplains, muskegs, or forested habitats for protection of water quality and specifying buffers or split-yarding/full suspension requirements on Class III and Class IV streams as appropriate (also see response to issue 2A, 2P).

Issue 2S. Stream baseflow discussion and effects need to be improved.

Letters and Comments on this Subject Include:

32

Examples Included:

I would like to suggest this whole section beginning with Water Quality, Stream Nutrient Cycling, Sédiment and Sediment Transfer and Deposition are analyzed incompletely hence incorrectly because all of the variables discussed in these sections depend crucially upon low water summer baseflows, not infrequent in Southeast Alaska, even though it is a rainforest. Baseflows appear to be seriously modified by evapotranspiration of the system. #32

Forest Service Response:

You are correct, changes in evapotranspiration will affect stream base-flow. As you know, Bartos (1989) found a significant increase in summer flows in Staney Creek following timber harvest on approximately 35 percent of the watershed. The

increased summer low flow is attributed to decreased evapotranspiration. Similarly, Hicks et al. (1991) found an increase in August water yield that lasted for a period of 8 years in a completely clearcut watershed in western Oregon. This increase was then followed by a decrease in predicted water yield that has continued for a period of 18 years. In an adjacent watershed that was 25 percent patch-cut, Hicks et al. (1991) found an increase in August water yields that lasted for 16 years, followed by a return to predicted August water yields that lasted for 10 years. The difference in response was attributed to differences in riparian vegetation caused by differing valley geomorphologies between the two watersheds. A relatively wide valley floor in the completely clear-cut watershed allowed development of hardwoods in the riparian zone, but the narrow valley floor in the patch-cut watershed allowed for only limited development of hardwood stands. This study points out the importance of assessing not only the amount of a watershed that has been harvested, but the changes in vegetation following harvest that will affect the longer term response of streamflow.

For the Upper Carroll Project, riparian vegetation along all Class I and Class II streams will be protected by a no-harvest buffer of at least 100 feet in width. In wider, alluvial valley bottoms, typical of lower Carroll and Neets Creeks, this buffer has been extended to distances greater than 100 feet in order to protect side channels and wet soils. Furthermore, as described under "Cumulative Watershed Effects" in the Water Resources section of the FEIS, the amount of each watershed proposed for harvest is much less than has occurred in Stoney Creek or in the watersheds studied by Hicks et al. (1991). The discussion of possible long term effects on streamflow in the DEIS was brief because the proposed alternatives involve harvest of less than 10 percent of most watersheds.

Issue 2T. Effects upon wetlands.

Letters and Comments on this Subject Include:

1,2, 6, 10, 17, 18, 32

Comments Include:

We suggest the Final EIS address cumulative effects on wetlands and how the goals of relevant protective Federal laws and regulations will be met to avoid the long- and short-term adverse impacts associated with wetland destruction or modification. #2

Minimizing impacts to waters of the U.S., including wetlands, should be incorporated into your review and design of alternatives with regard to meeting BMPs... #18

Forest Service Response:

The FEIS discusses the effects upon wetlands, mitigation measures, and how applicable Federal laws are addressed.

Issue 2U. Specific comments on the Upper Carroll DEIS.

Comments Include:

Compounding this concern is the proposed harvest of adjacent Units 4, 5, and 86 which will result in a combined clear-cut totaling 193.3 acres in size. This is the largest contiguous clear-cut of all the alternatives. In addition, it appears that the vast majority of Class I and Class II stream crossings proposed under this alternative occur within Sub-basin S5. # 1

Forest Service Response:

Harvest units 4, 5, and 86 are redesigned in the FEIS and are significantly smaller and include fewer stream crossings which are located higher in the watershed. Alternative 3 addresses the concern about these harvest units and stream crossings in sub-basin S5 by proposing no timber harvest or road construction in the west fork of Carroll Creek.

L Appendix

Comments Include:

The FEIS should clarify, both within the text and in the unit cards, whether MMI 4 soils will be harvested and, if so, how this comports with the requirements of the Forest Plan. #1

Forest Service Response

This concern has been clarified in the Upper Carroll FEIS. The amounts of timber harvest on MMI=4 soils is displayed in Chapter 3 of the FEIS and in the Unit and Road Cards—Appendix K.

Comments Include:

Although the unit cards recommend that at least partial suspension be achieved during yarding operations, given their close proximity to fish habitat, these units (9, 11, 18, 22, 40, 41, 44, 50, 61, 86, 91, 95, 132) should be yarded using full suspension to more effectively minimize the risk of slope failure and potential impacts to water quality and fish habitat. #1

Forest Service Response

These harvest units have been examined in the field and recommendations were made based upon the objective of maintaining or enhancing existing water quality. The accepted Best Management Practices recommended were determined by an interdisciplinary process to be adequate to meet those objectives on that site. Acceptance of risk will be the responsibility of the Decision Maker for the Upper Carroll Project and will be displayed in the Record of Decision.

Comments Include:

As depicted on the unit card maps, significant portions of Units 35 and 126 overlap the estuary buffers of Upper Carroll Inlet and Shelter Cove... #1

Forest Service Response:

These units have been redesigned in the Upper Carroll FEIS. They no longer overlap the estuary buffers.

Comments Include:

We suggest the Final EIS include information, including the rate of growth on hydric soils, to support the notion that forested wetlands are capable of regenerating on a sustainable yield basis. #2

Forest Service Response:

The FEIS contains general information on timber productivity class for the Upper Carroll Project Area. More detailed information on timber site productivity class is available in the Upper Carroll Planning Record files. Presently a significant portion of the forested wetlands within the project are classified as suitable commercial forest land. A significant amount of commercial forest land on hydric or wetland soils has been harvested in the past on the Ketchikan Area. Regeneration surveys conducted on these sites has not indicated any deficiency in reproduction. Growth and yield potential on these sites is generally estimated to be low with site index for Sitka spruce generally estimated to range from 55 to 80 feet at an age of 100 years.

Comments Include:

We suggest wetland delineation maps be included in the Final EIS. #2

...we would appreciate a copy of the wetland delineation mapping prepared for this project, including field notes. #18

Forest Service Response:

The map *Landscape Management Zones - Upper Carroll Area* in Chapter 2 of the FEIS displays fens within Riparian Habitat Areas. These fens are important wetlands in the area which serve as the medium of transport of surface and subsurface water flows between upland and bogs and the riparian areas along streamcourses. The Unit and Road Cards, in Appendix K, contain a narrative description of wetlands located within harvest units or along road corridors. Additional wetland maps, field notes, and management recommendations may be found in the Upper Carroll Planning record harvest unit folders and road files located at the Ketchikan Ranger District office.

Comments Include:

The draft EIS states that approximately 43 percent of Upper Carroll area is classified as wetlands. However on page 49, 50 percent is so classified. #2

Forest Service Response:

This discrepancy has been resolved in the FEIS. 43 percent of the Upper Carroll Project Area is classified as wetlands according to the Ketchikan Area's Common Land Unit (CLU) Inventory. See also the response to Issue 2C.

Comments Include:

We believe that the final EIS should include a discussion of how the use of this newly-introduced modeling process fits into the timber sale planning process. #3

Forest Service Response:

The Upper Carroll FEIS includes a further discussion of the watershed analysis process and how it was utilized in the evaluation of alternatives. Site-specific information developed in the watershed analysis process is displayed in the *Soil*, *Water*, and *Fisheries Input* sections of the Unit and Road Cards—Appendix K.

Comments Include:

Because management activities associated with the proposed action will result in affects directly related to these parameters (sediment delivery to streams), a discussion of the applicable WQS should be included in the EIS. #3

Forest Service Response:

The discussion of State of Alaska Water Quality Standards has been expanded upon in the Upper Carroll FEIS.

L Appendix

Comments Include:

Past slides and slumps in the sale area which resulted from previous logging or road construction activities should also be inventoried to determine the causes. #10

Forest Service Response:

This has been done. No significant landslide related to past road construction or logging was identified in the Upper Carroll Project Area. Although numerous naturally occurring landslides are located in the area, most have occurred on land that is physically unsuited for commercial timber production.

Comments Include:

...it is critical that the Forest Service develop site specific implementation monitoring plans. #13

Forest Service Response:

The District Rangers and their representatives, generally the timber sale administrator, are responsible for the implementation of timber sale projects. These project implementation responsibilities include monitoring of BMPs and their implementation. Program responsibilities and constraints upon personnel, time, and resources generally do not permit watershed program staff on a National Forest the opportunity to do all, or any of planned implementation monitoring activities. Implementation monitoring is not a very technically involved process and can be easily managed by individuals with resource management training and experience. Timber sale administrators routinely carry out various functional (fish, wildlife, watershed, etc.) implementation monitoring activities throughout the National Forest system. The Ketchikan Area is not unique in this respect and it's sale administration staff presently does this work.

Comments Include:

We suggest the Final EIS explain why the USFS subdivides TTRA Class II streams into Class II(a) and Class II(b). #2

Forest Service Response:

Class IIa and IIb streams were defined for the Upper Carroll analysis based on the Nov 21, 1995 interpretation of TTRA language. Class IIa designation applies to all Class II branches of a Class II stream, that flow directly into a Class I stream without an intervening Class III, Class IV, or nonstream segment. Class IIb streams are those Class II streams which flow into streams (or other water bodies) that are not Class I.

The TTRA requires that a minimum 100-foot buffer be applied to each side of "Class II streams which flow directly into a Class I stream, within which commercial timber harvesting shall be prohibited." TTRA does not prohibit commercial timber harvest within 100 feet of a Class II stream that does not flow into a Class I. However, a project level decision was made to provide minimum 100-foot buffers on all Class IIb streams. The majority of Class II streams were also reviewed by specialists in the field to assess relative risk to water quality and fisheries habitat. Riparian buffers and harvest systems were then assigned by the resource specialists based on site-specific information.

The FEIS has been revised to eliminate reference to Class IIa and Class IIb streams in the text. Class IIa streams are now referred to as TTRA and Class IIb as AHMU. A complete explanation of these terms has been included in the FEIS.

Comments Include:

The level of field-based information contained in the DEIS is unclear. Fisheries data on unit cards indicates that inadequate field verification has occurred. "SPL" identified Class I, II, and III streams in many units on January 2 and 3, 1995. This appeared to be a desk exercise, judging from the dates and the nature of entries on the unit cards. #10

Forest Service Response:

Basin Wide Surveys (BWS) were conducted in the Carroll Creek watershed in 1994 and the Neets Bay watershed in 1995. Since the BWS focused primarily on reaches of anadromous and resident fish habitat in close proximity to proposed harvest units, much of the remaining stream segments were reconned to determine channel type and AHMU Class. Fisheries biologists also surveyed the existing roads in both watersheds in June 1995. Information from all these efforts was used to update and ground verify the channel types and AHMU Classes in the GIS stream layer. Field notes and the updated GIS stream layer were then used to provide fisheries data for the unit and road cards. The dates (January 2 and 3, 1995) associated with the entries indicate when the fisheries data was transferred to the unit cards for the DEIS. More detailed information is available in the planning record, harvest unit folders and road files located at the Ketchikan Ranger District.

L Appendix

Issue 3: Recreation and Scenic Quality

Issue 3A. Timber harvest activities affect recreational experiences/opportunities.

Letters and Comments on this Subject Include:

10, 11, 13, 15, 19, 20, 26, 27, 37, 44, 49, 55, 58, 61, FL2, FL3, FL4

Examples Include:

The log dump near the Carroll River estuary, log rafting, towing, floathomes, camp facilities, road construction, clearcutting within the viewshed, loss of anchorages, and similar project related activities can all negatively impact the use of this area by those seeking high-quality sport fishing opportunities. #10

Development of this area would certainly create more roaded recreation area, of which people in this area are always wanting more of, and yes, would create easier hunting access. #11

Access to recreation and wildlands must be provided in the form of intact, healthy, scenic viewsheds which can offer opportunities for viewing wildlife, sport fishing, camping, hiking, and photography. #13

These road ties (from Ketchikan to Shelter Cove and Shelter Cove to Upper Carroll...mentioned in scoping documents) will help expand the recreational opportunities for the citizens of Ketchikan. #15

I, myself, find that Fishing, Hunting is better in areas that are logged. The cut forest areas will only be gone for awhile and the new trees are so beautiful, and grow so fast. The old dead trees are not pretty, to me. #58

I enjoy hunting and have found the best hunting to be in and around harvested units. I want to see more roads developed on Revilla Island so that I can continue to hunt and fish without the expense of taking the ferry to Prince of Wales or chartering a plane to a remote location; that I can drive to some of the good fishing locations that might be accessed by a road system on the island. #FL3

Forest Service Response:

The Forest Service seeks to balance the commodity and non-commodity uses of the Forest resources through the Forest Plan land-use allocation process. Because of this, timber harvest activities may or may not affect a Forest visitor's recreational experience. To a local Ketchikan resident in need of more recreational opportunities, timber harvests may mean a positive opportunity; to the occasional Forest visitor, timber harvest may not appeal to their expectations.

Issue 3B. Timber harvest will affect the scenic quality along Neets Bay and Carroll Inlet

Letters and Comments on this Subject Include:

10, 11, 13, 16, 25, 27

Examples Included:

Intense roading and clearcutting in the lower Carroll River will diminish the attractiveness of this area for both resident and out-of-state fisher persons. #10

I do not believe development of this Area would have an adverse impact on the flight-seeing experience and may actually enhance..it..by providing a variation in the scenery. #11

At the very least, it is important to maintain the viewsheds from the popular recreation areas such as Carroll Inlet and Neets Bay. #13

I have used Carroll Inlet for twenty years as an accessible area for boat recreation. I deplore the impact visually ... this project will have. #16

Maybe the trollers fishing the Carroll River terminal kings don't mind how the proposal will change the visual landscape, but I sure don't want to see any more degradation of the eastern Neets Bay viewshed. #25

I have fished some of the lakes, the Carroll River, and the saltwater. I have viewed the wildlife,...I have hiked many of the valleys,...I have flown over the area in...aircraft too many times to count. And, I have also watched Carroll Inlet go from a relatively pristine area to one that looks more like a Neutron bomb hit it, all in the name of economic development. #27

Forest Service Response:

Forest plan direction for the Project Area in regards to the visual resource is to provide Forest visitors (local residents and tourists) with visually appealing scenery, with emphasis on those landscapes seen from saltwater use areas and small boat routes such as Carroll Inlet and Neets Bay. The management intent for these saltwater viewsheds from the Forest Plan is to reduce the apparent visual impact of timber harvest on steep and evenly-vegetated landforms.

As viewed from Carroll Inlet and eastern Neets Bay, the landscape will be managed for a combination of commodity output and amenity-oriented activities. These landscapes will have a modified but still basically "natural" appearance. Over time, all economically suitable National Forest System lands in the Project Area will be harvested.

L Appendix

Issue 4: Wildlife

Issue 4A. Long-term viability of species.

Letters and Comments on this Subject Include:

2, 4, 5, 10, 13, 16, 40, 41

Examples Include:

We remain concerned about the cumulative effects of this project in combination with other ongoing and proposed timber harvests on Revillagigedo Island and across the Tongass National Forest, particularly in relation to long-term viability of species. #2

We believe the Final EIS should address how the USFS will maintain viable populations of this and other native species throughout the planning area if habitat capability continues to decrease. #2

On page 113, Chapter 3, it states that the project area's contribution to well-distributed populations through maintenance of connectivity is critical. How did the planning team provide for connectivity of areas? #13

Forest Service Response:

The assessment of population viability is an ongoing science, which the Forest Service is continuing to evaluate and address in the TLMP Revision. The TLMP RSDEIS (1996a) would maintain wildlife populations through a complex of large, medium, and small old-growth habitat reserves laid out across the Tongass totalling 1 million acres, outside congressionally designated areas. This strategy implements the concepts recommended by the VPOP Committee. At least 73 percent of the old-growth habitat that existed on the Tongass when large scale logging began in 1954 would remain undisturbed, even after implementation for 100 years.

As recommended by the PNW Peer Review of the VPOP Committee Report, the function of the old-growth habitat reserves would be enhanced by establishing corridors between them under a variety of land-use allocations or standards and guidelines. These include beach and estuary fringe and riparian buffers as well as identified travel corridors.

As noted in the Upper Carroll EIS, Chapter 3, Old Growth and Biodiversity section, viability within the project is expected to be maintained after implementation of the project. Implementation of old-growth habitat reserves as identified in the 1996 TLMP RSDEIS, identified adjacent to the Project Area, and one small habitat reserve identified in Carroll River, along with beach, estuary, and riparian buffers, are strategies to maintain viable populations. Alternative 3 proposes no harvest, and Alternative 7 proposes little harvest, within these old-growth habitat reserves.

The Tongass Land Management Plan Draft Revision is continuing to undergo analysis. Interagency teams were convened to conduct conservation assessments and resource analyses. These assessments are providing a scientific basis for incorporating viability considerations into the TLMP Planning process. These assessments have been incorporated into the FEIS.

Issue 4B. Goshawk guidelines.**Letters and Comments on this Subject Include:**

2, 13, 36

Examples Include:

The USFS should adopt interim goshawk guidelines to avoid further compromising the available habitat base needed to assure continuance of a viable goshawk population across the Tongass. #2

TCS supports strong conservation measures to ensure the protection of goshawk nesting areas. #13

I think goshawks should be given full protection because the 1996 Appropriations Bill was vetoed - full protection for those goshawk nests, foraging areas, et cetera. #36.

Forest Service Response:

The TLMP RSDEIS (1996a) proposes updated standards and guidelines for goshawk habitat management. These guidelines include a 25 acre nest stand and an additional 75 acre nesting habitat that are to be maintained with no commercial timber harvest. These guidelines will be followed as project mitigation measures unless new revised guidelines are issued. These guidelines apply to areas with known or probable goshawk nests. Although there have been reports of goshawk sightings in the Upper Carroll Project Area, no nests have been found. If a goshawk nest is found during unit layout, the unit will be modified or dropped to conform to the guidelines.

A draft conservation assessment for the goshawk has been completed by an interagency group. Information from this assessment has been incorporated into the FEIS. Each alternative proposed in the FEIS incorporates a strategy to maintain old growth habitat. Each strategy protects old growth to a different level, yet provides protection for an equal or greater number of acres than the 1979 retention plan.

Issue 4C. Public Law 104-19 is no longer valid.**Letters and Comments on this Subject Include:**

2, 4, 5, 13, 36

Examples Include:

The Draft EIS states that Habitat Conservation Areas (HCAs) will not be implemented in response to Section 502(a) of Public Law 104-19, signed by the President on July 27, 1995. It is our understanding that, as of September 30, 1995, this law no longer applies. #2

Forest Service Response:

This is a valid concern. Public Law 104-19 no longer applies. Old-growth habitat reserves and the latest goshawk management guidelines are considered in the FEIS.

L Appendix

Issue 4D. Incorporate HCAs and travel corridors into final decision.

Letters and Comments on this Subject Include:

2, 4, 5, 10, 13, 35, 36, 41

Examples Include:

We suggest that the Final EIS include a habitat conservation management approach retaining existing large blocks of mature forest to maintain management options required to conserve this species (goshawks). #2

We encourage inclusion in all Final EIS project alternatives of large, medium, and small old growth forest reserves or HCAs and wildlife travel corridors, as defined in the interagency Viable Population (VPOP) Committee's draft strategy, with the peer review suggested modifications. #2

In designing alternatives for consideration, all of the immediate interim actions recommended by the VPOP Committee, in response to the PNW Peer Review, must be considered for maintaining options for conserving healthy wildlife populations pending completion of the TLMP Revision. Among the immediate actions recommended by the VPOP Committee were expanding proposed Large and Medium HCAs and connecting corridors.... #4

What is the status of the HCAs that were designed for this area? #5

We support avoiding timber harvest west of Carroll Creek to maintain the Naha and Carroll Creek old growth blocks. #10

How did the planning team provide for connectivity of areas? #13

Some of the corridors in the project area have already been affected by timber harvest, and second growth should not be used as an "old growth corridor", especially considering that corridors are not even a proven strategy for maintaining connectivity. #13

Forest Service Response:

The connectivity of remaining patches of old growth forest is discussed in the FEIS in Chapter 3, Biodiversity, and the effects of fragmentation are discussed in the Wildlife section. The remaining patches of old growth and the connections between them are mapped in Chapter 3, Biodiversity. The Landscape Management Zones Map in Chapter 2 shows the large, medium, and small old-growth blocks and travel corridors.

Each alternative proposed in the FEIS incorporates a strategy to maintain old growth habitat. Each strategy protects old growth to a different level. Alternative 3 minimizes fragmentation of old-growth blocks and corridors. The proposed strategies allow the Forest Service to maintain options for future decisions regarding size, spacing, and location of old growth retention areas.

Issue 4E. Species of concern should be addressed.

Letters and Comments on this Subject Include:

2

Examples Include:

The FWS, USFS, and Alaska Department of Fish and Game are cooperating in the preparation of conservation assessments for three such species (Queen Charlotte's goshawk, Alexander Archipelago wolf, and marbled murrelet) in accordance with the December 1994, Interagency Memorandum of Understanding. The long term land management requirements of these

and other old growth dependant species are also being addressed through revision of the TLMP. We suggest the Final EIS identify how the proposed timber sale will achieve and continue to support these on going efforts. #2

Forest Service Response:

The Forest Service is addressing this issue as part of the TLMP Revision. Conservation Assessments have been completed by an interagency group on the goshawk, wolf, and marbled murrelet to determine the level of risk under different management scenarios. These assessments will be used in the revision of the TLMP.

The TLMP RSDEIS (1996a) proposes standards and guidelines for some Species of Concern such as the northern goshawk, Alexander Archipelago wolf, and marbled murrelet. It also provides direction for coordinating with the US Fish and Wildlife Service in the conservation and management of Candidate Species and Species of Concern.

These standards and guidelines are incorporated as project mitigation measures into the Upper Carroll FEIS. A discussion of the analysis of Species of Concern is presented in the Biological Evaluation in Appendix D and in the Threatened and Endangered Species section of Chapter 3.

Issue 4F., M. Fragmentation of the old-growth forest and connectivity of the remaining patches.

Letters and Comments on this Subject Include:

2, 5, 10, 13, 16

Examples Include:

Collectively, these sales are expected to have adverse effects on habitat for the goshawk, wolf, and other old growth forest associated species by removing old growth forest and fragmenting large old growth blocks, which are critical for maintaining viable, well distributed populations of wildlife across the forest landscape. #2

Local populations of old growth dependant Neotropical bird species can be reduced by fragmentation causing an increase of predation, competition, hatching failure, loss from inclement weather, and noise disturbance. #2

I'm glad to see protection extended to Orchard Lake, but I believe the cutting of Zone 7 and Zone 2 would cause too much fragmentation of the forest and the proposed roads would impact wildlife. #16

Forest Service Response:

The connectivity of remaining patches of old growth forest is discussed in the FEIS in Chapter 3, Biodiversity, and the effects of fragmentation are discussed in the Wildlife section. The remaining patches of old growth and the connections between them are mapped in Chapter 3, Biodiversity,

The Selected Alternative is consistent with the TLMP RSDEIS (1996a) Preferred Alternative and its strategy for maintaining viable populations of wildlife through a complex of large, medium, and small old-growth habitat reserves laid out across the Tongass totalling 1 million acres, outside of congressionally designated areas. Connectivity is maintained between these reserves through beach fringe and estuary buffers, riparian zones, and travel corridors identified in the Upper Carroll EIS.

L Appendix

Issue 4G., K., N. Marbled murrelet, spotted frog, and waterfowl surveys.

Letters and Comments on this Subject Include:

2, 10, 31

Examples Include:

We suggest the Final EIS discuss the adequacy of the marbled murrelet surveys and the implications and conclusions, if any, that were derived from them. #2

Spotted frog habitat includes marshy ponds, streams, and lakes. If additional amphibian surveys are planned for preparation of the Final EIS, we suggest that site visits at potential frog habitat be made during, or shortly following, ice-out. #2

We suggest the Final EIS address what surveys were completed for waterfowl species and their frequency, and that a map showing bird distribution and areas of concentration be included. #2

Wildlife surveys, especially for mountain goats (winter use only), goshawks, murrelets, great blue herons, sandhill cranes, and Vancouver Canada geese need to be conducted in the project area to locate and maintain important habitats prior to unit selection in the ROD. #10

Forest Service Response:

Surveys were conducted for these species to facilitate development of reasonable alternatives and are discussed in the Wildlife Specialist Report for the Upper Carroll Project. This document is part of the planning record and is available upon request from the Ketchikan Ranger District. This level of detail would not be appropriate for inclusion in the EIS. No additional surveys are planned between the Draft and FEIS. Impacts to these and other wildlife species are discussed in the Wildlife and Threatened and Endangered Species sections of Chapter 3, and in the Biological Evaluation in Appendix D.

Issue 4H. Effects of blowdown on marbled murrelet nests - scientific basis of 30 acre nest buffer.

Letters and Comments on this Subject Include:

2

Examples Include:

We also suggest that the Final EIS discuss the effects of blowdown on proposed 30 acre murrelet nest buffers, and the scientific basis for the 30 acre buffer. #2

Forest Service Response:

Impacts are discussed in the Biological Assessment in Appendix D. The Biological Assessment concluded that there may be impacts to marbled murrelets as a result of harvesting nesting habitat. The TLMP RSDEIS (1996a) includes standards and guidelines for marbled murrelets. The standards and guidelines require a 600 foot radius buffer around any known marbled murrelet nest. This equates to about 26 acres. Activities are to be minimized within this buffer zone during the nesting season (May 1 - August 15). The buffer zone is to be maintained and monitored for two years following nest activity. These standards and guidelines are considered adequate to maintain the necessary habitat for these species. These standards and guidelines are incorporated as project specific mitigation measures into the Upper Carroll FEIS. Every attempt will be made to make the nest buffers wind firm. This will be assessed on a case by case basis to take into account susceptibility of the nest to blowdown. The scientific basis for the nest buffers is contained in the TLMP RSDEIS (1996a), its planning record, and the Marbled Murrelet Conservation Assessment Report that was completed for the Draft TLMP Revision.

Issue 4I. Effects of road density and access on wildlife need more analysis.**Letters and Comments on this Subject Include:**

2, 10, 13, 36, 38

Examples Include:

Not taken into account was access by boats carrying all-terrain vehicles which can be expected to use the road system, especially if the road to Shrimp Bay is constructed. We suggest the Final EIS address alternatives to road construction and the management of constructed roads. #2

The Lake Tyee to Swan Lake Transmission Intertie preferred route passes through the Project Area by way of Carroll Creek and Neets Creek drainages. The intertie's preferred route and accompanying road will increase hunter access for deer hunters in the Project Area, leading to increased competition for deer. #10

An attempt should be made to identify and maintain wolf travel corridors, and predict changes in wolf behavior and travel patterns following the construction of proposed roads. #10

The DEIS suggests that access management would mitigate the effect of road density on the Alexander Archipelago wolf (page 141). Because the proposed road density in this project is very high, especially in terms of volume of timber harvested, we think more protection is needed. #13

Forest Service Response:

Increased access due to road construction is indeed a concern. This is analyzed in the FEIS. Only the mainline road along Carroll Creek would remain open after project completion. The possibility of increased non-motorized and/or all terrain vehicle use even after such measures are implemented is acknowledged.

The effects of roading on wildlife is covered in the FEIS, Chapter 3, Wildlife section under Cumulative Effects - Road Density Effects Analysis. Open road densities were considered when developing the Road Management Objectives for all the roads in the Project Area. Road building is minimized to the extent possible in alternative design.

The Swan Lake/Lake Tyee Intertie Draft EIS had not been released prior to the release of the Draft Upper Carroll EIS. Information released in the Swan Lake/Lake Tyee Intertie DEIS has been incorporated into the cumulative effects of the Wildlife and Threatened and Endangered Species sections of Chapter 3 of the Upper Carroll FEIS.

Issue 4J. Wildlife models are inaccurate.**Letters and Comments on this Subject Include:**

2, 10, 31

Examples Include:

We believe the current wolf and Sitka black-tailed deer habitat capability models used for analyzing the effects of projects on wildlife habitats are outdated, over simplistic, and are not useful in determining population viability. More empirical information is available and, we suggest, should be used to update these models and rerun them for the Final EIS. #2

We believe the Vancouver Canada goose habitat capability model from which these figures were derived is too narrowly defined and based on out dated perceptions of the needs of this species. #2

L Appendix

We question the outputs shown by the habitat capability models in this DEIS. #10

We recommend these models be used consistently across the Tongass in each EIS until they are improved or changed by the interagency model development committee that was created to oversee the quality and verification of the models. Any significant changes to the models should only be made after reaching consensus among the original authors of the model. #10

The numbers of animals predicted by the models are the best available estimate of habitat capability given the current available information. #10

The DEIS claims a total loss of only 16 deer as a result of logging almost 2,500 acres in Alternative 2. This equates to an average habitat capability for the acres harvested of only 4 deer per square mile. This seems an unlikely low deer density for commercial forest in the Project Area even with predators and deep snow conditions. In contrast, the DEIS indicates that the previous harvest of about 1,400 acres in the project area resulted in the loss of 240 deer, or about 110 deer per square mile. Clearly these anomalies need to be examined and any errors corrected. #10

Forest Service Response:

All habitat capability models were developed by a group of State and Federal biologists, including biologists from Alaska Department of Fish and Game, USDA Forest Service and USDI Fish and Wildlife Service. The models are used to estimate long-term habitat changes. They cannot be used to estimate the current or future populations, as discussed in Chapter 3 of this document.

The PNW Peer Review of the VPOP Committee Report pointed out various needs of the deer model, but complemented research supporting the model. The report noted some shortcomings in the models for other species. However, these are the best models available for the Tongass National Forest, and are continually being re-evaluated and updated. If field verification indicates the need to adjust the models, such adjustments will be made. This type of validation monitoring is usually carried out at the regional level.

The model predicts a low number of deer capability lost (16) as a result of the project. This is due to the fact that previous harvesting in the Carroll Creek and Neets Creek drainages removed much of the high value deer winter range. This is the reason for the high number of deer capability (240) lost to previous harvest. As a result, the Upper Carroll project harvests mostly at high elevations, away from salt water, and on west and north facing slopes, which results in a significantly lower number of deer capability lost as predicted by the model. The models place a high value on unfragmented blocks. Therefore, the first entry into an area shows very high losses of habitat capability and subsequent entries show less. A rough hand calculation based on the model was done to check the accuracy of the model generated figures. The hand calculations were very similar to the model predictions.

Issue 4L. Impacts of timber harvest on neotropical migratory birds.

Letters and Comments on this Subject Include:

2, 13, 36

Examples Include:

We suggest that surveys be conducted to determine neotropical bird population and distribution. #2

Several neotropical migratory and resident bird species nest in the Tongass, including, but not limited to, the Pacific-slope flycatcher, Townsend's warbler, hairy woodpecker, and brown creeper (the latter two are USFS Management Indicator Species). Sidle (1985) found that species richness can be negatively influenced by timber harvesting. #2

As far as we know, there is no literature that supports the concept of clearcutting improving habitat for the olive-sided flycatcher, as the DEIS suggests on page 141, Ch. 3. #13

Forest Service Response:

The management indicator species identified for the Tongass National Forest do not include all neotropical migratory birds. The Forest Plan is currently under revision, and the addition of new management indicator species would need to take place at that level. However, until that time, effects can be partially addressed using old-growth dependant bird species such as the brown creeper, and hairy woodpecker that use similar habitat and therefore would be similarly affected by harvest. It is not practical to evaluate each species individually. That is the purpose for selecting management indicator species.

The impacts to olive-sided flycatchers were evaluated as part of the Biological Assessment. The effects of clearcutting on olive-sided flycatcher habitat will be reviewed again for the FEIS.

Issue 4O. Martin habitat capability figures in DEIS are wrong.

Letters and Comments on this Subject Include:

2

Examples Include:

However, we believe Table 3-31 shows an error in the martin habitat capability change within the project area between 1954 and 1995. The correct figure should be 90 percent, which means the pine marten has lost a substantial amount of habitat. #2

Forest Service Response:

Table 3-31 should show a habitat capability value of 45 marten. This is a 10 percent decline in habitat capability. The correction will be made in the FEIS.

Issue 4P. Do not harvest in travel corridors.

Letters and Comments on this Subject Include:

2, 10, 16, 41

Examples Include:

We believe further analysis should be conducted to ensure wildlife corridors are not compromised, and suitable old growth habitat is maintained. #2

We are also pleased to see old growth corridors delineated in the EIS. Unfortunately, all action alternatives except alternative 3 put timber harvest units in these corridors. If these corridors are to be functional, timber harvest needs to avoid them or alternative corridors need to be delineated. #10

The project area falls too close to Naha and would cut off any wildlife corridor between this protected wilderness and Misty Fjords Wilderness. #16

Because of its nature of being sort of a constriction between two halves of the island, I think harvesting within the areas that are potential passage routes for all species, particularly large mammals, presents a problem and a challenge, and I think that harvest within areas, particularly in the center of the area that has been proposed, ...it should not be entered. #41

Forest Service Response:

Each alternative in the Upper Carroll Project addresses wildlife corridors to a different degree. Effects on fragmentation are displayed in the Old Growth and Biodiversity section in Chapter 3. Alternative 3 minimized impacts to old-growth blocks and maintains wildlife corridors between these blocks. The comment to avoid harvesting in travel corridors is acknowledged.

The VPOP Report (1993) outlines the objectives of designated travel corridors in a Habitat Conservation Strategy. These objectives were followed for the design and location of travel corridors for the Upper Carroll Project. Travel corridors are a minimum of one-quarter mile in width. Roads and harvest units are proposed in some of the project level corridor since adequate forage and hiding habitat would remain with them for wildlife species to successfully move from one large block to another.

Issue 4Q. Identify retention areas for the FEIS

Letters and Comments on this Subject Include:

2

Examples Include:

We suggest the Final EIS include a map showing the old growth retention block locations for each alternative. #2

Forest Service Response:

Old-growth habitat blocks were identified for the overall project. These blocks include the large and medium old-growth habitat reserves proposed under the TLMP RSDEIS (1996a). A small old-growth block is identified along the west side of Carroll Creek. These blocks are shown on the Landscape Management Zone Map in Chapter 2. The ROD includes a map of old-growth retention designated for the Selected Alternative.

A draft conservation assessment for the goshawk has been completed by an interagency group. Information from this assessment has been incorporated into the FEIS. Each alternative proposed in the FEIS incorporates a strategy to maintain old growth habitat. Each strategy protects old growth to a different level, yet provides protection for an equal or greater number of acres than the 1979 retention plan.

Issue 4R. Cumulative effects of past and current timber harvest on wildlife need to be addressed.

Letters and Comments on this Subject Include:

2, 10, 13, 27

Examples Include:

We suggest a cumulative analysis of past and current habitat losses within the sale area and adjacent timber sale units be included in the Final EIS. #2

The cumulative effects analysis should consider the effects of the proposed timber sale in combination with effects of past and reasonably foreseeable sales on Revilla Island. #10

The cumulative impacts caused by roading and logging are at odds with other uses of the forest such as subsistence hunting and gathering. #13

Further, cumulative analysis which includes impacts of management activities or projects outside the Carroll Inlet project boundaries are critical. #13

Also obviously, the cumulative effects of all this isn't good for long term wildlife habitat. #27

Forest Service Response:

The cumulative impacts to wildlife species are discussed in the Wildlife and Threatened and Endangered Species sections of Chapter 3. Also, Tables 3-99 and 3-100 in the Subsistence section of Chapter 3 show the cumulative impacts for deer on Revilla and Prince of Wales Island. Assessments on wildlife populations viability are being done for the TLMP Revision. These assessments have been incorporated into the design of alternatives for his project and Alternative 3 maintains the large contiguous blocks to the extent possible.

Issue 4S. Wildlife field inventories and methodology should be published in the FEIS.

Letters and Comments on this Subject Include:

2

Examples Include:

We suggest including in the Final EIS, descriptions of the sampling methodologies and any variations from those methods. #2

Forest Service Response:

Surveys conducted for wildlife species are discussed in the Wildlife Specialist Report for the Upper Carroll Project. This document is part of the planning record and is available upon request from the Ketchikan Ranger District. This level of detail would not be appropriate for inclusion in the EIS. No additional surveys are planned between the Draft and FEIS. Impacts to wildlife species are discussed in the Wildlife and Threatened and Endangered Species sections of Chapter 3, and in the Biological Evaluation in Appendix D.

A Botanist conducted surveys for plant Sensitive Species and Species of Concern and the information was used to prepare the Biological Assessment. No additional plant surveys are planned for the Upper Carroll Project.

Issue 4T. Incorporate Kiester and Echart (1994) review of viable population strategy into FEIS.

Letters and Comments on this Subject Include:

4, 10

Examples Include:

Recommendations to attempt to keep wildlife populations viable and well distributed, as required by the National Forest Management Act, are contained in the draft Interagency Viable Populations Committee (VPOP) Report and were strengthened by the Kiester and Echart review of this strategy. These recommendations should be incorporated into the ROD. #10

L Appendix

The VPOP Committee, the PNW Peer Review, and the Draft EA, conclude that current practices are insufficient to maintain viable populations of wildlife. #4

In designing alternatives for consideration, all of the immediate interim actions recommended by the VPOP Committee, in response to the PNW Peer Review, must be considered for maintaining options for conserving healthy wildlife populations pending the completion of the TLMP Revision. #4

Forest Service Response:

The assessment of population viability is an ongoing science which the Forest Service is continuing to evaluate and will address in the TLMP Revision. As noted in the EIS, Chapter 3, Old Growth and Biodiversity section, viability within the project is expected to be maintained after implementation of the project. Implementation of old-growth habitat reserves identified adjacent to the Project Area, as identified in the TLMP Revision, and one small old-growth habitat reserve identified in Carroll Creek, are strategies to maintain viable populations. Alternative 3 proposes no harvest within these old-growth habitat reserves.

The Selected Alternative incorporates an old-growth strategy. The strategy is consistent with that which is proposed in the TLMP RSDEIS (1996a) and implements the concepts recommended by the VPOP Committee. As recommended by the PNW Peer Review of the VPOP Committee Report, the function of the old-growth habitat reserves would be enhanced by establishing corridors between them under a variety of land-use allocations or standards and guidelines. These include beach and estuary fringe and riparian buffers. A discussion of the VPOP Committee Report is included in the Old Growth and Biodiversity section of Chapter 3. A discussion of Kiester and Echart's peer review has been added to the FEIS.

Issue 4V. Add mountain goat as a MIS and define winter range within Project Area.

Letters and Comments on this Subject Include:

5, 10, 13, 36

Examples Include:

Goat Winter Range: There is nothing mentioned of this species. The project is within important goat winter range for the goat. Extensive surveys and analysis must be implemented, before anything is offered in this project area. #5

Of particular concern to us is the necessity for the field identification of mountain goat winter range. The location of this important habitat was not identified or discussed in the draft EIS. The FEIS needs to demonstrate proper consideration for avoidance of this habitat type. #10

Forest Service Response:

The mountain goat has been added to the FEIS as a Management Indicator Species. An analysis has been included in the FEIS on the effects of the project on mountain goats and their habitat. Allowances have been made in the FEIS for maintain goat habitat.

The Alaska Department of Fish and Game (ADF&G) monitors the mountain goat populations through aerial surveys. Information was gathered from ADF&G biologists. This included information on important mountain goat winter range, escape terrain (cliffs), and population concentrations. The information was used in the EIS analysis.

Cliffs and slopes over 50 degrees were identified and the mountain goat model was used as an additional analysis tool. In this analysis, important winter range was identified as high volume stands within 1300 feet of escape terrain (50 degree slopes or cliffs). The analysis is included in the Wildlife section in Chapter 3 of the FEIS.

Issue 4W. Harvest of previously designated retention and extended rotation areas.**Letters and Comments on this Subject Include:**

10

Examples Include:

Under the current Tongass Land and Resources Management Plan (TLMP), the wildlife habitat retention requirements have been the FS's primary strategy for assuring protection of wildlife habitat is balanced with the production of timber. Therefore, the department will carefully consider any proposed harvest of previous designated wildlife habitat retention that we previously found consistent with the ACMP. ...we may determine that deferral of logging in the previous retention is still necessary to ensure the ACMP standards are met. #10

Forest Service Response:

Most of the old-growth habitat identified as retention within the normal CFL was located around the head of Carroll Inlet and along Carroll Creek. Most of the isolated retention was high elevation alpine area that was identified because of its value as summer range for deer and bear. Some harvesting will take place in previously identified retention. This is discussed in the Old Growth and Biodiversity section in Chapter 3.

Old-growth retention was never intended to be a permanent land allocation. The retention was re-evaluated for subsequent projects. The previously identified retention is mapped in GIS. The Selected Alternative is consistent with the retention requirements and allowances have been made for important fish and wildlife habitat as required in the Alaska Forest Resources and Practices Act.

A draft conservation assessment was completed for the TLMP Revision by an interagency group. Information from this assessment has been incorporated into the FEIS. Each alternative proposed in the FEIS incorporates a strategy to maintain old growth habitat. Each strategy protects old growth to a different level, yet provides protection for an equal or greater number of acres than the 1979 retention plan.

Implementation of the old-growth habitat reserves identified adjacent to the Project Area, as identified in the TLMP Revision, and one small old-growth habitat reserve identified in Carroll Creek, are strategies to maintain viable populations and offset harvesting previously identified old growth retention. We feel this strategy does a better job of addressing viable population concerns by more closely following the recommendations of the VPOP Committee and the PNW Peer Review.

Issue 4X. Patch size analysis should incorporate edge effects.**Letters and Comments on this Subject Include:**

10

Examples Include:

Patch-size effectiveness also needs to be correctly analyzed to accurately portray cumulative impacts. For example, old growth blocks containing 8,000 bf/acre or more should be reduced by a 300-foot-wide perimeter buffer to clearly display the sizes and patterns of remaining interior forest conditions. Besides displaying the blocks of various sizes and the percentage or number of forest acres in these block, the FEIS should show edge-to-area ratios for each block in excess of 1,000 acres to provide an index of fragmentation within the blocks. #10

L Appendix

Forest Service Response:

Patch size effectiveness is discussed in the Old Growth and Biodiversity section of Chapter 3 of the FEIS. The analysis for edge effectiveness was done using the patch size effectiveness calculations from the Management Indicator Species Habitat Capability Models. These were developed at the Workshop to Recommend Patch Size Relationships and Corridor Requirements for the MIS and TES Species. As discussed in Chapter 3, individual species respond differently to natural and human-induced fragmentation. Our analysis takes these differences into consideration. The application of a standard 300 foot wide buffer has not been adopted by the Forest Service and does not take these species' differences into consideration.

Issue 4Y. Brown bear and moose should be addressed.

Letters and Comments on this Subject Include:

10

Examples Include:

Small numbers of brown bear and moose have been observed in recent years on Revilla Island. The EIS should evaluate the potential for these species eventually becoming established on Revilla Island under the "no action alternative" versus the cumulative roading and habitat losses which would occur as part of this proposed action. #10

Forest Service Response:

Only one occurrence of brown bear has been reported on Revilla Island and this occurred in Carroll Inlet. One moose was reported in the vicinity of Orchard Lake a few years ago. There are no established populations of these species on Revillagigedo Island and no indication that they are colonizing the island. It would not be surprising that individuals of both species would cross to Revilla Island from the mainland since the saltwater separating the two land masses is less than one mile wide at the north end of the island. With this in mind, colonization would probably already have taken place if sufficient habitat were available on Revilla Island to support populations.

Due to the absence of populations of these species on Revilla Island, these species were not selected as Management Indicator Species. We are unable to predict if and when populations of these species will establish themselves on Revilla Island.

Issue 4Z. Timber harvest, road location, and construction should incorporate bear timing.

Letters and Comments on this Subject Include:

10

Examples Include:

The traffic at stream crossings may displace bears from these vital areas at critical times. Field inspections by wildlife biologists of the fish streams in the project area should precede final siting of stream crossings. #10

Forest Service Response:

There has been no evidence of reduction in bear populations in areas where roads cross salmon streams, except in relation to excess hunting pressure. The roads in this Project Area are not connected to the Ketchikan road system and are not expected

to receive large numbers of hunters using all terrain vehicles. In addition, most roads will be closed following completion of the project.

Road crossings are not constructed during the spawning season to protect salmon. This will also avoid impacts to bears when feeding on salmon.

Issue 4AA. Threatened and endangered plant surveys.

Letters and Comments on this Subject Include:

10

Examples Include:

Surveys for rare or unique species of plants should be continued within the project area in the coming field season. #10

Additionally, Pacific Yew could potentially occur within the project area. Inventories should be conducted prior to the FEIS and, if this species is found, the provisions of the Pacific Yew Act of 1992 should be implemented in the ROD. #10

Forest Service Response:

Surveys for threatened, endangered, and sensitive plant species were conducted in 1995. No additional surveys for TES plants are planned in the Project Area. Crews working during the implementation of the project will record observations of any such species. Surveys for Pacific Yew were done during stand exams. No occurrences have been recorded within the Project Area.

Issue 4BB. Protect estuary and beach habitat.

Letters and Comments on this Subject Include:

16, 21

Examples Include:

I am very concerned that the Carroll Creek block in the project boundary does nothing to protect important estuary habitat. #16

I would like to think that a 500 foot beach fringe would take care of all subsistence needs, but I don't think it does. #21

Forest Service Response:

The Carroll Creek block includes areas on the west side of the Carroll Creek estuary. A 1,000 foot estuary buffer is also implemented for each alternative to protect these sensitive areas.

The finding in the Subsistence section of Chapter 3 indicates that subsistence may be restricted as a result of this project. The 500 foot beach fringe does not eliminate that risk. However, an effort was made to protect the highest value subsistence areas. The beach fringe is one of the highest use subsistence areas. The beach fringe will also maintain a travel corridor along the beach. Reductions in habitat capabilities for deer and other subsistence wildlife species are displayed in the Subsistence section in Chapter 3 of the FEIS.

L Appendix

Issue 4CC. Is the ban on encroachment on marine mammals enforceable?

Letters and Comments on this Subject Include:

21

Examples Include:

Is the ban on approaching marine mammals enforceable? #21

Forest Service Response:

The Forest Service monitors disturbances to marine mammals as a result of project implementation. If violations occur, they can be enforced through contract administration. Violations not associated with Forest Service activities are enforced by the National Marine Fisheries Service.

Issue 4DD. Effect of water pollution on TES marine mammals and other species.

Letters and Comments on this Subject Include:

31

Examples Include:

Humpback Whale -- should add impacts from toxic substance going into Ward Cove and Tongass Narrows from KPC wastewater outfall. #31

Sea lions were observed during one of the more recent large fish die-offs in Ward Cove. They were eating the herring. I don't know that this is healthy #31

The toxic substances in Ward Cove are of particular concern in regards to swans. #31

Forest Service Response:

The timber from this project may be sold to 1) Ketchikan Pulp Company, 2) an independent processor, or 3) not sold at all. There may be some impacts to whales, sea lions and other wildlife species if toxic substances are released into salt water. This issue is outside the scope of this document. The enforcement of air and water pollution standards are the jurisdiction of the Environmental Protection Agency. Also, these species do not occur in Ward Cove and Tongass Narrows in high numbers. They are mostly observed passing through the area or staying only for a short time.

Issue 4EE. Monitoring/surveys of trumpeter swans.

Letters and Comments on this Subject Include:

31

Examples Include:

I am not sure that monitoring for effects on swans is sufficient. On a very infrequent basis someone has to look and see if swans are being disturbed and then report to someone if they are. Will this really happen or is this a paperwork solution that will never be implemented? #31

Forest Service Response:

Monitoring will occur as outlined at the end of Chapter 2. Swans will be monitored by the Forest Service Sale Administrator and Wildlife Biologist. A report is prepared and filed with the contract files. If disturbances are found, efforts are made to correct the problem. The information is also used to modify our mitigation practices if deficiencies are found.

Issue 4FF. Trumpeter swan death at Ward Lake.**Letters and Comments on this Subject Include:**

31

Examples Include:

I know that trumpeter swans use the Ward Cove/Ward Lake area and that last year after being in Ward Cove, one of the swans died. My real worry though is for gradual bioaccumulation in swans of the dioxins/futans/pCBS and methylmercury and other persistent substances. #31

Forest Service Response:

The swan that died at Ward Lake last year died for unknown reasons. The carcass was sent to the US Fish and Wildlife Service for tests to determine the cause of death. There was no evidence that the swan died of poisoning. The bird was badly emaciated, suggesting starvation was a factor.

Issue 4GG. Specific comments on the Upper Carroll DEIS.**Comments Include:**

We suggest the Final EIS include a map noting harbor seal haulouts. #2

Forest Service Response:

Harbor seal haulouts will be shown on a map in the FEIS.

Comments Include:

Chapter 3, page 4, paragraph 2 (GIS): This paragraph states that the GIS contains a large database with information on a variety of resources. We suggest the nature of such information be described. #2

Forest Service Response:

The nature of the GIS database is discussed in the latter part of the same paragraph.

L Appendix

Comments Include:

We suggest defining a manageable set of species #2

Forest Service Response:

A manageable set of species is a reasonable number of species that can be analyzed in the EIS. This is the basis for selecting Management Indicator Species. As discussed in the Wildlife section in Chapter 3, Management Indicator Species collectively represent the complex of habitats, species, and associated management concerns for the total number of species occurring within the Project Area.

Comments Include:

Chapter 3, page 83, Table 3-31: We believe the marten habitat capability percent change should be "-90" instead of "-18". #2

Forest Service Response:

This is correct. These and other figures will be corrected in the FEIS.

Comments Include:

Chapter 3, page 85, Table 3-32: We believe the percent changes for the WAA column should read "-30" instead of "-27", and "-19" instead of "-18". #2

Forest Service Response:

These are valid corrections and will be changed for the FEIS.

Comments Include:

Chapter 3, page 85, Deer Population Objectives, 2nd paragraph, 4th sentence: The sentence should refer to "Table 3-32" rather than "Table 3-40". #2

Forest Service Response:

The correction will be made in the FEIS.

Comments Include:

Chapter 3, page 86, paragraph 4, last sentence: This sentence should read "90%" instead of "10%" for marten habitat capability decline' #2

Forest Service Response:

This correction will be included in the FEIS.

Comments Include:

We suggest the Final EIS identify the number of acres contained within the Carroll Block and the portion of Misty Fjords that is on Revillagigedo Island. #2

Forest Service Response:

These figures will be included in the FEIS.

Comments Include:

The wildlife timing restrictions which have been placed on species other than those listed as threatened or endangered under the Endangered Species Act should be dropped. The restrictions only add cost and delay road building and logging operations. Some of the most restrictive timing requirements are on species which can be hunted during certain times of the year. #45

Forest Service Response:

Species of Concern (formally called Category 2 Candidate Species) are identified by the U.S. Fish and Wildlife Service. Sensitive Species are identified by the Forest Service Regional Forester. There is some overlap between these two lists. The Forest Service works closely with the U.S. Fish and Wildlife Service to maintain viable populations of these species in an attempt to keep them off the Endangered Species List.

In the Upper Carroll project, timing is applied to nesting bald eagles and wintering trumpeter swans. The bald eagle is protected under the Bald Eagle Protection Act administered by the U.S. Fish and Wildlife Service. The Forest Service operates under an interagency agreement with the U.S. Fish and Wildlife Service in which we agree to restrict activities within one-half mile of active nests.

Swans are a Sensitive Species and are sensitive to disturbances on their wintering areas. The TLMP RSDEIS (1996a) contains the following standards and guidelines which are incorporated into the Upper Carroll Project:

1. Provide for the protection and maintenance of trumpeter swan habitats.
2. Avoid disturbance of trumpeter swan, particularly during nesting, brood-rearing, and wintering periods, to prevent abandonment of their nests, brood-rearing areas, and winter habitats. As a general guideline, limit developments within 0.5 miles (2640 feet) of wetlands used by nesting, brood-rearing, and wintering trumpeter swans. The District Ranger will take feasible measures to minimize disturbance.
3. Avoid placement of overhead wires, fences, and other structures which could interfere with the flight paths of swans and cause injury or mortality.
4. Cooperate with State and other Federal agencies to develop sites and opportunities for the safe viewing and observation of trumpeter swans by the public. Maintain a public education program explaining forest management activities related to trumpeter swans in cooperation with State and other Federal agencies.

Comments Include:

Units 79 and 80 should be deleted to maintain the Carroll River to Traitors Cove wildlife corridor. #10

Forest Service Response:

These units were considered for harvest but were dropped from all alternatives in the FEIS.

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Comments Include:

Units 16, 64, 66, and 67 should be deleted from the preferred alternative to avoid potential mountain goat winter range. #10

Forest Service Response:

Mountain goats have been included as a Management Indicator Species in the FEIS. Impacts to mountain goats and goat winter range are discussed in the Wildlife section of Chapter 3. The units mentioned in the comment have been eliminated from Alternatives 6 and 7 in the FEIS.

Comments Include:

Unit 24 significantly fragments a high-volume old growth block located above the Carroll estuary. This unit should be deleted in the ROD. #10

Forest Service Response:

This unit was dropped in the ROD to maintain the old growth corridor and to meet proportionality requirements.

Issue 5: Subsistence

Issue 5A. TRUCS data is not accurate. Inadequate information on subsistence use of the area.

Letters and Comments on this Subject Include:

2, 7, 38

Examples Include:

The FWS is concerned that much of the data on subsistence uses presented in the Draft EIS was originally collected in 1987, for the Tongass Resource Use Cooperative Surveys (which is now outdated). #2

The subsistence section shows only lower use area, which tends to have me think you are using information that is either flawed or out of date. You should make a real effort to seek the truth rather than just saying the state says low use. Talk to people like you did during the investigation for the intertie. #2

I have many reservations about the studies that have been done on the Upper Carroll Inlet, and I am concerned about Lake Tyee, because I think they need to do further study of the wildlife and follow up with the villages on how they use subsistence, and maybe work with the State, which has done many studies on subsistence use in Saxman. #38

Forest Service Response:

Although the TRUCS was done in 1987-88, the information is continuously supplemented with ADF&G harvest data and additional surveys by the ADF&G Subsistence Division. The FEIS also contains subsistence information gathered about the Carroll River area during the Swan Lake/Tyee Lake Intertie DEIS. Subsistence hearings were conducted in Ketchikan and Saxman to ensure that the Upper Carroll analysis was performed using the best information available.

Issue 5B. Subsistence finding/AFHA report.

Letters and Comments on this Subject Include:

4, 31

Examples Include:

Because all the action alternatives in the DEIS result in a significant possibility of a significant restriction on subsistence, this DEIS violates Section 810 of ANILCA and the Tongass Timber Reform Act. #4

Because the Forest Service's failure to conduct an effects analysis for subsistence use of salmon and trout, or disclose and analyze the findings of the AFHA Report, the DEIS lacks any basis for concluding that "The potential foreseeable effects from the action alternatives in the Upper Carroll Project Area do not present a significant possibility of a significant restriction of subsistence uses of... salmon....." #4

Maybe you aren't required to count Ketchikan because we don't qualify under some legal qualifications as a rural subsistence town, but..., we aren't any different than the people of Saxman down the road ...in that we subsist.... The Carroll Inlet salmon and Neets Bay salmon are very important. The potential degradation of salmon streams with all the roading and clearcutting in this project is of serious concern. #31

L Appendix

Forest Service Response:

ANILCA declared that the utilization of public lands in Alaska is to cause the least adverse impact possible on rural residents. Ketchikan residents are not considered rural under ANILCA. Therefore, Ketchikan residents are considered sport users. Effects on deer and salmon can be found in the Wildlife and Fish sections of Chapter 3 of the FEIS.

Section 810 provides for a review of action on federal lands which may significantly restrict subsistence uses, but allows such actions to take place if (1) proper notice is given to State agencies, local communities, and other pertinent bodies; (2) hearings in the vicinity of the area involved are conducted; and (3) such an action is determined necessary, consistent with sound management principles for the utilization of public lands, will involve the minimal amount of public lands necessary to accomplish the proposed action, and reasonable steps will be taken to minimize the adverse impacts upon uses and resources resulting from the proposed action. The compliance of the Upper Carroll Project with these provisions is discussed in the Subsistence section, Chapter 3, of the FEIS.

Issue 5C. Maintain huntable populations.

Letters and Comments on this Subject Include:

4, 10, 27, 31, 41

Examples Include:

ANILCA requires the agency to maintain healthy and huntable populations of subsistence species. Accordingly, the alternatives considered in the DEIS must provide for healthy, harvestable populations of subsistence fish and wildlife. #4

We are concerned that additional habitat loss in the area will exacerbate the shortage of deer available to sport hunters in other WAAs which are unable to meet current demand. #10

Pg. 246 -- You are planning that for areas affected by this sale, during the harvest rotation for this area, that habitat capability effect for deer will decline by 62% in WAA 510 and by 48% in WAA 406? Doesn't this sort of imply poor management of subsistence uses of the area? Isn't 48-62 percent decline in deer habitat sufficient to imply too much impact on subsistence uses? #31

I belong to Sealaska Corporation, but timber and subsistence are two different issues, and our primary concern is providing for the studies of the animals, protection of those resources are mandated by ANILCA in 1980, and I hope that the Forest Service does do everything they can to protect the interests of the public and the users of the land. #38

Forest Service Response:

The Subsistence section in Chapter 3 of the FEIS discusses the impacts of this project on subsistence resources. Habitat capability models were used to estimate population levels relevant to current and future hunting demands. Habitat capabilities in WAAs 406 and 510 are presently adequate to sustain all current and projected harvest through the year 2040, except for wolf in WAA 510. If a road connection is made to Ketchikan in the future, it would significantly increase the amount of rural and non-rural use in the area and could increase the amount of competition to the point that there would be a significant restriction in subsistence use of deer and marten in the Project Area.

With future reductions of habitat capability for deer and marten, and in light of the fact that Saxman residents' use of the area may be under reported for the Project Area, there may be a possibility of a significant restriction of subsistence use of marten and deer at some point in the future.

Issue 5D. ANILCA wording is wrong.**Letters and Comments on this Subject Include:**

4

Examples Include:

The standard used by the Forest Service is unlawful. A finding that proposed activities "may" restrict subsistence is what the law requires. The heightened standard used by the Forest Service, "a significant possibility of a significant restriction," is contrary to court rulings and Congressional intent. #4

Forest Service Response:

The Forest Service disagrees with this statement. The language used with regard to ANILCA is appropriate. The "significant possibility" standard is the same as the "may" standard.

Issue 5E. Minimum adverse impact is required under ANILCA.**Letters and Comments on this Subject Include:**

4, 5, 10, 13, 21, 34, 38

Examples Include:

Alternative 5 has the greatest proportion of harvest in the high volume classes which are critical for the Sitka black-tailed deer, a subsistence species. That is not abiding by section 810 which also requires under the law the "least adverse impact" to subsistence. #5

We believe that the Forest Service has failed to show that a significant possibility of a significant restriction of subsistence uses in the Project Area is necessary and consistent with sound management principles for the utilization of public lands. Therefore we disagree with the FS that it has presented an alternative in this DEIS which takes reasonable steps to minimize adverse impacts upon subsistence. #10

Forest Service Response:

The analysis clearly presents the range of effects upon the most likely affected resources in terms of the alternatives considered, and allows the Forest Service to meet its obligation to serve the overall best interest of the nation while affecting current patterns of subsistence use as little as possible. The alternatives, while potentially adversely affecting subsistence uses, do not eliminate opportunities for subsistence, although it may require some users to hunt in different areas, increase their effort, and make other adjustments, as well as changing their experience of the hunt and overall perception of their quality of life. The threshold between "alteration and adaptation" and "elimination" can be different for individual subsistence users. The "No Action" alternative provides the least impact to subsistence uses. Support for the Forest Service findings regarding ANILCA 810 are found in the Subsistence, Fish, and Wildlife sections of the ROD, FEIS, and the planning record.

L Appendix

Issue 5F. Effects of road connections on subsistence use.

Letters and Comments on this Subject Include:

10, 33, 34, 38

Examples Include:

Risks to wildlife from road access also exists during logging operations. The FS should consider asking Forest Service Employees and logging contractors to voluntarily restrict hunting and trapping while logging operations are underway. #10

The FEIS should better evaluate the cumulative impacts of intensive roading on marten, black bears, and wolves. ADF&G research has shown high road densities to be detrimental to each of these species. #10

And also, from KIC's perspective, on subsistence, the various animals, deer, bear, marten, wolves, all the various animals that we feel building roads through this area will greatly increase man's access to these animals and lower the total populations. #33

Forest Service Response:

Connecting the Upper Carroll roads to Ketchikan is not part of this project and has not been analyzed as such. The evaluations in the EIS assume no road connection to Ketchikan. The Subsistence section in Chapter 3 analyzes the effect of road construction on subsistence uses. No portion of the road will be open to motorized vehicle use, other than administrative use. Miles of road proposed for construction can be found in the Roads and Facilities section in the EIS. The cumulative effects analysis in Chapter 3, Page 102, did discuss the potential effects of a road connection to Ketchikan on wildlife populations.

Issue 5H. Cumulative effects analysis for subsistence.

Letters and Comments on this Subject Include:

13, 34, 36

Examples Include:

The subsistence analysis should consider Revilla Island in consort with the surrounding islands that, together, form an overall subsistence and personal use area for residents of Ketchikan and other nearby communities. Given the cumulative impacts of timber harvests under all land ownership surrounding George and Carroll Inlets, and the high demand for consumptive uses of fish and wildlife, it is possible that all timber sales in this area could affect subsistence users. #34

One suggestion I'd like to make to the Forest Service is that they do a cumulative impact analysis for subsistence. Look at all the areas, look at what areas are the most important for subsistence, particularly traditional areas. #36

Forest Service Response:

A cumulative impact analysis for Revilla Island is not necessary for a reasoned decision regarding this project. Analysis in the Subsistence section in Chapter 3 discusses the effects of the Upper Carroll Project and other past and future timber sales surrounding the Project Area. A table showing the effects of past and present projects on Prince of Wales Island is also included in the section. Updated Forest-wide cumulative impact analysis in the TLMP Revision RSDEIS is incorporated by reference.

Issue 5I. No subsistence alternative.**Letters and Comments on this Subject Include:**

4, 34

Examples Include:

Finally, this process violates Section 810 of ANILCA by failing to evaluate alternatives that would avoid restrictions on subsistence resources and uses. #4

Forest Service Response:

There is no alternative that would avoid the possibility of restrictions on subsistence use. The No Action Alternative is evaluated in detail. A reasonable range of action alternatives that provide for minimization of impacts on subsistence use are evaluated in detail.

Issue 5J. All action alternatives will negatively affect my subsistence lifestyle.**Letters and Comments on this Subject Include:**

4, 13, 31, 33

Examples Include:

We depend on the area for our fishing, our recreation, our joy and happiness in being with families. But, very, very concerned about the affects on water quality, because of the importance of the fishing to us and to just about everybody we know. #33

Of primary concern to SEACC's members is the long-term, cumulative impact of the level of development proposed in the DEIS for this project area on their livelihoods and way of life. #4

Forest Service Response:

Timber harvest will have effects on the environment, which are displayed in Chapter 3 of the FEIS. Subsistence hearings and comments on the Draft EIS are used to try and avoid important subsistence use areas. Forest Standards and Guidelines, mitigation measures, and design of the preferred alternative will minimize those effects.

The Upper Carroll Project does not change the priority allocation of fish and game to rural community residents. Based on a review of available harvest volumes for each VCU, it appears that in order to meet independent purchaser and KPC contract volume commitments, most of the LUD III and LUD IV VCUs would need some level of harvest prior to the end of the KPC contract in 2004. Harvest of other areas at this time may decrease the impacts on subsistence users in the Upper Carroll Project Area but would be likely to increase effects on subsistence users in those other areas.

L Appendix

Issue 5GG. Specific Comments on the Upper Carroll DEIS

Comments Include:

Subsistence terminology: We haven't come up with something that is more appropriate for us, but we're seeing that not only is the term subsistence used, but now we're getting into high, moderate, and low levels of use. #34

We, as Native People, don't fall into the classification of subsistence use as high, low, or moderate. #38

Forest Service Response:

The high, medium, and low ratings discussed in terms of subsistence are not intended to apply to subsistence users, but rather to subsistence areas. The term describes how much use an area receives, not how much subsistence a particular community uses.

Issue 6: Social and Economic Effects.

Issue 6A. Supply the volume needed to sustain the local mills and meet the long-term sale obligations.

Letters and Comments on this Subject Include:

11, 12, 20, 43, 49, 50, 53, 55, 56, 57, FL2

Examples Included:

The Forest Service should honor the commitments it has made to the timber industry. #20

Forest Service Response:

The current Tongass Land Management Plan established an allowable sale quantity (ASQ) which is not considered a commitment but is considered a ceiling. This quantity was designed to provide a significant contribution to Southeast Alaska's employment and local community stability, while meeting multiple-use resource goals.

Information on the timber supply situation on the Ketchikan Area of the Tongass National Forest is contained in the Upper Carroll FEIS, Chapter 1, Purpose of and Need for Action, and Appendix A. These sections describe timber volume needs, volume remaining from previous NEPA projects, and ongoing Forest Service project planning efforts. The Forest Service intends to continue to meet long-term contract commitments.

In order to provide the volume to meet contractual commitments, each planned and ongoing EIS must be completed in a timely and expedient manner. To date, all long-term contractual commitments have been met by the Forest Service.

Issue 6B. Timber industry is a key component of the economic stability of Southeast Alaska.

Letters and Comments on this Subject Include:

12, 20, 26, 37, 44, 46, 48, 49, 51, 52, 53, 54, 55, 56, 57, 59, 60, 62, FL2, FL5, FL6

Examples Included:

My family is supported by the timber industry. I believe the timber industry is the key part of the economy for Ketchikan and Southeast Alaska; hunting and fishing are very important to me. #20

Forest Service Response:

The Tongass Land Management Plan (TLMP) and this project provide for the timber industry and hunting and fishing, among other uses. The TLMP determines, among other things, the levels of possible resource production and management, and the availability and suitability of lands for resource management, including timber management. TLMP data is incorporated within the Upper Carroll EIS and is refined by site-specific examination during the project analysis.

L Appendix

Issue 6C. Need a supply of old growth for value added products.

Letters and Comments on this Subject Include:

14

Examples Included:

Our company depends on the continued operation of the forest industry. Without it the viability of all our operations is threatened. #14

Forest Service Response:

Present Supplies Of Old Growth From Within The Project Area. Sawlogs from the Contract Area are currently being processed into sawtimber at mills in Ketchikan and Metlakatla. Water resistant woods (cedars) are not used in the pulping process. The demand for the dissolving pulp, usually limited to low or utility grade logs, made at the KPC facility in Ketchikan is expected to remain long into the future. Pulping provides a market for logs which cannot be economically converted to lumber.

During the remaining nine years of the KPC long-term contract, it is unlikely that other than minimal timber volume will be offered from the sale area to independent timber purchasers. There is potential for small salvage sales to independent timber purchasers in conjunction with KPC sale area clean-up operations. After the termination of the KPC long-term contract, it is likely that the Project Area can support some level of smaller independent timber offerings. Chapter 2 identifies the amount of old-growth remaining after the proposed harvest depending on the alternative.

Future Supplies Of Old Growth From Within The Project Area. The Forest Service recognizes the future need for old-growth to meet a variety of needs. It is expected that these future supplies, though limited, will be available because of a variety of management prerogatives, such as extended rotation areas and partial cutting. The FEIS identifies the acres of old-growth remaining after proposed entries and identifies the percent of CFL harvested by 2140.

Issue 6D. Implementation of this project will provide jobs.

Letters and Comments on this Subject Include:

11, 19, 22, 23, 37, 43, 49, 50, 51, 52, 53, 55, 59, FL1, FL5

Examples Included:

The sale would help boost the economy of the Ketchikan area by providing jobs not only of harvesting the timber but for building roads, for transportation to and from the area, for providing supplies and for the many support functions involved in such a process. #19

Stop putting the needs of people after the needs of fish and wildlife. People are important and jobs are vital to our communities. Anything that can be done to provide more jobs and opportunity for people; that's what I want to see done." #22

Forest Service Response:

The Preferred Alternative, as well as the other action alternatives, would contribute to meeting KPC Long-term Contract or Independent Sale volume objectives and the support of current employment levels. The selection of any of the action alternatives will not effect a net loss or gain in regional employment levels but would help maintain employment at current levels.

Issue 6E: Economic analysis needs to be improved.**Letters and Comments on this Subject Include:**

25, 31

Examples Included:

...the statement on pp3-225 "All the action alternatives have a negative PNV". I seem to recall something from the Regional Guide or R-10 Handbook that alternatives with negative mid-market appraisals should be considered nonviable and dropped from detailed consideration. #25

Forest Service Response:

Current Forest Service direction is to conduct financial assessments or "mid-market analysis" regarding the economics of proposed projects. They are used to determine the financial efficiency for comparing between the range of alternatives. At the time of the analysis (DEIS and FEIS), modifications can be and are implemented to enhance the economics of individual alternatives. The mid-market analysis for Upper Carroll Project alternatives was performed as directed by FSH 2409.18—Sale Preparation Handbook, WO Amendment 2409.18-95-1, 2, 3, and 4 and further described in the R-10 Supplement No. 2409.18-93-3. The R-10 Supplement requires that factors used in calculating the mid-market analysis be based on regional average timber values and logging costs in effect at the date of the Notice of Intent (August 28, 1994). The R-10 Supplement also requires that 60 percent of normal profit and risk be used in the mid-market analysis (see the Socio-economic Environment section in Chapter 3). The current FSH does not have a requirement to drop sales that exhibit negative mid-market appraisals. The final contract stumpage rates will be determined by the appraisal of each offering area using current values and costs.

In a letter within the Upper Carroll Study Plan dated July 7, 1994, Forest Supervisor Dave Rittenhouse (Planning Record—Microdoc #167) documents the rationale behind proceeding with the project even though the mid-market analysis indicated a negative stumpage value. This rationale included:

Independent timber purchasers are offering substantial bid premiums (the difference between the appraised rate and the amount actually bid or offered). The limited timber supply available for the next few years means that current transaction evidence may better reflect future values than current mid-market rates.

Ketchikan Public Utilities is in the process of soliciting an RFP for a 115 KV Transmission Line that will run north to south through the Project Area. Information that would be collected during field reconnaissance for the Upper Carroll EIS will assist the Forest Service in providing NEPA input and in developing specifications for the Special Use Permit.

The Alaska Department of Transportation has issued a contract to evaluate potential transportation inter-tie routes from Ketchikan to the Bradfield Canal area. Many of the potential transportation routes involve the Upper Carroll Project Area. Forest Service transportation needs and field information should be coordinated with those routes being considered by the State of Alaska to minimize environmental effects (i.e. we don't want parallel roads when one well planned route will suffice).

The TLMP SDEIS (1991a, Chapter 2, page 43) lists five million dollars in capital improvement funds for timber road construction and reconstruction planned for FY 1994 through 1999. These CIP funds would make the proposed timber sale economically viable.

Alternative 3 was specifically designed to display maximized sale economics in part through eliminating costly helicopter yarding and road building required to harvest some units or groups of units. All other alternatives were designed to meet specific objectives while minimizing overall costs.

The statement on page 3-225 of the Upper Carroll DEIS "All the action alternatives have a negative PNV" was in error and should have read: "Alternatives 2 and 4 show a negative PNV based on the mid-market analysis, while Alternatives 3 and 5 show a positive PNV".

L Appendix

Issue 7: Roads, LTFs, and Marine Environment

Issue 7A., J. Road maintenance/road closure effectiveness. Road closures must meet ACMP requirements of 11AAC 95.320.

Letters and Comments on this Subject Include:

1, 2, 3, 5, 10, 21, 38

Examples Included:

...proposed methods of closure do not comply with the road closure requirements of 11AAC 95.320. #1

Forest Service Response:

After construction of roads for harvesting timber the Forest Service may close roads for protection of other resources and/or for economic reasons. The Forest Service does not harvest *all* available timber that the roads access, as other land owners usually opt to do, so road closure according to ACMP definition has an adverse effect on streams and other resources when multiple entries are required. Roads proposed to be closed, by the Forest Service definition, will be closed by using the Code of Federal Regulations (CFRs) to prohibit motorized vehicle and other unofficial use, where applicable. Closed specified roads are to be considered "inactive" by the ACMP definition, unless otherwise indicated in the road management objectives. Roads specified to be eliminated will be considered "closed" by ACMP definition. All roads and drainage structures will be monitored and maintained, if necessary, after completion of each sale.

Monitoring of roads and road maintenance is accomplished through final road inspections. A monitoring form is prepared, an inspection is made, and additional work needed to bring the road to Forest standards is done. The Ketchikan Area also monitors a random selection of roads during the annual interdisciplinary BMPs monitoring trip. Periodic inspections of roads by road maintenance staff, other Forest Service employees, other agency employees, and the general public are also used for monitoring. Roads are also monitored after any large scale events such as unusually heavy rains.

Issue 7B. Road cards in DEIS should be changed or improved.

Letters and Comments on this Subject Include:

1, 10, 18

Examples Included:

They are not actually "Road Design Cards" in the traditional sense,... #1

Forest Service Response:

Complete road recon/implementation cards are included in the FEIS for those roads required to implement the units and roads for the Record of Decision. Road cards will contain reconnaissance information pertinent to the roads from other resources.

Issue 7C. Road locations within Class I and Class II stream buffers (Units 6, 8, 18, 21, 68, 72, and 138).**Letters and Comments on this Subject Include:**

1, 3

Examples Included:

The elimination of substantial portions of 100-foot wide Class I and II stream buffers for right-of-way clearing is significant.... #1

We are concerned that some roads would be constructed within TTRA-defined buffers and riparian areas. #3

Forest Service Response:

When final road locations are designated on the ground, care will be taken to keep as much of the road as possible outside of the Class I and Class II TTRA buffer zones. Roads designated for implementation in the Record of Decision, will have buffer zones checked on the ground in order to minimize the length of road segments affecting the buffer zones as part of the Forest Service monitoring plans prior to release for implementation. The Tongass Timber Reform Act (TTRA) allowed for road construction within the buffers through use of Best Management Practices, as defined in the Region 10 Soil and Water Conservation Handbook (FSH 2509.22).

Issue 7D. Water depths for rafting and flushing areas at the Carroll Inlet LTF #7**Letters and Comments on this Subject Include:**

2, 10

Examples Included:

If the maximum water depth for site #7 is 40 feet at MHW, then at MLLW the depth is considerably less. #2

Minimum water-depth standards, for example, appear not to be met in this location. #2

Forest Service Response:

A survey of the LTF site #7, required for permit applications, has shown that the depth of the rafting areas at MLW ("0" foot elevation) will be 40-90 feet in depth. This depth meets the requirements of ATTF guidelines for rafting and flushing capabilities.

L Appendix

Issue 7E, M. Rationale for LTF selection.

Letters and Comments on this Subject Include:

2, 10, 16

Examples Included:

To reduce impacts to Carroll River/Inlet fisheries, though, the Commercial Fisheries Management and Development Division have recommended a second LTF be located in Neets Bay to accommodate much of the volume harvested. #10

We suggest the Final EIS clarify why the Shrimp Bay LTF would be needed if the Fire Cove LTF is available. #2

Forest Service Response:

Location of LTF sites involves transportation analysis of the road system tributary to the facility and site-specific siting considerations. Required information includes: (1) preliminary subsurface evaluation, (2) an inventory of salmon spawning areas, (3) identification of areas protected from wind and adverse sea and swell conditions, (4) existing upland facilities, (5) safe access to the facility from the uplands, (6) submarine bark dispersal, (7) the site's biological productivity, (8) sensitive habitats, (9) safe marine access to facility, (10) storage and rafting areas, (11) locations of eagle nests, (12) tidal flushing, (13) small craft boat anchorages and use areas, (14) effects of earthquakes, and (15) proximity to wetlands.

The rationale for use of the LTFs on the Project Area is contained in the 404(b) permit application. A copy of this is in the FEIS appendix and was also contained in the appendix of the DEIS.

Issue 7F.,G., H. Bark accumulation, toxicity, and monitoring associated with LTF locations

Letters and Comments on this Subject Include:

2, 3, 10, 16

Examples Included:

In addition to the physical presence of bark, there can also be changes in water chemistry, such as the release of hydrogen sulfide and reductions in dissolved oxygen. #10

Accumulation of bark or debris in this area could have a significant adverse impact. #2

Soluble leachates from wood waste have been shown to be toxic to aquatic organisms,... #2

We suggest that the Final EIS include bark accumulation monitoring and establishment of permanent transects prior to operation of any LTF. #2

Forest Service Response:

A monitoring plan is developed and will be implemented to detect and evaluate possible effects of bark accumulation, oil sheens, and surface runoff. Monitoring of existing LTF sites started in 1991 and is ongoing. As more data from the monitoring is collected, further analysis of site-specific information can be used to analyze the impacts of log transfer at these sites. All LTF sites on the Ketchikan Area are being evaluated for non-point source pollutant discharge systems. Some sites are to be modified in 1993 to comply with the new Storm Water Discharge for Industrial Site requirements established in 1992.

Permits required include tideland permits, solid waste permits, COE 404 and EPA 402 permits, State 401 certification, and consistency with Alaska Coastal Management Program.

All existing and proposed LTFs will be consistent with the Alaska Timber Task Force siting guidelines.

Issue 7 I. Navigational hazards to commercial fishermen from LTFs and log rafts.

Letters and Comments on this Subject Include:

2, 10, 25

Examples Included:

Though shrimp pots are typically fished in deeper water throughout the length of the inlet, a conflict exists where log rafts are towed through areas of stationary fishing gear. #10

Forest Service Response:

We are aware of the potential impacts of towing of log rafts on commercial and recreational fishing in the area. The time and duration of these activities is very limited in these areas. The short duration of these activities and the ability of fisher persons and tug operators to coordinate/navigate in these waters will negate any significant impacts to users.

Issue 7K. Drainage structure condition/functionality on existing roads.

Letters and Comments on this Subject Include:

2, 10

Examples Included:

...we suggest the Final EIS include a list of existing drainage structures within the Upper Carroll Project area that have been inventoried and are need of replacement. #2

Forest Service Response:

Prior to implementation of this project, all existing drainage structures, whether culverts or bridges, will be evaluated for their ability to function properly. Structures not functioning to meet all resource needs and requirements will be replaced with properly functioning structures. Field reconnaissance indicates most roads in this area have not been used for approximately 30 years and virtually all drainage structures will be replaced.

L Appendix

Issue 7L., N., P. Utility corridor Intertie road construction. Multipurpose roads require CWA permits

Letters and Comments on this Subject Include:

2, 5, 13, 14, 15, 18, 25, 26, 36, 37, 43, 49, 55, FL3, FL4

Examples Included:

We suggest the issues of multipurpose road construction and the application of the CWA permitting process be addressed in the Final EIS. #2

In addition, we believe the Final EIS should clarify if CWA (Section 404) permits will be needed and obtained for the road sections that are utility corridor related. #2

Forest Service Response:

The roads being proposed in the Upper Carroll EIS are not multipurpose roads, but are intended and designed for use solely for silvicultural purposes.

Section 404(f) of the CWA allows for certain limited agricultural and silvicultural activities to be exempt from the Section 404 permitting requirements. On-going silvicultural operations and associated activities, including related road construction and maintenance, are exempted activities. All roads proposed for construction in this EIS are specifically for silvicultural purposes. Roads to be constructed for access to the utility corridor will be addressed in the DEIS for the Swan Lake-Lake Tyee Intertie. If additional road is constructed for the Swan Lake-Lake Tyee power transmission line, these roads would not be exempt from Section 404 (f) Clean Water Act permitting requirements.

Additional roads that may need to be built to facilitate the utility Intertie use may require permitting through Section 404 of the Clean Water Act. Those roads will be addressed in the Swan Lake-Lake Tyee Intertie EIS.

Issue 7O. Effectiveness of LTF siting BMPs to minimize adverse impacts of LTFs. Dive reports.

Letters and Comments on this Subject Include:

3

Examples Included:

An underwater dive survey should be conducted at each of the four sites..... #3

Forest Service Response:

Location of LTF sites involves transportation analysis of the road system tributary to the facility and site-specific siting considerations. Required information includes: (1) preliminary subsurface evaluation, (2) an inventory of salmon spawning areas, (3) identification of areas protected from wind and adverse sea and swell conditions, (4) existing upland facilities, (5) safe access to the facility from the uplands, (6) submarine bark dispersal, (7) the site's biological productivity, (8) sensitive habitats, (9) safe marine access to facility, (10) storage and rafting areas, (11) locations of eagle nests, (12) tidal flushing, (13) small craft boat anchorages and use areas, (14) effects of earthquakes, and (15) proximity to wetlands.

A monitoring plan is developed and will be implemented to detect and evaluate possible effects of bark accumulation, oil sheens, and surface runoff. Monitoring of existing LTF sites started in 1991 and is ongoing. Monitoring includes the setting

up of transects for future use, measuring existing bark depths, underwater photos of the areas, and compiling reports on each site; all of which has been reported to the EPA as part of the monitoring process. As more data from the monitoring is collected, further analysis of site-specific information can be used to analyze the impacts of log transfer at these sites. All LTF sites on the Ketchikan Area are being evaluated for non-point source pollutant discharge systems. Some sites were modified in 1993 to comply with the new Storm Water Discharge for Industrial Site requirements established in 1992.

Permits required include tideland permits, solid waste permits, COE 404 and EPA 402 permits, State 401 certification, and consistency with Alaska Coastal Management Program.

All existing and proposed LTFs will be consistent with the Alaska Timber Task Force siting guidelines.

During the environmental analysis, an interdisciplinary team was used to ensure that management needs, objectives, requirements, and controls are incorporated in the location of the LTF facility. Criteria needed to protect soil, water, and biological resources were identified by the IDT process. Detailed mitigation measures will be developed in the design phase using criteria from the environmental analysis and through consultation with appropriate resource staffs. Contract provisions and drawings will then be prepared that meet the soil, water, and biological requirements. State and Federal agencies with expertise in marine and intertidal ecosystems have been contacted to gain necessary information for the environmental analysis.

Issue 7Q. Road connections to Ketchikan, Shelter Cove, Shrimp Bay, and Fire Cove

Letters and Comments on this Subject Include:

7, 8, 9, 11, 15, 16, 19, 21, 23, 25, 26, 37, 38, 43, 44, 49, 61, FL1

Examples Included:

Additionally, the roads built during the process are a great benefit to the community because they provide access to expanded recreation areas for all citizens of Southeast Alaska. #19

These road ties will help to expand the recreational opportunities for the citizens in Ketchikan. #FL4, 44

Further, the Assembly encourages the U.S. Forest Service to complete the road segment from Shelter Cove to Upper Carroll Inlet as part of their timber sale. #37

Forest Service Response:

The roads being proposed in the Upper Carroll EIS are not multipurpose roads, but are intended and designed for use solely for silvicultural purposes.

The road connections to other LTFs were analyzed for the 404 permit process, a copy of which appears in Appendix G. The major amount of public comment concerned the connection of the Upper Carroll road system to the Shelter Cove road system with the assumption that the Shelter Cove road system will eventually be connected to the Ketchikan road system giving public access to a large system of roads for recreational purposes. The DEIS did not include the Carroll to Shelter Cove road system due to the high cost of constructing the connection. Due to the concern for displaying this connection, Alternative 2 in the FEIS has been changed to display the effects of using the Carroll Inlet to Shelter Cove tie.

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Issue 7R. Garbage disposal at camp locations.

Letters and Comments on this Subject Include:

10

Examples Included:

Incinerators need to be installed to dispose of garbage at logging camps in the project area. #10

Forest Service Response:

Disposal of refuse on National Forest lands is illegal. Camp operators will be required to conform to all Federal and State laws regarding disposal of refuse and all other regulations pertaining to camps.

Issue 7S. Road clearing widths and potential impacts to wetlands.

Letters and Comments on this Subject Include:

18

Examples Included:

...projected road construction impacts to wetlands are based on a 75' disturbed road corridor. #18

Forest Service Response:

The average disturbance width for the road right-of-way is calculated at 75 feet. Actual disturbance on wetland may be less than that because construction through wetlands is easier than on steep sideslopes, i.e. on relatively flat wetland areas the clearing width would average 30' wide with the actual road prism only occupying 19.5 feet. The 75' average used in the DEIS also includes rock quarry areas, which occur every 1-2 miles along the road right-of-way. Since rock quarries rarely if ever occur in wetland, this would also significantly reduce the amount of acreage that may require clearing in wetland areas. Consequently, the disturbance acreages presented in the DEIS are maximum values. Best Management Practices (BMPs) 12.5 and 14.3 in the Forest Service Handbook 2509.22, Soil and Water Conservation Handbook describe road design for wetlands.

Issue 8: Range of Alternatives

Letters and Comments on this Subject Include:

1, 3, 4, 6, 9, 10, 11, 13, 14, 15, 17, 19, 20, 21, 22, 23, 25, 26, 27, 28

Examples Included:

The range of alternatives considered in the DEIS violates NEPA by failing to include reasonable alternatives resulting from the Forest Service exercising its authority, under the KPC contract or agency regulations, to cancel or terminate the KPC contract, or to debar or suspend KPC's operations under the contract. #4

The range of alternatives presented in the DEIS is very narrow. The action alternatives considered in detail call for harvesting between 36 and 72 MMBF, necessitating reductions in deer and other wildlife habitat in well documented subsistence hunting and trapping areas. Levels of road construction, (between 24 and 58 miles of new road for the action alternatives), also fail to offer an alternative that does not have negative impacts on subsistence hunting and trapping areas. #10

Although the range of alternatives in this DEIS is an improvement over those offered in other recent EISs on the Ketchikan Area, the timber target of 70 MMBF as identified by the agency's purpose and need statement severely restricts their ability to manage for multiple use and do appropriate evaluations required by NEPA and ANILCA. #13

Forest Service Response:

Range of Alternatives - The Council on Environmental Quality (CEQ) regulations governing the implementation of the National Environmental Policy Act (NEPA) require that the alternatives, including the proposed action, respond to the underlying purpose and need for the project (40 CFR 1502.13). In the Notice of Intent (NOI), published in the Federal Register, the Forest Service identified part of the purpose and need for the proposed action to be to make up to approximately 70 million board feet (MMBF) of timber volume available under the Ketchikan Pulp Company Long-term Timber Sale Contract, and/or the Ketchikan Area independent timber sale program

Appendix A of the EIS describes the reasons for scheduling the environmental analysis for the Upper Carroll Project Area at this time. Appendix A also describes the need for up to approximately 70 MMBF in one or more offerings. It briefly addresses the reasons why providing less than the contract volume was not considered in detail. This would include the option of cancelling the contract. In addition, reducing the volume provided, or cancelling the contract, or withdrawing the Project Area from the contract area does not meet the purpose and need for the Upper Carroll Project. Appendix A also includes a discussion of available timber outside the Project Area.

The Upper Carroll alternatives are designed to respond to the significant issues, while (1) meeting the purpose and need for the project and (2) complying with environmental regulations and Forest Plan Standards And Guidelines. Social and environmental consequences of the individual resources are fully analyzed by resource in Chapter 3 and compared in Chapter 2. It is the intent of the analysis to present a clear basis of choice to the decision-maker, in this case the Forest Supervisor.

The action alternatives presented in the FEIS range from 19 MMBF to 61 MMBF net sawlog plus utility (excluding ROW - road clearing volume). More importantly, these alternatives represent reasonable courses of action that address the issues and provide a clear basis for choice among options while accomplishing the stated purpose and need. The No Action Alternative is also presented in detail.

As stated at the beginning of Chapter 2, the alternative development process was issue-driven and began with the determination of specific options that could be utilized to resolve each issue. The developed alternatives explore ways to satisfy public concerns and resolve the issues. They respond differently to the issues and provide a range of choices to the decision-maker and the public. For example, Alternative 3 focuses the proposed actions away from the Naha large old-growth habitat block, the west side of Carroll Creek, Neets Bay, and other sensitive areas. Alternative 7 emphasizes helicopter yarding and alternatives to clearcutting, and minimizes road construction. Other alternatives similarly reflect

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different approaches to addressing the public issues. As a result of reconnaissance efforts between the DEIS and the FEIS, and in response to public comments, all of the alternatives have been modified to varying degrees.

See also response to issue 10 and 18.

Issue 9: Monitoring Levels and Funding

Letters and Comments on this Subject Include:

1, 2, 3, 4

Examples Included:

We are somewhat concerned with the caveat given on page 2-48 that "All monitoring is subject to funding and personnel limitations imposed upon the agency." # 1

The last statement of the first paragraph on page 2-48 of the draft EIS suggests that the monitoring component (and the important steps that follow) may be vulnerable to budgetary constraints, irrespective of the merits of those efforts and the important role they play in Forest planning activities. We trust that this is not the case and recommend that such a statement be eliminated from the EIS. #3

Forest Service Response:

The fiscal and staffing limitations described on page 2-48 of the DEIS will be carried forward into the FEIS. National Forest System program activities related to monitoring are subject to the Federal budget process. The Federal Budget process requires that the Forest Service submit its budget request, including such projects as monitoring of the Upper Carroll Project, to the Office of Management and Budget (OMB) for review, which then makes recommendations to the President of the United States. The President then submits his budget to Congress for further consideration. Only when Congress passes and the President approves the budget is the Forest Service authorized to obligate funds for programs such as monitoring of the Upper Carroll Project. We operate only within the obligation authority of this process. If funding for this project is not authorized the Forest Service has no ability to conduct this monitoring.

Issue 10: Purpose and Need (70 MMBF)

Letters and Comments on this Subject Include:

3, 4, 10, 13, 19, 20, 21, 25, 26, 30, 31, 34, 37, 38, 40, 41, 42, 43, 44, 45, 46, 48, 50, 58

Examples Included:

We believe there are issues related to National Environmental Protection Act (NEPA) implementation that arise by explicitly specifying a harvest volume in the purpose and need section of the draft EIS. For example, in stating that the needed volume from the proposed project is 70 MMBF, we believe the range of alternatives has been limited to those that would meet the identified volume. #3

Chapter 1 and Appendix A of the DEIS offer rationalizations for why clearcutting is scheduled in the Upper Carroll Project Area at this time. However, no reasoned explanation is provided as to when or how the Forest Service determined that the purpose and need for this project was to provide approximately 70 MMBF to KPC and/or the Keichikan Area Independent Sale Program. #4

This "black-box" process violates NEPA by shielding the most important decisions made in the planning process from any public participation. It further violates NEPA by unreasonably restricting the range of alternatives evaluated in this DEIS. #4

While the Forest Service has the discretion to select the purpose and need for a proposed project, the TTRA restricted this discretion by requiring the Forest Service to only "seek to provide" a supply of timber to KPC or other timber operators, subject to the requirements of other applicable laws, and only "to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources." #4

... please state for the record the origination of the management decision to log 70 MMBF from the project area. #25

Forest Service Response:

Purpose and need is too narrow. The Council on Environmental Quality regulations do not provide specific guidelines for the development of the purpose and need for a project. This implies that an agency has considerable discretion in determining the purpose and need. The Forest Service has exercised this authority in a reasonable way. A position statement (feasibility study) for the Upper Carroll Project Area was completed and signed by the Forest Supervisor on July 5, 1994. The position statement determined that up to 70 MMBF could be harvested from the Project Area while meeting Forest Plan Standards And Guidelines (Upper Carroll Planning Record - Microdoc #0199). The position statement in combination with higher order planning documents served as the basis for the purpose and need included in the NOI, published in the Federal Register on August 31, 1994.

Purpose and need decision was made outside NEPA. When there is a major Federal action, such as the Upper Carroll Proposed Action, there is a requirement to produce a NEPA analysis, which in this case has been determined to be an EIS. One of the key elements in any NEPA analysis is the specification of the project's purpose and need. The specification of said purpose and need is part of the NEPA analysis itself and not a major federal action requiring its own NEPA analysis. Consequently it is not necessary to perform a NEPA analysis to identify the purpose and need for Upper Carroll.

Incorrect interpretation of TTRA and as a result Appendix A is flawed. The three-year timber supply provision in Section B0.62 of the KPC Long-term Contract is primarily related to Section 301(C)(1). The provision is consistent with Forest Service objectives of providing a three-year supply of NEPA-cleared timber for independent timber sale programs. Section B0.62 also facilitates completion of harvest of the total KPC contract volume by the termination date of the contract, and replaces (along with other provisions in section B0.6) the five-year operating period timber supply scheduling requirements in the pre-TTRA contract. The provision is wholly consistent with TTRA Section 101. The GAO has agreed that the contract modifications in Section B0.62 comply with the TTRA.

The analysis recognizes that volume in the past has come from areas other than the Primary Sale Area (PSA) and will also need to come from off the PSA in future. However, for the first round of EISs for the Long-term Sale following the passage of TTRA, it was determined to look first at the PSA as required by sections B03 and B03.1 of the KPC contract. The sale schedule for completing the project is dynamic and changes over time. The changes are made to incorporate new information at the project level and from the Forest Plan Revision.

Issue 11: Effects on air and water quality outside the Project Area.

Letters and Comments on this Subject Include:

3, 4, 5, 13, 30, 40, 41

Examples Included:

...we believe that potential impacts in the vicinity of the KPC mill and at Thorne Bay are direct impacts from the proposed timber sales as they are a direct consequence of the proposed action. Furthermore, while we agree that KPC is responsible

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for meeting permit requirements, we believe that additional discussion of these potential impacts should be included in the EIS to satisfy the implementing regulations for NEPA (40 CFR 1502, section 1502.16). #3

The EIS should be revised to include a discussion/evaluation of the project-related impacts "outside" of the project area. #3

Although we agree that emissions are the mill's legal responsibility, we also think the Forest Service has a moral and legal responsibility to the public to fully address and examine these effects. #13

...the full impacts on the environment of the pulp mill's air, water and land toxic and hazardous emissions should be stated. #30

Forest Service Response:

The proposed action would make timber available to Ketchikan Pulp Company (KPC) under its Long-term Timber Sale Contract with the Forest Service, and/or the Ketchikan Area independent timber sale program. Purchase by an independent logging contractor would not necessarily result in the processing of any timber at the KPC mill at Ward Cove.

The discussion of the effects of the proposed project upon air and water quality outside of the Project Area has been expanded in the FEIS. Those areas of specific concern are the Ketchikan Pulp Corporation's (KPC) mill site at Ward Cove, Alaska and their log sort yard at Thorne Bay on Prince of Wales Island. Evaluation of the potential impacts of KPC's activities upon air and water quality at these sites is the responsibility of the federal Environmental Protection Agency (EPA) and is fully disclosed in separate environmental studies. As such, an analysis of these effects is redundant and outside the scope of the Upper Carroll FEIS.

Emissions impacting air and water quality at KPC facilities are permitted by the EPA and certified by the Alaska State Department of Environmental Conservation (ADEC). KPC's discharges into air and water under permits issued and certified by these agencies. The "Ambient Impact Assessment" conducted for Ketchikan Pulp Company by EMCON and Industria, a process and engineering firm from Portland, Oregon, in which anticipated environmental effects of the Air Quality Control Permit are described and analyzed, was submitted, August 29, 1995. This assessment includes the following points: (1) the emission sources of interest, (2) the operating scenarios and related emission rates, (3) the modeling methodology used, and (4) the results of the modeling analysis. Ketchikan Pulp Company has proposed to extend one of its existing National Pollutant Discharge Elimination System (NPDES) permitted wastewater outfalls from Ward Cove to a new location in the Tongass Narrows. KPC has prepared a number of documents to support its request for an NPDES permit for the extended outfall, including "Outfall Extension Study", April, 1994; "Mixing Zone Request and Environmental Analysis for Outfall Extension into Tongass Narrows - Revised", August, 1994; and "Alaska Department of Environmental Conservation (ADEC) Information Request Work Plan", February, 1995. The latest of these studies, the ADEC Information Request Work Plan is a tiered risk assessment using an initial "screening level" assessment of the potential incremental risks to the environment and human health that might result from exposure to discharges from an extended outfall. A further discussion of this permit process and associated studies is included in the FEIS.

For further information on the effect of KPC's operations on air and water quality at Ward Cove and Thorne Bay, contact the Environmental Protection Agency Region 10 Office in Seattle, Washington, or the Alaska Department of Environmental Conservation offices in Ketchikan or Juneau, Alaska.

Issue 12: Multiple Use & Sustained Yield

Letters and Comments on this Subject Include:

4, 10, 13, 14, 16, 21, 25, 26, 27, 31

Examples Included:

First, Section 101 of the TTRA allows the Forest Service to only offer timber under the contract subject to the requirements of other applicable laws, such as Section 810 of ANILCA and NFMA, and only "to the extent consistent with providing for the multiple use and sustained yield of all renewable resources." Even the faulty and incomplete analysis contained in this DEIS demonstrates these requirements can not be met for this project area. #4

Cumulatively, what conclusion can the public reach regarding the sustainability of all logging efforts on Revilla Island from this analysis, particularly logging justified to satisfy the high volume KPC contract. #4

The long-term sustained yields of (1) harvestable surpluses of old-growth dependent wildlife and (2) old-growth timber supply both need an expanded and much more detailed analysis in the FEIS...In other words, the FS timber harvest calculations currently used to compute sustainability are based on what appears to be the maximum possible number of "suitable" acres. Timber harvest calculations that are overly optimistic are detrimental to sustained yields of old-growth dependent wildlife for human utilization and to ensure viable populations are maintained and well-distributed. #10

Page 1-21 states that Timber Supply has been exiled to the netherland "Outside the scope of this analysis". Please return it to its rightful place as a significant issue, as it was in CPOW, Lab Bay, Control Lake, Polk Inlet, etc. #25

Forest Service Response:

The Upper Carroll Project Area contains approximately 9,542 (10,387 acres minus 845 acres of encumbered lands) acres of suitable lands (DEIS Chapter 3, page 3-187). Assuming a 100 year rotation, approximately 95 acres of harvest per year could be sustained. The DEIS and FEIS contain a thorough discussion of falldown in Chapter 3 - Silviculture and Timber. Hard falldown of approximately 50 percent was calculated in the Project Area. After accounting for the existing harvest, roughly (8151 acres X .50) 4,090 acres of suitable lands would remain. Since large scale timber harvest began occurring on the Tongass National Forest in 1954, there would be approximately 58 years left in the rotation. This would indicate that (4,090 acres divided by 58 years) approximately 71 acres of harvest could be sustained annually over the remainder of the rotation, or 25 percent less than originally scheduled. This is admittedly, a crude approximation, but does reflect that due to the limited previous entries the impacts of falldown from within the Project Area could be similar to those identified by the Irland Group. The suitable acres within the Upper Carroll Project Area represent approximately 1 percent of the Forest-wide TLMP (1979a, as amended) acres scheduled for harvest over the rotation. Both falldown and interim changes in land use affect the timber harvest rates established in the Forest Plan. Because these factors occur at the Administrative Area and Forest-wide level, as well as at the project level, they cannot be completely addressed within a project-level EIS. Thus, the issue of timber supply across a broad regional area must be addressed at the Forest Plan level. Calculation of the sustained yield is an extremely complex process and exceeds the scope of this project.

The National Forest Management Act regulations require that Forest Plans be revised on a 10 to 15 year cycle to adapt to changing public views, resource uses and demand, and natural resource knowledge. The Forest planning process is used to address resource issues, land use demands, and changing land use policies. Such changes are reflected in the acres and Allowable Sale Quantity available for harvest in the future.

The 1996 TLMP RSDEIS (USDA Forest Service 1996a) addresses in detail the issues of long term timber supply, sustainability, and effects on community stability. New estimates of timber supply are included, reflecting analysis of falldown factors, changes in land use planning, and economic considerations. Specifically, the 1996 TLMP RSDEIS incorporates the Ketchikan Area update. This update reflects new information about streams, slopes, soils, and operability ratings as well as karst vulnerability ratings. New Land Use Designations and Conservation Biology Strategies are also incorporated in the 1996 TLMP RSDEIS. Future harvest projected in the 1996 TLMP RSDEIS reflects adjustments for

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various types of falldown factors based on recent field investigations for timber sale EISs, including adjustments for alternative, non-clearcutting harvest methods. The 1996 TLMP RSDEIS, when finalized, will present the best available assessment of future timber supply for the Project Area and the Tongass National Forest as a whole.

Sustained Yield of All Resources. The Multiple Use Sustained Yield Act (1960) states in Section 2: "The Secretary of Agriculture is authorized and directed to develop and administer the renewable surface resources of the national forests for multiple use and sustained yield of the several products and services obtained therefrom. In the administration of the national forest due consideration shall be given to the relative values of the various resources in particular areas."

The Act further states in Section 4(b): "Sustained yield of the several products and services means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land." (16 U.S.C. 531)

Further direction regarding sustained yield management is contained in Section 101 of the TTRA (1990), which states in part: "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."

Sustained yield is calculated and managed at the forest level, which means the Forest Service must manage the entirety of the Tongass National Forest on a sustained yield basis. There is no requirement that each Project Area or other segment of a National Forest be managed in isolation on a sustained yield basis. It is also not biologically possible to manage any isolated area for maximum production of all resources simultaneously. The existing Forest Plan made a decision to reduce the scope of the sustained yield management unit from the entirety of the Tongass National Forest to individual Administrative Areas, i.e., Chatham, Stikine, and Ketchikan. Consequently, sustained yield for the Ketchikan Area of the Tongass National Forest is a Forest issue and is discussed in the TLMP (1979a, as amended) and the 1996 TLMP RSDEIS.

The Forest Service has no requirement to manage the Upper Carroll Project Area for sustained yield of non-timber resources. Nonetheless, there are individual resources which can achieve "maintenance in perpetuity of a high-level annual or regular periodic output...." Water quality, soil productivity, fishery production, and outdoor recreation are predicted to be maintained at high levels. Other resources, such as deer, bear, and old-growth habitat, will probably decline on a localized basis, but are planned to be available on a Forest-wide basis.

Multiple Use Policy. The Multiple-Use Sustained-Yield Act of 1960 Section 1 states, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." The Tongass National Forest is managed for multiple uses. Not every area, watershed, or travel route can be all things to all people at all times. Under the current TLMP, approximately 23 percent of the Tongass National Forest is designated LUD IV (areas for commodity development) and an additional 15 percent is designated LUD III (areas for a mix of commodity and aesthetic resource management). Thus, over 60 percent of the entire Tongass National Forest is scheduled to maximize scenery, fisheries, wildlife, and subsistence opportunities.

At the project level, the Upper Carroll Project has developed a range of alternatives which addresses the issues identified in scoping. The range of alternatives, combined with the design criteria and the mitigation measures, protect resources such as wildlife, fisheries, and subsistence opportunities at different levels of intensity.

See also response to issue 1J.

Issue 13: Unit and Road Cards

Letters and Comments on this Subject Include:

1, 2, 10, 18

Examples Included:

...by printing the unit map on the reverse sides of the cards, rather on the facing pages, they are somewhat cumbersome to use. #1

The road cards...are by far the most deficient that we have seen in an EIS. #1

Detailed unit cards and road cards are an essential component of the FEIS. #10

The maps for both unit and road cards must accurately depict the relationship of the units and roads to watercourses (by stream class), riparian buffers, hazardous soils (by MMI ratings) and topography. #10

...the DEIS does not provide specific information concerning the geographic location of wetlands within the study area,... #18

Forest Service Response:

The unit and road cards have been substantially improved between the DEIS and the FEIS. Field reconnaissance and incorporation of public comments has improved the overall quality and usefulness of the unit cards. The acres balance because mapped non-forested sites were removed from the unit(s) and small discrepancies due to poor registration between data layers were painstakingly (manually) verified and corrected. The timber type maps (TIMTYP) generally map stands greater than five acres in size. Small rock outcrops and other non-forested inclusions within stands are not accounted for, although the IDT generally excluded non-forested sites larger than one to two acres in size when delineating unit boundaries. The unit and road cards contain narrative information which describes resource concerns, mitigation measures and a track of how resource concerns have been resolved.

Additional site-specific information, including wetland mapping, riparian area maps, stand exam plots, stream surveys, unit profiles, and soil mass movement index maps, which could not all be easily be put on the Unit and Road Cards in Appendix K, are available for review in unit folders as a part of the Upper Carroll Planning Record at the Ketchikan Ranger District office.

The unit cards were designed to serve as implementation cards as well as displaying site specific information in the DEIS and FEIS. This is the reason that they were printed on reverse sides rather than facing pages. These cards may simply be removed from Volume II of the FEIS and used in the field, with map and resource information on a single sheet of paper. This has proven to be an efficient way to design and use the Unit Cards. I recommend that the FEIS reviewers do the same.

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Issue 14: Avoid Subsistence Impacts

Letters and Comments on this Subject Include:

4, 5, 7, 10, 13, 21, 25, 34, 38

Examples Included:

Finally, this process violates Section 810 of ANILCA by failing to evaluate alternatives that would avoid restrictions on subsistence resources and uses. #4

Section 810(a)(3)(B) of ANILCA requires that it conduct those activities on the "minimal amount of public lands necessary to accomplish the purposes of such use." #5

The ANILCA provides for "the continuation of the opportunity for subsistence uses by rural residents of Alaska" (Sec. 801 (1)). The selection and scheduling of this project does not appear to have been influenced by subsistence considerations...If minimizing effects on subsistence was an important planning goal, Upper Carroll would not be scheduled for significant logging as long as other areas in the Ketchikan Area or forest wide were available for logging where subsistence impacts might be less. #10

Forest Service Response:

Harvest Timber Somewhere Else. The Upper Carroll Project does not change the priority allocation of fish and game to rural community residents. Based on a review of available harvest volumes (see Appendix A), it appears that in order to meet KPC Contract and independent timber sale objectives, most of the LUD III and LUD IV VCUs would need some level of harvest prior to the end of the KPC contract in 2004. Harvest of other areas (such as Cleveland Peninsula, Moria Sound, etc.) at this time may decrease the impacts on subsistence users in the Upper Carroll Project Area but would be likely to increase effects on subsistence users in those other areas.

Issue 15: Scope of the Project - Project Boundaries

Letters and Comments on this Subject Include:

10

Examples Included:

Although the project area only contains three VCUs, it overlaps one of the primary VCUs contained in the North Revilla Project area and part of a VCU in the Shelter Cove project area. #10

Forest Service Response:

A position statement (Gate 1 feasibility study) was completed for the project on 7/5/94 prior to the NOI and scoping being sent out. The position statement discusses the rationale for the scope of the project and contains maps which display the different boundary configurations.

The rationale for including VCU 737 (Neets Creek) includes:

- 1) The North Revilla EIS did not schedule any harvest from this area in the ROD.
- 2) Its a LUD IV area. Comments received from ADF&G on the North Revilla EIS stated that they would prefer to see this area harvested before other more sensitive areas were harvested. This was due to the previous level of harvest and its LUD IV status.

- 3) The Forest Service recognizes that the area remains economically marginal and has water quality concerns related to the SSRAA Fish Hatchery. However, in order to address LTF and road construction concerns in Carroll Creek, we needed to have a way to analyze whether hauling north to Fire Cove or Shrimp Bay were environmentally/economically viable alternatives. Scoping and DEIS comments regarding road connections and LTFs, especially 401B permits, tend to verify the voracity of this decision.

The rationale for including a portion of VCU 746 includes:

- 1) The LTF in Carroll Inlet could be avoided by making the road connection down to the Shelter Cove LTF. Following VCU and watershed lines to the extent practicable, only that area needed to make the tie over to Shelter Cove was included. The Forest Service knew from previous EISs that LTFs and road connections would be a significant issue relating to this project.

The rationale for not including VCU 734 (Orchard Creek) includes:

- 1) The analysis in the 1991 TLMP Draft Revision indicated that Orchard Creek was eligible for inclusion under the Wild and Scenic Rivers Act. Preliminary review indicated that timber harvest would not be economically feasible at this time. Given the facts listed above, the Forest Service exercised its discretion to determine the preliminary scope of the project.

Issue 16: Economic Analysis Should be Improved

Letters and Comments on this Subject Include:

25, 31

Forest Service Response:

See response to issues 6A through 6F, and in particular response 6E.

Issue 17: Better Maps

Letters and Comments on this Subject Include:

2, 3, 10

Examples Included:

We suggest correcting the following errors noted on the maps: #2

High value wildlife habitat for deer, marten, and black bear, as well as other sensitive habitats should also be depicted on unit maps in the EIS. #10

Forest Service Response:

The Forest Service appreciates site-specific comments from the public that have pointed out inaccuracies with maps presented in the DEIS. All maps accompanying the FEIS and ROD use the most current information available and correct all site-specific errors identified from field reconnaissance and from public comment.

Old growth "retention" was not mapped in the DEIS, the location of all old-growth was displayed. A map of the previously designated old-growth retention is in the planning record. The DEIS (Chapter 3, page 129) provided a complete accounting of the retention acres and the effects of each action alternative. Of the 5,147 acres of previously designated retention, the FEIS alternatives would harvest from 3 to 8 percent. Areas that will be managed to provide old-growth habitat conditions for

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the life of this project, totaling more than 6,077 acres in size, are displayed on the ROD map. The net effect being that over 92 percent of the original retention is not harvested this entry, plus a 6,077 acre old-growth habitat block is established. See also response to issue 4D, Q, & W.

Issue 18: Alternative and Unit Specific Comments

Comments Include:

...recognizing that Alternative 2 simply represents the maximum harvest level for purposes of cumulative effects analysis and, therefore, is not a realistic alternative on its own. #1

Further, the Assembly encourages the U.S. Forest Service to complete the road segment from Shelter Cove to Upper Carroll Inlet as part of this timber sale. #9

I was happy to see the proposed road from Shelter Cove to Upper Carroll in the scoping documents. However after seeing the Draft EIS for Upper Carroll, I see the Forest Service has decided not to address this issue in any of the alternatives...The Forest Service should add an alternative which will analyze the environmental, economical and social impacts of hauling all of the Upper Carroll volume to the existing LTF at Shelter Cove. #49

Forest Service Response:

The Forest Service disagrees. Alternative 2 represents the maximum level of harvest while meeting all Forest Plan Standards And Guidelines. As such, it is a fully implementable alternative. The commenter is correct in that it also helps the Forest Service to analyze site specific indirect effects of foreseeable future actions (full implementation of Forest Plan).

The road segment from Shelter Cove to Carroll Inlet was part of the original scoping. It was ground verified, thoroughly analyzed and discussed in the DEIS. It was dropped from the DEIS alternatives because it cost approximately \$8,000,000 to construct. In the FEIS, Alternative 2 is analyzed with and without this road connection to make the economic impact more apparent. None of the action alternatives would be economically viable, with this road connection included.

Comments Include:

From a water quality and fish habitat perspective, we feel that the technical analyses (particularly the watershed analyses presented in Appendix F) do not support the selection of Alternative 5 as the preferred alternative. We believe that Alternatives 3 and 4 are better supported by the analyses in the EIS, with Alternative 3 being the environmentally-preferred alternative. #3

Forest Service Response:

Your comment has been noted.

DEIS Alternatives 3 and 4 received a considerable amount of support from the public and other Agencies. The public and other Agencies whose objective/mission is to emphasize/protect non-commodity values (water quality, wildlife and fisheries habitat, etc.) favored these two alternatives, of the action alternatives presented in the DEIS. Many of these commenters focused on the watershed analysis that was completed and minimizing affects to SSRAA and fisheries habitat in Carroll Creek. Fewer acres of old-growth harvest were also mentioned.

In the DEIS, Alternative 4 harvested the northern portion of VCU 744 while Alternative 3 did not. Based on reconnaissance information and additional analysis, units 15, 75, 108, and 129 will be dropped, due to low volume. The end result is that Alternative 3 and 4 would have no meaningful difference. DEIS Alternative 4 harvested an additional stringer of timber (units 73, 74, 130, 131, and 132) totaling approximately 3.5 MMBF. The unit configuration for Alternative 3 constructed

significantly less road than Alternative 4 and was economically more efficient. It also would have less impact on water quality and fisheries values because of the reduced road construction miles and crossings.

Alternatives 3 and 4 have been combined for the FEIS. Alternative 3, plus units 73, 74, 130, 131, and 132 from Alternative 4. This is Alternative 3 in the FEIS. Alternative number 4 has been dropped, and is not used in the FEIS.

Comments Include:

Recommended Changes to Unit Selections in Preferred Alternative. Based on the comments in the preceding sections of our response to the Upper Carroll Timber Sale DEIS, we recommend that, at a minimum, the following changes be made regarding the selection of units to be logged in Alternative 5, the "Preferred Alternative:" #10

Units 79 and 80 should be deleted to maintain the Carroll River to Traitors Cove wildlife corridor.

Units 16, 64, 66, and 67 should be deleted from the preferred alternative to avoid cutting potential mountain goat winter range.

Additionally, the FS should conduct field surveys to identify other potential goat winter range and exclude such areas from being logged as a result of any ROD.

Unit 24 significantly fragments a high volume old-growth block located above Carroll River estuary. This unit should be deleted from any ROD.

The deletion of these units from the ROD would result in a decreased volume of at least 9.1 MMBF and 317.9 acres. If this results in a total sale volume which is unacceptable to the FS, then we would recommend adding all but Unit 13 in VCU 737 to those units selected in the ROD. These units (14, 17, 93, 95, 97, 98, 99, 104, 106, 107, and 110) contain a total of 10.8 MMBF and 344.4 acres.

KPC wants to make it clear to the FS that we support an alternative which will provide the most economically feasible timber possible, while protecting the important resources in the Upper Carroll Area. The Forest Service prefers Alternative 5. KPC agrees with this alternative but thinks that Alternative 5 could be improved by dropping unit 92 and adding units 110, 13, 14, 104, 99, 17, 107, 106, 98, and 97 from Alternative 2 to be helicopter logged. This reflects the unified position of the Ketchikan Area Chamber of Commerce, Southern Southeast Regional Aquaculture Association and the Alaska Forest Association. #45

The Forest Service prefers Alternative 5. I agree with this selection but think that Alternative 5 could be improved by dropping unit 92 and adding units 110, 13, 14, 104, 104, 99, 17, 107, 106, 98, and 97 from Alternative 2 to be helicopter logged. #FL1

Specifically, I believe Alternative 5, with the units added from Alternative 2 that are in VCU 737 and could be helicopter logged, will make the best economical timber sale possible. # FL2

Forest Service Response:

Alternative 5 was the preferred alternative in the DEIS. Many comments were received which wanted to keep Alternative 5 plus add in either all the units in VCU 737 or just the helicopter units from VCU 737. Those who wanted just the helicopter units from VCU 737 usually mentioned dropping unit 92 (the only roaded access unit in VCU 737 DEIS Alternative 5 that could affect the SSRAA facility).

Between Draft and Final the IDT re-examined the stand exam data for the marginal (low) volume units. Many of the low volume units near transition zones to muskeg contain a high number of shore pine trees. Shore pine mixed conifer stands typically contain more defect than hemlock/spruce stands. As a result of this analysis, units 15, 75, 108, and 129 will not meet minimum merchantability (8 MBF/acre) standards for commercial harvest. Road construction to harvest unit 92 was a marginal economic trade-off before dropping the units listed above. Currently it would require almost 4 miles of road to harvest 2 MMBF of timber. A general rule of thumb is that approximately 1-2 MMBF of timber per mile of road

L Appendix

construction is required for economical timber harvest. Helicopter yarding distances over 1 to 1.5 miles are usually not cost effective either.

Based on the information listed above, the IDT examined two possible scenarios for modification to DEIS Alternative 5:

- 1) Drop units 92, 15, 75, 108, and 129. Add potential helicopter units in Neets Bay (VCU 737).
- 2) Drop units 92, 15, 75, 108, and 129. Do not add any units from Neets Bay (VCU 737). Address other concerns to the extent practicable.

Scenario number 1 would yield an alternative that is not much different from Alternative 2, with the exception that no road construction that could potentially affect water quality at the SSRAA facility would occur. Unit 92 would not be harvested. Units 97, 106 and 110 would be converted from cable logging to helicopter yarding. Also no harvesting in the Naha Old-Growth Habitat Reserve block would occur (units 1 and 90). This alternative responds directly to a large number of public comments. This is Alternative 5 in the FEIS.

Scenario number 2 would respond to most of SSRAA's concerns by not harvesting in the Neets Creek watershed (VCU 737). The west side of Carroll Creek would be helicopter logged to minimize road and fisheries concerns raised by the public. Potential goat winter range is avoided in this alternative by not harvesting units 16, 63-66, and 70. This is Alternative 6 in the FEIS.

Comments Include:

No new roading is essential if you look at wolf mortality on Prince of Wales which can be correlated to road density and human access. #5

Other ecosystem management concepts we recommend include: ...3) moving away from clearcutting as the predominant method of timber harvest... #10

The Ketchikan Indian Corporation supports aerial logging only, opposing any road building in the Carroll Inlet, Swan Lake, Lake Tyee area. #34

We believe the Final EIS should consider alternative harvest methods that minimize and reduce road construction. #2

Forest Service Response:

Alternative E in the Upper Carroll DEIS was originally developed as a project alternative but eliminated from Detailed Study (see Upper Carroll DEIS, page 2-11, Alternative E, Helicopter Logging Alternative) due to poor economic returns and not meeting the project's stated purpose and need. Due to public comment, Alternative E has been modified and brought forward in the Upper Carroll FEIS as Alternative 7. Alternative 7 is modified by including the reconstruction of existing roads and LTFs only to permit the selection of additional units which help the alternative to better meet the project's stated purpose and need, as well as, addressing significant issues and concerns in a way that is meaningfully different than other alternatives.

In conversations with members of Ketchikan Indian Corporations subsistence board the Forest Service received clarification regarding new versus existing roads. The primary concern was with avoiding the construction of new roads to limit subsistence impacts. The ability to reconstruct the existing roads was critical to the viability of this alternative since it reduces the yarding/flight distances by several miles. This is due to the fact that the shallow water in Carroll Estuary prohibits the placement of a barge closer than the proposed LTF location.

Helicopter logging results in less damage to the submerchantable component that remains in a harvest unit after logging. The visual impact is less than a similarly treated cable yarded unit.

All of the alternatives meet the visual standards and guidelines established in the Forest Plan. Road closures (pulling bridges and culverts, administrative closure, etc.) can address many of the access, subsistence, wildlife, and water quality concerns. However, Alternative 7 addresses these issues (as opposed to the effects) in a manner that is meaningfully different than the other alternatives.

Comments Include:

Mr. Powell, I want to personally thank you for breaking the stranglehold that project Purpose and Need statements previously imposed on alternative development, i.e., forcing each alternative to jump over the volume target stick and immediately dismissing the non-jumpers. For years, I have asked the Forest Service to consider a range of alternatives, and I finally feel heard. Nonetheless, as I mentioned in my scoping comments, I would like to see a lower volume alternative (say 10 MMBF) considered in detail. #25

In my scoping comments, I opposed harvest in the entirety of VCU 737 which would haul to the LTF at Shrimp Bay (thank you for listening to me in your preferred Alin 5). In studying the colored map, I feel units 744-1, -18, and -90 (west side of head of Carroll Inlet) should be dropped, as well as unit 744-49 and EVERYTHING north. The potential impact to anadromous fisheries, which are my life blood, from sediment, increased solar insolation, or (God forbid) a 100-year windstorm are simply too great. I would like to see this proposal considered in detail in the FEIS in response to my request for a 10 MMBF "Fishermen's Alternative". #25

One concern I have for the "Fisherman's Alternative" is that the units below 744-49 are mostly in volume class strata 6/7. It may be tough to achieve proportionality parity and still get 10 MMBF. Oh well, less than 10 MMBF is OK, too. #25

Forest Service Response:

The proposed "Fishermen's Alternative" was evaluated by the Upper Carroll IDT. Constraints applied by the commenter were that no harvesting occur north of, and including unit 49 (first drainage to the east of Carroll Creek). The alternative would need to meet proportionality, which would be very difficult because all of the remaining units but one are composed of volume class strata 6 stands. The constructed alternative would result in approximately 6 MMBF of harvest in Management Area K32 (VCU 744) and approximately 1-2 MMBF in Management Area K35 (VCU 746).

This alternative was considered but eliminated from detailed study because:

- 1) It did not address any significant issues in a way that is meaningfully different.
- 2) The economic viability is hampered by the low volume to spread fixed costs (LTF and roads) against.
- 3) The alternative does not respond to the underlying purpose and need for the project (40 CFR 1502.13).

Comments Include:

Under Section B0.7 of the contract, the Forest Service may terminate the contract "upon a determination that Purchaser's operations would cause serious environmental damage...." #4

The Forest Service may also terminate Ketchikan Pulps contract under agency regulations "for serious or continued violation of [its] terms." 36 CFR 223.116(a)(1). According to provision B6.01 of the contract, KPC is required to conduct its operations "in compliance with Federal, State, and local statutes, standards, orders, permits, or other regulations." KPC has a long history of violating its air and water permits. #4

Even the faulty and incomplete analysis contained in this DEIS demonstrates these requirements can not be met for this project area. In addition, alternatives which include termination of the contract and debarment or suspension of contract operations, must be analyzed in the DEIS for this analysis to meaningfully inform the Congress and Administration as to whether fulfilling the contract volume requirements for KPC is consistent with meeting the agency's legal obligations to provide for balanced and sustainable multiple use on the Tongass. #4

It would seem legally proper for the Forest Service to consider an alternative in this EIS which delays provision of any more timber to KPC under the long term contract until which time they can provide evidence that their facility can operate in full compliance with environmental laws. #30

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Forest Service Response:

See response to issue 8 - Range of Alternatives

See response to issue 11 - Effects on Air and Water Quality Outside the Project Area

See response to issue 12 - Multiple Use and Sustained Yield

The issue of cancelling the KPC Long-term Sale Contract is outside the scope of this project and is not an alternative to be considered in detail. The No Action alternative is considered in detail in both the DEIS and FEIS. Cancelling the contract would not meet the purpose and need for the project. DEC and EPA continue to allow the KPC mill to operate while working to resolve air and water quality issues through their statutory and regulatory processes. So terminating the contract for environmental conditions at Ward Cove and in Thorne Bay would not appear to be warranted. In either case, the decision as to whether to terminate the contract or not, is a contracting officer's decision and not a NEPA decision.

Issue 19: Cumulative Effects of Powerline Intertie

Letters and Comments on this Subject Include:

10, 13, 16, 42,

Examples Included:

As these two projects "appear to be connected actions," their cumulative impacts should be analyzed together, and the findings of the "Cumulative Effects Analysis" and other appropriate sections of the FEIS should reflect this. #10

The DEIS correctly notes that the impacts of the Intertie on various resources or additions of the Intertie to cumulative impacts in the Upper Carroll project area would not be significant...KPU concurs with this assessment, and recommends that the same conclusion be noted for other resource areas... #42

Forest Service Response:

The Swan Lake-Lake Tyee Intertie Project is a similar action (40 CFR 1508.25(a)(3)). The Upper Carroll DEIS discussion of the cumulative effects of the proposed intertie have been expanded in the FEIS.

Issue 20: Wild & Scenic River Designation for Carroll Creek

Letters and Comments on this Subject Include:

13

Examples Included:

The DEIS states that in the TLMP SDEIS, Carroll Creek and Neets Creek "were determined not to contain outstandingly remarkable values representative of the resource or geographic province." #13

Forest Service Response:

Carroll Creek was thoroughly analyzed for Wild and Scenic River eligibility as part of previous Forest planning efforts. Carroll Creek was analyzed as part of the TLMP Revision to determine if it was eligible to be included under the Wild and

Scenic Rivers Act. That analysis determined that no segment of Carroll Creek was eligible for inclusion under the Wild and Scenic Rivers Act.

Issue 21: Define Cumulative Effects Periods

Letters and Comments on this Subject Include:

31

Examples Included:

You define direct effects as those occurring at the same time and place as the initial cause or action. Makes sense. But the indirect effects are defined as only those occurring from now until 2004 (the end of the KPC contract). Cumulative effects also only consider as reasonably foreseeable future actions the potential actions through 2004. This is ridiculously short term analysis of indirect and cumulative effects!! #31

Forest Service Response:

The definition of direct, indirect and cumulative effects periods is included in the DEIS and FEIS at the beginning of Chapter 3. The cumulative effects considers full implementation of the Forest Plan over the full rotation.

Issue 22: Prepare a New Analysis

Issue 22A. Write a new EIS or prepare a supplement to the DEIS.

Letters and Comments on this Subject Include:

4

Examples Included:

Please provide a reasoned comparison of the procedures used in the watershed analyses for this DEIS and those recommended by AFHA in the supplemental DEIS... #4

Forest Service Response:

The Upper Carroll FEIS provides a full and fair discussion of significant environmental impacts and informs the decision-maker and the public of the reasonable alternatives which avoid or minimize adverse impacts or enhance the quality of the human environment. The Code of Federal Regulations [40 CFR 1502.14(a)] states agencies shall "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which have been eliminated from detailed study, briefly discuss the reasons for their having been eliminated." The Forest Service feels each alternative (except the no-action alternatives) must meet the purpose and need to some large degree to be considered "reasonable." The Forest Service is unaware of any substantial change in the proposed action or of any significant new circumstances or information that would necessitate producing a Supplemental DEIS under 40 CFR 1502.9(c)(1)(i),(ii).

See also response to issue 2F.

Issue 22B. Write a Programmatic EIS for Revilla Island

Letters and Comments on this Subject Include:

4, 10, 34, 36

Examples Included:

TLMP, as amended, requires a public, mid-level scheduling process that was not followed on the Ketchikan Area. #4

One suggestion I'd like to make to the Forest Service is that they do a cumulative impact analysis for subsistence. Look at all the areas, look at what areas are most important for subsistence, particularly those historical traditional areas. The same for KIC Saxman. I think that's absolutely essential. Once you get those areas established, then, to me, rather than viewing subsistence as an activity, which you currently do, that you look at it as a resource, and give it actually a LUD designation, which would provide for a lot of those traditional subsistence values. #34

Forest Service Response:

The Forest Service utilizes a two step planning process: the first level Forest Plan provides land use allocations to a second-level project plan, where site-specific social and environmental effects are analyzed. The Tongass Land Management Plan (TLMP 1979a, as amended) is the planning stage where trade-offs are analyzed among areas forest-wide over the remaining contract term and beyond. This would include evaluation of many items such as wildlife population viability, subsistence, availability of timber, and other considerations. The Upper Carroll project was scheduled after consideration of the current TLMP (as amended 1986, 1991). TLMP as amended does not require a public "mid-level" scheduling process. "Area Analysis" is combined with project level NEPA analysis.

The TLMP is a permissive plan with four zones or Land Use Designations (LUDs) and allows analysis and scheduling of individual projects based on a zoning concept. The entire Upper Carroll Project Area is in LUD 4. LUD 4 areas provide opportunities for intensive resource use and development where emphasis is primarily on commodity or market resources. Chapter 1 and Appendix A display the reasons for scheduling the Upper Carroll Project at this time.

The TLMP is currently under revision, and the public can influence the scheduling of timber sale and other projects for the whole forest. The first draft was available for public review from June 1990 through January 1991. A supplement to the Draft EIS for the Revised Forest Plan was available for review and public comment until December 1991. Emerging issues requiring additional studies, resulted in a Revised Supplement to the Draft Environmental Impact Statement being released in April 1996. Public comment has been accepted through August 1996. The comprehensive analysis in the TLMP RSDEIS (including the cumulative effects regarding the projected areas of timber harvest) has been fully considered in proposing the Upper Carroll area for timber harvest. The allocation of timber harvest forest-wide, and associated cumulative impacts, is outside the scope of a project-level plan such as the Upper Carroll project.

Issue 23: Tiering and Referencing

Letters and Comments on this Subject Include:

4

Examples Included:

In describing the purpose and need for this project, the Forest Service incorrectly relies upon its intention ...The 1991 draft Revision is just that -- a draft, and obsolete as well. #4

Forest Service Response:

Tiering (40 CFR Part 1502.20) - The Upper Carroll FEIS tiers to the TLMP 1979a EIS, as amended in 1986 and 1991 (See Chapter 1).

Incorporation by reference (40 CFR Part 1502.21) - The proposed alternatives are also consistent with the standards and guidelines in the Preferred Alternative of the TLMP RSDEIS (1996a). These standards and guidelines are consistent with and, in many cases, provide a higher level of resource protection than the standards and guidelines in TLMP 1979a.

Issue 24: Landscape Management Zones and Maps

Letters and Comments on this Subject Include:

10

Examples Included:

Lack of attention to detail and consistency make this DEIS confusing and frustrating to read... Table 2-1 refers to "Late-successional corridors," but the corresponding map does not. #10

On the same table [Table 2-1], "Low and Very Low Economic Zones" are inappropriate designations for Landscape Zones as they are economic classification based upon a value judgement. #10

On the Alternative maps, the term "Alternative Road" is confusing when juxtaposed with the term "Existing Road". Please use the term "Proposed Road" instead of "Alternative Road". #10

Forest Service Response:

Your comments have been noted. The alternative maps will use the term "Proposed Road".

The map utilized the term "Travel Corridor" versus "Late Successional Travel Corridor" because it wouldn't fit on the legend. We will add the term to the glossary for the FEIS.

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The vast majority of Landscape Management Zones are the result of value judgements (i.e. large blocks of old-growth are important for wildlife and Low Economic Zones present a less viable economic opportunity than High Economic Zones). Both are based upon the latest research and analysis tools available to the IDT, but, none-the-less, represent a value judgement, as does almost all environmental analysis. The Chief of the Forest Service, Jack Ward Thomas, recently offered the following definition of ecosystem management:

A concept of natural resources management wherein National Forest activities are considered within the context of economic, ecological, and social interactions within a defined area or region over both short- and long-term.

A large number of recent publications and other discussions on ecosystem management have focused on the importance of incorporating the social/human/economic dimension into the process. The IDT spent a considerable amount of time incorporating these aspects into the landscape zones. The IDT discovered that by incorporating these aspects of ecosystem management into the process, many of the significant issues could be translated into Landscape Management Zones. This greatly facilitated the development of alternatives that directly responded to the issues, concerns and opportunities identified within the Project Area.

Issue 25: Determine Timber Supply and Demand

Letters and Comments on this Subject Include:

25

Examples Included:

Page 1-21 states that Timber Supply has been exiled to the netherland "Outside the scope of this analysis." Please return it to its rightful place as a significant issue... #25

Forest Service Response:

Issue E: Timber Supply and Demand referred to the regional demand and Forest supply (ASQ) question. The Forest Service believes this issue to be outside the scope of this document.

The issue of how the Project Area contributes to the long-term timber supply is addressed as part of Issue 1: Timber Economics. The narrative description of this issue has been changed in the FEIS. It is also titled to read *Timber Economics and Supply* to help clarify the difference between Issue 1 and Issue E. See also Appendix A.

References for Appendix L

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- 40 CFR. See National Environmental Policy Act (NEPA).
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- National Forest Management Act (NFMA). 1976. Implementing regulations published under 36 CFR 219.
- National Historic Preservation Act (NHPA). 1966.
- PNW Peer Review of the VPOP Committee Report. See Kiester, et al. 1994.
- Rittenhouse, D. 1992. Administration and implementation of TTRA buffers. Memo from Ketchikan Area Forest Supervisor to District Rangers.
- Rittenhouse, D. 1994. Forest-wide policy for unit change analysis. Letter to management team. Tongass National Forest, March 3, 1994.
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- Suring, L.H., D.C. Crocker-Bedford, R.W. Flynn, C.S. Hale, G.C. Iverson, M.D. Kirchhoff, T.E. Schenck, L.C. Shea, K. Titus. 1993. Report of an Interagency Committee: A proposed strategy for maintaining well-distributed, viable populations of wildlife associated with old-growth forests in Southeast Alaska. Review Draft. Juneau, AK. 96 p.
- TLMP 1979. See USDA Forest Service 1979a.
- TLMP Draft Revision. See USDA Forest Service 1991a.
- TLMP RSDEIS. See USDA Forest Service 1996a.
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- TRUCS. 1988. See Kruse and Frazier 1988.
- USDA Forest Service. Forest Service Handbooks:
FSH 2409.17, Silvicultural Practices Handbook.
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Index of Letters

The following list includes all individuals, organizations, and agencies that the U.S. Forest Service received comments from during the 45 day comment period following the publication of the Upper Carroll Draft Environmental Impact Statement. Each comment received was given an individual letter number which is listed in the following table next to the name of the commenter. Letters have been republished in the following order. Only one copy of the form letters has been published.

Letter #	Last Name	First Name	City	State	Organization
1	Hanley	Kevin	Juneau	AK	Alaska Dept. of Environmental Conservation
2	Gates	Paul	Anchorage	AK	U.S. Dept. of the Interior
3	Parkin	Richard B.	Seattle	WA	Environmental Protection Agency - Region 10
4	Lindekugel	Buck	Juneau	AK	SEACC
5	Canterbury	Jackie	Ketchikan	AK	
6	Rabung	Sam	Neets Bay	AK	Neets Bay Hatchery Manager
7	Thomas	Carol	Ketchikan	AK	
8	Hays	Hank	Bainbridge Is.	WA	
9	Carlton	Mayor Jim	Ketchikan	AK	Ketchikan Gateway Borough
10	Gustafson	Jack	Ketchikan	AK	Alaska Dept. of Fish and Game
11	Bennett	Jill L.	Ward Cove	AK	
12	Amundson	Diana	Ketchikan	AK	A-K Tug & Barge Inc.
13	Smith	Tracy	Ketchikan	AK	Tongass Conservation Society
14	Gossman	Lloyd	Ketchikan	AK	Ty-Matt Inc. and AK Ship & Dry Dock
15	Cook	H.R.	Ketchikan	AK	
16	Gravel	Deborah	Ketchikan	AK	
17	Freitag	Gary	Ketchikan	AK	SSRAA
18	Gutleber	Richard J.	Anchorage	AK	U.S. Army Engineer District
19	Lewis	Cecelia L.	Ketchikan	AK	
20	Romine	Linda	Ward Cove	AK	
21	Sallee	Mike	Ketchikan	AK	
22	Romine	Bruce	Ward Cove	AK	
23	Swiger	Stuart & K. A.	Ketchikan	AK	
24	Garza	Corrine	Ketchikan	AK	Ketchikan Indian Corporation
25	Shoaf	Bill	Ketchikan	AK	
26	Shull	Delmar L.	Ward Cove	AK	
27	LaPerriere	Marcel & Connie	Ketchikan	AK	Glacier Grotto
28	Pitcher	Gerald, Cheri, & Kim	Thorne Bay	AK	Alaska Families in Timber
29	Timothy	Jackie	Juneau	AK	State of Alaska - DGC
30	Clabby	Margaret	Ketchikan	AK	
31	Clabby	Margaret	Ketchikan	AK	
32	Myren	Richard	Juneau	AK	
33	Carnes	George A.	Ketchikan	AK	K.I.C.—Deer Mtn. Fish Hatchery
34	Hope	Gerry	Ketchikan	AK	Ketchikan Indian Corp.
35	Freitag	Gary	Ketchikan	AK	SSRAA
36	Canterbury	Jackie	Ketchikan	AK	
37	Carlton	Mayor Jim	Ketchikan	AK	Ketchikan Gateway Borough
39	Rabung	Sam	Neets Bay	AK	Neets Bay Hatchery
38	Jacksyn	Richard	Ketchikan	AK	Ketchikan Indian Corp.
40	Clabby	Margaret	Ketchikan	AK	
41	Hummel	Eric	Ketchikan	AK	
42	Magyar	John A.	Ketchikan	AK	Ketchikan Public Utilities
43	Ballard	Ernesta	Ketchikan	AK	Ketchikan Chamber of Commerce
44	Hendricks	Bill and Joanna	Ketchikan	AK	

L Appendix

45	Nicholson	Kent P.	Ketchikan	AK	Ketchikan Pulp Company
46	Olivadoti	Troy	Ketchikan	AK	
47	Miller	Kathy	Ketchikan	AK	Miller Inc.
48	Meske	Sandra	Ward Cove	AK	
49	Craig	Tom	Ketchikan	AK	
50	Amundson	Peter	Ketchikan	AK	A-K Tug & Barge Inc.
51	Meske	Sandra	Ketchikan	AK	American Agri-Women
52	Meske	Sandra	Ketchikan	AK	Alaska Women in Timber
53	Cleman	Mike	Ketchikan	AK	Campbell Towing Company
54	Tanino	Roy	Ketchikan	AK	
55	Zadina	Lauri L.	Ketchikan	AK	
56	Lisac	Jennifer L.	Ketchikan	AK	
57	Wladyka	Curtis	Ketchikan	AK	
58	Baskett	Antone	Ketchikan	AK	
59	Meck	Jacqueline R.	Ketchikan	AK	
60	Montgomery	Katie	Ketchikan	AK	
61	Hendricks	Ray, III			
62	Rodger	Jeffrey L. & Kathleen I.	Ketchikan	AK	

FL1 See the "List of Commenters" on page 3 for a listing of all individuals that
 FL2 Form Letters 1 through 6 were received from.
 FL3
 FL4
 FL5
 FL6

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

Division of Air and Water Quality
Industrial Operations
410 Willoughby Avenue, Suite 105
Juneau, Alaska 99801-1795

Phone: (907) 465-5260
Phone: (907) 465-5364
Fax: (907) 465-5274
TTY: (907) 465-5133

USDA FOREST SERVICE KETCHIKAN RANGER DISTRICT	
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RANGER	SD
PLANNING	
FISH/WLDF	
RECLANDS	
SILVI	
S.S.S.	
TV79	

Mr. Bradley E. Powell
Forest Supervisor
Tongass National Forest
Ketchikan Area
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Powell:

The Department of Environmental Conservation appreciates the opportunity to review the Draft Environmental Impact Statement for the Upper Carroll Timber Sale. Per the memo from Jackie Timothy of the Division of Governmental Coordination to state project reviewers, dated 1/24/96, we offer the following preliminary NEPA, Clean Water Act (CWA) Section 319, and Alaska Coastal Management Program (ACMP) consistency comments for this project.

NEPA & CWA SECTION 319 COMMENTS

1. Watershed Analysis / Selection of Preferred Alternative

The watershed analysis presented in Appendix F raises significant concerns regarding the selection of Alternative 5 as the preferred alternative for this timber sale. Of all the action alternatives, only alternatives 2 and 5 propose timber harvesting and road construction within the sub-basin comprising the west fork of Carroll Creek. According to the watershed analysis, this sub-basin (S5) *"is one of the most significant [sediment] transport areas in the watershed. It also has high productivity anadromous fish habitat Sediment introduced into the stream system from road building or harvest would quickly be transported to depositional reaches within the sub-basin and could significantly affect fish habitat. Potential impacts include degradation of spawning gravels, infilling of pools, and limiting access to off-channel rearing habitat This analysis suggests that management activity in sub-basins S4 and S5 have the highest potential for adversely affecting fish habitat"* (emphasis added).

Despite these findings, Alternative 5 proposes at least 9 units, comprising approximately 412 acres, within this most sensitive sub-basin (S5), along with an undetermined amount of road construction and stream crossings. According to Appendix B (page 2), *"Under this alternative, all available timber [within the sub-basin] would be harvested this entry."* Of particular concern is the fact that 71 percent of the total unit acreage within S5 occurs on high mass movement index (MMI 3) soils. Compounding this concern is the proposed harvest of adjacent Units 4, 5,

and 86, which will result in a combined clearcut totalling 193.3 acres in size. This is the largest contiguous clearcut of all the alternatives. In addition, it appears that the vast majority of Class I and Class II stream crossings proposed under this alternative occur within sub-basin S5.

In addition to the extensive harvesting and road construction within this sub-basin, Alternative 5 presents the highest risk for impacts to water quality and fish habitat throughout the project area as a whole when compared with Alternatives 3 and 4. For example, according to Table 3-8, all the action alternatives, except Alternative 3, propose harvesting on very high mass movement index (MMI 4) soils, with Alternative 5 proposing the most. In fact, 53 percent of the total acreage harvested under this alternative occurs on soils with high and very high mass movement indices (Tables 2-2, 2-8, and 3-8). Alternative 3, on the other hand, proposes no harvest on MMI 4 soils, and the least amount of harvest on MMI 3 soils of all the alternatives. Other comparisons include the following:

- Alternative 5 proposes to harvest nearly five times as many acres of units with high potential for sediment delivery to Class I streams than that proposed for Alternative 3 (326 acres vs. 71 acres) (Table 2-2).
- With the exception of Alternative 2, Alternative 5 proposes the greatest amount of road construction on MMI 4 soils; Alternative 3 proposes none (Table 3-9).
- Alternative 5 will require 14 crossings of Class I streams and 29 crossings of Class II streams; Alternative 3 proposes 7 crossings of Class I streams and 10 crossings of Class II streams (Table 2-7). This equates to approximately 2.5 times more road crossings of fish-bearing streams for Alternative 5 than for Alternative 3.

It is apparent, therefore, that, in terms of minimizing impacts to water quality and fish habitat, Alternative 5 is the least environmentally preferred of all the action alternatives that can be realistically considered for this project (recognizing that Alternative 2 simply represents the maximum harvest level for purposes of cumulative effects analysis and, therefore, is not a realistic alternative on its own). Consequently, we strongly recommend that the Forest Service reconsider the selection of Alternative 5 as the preferred and, instead, implement Alternatives 3 or 4, or a combination thereof, which avoids the west fork Carroll Creek sub-basin altogether, and better minimizes the risks of impacts to water quality and fish habitat. Interestingly, Alternative 3 is also the most cost-efficient of all the alternatives.

2. Harvesting on MMI 4 (Very High Mass Movement Index) Soils

According to the EIS (pg. 3-32), *"Very high MMI soils are not suitable for timber harvest, as described in the TLMP Draft Revision (1991a), Timber Suitability Classification, pp. A1 - 16."* However, as indicated above, all of the action alternatives, except Alternative 3, propose harvesting on MMI 4 soils, with Alternative 5 proposing the most.

The EIS is confusing and inconsistent on this subject in that, apparently, harvesting might not occur on MMI 4 soils, despite the fact that Tables 2-2, 2-8, and 3-8, and elsewhere in the document, including the unit cards, indicate that it will. This confusion arises from the footnote in Table 3-8, which states that *"On-site analysis by soil scientist has reclassified these soils as*

MMI=2 or MMI=3." If this is the case, however, then why do the unit cards for Units 81, 83, 94, 130, and 131 indicate that, collectively, a total of 67.8 acres of MMI 4 soils occur within these units? Specifically, according to the unit cards, MMI 4 soils comprise 88% of Unit 81, 90% of Unit 83, 13% of Unit 94, 14% of Unit 130, and 39% of Unit 131. In addition, the statement is made on page 3-37 that *"areas with a high potential for landslide occurrence were evaluated in the planning process, and timber harvest was deferred in many of these areas during unit design,"* implying that some MMI 4 soils will be harvested (emphasis added).

An additional source of confusion is the information presented in the unit card for Unit 51. The soils report for this unit states *"Much of the unit includes extremely steep, shallow, potentially unstable soils, MMI=4, that are physically unsuited for commercial forest production (BMP 13.5). Recommend that this unit be dropped from consideration in any alternatives"* (the unit is proposed for Alternatives 2, 3, and 4). In addition, the geology report states *"Very high landslide potential, MMI=4."* However, according to the "Physical Description" section of the unit card, this unit contains no MMI 3 or MMI 4 soils. Why is there such a discrepancy of information?

In addition to being inconsistent with the timber suitability classification criteria of TLMP (1991), harvesting on MMI 4 soils presents significant concerns for impacts to water quality and fish habitat. This is particularly true for Units 81, 83, 94, 130, and 131, as they occur immediately adjacent to and/or directly above Class I or Class II fish habitat. The FEIS should clarify, both within the text and in the unit cards, whether MMI 4 soils will be harvested and, if so, how this comports with the requirements of the Forest Plan. DEC is opposed to harvest activities where slope instability is a concern, especially when risks to water quality and fish habitat are involved.

3. Harvesting on MMI 3 (High Mass Movement Index) Soils

We are concerned with the large amount of harvesting that is proposed on MMI 3 soils in close proximity to Class I and Class II fish habitat. In particular, according to the unit cards, MMI 3 soils comprise greater than 90 percent of the following units:

Unit 9: 100% MMI 3 soils; occurs immediately adjacent to and upslope of *"very productive and highly complex"* Class II fish habitat.

Unit 11: 100% MMI 3 soils; occurs immediately adjacent to and upslope of Class I (west fork Carroll Creek) and Class II fish habitat.

Unit 18: 99% MMI 3 soils; occurs upslope of Class I floodplain depositional channel type.

Unit 22: 93% MMI 3 soils; occurs upslope of Class II fish habitat.

Unit 40: 100% MMI 3 soils; occurs immediately adjacent to and upslope of Class II fish habitat.

Unit 41: 100% MMI 3 soils; occurs immediately adjacent to and upslope of Class II fish habitat.

Unit 44: 100% MMI 3 soils; occurs directly above Class II fish habitat.

Unit 50: 91% MMI 3 soils; occurs immediately adjacent to and directly above Class I and Class II fish habitat.

Unit 61: 92% MMI 3 soils; occurs above Class II fish habitat with Sub-basin S4.

Unit 86: 91% MMI 3 soils; occurs immediately adjacent to and directly above Class I and Class II fish habitat.

Unit 91: 99% MMI 3 soils; encompasses Class II fish habitat (not assigned to any alternative).

Unit 95: 92% MMI 3 soils; occurs adjacent to and above Class II fish habitat.

Unit 132: 99% MMI 3 soils; occurs adjacent to and directly above Class II fish habitat.

Although the unit cards recommend that at least partial suspension be achieved during yarding operations, given their close proximity to fish habitat, these units should be yarded using full suspension to more effectively minimize the risk of slope failure and potential impacts to water quality and fish habitat.

4. Effectiveness Monitoring

We are pleased to see that hydrologically-based effectiveness monitoring is proposed for this project. Specifically, this includes the proposed water temperature monitoring within potentially temperature-sensitive stream systems, and the stream morphology monitoring in the Neets Creek and Carroll Creek watersheds. However, no indication was provided as to the duration of these monitoring efforts. To be meaningful, the measurements need to be made over a number of years -- the longer the better. This is especially true for the morphological measurements.

We are somewhat concerned with the caveat given on page 2-48 that "*All monitoring is subject to funding and personnel limitations imposed upon the agency.*" Effectiveness monitoring should be given a high priority, with sufficient staff and funding committed to carry it out. However, if funding proves to be a constraint, then we would recommend extending the monitoring effort over a greater number of years, but reducing the sampling frequency to every other year. This would still allow for the detection of changes in channel morphology and habitat conditions, and for comparisons to be made with the watershed analysis baseline data. In addition, given the currently undisturbed condition of the west fork Carroll Creek sub-basin, and the productive fish habitat that it provides, we strongly recommend that it not be entered at this time and, instead, be used as a small reference watershed for the project area.

5. Windthrow

The discussion of windthrow on pages 3-164 through 3-169 is extremely general and, for the most part, not project-specific. In fact, much of this discussion was simply pulled directly out of TLMP, Appendix G (1991). Other than the windthrow risk areas identified in Figure 3-16, no site-specific information is provided regarding what, if any, mitigation measures are prescribed to minimize the potential for blowdown within the project area as a whole and, more specifically, within and adjacent to those units (areas) identified in Figure 3-16 as having high and very high

risks of windthrow. We suggest that the FEIS include a discussion of localized storm wind patterns (as evidenced by the orientation of past blowdown), and site-specific (unit card) descriptions of how windthrow will be minimized in "at risk" units.

According to the unit card for Unit 52, a "*wind-firm slope break buffer*" will be retained along the Class III V-notch which forms the unit's northern boundary. However, given its orientation to prevailing storm winds, and the fact that this unit is identified in Figure 3-16 as having a high to very high windthrow risk, this buffer will be highly susceptible to blowing down into the stream that it was intended to protect. Rather than creating a "hard edge," this buffer should be selectively harvested to retain only the most windfirm trees, including all smaller diameter, short and open crowned, and nonmerchantable trees. This would better ensure the maintenance of V-notch sideslope stability and the protection of water quality by minimizing the risk of blowdown.

6. Units Located Within Designated Estuary Buffers

As depicted on the unit card maps, significant portions of Units 35 and 126 overlap the estuary buffers of upper Carroll Inlet and Shelter Cove, respectively. Since these units are proposed under all the action alternatives, it is essential that the unit boundaries be adjusted prior to release of the FEIS/ROD to avoid encroaching upon these buffers. This is especially important if the unit cards are the "blueprints" to be followed by the purchaser/operator.

Other units which occur within the upper Carroll Inlet estuary buffer include Units 32, 33, 34, and 39. However, according to the unit cards, Units 33 and 34 have been dropped from the unit pool due to their locations within the buffer, and Units 32 and 39 were not assigned to any of the alternatives. Consequently, it is our understanding that none of these units will subsequently be considered for future timber sales within this area.

7. Figure 3-43 (page 3-329) -- "Roads Open and Scheduled for Closure"

This figure is confusing and, apparently, incomplete. It is described on page 3-328 as illustrating "*the roads in the project area [that are] to remain open with limited maintenance and the roads to be closed.*" However, only one road alignment (apparently, the transmission intertie road) is shown. This figure should either be improved to display all roads and accurately identify their post-sale disposition, or removed from the document altogether. This information is best displayed, however, on the project area map and/or on the alternative maps. This was done for the Lab Bay and Control Lake DEISs and proved to be very useful in determining the location of all roads and whether they are proposed to remain open or closed. We request that this approach be used for the Upper Carroll FEIS.

ACMP COMMENTS

1. Road Maintenance/Closure

The Road Management Objectives for all but 5 of the 52 roads listed in Appendix K indicate that these roads are proposed to be closed (maintenance level 1) following completion of this timber sale. However, according to the narrative information provided in this appendix, and that contained in Volume 1 (page 3-328), the proposed methods of closure do not comply (are

inconsistent) with the road closure requirements of **11 AAC 95.320**. For example, the EIS (Appendix K, page 1) states "*Maintenance level 1 roads are closed by bridge removal or organic encroachment and are monitored for resource protection*" "*Such roads will be allowed to revegetate naturally over time, resulting in eventual closure to vehicular traffic (organic closure). Modular bridges will be removed upon completion of harvest activities. Other drainage structures will be left in place.*"

With the exception of bridge removal, this is essentially a build it and walk away strategy for road closure. Although the EIS indicates that these roads will be monitored for the functional condition of drainage structures and for overall resource protection, given the past record of such monitoring, and the observed condition of both open and closed roads throughout the Tongass, it is doubtful that effective and consistent monitoring will occur over time. This is especially true given the existing and projected Forest Service funding for conducting such monitoring.

11 AAC 95.320 is very specific in its requirements for removing all bridges, culverts and other drainage structures, outsloping or water barring the road surface, and leaving ditches in a condition suitable to reduce erosion. In no case should natural "*organic encroachment*" be considered an adequate or acceptable road closure technique. If the Forest Service subsequently indicates that these roads will actually be inactive, rather than closed, then the road maintenance requirements of **11 AAC 95.320(c)(1-3)** will apply. In addition, the Forest Service must assure the commitment of sufficient funds and staff to effectively conduct routine monitoring and maintenance of all roads that are scheduled to remain open after completion of this timber sale.

2. Unit and Road Cards

With the exception of the conflicting slope stability information presented for Unit 51, the unit cards for this EIS are adequate in terms of the level of information provided. However, by printing the unit map on the reverse sides of the cards, rather than on the facing pages, they are somewhat cumbersome to use. We were particularly pleased to see that the alternative(s) for which each unit is proposed was included at the top of each card.

The road cards, on the other hand, are by far the most deficient that we have seen in an EIS. They are not actually "Road Design Cards," in the traditional sense, but rather, are poor quality maps lacking information concerning topographic features, unit locations, and stream classifications. More importantly, however, no specialist reports are provided concerning the number of stream crossings and the stream classifications at the crossing sites; the types of crossing structures to be used; the specific fisheries timing windows to be implemented during crossing structure installation; the methods of construction (e.g., overlay, cut & fill, full-bench); engineering, slope stability, and other resource considerations; and road segment-specific BMPs that will be implemented during and subsequent to construction. This information must be included in the FEIS to provide assurance that this aspect of the project is consistent with the standards of **11 AAC 95.285 - 315**.

3. Road Location

According to the unit card maps, those portions of the 8450, 8300800, 8448, and 84006 Roads that access Units 6, 18, 21, and 138, respectively, substantially encroach upon and traverse

through Class I and Class II stream buffers. The same is true for portions of the 84 Road in the vicinities of Units 8, 68, and 72. However, no site-specific discussion of the reasons for these incursions is provided in the EIS.

11 AAC 95.285(b) states "A road may not be located in a riparian area except where access is needed to a water body crossing, or where there is no feasible alternative." The elimination of substantial portions of 100-foot wide Class I and II stream buffers for right-of-way clearing is significant, and the rationale for doing so must be clearly stated in the EIS. The discussion on page 3-321 is insufficient in that it does not address the specific road segments where these encroachments occur. This site-specific information normally is provided in the specialist reports of the road cards. However, as indicated above, no specialist reports were included in the road cards for this EIS.

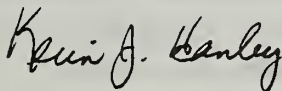
If not already done, alternative road alignments which avoid these buffers altogether must be investigated prior to development of the FEIS and ROD.

4. Unnecessary Road Construction

Under Alternative 5, approximately 3 miles of road construction is proposed between VCU's 744 and 737 to access only one unit (#92) in the upper Neets Creek drainage. This appears to be excessive and unnecessary for this timber sale, and does not fully comply with the standards of **11 AAC 95.285(a)(1)** and **(a)(2)** which state, respectively, "**minimize the amount of road construction**" [(a)(1)], and "**avoid isolating a patch of timber that may require unnecessary additional road construction**" [(a)(2)]. It also appears to be economically unjustified, especially given the average road construction cost of approximately \$260,000 per mile (Table 3-123).

Thank you for the opportunity to comment. We look forward to reviewing the final EIS for this timber sale.

Sincerely,



Kevin J. Hanley
Environmental Specialist

cc: Mike Conway, ADEC, Juneau
Jim Ferguson, ADEC, Juneau
Jackie Timothy, DGC, Juneau
Lana Shea Flanders, ADF&G, Douglas
Jack Gustafson, ADF&G, Ketchikan
Jim McAllister, ADNR, Juneau

Wayne Elson, USEPA, Seattle
Mark Jen, USEPA, Anchorage
Vicki Davis, USFWS, Ketchikan
Dave Arrasmith, USFS, Ketchikan
Bill Nightingale, USFS, Ketchikan
✓ Jimmy DeHerrera, USFS, Ketchikan



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
1889 C Street, Room 119
Anchorage, Alaska 99501-5126

ER 96/023

MAR 12 1996

Mr. Bradley Powell
Forest Supervisor
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Powell:

In response to your January 9, 1996 request, we have reviewed the Upper Carroll Timber Sale Draft Environmental Impact Statement (EIS). We offer the following comments (see Enclosure) for your consideration.

We remain concerned about the cumulative effects of this project in combination with other ongoing and proposed timber harvests on Revillagigedo Island and across the Tongass National Forest (Tongass), particularly in relation to the long-term viability of species. Lawsuits were recently filed against the U.S. Fish and Wildlife Service (FWS) relative to its decisions not to list the Queen Charlotte goshawk and Alexander Archipelago wolf for protection under the Endangered Species Act. In part, those decisions were based on expectations of the U.S. Forest Service (USFS) employing species-specific protection strategies in the revised Tongass Land Management Plan (TLMP). However, the USFS has continued to implement old guidelines that we believe are inadequate and contrary to FWS recommendations. We believe that in the Final EIS, the USFS should adopt conservative interim goshawk guidelines to avoid further compromising the available habitat base needed to assure continuance of a viable goshawk population across the Tongass.

The Draft EIS states that Habitat Conservation Areas (HCAs) will not be implemented in response to Section 502(a) of Public Law 104-19, signed by the President on July 27, 1995. It is our understanding that, as of September 30, 1995, this law no longer applies. Since the Draft EIS was published after that date, we suggest that implementation of HCAs or reserves be considered in the Final EIS--as they are being considered for inclusion in the TLMP. We encourage inclusion in all Final EIS project alternatives of large, medium, and small old-growth forest reserves or HCAs and wildlife travel corridors, as defined in the interagency Viable Population (VPOP) Committee's draft strategy, A Proposed Strategy for Maintaining Well-Distributed, Viable Populations of Wildlife Associated with Old-Growth Forests in Southeast Alaska (1993), with the peer review suggested modifications. The old-growth

blocks, we believe, are critical for maintaining viable, well-distributed populations of wildlife across the forest landscape.

We appreciate the opportunity to review and comment on the Upper Carroll Timber Sale Draft EIS. If you have questions about our comments, please contact Vicki Davis, FWS, at (907) 225-9691.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul A. Smith". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Regional Environmental Officer - Alaska

Enclosure

ENCLOSURE

GENERAL COMMENTS

SPECIES OF CONCERN

As a result of a recent FWS policy change, those species formerly designated "Category 2 Candidate Species" are now referred to as "species of concern." Species of concern are species for which the FWS has available information which indicates populations may be declining or facing threats. The FWS, USFS, and Alaska Department of Fish and Game are cooperating in the preparation of conservation assessments for three such species (Queen Charlotte goshawk, Alexander Archipelago wolf, and marbled murrelet) in accordance with the December 1994, Interagency Memorandum of Understanding. The long-term land management requirements of these and other old-growth dependent species are also being addressed through revision of the TLMP. We suggest the Final EIS identify how the proposed timber sale will achieve and continue to support these on-going efforts.

Several timber sale proposals, including the Upper Carroll Sale, are currently at various stages in the National Environmental Policy Act (NEPA) process. Collectively, these sales are expected to have adverse effects on habitat for the goshawk, wolf, and other old-growth forest associated species by removing old-growth forest and fragmenting large old-growth blocks, which are critical for maintaining viable, well-distributed populations of wildlife across the forest landscape. We suggest a landscape-level cumulative impact analysis for goshawks, marbled murrelets, and wolves be included in the Final EIS. Subsequent NEPA documents for the Upper Carroll Timber Sale and other sales located on Revillagigedo Island should, we believe, fully address these cumulative effects on goshawks, wolves and marbled murrelets.

QUEEN CHARLOTTE GOSHAWK

Recent analysis by the FWS found that listing the Queen Charlotte goshawk pursuant to the Endangered Species Act was "not warranted" based, in part, on insufficient scientific and commercial information. The ongoing interagency conservation efforts were also considered important in the FWS decision. The FWS remains concerned about the status of the Queen Charlotte goshawk.

Although more information is needed to determine the specific effects of past timber harvest, currently available information suggests that large blocks of old-growth forest are necessary for goshawks. We suggest that the Final EIS include a habitat conservation management approach retaining existing large blocks of mature forest to maintain management options required to conserve this species.

The Draft EIS proposes to harvest from 6 percent (Alternative 4) to 14 percent (Alternative 2) of the commercial old-growth forest in the Project Area. Alternative 5 (preferred alternative)

would harvest approximately 11 percent. The Draft EIS states that any nest found during field reconnaissance or unit layout will be protected using guidelines current at the time of project implementation. The Draft EIS also states that the goshawk guidelines to be used are the USFS August 18, 1992, Interim Guidelines for Goshawk Habitat Management. As stated above, we encourage the adoption of conservative interim guidelines in the Final EIS, so as to not further compromise the available habitat base needed to assure a viable goshawk population across the Tongass until the Revised TLMP is implemented. The FWS concurs with the USFS that the goshawk may be adversely affected by this timber sale.

MARBLED MURRELET

Marbled murrelets typically are associated with mature, old-growth forest habitat which provides one or more critical elements of their life requirements. The proposed harvest would result in loss of such habitat, and may have significant impacts on this species and its future existence in the Revillagigedo Island area. Research conducted in the murrelet's Pacific Northwest range suggests that there are sufficient indicators to demonstrate a cause and effect relationship between loss of mature forest and a reduction of murrelet populations.

The Draft EIS states that surveys conducted in 1993 along Carroll Creek (July 7-9) detected only two marbled murrelets. An August 5, 1993, survey conducted at Orchard Creek, outside the project area, had 61 murrelet detections. Conducting surveys on four days out of a three year period is not, we believe, sufficient to determine the extent of murrelet use of forested habitat. In February 1996, the FWS conducted aerial waterfowl surveys over 20% of southern Southeast Alaska. On February 27, 1996, the FWS found a large concentration of murrelets in Carroll Inlet (66 birds), more birds than at any other site surveyed during that survey period. We believe that repetitive surveys for at least a two year period should be performed. We suggest the Final EIS discuss the adequacy of the murrelet surveys and the implications and conclusions, if any, that were derived from them.

Remaining old-growth forest and average patch size effectiveness indices for all alternatives show an overall reduction of nesting habitat (p. 3-121 of the Draft EIS). The FWS concurs that a reduction in available nesting habitat may occur which may affect marbled murrelets (p. 3-140). We believe the Final EIS should adequately analyze cumulative and secondary impacts (such as additional entries into the project area and adjacent sale areas) on this species. We also suggest that the Final EIS discuss the effects of blowdown on proposed 30 acre murrelet nest buffers, and the scientific basis for the 30 acre buffer.

The Draft EIS states that many large unroaded blocks of habitat exist in and adjacent to the Project Area, therefore, effects to regional populations are not anticipated (p. 3-140). This statement implies that the USFS has conducted quantitative surveys and has data to support this finding. The assumption that the species occurs elsewhere, and that additional habitat loss is insignificant, raises questions regarding species distributions as addressed in the National Forest Management Act. It suggests the existence of a long-term plan to ensure well-

distributed populations. We suggest the Final EIS clarify this issue. We also suggest that the Final EIS discuss a landscape management plan that will include long-term retention of large tracts of mature, old-growth forest containing trees with suitable branch structure to support murrelet nests.

ALEXANDER ARCHIPELAGO WOLF

The FWS's 12 month "not warranted" finding for the Alexander Archipelago wolf, pursuant to the Endangered Species Act, was published in the Federal Register on February 23, 1995. However, the FWS remains concerned about the direct and indirect impacts to wolf populations occurring on Revillagigedo Island as a result of timber harvesting.

According to the Draft EIS, effects of increased road density would be substantially mitigated by access management, and that roads in the Project Area are not connected to any human population centers. Not taken into account was access by boats carrying all-terrain vehicles which can be expected to use the road system, especially if the road to Shrimp Bay is constructed. The VPOP Committee recommended that shoreline access be taken into consideration when conducting impact analyses. We suggest the Final EIS address alternatives to road construction and the management of constructed roads. The Final EIS should also contain, we believe, an analysis of the direct, indirect, and cumulative impacts of the proposed project on the continued viability of wolf populations.

The Project Area contains a high percentage of natural fragmentation and low elevation productive forest land, coupled with steep terrain. Neets Bay valley bottom timber was extensively harvested during 1950-1960. The head of Carroll Inlet sustained a moderate amount of harvesting during the 1970s. Current harvesting has targeted remaining low elevation forest, which will increase fragmentation and further impact deer by reducing old-growth forest winter habitat. Value Comparison Unit's (VCU) 737 and 744 have deep snow depth ratings and VCU 746 has a moderate snow depth rating. Ultimately, we suggest that large scale habitat conversion will result in severely reduced populations of Sitka black-tailed deer, with a corresponding reduction in the wolf population.

We estimate that within the next 10 to 30 years, given historic and ongoing old-growth timber harvest on Federal, State, and Native corporation lands, significant localized reductions in the Alexander Archipelago wolf populations will occur as clearcut areas transform into second growth stands, thus rendering such areas unusable by deer. We believe the current wolf and Sitka black-tailed deer habitat capability models used for analyzing the effects of projects on wildlife habitats are outdated, overly simplistic, and are not useful in determining population viability (Kiestler and Eckhardt 1994). More empirical information is available and, we suggest, should be used to update these models and rerun them for the Final EIS.

We believe the Final EIS should consider alternative harvest methods that minimize and reduce road construction. We also suggest that the Final EIS address ways to improve wolf

populations, including maintaining habitat for deer, minimizing habitat fragmentation and road construction, developing and implementing monitoring programs, and identifying mitigation and restoration potentials.

SPOTTED FROGS

Spotted frog habitat includes marshy ponds, streams, and lakes. During April 1995, the FWS documented spotted frogs in the Unuk River system. The Draft EIS states that several ponds and streams in the Carroll Creek drainage were checked for the presence of spotted frogs, but none were discovered. If additional amphibian surveys are planned for preparation of the Final EIS, we suggest that site visits at potential frog habitat be made during, or shortly following, ice-out. Spotted frogs congregate to breed as soon as open water is available at wetland edges.

OTHER TRUST RESOURCES

NEOTROPICAL MIGRANT AND RESIDENT BIRDS

Several neotropical migratory and resident bird species nest in the Tongass, including, but not limited to, the Pacific-slope flycatcher, Townsend's warbler, hairy woodpecker, and brown creeper (the latter two are USFS Management Indicator Species). Sidle (1985) found that species richness can be negatively influenced by timber harvesting. We suggest that surveys be conducted to determine neotropical bird population and distribution. As age structure and seed producing coniferous forest declines due to clearcutting activities, specialized species, such as red crossbills, inevitably will decline, with possible local extirpations. We believe the Final EIS should address direct and cumulative impacts on these and other Federal trust species that could be adversely affected by the loss of mature, old-growth forest and/or forested wetlands. We suggest the Final EIS include assessments that address habitat capability on a landscape level, and identify areas that produce large, low elevation cone crops for inclusion in retention areas.

As indicated by Tables 3-31 and 3-49, hairy woodpecker and brown creeper habitat capabilities continue to decline as a result of this and other timber sales. The same trend was noted in the North Revillagigedo and Shelter Cove EISs. With the amount of habitat capability decline predicted for past, current and future timber sales within the Revillagigedo/Cleveland Province, it is unclear how old-growth forest dependent species will be maintained. We believe the Final EIS should address how the USFS will meet the requirements of the National Forest Management Act and maintain species diversity, in light of these declines.

Brown creepers not only function as an indicator species responding to changes in mature, old-growth forest habitat, but also provide a useful biological function by consuming such forest pests as sawfly larva and adults (Terres 1980). In recent years, according to the National Climatic Data Center in Ashville, North Carolina (personal communication), Southeast Alaska

has experienced a decrease in annual rainfall. As a result, some forest pest outbreaks have increased. Theoretically, as more forest is clearcut exposing additional buffer trees to wind and radiant energy, drier conditions may evolve (p. 3-169). As more trees per acre are regenerated in these areas, additional water is transported from the ground to the tree through its root system, thus creating a drier condition within the stand.

Sawflies, for example, appear to be attracted to warmer and drier conditions (Tom Libescher, USFS, personal communication; Holsten, E.H. et al. USDA Forest Service, Alaska Regional Report #181, Anchorage, 1985). One can assume forest pest outbreaks will increase as the forest landscape changes, insect-eating birds decline, and man-induced forest ecosystems are altered. Without suitable numbers of brown creepers, as well as other insectivorous species, insect outbreaks could result or be exacerbated in large clear cut areas. We believe the Final EIS should address the cumulative and secondary impacts associated with the loss of such insect-eating birds.

It is unclear if the impacts of roads were included in the fragmentation analysis. The USFS has built an extensive road system in large tracts of old-growth forest blocks throughout the Tongass in order to harvest and transport logs to log transfer facilities. Roads create edge effects and contribute to forest fragmentation. Studies have shown that roads and trails as narrow as < 10 meters adversely impact nesting bird communities in forested areas (Askins 1994). Edge-related predation may extend as far as 600 meters into the forest (Wilcove 1987). Local populations of old-growth dependent neotropical bird species can be reduced by fragmentation causing an increase of predation, competition, hatching failure, loss from inclement weather (Chasko and Gates 1982), and noise disturbance (Ferris 1979). Edges also alter the climate of the forest microenvironment that interior forest dependent species require (Wilcove 1987). We believe the Final EIS should address these impacts.

WATERFOWL

The estuarine area at the north end of Carroll Inlet and Shelter Cove are waterfowl concentration areas, and sections of the Carroll Creek drainage may be used for nesting. The FWS conducted waterfowl surveys in Carroll Inlet on February 27, 1996, and found a large concentration of waterfowl. In addition, Shrimp Bay Cove has also been documented as having high waterfowl use, especially during winter. Species of particular interest include, but are not limited to, Vancouver Canada goose (*Branta canadensis fulva*) and harlequin duck (*Histrionicus histrionicus*).

The Draft EIS indicates that between 1997 and the year 2004 no changes in habitat capability will occur, but a 26 percent decrease from 1954 is indicated. Habitat capability will further decrease by the year 2140 by 49 percent. We believe the Vancouver Canada goose habitat capability model from which these figures were derived is too narrowly defined and based on outdated perceptions of the needs of this species (Kiestler and Eckhardt 1994). The model specifically focuses on conditions for nesting and brooding, but fails to address the importance of winter habitat in determining body condition before breeding and nesting. Since the birds

utilize mature, old-growth forest and associated understory plants for foraging, escape cover, and as a beneficial microclimate, the continual reduction of this type of habitat may have more of a significant deleterious impact on this species than that shown on Table 3-436 (page 3-98). We believe the Final EIS should address how the USFS will maintain viable populations of this and other native species throughout the planning area if habitat capability continues to decrease.

The Draft EIS references Gabrielson and Lincoln (1959), which summarized their observations that the harlequin duck was "common or abundant." Over the course of 37 years, many species that once were abundant or common have demonstrated decreases as a result of habitat losses. The Draft EIS does not identify if more recent information about harlequins exists for southern Southeast Alaska, or if surveys for this species were conducted in association with project planning. We suggest that USFS contact the FWS Migratory Bird Office in Juneau for recent 1995 survey data and incorporate those data into the Final EIS.

The 1994 FWS scoping comments on this project recommended waterfowl and shorebird surveys be conducted in order to avoid important areas used by these species for resting and feeding during migration and breeding. It was suggested that preliminary fall and late spring waterfowl aerial surveys be conducted. The surveys should have been repeated several times throughout each season for several years. We suggest the Final EIS address what surveys were completed for waterfowl species and their frequency, and that a map showing bird distribution and areas of concentration be included. Furthermore, we believe the Final EIS should address additional protective measures for species that concentrate at the head of Carroll Inlet, in Shelter Cove, and Shrimp Bay Cove during the winter months, the most critical time during these species' life cycles. We also suggest the Final EIS address the impacts on these species associated with proposed log transfer facilities, log storage, and/or rafting areas.

PINE MARTEN

Martens prefer mature old-growth forest with a well developed overhead canopy. According to Simon (1980) the distribution and abundance of this species is dependent on this type of available habitat. The Draft EIS states that the marten model, with patch-size effectiveness taken into consideration, indicates there is habitat for an estimated 45 martens within the Project Area. However, we believe Table 3-31 shows an error in the marten habitat capability change within the project area between 1954 and 1995. The correct figure should be 90 percent, which means the pine marten has lost a substantial amount of habitat. We suggest the Final EIS reexamine marten habitat capability and determine how much habitat is available.

The Draft EIS did not include shoreline access in the assessment of road impacts on wildlife species. We believe that, theoretically, the pine marten not only has lost a majority of its habitat but could be extirpated within the project area by overharvesting as a result of increased road density (see above comments on Alexander Archipelago wolf). We suggest the Final EIS be corrected to include complete and current information about pine martens.

Furthermore, we suggest the measures to be employed to ensure maintenance of suitable habitat for this species to effect continuation of viable populations be described in the Final EIS.

FISH HABITAT

Roads and stream crossings constitute the greatest risks to fish habitat and water quality. The Draft EIS provides information on the number of stream crossings per alternative in the description of alternatives, but does not analyze the risk associated with each alternative in the effects section. We suggest that the Final EIS present an analysis of each alternative, describing the potential risks associated with proposed numbers of stream crossings for each stream class. The type of stream crossing structure proposed for each crossing and its eventual fate needs to be presented in the Final EIS, we believe.

The Draft EIS includes road cards that give the total number of crossings proposed for any alternative, and state that only modular bridges will be removed. We believe the Final EIS should discuss impact mitigation practices for road stream crossings, including: use of bottomless culverts or similar structures at permanent stream crossings since perching of culverts is a common impediment to fish passage; proper installation of round culverts where they are used to allow natural downcutting of the streambed, baffled if necessary to reduce flows and allow juvenile migration, and removed after harvesting is complete; monitoring of all culverts left in place for fish passage capability, and a mitigation plan for stream restoration if damaged or washed out culverts occur; and a description of the frequency of culvert inspections and the types of possible remedial actions when problems occur.

The Draft EIS repeatedly states that implementation of Best Management Practices (BMPs) will mitigate direct stream channel impacts from timber harvesting or associated activities. However, the January, 1995, Anadromous Fish Habitat Assessment (AFHA) found that BMPs were inconsistently implemented on the forest, and even when appropriately implemented, failed to adequately protect fish habitat and water quality. We believe the Final EIS should include the recommendations contained in AFHA, or acknowledge the shortcomings of BMPs in the impacts analysis. The fairly rigorous monitoring protocol described in the Draft EIS, if adhered to, should increase the effectiveness of BMPs. The monitoring plan should ensure that remedial actions are implemented when adverse effects are identified. Current limitations on funding and staff for conducting monitoring, and the long-term need for monitoring may severely affect the ability to carry out the monitoring as described. We suggest these limitations on monitoring be addressed in the Final EIS.

The Draft EIS mentions that the project area can be categorized into watersheds (page 3-56), yet only two watersheds are discussed, Orchard Creek and Carroll Creek. We suggest the Final EIS more clearly discuss watersheds and provide a listing and a map delineating them within the project area. The watershed analysis that was conducted in Carroll and Neets Creek drainages identified several sub-watersheds at high risk of sedimentation due to road

construction, maintenance, and timber harvesting. Based on the high risk of debris slides within Carroll River sub-basins S4, S5, and S9, and the medium-to-long term storage potential of the downstream low-gradient depositional channels (R4 and R6), we believe harvest in these sub-basins may pose unacceptably high risks to fisheries dependent on downstream habitat. These stream reaches provide considerable spawning habitat for steelhead trout, chinook, pink, coho and chum salmon. We suggest that in the Final EIS, harvest units located on the west side of Carroll Creek in sub-basins S5 and reach R3 be deferred.

We believe the Final EIS should reflect that anadromous fish habitat exists in the Neets Creek watershed. The Neets Bay watershed supports no anadromous fish due to a migration barrier in the lower reach, but does contain anadromous fish habitat. Southern Southeast Regional Aquaculture Association (SSRAA) dam construction in 1982 blocked passage of native coho, chum and pink salmon, so although access has been eliminated, habitat still exists, as would a fish enhancement potential.

The Neets Bay watershed could be adversely affected by Alternatives 2 or 5 due to the additional roads required and increased landslide potential. Potential slope failures resulting from new road construction and harvest in R1, R2, and R4 have the highest risk of sediment delivery to Bluff Lake and Neets Creek. This area has had landslides resulting from road construction and timber harvest. The instability of this watershed along its steep slopes poses a threat to resident fish populations and to the SSRAA's hatchery operations. We suggest the Final EIS discuss cumulative and secondary effects on fresh water supplies used by the hatchery from additional road construction and timber harvesting.

Within the project area the Draft EIS identifies historic, and potential future fish habitat degradation caused by past and proposed logging, respectively. We suggest that the Final EIS address measures to restore the Neets Bay watershed, improve water quality, improve fish habitat, and reduce or eliminate the sedimentation problems that persist from previous and proposed timber harvesting and road building activities.

Through the year 2140, fish habitat capability decreases for coho salmon and Dolly Varden char are listed in Tables 3-24 and 3-25. Notwithstanding, the Draft EIS states that all timber harvesting alternatives proposed will not cause a reduction of fish habitat capability for the project area. We believe the Final EIS should reexamine fishery effects, considering current habitat degradation, cumulative effects of past and proposed harvest activities, the limitations of the habitat capability models, and the known limitations of BMPs, and revise this finding.

WETLANDS

Degradation of wetlands caused by heavy equipment impacting vegetation, impairment of natural drainage patterns, loss of nesting and foraging habitat for migratory birds and small mammals, and displacement or mortality of game species, including black-tailed deer, black bear, and wolf are a concern. Such habitat alteration can result in permanent hydrologic

change, and, in some cases, loss of functional wetlands. We suggest the Final EIS address cumulative impacts on wetlands and how the goals of relevant protective Federal laws and regulations will be met to avoid the long- and short-term adverse impacts associated with wetland destruction or modification.

Table 3-63 identifies anticipated reforestation treatments prescribed for each alternative. The Draft EIS states that areas requiring artificial regeneration cannot be accurately identified until after harvest, when the third year stocking surveys indicate inadequate natural regeneration. Therefore, the acres requiring replanting may differ than those listed in the above table. As indicated on the unit cards, wetlands appear to require replanting more often. This may indicate that forested wetlands prescribed for harvest may not regenerate as expected. We suggest the Final EIS include information, including the rate of growth on hydric soils, to support the notion that forested wetlands are capable of regenerating on a sustainable yield basis.

During road construction, some excavation of wetland overburden is required. We suggest the direct and cumulative impacts associated with disposal of this material be discussed in the Final EIS. Furthermore, we suggest that the total cubic yards removed and location for its disposal should be described in the Final EIS.

Although normal silvicultural practices are exempted from Clean Water Act (CWA) permitting requirements, Federal public trust responsibilities, associated with protection of waters of the United States, remain. We believe the Final EIS should identify appropriate mitigation to offset unavoidable, adverse impacts existing after all efforts to minimize resource losses have been met. This includes restoration that returns function and value to impacted wetland areas. Some examples would include, but not be limited to: returning wetlands to pre-existing condition by removing old road beds, reestablishing buffer strips along streams that were harvested prior to the passage of the Tongass Timber Reform Act (TTRA), and preservation of significant habitats.

LOG TRANSFER FACILITIES (LTFs)

According to the Draft EIS, there are three existing LTFs within the Project Area: Shrimp Bay, Fire Cove and Shelter Cove. One new LTF is being proposed in the upper reaches of Carroll Inlet (#7). In 1983, the National Marine Fisheries Service and FWS investigated four sites in Carroll Inlet to determine their suitability for use as log transfer sites. Site #7, a former LTF site, was reported as having substrate composed of silt mixed with woody debris. A maximum depth of 40 feet, Mean High Water (MHW), was recorded.

The Alaska Timber Task Force (ATTF) Guidelines recommend LTFs be sited along or adjacent to straits, channels, or deep bays where currents may be strong enough to disperse sunken or floating wood debris. The guidelines state that log bundles or rafts should be stored in areas where they will not ground at low tide and in a minimum depth of 40 feet or deeper, measured at Mean Low Low Water (MLLW). If the maximum water depth for site #7 is 40

feet at MHW, then at MLLW the depth is considerably less. This site may also lack sufficient flushing capabilities, as evidenced by the silty bottom. We suggest the Final EIS address this.

During 1995, the FWS reviewed the distribution of bark deposits at Shrimp Bay bight, an inactive LTF site. Patches of bark debris were noted along a narrow ledge along the cliff and on the bottom of the bight immediately south of the old LTF site. Scattered pockets of bark, up to 25.4 centimeters deep, were found on the flat of the bight. This accumulation exceeded the ATTF guideline standards for bark accumulation. Other debris noted during the dive included cables, metal chairs, refrigerators, netting and other assorted discarded items. The Shrimp Bay bight provides the only dungeness crab habitat in the immediate area. The FWS recommended the Shrimp Bay bight not be used for log rafting, storage, or any other activity that could cause the deposition of woody debris or other waste material. We believe the Final EIS should discuss the rationale for selecting a Shrimp Bay LTF site.

We suggest the Final EIS address existing bark depth at all of the LTF sites, and that it identify what mitigation measures would be implemented if bark accumulation is found to exceed the ATTF Guidelines. We suggest a mitigation plan to address clean-up measures and implementation time frames be included in the Final EIS. We also suggest that current dive reports be included in the Final EIS.

The Draft EIS states that bark deposition impacts are expected to occur on marine habitats, and attempts to quantify the total acreage impacted for each alternative (p. 3-338). Reference is made to Faris and Vaughn's (1985) re-examination of the "original data from Schultz and Berg (1976) and found the average accumulation size was 1.96 acres for all sites" (p. 3-339). They assumed the 1.96 acre as an average to estimate the percentage of estuarine area covered by bark. The study did not test the 1.96 acres coverage. They did state, however, "changes in water quality that result from bark deposits may affect the entire estuary, even though only a small area may be physically impacted."

The bark accumulation data obtained by Schultz and Berg were from LTFs that ranged from having recent use to those not active for years. Therefore, to imply that a one-size-fits-all approach to this issue would not be appropriate. Bark accumulation is dependent on the geophysical/bathymetric aspects of the site. This includes such things as gradient, currents, deposit of silt, and logging operations. We suggest that site specific analysis be conducted for each LTF to determine the total area of impact, and the results thereof included in the Final EIS. Information such as percent coverage of bark accumulation and bark thickness, bathymetrics, substrate type, water current and flushing characteristics, biological productivity, type and quantity of other debris (*i.e.*, cables) present should be included.

We suggest that the Final EIS include bark accumulation monitoring and establishment of permanent transects prior to operation of any LTF. We further suggest that any modifications proposed for existing LTFs be described in the Final EIS, including a review of impacts associated with fill activities. We also believe mitigation for the net loss of estuarine habitat as a result of bark accumulation and impacts should be included in the Final EIS.

At the upper reaches of Carroll Inlet lies an extensive intertidal mudflat, approximately 200 acres in size. Above the north end of the inlet high tide level, grassy meadows extend up Carroll Creek for some distance. Numerous waterfowl and shorebirds congregate to feed and rest in this area. Steelhead trout, pink, coho, chum and king salmon utilize this area as well. Carroll Inlet supports sport and recreational crabbing, shrimping, and fishing, as well as a major commercial shrimp fishery.

Accumulation of bark or other debris in this area could have a significant adverse impact. Logs, bark, and woodwaste entering marine waters can impact productivity of estuaries by smothering organisms and substrate, by creating anoxic conditions, and by releasing toxic compounds from the wood itself. Soluble leachates from wood waste have been shown to be toxic to aquatic organisms, including salmon fry (Pease 1974), shrimp, and crab larva (Buchanan 1986). Logs lost to sinking or breaking free from log booms could increase navigational hazards and become entangled in commercial nets. We suggest the Final EIS consider a less impacting alternative, such as barging. The direct land to barge transfer of logs would avoid and minimize direct, secondary, and cumulative impacts of bark accumulation, shading, and compaction associated with this type of activity.

We suggest the Final EIS identify additional secondary impacts associated with LTF sites related to improper disposal of solid waste materials directly affecting marine mammals and other aquatic life using the project area. We believe appropriate mitigation, along with effective enforcement measures to eliminate such improper disposal, and removal of existing solid waste materials, should be described in the Final EIS.

ROADS

In 1994, the Alaska Department of Fish and Game inspected the North Revillagigedo Project Area and found culverts had not been maintained or removed from the last entry, some were collapsed and/or perched and in need of replacement to accommodate fish passage, and that an adequate monitoring effort was lacking. Other State inspections on Prince of Wales (Lab Bay for example), have demonstrated similar recurring problems. The Draft EIS states by following BMPs little impact is expected. We believe the Final EIS should identify how road construction and maintenance for this timber sale will ensure BMPs are adhered to so that problems described above are not repeated.

In addition, we suggest the Final EIS include a list of existing drainage structures within the Upper Carroll Project Area that have been inventoried and are need of replacement. A comprehensive report of the inventory, including problems related to fish habitat, hydrology, and erosion should be identified. Frequency of proposed monitoring inspections should be provided in the Final EIS. Providing a list of proposed inspection dates allows other agencies an opportunity to accompany the USFS during such inspections. We believe a commitment to providing reports generated as a result of field reviews to resources agencies for additional recommendations and suggestions should be included in the Final EIS.

The majority of proposed harvest units are clustered within the 4½ miles of Carroll Inlet. Past this point (unit 73), they are scattered and isolated (page 3-198). The Draft EIS proposes to install a temporary bridge (\$500,000) across the lower reaches of Carroll Creek and construct approximately three miles of road to access three timber units. Since road construction, maintenance and repair are expensive, we suggest the Final EIS include an analysis for utilizing helicopter yarding as an alternative harvest method to reduce the need for additional roads. By reducing the need to construct roads, helicopter yarding reduces impacts caused by sediment loading of streams, reduces road related landslides, protects karst landscapes, and protects estuaries, wetlands and other habitat. It also reduces the amount of old-growth timber permanently removed by road construction.

All proposed roads north of the northernmost part of VCU 744, all of VCU 737 (Neets Bay), and to Shrimp Bay LTF further fragment proposed wildlife corridors, will occur in low elevation terrain which impacts habitat utilized by old-growth dependent species, are located on unstable soils, and appear to be more related to the utility corridor needs than timber harvest activities. We suggest the Final EIS clarify why this amount of road building is needed and why the USFS is willing to incur such a significant impact for very little timber. We believe further analysis should be conducted to ensure wildlife corridors are not compromised, and suitable old-growth habitat is maintained. In addition, we believe the Final EIS should clarify if CWA (Section 404) permits will be needed and obtained for the road sections that are utility corridor related.

The Draft EIS states "If a road connection between LTF tributary areas are feasible and practical, LTF sites can be eliminated." It further states "It is feasible to connect proposed Carroll LTF to the existing LTF at Shelter Cove (3-319)." The seven mile route between the proposed and existing LTF would occur along the existing powerline corridor and is the future transportation link with Ketchikan. Construction of this road would not access additional timber for the project, but would eliminate the Carroll LTF. This was considered, but due to high construction cost was not analyzed. However, connection between Fire Cove LTF to the Neets Bay road system would not eliminate the need for an LTF but would connect Fire Cove road system to Shrimp Bay to the Carroll Inlet system, and ultimately to the Ketchikan transportation system. This would provide an option to haul the Neets Bay drainage system timber to Fire Cove in lieu of Shrimp Bay. We suggest the Final EIS clarify why the Shrimp Bay LTF would be needed if the Fire Cove LTF is available. The proposal used does not minimize impacts to wetlands, floodplains, and old-growth habitat, and may not meet the CWA 404(f) exemptions requirements.

We remain concerned about the effectiveness of the USFS road closure measures. The FWS has observed that implementation of road closures, as proposed, has not eliminated or controlled access to affected fish and wildlife habitat areas. We believe post-timber operation road closures as mitigation for adverse impacts on wildlife populations are of minimal benefit to fish and wildlife if they cannot be enforced.

Arterial and collector roads (p. 3-316), which occur in all alternatives, are generally mainline roads requiring higher design and construction standards, and are usually maintained for use by passenger vehicles. Alternatives 2 and 5 propose to develop 58.48 and 45.31 miles of road, respectively. The Draft EIS, Table 3-126, states 21.73 miles out of 58.48 (37%) will be arterial/collector roads and Alternative 3 proposes 15.32 miles of 45.32 (34%) will be classified as arterial/collector roads. Section 404(f) of the CWA allows for certain limited agricultural and silvicultural activities to be exempt from the Section 404 permitting requirements. On-going silviculture operations and associated activities, including related road construction and maintenance, are exempted activities. Roads that are to be used for other purposes may not qualify for this exemption. We suggest the issues of multipurpose road construction and the application of the CWA permitting process be addressed in the Final EIS.

OLD GROWTH RETENTION/TRAVEL CORRIDORS

The FWS supports establishing linkages between old-growth forest habitats to aid in species dispersal. However, travel corridors associated with roads, second growth, and utility corridors are not suitable for wildlife in this regard. In order to maintain some structural characteristics of old-growth to ensure wildlife dispersal, breaks in the corridor as a result of harvesting timber units should not exceed 65 feet, as stated in the VPOP Committee's 1993 report, unless another corridor route can be established or the HCA increased to aid in dispersal. We suggest that in the Final EIS, corridors should be positioned away from the utility corridor to reduce possible electrocutions and collisions with transmission lines.

Carroll Block, a small unfragmented old-growth retention area, will become highly fragmented by road construction west of Carroll Creek. Roads and fragmentation will reduce its effectiveness as a retention area. Several timber units (Alternative 2: units 1, 90) located along the western extension of the Naha Block are also proposed for harvesting.

As Kiester and Eckhardt (1994) stated, natural fragmentation must be clearly understood before management-induced fragmentation can be properly evaluated. We believe the Final EIS should clarify the intent of the old-growth retention strategy, if harvesting will result in further old-growth forest fragmentation and reduced block and corridor sizes. We suggest the Final EIS include a map showing the old-growth retention block locations for each alternative.

CUMULATIVE IMPACTS

Construction of the Swan Lake-Tyee Intertie Project may have a significant impact on fish and wildlife resources in the Upper Carroll Timber Sale area by increasing land clearing activities adjacent to or near riparian zones. Additional road construction and development of pad footings for transmission lines will increase sedimentation. Transmission line right-of-way clearing could expose fish habitat to direct radiant energy and decrease thermal retention during winter. We suggest a cumulative analysis of past and current habitat losses within the sale area and adjacent timber sale units be included in the Final EIS.

The Draft EIS states (page 3-130) that it is “too subjective to analyze beyond what has been analyzed for the Upper Carroll Project” when considering the cumulative impacts of this and the Swan Lake-Tyee Powerline Project. We believe the USFS should analyze the impacts of both of these projects on the project area's fish and wildlife and include the results in both project EISs, considering that the USFS is planning these projects at the same time. In addition, we suggest timber harvesting or other habitat-altering activities on adjacent private lands should be identified and their impacts included with the cumulative impacts analysis in the Final EIS.

ALTERNATIVES TO CLEARCUTTING

The Draft EIS describes in detail the alternatives to clearcutting and the criteria for their selection (page 3-149). However, the USFS is proposing to apply the shelterwood method to only a few units, and dropped other alternative methods from consideration. It has been suggested that alternatives to clearcutting better emulate small-scale natural disturbance regimes (windthrow) common in Southeast Alaska. Clearcutting increases risks of windthrow along sharp forest edges, while selective cutting maintains contiguous overstory trees giving protection from wind. Alternatives to clearcutting maintain within-stand structural diversity and understory important to various wildlife species, and maintain the visual quality of the stand. Selective cutting would nullify the problem of low wildlife habitat capability during the possibly extended stem exclusion stage that develops after clearcutting. (Gregory Nowacki, USFS Regional Ecologist, 1995 draft report, Natural Disturbance Regime Module for the Tongass Land Management Plan Revision). We suggest that alternatives to clearcutting be given further consideration in the Final EIS.

Though heavy mistletoe infestation can affect timber quality, some infestation may not justify dismissing alternatives to clearcutting when considering important wildlife habitat and visual quality. The Draft EIS includes information that a stand inventory was conducted that contains quantitative information showing levels of mistletoe infestation which require clearcutting. Mistletoe may also provide a unique forest structure that contributes to habitat diversity. Some bird species are known to nest in mistletoe brooms (*i.e.*, goshawks and some owls). We suggest the Final EIS expand on this issue.

SUBSISTENCE

The FWS is concerned that much of the data on subsistence uses presented in the Draft EIS was originally collected in 1987, for the Tongass Resource Use Cooperative Survey (which is now outdated). Based on identified use of the project area, the study selected several communities for analysis (page 3-228 & 230), including Metlakatla, Meyers Chuck, Saxman, Wrangell, Thorne Bay, and Ketchikan. Population figures given for these communities appear to come from the 1990 census. Only for Metlakatla is the proportion of Native residents given. Of other communities and camps that use the Project Area, such as Margaret Bay Camp, Neets Bay Hatchery Camp, and Shoal Cove, the study says that subsistence use is expected to have minimal impact on the area. However, in further discussion of harvests of

salmon, deer, black bear, furbearers, and waterfowl, it appears that residents of these communities have recorded harvest, in some cases more harvests than the more permanent communities selected for analysis. We suggest the Final EIS list what proportion of each community is Native and the portions of local harvests attributable to both sport and subsistence use.

FIELD INVENTORIES

We believe the Final EIS should address the wildlife survey methodologies employed, the percentage of units covered, the frequency, and time of year that surveys were performed. Survey information should be in sufficient detail to allow a meaningful evaluation of the impact of the proposed project on those species that may utilize the area. We suggest including in the Final EIS, descriptions of the sampling methodologies and any variations from those methods. Also, we suggest a map be included in the Final EIS that identifies the location of all pedestrian transects, trap grids, herpetology arrays, or other sampling plots used to determine the on-site status of species.

MONITORING, ENFORCEMENT, AND REHABILITATION

Monitoring, enforcement, and rehabilitation programs require a commitment of personnel and budget. To ensure that such programs are maintained at a functional level, we suggest that the Final EIS identify how these programs will be maintained throughout the life of the project.

MAPS

Since the small maps included in the Draft EIS are difficult to read, we suggest that transparencies which address specific issues be used to assist review of Final EIS base maps. Ideally, one base map could be generated that shows the project area, contours, and landmarks. Features such as watersheds, sub-basins and reaches, alternative proposals (units layout), old-growth retention areas, etc., could be placed on separate transparencies to be superimposed on the base map.

We suggest correcting the following errors noted on the maps:

Landscape Management Zone Map (page 2-6).

--An unnumbered unit exists above unit 81 that is not identified on the large Current Conditions Map.

--Two unnumbered units adjacent to unit 92 that are not included on the large Current Conditions Map.

Large Map (Current Conditions):

- The gray linear corridor running from Shelter Cove to an area identified as second growth in VCU 746 needs to be identified.
- VCU "744" is misidentified as VCU 737. "744" is not noted on the map.
- "Class 3 and other streams" is listed twice in the legend.
- The segment of "new road" located south of the proposed LTF is not connected to a timber unit and it appears to go nowhere.

SPECIFIC COMMENTS

Chapter 2, page 45: We suggest the Final EIS include a map noting harbor seal haulouts.

Chapter 2, page 31, paragraph 2, last sentence: Alternative 5 would harvest 412 acres, not 394.

Chapter 3, page 4, Wildlife Analysis Areas (WAA), paragraph 2 (GIS): This paragraph states that the GIS contains a large database with information on a variety of resources. We suggest the nature of such information be described.

Chapter 3, page 21, Table 3-3: Watersheds are identified as "C41B." However, Appendix F refers to watersheds by sub-basins and reaches. No map shows locations of C41B, for example. We suggest that cross references be provided.

Chapter 3, page 41: We suggest wetland delineation maps be included in the Final EIS.

Chapter 3, page 42: The Draft EIS states that approximately 43 percent of Upper Carroll area is classified as wetlands. However, on page 49, 50 percent is so classified. This discrepancy should be resolved in the Final EIS.

Chapter 3, page 49: We suggest the Final EIS include information on how "detrimental altered wetness" is calculated.

Chapter 3, page 51: It is stated that "rock overlay construction techniques on wetlands ...provides a highly permeable fill that minimizes changes in hydrologic conditions." We suggest the Final EIS clarify how the rock overlay minimizes the hydrologic impacts normally associated with construction of road fill.

Chapter 3, page 64, Table 3-20: "Class II streams ...are subdivided into Class IIa and IIb." We suggest the Final EIS explain why the USFS subdivides TTRA Class II streams into Class II(a) and Class II(b).

Chapter 3, page 74: Reference is made to Table 3-129, yet the reviewer was unable to locate this table.

Chapter 3, page 76: We suggest defining the term “manageable set of species.”

Chapter 3, page 83, Table 3-31: We believe the marten habitat capability percent change should read “-90” instead of “-10.”

Chapter 3, page 85, Table 3-32: We believe the percent changes for the WAA column should read “-30” instead of “-27”, and “-19” instead of “-18.”

Chapter 3, page 85, Deer Populations Objectives, 2nd paragraph, 4th sentence: The sentence should refer to “Table 3-32” rather than “Table 3-40”.

Chapter 3, page 86, paragraph 4, last sentence: This sentence should read “90%” instead of “10%” for marten habitat capability decline.

Chapter 3, page 218, Neets Bay Fish Hatchery: “... a road connection to a LTF in Shrimp Bay...SSRAA Shrimp Bay activities could be enhanced.” According to SSRAA (personal communication), this statement is not true. All Shrimp Bay activities have been terminated and the road connection is not needed nor supported. We suggest this be corrected.

We suggest the Final EIS identify the number of acres contained within the Carroll Block and the portion of Misty Fjords that is on Revillagigedo Island.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

March 15, 1996

Reply To
Attn Of: ECO-088

REF:96-009-AFS

Bill Nightingale
Planning Forester
Ketchikan Ranger District
Tongass National Forest
3031 Tongass
Ketchikan, Alaska 99901

USDA-
REC
MAR 18 1996

Dear Mr. Nightingale:

In accordance with our responsibilities under the National Environmental Policy Act and §309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (draft EIS) for the proposed **Upper Carroll Timber Sale**. The draft EIS analyzes four action alternatives to harvest between 37 and 77 million board feet of timber from a project area of about 48,000 acres on Revillagigedo (Revilla) Island, northeast of Ketchikan, Alaska.

Based on our review, we have rated the draft EIS EC-2 (Environmental Concerns - Insufficient Information). This rating and a summary of our comments will be published in the *Federal Register*.

Our primary concerns, which are related to the potential impacts of the project on water quality and the marine environment, are highlighted below.

- 1) From a water quality and fish habitat perspective, we feel that the technical analyses (particularly the watershed analyses presented in Appendix F) do not support the selection of Alternative 5 as the preferred alternative. We believe that Alternatives 3 and 4 are better supported by the analyses in the EIS, with Alternative 3 being the environmentally-preferred alternative.
- 2) We believe that roads presently proposed to be constructed within riparian buffer areas conflict with the intended goals of protecting water quality and fish habitat and recommend that alternative alignments (which avoid these areas) be identified. We also believe that the EIS needs additional clarifying information related to proposed road maintenance and closure procedures to be employed.
- 3) We are pleased to see the incorporation of watershed analyses and effectiveness monitoring into the planning process for this timber sale. We offer some suggestions (see

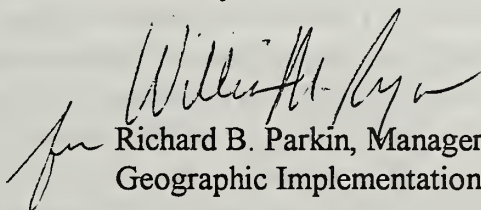
enclosure) on how the validity of the sediment transfer and deposition modeling approach used could be evaluated using water monitoring data.

- 4) We believe that additional information related to Log Transfer Facilities (LTFs) should be included in the final EIS.

Enclosed please find our detailed comments, which elaborate further on these issues as well as other areas of concern we believe need to be addressed in the final EIS. We are interested in working closely with the Forest Service in the resolution of these issues and I encourage you to contact Bill Ryan at (206) 553-8561 at your earliest convenience to discuss our comments and how they might best be addressed.

Thank you for the opportunity to review this draft EIS.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard B. Parkin". The signature is written in a cursive style with a large initial "R".

Richard B. Parkin, Manager
Geographic Implementation Unit

Enclosure

cc: Jim Ferguson, ADEC
NMFS
ADFG
COE-Alaska District

Detailed Comments for
Upper Carroll Timber Sale
Draft Environmental Impact Statement (draft EIS)

Selection of Preferred Alternative

While we are pleased to see the integration of an analysis of sediment transport and deposition potentials for the watersheds within the project area, we are concerned that the results of those analyses, which were field reviewed by hydrologists and fisheries biologists, are not fully reflected in the preferred alternative (Alternative 5). Sub-basins S4 and S5 within the Carroll River watershed are identified in Appendix F as having the highest sediment transfer potential in the watershed (posing a high potential risk to water quality and fish habitat), yet road construction and harvest activities are proposed for both areas. Interestingly, results for the Neets Creek watershed indicates that seven (7) sub-basins/reaches are high risk sediment areas and the preferred alternative indicates no entry is planned for these areas. It is difficult to determine why the results for the Neets Bay watershed are supported by the selection of the preferred alternative but those conducted for the Carroll River watershed are not. The EIS presents no information explaining how the results of these analyses were used in the ultimate selection of Alternative 5 as the preferred alternative. We believe that the final EIS should include a discussion of how the use of this newly-introduced modeling procedure fits into the timber sale planning process, particularly since there appear to be conflicts between what the model is showing, and the action the Forest Service is proposing to take.

Based on the information presented in the draft EIS, we believe that Alternatives 3 and 4 are the action alternatives best supported by the analyses conducted. We believe that Alternative 3 is the most environmentally-preferable alternative of the action alternatives presently under consideration.

Road Construction, Maintenance and Closure

Table 2-2 of the draft EIS indicates that 45 miles of "specified" roads and 16 miles of temporary roads would be constructed with the implementation of Alternative 5. Based on the information presented in the EIS, we are unable to determine the location of the proposed permanent and temporary roads. Because different design, construction, maintenance, and closure considerations are likely to be applied to the different roadway types proposed for construction, we believe that it is important for the EIS to disclose the spatial distribution of these roads. Equally important is a clear indication of the types of maintenance activities and/or closure methods for the different road types developed to support the proposed timber harvest. While the discussion on page 3-328 related to road disposition does indicate that certain roads will be maintained as Level 1 or Level 2 roads upon completion of harvesting activities, we believe that the EIS should indicate graphically (i.e., on a map) where the roads receiving Level 1 and Level 2 maintenance would be located. Similarly, the EIS indicates that temporary roads will be closed,

yet does not indicate that their closure will be performed in accordance with BMP 14.24. We assume all temporary and short-term roads developed as part of this timber sale will be obliterated as prescribed in BMP 14.24. This is important that proper road maintenance and closure activities are applied to mitigate impacts of roadways on water quality and fish habitat.

We are also concerned that some roads would be constructed within TTRA-defined buffers and riparian areas. The discussion of these roads on page 3-321 of the draft EIS fails to indicate why such roadway segments are necessary. Because these areas have been established specifically to provide protections to water quality and fish habitat, we do not see that building roads within them is consistent with those goals. We strongly recommend that alternative roadway alignments (outside these buffer areas) be identified and included in the final EIS to ensure that the intended goals of establishing the riparian buffer areas will be met.

Watershed Analyses

We are encouraged by the incorporation of the sediment transfer and deposition analyses for the Carroll River and Neets Creek watersheds into the EIS analyses. We believe analyses such as these provide useful planning information for identifying areas of high potential vulnerability to sediment generation, transport, and accumulation. We strongly encourage the Forest Service to continue the use of this tool in conjunction with additional analyses designed to establish the validity of the predicted results “on the ground.” To that end, we offer the following suggestions to augment the proposed monitoring effort for the project area in a way that would allow for some validation of the sediment transfer and deposition analyses conducted, as well as to evaluate the effectiveness of BMPs.

- 1) Conduct monitoring in a selected set of sub-basins and reaches identified in the EIS analyses to be most sensitive to sediment transport or deposition. For the Upper Carroll project area, this would include areas S4, S5, and R4 for the Carroll River watershed and areas S1 through S7 and R1 through R4 for the Neets Creek watershed. To evaluate the modeling approach used, monitoring should be conducted in sub-basins/reaches where harvesting would take place as well as those where it would not take place.
- 2) Monitor for suspended sediments and the accumulation of fine sediments in gravels in selected sub-basins/reaches both before and after project implementation. This provides a basis for evaluating the water quality impacts associated with the implementation of BMPs (or lack thereof) as well as determining the ability of the modeling approach to predict potential problems related to water quality degradation.
- 3) Compare results generated for sub-basins/reaches in areas with and without road construction and timber harvest activity to evaluate the validity of the modeling conducted as part of the EIS analyses.

Monitoring

We agree fully with BMP 11.6 (Soil and Water Conservation Handbook, FSH 2509.22) that “monitoring is an essential part of all BMPs as well as the overall BMP process.” Consequently, we are pleased to see the proposal to conduct two water quality-related effectiveness monitoring studies as part of this project. We believe these types of studies are essential for gaining an understanding of the effectiveness of applied BMPs in protecting water quality and fish habitat. We are, however, concerned with the statement in the EIS that “all monitoring is subject to funding and personnel limitations imposed upon the Agency.” While we are well aware of fiscal constraints under which all Federal agencies must operate these days, we believe that “effectiveness” monitoring is an important element of the BMP “system.” This system includes the following elements:

- 1) BMP design
- 2) BMP application
- 3) Monitoring
- 4) Evaluation
- 5) Reporting
- 6) BMP re-design (if necessary)

Without a balanced approach to funding each component of the BMP process, we do not believe that BMP 11.6 can be adequately implemented. The last statement of the first paragraph on page 2-48 of the draft EIS suggests that the monitoring component (and the important steps that follow) may be vulnerable to budgetary constraints, irrespective of the merits of those efforts and the important role they play in Forest planning activities. We trust that this is not the case and recommend that such a statement be eliminated from the EIS.

Additionally, consistent with BMP 11.6, we recommend that you coordinate the development of the proposed monitoring studies with the Alaska Department of Environmental Conservation.

Log Transfer Facilities (LTFs)

General Comments

The final EIS should summarize existing state and federal regulations, the Alaska Timber Task Force Guidelines, and appropriate Best Management Practices aimed at minimizing environmental impacts of LTFs.

The proposed action alternatives would utilize two (2) to three (3) log transfer facilities to be selected from 3 existing LTFs at Shrimp Bay, Fire Cove, and Shelter Cove and a potential new LTF at Carroll Inlet. The draft EIS does not adequately address the potential site-specific impacts to the marine environment from continued operation of the existing LTFs or the development of a

new LTF. This information is needed to support both the Alaska Timber Task Force (ATTF) guidelines and the description of the environmental requirements pursuant to NEPA. These impacts may be significant, and therefore require further evaluation in the final EIS.

Alaska Timber Task Force Guidelines

The USDA Forest Service has adopted the "Log Transfer Facility Siting, Construction, Operation, and Monitoring/Reporting Guidelines developed by the Alaska Timber Task Force." The ATTF guidelines were developed by private, public, and resource agency personnel to develop management practices to minimize adverse environmental impacts of LTFs. The final EIS should include a discussion on how the continued operation of the existing LTFs and the establishment of a new LTF would comply with the ATTF guidelines for Construction, Operation, and Monitoring/Reporting. These guidelines should be included as an appendix to the EIS.

The draft EIS provides no information on how the operation of the LTFs would comply with the ATTF Guidelines for Operation. Additional discussions are needed to determine whether the LTFs would be managed for the following:

- C5. Solid waste;
- C6. Bark accumulation;
- C7. Bundle speed;
- C8. Surface drainage;
- C9. Hydrocarbons;
- C10. Onshore log storage;
- C11. facility maintenance and reclamation.

In addition, the draft EIS does not indicate how the operation of the LTFs would comply with the ATTF guidelines for Monitoring/Reporting. The final EIS should present information on how existing and new LTF sites would be monitored for:

- M3. Bark accumulation (M4. Elements of bark accumulation monitoring should include but not be limited to the following:
 - a. permanent transects
 - b. measurements of areal extent, outer boundary, thickness and percent coverage of bark debris. As mentioned in the Site Specific Information section, the final EIS should provide information on the existing conditions of the LTF sites through underwater dive surveys);
- M5. Oil sheen;
- M6. Upland discharges.

Existing State and Federal Regulations

In 1983, the EPA determined that the discharge of bark and other woody debris from log transfer into marine waters constitutes a point source discharge, and therefore, requires a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean

Water Act (CWA). The NPDES permit is based on state water quality standards and/or effluent standards promulgated by EPA under the CWA. Since there are no effluent standards for LTFs, NPDES permits are based on EPA's best professional judgement. Permit conditions rely on Best Management Practices (BMPs) and monitoring procedures in the ATTF Guidelines.

In addition, the Corps of Engineers regulates construction of log transfer facilities through Section 404 of the CWA. A Section 404 permit is required for the discharge of dredged or fill material into waters of the United States.

The State of Alaska, Department of Environmental Conservation authorizes, in accordance with the Alaska Water Quality Standards (WQS), section 18 AAC 70.033, a Zone of Deposit (ZOD) for accumulation of bark and woody debris on the bottom of marine waters at the LTF. Typically, the ZOD may not exceed both one (1) acre of continuous coverage and a thickness of 10 centimeters at any point. The ZOD may include patchy or discontinuous coverage in addition to one (1) acre of continuous coverage. The ZOD must be located on the ocean bottom directly between the log transfer device and the minus-60-foot contour MLLW, including the log bundle rafting area.

The draft EIS does not indicate if any of the existing LTFs have the requisite permits to operate. Additionally, the EIS does not indicate whether permits have been obtained (or the permitting process has been initiated) for the new LTF proposed at Carroll Inlet. The final EIS should clearly indicate the type of permit and/or authorizations received, to date.

The EPA is currently developing a general permit (GP) for the authorization to discharge under the NPDES for LTFs in Alaska. After the GP is issued, all new and existing LTFs, including those constructed prior to October 22, 1985, will be required to submit a notice of intent (NOI) to be covered under the NPDES GP. The NOI will require dive reports documenting existing bark deposits and biological resources.

Best Management Practices

The achievement of Water Quality Standards from point and non-point source activities may occur through the implementation of Best Management Practices (BMPs) designed to protect beneficial uses. The final EIS should provide a description of BMPs which will be employed to minimize the discharge of bark, woody debris, and other pollutants from the existing LTFs. In addition, BMPs should be developed to control surface drainage, hydrocarbons, onshore log storage, log rafting, log bundling, etc. These BMPs could include the guidelines set forth by the Alaska Timber Task Force.

Site-specific Comments

The draft EIS provides very little site-specific information related to current conditions for each of the three existing LTFs and the single new LTF proposed for possible use. For example, the footnote to Table 3-139 indicates that the three existing LTFs have been or will be reconstructed and "meet all applicable EPA requirements," yet fails to indicate what those

requirements are. If all requirements necessary to obtain a NPDES permit have been satisfied, results from underwater dive surveys should be available for the Shrimp Bay, Fire Cove, and Shelter Cove LTFs. This information should be presented in the EIS.

The EIS also presents the results from a 1983 dive survey to support the selection of the Carroll Inlet (#7) site as a location for a new LTF. Unfortunately, the EIS fails to provide sufficient information to determine whether the results of the dive are relevant to current conditions. This is of particular concern when the EIS portrays the results of the dive survey (see Appendix G) as a thorough evaluation of proposed LTFs in accordance with Alaska Timber Task Force (ATTF) guidelines. These guidelines were not finalized until 1985, two years after the dive was completed. Because a current dive survey would be required before a NPDES permit would be issued for the Carroll Inlet LTF, we recommend that the Forest Service initiate planning for such a survey to facilitate the permitting process.

An underwater dive survey should be conducted at each of the four sites to (1) evaluate the biological resources, (2) delineate the areal extent and outer boundary of bark accumulation, and (3) estimate the thickness and percent cover of bark debris. This underwater survey would allow our agency and the public to evaluate whether accumulation of bark from the continued operation of the Shrimp Bay, Fire Cove, and Shelter Cove LTF sites (and the establishment of a new LTF at Carroll Inlet) may result in a direct and/or cumulative impact to the marine environment.

Furthermore, the final EIS should include the following descriptive information:

- 1) Description of the existing LTFs, including transfer devices (e.g., cranes, low-angle slide, A-frames (single or double with a mechanism for controlling speed), log slides, log bundle conveyors, drive down ramps, etc.) and sorting and storage areas;
- 2) Past estimate of timber volume (MMBF) handled by the existing LTFs.
- 3) Estimated volume of timber to be handled by each LTF with the implementation of the proposed sale.

Purpose and Need

It is difficult to determine why a timber harvest volume of 70 million board-feet (MMBF) is explicitly identified in the purpose and need section of the draft environmental impact statement (EIS). While we understand the purpose and need for the project is 1) to satisfy elements of the KPC contract and 2) to move toward the desired future condition of the forest as identified in the Tongass Land Management Plan (TLMP), the EIS does not explain why the harvest volume associated with this particular sale is necessary to meet those needs.

We believe there are issues related to National Environmental Protection Act (NEPA)

implementation that arise by explicitly specifying a harvest volume in the purpose and need section of the draft EIS. For example, in stating that the needed volume from the proposed project is 70 MMBF, we believe that the range of alternatives has been limited to those that would meet the identified volume. We believe that both the KPC contractual obligations and movement toward the desired future condition of the forest can likely be met through a wider array of harvesting options than those identified in the draft EIS (perhaps smaller, dispersed timber sales). Furthermore, in defining a specific volume for this project, we have concerns that critical decisions in the planning process (i.e., determination of the target volume) may have been made without adequate public involvement.

Additionally, we have some concerns that the specification of a target harvest volume in the purpose and need section of the draft EIS may conflict with the Forest Service's stated direction of using "ecosystem management" in their decision-making process. We believe that the approach being taken in this EIS is to manage the ecosystem "around" the desired timber harvest level instead of identifying the elements needed to maintain a healthy ecosystem and evaluating the project alternatives in relation to those needs. We believe that a management approach which is driven by pre-defined harvest levels will not ensure maintenance of a truly healthy ecosystem within (and outside) the project area.

The draft EIS does not provide any information related to the process used in defining the target timber harvest volume, and why it is judged to be "needed." At a minimum, the final EIS should identify the process used in determining the target harvest volume identified in the draft EIS, and how that process relates to the concerns identified above. This "pipeline" analysis should present the proposed 70 MMBF volume identified in the draft EIS along with all other planned timber sales (and volumes) to provide reviewers an understanding of overall harvest needs relative to the KPC contract requirements.

Water Quality Standards

A limited discussion of Alaska WQS is presented in the Chapter 3 of the draft EIS. Timber harvest and road construction will affect water quality. Unfortunately, this discussion fails to include a discussion of the WQS related to turbidity and fine sediments in gravels. Because management activities associated with the proposed action will result in affects directly related to these parameters (sediment delivery to streams), a discussion of the applicable WQS should be included in the EIS. Without a discussion of these WQS, along with associated project-related impacts, we are unable to determine how the action alternatives will be consistent with the WQS.

The statements on page 3-16 that "the application of BMPs and standards and guidelines will minimize sediment delivery by controlling surface erosion from roads and harvest units" by "avoiding or minimizing landslide and surface erosion potential" appear to be inconsistent with information presented in both the Soils and Associated Ecosystem section of the EIS (beginning on page 3-25) and analyses contained in Appendix F. Alternative 5 (the preferred alternative) would result in timber harvest activities and road construction taking place in areas within the

Carroll River watershed that have been identified as having high and very high soil mass movement indices (indicating their susceptibility to landslides and surface erosion) and, therefore, a high sediment transfer potential. This does not appear to agree with the statement indicating that landslide and surface erosion potential will be avoided or minimized and consequently impacts to water quality and fish habitat would be minimized. Clarification of these apparently conflicting statements is particularly important when one considers that sub-basin S5 of the Carroll River watershed is also a high-productivity anadromous fish habitat.

The statements related to the application of BMPs and standards and guidelines on page 3-16 also imply that WQS will be met if BMPs are implemented. We believe this conclusion is misleading since no information related to the effectiveness of the management practices to be employed has been reported in the EIS.

The achievement of WQS for nonpoint source (NPS) activities is intended to result from the implementation of BMPs. BMPs are to be designed to achieve WQS, which would include applicable water quality criteria (WQS consist of both designated beneficial uses and the criteria necessary to protect the uses, and an antidegradation policy). In other words, the water quality criteria are the measures by which BMPs are judged to achieve water quality protection. In addition, the antidegradation policy explicitly lays out that existing beneficial uses must be fully protected.

Also, BMP application does not equal standard compliance. The key issue however, as previously stated, is that findings of effectiveness monitoring efforts on the Tongass National Forest, and in the Ketchikan Area specifically, have not been reported or referenced in this EIS. Consequently, assurances of compliance with WQS are not meaningful with this fundamental link missing. BMPs are assumed to protect water quality, but monitoring must be conducted to determine if that is truly the case. If they are not protective, then the BMPs must be revised. This reinforces the need to successfully complete the monitoring studies proposed in the draft EIS.

Antidegradation

EPA believes that the proposed project could potentially exceed WQS so that the fisheries beneficial use will not be fully maintained, thereby violating the federal antidegradation policy. An antidegradation analysis, as specified in the Antidegradation Policy [40 CFR 131.12], should be included in the final EIS. This policy was developed to achieve the goals of the Clean Water Act, which are to restore and maintain the chemical, physical and biological integrity of the nation's waters.

The Antidegradation Policy describes three tiers of protection. Briefly:

Tier 1:

No activity is allowable which would partially or completely eliminate any existing beneficial use of a water body, whether or not that use is designated in a state's WQSs. If

an activity will cause partial or complete elimination of a beneficial use, it must be avoided or adequate mitigation/preventive measures must be taken to ensure that the existing uses and the water quality to protect those uses will be fully maintained.

Tier 2:

Where the quality of the waters exceed "fishable/swimmable" levels ("high quality waters"), that quality shall be maintained and protected unless the following are completed:

- 1) a finding that such degradation is necessary to accommodate important economic or social development in the area in which the waters are located.
- 2) full satisfaction of all intergovernmental coordination and public participation provisions, and
- 3) assurance that the highest statutory and regulatory requirements and BMPs for pollutant controls are achieved.

Please note that this provision is intended to provide relief only in extraordinary circumstances where the economic and social need for the activity clearly outweighs the benefit of maintaining water quality above that required for "fishable/swimmable" water. The burden of demonstration on the party proposing such activity is very high. In any case, the activity shall not preclude the maintenance of a "fishable/swimmable" level of water quality protection.

Tier 3:

Where "high quality waters" constitute outstanding national resources, that water shall be maintained and protected. As with the other tiers, the state determines the "tier" of the water body. If necessary, EPA can provide guidance on determining water quality status.

Federal Consistency Provisions of §319 of the Clean Water Act

The final EIS needs to fully integrate §319 of the Clean Water Act. Existing water quality conditions in the National Environmental Policy Act documents need to reflect and reference the state's water quality assessment. Direct or indirect nonpoint source water quality effects need to be reduced through design and mitigation measures to ensure that the project is consistent with the state's NPS program. The contact for the Alaska Department of Conservation is:

Jim Ferguson
Forestry Services Team Leader
Alaska Department of Environmental Conservation
Phone: (907) 465-5365

Affected Environment and Environmental Consequences

We are concerned with the lack of quantitative information presented in the draft EIS in

general, and specifically related to compliance with Alaska Water Quality Standards. This is the case in the assessment of existing conditions as well as in reporting expected impacts associated with the project alternatives. As a result, it is extremely difficult to determine the current state of the ecosystems within the project area (baseline conditions) or the significance of the impacts to those ecosystems for each of the project alternatives. While surrogate indicators are provided throughout the EIS which give some gross indication of the potential to impact water quality in a relative sense (e.g., number of stream crossings, acres of roads and disturbed soils, etc.), there is little information provided that allows the reader to translate these indicators into what conditions presently are or are likely to be in the affected streams in an absolute sense. Because insufficient information exists to indicate whether streams within the project area currently comply with or exceed WQS, it is difficult to determine whether any of the proposed alternatives would pose unacceptable risks to water quality and fish habitat.

While we believe that baseline water quality data is most useful when collected before alternative development and selection, we are pleased to see that monitoring of the Neets Creek and Carroll River watersheds will be conducted as part of the proposed project. The information derived from this effort should prove to be useful in developing an understanding of baseline conditions and the effectiveness of BMPs applied within those watersheds.

Environmental Effects Outside the Project Area

The draft EIS indicates that the project would “indirectly” affect air quality in the vicinity of the KPC mill at Ward Cove. Similarly, the project would also “indirectly” affect water quality in Ward Cove as well as Thorne Bay. The EIS states that KPC is responsible for ensuring that emissions impacting air and water quality are within legal limits. While it may be somewhat a matter of semantics, we believe that potential impacts in the vicinity of the KPC mill and at Thorne Bay are direct impacts from the proposed timber sale as they are a direct consequence of the proposed action. Furthermore, while we agree that KPC is responsible for meeting permit requirements, we believe that additional discussion of these potential impacts should be included in the EIS to satisfy the implementing regulations for NEPA (40 CFR 1502, section 1502.16). For example, what are the current air and water quality conditions in the vicinity of the KPC mill and Thorne Bay and what impacts to those conditions are likely to result from each proposed project alternative? Are there permits currently in place? What types of permits? What is the status of those permits? The EIS should be revised to include a discussion/ evaluation of the direct project-related impacts “outside” of the project area.

Economic and Socioeconomic Analyses

The draft EIS indicates that the IPASS model was used to evaluate the effects of the proposed project on employment and earnings in Southeast Alaska. First, the EIS present no description of the model and its structure. Without an understanding of the modeling approach being employed, it is difficult to understand what the modeled results really mean. This information should be included in the final EIS.

We have questions related to the consistency of economic analyses being conducted for different timber sale EISs on the Tongass, and within the Ketchikan area specifically. For example, the Control Lake EIS employed the IMPLAN model to predict economic effects associated with that project while the IPASS model was used for this project. Why have different models been used? How do the models differ? What are the implications of the use of different models? This should be clarified in the final EIS.

Table 3-80 presents base year information for the "Ketchikan Area Primary Influence Zone Input-Output Model." Because no discussion of this model is presented in the text, we are unable to determine what this model is/does or how it relates to the IMPLAN or IPASS models. We recommend that this be clarified in the final EIS. Additionally, we believe that a comparison of the number of jobs model output presented in the last column of the table with statistics compiled by the Alaska Department of Labor would provide useful insights into the utility of the model for predicting jobs.

Present Net Value should be defined as the difference between the discounted benefits and discounted costs associated with the alternatives.

Several tables in this section refer to Marks (1995) and Matson (1995). These references are not contained in the reference section of the EIS. We recommend that they be included in the final EIS.

Southeast Alaska Conservation Council

SEACC 419 Sixth Street, Suite 328 Juneau, AK 99801
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March 11, 1996

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

ATTN: Upper Carroll EIS

Dear Mr. Powell:

The following comments are submitted on behalf of the Southeast Alaska Conservation Council (SEACC) on the Upper Carroll draft environmental impact statement (DEIS).

SEACC is a broad-based coalition of 15 volunteer citizen organizations in 12 communities ranging from Ketchikan to Yakutat, including the Tongass Conservation Society (TCS) in Ketchikan.

Of primary concern to SEACC's members is the long-term, cumulative impact of the level of development proposed in the DEIS for this project area on their livelihoods and way of life. The National Environmental Policy Act (NEPA) requires the Forest Service to prepare an EIS that discloses and discusses "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity." 42 U.S.C. Section 4332(2)(C)(iv). The DEIS, however, fails to adequately weigh the short-term benefits of supplying timber to Ketchikan Pulp under its 50-year pulp contract, which expires by its terms in just over eight (8) years, with this project's long-term costs. The DEIS fails to adequately disclose the loss of future productivity resulting from unsustainable logging under the Ketchikan Pulp contract within the project area, including the cumulative impacts to the commercial, recreational and subsistence uses of fish and wildlife.

A. The Purpose And Need For This Project Violates The TTRA, NEPA, ANILCA And The NFMA.

Chapter 1 and Appendix A of the DEIS offer rationalizations for why clearcutting is scheduled in the Upper Carroll Project Area at this time. However, no reasoned explanation is provided as to when or how the Forest Service determined that the purpose and need for this proposed project was to provide approximately 70 mmbf to KPC and/or the Ketchikan Area Independent Sale Program. As noted in the EISs for other KPC offerings within the Ketchikan Area, the selection of a timber target for those projects

come from schedules adopted in closed Forest Service meetings in the late 1980's and early 1990's. A conclusion that this project's unreasonably narrow purpose and need resulted from similar "behind closed doors" scheduling meetings is supported by the lack of any documentation in either the 1979 TLMP, as amended, or the SDEIS for the TLMP Revision identifying this precise timber target, from this precise project area, at this precise time.

This "**black-box**" process violates NEPA by shielding the most important decisions made in the planning process from any public participation. It further violates NEPA by unreasonably restricting the range of alternatives evaluated in this DEIS.

This action violates the process set out in the 1985-86 TLMP Amendment, which remains the controlling Forest Plan. TLMP, as amended, requires a public, mid-level scheduling process that was not followed on the Ketchikan Area. The failure to comply with TLMP violates the NFMA.

Finally, this process violates Section 810 of ANILCA by failing to evaluate alternatives that would avoid restrictions on subsistence resources and uses.

While the Forest Service has the discretion to select the purpose and need for a proposed project, the TTRA restricted this discretion by requiring the Forest Service to only "seek to provide" a supply of timber to KPC or other timber operators, subject to the requirements of other applicable laws, and only "to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources." Therefore, selecting a purpose and need for this project that elevates supplying a specific volume of timber to KPC and/or the independent sale program above the Forest Service's substantive legal obligations "to cause the least adverse impact possible on rural residents who depend upon subsistence uses of the resources [within the project area]," or to provide for viable, healthy populations of fish and wildlife, violates Section 101 of the TTRA.

In describing the purpose and need for this project, the Forest Service incorrectly relies upon its intention "to move toward the desired future condition as identified in the TLMP Draft [Supplemental] Revision (1991a), consistent with Management Direction/Emphasis for each management area in the current Forest Plan (TLMP 1979a, as amended)." DEIS at p. 1-6. The 1991 draft Revision is just that -- a draft, and obsolete as well. We request that letters from Secretary Glickman, Undersecretary Lyons, and Regional Forester Janik identifying the shortcomings of Alternative P from the 1991 draft TLMP Revision be incorporated into the record.¹ As noted by Secretary Glickman, "Since [1991] ..., we

¹Letter from DOA Secretary Glickman to Senator Hatfield, Chairman of the Senate Committee on Appropriations (Aug. 4, 1995); Letter from DOA Undersecretary Lyons to Senator Hatfield, Chair of Senate Committee on Appropriations (July 28, 1995); Letter from Regional Forester Janik to Belinda Chase, Editor of Ketchikan Daily News (August 18, 1995); Letter from Regional Forester Janik to Senator Stevens (July 28, 1995).

have gained additional resource, economic and social information This new information should be incorporated into the final plan."

Although we agree that the project area includes areas designated as LUD IV in the 1979 TLMP, as amended, these designations remain subject to the site-specific determinations made during project planning, in compliance with NEPA and ANILCA. See AWRTA v. Morrison, No. 95-35222, slip op. at 8949-50 (9th Cir. July 24, 1995)(as amended Sept. 28, 1995).

The purpose and need for this project, as well as the range of alternatives considered in the DEIS, show that the Forest Service has elevated fulfilling the Ketchikan Pulp contract above complying with existing forest management direction and the law. Thus, the purpose and need for this project is arbitrary and capricious and violates NEPA, ANILCA, NFMA, and the TTRA.

B. The Narrow Range of Alternatives Considered in the DEIS Violates NEPA and Section 810 of ANILCA.

The range of alternatives considered in the DEIS violates NEPA by failing to include reasonable alternatives resulting from the Forest Service exercising its authority, under the KPC contract or agency regulations, to cancel or terminate the KPC contract, or to debar or suspend KPC's operations under the contract. Under Section B0.7 of the contract, the Forest Service may terminate the contract "upon a determination that Purchaser's operations would cause serious environmental damage" The DEIS clearly discloses that KPC continued operations have and will cause serious environmental damage in this, and other project areas in the Ketchikan Area. The serious cumulative impacts to fish, wildlife, water, as well as the significant restrictions to subsistence uses of wolf, marten and deer from this and other adjacent projects clearly qualify as "serious environmental damage." See also Section B8.222 (Offering Termination by Forest Service because Purchaser's operations would cause serious environmental damage).

The Forest Service may also terminate Ketchikan Pulp's contract under agency regulations "for serious or continued violation of [its] terms." 36 CFR 223.116(a)(1). According to provision B6.01 of the contract, KPC is required to conduct its operations "in compliance with Federal, State, and local statutes, standards, orders, permits, or other regulations." KPC has a long history of violating its air and water permits. KPC has seriously and continuously degraded the air and water in Ward Cove and the surrounding area which has resulted in significant toxic accumulations. In 1991, 1992, and 1993 KPC was either the largest or second largest toxic water polluter in the entire Pacific Northwest, including Washington, Oregon, Idaho, and Alaska. See EPA's Toxic Release Inventory Reports for 1991-1993. Most recently, Ketchikan Pulp pled guilty to criminal

and civil violations of its air and water discharge permits governing operation of its pulp mill.²

Agency regulations permit the Forest Service to "debar" a purchaser for "conviction of or civil judgment for ... a commission of a criminal offense in connection with ... performing a public contract ...," or "violation of the terms of a Government contract...." See 36 CFR 223.137(a)(1)(i) and (a)(2). Both agency regulations and provisions of the KPC contract further allow the Forest Service to "suspend" KPC's operations for "commission of ... a criminal offense in connection with ... performing a public contract ...," 36 CFR 223.142(a)(1)(i), or for breach of a "material" provision of the contract, Contract Provision B9.3. According to provision B6.01 of the contract, Ketchikan Pulp must conduct its operations "in compliance with Federal, State, and local statutes, standards, orders, permits, or other regulations." Unfortunately, KPC has never done so.

"The existence of a viable but unexamined alternative renders an environmental impact statement inadequate." Resources Ltd., Inc. v. Robertson, 35 F.3d 1300, 1307 (9th Cir. 1994)(quotations omitted). To serve NEPA's information purposes, an EIS must give a reasoned analysis of the evidence before the agency and make that evidence available to all concerned. The DEIS, however, fails to disclose Ketchikan Pulp's past and continued breach of the contract, the environmental consequences from these actions, or the management options thus provided the agency. This omission prevents the decision maker and public from making a reasoned and well-informed decision.

The decision by Congress to not cancel the KPC contract in the TTRA does not shield the Forest Service from considering alternatives that flow from the agency's authority to terminate, debar, or suspend KPC's contract operations in this DEIS. First, Section 101 of the TTRA allows the Forest Service to only offer timber under the contract subject to the requirements of other applicable laws, such as Section 810 of ANILCA and NFMA, and only "to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources." Even the faulty and incomplete analysis contained in this DEIS demonstrates these requirements can not be met for this project area. In addition, alternatives which include termination of the contract and debarment or suspension of contract operations, must be analyzed in the DEIS for this analysis to meaningfully inform the Congress and Administration as to whether fulfilling the contract volume requirements for KPC is consistent with meeting the agency's legal obligations to provide for balanced and sustainable multiple use on the Tongass. The 1992 Irland Group report, prepared for Congress pursuant to Section 301(e) of the Tongass Timber Reform Act, like the 1991 draft Revision, is outdated and fails to take into account new information now available to the agency.

²See, *USA v. Ketchikan Pulp Company*, No. A95-025 CR (D. AK Mar. 6, 1995)(Criminal Plea Agreement); *USA v. Ketchikan Pulp Company*, No. A92-587-CV (JKS) (D. AK Mar. 29, 1995)(Consent Decree).

Because all the action alternatives in the DEIS, result in a significant possibility of a significant restriction on subsistence, this DEIS violates Section 810 of ANILCA and the Tongass Timber Reform Act.

C. The Forest Service Relied On An Arbitrary And Capricious Procedure For Calculating Proportionality For This DEIS.

In determining proportionality, the Forest Service must use timber volume, not acres, and volume must be determined based on an accurate methodology rather than the TIMTYP database. The Forest Service has failed to do so in this DEIS. The Forest Service simply states that, "For the Upper Carroll analysis, the base proportions calculated using [the current Forest Handbook] to evaluate compliance with the proportionality requirement." DEIS at 3-63. However, the court in The Wildlife Society, et al. v. Barton, No. J93-001-CIV (Alaska), issued an order finding that the Forest Service's use of the methodology in the "current Forest Handbook" to determine proportionality was "arbitrary and capricious."

Two reports were completed and released this past spring on alternative methods for determining proportionality. The first report, Evaluation of Photo-Point Inventory Methods for the Estimation of Timber Volume and Proportionality in Southeast Alaska, is a scientific evaluation of four different methods for determining proportionality. This report was completed in April of 1995. The second report, Alternatives To Using The Timber Type Map For Determine Proportionality Under The Tongass Timber Reform Act, is a May 23, 1995 summary of the first report, and a recommended direction for implementing Section 301(c)(2) of the Tongass Timber Reform Act on the Tongass. Comments on these reports prepared by the Alaska Chapter of The Wildlife Society were submitted on June 28, 1995 by the Sierra Club Legal Defense Fund on behalf of its clients, plaintiffs in three ongoing cases on the Tongass, including SEACC. We request that these reports, and The Wildlife Society's comments, be incorporated into the planning record for the Upper Carroll project.

As stated in those comments, we agree with the first report's conclusion that "method C is probably advisable since photo measurements can be made with higher precision without substantially increasing cost." The DEIS fails to disclose the alternative methodologies or apply the best available approach, Method C, which was recommended in the first report. The Forest Service must apply the recommended alternative to the TIMTYP methodology for this sale to successfully halt highgrading as mandated by Congress in the TTRA. Achieving proportionality in the Upper Carroll project area is also essential for the conservation of highly productive wildlife habitat.

Additionally, in determining proportionality for volume class 6 and 7 stands, the Forest Service must separate volume class 6 and 7 stands. In this DEIS, and in all past timber sales, the Forest Service has lumped the two volume classes together resulting in excessive logging in class 7 stands. Field surveys should be done to identify locations of high volume timber and verify the actual amount of volume classes 4, 5, 6, and 7 in the Upper Carroll project area.

D. Forest Service Analysis Of Falldown Is Incomplete.

The DEIS (at p. 3-198) discloses that there is at least a 63% overestimation of available scheduled timber acres in the Upper Carroll Project Area. However, the Forest Service fails to put this alarming admission into a meaningful context for the public or decision maker. The DEIS also fails to disclose the impacts flowing from such an overestimate or explain how this overestimation of actual available timber acres effects "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity," as required by NEPA.

For example, what percentage of the actual available and scheduled timber acres are included in the project proposal? What timber inventory was analyzed for this project? What percentage of the actual timber base within the project area is left after completion of this project? What effect will this have on the local timber economy after 2004? Why is the percentage of "hard" falldown for this project area "considerably higher than other falldown studies"? Which studies are those? Have other studies been conducted relating to the North Revilla and Shelter Cove timber sales? If so, the public needs to be informed of their results to evaluate the impacts from this proposed project. Cumulatively, what conclusion can the public reach regarding the sustainability of all logging efforts on Revilla Island from this analysis, particularly logging justified to satisfy the high volume KPC contract? Please address each of these questions and provide the requested information in a supplemental DEIS for this project.

E. The DEIS Fails To Disclose Or Follow Recommended Measures To Adequately Conserve Fish Species In The Project Area.

The DEIS states (at p. 3-72) that "The timber harvest as proposed will not have a predicted reduction of fish habitat capability for the Upper Carroll Project Area alternatives, regardless of which alternative is selected...." But, the Forest Service's own report to Congress, The Anadromous Fish Habitat Assessment (AFHA), concluded that current protective measures (buffers, BMPs, other TLMP guidelines) are "not fully effective" to protect fish habitat from the impacts of logging, and recommends that additional protective measures be taken. Without disclosing and discussing the AFHA findings, the Forest Service has not taken the hard look required at the environmental consequences from the proposed project on streams and watersheds in the project area. In addition, it significantly impedes informed public participation in the decision-making process.

As part of the AFHA analysis, the Forest Service reviewed the PACFISH management strategy for protecting anadromous fish habitat in the Pacific Northwest and found many similarities. This conclusion, and other analysis, led these experts to conclude that current protective measures implemented on the Tongass were not effective. This is not surprising because the strategies developed in PACFISH were intended for application in Alaska from the very beginning. (Forest Service public meeting, Petersburg AK, June 28, 1995). Thus, the recommendations made in the AFHA should be disclosed and

applied to the alternatives considered, as it represents the best scientific information presently available on how to protect anadromous fish habitat.

NFMA explicitly states that the Forest Service must "insure" that logging on the Tongass does not "seriously and adversely affect water conditions or fish habitat." 16 U.S.C. Sec. 1604(g)(30(E)(iii). AFHA has established that the minimum 100-foot riparian buffers on Class I streams, and those Class II streams flowing directly into Class I streams, do not adequately protect fish habitat on the Tongass. Accordingly, NFMA compels the full implementation of the specific recommendations made in AFHA to ensure that sufficient riparian habitat is maintained during and after logging operations.

In conjunction with NFMA, the Forest Service must also meet the requirements of the Alaska Coastal Management Plan (ACMP) which requires that fish and wildlife protection on federal lands be no less than that provided on state lands. Under the state Forest Practices Act (FPA), which is incorporated into the ACMP, there can be no degradation of important fish and wildlife habitat within 300 feet of a fish stream. Thus, the Forest Service has a legal obligation to manage riparian zones consistent with the ACMP and FPA, and the alternatives considered for this project should be developed accordingly.

"The Forest Service needs to take a quantum leap to protect fish habitat on the Tongass." (Dr. Fred Everest, Forest Service public meeting, Juneau AK, December 11, 1995). But the DEIS and Forest Service Regional Forester Phil Janik's recent memo to Forest Supervisors and Staff Directors regarding the implementation of AFHA, dated August 25, 1995, do not make that leap or adequately protect salmon over the long-term. Like AFHA, the memo divides steps into those to be taken in the revision of TLMP, and those to be taken under current direction. Given Senator Stevens' effort to block the revision of TLMP, this division becomes arbitrary and fails to do more now to protect the valuable fish habitat in the project area. In the supplemental DEIS, the Forest Service should disclose and analyze the extra habitat protection measures recommended in AFHA, and apply those measures in this project.

Moreover, the memo's half-hearted message -- "These items assigned to the Forest Supervisors and the Director of WFEW will only be accomplished to the extent they can be as part of other on-going work, without substantially disrupting or delaying project planning or implementation" -- leaves us concerned that the Forest Service isn't serious about taking necessary steps to protect the Tongass rich fish habitat. "One watershed analysis per year as funding and staff permit" is hardly implementing the recommendations of AFHA or taking the quantum leap necessary to protect our world class salmon resource.

In the Upper Carroll DEIS, the Forest Service did not complete a true watershed analysis as recommended by AFHA. The AFHA recommended immediately implementing watershed analysis using the concepts presented in A Federal Agency Guide for Pilot Watershed Analysis (1994) before implementing logging or roading activities that could significantly influence fish habitat. See AFHA, Appendix C, at 39. Please provide a

reasoned comparison of the procedures used in the watershed analyses for this DEIS and those recommended by AFHA in the supplemental DEIS, with a reasoned explanation for the choice made. This issue is particularly troublesome with this proposed project because of the level of development which has already occurred in several watersheds, the increased disturbance proposed in this project, and the fisheries values of streams in the project area, particularly Carroll Creek.

The Forest Service's reluctance to immediately apply the AFHA recommendations to ongoing timber sale projects reminds us of Yogi Berra's comment that, "this seems like deja vu all over again." We remember in 1989 when the Forest Service chose not to follow the expert recommendations from the National Marine Fisheries Service when selecting between alternative riparian management strategies for the long-term protection of salmon and resident fish habitat. The Alaska Federal District Court subsequently found that decision to be arbitrary and capricious and enjoined logging within 100 feet of all Class I and II streams in the project area. The Forest Service should do the right thing now and implement the recommendations in the AFHA report without delay in this, and other ongoing timber sale projects.

The Forest Service should disclose the monitoring information it has collected to show that its BMPs are implemented and effective in eliminating damage to water quality and fish spawning and rearing habitat. SEACC has submitted several reports to the Forest Service since 1991, demonstrating that the agency has not adequately monitored implementation of BMPs and their impacts on fish and water quality in the Ketchikan Area. Those reports are incorporated into this planning record by this reference. We could not find any disclosure or discussion of specific monitoring information in the DEIS. It is the Forest Service's responsibility to demonstrate in the in advance that proposed logging and road construction will comply with State water quality standards and not harm beneficial uses of the water. NEPA prohibits the use of conclusory statements unsupported by data, authorities, or explanatory information when deciding to proceed with a proposed action. The DEIS fails to present credible information demonstrating that BMPs are implemented, and effective in protecting riparian resources.

F. The Forest service's Strategy For Maintaining Old-Growth Dependent Wildlife Is Scientifically Indefensible And Illegal.

The Forest Service must do more than merely maintain viable populations of wildlife. ANILCA requires the agency to maintain healthy and huntable populations of subsistence species. See 16 U.S.C. Sec. 3112(1). Accordingly, the alternatives considered in the DEIS must provide for healthy, harvestable populations of subsistence fish and wildlife resources.

The DEIS states that all of the alternatives in the DEIS would result in impacts consistent with the implementation of the TLMP (1979a as amended), Alternative P of the TLMP Draft Revision (1991a), the recommendations of the Interagency Viable Wildlife Population Committee (VPOP)(Suring et al. 1993) and the draft environmental assessment on interim habitat guidelines for maintaining well-distributed viable

populations within the Tongass National Forest (October 1994) (Draft EA 1994). This is insufficient to ensure that the Forest Service will be able to maintain healthy and huntable populations of wildlife widely distributed across the Forest. **All the experts who have reviewed Tongass wildlife conservation measures have urged the Forest Service to do more now.**

Why didn't the DEIS identify or address the recommendations of the Congressionally mandated peer review of the VPOPS wildlife strategy conducted by the Pacific Northwest Research Station (See Kiester and Eckhardt 1994) (Herein referred to as PNW Peer Review) or disclose and analyze the recommendations made in the reconciliation memo from the VPOP committee in response to the PNW Peer Review. Those actions are set forth in Appendix II to the Interagency Committee's Response to the Peer Review of: A Proposed Strategy for Maintaining Well-distributed, Viable Populations of Wildlife Associated with Old-growth Forests in Southeast Alaska (May, 1994).

In designing alternatives for consideration, all of the immediate interim actions recommended by the VPOP Committee, in response to the PNW Peer Review, must be considered for maintaining options for conserving healthy wildlife populations pending completion of the TLMP Revision. Among the immediate actions recommended by the VPOP Committee were expanding proposed "large" and "medium" Habitat Conservation Areas (HCA) and connecting corridors, prohibiting logging and road building in volume class 6 and 7 old-growth forest occurring below 800 feet in elevation, and connecting HCAs with habitat corridors that are off-limits to logging. The VPOP Committee also recommended establishing "small" HCAs in each large watershed on a project basis. It is crucial to note that the Draft EA 1994, which the Forest Service believes the alternatives to be consistent with, did not disclose or analyze the PNW Peer Review or the immediate actions recommended for habitat protection by the VPOP Committee in response to the PNW Peer Review.

The VPOP Committee, the PNW Peer Review, and the Draft EA, conclude that current practices are insufficient to maintain viable populations of wildlife. Arbitrarily implementing selected pieces of the VPOP Committee's strategy is simply not enough; all of the recommended actions must be disclosed and analyzed in the DEIS to ensure that all options remain open for developing a comprehensive viable wildlife population management strategy in the TLMP Revision.

The DEIS states (at p. 3-116) that Public law 104-19 prohibits the Forest Service from implementing Habitat Conservation Areas. The Senate Recision Bill was a spending bill in effect only until the end of FY 95, September 30, 1995. Since the restrictions on developing HCAs are no longer in effect, the Forest Service can now legally implement an HCA strategy.

The potential of a new wildlife plan in the upcoming revision to TLMP does not obviate the Forest Service from its responsibility to explain how the Upper Carroll project will be consistent with a comprehensive wildlife conservation plan that provides for healthy wildlife populations across the Forest. We note that the requirement in NFMA planning

regulations to provide for wildlife viability is directly applicable to activities, such as this proposed project, which implement a Forest Plan; this "minimum management requirement ... guide[s] the development, analysis, approval, implementation, monitoring and evaluation of forest plans." See 36 CFR 219.27 (emphasis added).

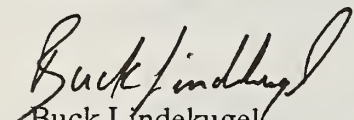
G. The Proposed ANILCA Findings Are Arbitrary And Capricious.

The standard used by the Forest Service is unlawful. A finding that proposed activities "may" restrict subsistence is what the law requires. The heightened standard used by the Forest Service, "a significant possibility of a significant restriction," is contrary to court rulings and Congressional intent.

Although the heightened standard probably makes no meaningful difference with respect to deer, it may effect findings regarding other fish and wildlife species, such as salmon. The AFHA report found that "procedures similar to those currently used to protect fish habitat on the Tongass ... failed to prevent declines in fish habitat capability, and resulted in increasing and now significant risk to the viability of salmon and steelhead stocks (in the Pacific Northwest)...." See AFHA at p. 7.

Although the DEIS identifies salmon and trout as the "principal fish resources in the affected area" (at p. 3-231), the following analysis of direct, indirect and cumulative impacts ignores the effects to subsistence use of salmon and trout. Because the Forest Service's failure to conduct an effects analysis for subsistence use of salmon and trout, or disclose and analyze the findings of the AFHA report, the DEIS lacks any basis for concluding that "The potential foreseeable effects from the action alternatives in the Upper Carroll Project Area do not present a significant possibility of a significant restriction of subsistence uses of ... salmon...." See DEIS at p. 3-256. A supplemental DEIS is therefore necessary to meet the requirements of ANILCA and NEPA.

Best Regards,



Buck Lindekugel

Conservation Director

Forest Supervisor
Ketchikan Area
Tongass National Forest
Attn: Upper Carroll EIS
Federal Bld.
Ketchikan, AK 99901

Please accept these comments regarding the Upper Carroll
Project area:

I. Specific To subsistence:

Congress has strictly defined subsistence uses and the mechanisms of protection. Both Title VIII of ANILCA and the Tongass Timber Reform Act require protection of subsistence resources and reaffirm a commitment to subsistence.

Section 810(a)(3)(B) of ANILCA requires that it conduct those activities on the "minimal amount of public lands necessary to accomplish the purposes of such use." Alternative 5 has the greatest proportion of harvest in the high volume classes which are critical for the Sitka black tailed deer, a subsistence species. That is not abiding by section 810 which also requires under the law the "least adverse impact" to subsistence. At the hearing, several people from Saxman spoke about their use of Carroll Inlet for subsistence. How will the agency deal with those comments? At the subsistence hearing, there was no mention of any alternative which had the least adverse impact on subsistence. The legal obligation to cause "least adverse impact" on rural residents on public lands was not followed. Is roading the watershed and selecting an alternative which harvests the most volume class 6 and 7 the least adverse impact?

Other comments:

P116: In response to the recissions bill (Public Law 104-19) by Ted Stevens, you state: the FS will not implement the HCAs as recommended by the VPOP committee. This is contrary to your own Regional Forester; the law was void as of September 30 1995 .

However, the January 1995 finding by USFWS on the wolf petition does bind you as the document reads as if the wolf should be listed, but listing was not warranted in large part because of the agreement for your implementation of a strong conservation strategy.

Page 135: In compliance with the 1995 Recission bill, the 1996 Appropriations bill, the interim nest protection zones for active goshawk nests will not exceed 300 acres. The 1995 Recissions bill does not extend into 1996 and the 1996 Appropriations bill was vetoed. This species was petitioned to list and was not because an interim conservation strategy was adopted. Where is that strategy in this document, and how was it designed? What is the status of the HCA's which were designed for that area?

Page 141: To suggest this project could affect Olive sided Flycatcher habitat for the better. This species, like many other neotropical migrants, is in decline. It uses open areas, however clearcutting will not improve its' habitat. To the contrary, habitat fragmentation is contributing to the decline of many neotropical migratory birds, both on their breeding grounds and their wintering grounds. Human induced openings of the size you are recommending in no way replicate the small openings created when single trees fall from wind events. Large scale clearcutting in fact may effect aerial sallying insectivores, such as the olive sided flycatcher, more than other neotropical migrants. Global warming, exacerbated by loss of forests, is predicted to have a greater impact on aerial sallying insectivores. That is in the literaturp141 Road density: Road density in this project is very high in terms of volume of timber harvested. Are you building this amount of road for the intertie or for logging? The intertie does not require a road. Additionally roads cause problems for many other resources, particularly fish and wildlife. My recommendations are no new roading in this project area, particularly an areas as significant as the Carroll river drainage.

With the amount of roading you propose, you suggest mitigation by access management for the wolf. The agency has failed miserably on controlling road access on Prince of Wales. Why would Carroll be any different. You do not have the personnel nor commitment to close roads and monitor their closure. It is better not to build them. No new roading is essential if you look at wolf mortality on Prince of Wales which can be correlated to road density and human access. The Carroll River drainage is a major travel corridor for the Alexander Archipelago wolf, which was petitioned for listing. It was not listed because this agency said they would provide a conservation strategy for this species. Where is that strategy in this project analysis? Buffer strips on streams, remnant patches of old growth, and unlimited roads are not a conservation strategy for maintaining the wolf on Revilla Island. In light of the incredible impacts to wolves and goshawks on Prince of Wales, this makes Revilla all the more significant. It should be treated as such. Though the Wilderness provides habitat for this species, the entire island is important habitat , as has been documented by ADF&G (Chris Smith) and (Lavern Beir, ADF&G per conv.).

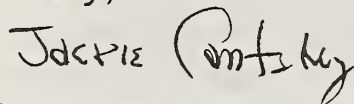
Goat winter range: There is nothing mentioned of this species. This project area is within important goat winter range for the goat. Extensive surveys and analysis must be implemented, before anything is offered in this project area.

Chapter 3, p113: Under the NFMA, the agency must maintain viable populations of wildlife, well distributed. Connectivity of those areas for dispersal becomes very important. You are expecting to maintain viable populations from beach fringe, estuaries, streams and riparian management. That is not an adequate strategy in light of the petition for listing of two species, both which use the project area. These species were not listed for political reasons, it was not because listing was not justified.

Water and air quality issues must be addressed in detail. The effect of the agencies activities on both local air and water quality should be analyzed. The amount of pollutants put out by KPC is significant. It is the FS responsibility to address the effects on air and water quality when selecting an alternative.

Thank you for the opportunity to comment.

Sincerely,



Jackie Canterbury

PO 3280

Wth. AK 99901

Forest Supervisor
Tongass National Forest
Federal Building
Attn: UPPER CARROLL EIS
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3/6/96

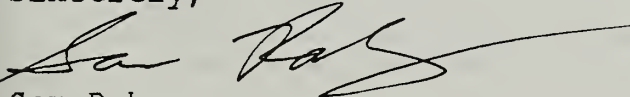
I have reviewed the proposed timber sale and road construction in the Upper Carroll DEIS and attended the public meetings in Ketchikan on October 4, 1994 and February 22, 1996. I have several concerns about the proposed activity within the Bluff Lake Watershed (VCU 737).

The Upper Carroll Timber Sale DEIS (Volume II, appendix F) Watershed Report contains information that must be clarified, particularly the last sentence of the discussion of analysis on page F-8. This sentence states that, "with regard to the hatchery", Bluff Lake will "tend to buffer sediment pulses". This is completely erroneous. This watershed, **through a pipeline out of Bluff Lake**, provides the Neets Bay Hatchery water supply as well as the domestic water supply for the hatchery residents. The Bluff Lake watershed was extensively harvested approximately 40 years ago, prior to modern protective regulations. The entire drainage, particularly above Bluff Lake, is very unstable and active. As a result, the sediment load in the hatchery water is high and at times injurious to the rearing fish and incubating eggs. The hatchery has experienced major fish losses due to sedimentation in the past. I am convinced that activity in the Bluff Lake drainage would increase sediment loads in the hatchery water supply which would be detrimental, and potentially devastating, to the hatchery production, which is now in excess of 100 million salmon fry per year.

Of the action alternatives, #2 poses the greatest threat to the Hatchery due to the amount of roading and harvest within VCU 737. The preferred alternative, #5, would not be harmful to the hatchery if unit 92 and the road associated with it were eliminated from the alternative. Alternatives #3 and #4 pose no harm to the Hatchery.

In conclusion, I remain strongly opposed to any additional activity within VCU 737 and request that unit 92 and the road to it be eliminated from the preferred alternative.

Sincerely,



Sam Rabung
Neets Bay Hatchery Manager
P.O. Box F.I.C.
Neets Bay, AK 99950

March 1, 1996

Forest Supervisor
Ketchikan Area
Tongass National Forest
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Comments on DEIS

I am commenting on your recent release of the Upper Carroll DEIS.

I would like to thank you for this chance to comment.

The EIS has some small items that need to still be looked at before a decision should be made regarding whether to harvest or not.

1) The chum run harvested by the native people in this area are important to the lifestyles and traditional use of this important resource. Under ANILCA the Federal Government is charged with the responsibility to protect these resources at levels needed to sustain subsistence use. I believe that the harvest activity would diminish the overall numbers due to degeneration of habitat in the Carroll and Neets Bay areas. This diminishment of resources, added to the potential overharvest by State of Alaska fisheries could impact the subsistence rights of peoples using the resource in the area. Many cannot travel three days to another fishing site, one owned by another clan. The Federal Government needs to take a more active role to protect the rights of ANILCA dependent peoples. This can be done thru protections and safeguards in the EIS. Not just reporting on impacts, but showing the conditions in which subsistence would be protected.

2) I do not see any recommendations for fisheries enhancement habitat. It would be good to open habitat above the existing barrier if overall the Forest Service wishes to impact existing habitat. This replacement would help all fish stocks if a ladder were to be installed as part of the projects. It would also serve to replace potential loss of wetlands existing habitat used by salmon impacted by logging activities upstream.

3) This winter has been a very cold winter. I have seen streams frozen solid. When this happens the smolt and eggs laid die. Please report the potential impacts along with the freeze as cumulative effects. Your reports show best situations. If you harvest in two to three years, this is when a poor return may be coming. How would this affect the stocks?

4) The King Salmon that actually do return to the Upper Carroll system do not go upstream far. But they are now a native stock in that they are not managed by any hatchery, Federal - State - or Local. The island run of King Salmon make this a unique stock and thus should be treated carefully. This would also make them one of two Alaska Island King Salmon runs, a most special species or stock. I would think that this would qualify them for threatened species at the least. Is there proper safeguards to protect this run?

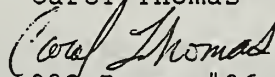
5) I see nothing to indicate use by natives or others for traditional items such as cedar bark gathering, plants for personal use, etc. that would fall under subsistence. This area is a native use area for special times during the year. The subsistence section shows only lower use area, which tends to have me think you are using information that is either flawed or out of date. You should make a really effort to seek the truth rather than just saying 'the state says low use'. Talk to the people like you did during the investigation for the Intertie.

6) Your writing implies that the FS would open up the Upper Carroll Inlet lower area to vehicle traffic thru a connection with the Ketchikan Road System. I am against that if it infringes on the traditional subsistence use areas or users. Not everyone subsists by vehicle.

7) I had a difficult time reading your watershed report. Is there anyway you could make it more easy for the average person to understand?

I hope you listen to the subsistence testimony and the comments. I think that your track record shows that you have not done well, doing what you want to do anyway. This usually has been bringing everyone to court in a no win situation for everyone. Please try to do better so that we do not waste our money in courts. Thank you.

Carol Thomas



832 Buren #36

Ketchikan Alaska 99901



United States
Department of
Agriculture

Forest
Service

Region 10

Tongass National Forest
Ketchikan Area
Federal Building
Ketchikan, AK 99901

FOREST SERVICE **Reply to: 1950**
RECEIVED Date: January 9, 1996

JAN 24 1996

Dear Reader:

Enclosed is the Draft Environmental Impact Statement (EIS) for the Upper Carroll Project Area.

If you received a complete set of documents, the following items should be found in the package:

1. Executive Summary
2. Draft Environmental Impact Statement (Volume I)
3. Draft EIS Appendices A - K (Volume II)
4. Large scale color Project Area Map of Existing Condition

Note that 11" x 17" maps of each alternative are included in Chapter 2 of of the DEIS (Volume I).

If you elected to receive the summary only, you will find 11" x 17" alternative maps bound into the back of the document as well as a large-scale Project Area Map (Existing Condition Map) included with the summary.

You are encouraged to review and comment on the Draft EIS. Written comments must be received by **March 9, 1996**. Comments should be addressed to:

Forest Supervisor
Ketchikan Area
Tongass National Forest
Attn: Upper Carroll EIS
Federal Building
Ketchikan, AK 99901

Subsistence hearings will be held in Saxman and Ketchikan. Each subsistence hearing will be preceded by an open house to answer questions you may have. The schedule of hearings and open houses is as follows:

Jan 20, 1996

Preferred alternative 4 is fine, but 2 and 5 have the advantages of connecting road in Neets Bay, Shing Bay. Very important to have connected road system usually.

H. E. Hays Ktn Dist Ranger 1960-64

Caring for the Land and Serving People



Hays
16630 Agate Pt. Rd. NE
Bainbridge Island, WA 98110

*KETCHIKAN
GATEWAY
BOROUGH*

OFFICE OF THE MAYOR
Jim Carlton
344 Front Street
Ketchikan, AK 99901-6494
Phone 228-6605 Fax 247-8439

February 22, 1996

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

UPPER CARROLL INLET EIS

The Ketchikan Borough Assembly endorses Alternative 2 for making timber available to local timber purchasers from the Upper Carroll Project Area. It will provide the largest timber volume to local timber purchasers. It will provide a maximum number of jobs and a healthier economy for Ketchikan. The availability of timber to keep our local jobs and mills active is crucial to this community.

Further, the Assembly encourages the U.S. Forest Service to complete the road segment from Shelter Cove to Upper Carroll Inlet as a part of this timber sale. For years, people in this community have longed for road access to get off this island. Opening the road will also give us additional commercial and recreational opportunities. People are anxious to see the road system at Shelter Cove connected to the Upper Carroll road system.

Thank you for the opportunity to comment on the Draft EIS.

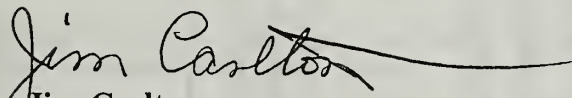

Jim Carlton
Mayor

Table 8

KETCHIKAN GATEWAY BOROUGH
RATIO OF NET GENERAL OBLIGATION BONDED DEBT
TO ASSESSED VALUE AND NET GENERAL OBLIGATION DEBT PER CAPITA
Last Ten Fiscal Years

Fiscal Year	Population (1)	Assessed Value (2)	Gross Bonded Debt (3)	Less Debt Service Fund (4)	Debt Payable from Enterprise Revenues (5)	Net Bonded Debt	Ratio of Net Bonded Debt to Assessed Value	Net Bonded Debt per Capita
1986	14,314	\$ 660,988,333	\$ 20,094,000	0	\$ 1,785,000	\$ 18,309,000	2.77%	\$ 1,279
1987	14,314	652,773,750	18,404,000	0	1,650,000	16,754,000	2.57%	1,170
1988	12,829	644,691,600	16,559,000	0	1,500,000	15,059,000	2.34%	1,174
1989	12,829	672,170,100	14,549,000	0	1,340,000	13,209,000	1.97%	1,030
1990	12,829	710,801,700	24,364,000	0	1,175,000	23,189,000	3.26%	1,808
1991	13,818	735,506,000	20,794,000	0	1,000,000	19,794,000	2.69%	1,432
1992	13,828	773,585,250	16,194,000	0	815,000	15,379,000	1.99%	1,112
1993	13,828	792,034,850	12,384,000	0	620,000	11,764,000	1.49%	851
1994	14,923	819,894,650	8,819,000	0	480,000	8,339,000	1.02%	559
1995	15,028	915,900,800	6,530,000	0	330,000	6,200,000	0.68%	413

(1) U.S. Government Census

(2) From Table 4.

(3) Amounts do not include revenue bonds.

(4) Amount available for repayment of general obligation bonds.

(5) These amounts include the general obligation bonds that are being repaid from the Airport Enterprise Fund.

Consideration of proposed comments on the Forest Service draft EIS for the Upper Carroll Timber Sale related to the road connection between upper Carroll Inlet and Shrimp Bay

M/S Conley/Coyne to endorse Alternative 2 in the Upper Carroll Inlet Draft EIS and encourage the U.S. Forest Service to complete the road segment from Shelter Cove to Upper Carroll Inlet as part of this timber sale.

Assemblymember Conley said the reason he encourages the Assemblymembers to vote in favor of this is it will provide 116 jobs and a payroll of \$27.6 million dollars. He believes this community will share in the majority of this economic benefit because of its proximity to the timber sale. He feels the community needs to support timber jobs. The industry is in crisis. The Seley saw mill is down with no outlook for timber. Half the timber offered in 1996 has been injected. The Assembly needs to start sending a clear message that not only do we rely on the revenue from the timber sales, we also depend on it. We, as a government, need to speak for those timber jobs. By endorsing this alternative we are saying we want the maximum jobs for this community. We want the Forest Service to get back on track.

Assemblymember Mitchel said it seems like the reason this is included in here is because of the road. He is not sure it is the Assembly's place to vote on every timber sale. We have no control over this. He will probably vote "no" and not because of the merits of any particular argument. He doesn't think it is his place to vote on this.

Assemblymember Tipton said he would like to make sure we are also endorsing completion of the road segment.

Assemblymember Conley said he would like to point out that Alternative 2, on page 42, is going to provide \$142 thousand to the Ketchikan Gateway Borough. Every penny we get goes to education. And 100% of the timber receipts are used for education.

Assemblymember Coyne said he agrees that it isn't our duty to vote on the timber sale.

Assemblymember Yetka said she doesn't see the Assembly as voting on the sale so much as encouraging the Forest Service to continue with the sale. She agrees it is the life blood for this community. The Timber industry needs to be kept viable.

Assemblymember Elkins said there are a lot of good people in this community who think this sale should go forward. We have an administration in Washington DC that are trying to stop these timber sales. By endorsing this we give the local people a bigger club and more clout when they are telling their bosses in Washington DC that Ketchikan needs timber. The Assembly does need to be vocal about timber. Most of the people that live and work in Ketchikan wouldn't be here if it wasn't for the timber industry.

Assemblymember Coyne said he resents the implication that he is not vocal on supporting the timber industry.

Assemblymember Mitchel said this option includes a road. He thinks he is the only one who went out there to ride the road. He listened to the Forest Service proposal and saw how it linked up to Leask Lakes. He doesn't think he has been negligent in looking at it. He doesn't think it is his place to voice an opinion.

Mayor Carlton said he personally thinks anything that effects us whether it is local, state or international, we have a right to voice our opinion.

Assemblymember Conley said this is probably the most readable Environmental Impact Statement he has seen. It is really straightforward and easy to understand.

Upon roll call, the vote on the motion was:

YES: COYNE, ELKINS, YETKA, CHENHALL, TIPTON, CONLEY

NO: MITCHEL

ABSENT: NONE

MOTION DECLARED CARRIED.

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF FISH AND GAME DIVISION OF HABITAT AND RESTORATION

2030 SEA LEVEL DRIVE, SUITE 2
KETCHIKAN, ALASKA 99901-6061
PHONE: (907) 225-2027
FAX: (907) 225-2676

March 8, 1996

Mr. Bradley E. Powell
Forest Supervisor, Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Powell:

Re: Upper Carroll Timber Sale (AK9601-14JJ)

The Alaska Department of Fish and Game (ADF&G) appreciates the opportunity to review the Forest Service's (FS) request for comments for the Carroll River Timber Sale Draft Environmental Impact Statement (EIS), which will direct continued timber harvest on Revillagigedo Island. In this EIS the Forest Service's Ketchikan Area proposes to clearcut 70 million board feet of timber on approximately 2,200 acres from 1996 to 1999. We anticipate the need for the state's consistency review following the receipt of the fully developed information provided in the Final EIS. Our comments are as follows:

ACMP Consistency Issues

ACMP Consistency

The Alaska Forest Resources and Practices Act constitutes the ACMP standards for federal timber sales. The most pertinent standards are found in Section 41.17.060 REGULATORY AND ADMINISTRATIVE STANDARDS (b) and (c):

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

(c)(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";

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

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

Additionally, referring to state and federal land, Section 41.17.118 (a) (2) of the Alaska Forest Resources and Practices Act states:

(A) "harvest of timber may not be undertaken within 100 feet immediately adjacent to an anadromous or high value resident fish water body;"

(B) "between 100 and 300 feet from the water body, timber harvest may occur but must be consistent with maintenance of important fish and wildlife habitat."

The above standards are in addition to the **minimum** 100-foot riparian buffer for federal lands (AS 41.17.119). To help ensure the ACMP standards are met in this sale area, we request that maps be produced from the TLMP Revision wildlife habitat capability models showing areas rated as HSI of 0.5 or greater for marten, land otter, black bear, wolf, Canada geese, and bald eagle. For deer, habitats in VCU 746 with an HSI of 0.32 or greater, and habitats in VCUs 744 and 737 with an HSI of 0.25 or greater should be considered for deferral. The lower HSI values for deer are appropriate because, in VCU 746, the intermediate snow rating and presence of wolves limit the highest deer HSI value to 0.64. In VCUs 744 and 737, the deep snow rating and wolves limit the highest HSI values to 0.49. Therefore, comparable values to the HSI 0.5 used for other species are 0.32 and 0.25, respectively.

Given the regional nature of the wildlife models and their lack of site-specific environmental factors (e.g. microclimates), site-specific habitat and wildlife information should continue to be collected in the field to help identify important habitat areas to be managed for the production of wildlife. Of particular concern to us is the necessity for the field identification of mountain goat winter range. The location of this important habitat was not identified or discussed in the draft EIS. The FEIS needs to demonstrate proper consideration or avoidance of this habitat type.

The habitat maps produced from the regional models should be used as a means of stratifying where the field reviews are conducted to refine the delineation of the most important habitats. Evaluation of these stands include field review and consultation with ADF&G regarding their habitat values. The ADF&G Area Habitat Biologist is available to assist the FS with the field reviews. Areas where timber harvest is proposed within 300 feet of anadromous fish streams need to be clearly identified in the FEIS so ADF&G can review each specific location against Section 41.17.118 (a)(2)(B).

TLMP Retention/ACMP Standards

Under the current Tongass Land and Resources Management Plan (TLMP), the wildlife habitat retention requirements have been the FS's primary strategy for assuring protection of wildlife habitat is balanced with the production of timber. Therefore, the department will carefully consider any proposed harvest of previous designated wildlife habitat retention that we previously found consistent with the ACMP. Unless a new Forest Plan, which adequately

protects important wildlife habitats, is in effect prior to the Record of Decision (ROD) for this project, we may determine that deferral of logging in the previous retention is still necessary to ensure the ACMP standards are met. TLMP's extended rotation requirements may also need to be met to ensure compliance with Section 41.17.060 (c)(1). Extended rotation allows the harvest of timber over a long enough rotation that wildlife yields are produced in the latter portion of the rotation.

The department, as manager of fish and wildlife populations on the Tongass National Forest, would like to request that the FS provide retention of old growth habitat sufficient to ensure the maintenance of both viable and huntable wildlife populations. We continue to emphasize the importance of the Carroll river estuary to wildlife. As in the past (see correspondence of 7/19/94), we continue to recommend the deferral of logging near this estuary and in the adjacent old growth extending two miles upstream. Mountain goat winter range, the location of which is currently unknown but expected to occur within portions of the project area, also needs to be retained.

Title 16

The State of Alaska maintains that ADF&G has Title 16 authority over all activities in cataloged anadromous water bodies in the state. The FS is the only federal agency which contests this authority. Until this issue is resolved in court, the FS has agreed to provide the level of information required for department review of activities in anadromous water bodies before any activity commences [Central Princes of Wales (CPOW) Letter of Agreement]. This is the procedure we will follow for the Carroll River Sale. The following standards from the ACMP General Concurrence 7 comprise the **general** standards by which we review stream crossings for Title 16 permits, although more specialized measures are required on a site-specific basis:

1. The structure shall be designed, installed, and maintained to accommodate the efficient passage and movement of fish, both upstream and downstream, at all flows up to and including a mean annual flood design discharge with a two-day duration.
2. Alteration of stream banks shall be minimized and restricted to that necessary for the stream crossing. Disturbed streambanks shall be immediately stabilized to prevent erosion and sedimentation of the stream.
3. Authorized activities shall avoid sensitive fish life stages. (Note: ADF&G may restrict or prohibit activities during certain sensitive time periods as necessary.)
4. The installation, replacement or modification shall be conducted in a manner that maintains fish and wildlife and their habitats.
5. If the structure crosses a fresh water body, it shall not be constructed of any wood treated with a preservative containing creosote or pentachlorophenol.

Because of the sensitivity of salmon streams and high-value resident fish streams and the need to maintain fish productivity, the project must be designed to protect salmon spawning areas. Towards this objective, we will require that bridges or open-bottomed structures rather than culverts be used for road crossings over salmon spawning habitat.

Additionally, in order for the state to finalize its ACMP consistency determination following the release of the FEIS/ROD, detailed information about all activities in anadromous water bodies will need to be provided.

Fisheries Concerns

This timber sale raises concerns regarding possible impacts to the salmon stocks in the Carroll River, cataloged stream #101--45-10780, located at the head of Carroll Inlet. All five species of salmon occur in this anadromous stream. ADF&G escapement information has historically been collected through aerial surveys timed to coincide with the pink and chum salmon runs. We also have limited coho salmon escapement surveys for this system, which have been accomplished primarily by walking the river. The main focus of these escapement surveys have been to use the stream primarily as an index for pink salmon in the central portion of District 1 and, secondarily, as a chum index stream to determine the magnitude of the chum returns in any given season.

The Carroll River is a medium-sized system with peak pink index escapements in the vicinity of 100,000 to 150,000. Higher escapements, though, have been observed in this system; for example 173,000 in 1986, 211,000 in 1989, and 185,000 in 1995. In reviewing the last ten seasons (1986 to 1995), the average index escapement to this system has been roughly 120,000 pinks and 12,000 chums. The timing of the coho surveys are weather dependent and may not reflect the actual magnitude of the run size. Excluding two seasons (70 in 1989 and 1 in 19990), the average observed annual coho salmon escapement has been roughly 300 fish since 1986. During some seasons, aerial surveys may be terminated after adequate escapements have been attained. This allows the ADF&G biologists to focus efforts and time on other streams in a different area. Also, weather may preclude obtaining a peak escapement during the optimum timing window, and the counts may not reflect the highest peak count which actually occurred in any given year. In addition, the total production of the stream is higher than the observed peak count. Though considered a medium size system, the Carroll River is an important contributor to commercial fisheries for middle run systems in District 1, and also to the Annette Island Fisheries. This is important fisheries habitat needs a high level of protection from potentially detrimental impacts. The information in the DEIS does not adequately demonstrate that this will occur.

The fisheries section in Vol. I could be improved. The statement near the top of page 3-56, "Subsequent field reconnaissance during unit layout may identify additional streams" suggests that insufficient field verification has occurred, and unit layout needs more work. The level of field-based information contained in the DEIS is unclear. Fisheries data on unit cards indicates that inadequate field verification has occurred. "SPL" identified Class I, II, and III streams in many units on January 2 and 3, 1995. This appeared to be a desk exercise, judging from the dates and the nature of entries on the unit cards. "NRB" (a soil scientist by profession, who also

signed most of the soils, lands, and geological input) appears to have added mitigation measures from a book, in August and September 1995. This approach lacks the level of detail necessary in determining appropriate mitigation measures. Also, unit data and maps should be published on "facing" pages in the FEIS to make reviews less cumbersome.

Class III streams are mentioned on unit cards, but in many cases no protective measures are recommended. A USFS-prepared summary of the Anadromous Fish Habitat Assessment Report (Pacific Northwest Research Station, January 1995) recommends "increased protection of headwater areas, steep slopes, high hazard soils, Class III and smaller streams." This study found inadequate protection of Class III streams on the Tongass. Based on similar practices in place for 20 years in the Pacific Northwest, a decline in habitat and consequent risk to the viability of fish stocks is predicted. The FEIS and ROD needs to consider increased measures of protection. Variable width slope break buffers, now prescribed on some Class III streams, may be adequate in some cases, but this alone may be insufficient. More detailed recommendations regarding this concern are contained in our section entitled "Oversteepened Slopes and Class III Streams."

The habitat capability model for pink salmon appears to be flawed; it indicates no future change in habitat capability for pink salmon, because they "are not dependent on instream pools created by LWD..." (Vol. 1, pg. 3-72). This model is too narrow because it does not take into account potential problems on the spawning grounds which can occur as a consequence of timber harvest; e.g. siltation, landslides, dewatering resulting from abrupt changes in flow patterns, and eggs washing out during high flows.

The level of protection on Class II streams is unclear in many places. Some units (e.g. 19, 20, and 25) recommend a variable 100 ft. buffer, rather than the anticipated minimum 100' buffer. It is also unclear as to why Table 3-20 is included in this EIS, as none of the data are linked to the document being reviewed.

Alternative 5 was selected in the DEIS as the preferred alternative because it strikes a balance between timber sale economics and other resource values." However, the potential impact of Alternative 5 to fisheries habitat is, in several aspects, at least as severe as in Alternative 2, the alternative that maximizes timber volume. Perhaps the reason for this is that Alternative 2 schedules more timber harvest in the Neets Creek system, which unlike the Carroll River, does not have significant runs of wild anadromous salmon. The FS predicts no substantive effects from timber harvest to water resources supplying the Neets Bay Hatchery (Vol. 1, pg. 3-218). For this reason (and to reduce impacts to important wildlife habitats) the FS should emphasize timber harvest in the Neets Bay watershed rather than the Carroll River. Alternative 5:

- matches the number of acres harvested in riparian areas in Alternative 2 (Table 3-12)
- has 146 road crossings of riparian areas; next highest is 57 in Alternative 2 (Table 3-13)
- has the highest percent of soil disturbance compared to acres harvested (Table 3-7)
- has the most harvest unit acres with high potential for sediment delivery to Class I streams in the Carroll River watershed (Table Sum-2)

- harvests 1.7 times as many acres in corridors connecting old growth blocks as Alternative 2 (Table Sum-2)
- has the same number of roads crossing Class I or Class II streams as Alternative 2 (Table Sum-2)
- matches the acres harvest on MM14 soils in Alternative 2....a footnote tells us these are not *really* MM14 soils, but the data was not corrected in the table (Table 3-8)

Restoration of Degraded Stream Crossings within the Project Area

A common problem in previously logged areas is the condition of the drainage structures where roads cross streams. Many of these are in a degraded condition or do not meet the state standards of providing for fish passage and the protection of aquatic habitats. Prior to the release of the Carroll River FEIS all drainage structures within the project area should be thoroughly evaluated in the field to inventory problems related to fish habitat, hydrology, and erosion. The FEIS should include a comprehensive and detailed technical report of the results of this inventory and the schedule and design specifications of the proposed restoration or mitigative measures to bring each structure up to state standards. All restoration activities below the ordinary high water line of cataloged anadromous waterbodies need to be reviewed by the Ketchikan Area Habitat Biologist's to ensure state standards are met.

Unit Cards

Detailed unit cards and road cards are an essential component of the FEIS. It would be helpful to know which unit cards have been ground-truthed, and which have not. The maps for both unit and road cards must accurately depict the relationship of the units and roads to watercourses (by stream class), riparian buffers, hazardous soils (by MMI ratings) and topography. A narrative description is also needed to describe the potential degradation of downstream water quality and mitigative measures which will be implemented at each individual stream crossing and high hazard soil area.

Many unit narratives have not provided the level of information necessary to complete ACMP reviews. The unit descriptions should describe the riparian and wildlife habitat values in more detail, including how the fish and wildlife values of the unit were evaluated and whether the unit contains high values for a particular species for a particular season. This type of information is available only as a result of field surveys. Also, detailed comments by soil specialists, hydrologists, and biologists provided in specialists reports is also pertinent to conducting ACMP reviews of units.

Inclusion of the detailed information needed for ADF&G to review proposed stream crossings against the ACMP general Concurrence 7 stipulations is needed. Each unit card should specify the stream channel type and horizontal width of proposed riparian buffers for each stream segment and specify the field review used to determine the distribution of anadromous and resident fish species.

Log Transfer Facilities

Between now and the time of the FEIS/ROD, it would be possible to make improvements in the locations and methods of transfer of logs from the project area. Concerns have been expressed that the proposed Carroll Inlet log transfer facility (LTF) may be the primary outlet for timber to be taken out of the entire project area. This action has been questioned based upon the importance of the Carroll River and the fact that the LTF would concentrate significant impacts near the mouth of this productive river.

The defunct log transfer facility near the Carroll River estuary was established long before significant environmental considerations were incorporated into timber sales, the ACMP, and the development of the Alaska Timber Task Force's LTF Siting, Construction, and Operation Guidelines. Minimum water-depth standards, for example, appear to not be met in this location. As this LTF may violate ACMP standards, the continued use of this site may not be reauthorized under the ACMP. This is an area high in shellfish, rearing salmonid, and waterfowl habitat values. Dungeness crab concentrations and winter concentration of trumpeter swans (a designated sensitive species), in addition to other factors, make this site undesirable as a log dump and log rafting, towing, or storage area. Carroll Inlet has historically been an important commercial shellfish harvest area, primarily for shrimp and Dungeness crab. The typical method of harvest is through the use of stationary pot gear. In recent years we have seen a dramatic increase in interest in the shrimp pot fishery in area near Ketchikan, including the Carroll Inlet area. Though shrimp pots are typically fished in deeper water throughout the length of the inlet, a conflict exists where log rafts are towed through areas of stationary fishing gear. Bark deposition, even in towing, rafting, and storage areas, is also a concern. Even in deeper waters this concern may not be eliminated if productive benthic habitats supporting commercial shrimping become detrimentally affected. Additionally, we have concerns that large scale inwater storage or sorting may impact milling adult salmon or out-migrating smolts. Many log sorting, storage, and transfer activities can be confined to the uplands to decrease inwater bark loss, and some activities can be located to avoid important marine habitats. If accumulations of bark still persist near the mouth of the Carroll River estuary, the potential for site rehabilitation and restoration should be analyzed in the FEIS. Alternative sites outside the Carroll River estuary should also be evaluated in the FEIS. The DEIS has not adequately or clearly described the environmental effects of log transfer and storage sites. In addition to the physical presence of bark, there can also be changes in water chemistry, such as the release of hydrogen sulfide and reductions in dissolved oxygen. Consequently, there is a need for a more comprehensive and professional analysis of the past and potential impacts at the Carroll River estuary site, and other potential LTFs, on the local biotic resources, along with recommendations for closure, rehabilitation, mitigation, and a long-term monitoring program.

It should also be noted that the proposed new road construction which accesses the Shrimp Bay LTF is outside of the project area currently being analyzed. To reduce impacts to Carroll River/Inlet fisheries, though, the Commercial Fisheries Management and Development Division have recommended a second LTF be located in Neets Bay to accommodate much of the volume harvested. The advantages and disadvantages of this should be analyzed further in the FEIS,

along with other options such as helicopter yarding to off-shore barges, or utilizing shore-based barges.

Oversteepened Slopes and Class III Streams

An increasingly important issue on the Tongass as second and third entries are made into watersheds concerns methods of harvest and road building on high hazard soils or over-steepened slopes. Currently, "... unscheduled CFL includes the retained areas [and] CFL in LUD's III and IV on slopes greater than 75 percent." (FS Admin. Doc. #139, TLMP Evaluation Report, 11/84). Thus, timber on slopes of over 75 percent gradient should not be included in the timber base of the sale area.

Past slides and slumps in the sale area which resulted from previous logging or road construction activities should also be inventoried to determine the causes. The FEIS needs to analyze this with the objective of preventing the recurrence of similar impacts. If this is not adequately evaluated and convincingly mitigated on a site-specific basis within each unit, such areas may be determined inconsistent with the ACMP [Section 41.17.060 (b)(5)].

Additionally, similar types of concerns exist for the protection of Class III streams on steep gradients. The recent Anadromous Fish Habitat Assessment (AFHA) report (Pacific Northwest Research Station, January 1995) recommends that the TLMP revision include "increased protection of headwater areas, steep slopes, high hazard soils, Class III and smaller streams" (from USFS summary of AFHA report). Whether or not these recommendations make it into the TLMP revision, these were conclusions reached by experts, and they should not be ignored. The protection measures presently defined in the Unit Cards should be revisited, and increased measures of protection considered.

The AFHA report raised concern for the long term health of anadromous fish watersheds. Based on a literature review, "streams in SE Alaska react to disturbance like streams in similar landscapes and conditions of the Pacific Northwest (PNW). Procedures in place in the PNW for 20 years similar to those procedures on the Tongass failed to prevent declines in habitat and continued to pose significant risk to the viability of fish stocks in the PNW. Timber harvest and road building on unstable slopes and headwater areas on coastal zones of the PNW resulted in simplified and degraded fish habitat" (from USFS summary of AFHA report). Part of the problem is sedimentation of spawning gravels: "Sediment input is affected by quantity of road miles, number of stream crossings, slope, total harvest acres and riparian harvest acres." If inadequate protection of Class III streams continues, siltation of spawning gravels may impact salmon spawning habitat, potentially causing declines in production. Both pink salmon and the coho production models should be revisited because they do not adequately consider impacts to spawning habitat as a potential risk to reductions in populations. Adult coho often ascend as far as possible into streams for spawning. up into areas that are more likely affected by siltation from the inadequate protection of Class III streams.

In general, the FS should consider more helicopter logging to minimize the impact to Class III streams. In this FEIS, helicopter logging would be especially appropriate where units are located

at the end of proposed roads (consider road building costs) and where many Class III stream crossings are within the units or are crossed for access. This is an ACMP issue pursuant to the applicable portions of 11 AAC 95.280, 285, 290, 340, 345, and 360.

Falldown and Resource Sustainability

The state's review comments on the CPOW DEIS and FEIS expressed concerns for the lack of a sustainable timber harvest within that project area, and discussed the resulting social and biological conflicts with other resources. These concerns are much the same for the upper Carroll Timber Sale project area.

The DEIS states that "**hard falldown**" due to suitability factors such as very high mass movement index (MMI) soils, low site index, and TTRA stream buffers was estimated at 42% of the tentatively suitable base" (p. 3-198). Additional timber falldown due to economic factors in the Control Lake DEIS were estimated by the FS to be another 21-52%. The economic falldown in the preferred alternative is estimated to be 40%. These factors would seem to indicate that this project area could be scheduled to receive harvest levels which may be unsustainable in the long-run. These concerns are further exacerbated given the recent FS recommendations for additional protection of karst and wildlife, which have not yet been considered in the calculation of timber falldown. Also, the current recommendations for wildlife are just for viable populations, not harvestable ones. Also pertinent to this issue is the fact that the provisions of Public Law 104-19 applicable to this issue in 1995 expired at the beginning of FY96.

The long-term sustained yields of (1) harvestable surpluses of old-growth dependent wildlife and (2) old-growth timber supply both need an expanded and much more detailed analysis in the FEIS. The Polk Inlet FEIS, for example, clarified that because of economic falldown, timber sustainability in the project area is dependent upon the assumption that timber values will need to continue to increase and/or improved logging systems will need to be developed to access currently marginal timber (Summary, p. 23) and that "the timber supply can support the projected harvest through 2050 only if economic conditions improve substantially over time" (Vol. 1, p. 4-74). The FS reported a similar finding within the Lab Bay DEIS, "The current timber supply can support the projected harvest in the Lab Bay Project Area through 2054 only if falldown and changes in land use are considerably less than estimated using currently available data and assumptions" (Summary, p.11). Additionally, however, the Lab Bay and Carroll Inlet FEIS also need to discuss the fact that even if future timber values and logging systems substantially improve, the concerns for wildlife viability, harvestable surpluses for hunters, and high vulnerability karst significantly complicates keeping such areas within the suitable timber base. In other words, the FS timber harvest calculations currently used to compute sustainability are based on what appears to be the maximum possible number of "suitable" acres. Timber harvest calculations that are overly optimistic are detrimental to sustained yields of old-growth dependent wildlife for human utilization and to ensure viable populations are maintained and well-distributed.

Another significant concern pertinent to the preceding "timber availability/sustainability" discussion is that even if wildlife viability issues were factored into sustained-yield calculations, the DEIS appears to assume that the unimplemented "solutions" under consideration to protect viability are adequate. This seems to be an unrealistic assumption which is lacking in supporting data and is vulnerable to becoming a "Type II error." Baseline data has not been collected to avoid this type of error. In fact, a comprehensive inventory of species occurring within the project area to document their distributions and abundances has never even been accomplished. Except for deer, comparatively little is known of the ecological relationships of the species within the project area, genetic variability, habitat requirements to maintain viability, or the role of this specific project area in assuring long-term viability of landscape-level species such as wolves. The current approach of seeking a maximum amount of operable timber does not appear to incorporate "safety-factors" which would allow for any margin of error. Additionally, managing for minimum viable populations will not provide sustained yields of wildlife for hunters and non-consumptive users.

We disagree that timber supply sustainability is exclusively a Forest Plan-level issue. Timber targets established in a forest plan need to be field-verified to check the supply assumptions upon which the targets were based. Project-level timber supply falldown should alert the FS to the high risk of following unsustainable TLMP timber supply targets that also threaten sustained yields of old growth-dependent wildlife upon which subsistence and general hunters depend, as does the tourism industry. This is an issue which is especially pertinent to Sec. 41.17.060 (c) (1) and 11 AAC 95.185 (a) and (e) of the FRPA.

ANILCA Sec. 810(a) Comments

Available subsistence research, wildlife modeling and harvest reporting, and Forest Service ANILCA Section 810 procedures and requirements, when taken together, would permit a thorough examination of the impacts to subsistence uses of this timber sale. The following comments will examine how Forest Service has used best available data and whether or not Forest Service has followed accepted procedures in making Section 810 determinations in this document.

Forest Service analysis projects that at some point in the future there may be a significant restriction of subsistence use of marten and deer under all of the alternatives, including the No Action Alternative. These anticipated restrictions on subsistence raise some general concerns regarding the selection and scheduling of this sale and about the range of alternatives provided in this DEIS. One shortcoming of the DEIS is that it does not analyze any action alternative which will lessen or ameliorate reductions in deer habitat capability.

Selection of Upper Carroll as a Project

The ANILCA provides for "the continuation of the opportunity for subsistence uses by rural residents of Alaska" (Sec. 801 (1)). The selection and scheduling of this project does not appear to have been influenced by subsistence considerations. Competition for deer is likely to increase due to logging camps, road building, and other developments planned for the Upper Carroll

Project Area. Reductions in deer habitat capability will also lead to fewer deer in the project area. If minimizing effects on subsistence was an important planning goal, Upper Carroll would not be scheduled for significant logging as long as other areas in the Ketchikan Area or forest wide are available for logging where subsistence impacts might be less.

Consideration of project alternatives

The range of alternatives presented in the DEIS is very narrow. The action alternatives considered in detail call for harvesting between 36 and 72 MMBF, necessitating reductions in deer and other wildlife habitat in well documented subsistence hunting and trapping areas. Levels of road construction, (between 24 and 58 miles of new road for the action alternatives), also fail to offer an alternative that does not have negative impacts on subsistence hunting and trapping areas. Only the No Action alternative avoids further destruction of deer habitat, providing the best option for a sustainable deer supply for subsistence hunters. No serious consideration is given to this alternative.

Transportation/Utility Corridor

The DEIS failed to address the issue of increased hunter access due to the proposed Lake Tye to Swan Lake Transmission Intertie. The Lake Tye to Swan Lake Transmission Intertie preferred route passes through the Project Area by way of Carroll Creek and Neets Creek drainages. The intertie's preferred route and accompanying road will increase access for deer hunters in the Project Area, leading to increased competition for deer.

Section 810 Determinations

We believe that the Forest Service has failed to show that a significant possibility of a significant restriction of subsistence uses in the Project Area is necessary and consistent with sound management principles for the utilization of public lands. In July 1990, the Federal Government took over management of subsistence use of wildlife resources on federal lands, making the Forest Service responsible for maintaining subsistence resources on the Tongass National Forest. We believe that the Upper Carroll project's failure to offer alternatives which maintain opportunities for subsistence uses by rural residents of Alaska is inconsistent with sound management principles for the utilization of public lands.

We also believe that efforts taken by the Forest Service to protect what it considers "highest value subsistence areas," lands adjacent to existing road systems, beach fringe habitat, and areas in close proximity to communities, is insufficient for the protection of subsistence resources. By failing to protect important subsistence use areas, other than "highest value subsistence areas," the Upper Carroll project involves more than the minimum amount of public land necessary to accomplish the purpose of the proposed activity.

The potential foreseeable and cumulative effects from the action alternatives in the Upper Carroll Project Area may represent a significant possibility of a significant restriction of subsistence use of deer. By 2140, the anticipated cumulative timber harvest in the project area will result in a

significant decrease in deer and marten habitat capability in WAA 510,;62 percent for deer and 50 percent for marten (DEIS, Table 3-110). The only mitigation offered by the Forest Service for loss of deer and marten habitat capability is the suggestion that "at some point in the future it may be necessary to restrict the non-rural harvest of deer, marten and wolf and give rural residents priority." (DEIS, Vol. 1, pg. 3-256). We find this attempt at mitigating a significant possibility of a significant restriction on subsistence use of Sitka, black-tailed deer inadequate. Therefore, we disagree with the FS that it has presented an alternative in this DEIS which takes reasonable steps to minimize adverse impacts upon subsistence.

NEPA Comments

Entry into North Revilla and Shelter Cove Project Areas

Although this project area only contains three VCUs, it overlaps one of the primary VCUs contained in the North Revilla Project area and part of a VCU in the Shelter Cove project area. The North Revilla EIS implied that entries would be spaced over time, consistent with sustained yield concepts. As the North Revilla EIS was finalized in 1994, another immediate entry into this project area is a somewhat questionable decision which could fail to meet the intent of NEPA.

Although the North Revilla EIS indicated further entries beyond the year 2004, it did not suggest that scoping for a new entry would occur just months after resolving the ACMP consistency review for the North Revilla project. The Cumulative Effects Analysis for visual resources, for example, appears to assume that there will be a continuation of present harvest levels, but that it will occur in 3-5 entries which are spaced over 100 years (pg. 3-343). This creates the expectation for the next entry to be significantly delayed in time, perhaps not occurring for 20-33 years. The Cumulative Effects Analysis for timber (pg. 3-205) implies a similar situation. Even though it shows the availability for another "light" entry into the North Revilla project area, it indicates to reviewers that this entry will not be forthcoming until 2000-2004 (Table 3-101) and consists only of another 1,789 acres. If it was intended to immediately include part of the North Revilla project area in a new project area under a different name, why wasn't this revealed in the North Revilla EIS? Essentially, this is a connected activity which significantly modifies (increases) the harvest level in the North Revilla project area and should have been analyzed as part of that EIS. These same comments also apply to that portion of the 1991 Shelter Cove project area, which is now included in the Carroll River project area.

Proposed Harvest Level

We question if the Purpose and Need for this project may be contrary to the other FS objective of using "ecosystem management" in the decision-making process. The proposed action appears to harvest most units in the Carroll River and Shelter Cove unit pool which do not have adjacency conflicts. The unit pool and proposed action appears to maximize forest fragmentation in the project area. Couldn't a unit pool have been devised which grouped more units at the edges of old-growth blocks rather than scattered them throughout the project area? The FEIS should

clearly depict on a map all the operable and available CFL which could be cut over the rotation so that this may be evaluated by the reviewers.

Once the operable and available CFL has been accurately determined, and verified in field surveys, alternatives should be developed based on different cutting levels to give a "true range of alternatives" and provide the decision maker with a "reasonable choice" based upon the biotic capabilities of the project area. The FS should develop the alternatives that would provide optimum fish and wildlife production to meet public demand; viable populations; sustained yield of timber and fish and wildlife; and maximum sustained yield of timber.

Old growth blocks and corridors

We support avoiding timber harvest west of Carroll Creek to maintain the Naha and Carroll Creek old growth blocks. Because of the highly productive estuary and significant fish runs, the old-growth forest in this area has the type of complex food chain and biological richness not found in other parts of the project area. It would be desirable to enlarge the size of this old-growth block and select units in less sensitive wildlife habitats, such as in VCU 737. We are also pleased to see old growth corridors delineated in the EIS. Unfortunately all action alternatives except Alt. 3 put timber harvest units in these corridors. If these corridors are to be functional, timber harvest needs to avoid them or alternative corridors need to be delineated. Please see our section on roads regarding specific recommendations.

Ecosystem Management

The TLMP timber target for the management area in which the sale will occur appears to be driving the planning process for the Carroll River Project. Given this constraint, "ecosystem management" will be an elusive goal. We believe that the foremost concept of ecosystem management is not mandating a project timber harvest level before field review of the area to verify the level of harvest that could be sustained given the multiple resource management objectives for the area.

Other ecosystem management concepts we recommend include: 1) minimizing forest fragmentation by locating harvest units on the edge of old-growth blocks; 2) adopting the recommendations of Samson, et. al. 1989 in "Conservation of Rain Forests in Southeast Alaska: Report of a Working Group"; 3) moving away from clearcutting as the predominant method of timber harvest and tailoring the method to fit the elevation, aspect, species composition, wildlife needs, or other relevant components of the ecosystem including replication of the natural disturbance regime; 4) avoiding or minimizing timber harvest in the most important wildlife habitats (i.e. lower Carroll River, etc.); and 5) determining in advance of timber harvest how the retained habitat in the project area will fit into a Tongass-wide plan to maintain viable and well-distributed wildlife populations and sustained yields of fish and wildlife.

Cumulative Effects Analysis

The cumulative effects analysis should consider the effects of the proposed timber sale in combination with effects of past and reasonably foreseeable sales on Revilla Island. TLMP did not do such site- and action-specific analysis, claiming that only project level planning could address these impacts. TLMP designations, the logging levels mandated by that plan, and the consequences of complying with the management directives of TLMP should all be explicitly presented in the FEIS. Sport and commercial fishing and subsistence and sport hunting patterns by residents of Ketchikan and other communities are also being affected by other nearby timber sales. Treating this sale in isolation would not allow adequate evaluation of effects on subsistence and sport users of the area.

The wildlife cumulative effects analysis provided within the DEIS appears flawed. It is not consistent with past evaluations done in other project area EISs. Wolf habitat capabilities, for example, are shown to not change over time and remain at a constant level that is almost twice as high as normal in most project areas. The time-span between Table 3-47 and 3-49, showing percent reductions is 136 years. The percent reductions exhibited, however, are inconsistent with other timber sale project areas. Additionally, these figures are not shown in Table 3-48. We suspect Tables 3-48 and 3-49 are in error. Some possible sources of error are described in the sections where we discuss "Deer" and "Habitat Capability Models," but other errors may also be present. Additionally, the mountain goat is a management indicator species (MIS). The DEIS has failed to include this MIS in the cumulative effects analysis. Mountain goats should be analyzed as an MIS in the FEIS.

Habitat Capability Models

We question the outputs shown by the habitat capability models in this DEIS. The FS has used the TLMP revision habitat capability models to analyze effects on wildlife for timber sales in recent years. We recommend these models be used consistently across the Tongass in each EIS until they are improved or changed by the interagency model development committee that was created to oversee the quality and verification of the models. Any significant changes to the models should only be made after reaching consensus among the original authors of the models. Until a better technique is developed, verified, and accepted by peer groups, the presently accepted models should be used consistently across the Tongass, just as the FS uses the timber volume estimates of TIMCLU or TIMTYP databases and the models that predict timber growth and yield.

The department has always maintained that the habitat capability models are not population predictors for any given point in time, but rather estimators of the **long-term** habitat carrying capacity of an area for a species given the long-term climatic patterns. To us, habitat capability and carrying capacity are synonymous. One can indeed state that the long-term average population should not exceed carrying capacity; that is inherent in the definition of long-term carrying capacity. The numbers of animals predicted by the models are the best available estimate of habitat capability given the current available information.

The FEIS should provide a balanced discussion of the limitations of existing wildlife information compared to the reliability of the other resource analyses. There has been great interagency attention, effort, and rigor applied to developing credible wildlife models. If these models were used incorrectly in the DEIS, this could be the reason for some of the puzzling results presented in the cumulative effects analysis. Patch-size effectiveness also needs to be correctly analyzed to accurately portray cumulative impacts. For example, old-growth forest blocks containing 8,000 bf/acre or more should be reduced by a 300-foot-wide perimeter buffer to clearly display the sizes and patterns of remaining interior forest conditions. Besides displaying the blocks of various sizes and the percentage or number of forest acres in these blocks, the FEIS should show edge-to-area ratios for each block in excess of 1,000 acres to provide an index of fragmentation within the blocks.

Viable Populations

We request the FS incorporate current conservation biology concepts and strategies into the FEIS which will maintain biological diversity in the Revilla Island/Cleveland Peninsula Ecological Province. Recommendations to attempt to keep wildlife populations viable and well distributed, as required by the National Forest Management Act, are contained in the draft Interagency Viable Populations Committee (VPOP) report (May 1993) and were strengthened by the Kiester and Eckhardt review of this strategy (March 1994). These recommendations should be incorporated into the ROD.

The VPOP interagency committee also recommended that a minimum of one small HCA of 1,600 acres be established in each VCU greater than 10,000 acres. Please note that this is a minimum figure which does not produce wildlife to meet human harvests.

The FEIS should ensure connectivity between old-growth blocks so as to maintain dispersal and genetic interchange for various species. The delineation of wildlife corridors should include as much old-growth forest as possible with dense canopy. This will help maintain interior forest conditions and facilitate travel for certain species. Cover is an essential element for travel corridors for some species and may be needed to avoid fragmenting or isolating populations. Alpine muskegs, partially forested muskegs, and low-volume stands lack the necessary canopy cover and preferred foods of some species. Although certain species are able to physically travel through these habitats at certain times of the year, such areas may not function well as corridors. The minimum required width for wildlife corridors by most species is still undetermined. The interagency VPOP committee recommendation for brown bear corridors on pink and chum stream fishing areas, for example, is 300 feet on either side of the stream. We believe this standard would also be appropriate for black bear, which are particularly abundant in the lower Carroll River.

Corridor planning should consider distances between forested blocks, species use, and duration. In general, the more widely spaced blocks of old-growth, the wider the corridors. For some species, travel corridors need not be so wide as to contain interior forest habitats as long as corridor length is less than a quarter mile. Travel corridors also need to be windfirm so that blowdown does not diminish their effectiveness.

Economics

The FEIS needs to contain an improved analysis of the economic value of fish and wildlife to the fishing, hunting, and tourism industries as well as their values to local residents and the likely effect of the proposed plan on those businesses. This should include dollar value estimates for tourism, fishing, subsistence, and other activities on the forest. One reference is Shea, 1990, "Impacts of development on the non-hunting wildlife-oriented businesses of Southeast Alaska."

Watershed Analysis

Since there has already been significant timber harvest in portions of this project area, this may be an excellent area for the FS to complete a watershed analysis prior to additional harvest and also conduct post-harvest monitoring to verify the results of the planning analyses.

Maps

The alternative maps contained within the DEIS were of extremely poor quality, and difficult to use. Similar problems were encountered with the unit card maps. Although the unit pool map was of good quality, it could also be improved. We would request that the ROD map be of no less quality than the unit pool map. We would also like to request that non-forested lands and non-commercial forest lands (less than 8,000 bf. ft/acre), be shown as **white** on the ROD map. The 1989-94 long-term sale maps were done this way, and it greatly improved the readability of the maps. This would also allow the FS to easily depict (in color shades) unavailable or unsuitable CFL on the ROD map, which is a request that we would also like to make.

High value wildlife habitat for deer, marten, and black bear, as well as other sensitive habitats, should also be depicted on the unit maps in the EIS. Such details are important for evaluating the effects of proposed harvest units or groups of units on wildlife.

Roading Effects and Road Cards

As evidenced by our 1994 inspection of the North Revilla project area, the development and expansion of road networks without adequately maintaining or putting the system to bed has resulted in erosion, fish passage blocks, wildlife conflicts, and related problems. The FS needs to avoid constructing and abandoning roads without either putting them to bed or implementing an effective and responsive maintenance program.

As development proceeds on Revilla Island, roadless areas (especially those greater than 5000 acres) are disappearing. This has significant implications for far-ranging species such as wolves, or species of lower fecundity which can be easily hunted and shot from newly developed road systems (e.g. black bears and marten). The FS needs to more carefully analyze how the elimination of roadless areas will affect wildlife species.

The FEIS should better evaluate the cumulative impacts of intensive roading on marten, black bears, and wolves. ADFG research has shown high road densities to be detrimental to each of these species. Disturbance effects of roads and camps, which are part of the habitat capability models for these species, should be used in this analysis. The FEIS should display the effects assuming all roads will be left open as well as display them for whatever access management closures are proposed because, even though the FS may desire to close a road, ATV users and others often find routes past the barriers. This area will be particularly attractive to ATV users given the proximity of the Shelter Cove and Carroll Inlet LTFs to Ketchikan. Trappers using ATVs can cause wildlife management concerns similar to road connected to the ferry system, with significant detrimental effects to marten, black bear, or wolf populations.

Road cards are inadequate for ACMP or NEPA review. Maps are difficult to read and have insufficient detail. We are encouraged, though, that the EIS indicates most roads will be closed after logging. If road closures are proposed to mitigate effects on wildlife, this must be planned in a systematic method. Current research on Chichagof Island indicates that road location may be as significant as road density in its effects on marten (Flynn, pers. comm.). For marten and wolves, ideally, access to the center of blocks of habitat would be restricted to provide refugia for furbearer populations whereas peripheral access would be retained so that trappers may utilize but not overharvest the population.

We do not agree with page 3-103 of the DEIS. Road management needs to include consideration for wildlife even though the roads in the project area are not accessible by ferry or connected to the Ketchikan road system. It is likely this road system will be connected to the permanent Swan Lake Hydro facility, and that this portion of the intertie road could remain permanently open. Additionally, if roads are not closed, trappers using ATVs transported to the area by boat can produce the same effects as would one connected to the larger road or ferry system. Unless roads are closed to use by ATVs as well as highway vehicles, detrimental effects to furbearers and bears may occur. Removal of culverts and bridges and the placement of large rocks is probably the best method of putting roads to bed for both highway vehicle and ATV use.

To avoid impacts to important core reserve habitat (and fisheries), we recommend the 83 spur road not be constructed. It is also unnecessary to have long sections of road traversing important wildlife corridors where units are isolated at the terminal ends of "uneconomical" roads. This appears to be the case for the 8470 road, which unnecessarily impacts the Carroll River to Traitors Creek wildlife corridor. The same is true for the northernmost 3 miles of the 84 road, which significantly impacts wildlife within the Carroll River to Neets Creek corridor. These portions of the 8470 and 84 roads should not be constructed as part of this project. This would require units 79 and 80 (68 acres) to not be cut. Logs from Unit 92, if cut, would need to be hauled towards Neets Bay. Helicopter yarding of units 15 and 108 to the landings in Unit 129 should also be considered.

To minimize the potential for detrimental impacts to mountain goat winter range, we recommend not constructing the 8460 road beyond the lower bridge crossing. This would mean that spur roads 8460200, 8460210, 8460300, and 8460310 would also not be constructed. Units 16, 64, 66, and 67 of the preferred alternative would also not be cut. However, helicopter yarding of Units 9 and 61

could occur, with these logs taken to the landings on the 8460100 spur road. Alternatively, if Units 9 and 61 were excluded, all of the 8460 road would become unnecessary and roading costs and impacts to fisheries could be significantly reduced.

The bridge on Road 845, which cross Carroll Creek, needs to be removed after logging. All bridges need to be pulled on the following roads to make their closure after harvest effective: 8448, 8460100, 8460300, 8400500. In addition, ATV proof barriers need to be installed where the following roads take off from the mainline road 84: 8400500, 8400550, 83, 8448, 8400610, 8450, 8400600, 8400705, 8460, 8400700, 8400707, 8470, 8400300, 8400850, and 8400900.

Road 8450200 accessing units 11, 12, and 85 in Alt. 5 is a problem. It appears to go through high risk soils along a Class 1 or II stream, and has 3 crossings. The road right-of-way eliminates a long string of high-volume, high-habitat-value, riparian forest. A more ecological and possibly economical approach to harvesting these units would be to helicopter harvest all three units using units 86 and 6 as landings.

Risks to wildlife from road access also exists during logging operations. Because of their proximity and easy accessibility to the project area, logging camp residents' effects on wildlife populations are likely to be greater than those of other rural and nonrural users. Logging camp residents hunt and trap and have access to road systems during project operations. The FS should consider asking Forest Service employees and logging contractors to voluntarily restrict hunting, and trapping while logging operations are underway. A precedent for camp prohibitions against hunting and trapping was set by the Greens Creek mining operation on Admiralty Island.

Finally, we ask the planning team to develop a strategy for monitoring access impacts so that unexpected problems can be managed if monitoring indicates unacceptable impacts to wildlife or historic subsistence use are occurring.

Brown Bear and Moose

Small numbers of brown bear and moose have been observed in recent years on Revilla Island. The EIS should evaluate the potential for these species eventually becoming established on Revilla Island under the "no action alternative" versus the cumulative roading and habitat losses which could occur as a part of this proposed action.

Wolves and Predation

An attempt should be made to identify and maintain wolf travel corridors, and predict changes in wolf behavior and travel patterns following the construction of proposed roads. Because quality winter deer habitat seems to be at a premium in this project area, further fragmentation along well-traveled wolf corridors may exacerbate impacts on deer by combining loss of habitat with increased predation. Road access to these areas would also likely increase hunting and trapping pressure on wolves. The DEIS shows wolf habitat capabilities remaining constant for 143 years. The FEIS should put more effort into accurately determining project impacts on wolves.

Black Bears

The FS should include mitigative measures to reduce the effect of bear hunting by logging camp residents because the greatest short-term potential for adverse impacts to black bears comes from those who have daily access to the area and work in and near critical habitats such as the lower Carroll River. The FS could prohibit hunting by logging camp residents as part of the timber harvest contract or by requesting the camp operators to establish such a prohibition voluntarily. This was done by the company operating the Greens Creek Mine on Admiralty Island. Given the historical increase in bear harvests associated with the operation of a logging camp, the alternative to prevent the overharvest of bears would be a complete season closure which we believe would unfairly affect existing hunters and guides. The success of the Greens Creek policy in protecting the local bear population is well known.

The department also recommends that logging operations in units immediately adjacent to fish streams on which bears concentrate to feed on salmon and berries be scheduled to avoid the spawning season. The scheduling would reduce the risk of disturbance to bears at the critical fishing time, and also reduce the risk of bear/human encounters which might result in defense-of-life-or-property kills or danger to humans.

Stream crossings need to avoid places where bears are known to congregate to fish or places with characteristics that make them good fishing spots for bears. For spawning salmon to be accessible to bears, the right combination of shallow water, pools, gravel bars, cover, and other factors must exist. The traffic at stream crossings may displace bears from these vital areas at critical times. Field inspections by wildlife biologists of the fish streams in the project area should precede final siting of stream crossings.

Incinerators need to be installed to dispose of garbage at logging camps in the project area. As with other large construction projects in Alaska, camp personnel should be given compulsory training on minimizing adverse impacts to bears and other wildlife.

Sitka Black-tailed Deer

We have serious concerns about the accuracy of the post-timber-harvest habitat capability of deer as shown in the DEIS. The DEIS claims a total loss of only 16 deer as a result of logging almost 2,500 acres in Alternative 2. This equates to an average habitat capability for the acres harvested of only 4 deer per square mile. This seems an unlikely low deer density for commercial forest in the project area even with predators and deep snow conditions. In the nearby Shelter Cove project area, the density of deer in logged areas was over 60 deer per square mile. Shelter Cove was an intermediate snow area whereas most of Upper Carroll is a deep snow area, but the difference still seems too great to be plausible.

Likewise, the DEIS on page 3-104, Table 3-49 asserts that logging of the rest of the 5,654 suitable acres in the project area would result in the loss of only 11 additional deer. (It is also claimed marten habitat capability would decrease by only 2 animals.) This equates to an average habitat

capability for the suitable acres of 1 deer per square mile, at least 10 times below what one would expect. Again, such a low density is extremely unlikely on typical commercial forest lands. In contrast, DEIS tables indicate that the previous harvest of about 1,400 acres in the project area resulted in a habitat capability loss of 240 deer, or 110 deer per square mile. Clearly these anomalies need to be examined and any errors corrected. We suspect errors in how the GIS database was queried, or some other misapplication of the habitat capability models for deer, marten, and possibly other species. We will make a formal request to review the use and outputs of the deer model. This should be accomplished before the FEIS and we would like to be notified of changes prior to publication in the FEIS.

Table 3-32 on page 3-85 is confusing and appears inaccurate. Column 3 should be labeled 1954 Habitat Capability, not 1995. Columns 4 & 5 should be labeled 1995 Habitat Capability. Columns 6 & 7 should be labeled "Percent change 1954 to 1995". In column 7, our calculations using figures in the table show the percent change in WAA 510 is -30, not -27. Total percent change for the WAAs should be -19, not -18.

The title of the table on pg. 3-252 should be changed to refer to subsistence species or large mammals instead of furbearers. Deer and black bear are not considered furbearers.

Mountain Goats

The potential impacts to mountain goats were not addressed in the Upper Carroll Timber Sale DEIS, despite the fact that a population exists in the vicinity of the proposed project area. The reason given for not including mountain goats was that there is limited habitat due to geology and topography (Vol. I, page 3-77). Project activities, however, could result in substantial impacts to mountain goats on Revilla Island, including the logging of important winter range. Mountain goats are also a Management Indicator Species (MIS), and a thorough evaluation of the potential impacts to this species needs to be included in the FEIS.

Seventeen mountain goats were transplanted from the mainland east of Ketchikan to a ridge near Swan Lake in 1983. Subsequent surveys revealed that the population had grown to a minimum of 44 by 1990 and to over 127 by 1993 (ADF&G data, Ketchikan). Goats from the introduction are known to have moved up to 12 miles from their original release site, including movements across the Carroll River drainage and onto ridges on the west side of Carroll Inlet (ADF&G unpub. rep., Ketchikan). Mt. Reid, with its steep terrain and alpine vegetation, offers good habitat for goats, perhaps some of the best on Revilla Island.. Of the 127 goats observed during a July survey in 1993, 59 were observed on or immediately adjacent to Mt. Reid.

Not much quantitative data is available regarding winter habitat use. However, given our knowledge about their fall habitat use, together with our knowledge about goats' needs for timbered old-growth during periods of snow accumulation, it is likely that at least part of the population is wintering on the south-facing slopes below Mt. Reid. This coincides with the drainage containing proposed logging units 16, 64-67, and 70. These units, particularly 16, 64-66, and 70 are of great concern because of their location relative to fall use areas. Other units in the project area could also be located within goat winter range.

Prior to the FEIS and ROD, the FS needs to conduct winter-time field surveys which can be used to accurately identify and describe mountain goat winter range within the project area. In the ROD, the FS needs to select units and roads which protect mountain goat habitats and migration corridors. This may be a reason for relocating some logging which is currently planned in the Carroll River drainage to VCU 737.

Marten

Tables on pages 3-238 and 3-249 show different figures for marten populations needed to support average harvest. These figures need to be reconciled.

Wildlife Surveys

Wildlife surveys, especially for mountain goats (winter-use only), goshawks, murrelets, great-blue herons, sandhill cranes, and Vancouver Canada geese need to be conducted in the project area to locate and maintain important habitats prior to unit selection in the ROD. We request road, camp, harvest unit, and ancillary facilities be located and designed to prevent the destruction and/or disturbance of nests and other important habitats.

Rare Plant Surveys

Surveys for rare or unique species of plants should be continued within the project area in the coming field season. Impacts to such species are generally unknown in the lowland forest habitats of this part of Alaska, and will remain so unless the appropriate botanical field surveys and inventories are planned and implemented. Additionally, Pacific Yew could potentially occur within the project area. Inventories should be conducted prior to the FEIS and, if this species is found, the provisions of the Pacific Yew Act of 1992 should be implemented in the ROD.

Degradation of Sport-fishing Opportunities

The project area includes significant recreational sport fishing areas which are at risk of degradation by project alternatives. Due to their close proximity to Ketchikan, the lower Carroll River and upper Carroll Inlet are especially important for both fresh and salt-water sport fishing. These areas are also particularly vulnerable to degradation by the proposed actions. Intense roading and clearcutting in the lower Carroll River, for example, will diminish the attractiveness of this area for both resident and out-of-state fisher persons. Additionally, a variety of high-quality salt-water sport fishing opportunities are available in the Carroll River estuary and upper Carroll Inlet. These not only consist of rod-and-reel fishing (e.g. for halibut, rockfish, five species of salmon, etc.), but also include the pursuit of shellfish such as crab, shrimp, clams, and the marine species. The log dump near the Carroll River estuary, log rafting, towing, floathomes, camp facilities, road construction, clearcutting within the viewshed, loss of anchorages, and similar project related activities can all negatively impact the use of this area by those seeking high-quality sport fishing opportunities.

Although the north end of the project area receives less use from Ketchikan residents, it is more accessible to certain other sport-fishing enthusiasts (such as clients of the Yes Bay Lodge). Salt-water sport fishing opportunities (including shrimping, and crabbing) in the upper Neets Bay and Shrimp Bay areas could be degraded in the same ways as previously described for the upper Carroll Inlet area. Additionally, the Orchard Creek/Lake complex is highly sought-after for its high-quality freshwater sport fishing opportunities. Fisher persons can access this area by anchoring in Shrimp Bay (proposed for log dumping and ancillary facilities) and hiking a trail up from salt-water. The EIS should thoroughly discuss, analyze and mitigate the impacts to all of these important sport fishing areas. In addition to NEPA issues, some of these are also ACMP concerns, particularly if they relate to a loss in productivity of coastal resources.

Loss of Sport-hunting Opportunities

The current sport hunter demand for deer exceeds long-term habitat capability in some WAAs and the supply comes largely from National Forest lands. We are concerned that additional habitat loss in the area will exacerbate the shortage of deer available to sport hunters in other WAAs which are unable to meet current demand. Hunters' options to seek deer in other nearby areas may be limited, especially if those areas are also experiencing high levels of habitat loss.

Besides describing the effects of logging on subsistence users, the effects on non-rural sport hunters and trappers should also be clearly displayed in the FEIS. If non-rural hunters are denied hunting opportunity they will have to find it elsewhere. Habitat losses on nearby areas such as the remainder of Revilla Island in addition to future entries onto places such as the Cleveland Peninsula may exacerbate this problem.

We remind the FS that providing habitat conservation areas for the protection of viable wildlife populations is probably not sufficient to provide enough wildlife for human consumptive use. If continued hunting and trapping of wildlife in the project area is part of the desired future condition, then more habitat should be maintained than that currently designated for retention.

Proportionality

We are concerned about the accuracy of the timber-type database used to evaluate wildlife habitat and monitor compliance with TTRA proportionality rules. Others have questioned the general accuracy of existing timber inventories, including a FS report by James Brickell, which states that the TIMTYPE database is not accurate enough to identify the location of high-volume timber on the ground. Therefore, prior to developing the FEIS, field surveys should verify the locations of timber volume classes 4, 5, 6, and 7 due to the relative importance of volume class to particular wildlife species. This information is also needed for the ACMP consistency review of individual unit cards.

The Forest Service's typical method for determining proportional harvest of volume classes was deemed illegal in the Kelp Bay decision in April 1994 because it was arbitrary and capricious. Yet in every timber sale project currently before us for review (Upper Carroll, Eight Fathom, Northwest Baranof, Lab Bay, Control Lake, Port Houghton, Shamrock) the Forest Service has

continued to use this arbitrary and capricious method. The prime reason for mandating proportional harvest was to avoid disproportionately cutting the most important wildlife habitat early in the rotation, thereby endangering biodiversity and prematurely reducing the yield of the wildlife resources. Disproportionate harvest of the most economical stands early in the rotation may reduce long-term community stability and make the job of managing timber harvest, while protecting wildlife values, more difficult for future managers. In the Upper Carroll sale, the Forest Service needs to use a legal method for determining TTRA proportionality.

Monitoring/Mitigation

The FEIS should clearly describe specific monitoring and mitigation activities so that thresholds of impacts are clearly identified and, if exceeded, trigger specific mitigation measures. Monitoring should focus on the most important wildlife/fish species described in our comments. Precommercial thinning should not be presented as a mitigation measure for wildlife habitat losses because research to date has not found any measurable improvement for wildlife.

Mitigation and monitoring of subsistence impacts needs to be emphasized. Appropriate strategies for mitigating and monitoring these impacts need to be developed through consultation with subsistence and other users regarding the potential impacts of timber harvest and the construction of roads and ancillary facilities on specific subsistence areas. Transportation planning and access management are important components of such a strategy.

Definition of "Forest Land"

One of the primary concepts emerging from FS EISs which tends to confuse the public in their understanding of forestry issues originates in the way the FS defines "forest land." Most people perceive of "forests" according to the dictionary definition of the term; i.e. "tracts of wooded lands" or "a dense growth of trees and underbrush covering a large tract." In the FS's definition of "forest land," however, these lands may be 90% unforested. It is only when a landscape has less than a 10% cover of trees, though, that it is recognized by the FS as "nonforest land." Consequently, in using this definition for "forest land" in the figures, charts, tables, and graphs of an EIS, it tends to create the perception that there is a lot more "forest" (and productive wildlife habitats) on the Tongass than actually exists. Perhaps the word "forest" should not be used to describe lands which have <8,000 bf/ac. If the word "forest" is used in the description of these lands, perhaps "partially forested muskegs" would be more accurate. This may include approximately 40% of a typical project area.

Relationship of Carroll River Project with Intertie Project

Currently, it is difficult to determine where the Carroll River project "ends" and the Intertie Project "begins." About 1,150 acres of clearing may be required for the Intertie Project. This is significant, as it appears to be about half as much clearing as is anticipated for the Carroll River Timber Sale. The Intertie may also significantly affect wildlife corridors, especially where road construction is planned. Additionally, the Carroll River to Shrimp Bay road is not likely to be connected in the Carroll River Timber Sale, but it could be as a result of construction of the

Intertie. Consequently, we disagree with the FS statement (Vol. 1, pg. 3-130) that, "It is not anticipated that the Swan Lake-Tyee Powerline Intertie Project will significantly increase cumulative effects that have already been analyzed for the Upper Carroll Project." As these two projects "appear to be connected actions," their cumulative impacts should be analyzed together, and the findings of the "Cumulative Effects Analysis" and other appropriate sections of the FEIS should reflect this.

Document Form

Lack of attention to detail and consistency make this DEIS confusing and frustrating to read. An example is Table 2-1 (vol. 1, pg. 2-4), entitled "...Landscape Management Zones". Is this the same concept as the "Landscape Zones" used in the Control Lake DEIS? The heading within Table 2-1 says "Landscape Zones". However, the concept seems to shift as the table progresses, from landscape zones to habitat types. "Riparian habitat" occurs in all landscape zones, and indeed, the map that follows page 5 (which appears to be is Figure 2-1 from the description of Figure 2-1 in the text at the bottom of page 5, but the figure is not numbered) shows riparian habitat within the Carroll Creek Block and elsewhere, but surely it does not show *all* riparian habitat. Does this perhaps mean Riparian Management Areas, which, is a different concept from landscape zone?

Table 2-1 refers to "Late-successional Corridors," but the corresponding map does not. Some prior knowledge of the term "late-successional" is needed because the term is not even in the glossary. The map has "small old growth blocks and travel corridors" which sound suspiciously like the description of "late-successional corridors" in Table 2-1. Consistent terminology should be used throughout the document.

On the same table, "Low and Very Low Economic Zones" are inappropriate designations for Landscape Zones as they are an economic classification based upon a value judgment. It would be more appropriate to designate them in terms of a timber characteristic or biophysical feature.

The large map supplement is an example of careless inattention to detail. The legend does not mention unit numbers, which are typographically similar to VCU numbers. Streams are extremely difficult to see, and the legend has duplicative designations. Also, where is the number for the northernmost VCU? Additionally, the term "Low Productive Forest Land" should be "Non-Productive Forest Land."

On the Alternative maps, the term "Alternative Road" is confusing when juxtaposed with the term "Existing Road". Please use the term "Proposed Road" instead of "Alternative Road".

In Vol. 1, on page 2-25, the first sentence implies that "watershed" is the same thing as a VCU. Yet Table 2-6 on the same page, has designations for watersheds that are definitely not VCU numbers. There does not appear to be a map showing the watersheds listed in Table 2-6. Also, Table 3-3 is a duplication of Table 2-6, but has different values for Alt. 1. These types of errors occur frequently throughout the EIS.

Recommended Changes to Unit Selections in Preferred Alternative.

Based upon the comments contained in the preceding sections of our response to the Upper Carroll Timber Sale DEIS, we recommend that, at a minimum, the following changes be made regarding the selection of units to be logged in Alternative 5, the "Preferred Alternative."

Units 79 and 80 should be deleted to maintain the Carroll River to Traitors Cove wildlife corridor.

Units 16, 64, 66, and 67 should be deleted from the preferred alternative to avoid cutting potential mountain goat winter range. Additionally, the FS should conduct field surveys to identify other potential mountain goat winter range and exclude such areas from being logged as a result of the ROD.

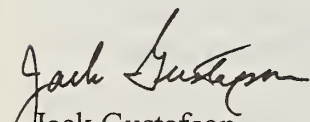
Unit 24 significantly fragments a high-volume old growth block located above the Carroll River estuary. This unit should be deleted in the ROD.

The deletion of these units from the ROD would result in a decreased volume of at least 9.1 mmbf and 317.9 acres. If this results in a total sale volume which is unacceptable to the FS, then we would recommend adding all but Unit 13 in VCU 737 to those units selected in the ROD. These units (14, 17, 93, 95, 97, 98, 99, 104, 106, 107, and 110) contain a total of 10.8 mmbf and 344.4 acres.

We hope these comments will enable the Forest Service to design a sale which can be found fully consistent with the ACMP. Please contact ADF&G biologists for further details on any questions you may have. We are available to work with the Forest Service as plans for this sale progress.

Thank you for the opportunity to comment.

Sincerely,


Jack Gustafson
Area Habitat Biologist

cc: J. Kowalski, ADF&G, Juneau
L. Shea-Flanders, ADF&G, Douglas
K. Titus, ADF&G, Juneau
S. Marshall, ADF&G, Juneau
R. Holmes, ADF&G, Juneau
L. Weissler, DGC, Juneau

D. Wallingford, DNR/DOF, Anchorage
J. Ferguson, DEC, Juneau
N. Holmberg, USFWS, Juneau
S. Pennoyer, NMFS, Juneau
S. Cantor, EPA, Anchorage
B. Schroeder, ADF&G, Juneau

March 8, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - Ketchikan
Federal Building
Ketchikan, AK 99901

Dear Mr. Powell;

Thank you for the opportunity to comment on the Upper Carroll Timber Sale Draft EIS. Because I live and work in the Ketchikan area I will be effected by the activities in this area and because I do live, work, and recreate in this area I feel more than qualified to comment.

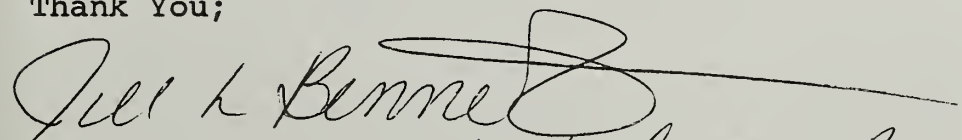
With the proposed timber sale being in close proximity to Ketchikan I feel the potential benefits to the communities of Ketchikan, Saxman and Metalkatla through development of this sale area would be great. Development of this area would most certainly provide jobs to these communities, would create more roaded recreation area, could possibly work towards development of the proposed Swan Lake/Tyee intertie, and would develop and utilize a renewable resource this area has an abundance of.

I do not believe development of this area would have an adverse impact on the flight seeing experience and may actually enhance this experience. Flight seeing tours are flown at such high altitudes through this area that any on the ground activity should not take away from the experience but add to it by providing a variation in the scenery.

Development of this area would certainly create more roaded recreation area, of which people in this area are always wanting more of, and yes, would create easier hunting access. In the event that these roads are connected with roads in Shelter Cove and then to the road system from White River into Ketchikan a large area of recreation would be opened up to the people of this area and I personally would like to see this happen. This forest belongs to the people of the United States and it's a real shame that people living right here are not able to see more of it's beauty because of limited access.

The Forest Service preferred Alternative 5 is close to a good selection but could be greatly improved by dropping unit 92 and adding units 110, 13, 14, 104, 99, 17, 107, 106, 98, and 97 from Alternative 2 to be logged by helicopter. While the Forest Service has a commitment to protect this National treasure it also has a responsibility to provide the public with the best possible return on the resources and to meet their contractual obligations with Ketchikan Pulp Company. I believe all these goals can be met through development of the Upper Carroll area.

Thank You;


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March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service
Federal Building
Ketchikan, Alaska 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

I want to take just a moment and thank you for allowing me an opportunity to comment on the Upper Carroll Draft EIS. I live in Ketchikan and will be effected by the proposed activities.

My family is supported by the timber industry. I believe the timber industry is the key part of the economy for Ketchikan and southeast Alaska; hunting and fishing are very important to me.

I would like to see the Forest Service provide the most economical timber possible to the timber industry. I want to see the forest developed so that I can enjoy its resources with my family. I don't think the Forest Service should place special restrictions on species which are not threatened or endangered. The Forest Service should honor the commitments it has made to the timber industry.

Thank you again.

Sincerely,

Diana Amundson



Tongass Conservation Society

PO Box 23377 Ketchikan, AK 99901 (907)225-5827

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

March 9, 1996

Dear Mr. Powell:

The following comments on the Upper Carroll Timber Sale DEIS are submitted on behalf of the Tongass Conservation Society (TCS). TCS is a local 501(c)(3) non-profit conservation organization with about 180 members. TCS is also a member group of the Southeast Alaska Conservation Council. Since 1970, TCS has played an active role in Tongass National Forest policy and management issues. Our members come from all walks of life and they rely on a healthy and diverse forest for their livelihoods and quality of life. The Upper Carroll Inlet area is important to our members. It is easily accessible for Ketchikan area residents and visitors and is used for a variety of activities including subsistence hunting and gathering, recreational boating, hiking, fishing, and wildlife viewing. TCS members have actively participated in the public process relating to local, state and federal management of the areas surrounding the Carroll Inlet, including the North Revilla Timber Sale, The Shelter Cove Timber Sale, the Naha LUD II, the Misty Fjords Wilderness Area, the Leask Lakes recreation area, and the George Inlet Salt Chuck. TCS has supported efforts to protect these areas for a variety of uses.

TCS is concerned by the Forest Service's continued emphasis on the timber industry over other uses. Most of our members agree that some timber harvest may be necessary on the Tongass, but the current large-scale clearcutting, with little secondary processing, is not sustainable or wise. The cumulative effects of intensive, large-scale clearcutting all across the Tongass is and will continue to have adverse effects on other vital forest uses such as fishing, tourism, and subsistence. These forest uses depend upon healthy, intact old growth forest. Too much of the forest is being harvested too quickly and the level of harvest is not sustainable over the 100-year rotation. The future of other forest dependent industries and uses, as well as fish and wildlife populations, are being compromised for the sake of a single industry. The Upper Carroll Timber Sale is no exception.

Issue 1: Management by Timber Targets:

The Tongass Timber Reform Act (TTRA) directed the Forest Service to end timber dominance and to provide for the multiple use and sustained yield of all renewable resources. Although the range of alternatives in this DEIS is an improvement over those offered in other recent EIS's on the Ketchikan Area, the timber target of 70 MMBF as identified by the agency's purpose and need statement severely restricts their ability to manage for multiple use and to do appropriate evaluations required by NEPA and ANILCA. The decision to cut 70 MMBF was part of a timber sale schedule, and was based on computer inventories and ASQ calculations from a Draft Forest Plan, not the current Forest Plan. To truly manage for multiple use and sustained yield, the Forest Service needs to recognize the increasing demands on the resource base and the cumulative effects of wide-scale clearcutting in the project area before locking into unsustainable timber targets. Recent admittance by the Forest Service of falldown levels as high as 30% make the available volume analysis even more suspect

Issue 2: Protection of Subsistence Resources:

ANILCA requires evaluations of impacts to subsistence. ANILCA Section 810 (a), "In determining whether to withdraw, reserve, lease, or to otherwise permit use, occupancy, or disposition of public lands ... the head of the Federal agency having primary jurisdiction over such lands or his designee shall evaluate the effect of use ... on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes." Congress has strictly defined subsistence uses and the mechanisms of protection. Both Title VIII of ANILCA and the TTRA require protection of subsistence resources and reaffirm a commitment to subsistence. The Forest Service lacks discretion of these federally-imposed duties.

Once the Forest Service limits its logging activities to only those that are necessary, Section 810 (a) (3) (B) of ANILCA requires that it conduct those activities on the "minimal amount of public lands necessary to accomplish the purposes of such use" Since the contract, logging has concentrated on the same high volume stands that are important for wildlife, particularly the Sitka black-tailed deer. Table 3-74, p. 195, shows the distribution of proposed harvest units by volume class. Alternative 5 has the greatest proportion of harvest in these volume classes with 300 acres in volume class 6 and 16 in volume class 7. Implementing this alternative would not abiding by Section 810 which requires under law the "least adverse impact" to subsistence. The only way to make a subsistence determination at the project level, and to cause the least adverse impact, is to do a cumulative analysis, That has never been done. For the North Revilla Timber Sale area there is a projected 66% decline in wildlife habitat capability for deer by the end of the rotation. The Carroll Inlet DEIS suggests a 48% reduction. The cumulative impacts caused by roading and logging are at odds with other uses of the forest such as subsistence hunting and gathering.

The Forest Service should provide more site-specific subsistence evaluations for the proposed project area. The evaluation offered is general and does not provide sufficient detail of subsistence use against which impacts can be measured and mitigated. Further, cumulative analysis which includes impacts of management activities or projects outside the Carroll Inlet project boundaries is critical. Although the tables displaying the cumulative effects for deer

and bear included the North Revilla EIS, other management activities and projects were not included.

Issue 3: Viable Wildlife Populations:

In response to the Recissions Bill (Public Law 104-19), the DEIS states, on p.116 of chapter 3, that the Forest Service will not implement the Habitat Conservation Areas as recommended by the VPOP committee. However, the Public Law 1004-19 was void as of September 30th, 1995. Further, not implementing HCAs is contrary to direction provided by the Regional Forester. The January, 1995, findings by the Fisheries and Wildlife Service (FWS) on the wolf petition bind the Forest Service. The FWS document states that the wolf should be listed, but listing is not warranted in large part because of the agreement by the Forest Service to implement strong conservation strategies. However, those strategies are not followed in the Carroll Inlet DEIS.

Also in response to the Recissions Bill, and the 1996 Appropriations Bill, the DEIS states that the interim nest protection zones for active goshawk nest will not exceed 300 acres. Again, the Recissions Bill is not in effect and the 1996 Appropriations Bill was vetoed. TCS supports strong conservation measures to ensure the protection of Goshawk nesting areas.

As far as we know, there is no literature that supports the concept of clearcutting improving habitat for the olive-sided flycatcher, as the DEIS suggests on page 141, Ch 3. This species, like many other neotropical migrants, is in serious decline in part due to habitat destruction.

The DEIS suggests that access management would mitigate the effect of increased road density on the Alexander Archipelago Wolf (page 141). Because the proposed road density in this project is very high, especially in terms of volume of timber harvested, we think more protection is needed. The wolf mortality on Prince of Wales Island from road density demonstrates that access management alone is not the only measures needed. As the DEIS points out on page 218, chapter 3, "access by foot travel and ATVs will increase with implementation of action alternatives. Past experience in adjacent project areas show an increase in sport fishing and hunting due to having a developed LTF and docking facility with a connecting road system. Even though roads are often closed to vehicle traffic, ATVs are often used if main roads remain open." On page 255, Ch.3, the DEIS states "Harvest levels of wolf and marten currently are at or exceed habitat capability for those species. This may represent a significant possibility of a significant restriction of subsistence uses of wolf and martin." TCS would like to see strong conservation measures implemented to protect the wolf.

The DEIS does not mention Mountain Goats or their habitat. This project area is in the middle of very important goat winter range. Extensive surveys and analysis should be implemented before the project proceeds to ensure protection of their populations and habitat.

On page 113, Chapter 3, it states that the project area's contribution to well-distributed populations through maintenance of connectivity is critical. How did the planning team provide for connectivity of areas? What ground truthing was provided for the DEIS? Why is Alternative P of TLMP Draft Revision used as the benchmark for acres to be preserved in a natural setting? Tiering to the TLMP SDEIS seems inappropriate and does not

relieve the Forest Service from conserving the wildlife resource on an equal level with other forest resources. The TLMP SDEIS does not have a valid, scientifically based wildlife conservation strategy. Beach fringe, estuaries, streams and riparian management areas alone are not enough to ensure viable populations and maintenance of biodiversity. Gap analysis is needed to determine what lands should be set aside. Some of the corridors in the project area have already been affected by timber harvest, and second growth should not be used as an "old growth corridor", especially considering that corridors are not even a proven strategy for maintaining connectivity. Erring on the side of conservation would be prudent when it comes to protecting viable populations.

Low-elevation, high volume stands are rare in the Tongass. Many wildlife species heavily use these productive areas. Maintaining viable wildlife populations requires maintaining these old-growth areas. 2,056 acres of the suitable forest land has already been harvested in the project area (Ch.3, p. 178). It is likely that these areas were high-volume stands, possibly volume class 6 and 7. These areas should be taken into consideration when determining the proportion of high volume stands to consider for harvest. Only looking at the effects of the harvesting the proposed 316 acres of volume class 6 and 7, as in alternative 5, does not accurately show the cumulative effects to these critically important areas.

Issue 4: Sedimentation:

Sedimentation caused by road building and timber harvest activities poses a very serious threat to water quality. Carroll Creek and Neets Creek are both important for fisheries and water quality should be protected in these drainages by minimizing the amount of road construction and harvest activities which could affect these streams and their tributaries. The Carroll Creek salmon provide an important wild genetic stock for local hatcheries. Alternatives 2 and 5 pose unacceptably high likelihood of sedimentation with numerous stream crossings and higher harvest levels, including areas of high and very high mass movement potential. As the DEIS points out, Carroll Creek already has significant natural sources of sediment and logging and road building activities would magnify the problem. The DEIS states that 3.4% of the riparian areas were harvested already with no stream protections, with Class I and II streams harvested to the banks (Ch. 3, p. 178). In addition, the Neets Bay Hatchery could be adversely affected by increased sedimentation.

The DEIS states that, "the application of BMPs and adherence to Standards and Guidelines in the future will assure that the effects upon water resources are minimal" (Ch. 3, p. 19). It also states that "the proposed alternatives have the potential to affect water quality and fish production in the Carroll Creek system.. The potential for direct effects on beneficial uses will depend mainly upon the topography and location of proposed roads and harvest units in relation to stream channels and high landslide potential" (Ch 3, p. 18). TCS is concerned because the DEIS does not provide any plan for implementation monitoring to ensure that water quality will be protected and that any problems that arise will be corrected. With harvest proposed in high and very high MMI areas and with many stream crossings, it is critical that the Forest Service develop site specific implementation monitoring plans.

Issue 5: Recreation and Tourism:

Tourism is a non-extractive industry which can offer jobs over a long period of time. Its importance to the diversity and stability of the economy in southeast continues to increase.

Between 1989 and 1994, tourism increased in southeast Alaska by 43%, which in turn has increased business and job opportunities. Visitors to Misty Fjords has increased by at least 5 times between 1989 and 1993, from 12,000 to over 60,000 visitors. However, access to recreation and wildlands must be provided in the form of intact, healthy, scenic viewsheds which can offer opportunities for viewing wildlife, sport fishing, camping, hiking and photography. The unspoiled character of Alaska is vitally important to developing tourism and recreation opportunities. Clearcutting eliminates opportunities for high-quality tourism and recreation and business opportunities are lost. Many residents and visitors will avoid areas which have been clearcut.

As the DIES states, nearly all of the Carroll Creek drainage remains roadless except for the very southeastern portion adjacent to Carroll River estuary. The major portion meets the criteria for consideration as a wilderness area because of its intact natural integrity, high scenic quality primitive recreation opportunities” (Ch. 3, p. 284). TCS supports protecting future recreation and tourism opportunities by maintaining these areas with “SPNM” and “P” ROS classes. At the very least, it is important to maintain the view sheds from the popular recreation areas such as Carroll Inlet and Neets Bay.

Issue 6: Wild and Scenic Rivers:

The DEIS states that in the TLMP SDEIS, Carroll Creek and Neets Creek “were determined not to contain outstandingly remarkable values representative of the resource or geographic province.” The DEIS should not rely on an incomplete, draft study for it’s findings relating to Wild and Scenic Rivers. As the DEIS states, Carroll Creek has 2.5 miles of anadromous habitat and supports spawning king salmon. Further, because “nearly all of the Carroll Creek drainage remains roadless ... major portion meets the criteria for consideration as a wilderness area because of its intact natural integrity, high scenic quality and high quality primitive recreation opportunities” (Ch. 3, p. 284), it has important recreation uses. The DEIS should explore the possibilities for Wild and Scenic designation further.

Issue 7: Small Business Opportunities:

Because the Carroll Inlet project area is mostly outside the Primary Sale Area, it is an important opportunity for the Forest Service to support local, independent operators. TCS believes that the Forest Service should support and facilitate changes in the timber industry to increase the level of processing done locally through value-added processing. It is important for continued community stability, as pointed out in the DEIS “value-added opportunities such as the further processing of wood products ... could be used to supplement community employment in association with expanding existing natural resource-based industries such as tourism and sport fishing” (Ch.3, p. 224). With growing demands on the resource, more jobs need to be created from less timber.

Issue 8: Tye-Swan Lake Intertie:

The Carroll Inlet DEIS states that the planning team determined that the Intertie project was likely to happen in the near future. Throughout the DEIS the effects of the future intertie line are discussed, but not in relation to road construction and transportation costs. As the DEIS points out, the main road proposed between Neets Bay and Carroll Inlet follows the proposed intertie corridor. TCS does not agree that the intertie is a “sure deal” and does not support

the Forest Service spending tax payer's money to facilitate the intertie project at this time. Any road building should only be done to the minimal levels necessary to support the project itself, and not to a higher standard for the proposed intertie project. It is questionable whether or not a road is even necessary for the intertie project.

In the section about the effects of the project on water quality, the DEIS states "construction of the Swan Lake-Tyee Lake power transmission line through the Upper Carroll Project Area will have no significant effect upon the water resources in the Area" (Ch.3, p. 21). This is presumptive statement with little basis. If the intertie project did include a road, it is likely that considerable road upgrading and maintenance, construction disturbance and stream crossings would be required before the logging roads would be usable for the intertie corridor, and such activities would likely have an effect on the water quality.

Issue 9: Air and Water Quality :

TCS believes that air and water quality pollution caused by the Ketchikan Pulp Company mill at Ward Cove is a serious threat to the health and well-being of Ketchikan area residents. The DEIS states, "the action alternatives would result in a continued supply of raw wood products to the Ketchikan Pulp Company mill at Ketchikan. This would indirectly affect air quality in the immediate area. It is KPC's responsibility to ensure that emissions from the mill are within legal limits" (Ch. 3, p. 10). Although we agree that emissions are the mill's legal responsibility, we also think the Forest Service has a moral and legal responsibility to the public to fully address and examine these effects. The mill has been cited for many water and air quality violations and was found guilty of felony charges relating to their pollution. The KPC mill has the highest releases of toxic chemicals in the entire state of Alaska. Air emissions from the KPC mill include many toxic chemicals, including sulfur dioxide, chloroform, chlorine, formaldehyde, carbon monoxide, hydrogen sulfide, nitrogen oxides and dioxins and furans.. Ward Cove is biologically dead and is on the state's list of harmed water bodies. Continued air and water quality pollution is a very direct effect of timber from this project going to the KPC mill and it has a very direct effect on the community.

Conclusion:

TCS, at this time, does not support any of the action alternatives fully because of the above stated reasons. TCS does not think any of the alternatives legally meet Forest Service obligations under TTRA, NEPA, ANILCA or NMFA. We appreciate the opportunity to comment on the DEIS for the Upper Carroll Timber Sale and we look forward to continuing to participate in the Carroll Inlet planning process.

Sincerely,

Tracy D. Smith, TCS Board of Directors



TY-MATT INC.

5216 BORCH STREET NORTH
P.O. BOX 8158 • KETCHIKAN, ALASKA 99901
BUS: (907) 225-7170 FAX: (907) 225-6118

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service Ketchikan
Federal Building
Ketchikan, Alaska 99901

Re: Upper Carroll Draft Impact Statement

Dear Brad;

As you know The timber in Southeast Alaska grows back faster, thicker and is less susceptible to forest fire than most anywhere else in the world. It also grows older faster and needs harvesting more than most other places in the world.


We can assist conservationists by letting them concentrate on saving the endangered forests of the world. They can help us by promoting harvest of the renewable resource here in Southeast Alaska. Every time a timber sale is released here it relieves pressure on forests somewhere else where it does not readily renew itself, if ever.

Please use Alternative five and add in the additional Helicopter units available from alternative 2. This seems to be the most economical and productive.

We believe contacting other entities involved in this area may lead to some road building that could be used for the good of all. Please look into this.

Our company depends on the continued operation of the forest industry. Without it the viability of all our operations is threatened. Please help everyone and use Alternative 5 and add in any other available timber.

Thank You


Lloyd Gossman

Ty-Matt Inc and Alaska Ship and Dry Dock.

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

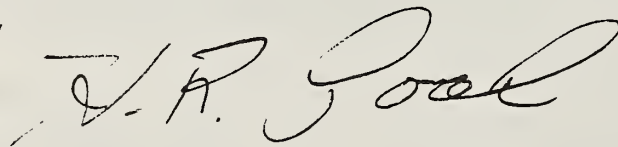
Dear Mr. Powell,

The Upper Carroll EIS is very important to me. I believe it is one of the most important areas for Ketchikan's future development. As you are aware, a proposed intertie between Swan Lake and Lake Tyee is underway. Also, there has been a good deal of talk regarding a road corridor from Ketchikan to Shelter Cove and from Shelter Cove to the Upper Carroll area.

I was happy to see the proposed road from Shelter Cove to Upper Carroll in the scoping documents. However, after seeing the DRAFT EIS for Upper Carroll, I see the Forest Service has decided not to address this issue in any of the alternatives. I believe this was short sighted and must be corrected in the Final EIS. The proposed LTF at Upper Carroll is in a poor location and will be very difficult to operate. The Forest Service should add an alternative which will analyze the environmental, economical and social impacts of hauling all of the Upper Carroll volume to the existing LTF at Shelter Cove.

These road ties will help to expand the recreational opportunities for the citizens in Ketchikan. Ketchikan has very few miles of roaded recreational access, and these tie roads will help expose people to the vast recreational opportunities which currently are out of their reach.

Sincerely,



3054 So. Tongass
Ketchikan

Phone 225-879

Forest Supervisor Ketchikan Area
Tongass National Forest
Attn: Upper Carroll EIS
Federal Building
Ketchikan, AK 99901
March 11, 1996

Mr Brad Powell,

A clear-cut forest makes money for one season and is gone for more than a century. Untouched forest is worth more alive than dead - it is cherished by visitors, provides habitat for wildlife, keeps fisheries thriving and subsistence resources healthy. It is worth more alive than dead. The diversity of our Tongass old-growth is unique to the world and to the U.S. The fishing industry is an important contributor to the Alaskan economy. My family was supported by commercial trolling for 12 years and Carroll Inlet was a significant source of fall and winter kings. It is close to town and protected from severe winter weather. The biggest trees in the forest protect, and are part of, important riparian habitat - essential to healthy fisheries.

We need to have a clearer long-range strategic plan for timber management. Short-term gain with massive clear-cuts and logging roads is causing irrevocable harm to biological diversity and essential habitats. NEPA is intended to give the public a voice in the planning process, but we don't seem to be able to alter the timber industry's control of forest practices. No matter how indefensible the proposed cut is, it seems the KPC contract is the only factor considered. TTRA modified the long-term contract. The supply of timber must still address wildlife protection, subsistence, habitat conservation and recreation - multiple uses of the forest.

I would like to see the Forest Service manage the Tongass on a 250 year rotation. By then the forest may be starting to exhibit old-growth characteristics.

I am very concerned that the Carroll Creek block in the project boundary does nothing to protect important estuary habitat. This is a great source of crab and is an area important to migratory waterfowl. Too much shoreline is within the project area. As a Herring Cove (S. Tongass Hwy.) resident, I have used Carroll Inlet for twenty years as an accessible area for boat recreation. I deplore the impact visually and to fish and wildlife habitat this project will have. As a commercial fisherman and former SSRAA boardmember my husband and myself are very much opposed to cutting in zone 7. The Neets Bay Hatchery is an important partner in maintaining a healthy SE salmon fishery.

As for the proposed utility corridor, this may never happen and should not. The Tyee Lake-Swan Lake Intertie is overpriced, will not begin to meet Ketchikan's future power demand, and would tie Ketchikan into a power line already plagued with many breakdowns due to substandard transmission lines. Tyee Lake is notorious for water supply problems in dry summers and winters and even when lake levels are adequate could only supply 4-5 megawatts. The intertie would entail the construction of 60 miles of transmission line at a cost that is projected to exceed \$90 million. The

Mahoney Lake project is a no-risk source of 11 megawatts of power with a transmission line of one mile if it ties in at White River or 5 miles if it follows George Inlet to Beaver Falls.

The project area falls too close to Naha and would cut off any wildlife corridor between this protected wilderness area and Misty Fjords wilderness. I'm glad to see protection extended to Orchard Lake, but I believe the cutting of zone 7 and zone 2 would cause too much fragmentation of the forest and the proposed roads would impact wildlife.

The road costs to connect the Shelter Cove road system seem exorbitant. As a federal taxpayer I strongly object to any possibility of cutting on the west side.

I urge you to choose Alternative 1 as the only choice that protects multiple-use of the area. Soils are very unstable in much of this area and proposed LTF's will threaten water quality.

Thank you for this opportunity to comment.

Sincerely,

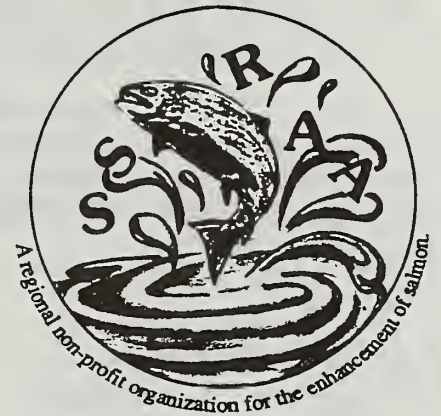
Debbie Gravel

7941 S. Tongass Hwy.

Ketchikan, AK 99901

Southern Southeast Regional Aquaculture Association, Inc.

221 Tongass Avenue
Ketchikan, Alaska 99901
Phone: (907) 225-9605
Fax: (907) 225-1348



Feb. 1, 1996

Forest Supervisor
Ketchikan Area
Tongass National Forest
Attn: Upper Carroll EIS
Federal Building
Ketchikan, Alaska 99901


We Have reviewed the "Upper Carroll Timber Sale EIS. We are extremely concerned with the selection of alternative 5 as the preferred alternative. As you are well aware we have objected to any entry or road building that has the potential to influence the water supply of the hatchery located at Neets Bay. Enclosed are copies of our previous objections. Please review these again since our concerns have not changed. Alternative 5 allows timber harvesting and road building in the very locations we have the most concern. Regardless of the 1995 studies presented in this EIS regarding soil stability we have documented the instability of soil in the area being proposed for timber activity. In 1988 a slide occurred naturally, that nearly wiped out the Neets Bay Hatchery production. We feel that any activity in the area will increase the probability of a major disaster for SSRAA to a level that is totally unacceptable. We urge you to eliminate the units and road building in Alternative 5 that we have pointed out in our previous letters.

We would also like to point out that on page 218 of Volume 1 a misleading statement is made about SSRAA, "should harvest in Neets Bay area occur, and a road connection to a LTF in shrimp Bay be constructed, access to SSRAA Shrimp Bay activities could be enhanced". We pointed out in our Feb 3 1993 letter that SSRAA had little interest at that time in a road connection to Neets Bay. Since then all Shrimp Bay releases have been terminated, any potential enhancement for SSRAA activities resulting from a road connection are gone. We feel the potential hazard with road building in the area that could impact the Neets Bay Water supply is high enough that we strongly oppose such development.

In chapter 3 of the EIS the watershed analysis specifically states there is a higher risk for sediment production for Neets Bay water supply in Alternative 5. We feel the risk is greater than what is documented since slide events occur without any activity in the area. We feel the risk will be dramatically increased with the proposed activity. One sedimentation event caused by these activities in the area has the potential to completely wipe out the benefits SSRAA has been making over the past 20 years to a struggling fishery industry.

Please reconsider your selection of Alternative 5 as the preferred alternative or modify it such that timber activity that we have identified as risk to our water supply are eliminated.

Thank you


Gary Freitag
R&E Manager

Here are my scoping comments for the Upper Carroll EIS:
Due by October 28, 1994

Please complete the other side before sending in your comments.

If you have no comments at this time but wish to remain on the Upper Carroll mailing list, be sure to return this form with the other side legibly filled out. **IF WE DO NOT HEAR FROM YOU AT THIS TIME, YOUR NAME WILL BE REMOVED FROM THE UPPER CARROLL MAILING LIST.**

Forest Supervisor
Tongass National Forest
Federal Building
Attn: UPPER CARROLL EIS
Ketchikan , Ak 99901

We have reviewed the proposed timber sale in the Upper Carroll Project. Enclosed is a copy of our February 3 1993 letter which involved our review of North Revilla Project . It outlines our concerns about timber harvesting in the water shed that provides the Neets Bay water supply and saltwater rearing facilities. It also describes the unstable sediments in the uplands of this area. Our concerns for some of the units in the Upper Carroll plan are the same. Neets bay hatchery is vital to SSRAA's operation and provides significant benefits to the fishing and recreational industry of all of Southeastern Alaska.

We strongly oppose any timber harvesting or road building that even remotely may negatively impact the water shed that supplies the facility and saltwater rearing facilities. This includes all units within VCU # 737 and potentially #733. We strongly recommend the elimination of this timber harvesting and road building or upgrades in these VCUs as part of the project. The fish culture at the Neets Bay facility is at maximum production (over 100 million salmon fry) , and any one event that alters the water quality (such as minor increases in sedimentation loads) would be devastating to the production (see discussion under Alternative 2 ,Feb 3 1993 letter). The annual revenue from the Neets program to all fisheries and SSRAA exceeds 7 million dollars. Surely this long term benefit exceeds the value from the short term benefit from the rotational harvesting of the timber from these units.

SSRAA requests the elimination of timber activities from the proposed sale in the above units to protect the Neets Bay water supply and salt water rearing environment.

Sincerely

Gary Freitag
R&E manager

Please complete the other side, and mail to: Forest Supervisor, Tongass National Forest, Ketchikan Area, Federal Building,
Ketchikan, AK 99901 Phone or FAX: Telephone: (907) 225-3101; FAX: (907) 225-5626

Southern Southeast Regional Aquaculture Association, Inc.

2721 Tongass Avenue
Ketchikan, Alaska 99901
Phone: (907) 225-9605
Fax: (907) 225-1348



February 3, 1993

David Arrasmith, IDT Planning Staff Officer
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Arrasmith:

We have reviewed the Draft Environmental Impact Statement for the Ketchikan Pulp Company Long Term Timber Sale Contract for the North Revilla Project Area.

First we have a comment on a statement made in Volume 1, Chapter 3, page 189. Under Employment and Income: it is stated that SSRAA has expressed interest in a road connection to Shrimp Bay. Although if a road connection was made between Neets Bay and Shrimp Bay we would show interest in using it, we feel the benefit would be very minor to our operations. Cost recovery will not be enhanced by such a road and the safety issue is not appropriate since medical help is in Ketchikan not at Neets Bay. In the event of an accident help will most likely be flown in from Ketchikan directly. In light of the alternatives that allow for such road construction the risk to SSRAA's Neets Bay facility is high enough that we can not be in favor of the three alternatives that result in the Shrimp Bay-Neets Bay road construction.

The following are comments on the Alternatives:

Alternative 1

We would have no objection to the "No Action" alternative, primary concern is to protect SSRAA's current program from activities that have the potential to negatively impact them.

Alternative 2

We are opposed to Alternative 2, Unit Numbers 7022-7037 all fall in the water shed that potentially could influence SSRAA's program.

February 3, 1993

Page 2

In the past we've experienced a land slide which entered Bluff Lake and caused a loss of fish production. The unit cards for these units verify our experience that there is an abundance of unstable, over-steepened slopes making road construction and timber activity very dangerous to the integrity of the water supply to the facility. Reports from personnel working at Neets Bay indicate that soil composition could be more unstable than reported in the unit cards for many of the units in the alternative. We feel that physical and financial risk to SSRAA and the users of the resource is too high for any timber activities to occur in the drainage of the water supply of the hatchery. SSRAA currently produces on an annual basis 63.5 million salmon which is estimated at current market level \$1.6 million of revenue to SSRAA and \$5.4 million to the commercial fishermen. Since the natural sedimentation in the water supply is marginal for our facility, even relatively minor increases in sediment will be devastating to the program. The single natural slide that occurred in 1988 resulted in the loss of 50% of the fry which would have returned over 3.0 million dollars of value to the users of the resource. Sport fishermen were also impacted since the reduction in production reduced the availability of king and coho salmon in the West Behm Canal fisheries. The sport charter fleets in West Behm have expanded dramatically since SSRAA began its program in Neets Bay.

Road development which would occur if timber harvest developed in the Neets Bay drainage would also be considered a significant risk. The pipeline that supplies the hatchery passes under the existing path in two areas. This is the corridor suggested by the alternatives with operations in the Neets Bay drainage. SSRAA recently has spent over \$380,000 repairing the pipeline. Log truck activity would jeopardize the integrity of the pipeline. Approximately 50% of the hatchery water supply comes from the creek which passes alongside the road. The increases in road improvement and activity would devastate the hatchery with increased sedimentation loads being injected into the stream. In addition to the potential impacts to the fish production we also share the concern pointed out in Appendix G, page 29. The road construction and use would result in truck traffic through hatchery residential area that would expose employees and their families to relatively hazardous situation. In addition, the tourism industry is expressing an interest in using Neets Bay Hatchery as an attraction. The activities proposed in this alternative would be considered disruptive to that potential.

Alternative 3

SSRAA has less concern with this alternative since it eliminates the majority of timber activity in the Neets Bay Hatchery watershed. We do have a concern with units 7049, 7048, 7016, 7020, and 7050 since we have information that indicates drainage in the area of these units enters Neets Lake or Neets Creek. We are opposed to the harvest of these units for similar reasons expressed in Alternative 2. We have no objection to Alternative 3 if these units are eliminated from the plan.

Alternative 4

We are opposed to Alternative 4 for the same reason expressed in Alternative 2. Units 7094, 7030, 7093, 7031 are of special concern due to their location in areas of steep terrain and unstable soil. The potential for landslide is great enough that the risk is unacceptable. We again have the same road concern expressed in Alternative 2.

Alternative 5

We are opposed to Alternative 5 for the same concerns expressed for Alternative 2 and 4. Units 7063-7074, 7025, 7028-7032, 7034 all suffer from the same potential slide danger as the others in this drainage area. The road problems are again present in this alternative.

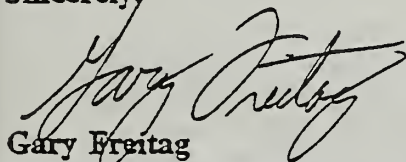
Alternative 6

SSRAA has the same concern with Alternative 6 as it does with Alternative 3. The units of concern are 7051, 7052, 7048, 7016, 7020, 7050. We have no objection if these units are eliminated from the plan.

Summary

Alternative 1, 3 and 6 with the suggested modifications meet SSRAA's needs to protect the Neets Bay Hatchery program from potential negative impacts. Even with the current state of the art timber practices no guarantees can be made that the timber activity will not result in a negative impact to the hatchery program. This program is vital to SSRAA's survival, as well as millions of dollars to the commercial fishing industry. As a result we strongly oppose Alternatives 2, 4 and 5 because of their activities in the immediate vicinity of the hatchery and the watershed it is dependent on.

Sincerely,



Gary Freitag
Research and Evaluation Manager



DEPARTMENT OF THE ARMY
 U.S. ARMY ENGINEER DISTRICT, ALASKA
 P.O. BOX 898
 ANCHORAGE, ALASKA 99506-0898

USDA FOREST SERVICES
 KETCHIKAN AREA
RECEIVED
 FEB 5 '96
 FOREST SUPERVISORS OFFICE

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REPLY TO
 ATTENTION OF:

Regulatory Branch
 East Section
 9-960036

JAN 30 1996

Mr. Bradley E. Powell
 Forest Supervisor, Ketchikan Area
 Tongass National Forest
 Federal Building
 Ketchikan, Alaska 99901-9999

Ref: Upper Carroll Environmental Impact Statement

Dear Mr. Powell:

This is in response to the January, 1996, Upper Carroll Timber Sale Draft Environmental Impact Statement (DEIS), which provides information concerning proposed timber harvest activities and road construction within the upper reach of Carroll Inlet on Revillagigedo Island, approximately 30 air miles northeast of Ketchikan, Alaska.

Based on information contained in the DEIS, we concur with your determination that wetlands and waters which are under the Corps of Engineers' (Corps) regulatory jurisdiction occur within the project area. The Corps' regulatory authorities that relate to timber harvest operations, are based on two laws. Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403) prohibits the obstruction or alteration of navigable waters of the United States (U.S.) without a permit from the Corps. In addition, Section 404 of the Clean Water Act (CWA) (USC 1344) prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a Department of the Army permit.

Wetlands are defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include "muskegs", forested swamps, marshes, bogs, and similar areas. Excluding the no action alternative, the DEIS summary indicates that the construction of a cumulative 37.5 miles of additional logging roads would directly impact approximately 337.5 acres of wetlands. Logging road construction would also necessitate 43 stream crossings. The logging roads would provide access to upland timber and 1,052 acres of wetland timber which would be harvested under this proposal by the year 2004, regardless of which alternative is implemented at this time.

The construction or maintenance of forest roads is exempt from regulation under Section 404 of CWA, where such roads are constructed and maintained in accordance with Best Management Practices (BMPs) listed at 33 CFR 323.4(a)(6) to assure that flow and circulation patterns and chemical and biological characteristics of waters of the U.S. are not impaired, that the reach of waters of the U.S., including wetlands, is not reduced, and that any adverse effect on the aquatic environment is otherwise minimized. A copy of the mandatory BMPs is enclosed with this letter. Your attention is particularly directed to BMPs (i) through (viii).

The DEIS indicates that the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual was used to determine a site's wetland status and classified using the U.S. Fish and Wildlife Service's classification system. It was also stated in the DEIS that the data for proposed roads and units on wetlands were derived using the Ketchikan Area Geographic Information System (GIS) data base. However, the DEIS does not provide specific information concerning the geographic location of wetlands within the study area, which would be required in order to demonstrate avoidance and minimization of impacts to wetlands as required by the BMPs. In this regard, we would appreciate a copy of the wetland delineation mapping prepared for this project, including field notes. This mapping would facilitate our review and determination of permit requirements.

Volume 1, Chapter 3 of the DEIS indicates that the projected road construction impacts to wetlands are based on a 75' disturbed road corridor. Based on the information we have, it is our determination that this design would not meet the BMP requirements (i) and (ii). Additionally, it was noted in the DEIS that wetland areas that do not support commercial or economic stands of timber will not be harvested, "but may be affected by yarding operations within the unit." Depending on the method by which these yarding operations are conducted, a permit may be required. Site specific information detailing the planned yarding operations should be submitted to this office for the necessary jurisdictional determination and, if necessary, the required authorization.

The DEIS also states that that culverts and permeable subgrade materials would be required when roads cross wetlands in order to maintain water circulation and minimize changes in hydrologic conditions. The Corps of Engineers and the U.S. Forest Service are jointly evaluating the effect of overlay road construction to wetland hydrology near Wrangell, Alaska. In that regard, we would appreciate copies of any reports or hydrological studies supporting the conclusion that the use of permeable subgrade material avoids restricting the natural movement of water.

Please be aware that the forest road exemption applies only to roads which would be used solely for normal silvicultural activities, (after demonstrating compliance with the BMPs), such as harvesting of trees. Any forest roads which would be constructed to also provide recreational access would not be exempt from 404 requirements. In this regard, those roads, if any, that would not meet the silviculture exemption or the BMP requirements, would require Corps of Engineers authorization by issuance of a permit.

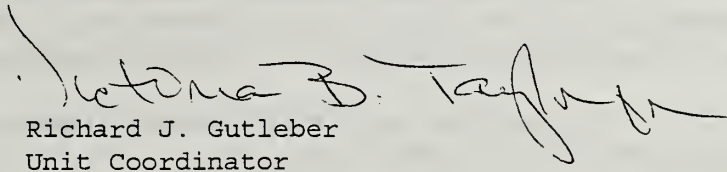
Additionally, construction of new road segments is expected to generate material which requires disposal. Disposal sites in areas subject to Corps jurisdiction are not exempt and would require 404 authorization prior to the disposal activity, or alternatively, disposal in uplands.

The DEIS states that a new log transfer facility (LTF) will have to be constructed. In addition to requiring the Corps' authorization, pursuant to both Section 10 of the RHA and Section 404 of the CWA, LTFs also require an U.S. Environmental Protection Agency, National Pollutant Discharge Elimination System (NPDES) permit under Section 402 of the CWA. As specific details become available regarding the placement and construction of the proposed LTF, please provide this office with this information for a determination of jurisdiction and, if necessary, the appropriate authorization.

Minimizing impacts to waters of the U.S., including wetlands, should be incorporated into your review and design of alternatives with regard to meeting the BMPs and for those components which would require individual 404 and 10 authorizations. Corps permits are issued only for projects which clearly demonstrate compliance with the CWA Section 404(b)(1) guidelines. Those guidelines state that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, as long as the alternative does not have other significant adverse environmental consequences. In those cases where the activity associated with a discharge is proposed for a "special aquatic site", such as wetlands, practicable alternatives are presumed to exist unless clearly demonstrated otherwise. It is the applicant's responsibility to rebut that presumption, when appropriate, by providing a detailed and verifiable discussion of alternatives for our consideration. An alternative is considered practicable if it is available and capable of being accomplished after taking into consideration costs, existing technology, and logistics in light of overall project purpose.

We appreciate your request for comments concerning this proposal. We are available for further discussion of our comments and encourage you to contact us at your earliest convenience in light of your need to proceed with your project plans. Please refer to file number 9-960036 in future correspondence or if you have any questions concerning our requirements. You may contact me at the letterhead address ATTN: CENPA-CO-R-E, by telephone at (907) 753-2720, toll free within Alaska at (800) 478-2712, or by FAX at (907) 753-5567.

Sincerely,



Richard J. Gutleber
Unit Coordinator

Enclosure

(a)(6) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained in accordance with best management practices (BMPs) to assure that flow and circulation patterns and chemical and biological characteristics of waters of the United States are not impaired, that the reach of the waters of the United States is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized. These BMPs which must be applied to satisfy this provision shall include those detailed BMPs described in the state's approved program description pursuant to the requirements of 40 CFR Part 233.22(i), and shall also include the following baseline provisions:

(a)(6)(i) Permanent roads (for farming or forestry activities), temporary access roads (for mining, forestry, or farm purposes) and skid trails (for logging) in waters of the U.S. shall be held to the minimum feasible number, width, and total length consistent with the purpose of specific farming, silvicultural or mining operations, and local topographic and climatic conditions;

(a)(6)(ii) All roads, temporary or permanent, shall be located sufficiently far from streams or other water bodies (except for portions of such roads which must cross water bodies) to minimize discharges of dredged or fill material into waters of the U.S.;

(a)(6)(iii) The road fill shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flows;

(a)(6)(iv) The fill shall be properly stabilized and maintained during and following construction to prevent erosion;

(a)(6)(v) Discharges of dredged or fill material into waters of the United States to construct a road fill shall be made in a manner that minimizes the encroachment of trucks, tractors, bulldozers, or other heavy equipment within waters of the United States (including adjacent wetlands) that lie outside the lateral boundaries of the fill itself;

(a)(6)(vi) In designing, constructing, and maintaining roads, vegetative disturbance in the waters of the U.S. shall be kept to a minimum;

(a)(6)(vii) The design, construction and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body;

(a)(6)(viii) Borrow material shall be taken from upland sources whenever feasible;

(a)(6)(ix) The discharge shall not take, or jeopardize the continued existence of, a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species;

(a)(6)(x) Discharges into breeding and nesting areas for migratory waterfowl, spawning areas, and wetlands shall be avoided if practical alternatives exist;

(a)(6)(xi) The discharge shall not be located in the proximity of a public water supply intake;

(a)(6)(xii) The discharge shall not occur in areas of concentrated shellfish production;

(a)(6)(xiii) The discharge shall not occur in a component of the National Wild and Scenic River System;

(a)(6)(xiv) The discharge of material shall consist of suitable material free from toxic pollutants in toxic amounts; and

(a)(6)(xv) All temporary fills shall be removed in their entirety and the area restored to its original elevation.

~323.4(b)

If any discharge of dredged or fill material resulting from the activities listed in paragraphs (a)(1)-(6) of this section contains any toxic pollutant listed under section 307 of the CWA such discharge shall be subject to any applicable toxic effluent standard or prohibition, and shall require a Section 404 permit.

Copies Furnished:

Ms. Amy Crook
Alaska Department of Environmental
Conservation, Region I
410 Willoughby Avenue, Suite 105
Juneau, Alaska 99801-1795

Commander (oan)
17th Coast Guard District
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Juneau, Alaska 99802-5517

Ms. Lana Shea
Regional Habitat Division
Alaska Department of Fish and Game
Post Office Box 20
Douglas, Alaska 99824-0020

Ms. Lorraine Marshall
Office of Management and Budget
Division of Governmental Coordination
Post Office Box 110030
Juneau, Alaska 99811-0030

Environmental Protection Agency
222 West Seventh Avenue, # 19
Anchorage, Alaska 99513-7588

Mr. Nevin D. Holmberg
Field Supervisor
U.S. Fish and Wildlife Service
Ecological Service/Juneau
3000 Vintage Park Boulevard, Suite 201
Juneau, Alaska 99801-7100

Dr. Steven T. Zimmerman
Chief, Protected Resources
Management Division
National Marine Fisheries Service
Post Office Box 2-1668
Juneau, Alaska 99802-1668

Mr. Andrew W. Pekovich
Alaska Department of Natural Resources
Southeast Regional Office
400 Willoughby Avenue, Suite 400
Juneau, Alaska 99811-1724

Ms. Judith Bittner
Alaska Department of Natural Resources
State Historic Preservation Office
3601 C Street, Suite 1278
Anchorage, Alaska 99503-5921

March 6, 1996

Forest Supervisor
Ketchikan Area - Tongass National Forest
Attn: Upper Carroll EIS
Federal Building
Ketchikan, Alaska 99901

I would like to voice my support for the timber harvest of the Upper Carroll Inlet area. The way things have been going for the timber industry strongly indicates that the timber should be made available for harvest. As it stands now, there have been so many delays and roadblocks for the timber industry that people's jobs are in jeopardy. The sale would help boost the economy of the Ketchikan area by providing jobs not only of harvesting the timber but for building roads, for transportation to and from the area, for providing supplies and for the many support functions involved in such a process. The wages of all these workers not only help to maintain families but also bolster the economy of our community as a whole.

Additionally, the roads built during the process are a great benefit to the community because they provide access to expanded recreation areas for all the citizens of Southeast Alaska. The city of Ketchikan also sees the harvest as a good thing because the new road system can help them in their pursuit of a much needed power expansion for their citizens.

I read in the paper where this harvest would provide jobs for 116 people - that means 116 families. Families require a lot of services from the community and are what help build a community and keep it functioning and healthy. I also feel that the big picture has to be looked at - what percent of the Tongass National Forest are we talking about here - less than one percent? I think all the issues have to be weighed and that the future of people and their families have to be included in the equation.

I not only support the timber industry - I also support the well-being of our community as a whole and feel this this timber harvest should be allowed to proceed.

Sincerely,



Cecelia L. Lewis
3338 First Street
Ketchikan, Alaska 99901

cc: Ketchikan Gateway Borough

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

I want to take just a moment and thank you for allowing me an opportunity to comment on the Upper Carroll Draft EIS. I live in the Ketchikan area and will be effected by the proposed activities.

My family is supported by the timber industry. I believe the timber industry is a key part of the economy for Ketchikan and Southeast Alaska. I enjoy the hearty outdoor lifestyle which is so common in Southeast Alaska; hunting and fishing are very important to me.

I would like to see the Forest Service provide the most economical timber possible to the timber industry. I want to see the forest developed so that I can enjoy its resources with my family. I don't think the Forest Service should place special restrictions on species which are not threatened or endangered. The Forest Service should honor the commitments it has made to the timber industry.

Specifically, I believe Alternative 5, with the units added from Alternative 2 that are in VCU 737 and could be helicopter logged, will make the best economical timber sale possible.

Thank you again.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jack Romine".

Forest Supervisor
Ketchikan Area
Tongass National Forest
Attn.: Upper Carroll EIS
Federal Building
Ketchikan, AK 99901

March 7, 1996

The issues "considered but eliminated from detailed study because their resolution is beyond the scope of this document" are the issues I have most concern with because ANY activity in the project area impacts resolution of those eliminated issues.

1-22: When you say "There is no direction or intent to establish a sustainable level of harvest for individual project areas or small geographic subdivision of the forest," I get the impression that because each project does not have to be managed sustainably, the whole 1.7 million acres of available CFL in the Tongass does not have to be managed sustainably. Will the sustainability buck be passed on until sustainability becomes unattainable?

We cannot create an EIS of the scope of this one without creating a taxpayer need to recoup that money through timber receipts or some other "bang for the buck." This places the taxpayer in the position of needing to choose some "action" alternative that makes money. "No action" is not an alternative. Perhaps Environmental Impact Statements should come under the heading: Irreversible Commitments of Resources, (3-346).

Since some parts of the world no longer allow the cutting of certain valuable species of living trees, perhaps an alternative should be developed that harvests only dead or down timber or that selectively harvests at a rate no greater than the current average annual growth rate of wood fiber on each acre, five acres, or whatever appropriate increment that promotes the closest approximation to a historic mix of species, volume, and wood quality.

The Long-Term Contract dictates an onerous situation wherein any timberlands from this sale area not dedicated to tree plantation status will have to come from, and contribute to plantation status, of some other part of the contract area. Which place do we least want to have "nuked"? Is this sound, orderly management, or merely orderly destruction? Will we ever have management that eliminates the condition wherein people must rush to see an area in its relatively untouched state because that area is very soon to be profoundly and irreversibly changed? Under the apparent interpretation of the Long-Term Contract we cannot select any alternative without profoundly influencing timber harvests in other parts of the Tongass, for example, Control Lake, North Revilla, North Kuiu, Cleveland Peninsula, Polk Inlet, or even ANCSA timberlands.

The socio-economics of population pressure seems to dictate we either convert virgin old-growth stands into even-aged tree plantations or find some other equally lucrative way of extracting money from that land. So we get the so-called clean industries, e.g. ecotourism, but I wonder if grand scale will bring about the demise of those industries also.

Will law enforcement agencies be able to effectively curb tree theft if legal access to timber is denied? How will increased road access affect tree theft or subsistence abuse?

We cannot place 26 to 65 miles of new road within a proposed major road corridor without creating some incentive to develop that corridor into a link for an off-island road, lengthy powerline interties, or more road-accessed recreation or subsistence use.

The public, including long-time residents, are being asked to make some important land use decisions about places most people have never seen from afar much less set foot upon. And most of those decisions will profoundly alter the landscape and subsequent land use.

2-44: Is the ban on approaching marine mammals enforceable?

1-20: It appears to me that Native Corporations weren't particularly worried about whether the Long-Term Contract holder had enough wood to keep its mill operating and providing jobs for the local communities. If the USFS can remain above that debate, why should it be the least concerned about road or utility corridors, or, (3-177), with a timber industry that has evolved into using high volumes of lower quality wood fiber?

3-177: Are there hemlock dependent species, and what becomes of them if more spruce is regenerated? Are we phasing out hemlock pulp logs in favor of spruce? What is the future of pulp? Will it be replaced by hemp or kenaf? Are there any redeeming qualities of dwarf mistletoe?

3-177: If I have a market for the kind of high volume top grade logs found in old growth stands, it appears the USFS is telling me and my market that in the future we'll either have to take only dead and down trees of that type from someplace outside the project area, or none at all.

It's interesting that paragraph 3, 3-177 states "log quality in second-growth stands is expected to be lower than in existing overmature stands" while Ketchikan Pulp Company's Troy Reinhart states "no wood quality is lost in second growth forests," (Ketchikan Daily News, 12/7/95, Letter to the Editor).

3-179: Will a sufficient percentage of those created snags fall into the streams to create LWD? Do Knutson-Vandenburg funds pay for such projects?

3-190: Why eagle buffers and no buffers for other birds, e.g. grouse, murrelets, swans, or even the state bird, ptarmigan? Will this cause an imbalance in bird populations, or between food chains that include eagles and food chains that do not?

3-155: Clearcutting eliminates risk of blowdown in residual stands? No logging damage to adjacent standing timber?

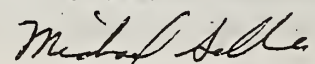
LTFs: I recently tallied about 25MBF of recently deposited pulp grade logs on a four mile stretch of beach on the north end of Gravina Island. Perhaps forms of transport should be considered that preclude log loss enroute to the mills or other destinations. Perhaps these trees are better off left, growing, in the woods.

3-226: Subsistence: It seems to me that subsistence is inextricably tied to the tools people have available to them. The instant you employ a modern firearm, or step onto a machine that burns non-renewable fuel, or use products produced by modern mass production and space-age technology you've diluted the customary and traditional criteria. In using these tools it's often only a matter of time before a resource falls prey to the over-exploitation of a populace living beyond its means and the land's carrying capacity. The tool has dictated what is customary and traditional. Space-age tools, technology, and access demand a change in customs and traditions. For many people that change is being forced upon them too heavily.

3-253: I would like to think that a 500' beach fringe would take care of all subsistence needs, but I don't think it does.

3-196, -198, -217, -219, -221, -222: Has falldown been factored into the projected profits?

Sincerely,
Mike Sallee



March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

Once again the opportunity to comment on a vital component of the timber industries base needs has arrived. I sincerely hope that my comments will be taken down and added to those who favor timber harvest and road building.

I am sick and tired of the crap that is being pulled by the environmental extremists in the White House. I am supported by the timber industry and depend on it to provide me with the basic needs of life. Lately, I feel threatened and attacked every time I read anything the Forest Service is proposing to do in the Tongass to help those who have been whining for "balance".

Take this Draft EIS for example. You have proposed Alternative 5 as the preferred alternative. It really isn't and you know it. Alternative 5 could be a much better alternative by making a few minor changes. For example, add the units in VCU 737 which could be helicopter logged to either Neets Bay or the existing road system and hauled to Shrimp Bay. Get rid of the unit 92 and make up that volume with another unit in the Shelter Cove area.

Stop putting the needs of people after the needs of fish and wildlife. People are important and jobs are vital to our communities. Anything that can be done to provide more jobs and opportunity for people; that's what I want to see done.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce A. Hamer". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

K.A. SWIGER

D.C. CUISINE
515 Front Street
Ketchikan, Alaska 99901

Telephone 907 225-1177
Fax 907 225-1177

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

March 1, 1996

Attn: Upper Carroll EIS

Dear Mr. Powell,

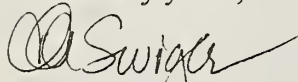
I have reviewed the Upper Carroll Timber Sale Draft Environmental Impact Statement, and wish to comment on the selection of alternatives.

As a resident of the Ketchikan community and a participant in the Ketchikan economy, I am most concerned with the economics and long range benefits of this timber sale. The Forest Service preferred alternative is Alternative 5. Assessing all of the alternatives, I do not see a substantial difference between Alternative 2 and Alternative 5. Alternative 2 harvests 11 MMBF more than Alternative 5, and therefore the numbers of acres, units, roads, etc will be greater, but in comparison, not by that much. I believe the number of jobs created by Alternative 2, and the long range benefits from road connections to Neets Bay, and Shrimp Bay as well as the utility corridor warrant a reconsideration by the Forest Service for this Alternative.

The timber industry in Southeast Alaska is in dire need of a wood supply. I therefore would like to go on record in support of Alternative 2, and I appeal to the Forest Service to reconsider their original selection. Again, the long range benefits of Alternative 2 far outweigh the negatives.

Thank you for the opportunity to comment.

Sincerely yours,


K.A. Swiger

K

J

C

Ketchikan Indian Corporation
(IRA Council)

429 DEERMOUNT AVENUE
 KETCHIKAN, ALASKA 99901
 (907) 225-5158
 FAX (907) 247-0429

January 18, 1995

Forest Supervisor
 Tongass National Forest
 Federal Building
 ATTN: Upper Carrol EIS
 Ketchikan, AK 99901

To whom it may concern:


I am writing to express some concerns that I have regarding the proposed logging in the Upper Carrol Project. This activity will occur in a very fragile environment that supports a variety of fish and animals that are of vital importance to native subsistence users. The intertidal area with its extensive mudflats and rich salt marsh extends a great distance up Carrol River. This rare wetland area is vital for early rearing of one of the few remaining natural Summer Chum Salmon runs in the region. Carrol River is host to Steelhead, King Salmon, Pink Salmon, Chum Salmon, and Coho Salmon. In some years the fish returning to this stream number into the hundreds of thousands. Many of our members are commercial fishermen who would be adversely impacted by the effects of logging upon the fish habitat. It is also a nesting area for migratory water fowl. Bears, wolves and eagles frequent this area when fish are abundant. This area is close enough to Ketchikan for our people to have access by small boat.

I feel that roadbuilding and logging in such close proximity to the river and surrounding river bottom will permanently degrade the water quality, and temperature profile in this area. There is a likelihood that siltation will damage the spawning grounds. Further more allowing road access to this area will allow for much more intense human impact to what was previously a semi-remote area. I question the wisdom of building this road along the East shore of Carrol Inlet, the North shore of Bluff Lake, and the North Shore of Neets Bay. These areas are also fragile and productive components of the wetland environment. The roadway along the North shore of Bluff Lake runs through an area where logging induced mudslides have already degraded the water quality to the detriment of the Neets Bay Hatchery.

We oppose the Upper Carrol Project on the grounds that it will adversely impact many areas. Soil and water resources support the anadromous fish habitat and habitat for wildlife. In turn we require this habitat for our subsistence and spiritual needs. Healthy thriving wildlife populations were always and should remain part of our culture.

Sincerely,

KETCHIKAN INDIAN CORPORATION



Corrine Garza
 General Manager

Lab Bay, Control Lake, Polk Inlet, etc. Timber supply is the subject of a current administrative appeal and likely will be before the Courts again. To dismiss it as a non-significant issue is nonresponsive and wholly without precedence.

Timber supply

It is interesting to note that the Purpose and Need for Upper Carrol was established at 70 mmbf, yet the max timber alternative states that only 72 mmbf is even available for logging within the project area. And that 72 mmbf is before falldown (20 - 70%, depending on whom you believe, eh?) and at a loss of -\$87/mmbf. One of your lead planners wrote in a July 1994 white paper that Upper Carrol would only log 20 mmbf of the targeted volume because of land selections, goshawk nests, and economics. I would say that makes timber supply a decidedly significant issue.

The graphics on pp 3-186 and 187 are helpful, but they make the mistake of equating suitable lands with operable lands (other than the obvious omission of previously logged or encumbered areas). That equation has never been proven on any of our National Forests (see October 1994 GAO Report "Factors Affecting Timber Sales in Five National Forests") and is particularly untrue of the Tongass.

Let me be very clear where I'm coming from on this issue. When TLMP establishes a timber base and subsequent ASQ, all kinds of wheels are set in motion. The public, timber industry, Alaska's congressmen, and certain USFS planners equate ASQ with timber coming out of the pipeline -- despite the Forest Service's disclaimer that ASQ is just a ceiling. And a very, very high ceiling, I might add. This is so much the case that the new TLMP Revision (would this be TLMP-duh?) could well be shortened to read:

TLMP 1996

ASQ = xxx

The End

When timber planners try to design units from the TLMP timber base within a given project area, they come way short of what TLMP predicts. Layout foresters come up short when they try to tag the planned units on the ground. And so on. It's like trying to pack ice across the desert -- there's a heckuva lot less at the end than there was at the beginning! Project EIS's need to clearly show this progression. I think this falls under the category of 'open disclosure' or perhaps 'Forest Plan validation monitoring'. Specifically, the FEIS should display how many project area acres of tentatively suitable-available TLMP predicted, how many acres of units the LSTA/MELP/whatever found within this tent suitable-available, and how many acres are expected to be operationally and economically viable. The public needs this information, and this DEIS is remiss in providing it.

Primary sale area

On pp 5 of the Summary there is the statement that the Polk Inlet project will be the first long-term contract offering outside the primary sale area. Boy is that statement off base!. What about all the old-timey logging on the outside islands, 1989-94 offerings on Heceta, Polk, 12 Mile, Honker Divide, etc., Sumez, Shelter Cove, Frosty, Starfish, and God knows what, where, or how much else?

Fisheries

The Deer Mountain Hatchery manager, SSARA research manager, and Neets Bay Hatchery manager have all gone on record as opposing this sale. As a commercial fisherman, this scares the hell out of me. The colored map provided shows a plethora of units adjacent to fish streams and roads' parallelling/crossing streams (particularly the arterial road up the gut of the Carroll River valley) -- this also scares the hell out of me.

I call your attention to unit 737-93 which proposes to yard timber through both sides of a fish buffer with a running skyline system. Please drop the portion of the unit across the stream. In my scoping comments, I opposed harvest in the entirety of VCU 737 which would haul to the LTF at Shrimp Bay (thank you for listening to me in your preferred Altn 5). In studying the colored map, I feel units 744-1, -18, and -90 (west side of head of Carroll Inlet) should be dropped, as well as unit 744-49 and EVERYTHING north. The potential impact to anadromous fisheries, which are my life blood, from sediment, increased solar insolation, or (God forbid) a 100-year windstorm are simply too great. I would like to see this proposal considered in detail in the FEIS in response to my request for a 10 mmbf "Fishermen's Alternative".

I take umbrage with the statement on pp 3-341 that logging operations do not conflict with commercial fisheries. Whoever wrote that bit about "...some difficulty maneuvering around log rafts or moored barges..." has never tried to perform that little trick in a gale in the dark. While I think most tug boat captains are very conscientious, I know fellow fishermen who have lost gear which has been overrun by tugs' towing barges. I also have lost gear in the vicinity of tug boat operations but am uncertain of the cause. The best anchorage in Neets Bay is unuseable because of sunken debris from the old logging camp. I personally have twice had my anchor fouled with old sunken logging cables which the old camp failed to remove. The shaft and fluke of my anchor are still bent, if you want to come down to my boat for "formal documentation".

Visuals

Maybe the trollers fishing the Carroll River terminal kings don't mind how the proposal will change the visual landscape, but I sure don't like want to see any more degradation of the eastern Neets Bay viewshed. Another reason I strongly oppose harvest in VCU 737.

Transportation/utility corridor

The only polite word that comes to mind is 'boon-doggle'. I oppose the utility corridor, but will reserve my comments for that proposal for another time.

Economics

The economics of the sale are horrible, cf., the statement on pp3-225 "All the action alternatives have a negative PNV". I seem to recall something from the Regional Guide or R-10 Handbook that alternatives with negative mid-market appraisals should be considered nonviable and dropped from detailed consideration. The current market appraisal is a good idea, but needs to be reappraised at full (100%) profit and risk -- the 60% profit and risk factor is intended singularly for the mid-market appraisal.

The proposed tie through road linking unit 737-92 with the Carroll River road system is unnecessary for removal of NFS timber under this proposal and needs to be dismissed from further consideration under this project.

Let's talk about TSPIRS. I think it is grossly unprofessional to quote 1988 - 1990 TSPIRS reports (pp 3-215) and omit more current reports which show the truly deficit nature of Tongass logging. On pp 3-214 there's the statement "...it [TSPIRS] can be adapted to provide some insight into the below cost sales for areas smaller than the entire forest." Yet on pp 3-219 this capability is denied, and the TSPIRS analysis is "...considered but not performed." I WANT to see the TSPIRS analysis for several reasons. First, it shows the effects of sunk costs -- like this EIS. Second, it shows the profitability after payments to the State of Alaska. Third, because 25% of purchaser road credits are also returned to the State of Alaska, it shows that helicopter logging is often less of a drain to the American taxpayer than conventional road and cable shows. Please make sure the TSPIRS analysis treats roads as the sunk cost they are, not as a capital investment.

Despite the grimness of this sale's economics, they are nonetheless understated. Falldown is not considered in reducing the volume which will likely be realized. Project fixed costs like roads and EIS's spread across markedly decreased logging outputs lead to significantly decreased stumpages. It is incomprehensible that there could be statements like "... large number of difficult and isolated harvest units" (pp 3-223) and not apply a falldown factor.

Falldown

On pp 3-198, implementation falldown factors for this sale are expected to range from 21 - 52%, yet every analysis in this document fails to carry forward the effects of falldown by reducing the amount of timber expected to be logged. This is like 'forgetting' to subtract cost and attempting to equate price with profit. At the very least, the timber and economics sections, as

well as Appendix A, need to objectively show reduced volumes. I can't believe this EIS blew away falldown with this very issue in front of the Courts.

Proportionality

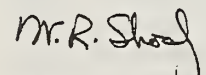
Given when the Upper Carroll ROD is released, the time lag for presale activities, and a minimum 3-year contract term, it looks like this will be the last entry into this project area before the end of the long-term contract. Altn 3 and the preferred alternative both show a proportionality departure for MA K32 (maybe this has something to do with their having the highest economic efficiency, eh?). As there is no planned future entry to fix this departure, it was probably a poor idea to issue this DEIS without reworking the alternatives to ensure proportionality compliance. The statement on pp 3-194 that everything will be up to snuff in the FEIS inspires little confidence -- especially when one considers that falldown will likely reduce the amount of volume class strata 4/5 acres logged and implementation proportionality (the legal yardstick) may be even worse than projected.

One concern I have for the "Fishermen's Alternative" is that the units below 744-49 are mostly in volume class strata 6/7. It may be tough to achieve proportionality parity and still get 10 mmbf. Oh well, less than 10 mmbf is OK, too.

Conclusion

Mr. Powell, I commend you for producing a DEIS that is incrementally better than most previously produced. I hope this is the start of a trend. However, I am not sure that incremental is enough. The Tongass has been much abused. It wasn't that long ago that KPC was tagging their own units. More recently the USFS had an 'acre neutral' policy that willfully logged outside the ROD boundaries (without NEPA disclosure or ANILCA Section 810 hearings) to partially make up for falldown. Even now 'unit change analyses' are being subtefuged to hide unit expansion acres. There's a lot of catching up to do. Please consider my comments.

Sincerely,


Bill Shoaf

6526 Rodgers Pass
Ketchikan, AK 99901

*I fully support this editorial we
need more of the same*

Ketchikan Daily News

*Debra L. Shull
Box 1518 Ward Cove, AK
99928*

Saturday-Sunday, March 2-3, 1996

Editorial

Time for comment

Timber harvest in the Upper Carroll Inlet will open recreation area, lead to additional roads on Revilla Island and enhance economic and education opportunity in Ketchikan.

Anyone who supports industry, jobs, recreation and expanded infrastructure for the Ketchikan area might like to take the opportunity to endorse the harvest. The public comment period is open through March 11, 1996.

Ketchikan Gateway Borough endorses the harvest alternative that would provide 77 million board feet of timber, 116 jobs, 58 miles of new road, 7 miles of reconstructed road, 21 miles of temporary road, one new log transfer facility, two reused log transfer facilities and 43 roads crossing salmon-supporting streams. Precautions would be required to protect the streams and the salmon.

As many as 45 miles of road could be used for the proposed Swan Lake-Tyee Lake intertie. The intertie would connect the two hydroelectric projects and provide an additional power supply to the Ketchikan area.

The harvest would provide timber for Ketchikan Pulp Co. under its long-term sale contract and/or the Ketchikan Area Independent Timber Sale Program.

The alternative supported by the borough would:

- support the timber industry to the fullest extent;
- give the community of Ketchikan the biggest economic boost;
- provide the most opportunity in additional recreation area;
- lead significantly to a road system throughout the island;
- prepare the way for a much-needed power expansion for Ketchikan;
- provide jobs for 116 people in the timber industry; and
- boost timber sales receipts for schools to as much as \$142,000.

If there is any place in Alaska that truly supports the timber industry and all of its related benefits, it is Ketchikan. Ketchikan wants to maintain a sustainable harvest of the Tongass National Forest and is willing to harvest in its neck of the woods to do that.

For those who support the industry and the many uses of the Tongass, the borough needs your added endorsement to its alternative for Upper Carroll Inlet. Comment papers should be addressed to Forest Supervisor, Ketchikan Area, Tongass National Forest, Attn: Upper Carroll EIS, Federal Building, Ketchikan, AK 99901. The deadline is March 11.

Bradley Powell, Forest Supervisor
 Ketchikan Area
 Tongass National Forest
 Attn: Upper Carroll EIS
 Federal Building
 Ketchikan, AK 99901

February 28, 1996

USDA FOREST SERVICES KETCHIKAN AREA	RECEIVED		MAR 01 '96	
	FOREST SUPERVISORS OFFICE			
INTL	ACT	INFO	DATE	
FS				
DFS				
PL & FC				
PAO				
AO				
T.M.				
FIN				
ECN				

Dear Sir,

In the last 15 years I have spent a lot of time in the Upper Carroll Inlet area, working and playing. In 1983 I worked for 6 months on the construction of the Swan Lake Power House, and then worked for Ketchikan Public Utilities at the Swan Lake Plant many times over a twelve year period. Also my family and I have chosen to recreate in this area on numerous occasions.

I have fished some of the lakes, the Carroll River, and the salt water. I have viewed wildlife including deer, black bear, otters, seals, killer whales, mink, swans, ducks, and other animals. I have hiked many of the valleys and have stood atop many of the peaks. I have flown over the area in rotary and fixed wing aircraft too many times to count. And, I have also watched Carroll Inlet go from a relatively pristine area to one that looks more like a Neutron Bomb hit it, all in the name of economic development.

But, is it truly economic development? On the short term maybe. Obviously, if past harvest rates of the last ten years within this area by both the USFS and Cape Fox Corporation continues, sustainability of the timber industry is not achievable. Also obviously, the cumulative effect of all this isn't good for long term wildlife habitat. Again obviously, Ketchikan's growing tourist industry will be harmed by the cumulative effect of of all this timber extraction. I believe further large scale timber extraction is only motivated by short sighted greed. Yes, call it whatever you want, but it is greed.

As the old saying goes "time will tell." And time will tell that Carroll Inlet was over cut. Depletion in fish, and wildlife stocks will tell you this, people who rely on subsistence will tell you this, concerned citizens will tell you this, tourist's will tell you this, and if one opens their eyes the trees will also tell them this! A person doesn't have to be a rocket scientist, or even a mathematician to figure out that you can't replace 300 year old trees in less than 300 years.

If the Ketchikan Area took the lead and slowed down the over harvesting, then this area could have a sustainable timber industry. This would be possible by much smaller clearcuts, and selective harvesting. Hike through most any of the old hand logged forests in this area, and you can see how successful selective cutting is.

If the USFS must complete the 50 year contract with KPC, then I would suggest that a good portion of the fiber that is needed for pulp be taken from the second growth that KPC is so proud of.

After all, we are now over 40 years into that contract. We were originally told that the rotation would be 50 years, so the second growth trees should be plenty big enough now to grind into pulp. Remember the long term contract is for a pulp mill, not a saw mill. Also remember KPC claims that the regeneration is twice what the old growth is, so it shouldn't be a problem to get the majority of the fiber needed from second growth.

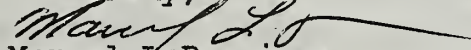
Just like Prince of Wales Island, Carroll Inlet has already been over harvested. Because of this please select Alternative 1. Or, if the political pressure from the short sighted, greedy can't be overridden please choose Alternative 3.

Please don't forget your actions will directly affect future generations. Remember we have borrowed this land from our children. Is it right for us to pass on to them a waste land? Is it right of us to deprive our children of jobs in the timber industry, because there are no trees left? Is it right for us to reduce wildlife stocks to a point it can no longer be used for subsistence?

We can either pay the Piper now, or he must be paid later. Let's act responsible and make the hard decisions now.

Thank you.

Sincerely,


Marcel LaPerriere

Box 9062

Ketchikan, AK 99901

2/29/96

We are for the alternative that allows the maximum amount of logging in the Upper Carroll Project Area.

Thank You
J.M. Pitcher
P.O. Box 19206
Thorne Bay AK 99919

STATE OF ALASKA

OFFICE OF THE GOVERNOR

TONY KNOWLES, GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET
DIVISION OF GOVERNMENTAL COORDINATION

CENTRAL OFFICE
CONSISTENCY REVIEW UNIT
240 MAIN STREET, SUITE 500
P.O. Box 1.10030-
JUNEAU, AK, 99817

JAN 31 1996

CONTACTS

DEC Jim Ferguson	465-5365	Fax: 465-5274
DFG Jack Gustafson	225-2027	
DNR Jim McAllister	465-5401	586-2954
DISTRICT:		
COE n/a	(800) 478-2712	753-5567

PROJECT INFORMATION SHEET

PROJECT TITLE: Upper Carroll Timber Sale - DEIS

STATE I.D. NUMBER: AK 9601-14JJ

DGC CONTACT: Jackie Timothy Phone: 465-8798 Fax: 465-3075

APPLICANT/PROPONENT: Forest Service, U.S.

AGENT: Bill Nightingale Phone: 225-2148 Fax: 225-8738

DIRECT FEDERAL ACTION: Y

REVIEW TYPE: NEPA-EIS

ACTIVITY TYPE: TIMBER HARVEST

PROJECT LOCATION:

Nearest Coastal District: KETCHIKAN GATEWAY BOROUGH
Project is OUTSIDE the District Boundary
District Plan Approved: Y

REVIEW SCHEDULE: 45 DAYS

REVIEW MILESTONES:

Day 1: 01/24/96

Comments Due To Forest Service with copy to DGC on or before: 03/09/96

PROJECT PREVIOUSLY REVIEWED UNDER STATE I.D. NO. AK --

STATE APPROVALS (AGENCY, APPROVAL TYPE AND NUMBER): n/a

FEDERAL APPROVALS (AGENCY, APPROVAL TYPE AND NUMBER): n/a

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Upper Carroll Timber Sale DEIS - AK9601-14JJ

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Note: The Forest Service distributed the DEIS directly to reviewers. If you did not receive it, please let us know immediately. You may request a copy of the document from DGC or the Forest Service.

MEMORANDUM

STATE OF ALASKA OFFICE OF THE GOVERNOR *Governmental Coordination*

To: Distribution List

Date: January 24, 1996

Telephone: 465-8798

Fax: 465-3075

From: Jackie Timothy
Project Review Coordinator

Subject: Upper Carroll Timber Sale
DEIS - AK 9601-14JJ

DGC has received a copy of the Draft Environmental Impact Statement for the Upper Carroll Timber Sale. The Forest Service distributed this document directly to reviewers. If you did not receive a copy, you may request one from DGC or from the Forest Service.

This document has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA). Therefore, the State should review this document in accordance with NEPA and provide comments and suggestions on the full range of issues and plans presented. The NEPA regulations (see 1501.1 of 40 CFR) emphasize that cooperative consultation among agencies should occur before preparation of the environmental document, rather than agencies submitting adversary comments on the final document. This consultation should identify environmental effects and values in adequate detail (so they can be compared, per section 1501.2, to economic and technical analysis). The purpose of the enclosed document is to identify the significant issues related to a proposed action.

Should the federal agency determine that the activity would directly affect the coastal zone per 15 CFR 930.33, a formal determination of this project's consistency with the Alaska Coastal Management Program (ACMP) will be prepared later in the planning process. However, the State should take this opportunity to preliminarily address potential ACMP consistency issues of this project. In your response, comments relating to the project's consistency with the ACMP should be identified separately from the NEPA comments.

Please comment directly to the Forest Service with a copy to DGC by 3/9/96.

Attachment

cc: Bill Nightingale, U.S. Forest Service, Ketchikan Ranger District

Comments on the Upper Carroll Timber Sale DEIS

The purpose of this sale is stated as to provide KPC timber under the long-term contract or provide it to independents. Because the real intent is to provide most of the wood to KPC, the forest service needs to more accurately portray in this DEIS the full environmental consequences of providing wood to KPC.

What are the environmental consequences of providing wood to KPC?

During the past year (as always), KPC has been given numerous notices of violation from the state Department of Environmental Conservation for violations of air quality permit, landfill permit (where hazardous substances and woodwaste are stored). KPC has also continued to violate it's wastewater permit (even for the few parameters and conditions that are in effect--All of the toxics limits are on hold because they are being appealed by KPC) and has allowed foam from its wastewater treatment tanks to contaminate home drinking water tanks in the area. In terms of air violations, KPC was fined \$22,000 by the state last December for having failed to maintain their air pollution control devices on their chemical recovery boilers, which resulted in over a 1000 lbs. of extra particulates plus gases being released each day, at least from Sept 94 through late winter/early spring 95. KPC for much of the past year has been paying about \$2000 a month for daily \$500 fines for violations of emissions from their power boilers. (E.g. they just got billed \$15,000 by DEC for 30 days violations in December 95 and January 96.) DEC files in Ketchikan and Juneau are filled with resident calls and staff observations about all the fumes and fallout and noxious smells and property damage, the health concerns, and operational difficulties of the mill (including frequent accidents which discharge sulfur dioxide, chlorine and other toxic substances to the ambient air).

On Sept. 15, 1995, in the U.S. Dept. of Justice memorandum in support of the U. S.'s motion for entry of consent decree in U.S. v KPC Case No A92-587 CIV (JKS), pg. 10, it states that "The United States recognizes that KPC's pulp mill operations have seriously degraded water quality in the vicinity of Ward Cove and that KPC has a checkered compliance history. It is precisely for those reasons that the Consent Decree requires KPC to pay a civil penalty of 3.111 million to settle claims regarding past violations--the largest civil penalty ever imposed on an entity operating in EPA's Region 10." In the related felony and misdemeanor complaints and settlements of this past year, KPC was cited for violations of both Clean Water and Clean Air Acts and is now on probation under court supervision.

The state's current draft of Alaska's 1996 Section 305(b) Water Quality Assessment Report indicates that Ward Cove is still an impaired water body due to the pulp mill. Fish and shellfish propagation and growth, contact and non-contact recreation, and other uses have been impaired by the mill's toxic wastewater discharges. Actual reports show "impaired" is the understatement of the year. Shellfish can't live there--even short exposure results in shell softening, lightening, accumulation of dioxins, and/or death. Embryos and larvae die or become deformed after short exposure. Fish kills occur every so often. Bottom fish get lesions or die. As yet there is no plan in place for adequately remedying this situation. While KPC would like to move their outfall to Tongass Narrows and pollute a new site, their own studies have shown that there isn't enough dilution in all of Tongass Narrows to safely dilute their 40 million gals. per day of toxic effluent, and they haven't yet figured out how to make it less toxic!

As you can see by the above, the U.S. Department of Justice recognizes that KPC operations are seriously degrading water and air quality, the state of Alaska (quietly) recognizes the same, the U.S. E.P.A. recognizes it. When will the forest service start portraying the full environmental impacts of f.s. actions (i.e. timber sales to KPC)?

To have a multi-volume EIS about this sale (the purpose of which is to provide timber to KPC) without adequately portraying the consequences of this action to the environment merely continues the coverup of illegal and environmentally degrading actions which have occurred for the past 42 years.

Serious air pollution from KPC air contaminants.

In 1992, KPC was informed that they would need to demonstrate that their air pollutants were not causing violation of ambient air standards and that their air pollutants were not causing unreasonable harm to human health, animals, plants, or property. In summer of 93, at the time of issuance of their air permit renewal, they had not provided such evidence and so a compliance schedule was written into the permit, requiring them to assess their air pollutants and show that they don't have the potential for causing unhealthy air. Typically, large facilities do this by using a computer program to model the dispersion of their air contaminants and predict the concentration of various chemicals at ground level in the neighborhoods around the

facility. For most facilities in the state, the modeling has shown that their pollutant levels are low enough and get diluted enough in the air so that problems aren't expected.

When KPC finally got around to turning in it's impact assessment (supposed to be a "compliance showing") on April 3, 95, it showed "very high human health risk" according to DEC records. Consequently, the state refused to renew KPC's air quality permit and instead allowed them to operate without a permit while conducting additional testing, reporting, and monitoring. The testing and reporting is done and it showed even higher levels of harmful air contaminants in the air around the mill!

KPC's own reports indicate increased cancer risk for area residents from current KPC air pollutants, particularly due to expected levels of chloroform and formaldehyde. Other carcinogens are also present at significant levels.

Predicted concentrations of chloroform at some residences are such that for some residents, the likelihood of acquiring cancer due to just the mill chloroform is very high. But you have to read the appendix of the report to really find this out. The mill's reports show the obvious--that if you don't live by the mill very long your risk goes down to "acceptable levels". If you live there and breathe alot, your risk exceeds 'acceptable levels". Note that no one bothered to ask the people in the area how much extra cancer in their children is acceptable to them.

KPC's own reports indicate an acute respiratory health hazard for area residents from KPC's air pollutants. Pollutant levels are predicted to be many times the levels where people are known to have respiratory and eye problems. Specifically, chlorine was at 2.7 to 11.1 times the level which is considered protective of humans, formaldehyde was at 1.5 times the protective level. Sulfur dioxide can cause severe health effects at the levels around KPC. Residents and users of the Ward Lake recreation area have been "gassed".

47 to
KPC's own reports indicate a chronic non-cancer health hazard to area residents from KPC air emissions. Chemicals in the residential areas around the mill were expected to be at levels 163 times "protective" levels. Highest hazard is to the respiratory system, but chemicals are also present in sufficient concentration in the ambient air to increase risks to the reproductive, central nervous system, and immune systems.

KPC's own reports as well as other reports indicate levels of air pollutants from the facility are sufficient to harm plant, animals and property in the surrounding area and on Tongass National Forest lands. Sulfur dioxide, oxides of nitrogen, and carbon monoxide plus others. The effects of persistent substances which bioaccumulate and travel up the food chain are quite severe. For example, the trillions of picograms of dioxins/furans which have been placed into the atmosphere, and which does not go away for many decades (or centuries) is quite serious.

KPC's own reports as well as others indicate serious environmental degradation from their wastewater.

see attachment A for some of the available references

Vol. I Ch. 1, pg. 9 says that when developing the timber schedule, the f.s. will consider the production requirements of the purchaser's manufacturing facilities. This needs some careful consideration. There has been this apparent assumption that the KPC pulp mill has the capability to produce at a particular level, and that the forest service must meet this level. This needs some serious analysis. During the past year, the pulp mill has been unable to produce pulp on many days--The total down days have gone far beyond the regular annual scheduled maintenance days. The mill has not been down for lack of timber--The cove has been full of logs and the chip piles have been abundant. The down times have been due to difficulties in maintaining equipment operations. If they can't keep the plant running because their equipment is too old, it needs more maintenance time, or it just should have been replaced with some modern equipment 10 years ago, then that is a choice that L.P. has made. They have taken the profits from the KPC long term contract timber volume, and not fed these profits back into the pulp mill sufficiently to make it a viable, environmentally sound, healthy, functioning operation. (Note that they have made some costly upgrades--usually under court order following lengthy violations of water and air permits, but compared to what other facilities in the Northwest have done, the upgrades have not been sufficient.) When the long term contract was issued, it carried with it a requirement to operate the pulp mill (at 450 tons a day?) and operating the pulp mill for 50 years obviously means operating it in an environmentally responsible manner. The mill's public relations line is that their environmental permitting and non-compliance problems have been due to increasingly stringent environmental laws, and they are going to get better. The fact is that it took just two years of mill operations for the reports to start showing serious environmental degradation from the mill outfall. And by the 70's the serious forest degradation in the Ward Creek Valley from the mill air pollutants was documented. (Note that the mill reports putting out more sulfur dioxide today than DEC reports say the mill put out in 1978.

For the mill to be considered as having a certain capacity, it must have a safe manner of disposing of it's plant wastes. Currently, KPC does not have such capacity. KPC is one of the leading toxic and hazardous waste dischargers to the environment among wood processing facilities. Years ago, other similar facilities made upgrades similar to what KPC is contemplating now.

KPC's solid waste landfill, where they haul fly ash, boiler ash, sludge, contaminated hog fuel, and dredgings from Ward Cove has had repeated problems with leachate--both with the leachate flowing into streams and down to saltwater in Ward Cove and Refuge Cove and with the leachate collection pond overflowing. (E.g. the line has frozen solid for many weeks and no alternative has been put in place, the line has leaked and has not been able to handle the amount of leachate. People down below

who have touched the stream of leachate in recent months as it flows down to the beach have had burning hands and numbness for hours afterwards. This leachate has been variously described as milky, blackish, causing a purplish tint in saltwater, etc. The state and EPA have been very kind to KPC--not sampling the leachate when it is at its worst, changing landfill permit to allow them to violate WQS, writing nice letters referring to small amounts of leachate that may be coming from the landfill. The latest notice of violation on the landfill permit (Mar. 5, 96) does state that they violated WQS and that their landfill is full and that the land fill is apparently combusting inside and smoking. This landfill is a mountain of dioxin, heavy metals and many very serious substances (because this is where they haul large quantities of fly ash and other substances and place the highly toxic dredgings from Ward Cove).

Under the contract, the forest service does not have an obligation to provide wood to KPC at any level they say they want. If their pulp mill can only process 500 tons per day as an annual average (safely and in a manner which complies with state and federal law), then the f.s. need only provide under the contract terms that amount.

Suggestions:

Clarify the purpose and need for this sale. If the purpose and need is to provide timber to KPC, then the full environmental consequences of providing timber to KPC should be stated. These should be clearly listed under the air and waste environmental effects section. Specifically, the full impacts on the environment of the pulp mill's air, water, and land toxic and hazardous emissions should be stated. It is not sufficient to just say that KPC has to comply with permits. They don't even have an air permit because the state can't issue them one because they can't comply with the air regs. They have a "ghost" wastewater permit and appeal every permit and it gets held up for years. KPC has not yet been required to meet the 1987 Clean Water Act changes involving water quality standards and attempts to make the nation's waters fishable/swimmable.

The harvest of pulpwood from this sale--if it goes to KPC under the provisions of the long term contract--will directly result in:
violation of state and federal ambient air standards by up to 20 times and extremely large discharge of toxic substances. Consequences of such violations are increased health problems in area residents and in people using the Ward Lake recreation area, serious plant growth problems, hazard to health for wildlife in the area, and general contribution to statewide and global atmospheric sulfur, NOX, and CO load.

Because KPC's Health Risk Assessments and Ambient Air Impact Assessments indicate that the daily discharge of many pollutants is a direct function of the amount of pulp produced (e.g. chloroform, formaldehyde, methylene chloride, chlorine, sulfur dioxide), it is obvious that the provision of this timber starting later this year will directly enable KPC to violate ambient air standards, to cause increased cancer risk in area residents, and cause unhealthy air for humans and animals and plants on Tongass and non-Tongass lands. The forest service is engaged in a contractual

situation in which they are knowingly providing supply to a facility which cannot safely or lawfully process that material.

It would seem legally proper for the forest service to consider an alternative in this EIS which delays provision of any more timber to KPC under the long term contract until which time they can provide evidence that their facility can operate in full compliance with environmental laws. Once KPC is operating under terms and conditions of air and water and solid waste permits and when these permits are fully in place with a prediction that KPC discharges won't be harming people, animals, plants or property, then the sale could proceed.

Ch 3 pg. 9 Environment and effects--Air Quality--Effects of the Alternatives

Paragraph 1. "There is presently little information on the possible effects of ambient air quality on forest resources in Alaska." This paragraph needs to be updated to include the results of the Air Monitoring on the Tongass report by Derr and the 79 report concerning Tree Decline in Ward Creek Valley. Both of these quite clearly indicate the significance of providing wood to sulfite pulp mills (APC and KPC). The result is significant vegetation effects for quite some distance from the mills.

Paragraph 4 says that the National Ambient Air Quality standards for PM-10 would not be violated by the proposed action. This paragraph needs to be changed to state that if the pulpwood is provided to Ketchikan Pulp Mill, that it is anticipated that the NAAQS standards will be violated in the ambient air in the vicinity of the mill., including on forest lands.

Paragraph 4 makes a statement regarding that no analysis of sulphur dioxide, oxides of nitrogen and total suspended particulates is needed. While the PSD increments may not have yet been triggered, this has only occurred through very contorted and probably illegal goings on between the state and KPC. KPC emissions are expected to cause violation of the NAAQS standards for sulphur dioxide, PM-10, TRS. Also probably for carbon monoxide and oxides of nitrogen. Actions which the plant is proposing are expected to increase plant emissions by 500 tons a year beyond current emissions. A lot of this is in legal limbo, with KPC operating without an air quality permit, with ambient air monitors for sulfur dioxide and PM-10 having been installed in the area on Feb. 9, 96 but the results not being obtained, etc.

Paragraph 5 says that all alternatives are expected to have limited, short-term impact on ambient air-quality. This needs to be revised to indicate that alt. 1 best protects air quality, while alt. 2-5 will increase air pollution to unhealthy levels in proportion to amount of wood given to KPC. KPC's air quality reports are quite specific in indicating that air pollutant discharge is a direct function of fiber input/pulp production.

Each MMBF of fiber to KPC results in pulp production of somewhere around 1200 tons of pulp and the consequent discharge to the ambient air of up to or over the following amounts (Note that these are gross estimates based on review of the mill's impact assessments, toxic release inventory reports and quarterly monitoring reports--There is considerable variability in amounts released (depending on which report is

used); these numbers are intended to give you an idea of order of magnitude of air pollutant releases per MMbf of wood to Ketchikan Pulp Mill from the Carroll Inlet sale:

- sulfur dioxide: 50,000 pounds
- Particulate matter (PM-10): 6,000 lbs
- Carbon monoxide: 20,000 lbs.
- Oxides of Nitrogen: 12,000 lbs.
- Volatile Organic Compounds: 60,000 lbs. (includes chloroform, benzene, phenols, toluene, chloromethane, methanol, methylene chloride, ketones, trichlorethelene, benzopyrene, etc.)
- Formaldehyde: 100 lbs.
- Sulfuric Acid: 800 lbs.
- Sulfur trioxide: 1100 lbs
- Hydrochloric Acid: 3000 lbs
- Chlorine: 1000 lbs
- Dioxins/Furans (in 2-3-7-8 TCDD toxic equivalents) : 17 billion picograms
- Lead; 2 lbs
- Mercury: .3 lbs
- Cadmium: .2 lbs

Other hazardous air pollutants with significant amounts include Acetaldehyde, Acetone, Acrolein, Ammonia, Antimony, Arsenic, Barium, Beryllium, Bromomethane, 2 Butanone, Carbon Disulfide, Chromium, Cobalt, Cumene, Diethyl Phthalate, Ethylbenzene, Hexane, Manganese, Naphthalene, Nickel, Polycyclic Aromatic Hydrocarbons, Propionaldehyde, Selenium, Styrene, Total Reduced Sulfur, Vanadium, Xylenes

Multiply the above amounts by the million bd. feet which each alternative plans to give to KPC for pulping, and you will have an estimate of the actual effect on air quality from the various alternatives. For example, 50 MMBF would mean over 2 million lbs of sulfur dioxide discharged to Tongass Forest air. Since the expectation is that even proposed permitted amounts at the mill would cause up to 20 times NAAQSs, this is a worthy impact to state in the EIS.

Some of the effects are very connected with the way that the purchaser handles the logs. For example, the 17 billion picograms a day of dioxins/furans (TEC) comes out of the multi-fuel burners apparently is primarily formed as a result of burning the hogfuel/woodwastes specifically because the wood is stored and towed in salt water. If the wood was barged instead or not stored in salt water, significant reduction in the extremely hazardous dioxins would occur. The dioxin issue is extremely serious at KPC as both cancer and non-cancer effects are predicted to increase in residents exposed to the levels of dioxin currently being discharged. A very weak impact assessment on this was done in April 95 by KPC regarding the impacts of their air discharges of dioxin--No effects on animals were discussed, even though it just takes miniscule quantities of dioxin to cause cancer in animals and interfere with reproductive capabilities of the offspring of exposed mothers, etc. Regarding the human effects, KPC's April impact assessment did not analyse the risk at the residential areas with highest dioxin impact--and they used a dispersion model which

was later shown to have underpredicted ambient air concentration plus made numerous other underestimations.

Apologies for the length of this--Not time for editing and up against the deadline.

I am not against harvesting wood or providing it to the pulp mill (if they could ever operate legally and safely)--I would just like to see an extremely honest EIS which fully portrays all the environmental consequences of f.s. actions which are taken regarding our public forests. Informed choices are the best.

Sincerely, Margaret Clabby 7960 S. Tongass, Ketchikan AK 99901

Re: Comments on Upper Carol Timber Sale, Draft EIS

This sale is close to my home (at the mouth of Carol/George Inlets). The prospect of yet another 2000 acres of clearcuts, 53 miles of roads logging roads and a further degradation of Tongass forest with a net loss to the public coffers is very distressing. The vast majority of the jobs coming from the timber from this sale will be in Japan or elsewhere overseas (as they have 1000's of sawmills "adding value" to our Alaskan cants and make things out of our spruce and hemlock cants and our valuable cedar round logs). We here in Ketchikan will get a measly few jobs and a little bit of timber receipts from alot of timber from which we should get alot more money and jobs.

① Overall, the forest service has, in this DEIS, come to the conclusion that you can clearcut over 2000 acres in the midst of an important habitat and subsistence area while crisscrossing salmon streams with roads and harvesting on high mass wasting areas without having any significant impacts on anything. (except deer habitat and subsistence and that has to go anyway because the demands of the KPC contract require it.) This is like saying I can have my cake and eat it too. The true environmental impacts of this sale have been understated.

In Vol I, Chapter 3, pg 2, it becomes obvious how this mystifying conclusion of insignificant effects on anything was able to be reached. It's because of your definitions. These need changing. You define direct effects as those occurring at the same time and place as the initial cause or action. Makes sense. But the indirect effects are defined as only those occurring from now until 2004 (the end of the KPC contract). Cumulative effects also only consider as reasonably foreseeable future actions the potential actions through 2004.

This is ridiculously short term analysis of indirect and cumulative effects!! When you are clearcutting 2000 acres of forest which in your own words "took hundreds of years" to develop, you should be anticipating and accurately portraying and mitigating for indirect and cumulative effects throughout at LEAST a 300 year period. What is the effect on my great great grandchild ? Will that child have the chance to harvest or buy tight grained old growth from the Tongass, sustain his or her family with deer, salmon, etc.--Analyse alt. 1 vs. the other alternatives. In alt one, old growth forest will be in the area. In all other alternatives, tree farm, low quality, high fiber wood product, with less yellow cedar, less habitat, etc. will be available.

Ch 3, pg 2, bottom, says that assumptions for assessing reasonably foreseeable effects included that "the no-action alt. would represent only a delay in implementating the TLMP and based on volume projections in the ten year timber sale action plan, foreseeable cumulative effects would begin to occur before 2004".

The idea here is that if you don't harvest all this acreage now, you'll do it within a few years anyway, so the natural conclusion is that it doesn't matter which alternative--

from 1 to 5 is used because you are going to harvest the area anyway before the end of KPC's long term contract. That's the given.

This is very wrong--because these assumptions are in fact carried throughout the document and into the conclusions. E.g. in talking about subsistence, it says that it doesn't matter which alternative because sooner or later its going to have the same effect.

What these crazy assumptions and definitions have done is to violate the intent of NEPA and ANILCA. Prior to taking a federal action, you are supposed to accurately state the environmental consequences of the action and also portray the environmental status for the no action alternative (and/or action that would maximally protect subsistence). By essentially saying, "There is no such thing as a null alternative because of the KPC contract. We have to release x amount of volume from this area within the next 7 years and it either comes from here now, here later, or someplace nearby," it means that the actual environmental direct, indirect and cumulative effects of alt. 1 are never portrayed. And there is no difference between harvesting 50 or 77 MBF because it's all going to go anyway.

2 This EIS keeps referring to the "desired future state of the forest". Saying that clearcutting helps move this vision forward. And that you can get there even quicker the more you harvest--and that we can get rid of all these dying unproductive forest and make them more productive. Also that clearcutting will help us get to the desired visual state of a mosaic. Shall we change the name to Tongass National Tree Farm? Clearcutting doesn't help "forests" any more than building a K mart on former forests would help forests. It doesn't help us get to a better visual condition! Clearcutting helps industrial profits, future tree farm fiber production (although research shows that this is misleading as there will be declining productivity after second or third growth is harvested), and tosses in a measly few jobs for locals compared to the amount of resource spent.

3 Because so much of the high volume old growth on the Tongass has already been cut during the past 50-80 years, the value of the remaining portions is higher than you are giving credit for. Standing old growth, from a habitat and world-wide value basis, is virtually priceless. It's monetary value standing (for the current and succeeding generations) is orders of magnitude higher than the current predicted value if it is cut now.

4 Appendix D II Threatened/ Endangered Species Assessments

Humpback Whale--Should add impacts from toxic substance going into Ward Cove and Tongass Narrows from KPC wastewater outfall. This effluent has extreme toxicity to larvae and embryos, results in water column and sediment deposition of dioxins/furans, arsenic, cadmium, zinc, copper, etc. We frequently watch humpbacks from our window near California head at Carol Inlet, and are quite concerned about overall water quality degradation throughout the Ketchikan area. The "pristineness" of our waters is fading as more and more industrial and residential outfalls and non-

point sources contribute to water degradation. The same humpbacks that we see in front of our house apparently travel near the pulp mill and out north by Naha. (This is just by talking with people about when they observe the whales and putting it all together.) Also, we know that the humpbacks (and orcas and grays or minkes) go up George Inlet so I presume they also use Carol Inlet. Any degradation of the streams in the project area stands to reduce both food supply and water quality in Carol Inlet. So--two issues here--the toxic and hazardous substances from the pulp mill through which whales swim, and secondly, the general concern for gradual water quality degradation in Carol Inlet.

Stellar sea lion--Same concern as above. Sea lions were observed during one of the more recent large fish die offs in Ward Cove. They were eating the herring. About 800 dead herring were there and the sea lions were chomping down. I don't know that this is healthy.

It is time for the forest service to start addressing toxics in the water from timber processing facilities on the Tongass.

Marbled murrelet pg. 15 Table 2

It appears that alternative two would result in a 14% reduction in habitat for these birds. This is a very substantial reduction. The conclusion is that "the upper carroll project may effect marbled murelets but the extent of this effect is unknown." At least this is an honest statement that clearcutting a substantial amount of murrelet habitat may effect murrelets. MAY effect? Once again, this is the forest service/KPC strategy of " lets try this out and see what happens. . .then years later we say Oh gee look what happened, when we cut out much of the old growth habitat, we don't have many of the old growth dependant species. Oops. . guess we now know what happens when you clearcut old growth. Oh well, now we can learn by our mistakes. Right. After the old growth is turned into kitchen cigarette wrappers and baby diapers for china, its a little late to say oops. If you don't know, then don't cut until you do.

Trumpeter Swan pg 22

I am not sure that the monitoring for effects on swans is sufficient. On a very infrequent basis someone has to look and see if swans are being disturbed and then report to someone if they are. Will this really happen or is this a paperwork solution that will never be implemented. Lately KPC has apparently failed to even send someone out to walk around their landfill once a month to see if it's leaking. If they can't do this right next to their plant, are they going to go observe and report swan disturbance while clearcutting in a remote location? Anyway to firm this up? Apparently, in some units, logging will be limited to times when swans are not in the area. I hope this will be enforced.

The toxic substances in Ward Cove are of particular concern in regards to swans. One reason is that because they can consume so much food in proportion to body

weight, they would seem to be at greater risk from the dioxins/furans, methyl mercury and other substances which are contaminating Ward Cove aquatic species. For example, in the very limited tissue sampling that was done in about 91 of Ward Cove crabs (probably crabs that weren't even as highly exposed to the mill effluent and sediments as some are now), dioxin/furan levels were orders of magnitude higher than levels which occur in crabs from uncontaminated sites. The levels of dioxins in the Ward Cove sediments approach those which could be expected to cause reproductive risk to certain avian species. There are numerous uncertainties in both the representativeness of the 91 sampling as well as the info on amounts of dioxin it takes to produce risk. We do know that trumpeter swans use the Ward Cove/Ward Lake area and that last year after being in Ward Cove, one of the swans died. My real worry though is for gradual bioaccumulation in swans of the dioxins/furans/pcbs and methylmercury and other persistent substances. While KPC pollutants in and of themselves may not cause reproductive problems, the contribution of this facility needs to be considered. Basically, it is outrageous that Ward Cove and Tongass narrows are so seriously degraded and full of toxic pollutants and that this degradation is furthured with every ton of pulp produced. The forest service lets KPC use Connell Lake water--Every day, 40 million gallons of this is turned into extremely toxic wastewater and discharged to Ward Cove, filled with metals, sulfides, persistent carcinogens, etc. etc.

For over ten years I have been attending EIS meetings regarding timber harvest on my island. Each time I have read the documents, looked at the maps and said, "How is this planned level of harvest sustainable?" The answer has been, well, you're right it's not, but maybe in 10 or 20 years when we run out, the political climate will change and we can log the areas now designated for habitat and other uses. There is no way in the world that past or current level of logging going on on Revilla is sustainable!!!! This is just one more sale that is stealing from the future.

Volume I pg Ch. 1 pg ten says that this area was selected in part because:

"providing substantially less timber volume than required by the KPC contract in order to avoid harvest in the Upper Carroll Project Area or other project areas would not meet contract requirements"

Summary--page20--Let me see if I read this right. The forest service's preferred alternative will maybe bring in about \$2.85 per MBF (about a mid-market priced hamburger per tree?) to the public treasury. I guess that's better than other alternatives which lose about \$ 87 per MBF. About 50 miles of logging roads will be built and about 2000 acres will be clearcut. The majority of the timber will have the edges cut off it and will be shipped overseas where 1000s of people will have jobs milling it. Maybe you need to be more honest about the economics of this area and what will happen if prices aren't great.

Chapter 3 Environment and Effects

pg. 230--regarding subsistence. Maybe you aren't required to count Ketchikan because we don't qualify under some legal qualification as a rural subsistence town, but good grief, we aren't any different than the people of Saxman down the road from me or Metlakatla across the water a little ways or Meyers Chuck or Wrangell--in than we "subsist" on salmon, salmon, salmon, and halibut, rockfish, crabs, berries, and alot of folks on venison. The Carroll inlet salmon and the Neets Bay salmon are very important. The potential degradation of salmon streams with all the roading and clearcutting in this project is of serious concern.

pg. 246--You are planning that for areas affected by this sale, during the harvest rotation for this area, that habitat capability effect for deer will decline by 62 % in WAA 510 and by 48% in WAA 406? Doesn't this sort of imply poor management of subsistence uses of the area? Isn't 48-62 percent decline in deer habitat sufficient to imply too much impact on subsistence uses? Your chart shows that these two WAAs had the capability to support 5,589 deer in 1954 and your "plan" includes prediction of capability to support only 2544 deer in the future? This looks like not harvesting in a manner which protects other values of the forest. If everybody says industrial logging can be done without harming other uses, then don't harm other uses and don't log so much that over half of our deer habitat will be lost in these areas. We need more deer habitat to support more subsistence users as population grows--not less!!

Something seems wrong with the chart on pg. 242 regarding percent decrease from 1995 deer habitat capability by alternative. It implies that all alternatives will result in less than 1% decrease in deer habitat. Now I have trouble believing that. Clearcutting 2000 acres of old growth, including high volume areas and it will produce less than a 1% decline?

→ pg. 348 discusses "energy requirements and conservation potential of alternatives". This section should include a more accurate representation of the actual fuel use that will occur as a result of the various alternatives. The table 3-145 accurately states that alternative 1 will result in 0 fuel use. The other alternatives should include the amount of fuel that will be used by the recipient of the timber--from time of purchase until the wood leaves the hands of the purchaser. Specifically, the largest fuel use should be accurately represented--that which will occur when the recepient for whom this sale is designed. At the pulp mill, KPC uses an average of about 1150 barrels of oil a day--just in their 3 power boilers. (sometimes as high as 2100 barrels a day). I don't have figures for vehicles, boats, etc., but nonetheless, you can see that the idea that this sale is only going to result in fuel consumption of at most 1284 gallons (or 17.9 gallons per MBF) is pretty ridiculous. KPC uses over 63,250 gallons of oil A DAY. If they process half a million board feet a day (which is somewhere in the ballpark) then the correct fuel consumption for alt. 2,3,4, and 5 should add on at least an extra 126 gal. per MBF.

→ Under conservation potential, you should list the conservation potential of not requiring the removal of pulp grade wood and not requiring the pulp mill to operate. It's sort of funny--This section talks about differences in harvesting techniques which

make a gallon per MBF difference in fuel consumption. While here in town we have one of the most energy inefficient factories in the universe (o.k., not the whole universe), which uses about a GALLON A SECOND!!!! If you want to talk conservation potential, please accurately portray that the only way to conserve energy is to not sell this stuff to the pulp mill, or else work with the mill to conserve.

4 Glossary --Is there a mistake under "Board Foot"? It says one million board feet yields approx. 75,555 pounds of dissolving pulp. This would be one million bd. ft to make about 37 tons of pulp. Since KPC makes on the order of 500-700 tons a day of pulp, that would imply that KPC uses around 17 million board feet a day and would therefore use about 6 billion board feet a year in their pulp facility. I think the correct order of magnitude is that they use more like 170 mil. bd. feet--not 6 billion. Something is wrong here. At that level, we could look like Kansas really quickly. Think of it--requiring this mill to operate at just 500 tons of pulp a day for 50 years (at one million bd ft per 75,555 pounds of pulp) under the long term contract would mean a total pulp harvest of 230 billion board feet for pulp alone. When you add timber harvest to that, if these figures are right, you can see why we are starting to have user conflicts on the Tongass!!! Seems like the figure should be more like 1200 tons or 2,500,000 lbs per MMBF.

Chapter 3 Environment and Effects

page 206 and 207

Reading the DEIS is enlightening on every page. If I understand this right, alternative 2 with its 77 MMBF is really the maximal amount of timber that the forest service feels it can take out of here while meeting the law. "harvesting as much of the project area as possible in a combination that still meets standards and guidelines" But this would produce a net loss at mid market of \$87.54 per thousand bd. feet or a loss of approximately 9 cents per board foot. This would be essentially a deficit sale in a big way.

Pg. 206 says that alternative 2 portrays the actual costs that are going to be associated with any future entry because it includes harvesting timber in areas increasingly difficult to road. Essentially, this is the reality of this sale area--it's a big time money loser overall. Alternatives 3-6 just select out some of the better timber and ignore the fact that sooner or later you'll have to come back and get the timber (if you want to meet f.s. obligations) At that time, the timber would be at even a greater loss than the predicted mid market of negative 87.54 per MBF for the total. This just shows that most of the alternatives involve highgrading of sorts.

Language--Please change language to more accurately reflect what the purpose and need is. This is a timber harvest EIS. It has no intention of improving wildlife habitat, increasing water quality in streams, bettering subsistence habitat. Examples of timber industry language that has snuck in here and needs ousting is:

1. Volume I pg. 172 Alternative 5 has one created opening of 193 acres. How about "clearcut" or "contiguous timber removal area" By the way, the justification for this over 100 acre clearcut is weak. I am not sure that the intention of the exceptions to the rule are to just let you do it because its cheaper.

pg.173 Alternative 1 proposes no timber harvest at this time and therefore does not provide an opportunity to bring medium and high sites under management." Other alternatives are touted as bringing a much higher number of acres under management. What kind of nonsense language is this? The forest service only can "manage" highly productive forests after clearcutting? Isn't retaining the acreage for our children (with mother nature doing all the legwork regarding caretaking for the next 25 years) a viable type of forest management?

The chart and paragraph on pg. 173 is shocking. Of the available timber within the project area (as identified in alt 2),

pg. 177 The discussion of long term productivity needs to put more emphasis on wood quality. The section is heavily weighted towards saying that the stands proposed for cutting are "overmature" and need to be "converted" to higher fiber production.

There is a fleeting mention of "log QUALITY in second-growth stands is expected to be lower than in existing overmature stands"--expectation for "fewer top grade logs than existing overmature stands. This is the understatement of the century!

Now-now. Which is it? These poor overmature stands that need talented professionals to make them productive (by harvesting all the trees). Or very high quality logs on the "overmature" acreages--the quality of which we will never on this earth see again. Please add at least a page about wood quality, the high value of our tight grained old growth and that these "overmature" forests are the system which has allowed these extremely high quality logs to be produced.

At the top of page 177, it says that all stands proposed for harvest are overmature. . They are representative of uneven-aged western hemlock stands that commonly take hundreds of years to develop under natural conditions." This is certainly a true statement and is a crux of the argument that the forest service has been and continues to harvest in an unsustainable manner. I walk around and count tree rings on cut trees, and it doesn't take a rocket scientist to know that lots of the trees that aren't even all that large looking (for around here) are 200 years or older. Some of my favorite 300-400 year old trees hit the log trucks this past year. O.K. It took these trees "hundreds of years" by your own words, and 200-400 years by my own ring counting. So where is your sustainability? A 100 year rotation is approximately one-third of a sustainable rotation, if you happened to want to sustain quality wood. If all you are going for is quantity of fiber production and define sustainability purely on that basis without consideration of QUALITY of wood, you are nutty as a fruitcake. Am I being too blunt? I have commented politely for about 14 years as I have watched the forest service and native corporations convert forest to non-forest. Just

like in the Olympics, we have shipped off our gold for peanuts. QUALITY counts. The Tongass COULD be a model forest wherein actual sustainable harvest takes place and where the forest service contracts with HIGH value added, low polluting timber users. The harvest rotation and planning has to retain highest quality wood-- not just quantity.

pg. 178 Second growth management for fisheries rehabilitation--I'm no fisheries biologist but I get very nervous when you say you need to manage the riparian areas to promote large woody debris. You talk of precommercial thinning at age 15 and 40-50. You are going to be girdling trees and creating snags. If I had my druthers, no logger would come within site of riparian zones on the Tongass. Those nice trees are just too attractive.

Ch. 3, page 7

Quite a bit of your data in this EIS is very old, misleading, or incorrect. The chart here is strange. In this section describing the weather in the project area, there is this large chart giving the rainfall and temperature for Bell Island from 1929 to 1952. It says 108 in. of rain annually. Down here we get 154 I think.

Other data problems are in giving population for Ketchikan. 1990 data is given. Employment data appears to be inaccurate, especially in regards to fisheries employment. A section discussing pulp prices says they have increased 50%. This was true last year at about this time--they were going through the roof, but now they are supposedly in a tailspin, and this should be more accurately represented.

I would also like to see a more clear portrayal of pulp wood volume, prices, etc. How much wood will be harvested that will be used for pulp? How much will be paid for this wood fiber? In this EIS and most forest service documents, it is hard to understand when figures include only sawlog volume, what exactly is "utility", and where does pulpable wood fit into all this? Because so much wood from this sale is slated for a pulp mill, it would maybe be nice if one page out of the thousands just laid it all out about how much, what price, etc.

Environment and effect, chapter 3 page 92 say that there is 17,641 acres of commercial forest old growth in the project area. Alt 2 proposes harvest of 14 % of this existing, alt 5 proposes 11 percent. Common sense says that you can't harvest 11% or 14% of a 300 year old forest plot and sustain the old growth capabilities of that forest (which is the only logical meaning of sustained yield--if you are only sustaining fiber volume growth but not wood quality and forest quality--i.e. old growth unless

Question, Since this sale involves high investments in roads and bridges and that sort of thing, how can the forest service assure that the forest service or buyer won't be highgrading --taking the best and cheapest wood that is less expensive to access and then just leaving the lower economic stuff. The concern here is that the EIS may not accurately reflect what is really likely to happen if market prices are down (which is very possible). Is the taxpayer going to end up paying for roads and bridges to

make the taggle end sales profitable to KPC? Is the buyer going to cut and run with the good stuff and then want better stuff from elsewhere?

Question: Please clarify in the EIS exactly what amount of direct jobs are predicted from each alternative. The jobs figures seem to lump direct and indirect but are not real clear about just what the "indirect" includes. Also, I have been unable to find out whether the job figures include sawmill and pulpmill and other processing jobs or not. I think that the number of jobs from the timber harvest of this area have been overportrayed.

Alternative one is obviously the best choice at this time as it fully protects habitat, tourism, timber economics, subsistence, and other jobs.

Sincerely, M. Clabby 7960 S. Tongass, Ketchikan AK 99901

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

RECEIVED MAR 11 1996

Upper Carroll Timber Sale, Draft EIS 1996.

I would like to point out a classic statement made on page 16-3,

. . Water Yield responses to timber harvest activities have received very little study in Southeast Alaska's watersheds."

It is my impression that as each draft of previous EISs emerge more and more attention is being paid--without a detailed accounting of each new or added detail--to streamflow and summer low flow problems. Because of thier vital link to fish resoruces such problems are finally beginning to recieve the attention they deserve. The present EIS admits the paucity of information. but the present draft has actually used the word, baseflow (page 17-3, Temperature), a word I suspect, like the word, evapotranspiration, were forbidden usage in the past Forest Service accounts of logging effects upon fish ressources.

In classic Forest Service selectivity of the data it has decided to single out the most powerful argument to potentially confound the now developing understanding of the effect of cutting and second growth forests upon summer baseflows with its admission on page 3-17 of the idea of baseflow is a factor in Class III streams. But is this not a gross inconsistency because previous EIS's in low precipitation regions e.g., Staney creek, avoid admitting it to the discussion unless someone like me forces them into it? And why have you not discussed baseflow, indeed, even used the word baseflow, in the lower gradient class I and II streams? That is a question. Again, why has not the subject of summer baseflow appeared only seldomly if ever in other previous EIS documents? Why does it appear in context to a situation in which baseflow of high gradient, alpine zone streams, where baseflow is least likely to be a environmental factor of significance, is introduced. Why do I have to continually raise these questions and attract attention to the problem?

Pg. 16-3, 3rd para., sentence 1. The Meehan publication has been discredited several times. Even in one example in the middle of the roar of the boiler-plate, somewhere in the past times of Forest Service rhetoric exists a printed statement admitting that the detection methods could not detect a change in baseflow with the instrumentation Meehan et al., had available to them. Your statement means nothing so why did you

publish it? There are two possibilities:

1. It makes the draft EIS appear competent to the innocent and the ignorant.
2. Because the statement was published even though it doesn't mean anything, because it was published, naive, and honest people who believe in the integrity of the government would believe that it has some significance that though the "accuracy of the equipment used" would mean that here was enough accuracy to give meaning to the belief of "no change in streamflow as measured on the Maybeso watershed following clearcutting of 25 percent of the drainage basin.

Pg. 16-3, 3rd para sentence 2. The use of the entire watershed to assess the flow in one stream or tributary of the watershed cannot be done. As stated in my Control Lake draft EIS December 22, 1995 (file__controls)"

"The fundamental flaw in all Forest Service arguments about baseflow during droughts to date is an assumption of a threshold, which, if cutting does not exceed, then negative effects cannot not occur. This threshold percentage has ranged from 28% to 35% according to the Forest Service. There are two major objections about a limit to the amount of logging until effects on baseflow are observed.

(1) The diurnal variation of baseflow at Staney Creek (Enclosure #1, file__evapt28) suggests evapotranspiration 15 years after logging is intense. If this rate is higher than before logging as it seems to be at Staney Creek from the 1965-1966 comparison before logging then the consequences for fish habitat during droughts when baseflow maintains streamflow are very serious. I have calculated the change in baseflow (see Table 3 of Enclosure #1) which suggests that only a small increase in evapotranspiration is necessary to reduce baseflow. For example, if 60% of the forest is cut and in higher rates of evapotranspiration due to second growth effects (alder and/or conifers) then an increase in evapotranspiration of only .95 area-inches over the 120 day period is required. If the 2 area-inches assumption of Dan Bishop model for second growth is used only 28 % of the forest need be cut.

(2) The second objection to the Forest Service model is because streamflows might appear constant as measured at a downstream gage. But flows upstream of the water gage in distant tributaries may be vary erratically in their relative contribution of flow at the downstream water gage depending upon how much of the watershed of the tributary was cut and

the age and composition of the vegetation. The effects may therefore be disastrous to upstream fish habitat while the downstream water gage is reporting little effect. In the watersheds of the individual tributaries which have been logged several years ago streamflows may be decreasing while increased streamflows sustained by new cutting may make the flow at the gage appear relatively constant (See Hicks et al., and Enclosure #1). "

Your statement of page 16-3 regarding the Bartos citation has no biological meaning.

pg. 17-3 1st para. There is not data nor information to know what the effects are for BMPs. The Paustain (1987) has been criticized.¹ Paustain (1987) hereafter referred to as *The Paper* commencing in June 1979 the studied a watershed logged by high-lead methods.² The highest bedload occurred in October 1978 (WY 1979) and in the baseline period which ended in June 1979 as logging began. (Did road building start with the logging in June 1979 ?).

Some of the hydrologic fraud committed in the analysis of Indian Creek and present in the Paustain paper included,

1. Only 6 depth integrated samples were taken in the 15 month period after logging began. How could valid comparisons be made between baseline observations and after logging commenced?

A clear mistake is on page 158,

. . . The highest monthly Qs [suspended sediment discharge]¹ in . . . period of record . . . occurred in conjunction with unusually high runoff during October of 1979 . . . No apparent changes in the relative magnitude or distribution of monthly Qs are otherwise indicated by the data". (Text in brackets added for clarity.)

However, the highest monthly Qs shown in *The Paper's* figure 2 is for October 1978 (WY 1979), not October 1979 (WY 1980).

If the depth integrated observations for WY 1980 were grouped in the baseline period--as shown on the computer print-outs--then there are no

¹ Note: Qs is suspended sediment discharge. It is the product of absolute volume of streamflow per unit time and the suspended sediment concentration.

concurrent depth integrated observations for WY 1980 to calibrate the continuous pumping sampling records for the sediment discharge Q_s estimates for WY 1980 of Figure 3 of *The Paper*.

There are therefore three serious mistakes or sources of confusion in the comparison periods defined in *The Paper*: (1) The baseline period does not end in summer 1979 with logging and road building nor end at end of September 1979 but at some undefined date in October 1979 after the 6 depth integrated observations are taken. (*The Paper* does not mention the 6 depth integrated observations; these were reported in the computer print-outs of the data and the Paustian data listing which was not categorized by period.) (2) According to p. 155 of *The Paper* the ".post-development period" ended in September 1981. (*The Paper* ignored observations of WY 1982.) The during logging and road building period is reported as a post-development period. (3) The wrong year is reported for the October 1978, the month of highest streamflows and suspended sediment discharge.

His conclusions are made up to satisfy the desires of the Forest Service to defend their untenable position no serious logging effects occur. Furthermore the statement, "The results of these investigations [Paustains, 1987] suggest no measured effects on chemical water quality . ." However, Paustain reported on suspended sediment, not chemical water quality, as if had his reported suspended sediment meant anything relative to anything else.

Page 16-3.

I would like to suggest those whole section beginning with Water quality, Stream Nutrient Cycling, Sediment and Sediment Transfer and Deposition are analyzed incorrectly because all of the variables discussed in these sections will depend crucially upon low water summer baseflows which will be modified by evapotranspiration of the system, both increased flow immediately following cutting and baseflow below initial levels as the vegetation process becomes vigorous. Upon a rainless period the drought conditions will modify temperatures, food, rearing space, sediment deposition oxygen. The draft EIS does not address this window of effects if low flows.

I would like to suggest a scenarios based upon a low flow event when the stream flow drops ad a rate $>$ or $=$ 3% and fish emigrate (Bilby and Bisson, 1987, Abstract).³ This is an indication of stress and a response to environmental stress because oxygen concentrations may be decreasing due to increased the temperature, amount of rearing space is decreasing because of decreasing streamflow, the amount of predation is increasing because of downstream emigration and living space reduction of press species, increased background oxygen consumption due to increased water temperatures, approaching lethal levels for mortality as temperatures

increase, increased production of photosynthetic plants which raise the oxygen consumption during the night (since daytime oxygen increase due to photosynthesis is shut off).

pg. 62-3, Pink Salmon.

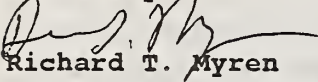
The actual empirical evidence is in fact there has been an effect upon pink salmon productivity (as measured by survival of eggs and larvae) shown from the Hollis studies and reported by Salo (1967).⁴ The discrediting of published Hollis studies with the authorship of McNeil, Sheridan and Meehan in particular is documented in enclosure #2. The facts are that adverse effects of logging were occurring at Hollis during logging and that it was likely such effects would continue at least a short time following the cessation of those studies due to the increased likelihood of land failures due to cutting. You will note in enclosure #2 that the Forest Service through its employees was not telling us the truth about logging effects.

More recent evidence of the corruption of Forest Service documents and literature on logging effects is seen in Table 3 of Sheridan, et al.,⁵ 1984 (Enclosure #3). Here a ANOVA was preformed which seemed to show a logged group of streams was little different from an unlogged group. The analysis violated the homogeneity of variance as was therefore invalid. If one plots the unlogged samples and the logged watersheds (Figure) one will see why both sets have nearly the same mean but the streams are different. If these two sets are really representative of the logged and unlogged watershed sediments then one can conclude logging brings increase sediment levels in unlogged watersheds which are high fish producing (with their low sediment, such as Anan, of Indian Creek before spawning channelization experiments, and others) and appears to have cleaned sediment from low fish producing watersheds with high sediment. Apparently logging destabilizes channel structure and through increased dynamic movement increases bedload movement which in turn cleans out the heavy sediment laden streambeds of the low fish producers. Due to greater dynamic movement of the bedload increases and sediment is removed resulting in a lower sediment content on the average than before logging (as shown in the unlogged sample of the figure). For the once high producers the opposite, the increased dynamic movement of the bedload increases the sediment. Once a sample of from all watersheds looked like the unlogged, after logging they look like the logged ones.

I consider the kinds of Administration that permitted this kind of management should be brought to justice. There were criminal activities going on within the Forest Service from the top on down and the above

analysis is enough evidence to make that case, in my opinion. Some of the advisors in academic institutions might also be subjected to the same scrutiny and approbation, as well.

Sincerely



Richard T. Myren
3320 Fritz Cove Road
Juneau, Ak 99801
March 7 1996

Three enclosures
file_carol2

1. Myren, R. 1992. A criticism of the Indian River analysis of the Paustian paper. 17p. On file with the U.S. Forest Service, Juneau.
2. Lundeen, S.K 1983. Indian River Water Quality Monitoring Study. USDA, F.S. Tongass Nat. For, Chatham area, Sitka AK.
3. Bilby, R. E., and P. A. Bisson. 1987. Emigration and production of hatchery coho salmon *Oncorhynchus kisutch* stocked in streams draining an old-growth and a clear-cut watershed. Can. J. Fish. Aquat. Sci. Vol 44, p. 1397.
4. Salo, E.O. 1967. Study of the effects of logging on pink salmon in Alaska. Soc. Am. For. Proc. Wash. D.C. 59-62
5. Sheridan, W. L., Perensovich, M. P., Faris, T. and K. Koski. 1984. Sediment content of streambed gravel in some pink salmon spawning streams in Alaska.

* The five enclosures listed above are available from the Upper Carroll Planning Record. They were not duplicated for this document.

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U.S. FOREST SERVICE

SUBSISTENCE HEARING

February 22, 1996

Cape Fox Lodge

Ketchikan, Alaska

and

February 23, 1996

Saxman, Alaska

M. JUNE ZENGE
ZENGE'S SECRETARIAL SERVICES
525 Monroe Street
Ketchikan, Alaska 99901
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Eric Hummel 31
Richard Jacksyn 22
Sam Rabung 22

1 tives was available at the open house preceding this hearing.
2 During the hearing questions cannot be accepted other than
3 those concerning hearing procedures.

4 Written testimony will be accepted until March 11th,
5 1996. Please mail written testimony to the Forest Supervi-
6 sor, Ketchikan Area, Tongass National Forest, Attention Upper
7 Carroll EIS, Federal Building, Ketchikan, Alaska 99901.

8 Thank you for attending this hearing. Who would like to
9 give the first testimony? And I'll just follow the list here
10 and go right down it. George — I can't read the last name.

11 MR. CARNES: That's probably me. Carnes.

12 HEARING OFFICER: That's a good guess. You can just
13 have a chair there.

14 MR. CARNES: I'm manager of the Deer Mountain Hatchery,
15 and.....

16 HEARING OFFICER: George, can I get you to state your
17 full name and spell it, please?

18 MR. CARNES: Okay. My full name is George A. Carnes.
19 The last name, C-a-r-n-e-s. I manage the Deer Mountain
20 Hatchery for Ketchikan Indian Corporation, and I am an ex-
21 officio member of their subsistence committee. They asked me
22 to come and speak to the fisheries issues regarding this
23 building of logging roads on Carroll — on Carroll River, or
24 in that general area, and the basic theme is that the people
25 in KIC are concerned about the fisheries resource in the

Zenge's Secretarial Services

1 Carroll River itself. It's a unique salt marsh with a really
2 rich ecosystem. Summer chum runs there are unique in
3 Southeast Alaska, and it's also the basis of SSRAA's brood
4 stock.

5 I went into Carroll River three seasons and developed
6 that summer chum brood stock there, so I'm familiar with the
7 creek, and the lower two miles are really delicate salmon
8 spawning conditions with, you know, up-welling waters within
9 the creek itself, and some of the road building activity and
10 logging activity on the upper watershed, we feel, there's a
11 chance of degrading the integrity of that whole ecosystem,
12 and that's basically what, you know, we're here to address.

13 The other — the other main topic is, we have concerns
14 that parallel SSRAA's concerns on developments in their
15 watershed above Bluff Lake, which is the water source for
16 their Neets Bay Hatchery. And we feel that, you know, there
17 could possibly, in spite of everyone's best efforts, be
18 problems with siltation, flash flooding, the lack of ground
19 cover to keep — just to delay the fluctuations in the
20 Carroll River itself.

21 And also, from KIC's perspective, on subsistence, the
22 various animals, deer, bear, martin, wolves, all the various
23 animals that we feel building roads through this area will
24 greatly increase man's access to these animals and lower the
25 total populations.

Zenge's Secretarial Services

1 So, I'm not — I'm not able to make specific comments
2 about logging units or whatever, but just — that's our
3 general position, and KIC is very concerned about it. That's
4 all I have.

5 HEARING OFFICER: Thank you, George. The next name on
6 the list is Gerry Hope.

7 MR. HOPE: Thank you for having me here. That's G-e-r-
8 r-y H-o-p-e. And I'm president of the Ketchikan Indian
9 Corporation, a federally recognized Tribe. One of the 226
10 that is federally recognized in Alaska. And, of course, as
11 you know, Governor Knowles did the right thing and also the
12 State now recognizes that federal list. I forgot which
13 number we are in the 226, probably the first one.

14 Anyway, my testimony is going to be pretty much reitera-
15 ting what we have already mailed to the Forest Service by
16 resolution. The resolution is KIC 95-41, and it's titled
17 Resolution to Provide for the Protection of Subsistence in
18 the Carroll Inlet Region With Regards to the Swan Lake-Lake
19 Tyee Intertie.

20 And, in that resolution, there's five points, and I'll
21 reiterate those points. The last time there was a hearing
22 held in this room I didn't outline those specific points, but
23 I'd like to even though you might have this on your files for
24 a record.

25 Now, therefore, be it resolved the Ketchikan Indian

Zenge's Secretarial Services

Hope Comments

1 Corporation, by way of this resolution states the following
2 in regards to the Swan Lake-Lake Tyee Intertie.

3 Number 1, the Ketchikan Indian Corporation opposes the
4 Yes Bay alternate route.

5 Number 2, the Ketchikan Indian Corporation supports
6 aerial logging only, opposing any road building in the
7 Carroll Inlet, Swan Lake, Lake Tyee area.

8 Number 3, the Ketchikan Indian Corporation Tribal
9 Counsel importunes those agencies of the federal government
10 to continue studies of wildlife, land, subsistence, and fresh
11 and saltwater subsistence, requesting traditional Native
12 people to assist in the impact study.

13 Number 4, the Ketchikan Indian Corporation requires
14 further study of the proposed Carroll Inlet route regarding
15 the close proximity of the power line to the river system.

16 And, number 5, the Ketchikan Indian Corporation will
17 work with the Saxman IRA Counsel, the Wrangell IRA Counsel on
18 issues regarding Carroll Inlet.

19 Now, I think it's important to say that I've been
20 approached by some of the other governing bodies in the
21 Ketchikan area, and it was an interest on their part to see
22 if there could be some coordinated efforts between those
23 governing bodies and our governing bodies, and we will be in
24 further dialog regarding this issue. The interest was to be
25 on the same page. It's difficult to be on the same page,

Zenge's Secretarial Services

1 however, when our members has cultural dependence on subsis-
2 tence, as outlined by our resolution, have a level of concern
3 that there hasn't been enough studies done that would require
4 the protection of those different land and water subsistence
5 uses.

6 There's some arm wrestling that we're willing to do in
7 the future regarding the term — terminology of substance.
8 We haven't come up with something that is more appropriate
9 for us, but now we're seeing that not only is the term
10 subsistence used, but now we're getting into high, moderate,
11 low. So it seems like a chess game when we come to the term
12 subsistence, where we lose a number of our over 3,000 members
13 are very active in the use of subsistence, and so it's our
14 position that we need to protect our members and uses in this
15 area.

16 A couple of — one other final point. Under ANILCA, and
17 I'm going to take this off of the State of Alaska Department
18 of Fish and Game, it's memo from Lorraine Marshall, who is
19 the Project Coordinator for the Division of Governmental
20 Coordination in Juneau — no. To her, excuse me. And it's
21 from Lana Shay, Regional Supervisor, Habitat ad Restoration
22 in Douglas. And it's a document dated October 19th, 1994,
23 and it's regarding the issue of the Carroll River Timber Sale
24 EIS scoping comments.

25 And, on page 9, and you probably have this in your

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1 files, but there's some levels of points that are brought up
2 in this that we — we have to raise also in agreement with —
3 under ANILCA, it is essential that the Forest Service
4 demonstrate that subsistence considerations influence the
5 selection of alternatives, as well as the final decision.
6 The maintenance of long-term subsistence uses needs — needs
7 to be the objectives of this sale.

8 If the EIS demonstrates the significant possibility of
9 significant restriction subsistence use, it must identify
10 what mitigation measures will be needed to protect subsis-
11 tence uses. The subsistence analysis should consider Revilla
12 Island in consort with the surrounding islands that, to-
13 gether, form an overall subsistence and personal use area for
14 residents of Ketchikan and other nearby communities.
15 Completion of a management area analysis on Revilla Island
16 and adjacent areas prior to completing this EIS would provide
17 such analysis.

18 Given the cumulative impacts of timber harvests under
19 all land ownership surrounding George and Carroll Inlets, and
20 the high demand for consumptive uses of fish and wildlife, it
21 is possible that all timber sales in this area could affect
22 subsistence users.

23 Anyway, there's a number of others — other points. I
24 think Saxman is going to have to probably answer to some of
25 the questions that they have, but we — we, on observation,

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1 have noticed the absence of Saxman and the IRA in some of
2 their considerations. I've noticed that in the newspaper
3 that you're not only holding a hearing here, but you're
4 holding one out there tonight, too. So, that's really good.
5 But, as they are a Tribal governing body, and we live so
6 closely, and we communicate so well with them, that was —
7 that was a concern that we needed to also share during the
8 testimony tonight.

9 At any rate, thank you for your time, and we look
10 forward to compiling a further written document to you by the
11 March 11th deadline. Thanks.

12 HEARING OFFICER: Thanks, Gerry. Okay. Next on the
13 list is Gary Freitag.

14 MR. FREITAG: The name's Gary, last name's Freitag, F-r-
15 e-i-t-a-g, and I'm research and evaluation manager for the
16 Southern Southeast Regional Aquaculture Association.

17 And I suppose that first of all we'd like to say we
18 appreciate the efforts that you've made to protect the water
19 supply around the Neets Bay facility in terms of it's like
20 being helicopter logging for example in some of those units
21 that we had brought forth. We still have a couple of
22 concerns with the preferred alternative, number 5. And I
23 think that primarily it's this Unit Number 92 in terms of
24 direct impact to the hatchery water supply. There's some-
25 thing in the order of 71 acres, two miles of road, in that

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Freitag Comments

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1 unit that potentially could influence our facility. As we
2 stated in our written document, we feel very strongly that
3 the Neets Bay Hatchery is — is operating on the limit right
4 now of its sedimentation rates from the system, and from
5 Bluff Lake, for that matter, and the various slides that have
6 occurred due to past activities in the area, timber activi-
7 ties, road building activities. We've had some slides in
8 there that we're calling natural slides, that almost wiped
9 the facility out one year, in the late 80s.

10 We fell that — at those times we weren't even a full
11 production. We're now at full production. It won't take
12 very much of a sedimentation increase to really influence the
13 survivability of the fish we have in that facility.

14 This particular unit does drain into Bluff Lake. The
15 one thing we would like you to look at in your document, and
16 to make sure that your people have checked out, is it's kind
17 of implied in the document that Bluff Lake will provide a
18 buffer for sedimentation spikes into the watershed. Basi-
19 cally the lake provides a settling pond for sediments that
20 may come into the system farther up. That implies that we
21 get our water down where the facility is located and not up
22 at the lake. The true answer is, is we have a pipeline into
23 the lake itself, so we will — any spikes of sediment into
24 the lake will probably go into our pipeline regardless. It
25 will not act as a sedimentation pond, and we're not sure that

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1 you're hydrologist understood that we actually extract the
2 vast majority of our water for the facility out of the lake
3 directly in a pipeline, and that the lake will not provide a
4 buffer.

5 So, we're concerned about that unit. If there's
6 something that can be done about that, in terms of the
7 harvesting in Unit Number 92, and I think that you've pretty
8 much addressed the other issues in terms of road building and
9 the concerns we had for directly impacting the facility
10 itself.

11 There's another area that we have a concern. The more
12 we started reading in this EIS, as well as some of the
13 concerns that are in Lorraine Marshall's letter, for example,
14 to the — from Alaska Department of Fish and Game, that we're
15 concerned about the actual fish production on the Carroll
16 itself. And you might as why we would, as an organization,
17 worry about the fish production on the Carroll River itself.
18 First of all, we have an obligation, as a Board of Director
19 of fishermen, to see that habitat is highly protected in
20 terms of fish production.

21 However, there's a real high concern for us for a
22 very — a very different reason, and that is that that
23 facility is the chum — the summer chum salmon brood stock
24 for all of SSRAA's releases of summer chum. They include
25 releases at Earl West Cove, Kendrick Bay, Nakat Inlet, Neets

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1 Bay. And there's several fishermen which depend almost on
2 their livelihood, with the Nakat Inlet gill net fishery, on
3 the releases that come out of the summer chum brood stock
4 program.

5 The issue comes, it's part of the obligation SSRAA has
6 made in its Board of Directors and in the Bylaws, that at
7 times we may have to infuse wild genes back into our hatchery
8 brood stock. That means the original brood stock has to be
9 untampered with and very — kept in a pure state.

10 It also is — another thing that potentially could
11 happen to us, which would be a disaster to us, but needless
12 to say it would be even more of a disaster if even the
13 production at Carroll was diminished slightly because of some
14 activity on the system, and that is if we had a pipeline
15 failure, if we had another sedimentation slide in the Neets
16 Bay area that wiped out our summer chum brood stock that we
17 had in the facility, we would potentially be looking at going
18 back into the Carroll River to get our brood stock.

19 In order for us to do that, in order to protect the wild
20 stock, we can't have any diminishment of the actual returns
21 that are going into the wild system, because they would
22 require us to make sure that we leave a good portion of the
23 original brood stock in the system.

24 So, when we started looking at the concerns Fish and
25 Game had in their letter, we want to emphasize the fact that

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1 any kind of activities on the Carroll River, that we would
2 like to see an increased emphasis on protection of, espe-
3 cially, the chum salmon brood, you know, fishery habitat. Of
4 course all the salmon are critical to us anyway, but that
5 program really is vital to us in terms of our summer chum.
6 It's not only — it's also in the regional comprehensive
7 salmon plan that we're supposed to maintain brood stocks for
8 our hatcheries in a pure state, and a fairly healthy state,
9 and I am concerned a little bit about some of the activity on
10 the lower reaches of the Carroll, as identified by Fish and
11 Game.

12 So, other than that, I think we're — we feel pretty
13 comfortable. There is — there are a few errors in the
14 document that we've encountered, and some of them are
15 typographical and things like that, and I'm sure that we
16 have — some of our individuals can, you know, point those
17 out to you so that you can get those right.

18 We also had a problem with, and we mentioned this in our
19 written commentary, it's implied in the EIS that SSRAA would
20 derive a benefit from a road that would eventually link the
21 Neets Bay area over to the Shrimp Bay, and well, actually,
22 the Orchard Lake, Shrimp Bay area, and SSRAA doesn't at all
23 agree that that's a true statement. We'd like to see
24 something done about that simply because we have no activity
25 over there at all anymore. We used to have a sockeye

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1 program, which, I think, is why it was implied that we would
2 have an interest in having a road over there. We have no
3 interest. In fact, we would like to see that no road does
4 get built over to there, because it will — we feel that it
5 presents additional risk to our program that we don't need at
6 this time.

7 So, other than that, I really appreciate the Forest
8 Service's attempt to protect our facility and our development
9 out there in what we're doing, because we do provide a
10 tremendous impact from the fisheries resources that are — go
11 into not only sport fishing, subsistence fishing for that
12 matter, as well as the commercial fleets. So, we appreciate
13 the efforts the Forest Service has made to protect this
14 program. So, thank you.

15 HEARING OFFICER: Thank you Gary. That's the only names
16 that I see checked here. Has anybody else decided that
17 they'd like to speak? Jackie?

18 MS. CANTERBURY: I just didn't check my name.

19 HEARING OFFICER: I'll check it for you here, as soon as
20 I find it.

21 MS. CANTERBURY: Okay. My name is Jackie Canterbury.
22 J-a-c-k-i-e C-a-n-t-e-r-b-u-r-y. And my comment — the first
23 of my comments are going to focus on subsistence issues and
24 then some of the other ones, just, I think, perhaps typos or
25 things that I assume you're going to change anyway.

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1 I was going to talk a little bit — follow up with what
2 Gerry said on Section 810(a)(3)(B) of ANILCA, which requires
3 that those activities that are conducted on federal lands
4 cause the minimum amount of public lands necessary to
5 accomplish the purposes of such use.

6 And, in reading the document, it seemed like — and
7 looking at all the other documents, since the contract
8 logging has seemed to concentrate on the same high volume
9 stands that are important for wildlife, and that's, of
10 course, volumes 5, 6, and 7.

11 On your Table 3.74, page 9 — 195, it shows distribution
12 by volume class, and it seems that there are 300 acres in
13 volume class six, and 16 in volume class seven in the
14 preferred alternative, and that strikes a chord with me
15 because a lot of the research done by John Sheen and Matt
16 Kurchoff suggest that those are the same volume classes that
17 are really important for deer. And, of course, deer is a
18 subsistence game species. So, I wanted to point that out to
19 you.

20 Also, I don't think that, in my way of looking at
21 ANILCA, that it's abiding truly by Section 810, again which
22 requires the least adverse impact in terms of subsistence.
23 And the thing that I'll follow up with Gerry is that — one
24 suggestion I'd like to make to the Forest Service is that
25 they do a cumulative impact analysis for subsistence. Look

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1 at all the areas, look at what areas are most important for
2 subsistence, particularly those historical traditional areas.
3 The same for KIC Saxman. I think that's absolutely essen-
4 tial. Once you get those areas established, then, to me,
5 rather than viewing subsistence as an activity, which you
6 currently do, that you look at it as a resource, and give it
7 actually a led designation, which would provide for a lot of
8 those traditional subsistence values.

9 When I looked at your tables, for North Revilla there's
10 a projected minus 66 percent decline in wildlife habitat
11 capability by the end of the rotation for deer. That's
12 pretty significant. If you add Carroll Inlet, which suggests
13 a 45 percent reduction in deer, that's very significant,
14 particularly in areas that seem to be very important for the
15 people of Saxman in terms of subsistence. And you add that
16 to families that sport hunt, and that adds a whole nother
17 layer on top of that.

18 The other things are specific to the document, and I'm
19 sure that you'll take these out, but page 116, in response to
20 the recisions bill, Public Law 10419 by Ted Stevens, you
21 state, the Forest Service will not implement the HCAs as
22 recommended (indiscernible). This seems contrary to your
23 Regional Forester, and also the law was void as of September
24 30th, 1995. So, I hope that you will continue on the path
25 that I'm really proud of, and that is one of protecting

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1 viability on the Tongass. I think you've really made great
2 strides, and I hope you'll continue, and continue by protec-
3 ting those habitat conservation areas that were recommended
4 by that committee that was convened by the Forest Service.

5 I also want to suggest that it seems to me that the Fish
6 and Wildlife Service on the wolf petition did not say — the
7 way I said it, it said that the wolf should be listed, but
8 they weren't going to list it because you were going to do a
9 habitat conservation strategy with HCAs. So, if that's the
10 case, it seems like you have an obligation to follow through
11 with that.

12 The same thing on page 135, in compliance with the 1995
13 recision bill, the 1996 appropriations bill — well, the
14 recision bill is dead and the 1996 appropriations was vetoed.
15 So, what that means is that the interim nest protection zones
16 for the goshawks, I think they should be given full protec-
17 tion because, again, those laws are null and void, and I hope
18 that we can maintain those — full protection for those
19 goshawk nest, foraging area, et cetera.

20 A real nitty gritty thing that I wanted to mention, on
21 page 141 is the olive sided fly catcher. One statement that
22 you made is that it would improve its habitat if it was clear
23 cut. I've worked on (indiscernible) and migrants up here for
24 five years, and I don't think that — I've never seen any
25 literature that suggests that, although I do know what you're

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1 getting at, that it does prefer edge, but I don't think that
2 it prefers the habitat, so I'd like to make that distinction.

3 The final thing — final two things, one is road
4 density. I find it very — the road density very high in
5 terms of the proportion to the units, and you sort of address
6 it at the beginning, but I think that roading, and as Gary
7 suggested, a lot of impacts to fisheries resources, and I
8 think if those roads could be cut down it would — it would
9 help in terms of wildlife, in terms of subsistence.

10 Last is goat winter range. I didn't see that addressed,
11 and I know Misty has a good sized goat population, and I
12 think it overflows into the upper Carroll. And I think
13 before anything is released you should do a real good
14 assessment of the winter range in Carroll Inlet of goats,
15 because I didn't see anything said in there about goats.

16 And I thank you very much for this opportunity.

17 HEARING OFFICER: Thanks Jackie. Is there anybody else
18 that would like to testify at the hearing? Jim?

19 MR. CARLTON: My name is Jim, Juliet-India-Mike Carlton,
20 Charley-Alpha-Romeo-Lima-Tango-Oscar-November. I'm the
21 Ketchikan Gateway Borough Mayor, and I represent 15,028
22 people. I had the opportunity here a few months ago to make
23 a fly-in. The Forest Service took me up there and flew me
24 over the whole area, so I am pretty familiar with it. I also
25 got out and took a ride in a car, and saw some of the logged

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1 off areas and so forth. I think it's going to be an excel-
2 lent place that we'll someday be able to get a road from
3 Ketchikan back into the back part of the island so we can
4 have some access to recreational areas and maybe even someday
5 get off the island.

6 I think that that KPU line will save the rate payers and
7 the taxpayers big bucks. The more road that's in already the
8 easier it's going to be for them to put it in if it happens
9 before, and maintain it if it happens afterwards. It's a
10 definite plus. There is also a definite need economically
11 for jobs that concern timber, and the Forest Service is way
12 behind on their obligation there.

13 As the Mayor, the Borough Assembly, we had a meeting
14 this Tuesday night, and we made a motion, Mr. Conley, to
15 endorse Alternative 2 in the Upper Carroll Inlet Draft EIS,
16 and encourage the U.S. Forest Service to complete the road
17 segment from Shelter Cove to upper Carroll Inlet as part of
18 the timber sale.

19 I'd like to read you some of the comments that Mr.
20 Conley made. I'll give you a copy of this when it's over
21 with. This is the official minutes from the meeting. He
22 said the reason for encouraging the Assembly members to vote
23 in favor of this is it will provide 116 jobs and a payroll of
24 27.6 million bucks. He believes the community will share in
25 the majority of this economic benefit because of its proxim-

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1 ity to the timber sale. He feels that the community needs to
2 support timber jobs. The industry is in crisis. The Seley
3 sawmill is shut down, with no outlook for timber. Half of
4 the timber offered in '96 has been injected.

5 The Assembly needs to start spending a — or sending a
6 clear message that not only we rely on the revenue from the
7 timber sales, but we also depend on it. We, as a government,
8 need to speak for those jobs. By endorsing this alternative,
9 we are saying we want the maximum jobs for this community.
10 Want the Forest Service to get back on track.

11 He also said later he would like to point out that
12 Alternative 2 on page 42 is going to provide \$142,000 to the
13 Ketchikan Gateway Borough. Every penny we get goes to
14 education. A hundred percent of the timber receipts are used
15 for education.

16 Later Mr. Elkins said there are a lot of good people in
17 the community who think this sale should go forward. We have
18 an administration in Washington, D.C. that are trying to stop
19 these timber sales. By encouraging this we give the local
20 people a bigger club and more clout than they are telling
21 their bosses in Washington, D.C., that Ketchikan needs
22 timber. The Assembly does not need to be vocal about — or
23 does need to be vocal about timber. Most of the people that
24 live and work in Ketchikan wouldn't be here if it wasn't for
25 the timber industry.

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1 I thought those were valid — very valid points. They
2 also authorized me to send a letter and they voted on that,
3 and I'll read the letter to you. It's sent to the Forest
4 Supervisor, and the address that you gave earlier.

5 The Ketchikan Gateway Borough Assembly endorses Alterna-
6 tive 2 for making timber available to local timber purchasers
7 from the Upper Carroll project area. It will provide the
8 largest timber volume to local timber purchasers. It will
9 provide a maximum number of jobs and a healthier economy for
10 Ketchikan. The availability of timber to keep our local jobs
11 and mills active is crucial to this community.

12 Further, the Assembly encourages the U.S. Forest Service
13 to complete the road segment from Shelter Cove to Upper
14 Carroll Inlet as part of their timber sale. For years people
15 in this community have longed for road access to get off the
16 island, and around on the island. Opening this road will
17 give us additional commercial and recreational opportunities.
18 People are anxious to see the road system at Shelter Cove
19 connect the Upper Carroll road system.

20 I appreciate the opportunity. If you have any ques-
21 tions, I'd be glad to answer them.

22 HEARING OFFICER: Thanks Jim.

23 MR. CARLTON: Please, don't let it fall on deaf ears.
24 Thank you.

25 HEARING OFFICER: Is there anyone else who would like to

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1 offer.....

2 MR. RABUNG: I wasn't planning on saying anything until
3 I just heard that. My name is Sam Rabung, R-a-b-u-n-g. I
4 live at Neets Bay. I'm the hatchery manager of SSRAA's Neets
5 Bay Hatchery.

6 Of all the alternatives, Alternative 2 scares me the
7 most. We walk the line daily with sediment loads, and I'm
8 convinced that Alternative 2's road options through the Neets
9 Bay watershed would pretty much shut us down.

10 Gary covered most of our concerns in detail, but I just
11 felt the need to reiterate that Alternative 2 would not be a
12 good thing for the fishing community.

13 If anybody has any other questions, I'd be happy to
14 answer them, but that's about all I have.

15 HEARING OFFICER: Thanks Sam.

16 (Off the record)

17 (On the record)

18 HEARING OFFICER: Is there anyone else who'd like to
19 testify?

20 MR. JACKSYN: My name's not on the list. Okay. My
21 name's Richard Jacksyn. R-i-c-h-a-r-d J-a-c-k-s-y-n. I'm
22 the chairman of the subsistence committee for the Ketchikan
23 Indian Corporation. I am on the economic development
24 committee for the Ketchikan Indian Corporation, which part of
25 it is dealing with the hatchery, which (indiscernible)

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1 corporation also.

2 I'm a traditional tribal member of the Taantakwaan,
3 which is the people of this area who have used the Upper
4 Carroll Inlet area for thousands of years.

5 I understand this issue that was before us is subsis-
6 tence, and I appreciate what the Mayor says about economics
7 in the town, but my interest is in subsistence.

8 Primarily if we're going to talk about something we
9 don't even know is going to happen, a road, I thought what I
10 heard here tonight, that these roads would only be for timber
11 harvest only. They don't tie in any grand plan of a road in
12 the future, although that may be the agenda for some people.
13 My concern about roads, as part of this EIS, is potential
14 damage to the habitat, particularly the wolves, and the
15 bears, and the martins, as it effects their migration
16 processes. Also for road, which can effect the fish that are
17 near in the rivers. It's been on record the Forest Service
18 has had problems in the past with culverts and structures
19 that go and drain into the river, which it affects the
20 balance of the ecosystem as it pertains to the fish habitat.

21 The other thing is, roads will affect subsistence use as
22 far as rural and non-rural. They have not studied the
23 relationship of subsistence use as it pertains to those who
24 can do subsistence use in this area, which, unfortunately,
25 Ketchikan cannot, but Saxman can. And I don't know if the

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1 Forest Service has researched that well enough.

2 In regard to what was said by my president of Ketchikan
3 Indian Corporation, we, as Native people, don't fall into the
4 classification of subsistence use as high, low, or moderate.
5 We all use subsistence equally and we share it together. So,
6 those that go out and get subsistence share with others.
7 Now, they may be taking a high use of subsistence, but as far
8 as their personal use it's moderate, because they have a
9 socialistic way of using that subsistence.

10 I have many reservations about the studies that have
11 been done on the Upper Carroll Inlet, and I am concerned
12 about Lake Tyee, because I think they need to do further
13 study of the wildlife and follow up with the villages on how
14 they use the subsistence, and maybe work with the State,
15 which has done many studies on subsistence use in Saxman. I
16 have seen those studies and the State needs to look at that
17 before they decide who's a high or a low, moderate, or high
18 user.

19 And, in concert with SSRAA, I'm concerned about their
20 Neets Bay fish hatchery because of the possibility — in
21 Alternative 5 it was recommended that the silt and runoff
22 from drainage will affect the fisheries there permanently,
23 and I am hopeful that the EIS will do these studies and make
24 a recommendation based on the input of the public that will
25 satisfy the use of the land and subsistence as it pertains to

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1 all users.

2 In that area, not only does the fish hatchery affect us
3 that produced the fish, but it affects the sports users in
4 Ketchikan, it affects the trollers, it affects the seiners,
5 and I would be interested in their comments on that area, and
6 I don't believe that we are finished with the studies as far
7 as that — their comments are concerned, so I hope that we'll
8 generate enough information through these hearings to hear
9 from their side of the picture as far as what their concerns
10 are.

11 I am a timber man. I belong to Sealaska Corporation,
12 but timber and subsistence are two different issues, and our
13 primary concern is providing for the studies of the animals,
14 protection of those resources as mandated by ANILCA in 1980,
15 and I hope that the Forest Service does do everything they
16 can to protect the interests of the public and the users of
17 the land. Thank you.

18 HEARING OFFICER: All right. Okay. Is there anyone
19 else who'd like to testify or submit additional testimony?
20 Okay. Thank you very much for showing up tonight. I
21 appreciate your coming. There'll be another hearing tomorrow
22 night out at Saxman City Hall, same time and place — same
23 time, not the same place.

24

25

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Jacksyn Comments

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1 HEARING OFFICER: This is a public hearing for ANILCA
2 Section 810 for subsistence for the Upper Carroll Draft
3 Environmental Impact Statement. My name is Bill Nightingale,
4 and I have been designated by the USDA Forest Service as the
5 hearing officer for this proceeding.

6 I would like to welcome you and express our appreciation
7 for your interest and effort to be here at this hearing
8 today. For the record, today is Friday, February 23rd, 1996,
9 and the time is 7:27.

10 This hearing is being held in Saxman, Alaska at the
11 Saxman City Hall. The purpose of this hearing is to get your
12 views on how the alternatives proposed for the project may
13 affect your subsistence use of the Tongass National Forest.
14 Other comments about the project will also be accepted. The
15 formal hearing hours are from 7 to 9 p.m.

16 If you have not done so, please sign in and clearly
17 print your name and who you are representing. When giving
18 testimony, sit near the microphone so your testimony can be
19 recorded. State and spell your full name. All testimony
20 will be limited to 10 minutes. If you wish to provide
21 additional information you will be given the opportunity to
22 do so after everyone else has had a chance to present their
23 views. We will waive the 10-minute rule at this time since
24 there's only two people here.

25 Information about the project and the various alterna-

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1 tives was available at the open house preceding this hearing.
2 During the hearing questions cannot be accepted other than
3 those concerning hearing procedures.

4 Written testimony will be accepted until March 11th,
5 1996. Please mail written testimony to the Forest Supervi-
6 sor, Ketchikan Area, Tongass National Forest, Attention Upper
7 Carroll EIS, Federal Building, Ketchikan, Alaska 99901.

8 Thanks for attending the hearing. Who would like to
9 give the first testimony?

10 MS. CLABBY: Okay. I will be submitting written
11 comments. This is Margaret Clabby, 7960 South Tongass in
12 Ketchikan, and I'll just mention a few of the things that are
13 of.....

14 HEARING OFFICER: Margaret, can I get you to spell your
15 last name for the record, too?

16 MS. CLABBY: Okay. It's C-l-a-b-b-y.

17 HEARING OFFICER: Thank you.

18 MS. CLABBY: And I guess the reason we're here and
19 there's a lot else is we happen to be maybe the closest
20 people to this sale other than the timber camps. We're —
21 our house is probably located — we're on the water at the
22 mouth of Carroll and George Inlets, and we look every day up
23 there, and that's where we get in our boat and go up there
24 and ourselves and all our neighbors use this area exten-
25 sively, the Carroll Inlet area.

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Clabby Comments

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1 We depend on the area for our fishing, our recreation,
2 our joy and happiness in being with families. But, very,
3 very concerned about the affects on water quality, because of
4 the importance of the fishing to us and to just about
5 everybody we know. I mean that's what people do here. You
6 live on fish. And that area is very, very important, so I
7 would like to see no harmful effects on the fishery.

8 I am concerned about other effects regarding the deer
9 habitat and the other wildlife effects, because those are
10 very important. I'm concerned about alternatives that enter
11 some of the habitat blocks and things like that because I
12 feel like there's a T-lump plan coming up and there needs to
13 be a good plan for true sustainability on this stuff. I
14 just — I look at this, and I say there's just too many
15 questions. There's too many things that haven't been
16 analyzed. I look at the cultural analysis and it says, well,
17 there's probably other cultural values of the Native people,
18 but we don't really know what they are, and we don't really
19 know what the — the subsistence uses area. And I don't
20 think we should cut first and then find out. I think it
21 should be the other way around.

22 And it — yes. It's extensive, but the other way is to
23 say if we don't know, then we shouldn't be harvesting. And
24 the bulk of the sales is focused on the need to quickly
25 provide profitable timber to KPC. I mean I read that in the

Zenge's Secretarial Services

1 document, and because there's this pressure to meet the
2 three-year timber supply, to meet the production capability
3 of the facility, I mean apparently the Forest Service
4 contract says you're supposed to meet the production require-
5 ments of the purchaser's manufacturing facilities.

6 I just question that as being a need for this. I mean
7 if we're going to have substantial subsistence risks, then
8 we'd better be darn sure that there's really a need to do it.
9 I've spoken a lot with people at KPC lately, and they're
10 having many, many equipment malfunctions and things where
11 they're having a lot of trouble just keeping the facility
12 operating at all, the pulp company, okay? Which a bulk of
13 this timber would go to.

14 One of their administrators was very upset with me for
15 indicating that they have been able to produce between — you
16 know, over 600 tons of pulp a day. He said we haven't —
17 well, it's just what they tell people that they produce, you
18 know, 620 or 630 a day. He said we haven't even been able to
19 keep up 500. And they've told the State Department of
20 Environmental Conservation that they're really having trouble
21 keeping some of their equipment even functioning. Okay? And
22 so that's very much a concern to me.

23 The other issue that I spoke with people about a little
24 bit was the air quality affects that don't al — only affect
25 the air quality out there, but if the purpose of this is to

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1 supply timber that ends up at KPC, there's very serious
2 concerns right now around that. They've been in violation
3 of — you know, very, very many violations of both the State
4 air things and their permits — they're not able to have a
5 permit right now because of those violations and expectations
6 of violations to ambient air standards, increased cancer
7 risk, enough of different toxic pollutants in the area that
8 would cause plant damage and other kinds of things.

9 They've also submitted reports to DEC saying that
10 there's a direct correlation between the level of pulp
11 production and their output of chloroform, formaldehyde,
12 sulphur dioxide, (indiscernible), which are all expected to
13 be at levels sufficient to harm people's health. And there's
14 a lot of reports of people's health being harmed.

15 I guess I feel like it's kind of this pressure thing
16 between the Forest Service. The Forest Service says you have
17 to keep your mill operating and we're going to provide the
18 timber for it, but they can't really do it and — safely, and
19 yet they've got to keep getting it in order — so I just wish
20 that someone could work out this catch 22.

21 And the other thing in that regard has to do with the
22 water quality, and it sounded like there was some better
23 understanding of what the water quality issues were. I'm
24 both very concerned about the water quality from sedimenta-
25 tion and that sort of thing in this project area, but also on

Zenge's Secretarial Services

1 the effects — I mean basically the sale is to provide timber
2 to a facility that is the — one of the worst water polluting
3 facilities in the Pacific Northwest. It has some of the
4 highest levels of toxic pollutants. They're in a pickle.
5 They can't figure out what to do with their waste because
6 they're so bad. And so it is connected, because we're all
7 connected here. You know, the large amount of dioxins and
8 mercury and that sort of thing.

9 I really don't want to spend the time with this, talking
10 about that, but that was just one thing that didn't seem to
11 be that people had a lot of understanding about the connec-
12 tion between that, so that's why I'm mentioning that.

13 One other thing was, in looking at it, in your report on
14 this, it did talk about the log quality and second growth
15 stands being lower than the existing stands, and I'm very
16 concerned about us using up our old growth in a way and
17 ship — and getting it shipped off, and I know that's not
18 your problem, but on a sustaining people in this area basis,
19 and sustaining jobs, the idea that we'd be using some of this
20 stuff more locally, and if we delay on this one it'll still
21 be there and we ca possibly use it and create more jobs for
22 our children. It's important to me. Thank you.

23 HEARING OFFICER: Thanks, Margaret.

24 MR. HUMMEL: My name if Eric Hummel, H-u-m-m-e-l. I
25 live at 7960 South Tongass Highway, Ketchikan. And, first,

Zenge's Secretarial Services

1 I guess, my comments would have to do with the subsistence
2 issue and the effects of the proposed alternatives on
3 wildlife. In discussing earlier with people, with the
4 biologists here, I see significant differences between the
5 alternatives and also with the existing situation, without
6 the harvest in the area.

7 I guess I look at this area as having some special
8 significance because of its — because this island, topo-
9 graphically, is a challenge. It's got lots of inlets, and
10 Carroll Inlet is one of the most prominent ones. It goes
11 pretty much into the heart of the island and divides the
12 island, along with Neets Bay, in half. And the topography
13 between those two, between Carroll Inlet and Shrimp and Neets
14 Bay, is kind of crucial, I think, for wildlife within the
15 area.

16 Because of its nature of being sort of a constriction
17 between two halves of the island, I think that harvesting
18 within the areas that are potential passage routes for all
19 species, particularly of large animals, of large mammals,
20 is — presents a problem and a challenge, and I think that
21 the harvest within areas, particularly in the center of the
22 area that has been proposed there really should not be — it
23 should not be entered. There's — there's the resource of
24 Misty Fjords on — to the east, and to the west there is the
25 demand of hunters from Ketchikan. There is areas of (indis-

Zenge's Secretarial Services

1 cernible) two, and the Naha drainage, and to put — to road
2 that area and to put in harvest units, and potentially, in
3 the future, have a road link through that area is going to
4 have pretty drastic effects on the passage of animals from
5 one side to the other, with, I think, the end result being
6 that on the — to the west side you will end up with very —
7 with depressed populations of animals in the vi — you know,
8 in the area of Ketchikan.

9 With regards to fish, I think that Carroll Inlet has a
10 real importance to all of us in stocks, and the reentry into
11 that watershed, and the plans for this harvest and future
12 harvests are likely to have significant effects on salmon
13 stocks, you know, both at the Carroll Inlet end, and, if the
14 plans in some of the alternatives are carried out over
15 towards Neets Bay, I guess I have real fear, in looking at
16 these plans, from the standpoint of my son, or my son's son,
17 that when he is my age, that he will be able to go up to
18 Carroll Inlet and find anything wild or alive. I mean
19 obviously it's not that bad, but the fact is that if the
20 area's entered as proposed in all of the alternatives now,
21 and then reentered again in 20 years or so, I guess I feel
22 like the likelihood of the wildlife and the fisheries
23 resources there will be pretty — pretty much gone.

24 I would also like to register my concern with the fact
25 that when the EIS examines issues of air and water pollution

Zenge's Secretarial Services

1 of the — and essentially says that there — there will not
2 be — you know, looks at water pollution as being simply an
3 issue of whether or not silt goes in the streams, and air
4 pollution, whether or not logging trucks create pollutants in
5 the area, and essentially dismisses that as not being of a
6 large effect. The connection between what happens to this
7 timber after it is harvested, and as it gets processed, is a
8 significant one.

9 Essentially, for every thousand board feet of trees that
10 is harvested, there is a necessary — I mean there is, at
11 least in the current situation, an automatic processing cost
12 that comes out of that, and that processing cost is in
13 sulphur dioxide into Ward Cove, and then — I mean into the
14 air of Ward Cove, and chloroform, nitrous — the oxides of
15 nitrogen, dioxins, metals. It results in toxic results on
16 fish in Ward Cove and basically that is a significant cost.
17 It's not a — it's not something that is unrelated to this
18 timber sale. This timber sale goes to create wood, to
19 power — to be processed in a process that creates pollution,
20 and that is not something that should be ignored, and it
21 should be chalked up as a cost of — a cost to this commu-
22 nity, and a cost to this nature of this timber sale. That
23 cost will have to be — will have to be paid at some point in
24 the future, and it's either going to be paid by leaving the
25 mess there and having people live with problems, or else

Zenge's Secretarial Services

1 cleaning it up at a cost of millions of dollars, and that is
2 a cost of this timber sale.

3 On a positive note, I would like to say that I am
4 happier that there are more diverse alternatives, at least
5 somewhat. I would like, however, Alternative 1 up on the —
6 as an equal alternative to all of them, and I've said that at
7 every hearing that I've ever been to, but I've never seen
8 Alternative 1 as a map on the wall, and considered seriously.

9 But I do thank you for this opportunity to testify.

10 HEARING OFFICER: Thank you. If anyone has anything
11 else they'd like to add? Well, at this point we'll suspend
12 the formal comment period and we can open up the questions
13 again if you want, in case anybody else shows up here in the
14 next period of time.

15 *****
16 END OF REQUESTED PORTION
17 *****

18 C E R T I F I C A T E

19 SUPERIOR COURT)
20) ss:
21 STATE OF ALASKA)

22 I, M. JUNE ZENGE, hereby certify:

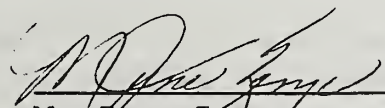
23 That the foregoing pages numbered 1 through 35 contain
24 a full, true and correct transcript of USDA Forest Service
25 subsistence hearings transcribed by me to the best of my
knowledge and ability from tapes recorded by me at the
meetings.

Zenge's Secretarial Services

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DATED at Ketchikan, Alaska, this 26th day of February
1996.

SIGNED AND CERTIFIED TO BY:



M. June Zenge
Court Reporter



KETCHIKAN PUBLIC UTILITIES

2930 TONGASS AVENUE

KETCHIKAN, ALASKA 99901

USDA FOREST SERVICES
KETCHIKAN AREA
RECEIVED
MAR 08 '96
TELEPHONE 907-2
FAX 907-2

FOREST SUPERVISORS OFFICE

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March 7, 1996

MUNICIPALLY OWNED
ELECTRIC TELEPHONE WATER

Ketchikan Area Forest Supervisor
U. S. Forest Service
Federal Building
Ketchikan, AK 99901

Dear Mr. Powell:

Subject: Comments on the Upper Carroll Timber Sale Draft Environmental Impact Statement

Ketchikan Public Utilities has reviewed with interest the DEIS on the proposed Upper Carroll Timber Sale, particularly with regard to how the proposed sale relates to our proposed Swan Lake-Lake Tyee Intertie Project. We offer the following comments, all related to the Intertie's relationship to the Upper Carroll sale:

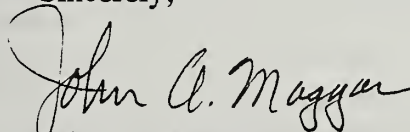
1. The Summary, pages 40 and 41, indicates that the action alternatives would include variable amounts of road construction, and that the road could potentially benefit the transmission line project by allowing shorter flights for helicopters removing timber cleared from the Intertie right-of-way and shorter flights for helicopters delivering towers, cable, and other materials during construction. The miles of road that could provide access to the Intertie corridor are greatest under Alternative 2 (23.8 miles), followed by Alternatives 5 (14.4 miles), 4 (10.2 miles), and 3 (6.4 miles). In the interests of increasing efficiency and reducing costs associated with the Intertie, KPU favors those alternatives that include more road construction rather than less (that is, Alternatives 2 and 5).
2. The DEIS correctly notes that the impacts of the Intertie on various resources or additions of the Intertie to cumulative impacts in the Upper Carroll project area would not be significant. Resources for which this conclusion is specifically noted include water resources, geology, soils, fisheries, wildlife, old-growth and biodiversity, and threatened and endangered species. KPU concurs with this assessment, and recommends that the same conclusion be noted for other resource areas, including wetlands, forest health, subsistence, cultural resources, recreation, roadless areas, silviculture and timber, and the marine environment.
3. The road location currently proposed for the Intertie is the same as that proposed for the Upper Carroll timber sale. The decision to propose the same road location was made by KPU to maximize our opportunities to increase efficiency and reduce costs for the public and KPU's ratepayers by planning jointly with the Forest Service insofar as our proposed project timelines permit. Toward that end, we request that the Forest Service actively include KPU in its planning and implementation of the Upper Carroll sale. We

Mr. Powell
March 7, 1996
Page 2

should coordinate to the fullest possible extent on issues such as road design and construction, LTF construction and use, harvest scheduling for timber harvest units overlapping the proposed Intertie right-of-way, and related issues.

We understand that the Forest Service cannot formally negotiate such issues with us until there are Records of Decision on both the timber sale and the Intertie. In the case of the Intertie, this is expected to be late 1996 or early 1997. In the meantime, however, we believe it is in the best interest of taxpayers and ratepayers alike that we coordinate our planning so that, if both projects go forward, together we will capture all the cost savings to be had.

Sincerely,

A handwritten signature in cursive script that reads "John A. Magyar". The signature is written in dark ink and is positioned above the printed name and title.

John A. Magyar
Acting General Manager

JAM:slb



Greater Ketchikan Chamber of Commerce

P.O. Box 5957, Ketchikan, Alaska 99901

(907) 225-3184

March 8, 1996

Bradley E. Powell
 Forest Supervisor
 Ketchikan Area
 Tongass National Forest
 Attention: Upper Carroll EIS
 Federal Building
 Ketchikan, AK 99901

USDA FOREST SERVICES
 KETCHIKAN AREA

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MAR 11 '96

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Dear Brad:

The Ketchikan Chamber of Commerce requests you modify and select Alternative 2 for the Upper Carroll Timber Sale EIS. We make this request based on the following reasons:

1. Alternative 2 provides the most jobs and salaries, needed for community economic stability.
2. Alternative 2 provides the most timber volume, needed for timber industry survival.
3. Alternative 2 will have the greatest economic multiplier effect for the local community, people, and businesses.
4. Alternative 2 provides the greatest benefit to the development of a transportation/utility corridor through the area.
5. Alternative 2 is the most cost efficient because all of the timber you intend to harvest this entry will be accomplished with this one EIS. The timber operators will have only one start-up cost in Carroll River. The taxpayers will save money because a second EIS will not have to be prepared.
6. Nothing in this EIS indicates there are any serious environmental or social adverse effects of harvesting this timber.

We suggest the following changes in Alternative 2 to better meet the needs of the local people, other users, and economics of the sale.

1. In Neets Bay area, changes may need to be considered to more adequately address the concerns of the hatchery. These could be dropping some units, changing some units to helicopter logging, and changing the road locations to better protect the water quality needed by the hatchery.
2. Reference is made to our letter dated October 28, 1994 to Forest Supervisor Dave Rittenhouse. This letter outlined an alternative developed by the Ketchikan Area

Forest Supervisor
Page 2
March 8, 1996

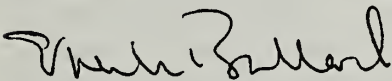
Chamber of Commerce, the Southern Southeast Regional Aquaculture Association, and the Alaska Forest Association. We request you review this proposed alternative and modify Alternative 2 according to maintain timber harvest volumes, the water quality of the Neets Bay Hatchery, and the utility/transportation corridor. During the fall 1994 scoping period you received letters from SSRAA, AFA, and Ketchikan Public Utilities supporting this alternative.

3. Add harvest units to those long road sections without harvest units to make them more economical @ between units 15 and 92.

We continue to be disappointed that you seem to plan for and make progress on the development of a road which will eventually connect Ketchikan to Carroll River and on to Behm Canal at the north end of Revilla Island. The people of and visitors to Ketchikan continue to be denied the recreational opportunities normally available on permanently constructed forest roads, because of no access to these isolated road systems. The Forest Service continues to sell timber sales and build permanent roads to nowhere, with no transportation system strategy or plan that serves the people's needs and desires.

Again, we urge the selection of Alternate 2 with modifications. It appears the only logical choice, and the EIS identifies no reasons why it should not be selected.

Sincerely,



Ernesta Ballard
President



Ketchikan Pulp Company

Post Office Box 6600
Ketchikan, Alaska 99901
U.S.A.

TEL 907/225-2151
FAX 907/225-8260

March 11, 1996

Mr. Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

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KETCHIKAN AREA

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Re: Upper Carroll Draft EIS Comments

Ketchikan District Ranger

Dear Mr. Powell:

Thank you for the opportunity to comment on the Upper Carroll Draft EIS.

The Upper Carroll Area is very important to Ketchikan Pulp Company (KPC) at this time. As you are aware, the Forest Service (FS) has not had success meeting the proposed targets for timber sales over the past few years, causing a shortage in timber available for the timber industry. Some of the timber shortage was caused by litigation, "hard fall down", proposed listings under the Endangered Species Act and the like.

KPC wants to make it clear to the FS that we support an alternative which will provide the most economically feasible timber possible, while protecting the important resources in the Upper Carroll Area. The Forest Service prefers Alternative 5. KPC agrees with this alternative but thinks that Alternative 5 could be improved by dropping unit 92 and adding units 110, 13, 14, 104, 104, 99, 17,

OPERATING DIVISIONS

WARD COVE PULP MILL
THORNE BAY LOG

KETCHIKAN SAWMILL
TUXEKAN LOG
NAUKATI LOG

ANNETTE HEMLOCK SAWMILL
EL CAPITAN LOG

TL7.A94

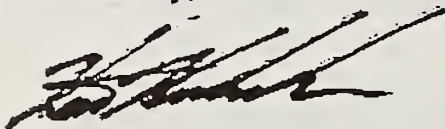
Mr. Brad Powell
March 11, 1996
Page 2

107, 106, 98, and 97 from Alternative 2 to be helicopter logged. This reflects the unified position of the Ketchikan Area Chamber of Commerce, Southern Southeast Regional Aquaculture Association and the Alaska Forest Association.

The wildlife timing restrictions which have been placed on species other than those listed as threatened or endangered under the Endangered Species Act should be dropped. The restrictions only add cost and delay road building and logging operations. Some of the most restrictive timing requirements are on species which can be legally hunted during certain times of the year.

Again, thank you for the opportunity to comment.

Sincerely,



Kent P. Nicholson
Contract Manager

KPN:ak

cc: SSRRA
Alaska Forest Association
Ketchikan Greater Chamber of Commerce
O. J. Graham
A. T. Reinhart

J. Troy Olivadoti
P.O. Box 8974
Ketchikan, AK 99901

Brad Powell
Forest Supervisor
USDA Forest Service
Federal Building
Ketchikan, Alaska 99901

Mr. Powell,

I would like to comment on the Upper Caroll Draft EIS. I live and work in Ketchikan, so I am concerned about this decision and its effect on the area.

I think that the timber industry is a very important part of the local and state economy. Therefore I feel that the USFS must provide the most economical timber while protecting the ecosystem.

The preferred alternative is Alternative 5. This selectoin appears to provide revenue and employment for the local economy. The problems with the plan is that unit 92 does not appear to take advantage of existing roads or landings. I would suggest that units from VCU 737 be substituted to take advantage of existing facilities and roads.

Thanks for your consideraton


J. Troy Olivadoti

March 7, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - Ktn.
Federal Building
Ketchikan AK 99901

RE: UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell:

As I sit here writing this letter I can't help but wonder if it will ever actually reach your hands. I'm beginning to feel like my efforts to share my ideals are wasted. I appreciate the opportunity to express my feelings and hope that you take the time to read them.

I think it is important to be able to have input into the way the Forest Service manages OUR forest lands. You are hire by us as taxpayers and we need to get the most out of our money.

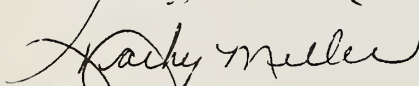
I have lived in Alaska for twenty years and I'm concerned for the communities of this state. Not only for Ketchikan, where I live, but also for Wrangell and Sitka where families have lost their jobs.

I would like to see the Forest Service provide the most economical timber possible to the timber industry. I feel that my neighbor and myself are more important than a wildlife species that may or may not be threatened. I'm sick and tired of radical environmental groups trying to lock-up and shut-down our forest.

Who more than the people that depend on timber for their livelihoods want to protect the forest?

I think the Forest Service is responsible to provide the public with the best possible return on the resources for which they have been entrusted by Congress. Alternative 5 seems to be the best decision out of those available. However, lets create jobs, fund schools, improve - better yet - build roads, and create a higher standard of living by harvesting all units of available timber.

Sincerely,


Kathy Miller

March 7, 1996

Brad Powell
Forest Supervisor
USDA Forest Service -KTN
Federal Bldg.
Ketchikan, Ak

Ref: Upper Carroll Draft EIS Comment

Dear Mr. Powell,

I appreciate the opportunity to respond to the Upper Carroll Draft EIS. I live and work in Ketchikan and support my family through a timber job. I believe the timber industry is a key part of the economy for Ketchikan and Southeast Alaska.

The Forest Service is responsible for providing the best possible return on the resources for which they have been entrusted by Congress. With that in mind, I would like to see the Forest Service manage the Upper Carroll area in a manner that my state, borough, and local community receives the greatest benefit from.

Specifically, I believe Alternative 5 with the units added from Alternative 2, that are in VCU 737, could be helicopter logged. This would make the best economical timber sale possible.

Sincerely,



Sandra Meske
P.O. Box 1445
Ward Cove, Ak 99928

March 7, 1996

Mr. Brad Powell, Forest Supervisor
USDA Forest Service-Ktn
Federal Building
648 Mission St.
Ketchikan, AK 99901

Re: Upper Carroll Draft EIS Comments

Dear Mr. Powell,

Thank you for the opportunity to comment. I think it is important to be able to have input into the way the Forest Service manages the land which has been entrusted to them for me and the other members of the public.

I have lived in Ketchikan for 34 years and have seen many changes over the years in our major industries, timber/construction, fishing and tourism. I have seen the ups and downs of each industry and there always seems to be a balance or a middle ground that can be reached when there is a difference of opinion on how things should proceed. Of particular concern to me in recent years is the process of getting timber released. It seems that the majority of people in Southeast Alaska are in support of a viable timber industry that supports employment in the area, and maximizes the return to the State of Alaska and the Ketchikan Gateway Borough but it seems that it only takes one person to either stop the process or at least slow down the release of timber. I hesitate using the term "environmentalist" because over the years we have used this term to draw distinct lines between those who want to lock up the Tongass to logging and the Timber Industry. The timber industry has supported me and my family for many years but I still consider myself an environmentalist because I do believe in protecting the environment but I also support a sustainable timber industry. There has to be a way to do both. Ever since ANILCA it seems that all the compromises have been made by the timber industry. There is no middle ground when it comes to the "environmentalist", it's all or nothing. The Forest Service should also honor the commitments it has made to the timber industry. If you keep giving half your pie sooner or later there's nothing left. Well, that's enough editorializing, let me get to the point.

The Upper Carroll EIS is very important to me. I believe it is one of the most important areas for Ketchikan's future development. As you are aware, a proposed intertie between Swan Lake and Lake Tyee is underway. Also, there has been a great deal of talk regarding a road corridor from Ketchikan to Shelter Cove and from Shelter Cove to the Upper Carroll area.

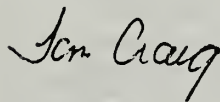
I was happy to see the proposed road from Shelter Cove to Upper Carroll in the scoping documents. However after seeing the Draft EIS for Upper Carroll, I see the Forest Service has decided not to address this issue in any of the alternatives. I believe this was short sighted and must be corrected in the Final EIS. The proposed LTF at Upper Carroll is in a poor location and will be very difficult to operate. The Forest Service should add an alternative which will analyze the environmental, economical and social impacts of hauling all of the Upper Carroll volume to

the existing LTF at Shelter Cove.

These road ties will help to expand the recreational opportunities for the citizens of Ketchikan. Ketchikan has very few miles of roaded recreational access, and these tie roads will help expose people to the vast recreational opportunities which currently are out of their reach. This will satisfy the following issues, 1) Economical, provide jobs in the Ketchikan area, both direct and indirect dependent upon the timber industry and give sizable returns to the State of Alaska and the Ketchikan Gateway Borough. The Forest Service should manage the Upper Carroll area in such a manner that the state, borough, and local community receives the greatest benefits from the proposed activities. 2). Provide access to recreational opportunities never available to Ketchikan residents so that they may enjoy the Tongass. 3). The plan will have the foresight of future development possibilities. 4). Environmental: I believe that the TTRA will continue to protect important streams and allow continued fishing along side of timber harvest units and no special restrictions should be placed on species which are not threatened or endangered.

Thank you again for the opportunity to comment and I sincerely hope that my comments will be taken down and added to those who favor timber harvest, road building, and who cares about the environment.

Yours truly,



Tom Craig
3910 S. Tongass
Ketchikan, AK 99901



TUG NORTON BAY
(907) 225-6300

A-K TUG & BARGE INC.

P.O. Box 5155
KETCHIKAN, ALASKA 99901



FAX (907) 247-6200

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service
Federal Building
Ketchikan, Alaska 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

I want to take just a moment and thank you for allowing me an opportunity to comment on the Upper Carroll Draft EIS. I live in Ketchikan and will be effected by the proposed activities.

My family is supported by the timber industry. I believe the timber industry is the key part of the economy for Ketchikan and southeast Alaska; hunting and fishing are very important to me.

I would like to see the Forest Service provide the most economical timber possible to the timber industry. I want to see the forest developed so that I can enjoy its resources with my family. I don't think the Forest Service should place special restrictions on species which are not threatened or endangered. The Forest Service should honor the commitments it has made to the timber industry.

Thank you again.

Sincerely,

Peter W. Amundson

American Agri-Women



March 7, 1996

Brad Powell
Forest Supervisor
USDA Forest Service -KTN
Federal Bldg.
Ketchikan, Ak

Ref: Upper Carroll Draft EIS Comment

Dear Mr. Powell,

I represent a national grassroots organization with over 48 affiliates. I appreciate the opportunity to respond to the Upper Carroll Draft EIS. Many of our members live and work in Southeast Alaska and support their families through direct and indirect timber jobs. -o

We know the Forest Service is responsible for providing the best possible return on the resources for which they have been entrusted by Congress. With that in mind, we would like to see the Forest Service manage the Upper Carroll area in a manner that the state, borough, and local community receives the greatest benefit. Remembering, that people are important and jobs are vital to their communities. LB CD

Specifically, we believe Alternative 5 with the units added from Alternative 2, that are in VCU 737, could be helicopter logged. This would make the best economical timber sale possible. 18

Sincerely,

Sandra Meske
Timber Commodity Chair

- Alaska Women in Timber
- American Angus Auxiliary
- American Hereford Auxiliary
- American Sheep Industry Women
- Arizona Agri-Women
- California Women for Agriculture
- California Women for Turkeys
- California Women in Timber
- Colorado State Woolgrowers Auxiliary
- Fur Farm Animal Welfare Coalition Ltd
- Idaho Women for Agriculture
- Idaho Women in Timber
- Illinois Agri-Women
- Indiana Agri-Women
- Iowa Agri-Women
- Kansas Agri-Women
- Kansas CattleWomen
- Kansas Sheep Auxiliary
- Lake States Women in Timber
- Michigan Peach Sponsors
- Minnesota Agri-Women
- Missouri Agri-Women
- Missouri CattleWomen
- Montana Women in Timber
- Morning Glory Farms Region
- AMPI Women
- National Peach Partners
- National Shorthorn Lassie Association
- Nebraska Agri-Women
- New Mexico Woolgrowers Auxiliary
- North Dakota Agri-Women
- North Dakota CattleWomen
- Oklahoma Women for Agriculture
- Oregon Women for Agriculture
- Oregon Women for Timber
- Penn's Agri-Women
- Phoenix Cotton Wives
- Red River Valley Potato Growers Auxiliary
- Salers Belles
- Texas Agri-Women
- Texas Sheep & Goat Raisers Womens Auxiliary
- Texas Women for Agriculture
- Washington State Dairy Women
- Washington Women for Survival of Agriculture
- Wisconsin Women for Agriculture
- Women of National Agricultural Aviation Association
- Women for Ohio Agriculture
- Women for the Survival of Agriculture in Michigan



ALASKA T WOMEN IN TIMBER

111 STEDMAN ST.
KETCHIKAN, ALASKA 99901
907-225-6114

March 7, 1996

Brad Powell
Forest Supervisor
USDA Forest Service -KTN
Federal Bldg.
Ketchikan, Ak

Ref: Upper Carroll Draft EIS Comment

Dear Mr. Powell,

I represent a grassroots organization of over 350 members. I appreciate the opportunity to respond to the Upper Carroll Draft EIS. Many of our members live and work in Ketchikan and support their families through a timber job.

The Forest Service is responsible for providing the best possible return on the resources for which they have been entrusted by Congress. With that in mind, I would like to see the Forest Service manage the Upper Carroll area in a manner that the state, borough, and local community receives the greatest benefit. Remembering, that people are important and jobs are vital to our communities.

Specifically, I believe Alternative 5 with the units added from Alternative 2, that are in VCU 737, could be helicopter logged. This would make the best economical timber sale possible.

Sincerely,

Sandra Meske
Vice-President AWIT

CAMPBELL TOWING COMPANY

4418 N. Tongass Hwy # 208 • P. O. Box 7141

Ketchikan, AK. 99901

Telephone: (907) 225-4939 • Fax: (907) 247-4939

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service-KTN
Federal Building
Ketchikan, Alaska 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

I would like to comment on the Upper Carroll Draft EIS. I live in the Ketchikan area, and will be affected by the proposed activities.

My family and the company I work for is supported by and depends on timber harvest throughout all of Alaska. In the last 2 years we have been effected badly because of the lock up of timber harvests, and the environmental invades resulting in the closure of mills, logging camps, and many other businesses. I still don't understand why we as Alaskans let outside of State groups close down and cutoff our resources. Our company normally employs 80 people and we usually have 90% of our equipment busy. In the last 2 years we are down to 25 employees and 70% of our equipment is growing mold from no use, but we still have to pay for what we can't use. The work is not there and we like many others are not going to survive due to the cut off of timber resources.

I'm sure you have heard a lot of these hard luck stories, but the bottom line is what are myself and the rest of the timber related businesses going to do to survive?

I would like to see the State-USFS and other agencies provide the most economical timber possible to the industry. I would like to continue to hunt, fish, and support my family in Alaska. The Forest Service should honor the commitments it has made to the timber industry.

Specifically I believe Alternate 5 with the units added from Alternate 2 that are in VCU737 and could be helicopter logged will make the best economical timber in this location.

Thank You.

Very Sincerely,



Mike Cleman
Campbell Towing Company

MARCH 8, 1996

BRAD POWELL
FOREST SERVICE SUPERVISOR
USDA FOREST SERVICE-KTN
FEDERAL BUILDING
KETCHIKAN, ALASKA 99901

UPPER CARROLL DRAFT EIS COMMENTS

MR. BRAD POWELL


BEING EMPLOYED IN THE TIMBER INDUSTRY, I AM GETTING VERY UPSET WITH HAVING TO RESPOND TO EVERY TIMBER SELECTION THAT SUPPOSEDLY YOUR DEPARTMENT IS RESPONSIBLE FOR MANAGING. WHEN DID MANAGING THE FOREST BECOME "PEOPLES CHOICE"? YOUR DEPARTMENT IS SUPPOSE TO DECIDE WHAT'S AVAILABLE-NOT SELECT AND LET THE ONES WHO RESPOND OR THE COURTS DECIDE.

I'M A LIFE LONG RESIDENT OF KETCHIKAN AND HAVE YET TO SEE ANY DESTRUCTION TO THE ENVIRONMENT THAT WAS CREATED BY THE HARVESTING OF TIMBER. BEING A RESIDENT OF OVER 50-YEARS, HARVESTING OF TIMBER AND THE OPERATION OF THE PULP MILL HAS BROUGHT TO SOUTHEAST A STANDARD OF LIVING WHICH COULD ONLY BE ACCOMPLISHED BY A FEW INDUSTRIES.

UPPER CARROLL AND NEETS BAY AREAS ARE VERY NECESSARY TO THE TIMBER INDUSTRY. YOUR DEPARTMENT SHOULD BE DECIDING WHAT SHOULD BE AVAILABLE TO BE HARVESTED OTHERWISE A COMPUTER, A CLERK AND A FORESTER IS ALL THAT IS NEEDED TO PRODUCE THE SELECTION FOR THE PUBLIC OR COURTS TO DECIDE.

LETS GET BACK INTO THE GAME AND START DOING WHAT YOU'VE BEEN TRAINED TO DO--MANAGE THE FOREST AND PUT THESE ENVIRONMENTALIST/PRESERVATIONIST IN THE PLACES THEY BELONG--WATCHING NEW GROWTH TREES FLOURISHING WHERE THE OLD GROWTH ONE RESIDED. WHY LET FOREST FIRES ENDANGER THE LANDS, ANIMALS AND HABITAT, IF IT IS NOT NECESSARY.

SINCERELY,



ROY TANINO

March 7, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - Ketchikan
Federal Building
Ketchikan, Alaska 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

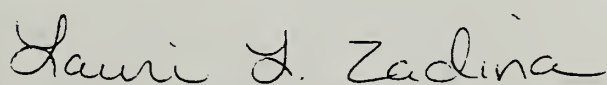
Thank you for the opportunity to make my comments concerning the Upper Carroll Draft EIS. I was born and raised here in Ketchikan where logging has always been a major contributor to the community. Now as an adult, I make my living in the timber industry. The future of the timber industry is of major importance to me and my family and we would like to see the industry continue for many years to come.

I would like to state my preference for alternative 5 because I feel that it represents a balance in the amount of timber harvested and other resource values. There is one change that I would like to emphasize and that is unit 92 in VCU 737 needs to be deleted and another unit or units from the Shelter Cove area needs to be included instead. I would like to preserve the Neets Bay Hatchery area as it stands now and except this one change which I have mentioned above, I believe Alternative 5 accomplishes this.

The State of Alaska receives 25% of all net receipts on timber sales and Alternative 5 provides the largest amount of receipts from the area which will bring back to Ketchikan revenues for schools and roads. The additional roads built from this timber sale will provide even more access to areas for hunting, fishing, and recreational activities.

Finally, I want to stress the importance of this timber sale for the future of the timber industry; an industry that is rapidly dying due to the environmentalist movement. I urge you to take a step back and listen to us who are directly affected by the extreme shortages felt by our industry. Thank you again for the opportunity to comment.

Sincerely,



Lauri L. Zadina

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, AK 99901

March 8, 1996

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

I live and work in the Ketchikan area. Both my husband + I are supported by the timber industry. Thank you for allowing me the opportunity to comment on the Upper Carroll Draft EIS.

I believe the timber industry is a key part of the economy of Ketchikan and Southeast Alaska. My family enjoys the outdoor lifestyle which is so common in Southeast Alaska; and we would like to see it continue.

68

I would like to see the Forest Service provide the most economical timber possible to the timber industry. I don't think the Forest Service should place special restrictions on species which are not threatened or endangered. The Forest Service should honor the commitments it has made to the timber industry.

30

60

Specifically, I believe Alternative 5 is agreeable, but think it could be improved by dropping unit 92 and adding units 110, 13, 14, 104, 99, 17, 107, 106, 98 and 97 from Alternative 2 to be helicopter logged. This reflects the best economical timber rule possible and the unified portions of the

18

Ketchikan Area Chamber of Commerce, Southern Southeast Regional
Aquaculture Association and the Alaska Forest Association.

Thank you again for hearing my comments.

Sincerely,

Jennifer L. Lisac
710 Carlanna #2
Ketchikan, AK 99901

Brad Powell
 Forest Supervisor
 U.S.D.A. Forest Service - KTN
 Federal Building
 Ketchikan, Alaska

3/9/40

Upper Carroll Draft EIS Comments

Dear Mr. Powell,

Concerning the Upper Carroll Inlet
 EIS I support the alternative that will
 be the most beneficial to the timber
 industry such as alt #2 or a modified,
 I repeat, modified version of alt #5 which
 is also the position of the Ketchikan
 Area Chamber of Commerce, Southern
 Southeast Regional Aquaculture Ass. and
 the Alaska Forest Ass. In case you might
 have forgotten the Forest Service has
 an obligation to provide the timber
 industry with a supply of raw material
 as the contract states, and not slowly
 bleed it to death as has been made
 clear this Forest Service under this
 administration is trying to do. Sitka
 and Wrangell's mill closings for example
 It is also clear that the Clinton admin.
 and Mr. Jack W. Thomas weren't too concerned
 about the impact their efforts to hinder
 a timely supply would have on the
 families in these towns, men, women, and children

I trust you will remember these pitiful examples of "supply" when deciding the Carrol Inlet Sale and not make it a continuation of the "slow death" policy being directed at the Tongass timber industry.

Your department is probably as happy as I to have Senators Stevens and Murkowski and Congressmen Young working to get this situation corrected and happier still to know they will have more opportunity with their new chairmanships on important committees.

Sincerely,

Chris J. Warkentin

March 8, 1996
Brad Powell
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr Powell;

I would like to thank you for this opportunity to express my thoughts and feelings. I am a Christian, and I wondered if what I think about the Upper Carroll Draft EIS were right, so I took it to the Lord. (Boy did I get surprised) Old Testament: Cut down the cedars and firs of Lebanon. There are still cedars and firs in Lebanon, after hundreds of years. We are to be good stewards of what he has given us. Do not waste and destroy what He has given us. It is a sin to let a crop that is ripe for harvest to rot in the field. If I (the Lord) have provided once, do you think I cannot do it again? Why, my son do you turn from me and try to do things the way of man, not by my ways? Be not angry and dectieful.

I, myself, find that Fishing, Hunting if better in areas that are logged. Hunting tapers off as the new trees take over. Deer like the grass that grow in the open areas, bear and wolves like the deer. The cut forest areas will only be gone for awhile and the new trees are so beautiful, and grow so fast. The old dead trees are not pretty, to me.

To cut this short, I agree with the alternative 5 Selection. Put the needs of the state and the people of Alaska before the needs of the environmental extremists. Modern Man has the technology to adjust the wild life if it is really nessary. Where I lived in Washington, the land belonged to Weyerhauser, was logged 5 years before I was born and they logged it again about 12 years ago. (about 40 years) Replanted, its' looking great, only now, they are taking it all out to put a housing project in. They were tired of fighting the environmentalist. Now, that forest is gone - forever!

Thank You Antone Baskett

Antone Baskett
NAUKATI LOG

March 9, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - Ketchikan
Federal Building
Ketchikan, Ak 99902

Re: Upper Carroll Draft EIS Comments

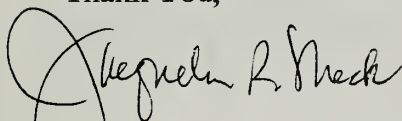
Dear Mr. Powell,

Thank you for the opportunity to comment on the Upper Carroll Draft EIS. I feel that Ketchikan could be negatively affected by the outcome of this proposed timber harvest and road building as it is stated. Even more close to home, as a local business owner with a husband who works at the mill, and a son who makes a living working on tugs, I am concerned about how our personal livelihood could be affected.

I trust that the Forest Service will take into consideration their responsibility to provide our community with the best program on the resources available in this area. Ketchikan has had steady growth since the mill was built in the 50's and I shudder to think of what would happen if they had no product and no reason to continue to do business here. My personal story as stated above is a common one. I believe that wildlife is important (the beauty of the wilderness is why I live here) but wouldn't it be sad if the next endangered species in this area was human beings?

Please consider making some changes to Alternative 5. How about adding units 110, 13, 14, 104, 99, 17, 107, 106, 98 and 97 from Alternative 2 (to be helicopter logged) and dropping unit 92. The additional road system is needed in this area, and I believe that this would be a livable situation and allow all sides to come out as winners.

Thank You,



Jacqueline R. Meck
909 Jackson Street
Ketchikan, AK 99901

March 7, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, AK 99901

Upper Carroll Draft EIS Comments

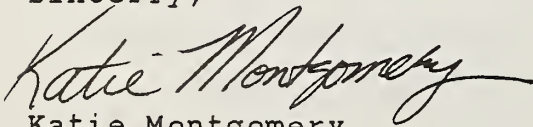
Dear Mr. Powell,

I would like to thank you for the opportunity to comment on the Upper Carroll Draft EIS. I'm a long time resident of Ketchikan and the proposed timber harvest and road building in the Upper Carroll area will have a life time effect on my future.

I applaud you for your preference of Alternative 5, but hope that you will choose to drop unit 92 and add units 110, 13, 14, 104, 99, 17, 107, 106, 98, and 97 from Alternative 2 to be helicopter logged. This also reflects the unified position of the Ketchikan Area Chamber of Commerce, Southern Southeast Regional Aquaculture Association and the Alaska Forest Association. I believe these groups are representative of the majority of the population that lives here in Ketchikan, therefore the Forest Service would be acting on the best interests of the community.

I ask you to manage the responsible harvest of timber, not to stop the harvest of timber.

Sincerely,


Katie Montgomery

March 6, 1996

Brad Powell

Forest Supervisor

USDA Forest Service - KTN

Federal Building

Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

Thank you for the opportunity to comment on the Upper Carroll Draft EIS. I live in the Ketchikan area and will be effected by the proposed timber harvest and road building in the Upper Carroll area.

I think the Forest Service is responsible to provide the public with the best possible return on the resources for which they have been entrusted by Congress. Therefore, I would like to see the Forest Service manage the Upper Carroll area in such a manner that my state, borough, and local community receives the greatest benefits from the proposed activities.

The Forest Service prefers Alternative 5. I agree with this selection but think that Alternative 5 could be improved by dropping unit 92 and adding units 110, 13, 14, 104, 104, 99, 17, 107, 106, 98, and 97 from Alternative 2 to be helicopter logged. This reflects the unified position of the Ketchikan Area Chamber of Commerce, Southern Southeast Regional Aquaculture Association and the Alaska Forest Association.

Sincerely,

David H. Alford
561 02 Loop Rd
KTN

March 7, 1996
Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, AK 99901

UPPER CARROLL DRAFT COMMENTS

Dear Mr Powell,

Thank you for the opportunity to comment on the Upper Carrol EIS. I am a life long Ketchikan resident as is over twenty of my immediate family members. We are all directly supported by the timber industry. I have reviewed the draft EIS and agree that Alternative 5 is a good choice but I believe that it could be improved by adding the units from VCU 737 that could be logged by helicopter.

I believe that the community would benefit greatly from the construction of roads on Revilla Island and am excited with that prospect. I also believe that streams are and will continue to be protected by the TTRA. I have fished and hunted near timber harvest locations and have had very good luck, in fact, I often look for harvested units to hunt deer in.

I encourage the Forest Service to continue to provide access to land for road building and logging, this community is depending on it.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ray Hendricks III', with a long, sweeping horizontal line extending to the right.

Ray Hendricks III

March 6, 1996

Jeff & Kathy Rodger
P.O. Box 9588
Ketchikan, AK 99901

Brad Powell
Forest Supervisor
USDA Forest Service
Federal Building
Ketchikan, AK 99901

Dear Mr. Powell;

My wife and I have lived in Southeast Alaska for a total of over 40 years. We fish, hunt, tour and camp here. We own our home here. We do not want to live elsewhere. I work in the timber industry.

Kathy's father owned a logging company here (Carroll Creek Logging) from 1958 to 1974 and the areas he logged have grown back to the extent that it is difficult to tell that they were clear cut at all.

We are writing because we feel that our way of life is being taken away from us. The timber industry provides us with the resources to hunt, fish, tour, purchase consumable and long term items, make house payments and pay taxes here. 6 B

While camping, hunting and fishing in the surrounding area, we have seen everything from fresh clear cuts to several hundred year old, old growth forest. Wildlife, game and non-game, will and do find their niche in this growth cycle, from fresh young sprouts to ancient semi-sterile forests. Timber harvest is not harmful to wildlife. In fact it provides more food and browse for both prey and predatory animals.

We are concerned about the Upper Carroll Draft E.I.S. The Forest Service prefers Alternative 5. We agree with this selection, but we believe Alternative 5 could be improved by dropping unit 92 and adding units 13, 14, 17, 97, 98, 99, 104, 106, 107, and 110 from Alternative 2 to be helicopter logged. This reflects the unified position of the Ketchikan Area Chamber of Commerce, Southeast Regional Aquaculture Association, the Alaska Forest Association and us. 18

We believe the Forest Service is responsible to provide the public with the best possible return on the resources for which they have been entrusted by Congress. With that in mind, we would like to see the Forest Service manage the Upper Carroll area in such a manner that my state, borough and local community receives the greatest possible benefits from the proposed activities. 10

Sincerely



Jeffrey L. & Kathleen I. Rodger

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

I want to take just a moment and thank you for allowing me an opportunity to comment on the Upper Carroll Draft EIS. I live in the Ketchikan area and will be effected by the proposed activities.

My family is supported by the timber industry. I believe the timber industry is a key part of the economy for Ketchikan and Southeast Alaska. I enjoy the hearty outdoor lifestyle which is so common in Southeast Alaska; hunting and fishing are very important to me.

I would like to see the Forest Service provide the most economical timber possible to the timber industry. I want to see the forest developed so that I can enjoy its resources with my family. I don't think the Forest Service should place special restrictions on species which are not threatened or endangered. The Forest Service should honor the commitments it has made to the timber industry.

Specifically, I believe Alternative 5, with the units added from Alternative 2 that are in VCU 737 and could be helicopter logged, will make the best economical timber sale possible.

Thank you again.

Sincerely,

Synda M. Bluteum
3850 Denali
Ketchikan, AK. 99901

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

I am a fisherman and a hunter. I want to comment on the proposed timber harvest in the Upper Carroll and Neets Bay area.

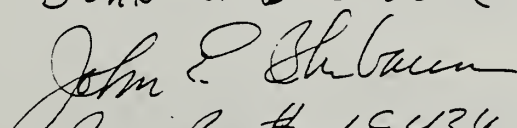
I enjoy hunting and have found the best hunting to be in and around harvested units. The browse seems to be plentiful after harvest and the deer take advantage of it. I want to see more roads developed on Revilla Island so that I can continue to hunt and fish without the expense of taking the ferry to the Prince of Wales Island or chartering a plane to a remote location.

I also enjoy fishing. I want to see more road developed on Revilla Island so that I can drive to some of the good fishing locations that might be accessed by a road system on the island. I believe that the TTRA will continue to protect important streams and allow me to continue fishing along side of timber harvest units. I don't think that the fish hatchery will suffer any sedimentation problems by the proposed helicopter logging in the Neets Bay area on alternative 2.

Fishing and hunting, what more could I ask for? Timber harvest and road development enable me to enjoy both types of recreation. I encourage the Forest Service to continue to provide access to the land.

Thank you for the opportunity to comment.

Sincerely,

John E. Blubaum

P.O. Box # 19434
Thorne Bay, AK 99919

(239)

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

The Upper Carroll EIS is very important to me. I believe it is one of the most important areas for Ketchikan's future development. As you are aware, a proposed intertie between Swan Lake and Lake Tyee is underway. Also, there has been a good deal of talk regarding a road corridor from Ketchikan to Shelter Cove and from Shelter Cove to the Upper Carroll area.

I was happy to see the proposed road from Shelter Cove to Upper Carroll in the scoping documents. However, after seeing the DRAFT EIS for Upper Carroll, I see the Forest Service has decided not to address this issue in any of the alternatives. I believe this was short sighted and must be corrected in the Final EIS. The proposed LTF at Upper Carroll is in a poor location and will be very difficult to operate. The Forest Service should add an alternative which will analyze the environmental, economical and social impacts of hauling all of the Upper Carroll volume to the existing LTF at Shelter Cove.

These road ties will help to expand the recreational opportunities for the citizens in Ketchikan. Ketchikan has very few miles of roaded recreational access, and these tie roads will help expose people to the vast recreational opportunities which currently are out of their reach.

Sincerely,

Cheryl A. Cepstrom
*KPC Employee

Home - 1723 2nd Ave.
Ketchikan, AK 99901

206

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - KTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

Once again the opportunity to comment on a vital component of the timber industries base needs has arrived. I sincerely hope that my comments will be taken down and added to those who favor timber harvest and road building.

I am sick and tired of the crap that is being pulled by the environmental extremists in the White House. I am supported by the timber industry and depend on it to provide me with the basic needs of life. Lately, I feel threatened and attacked every time I read anything the Forest Service is proposing to do in the Tongass to help those who have been whining for "balance".

Take this Draft EIS for example. You have proposed Alternative 5 as the preferred alternative. It really isn't and you know it. Alternative 5 could be a much better alternative by making a few minor changes. For example, add the units in VCU 737 which could be helicopter logged to either Neets Bay or the existing road system and hauled to Shrimp Bay. Get rid of the unit 92 and make up that volume with another unit in the Shelter Cove area.

Stop putting the needs of people after the needs of fish and wildlife. People are important and jobs are vital to our communities. Anything that can be done to provide more jobs and opportunity for people; that's what I want to see done.

Sincerely, Charles C. Ches ~~II~~

15413 IV TONGASS
KTN AK

FATHER OF 3

March 6, 1996

Brad Powell
Forest Supervisor
USDA Forest Service - RTN
Federal Building
Ketchikan, Alaska, 99901

UPPER CARROLL DRAFT EIS COMMENTS

Dear Mr. Powell,

Thank you for the opportunity to comment. I think it is important to be able to have input into the way the Forest Service manages the land which has been entrusted to them for me and the other members of the public.

In this light, I urge the Forest Service to continue to provide the opportunities; economical, recreational, and the like, to the people effected by the Upper Carroll EIS. Family, Schools, and Community, are very important to me. I want to see an alternative selected which will provide for each of these areas to the greatest extent possible. Don't sacrifice the people of the Ketchikan area to the emotional radical environmental groups which seek to "lock up" and "shutout" those who depend on the trees for strong, healthy communities.

Sincerely,

J. Collins
53398 Shoreline Dr N
Ketchikan Alaska
99901



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