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8713 HOUSE RESOURCES

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

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

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

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

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

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

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

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

[1] Totals may not sum due to rounding

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

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

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

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

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

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

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

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

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

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

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

[1] All MMBF figures are sawlog plus utility

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

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

[1] Sawlog plus utility volumes, all species.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Proportion of Deer Habitat Capability Remaining at 2095 Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9	Total Acres [1]	Vicinity
101	102	1564	1513	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.68	0.87	1.00	38952	Gravina Is.
303	6	1616	1592	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85	1.00	1.00	46825	Duke Is.
404	9	3359	3359	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	180282	Revilla Is
405	18	2000	1850	0.84	0.98	0.80	0.86	0.88	0.88	0.81	0.74	0.84	0.75	53095	Revilla Is
406	87	2742	2409	0.80	0.96	0.73	0.82	0.83	0.83	0.74	0.66	0.78	0.68	127166	Revilla Is
407	66	1000	950	0.75	0.98	0.67	0.77	0.81	0.81	0.69	0.70	0.79	0.66	41895	Revilla Is
408	39	373	361	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	16667	Revilla Is
509	58	1285	1214	0.90	0.99	0.83	0.91	0.89	0.89	0.83	0.70	0.85	0.80	68817	Revilla Is
510	41	2445	1860	0.75	0.99	0.72	0.80	0.84	0.84	0.74	0.51	0.70	0.60	154271	Revilla Is
511	0	335	334	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	53258	Revilla Is
612	57	1825	1802	0.77	1.00	0.69	0.79	0.82	0.82	0.70	0.64	0.77	0.63	70653	Cleveland
613	104	1447	1405	0.85	1.00	0.75	0.86	0.85	0.87	0.79	0.69	0.83	0.71	45412	Cleveland
614	13	463	463	0.67	0.95	0.67	0.72	0.79	0.79	0.68	0.66	0.70	0.64	13247	Cleveland
715	4	855	853	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.65	0.83	1.00	101544	Cleveland
716	0	322	322	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	335103	Cleveland
717	1	469	469	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	145861	Misty Fiords
719	1	280	280	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	199556	Misty Fiords
821	2	1179	1179	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	110949	Misty Fiords
822	1	3288	3288	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	390568	Misty Fiords
823	1	2414	2414	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	189136	Misty Fiords
901	38	1958	1940	0.81	0.96	0.77	0.85	0.86	0.86	0.78	0.63	0.82	0.62	37184	Sumez Is
902	36	5403	5399	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.98	0.95	106385	Outer Islands
1003	142	3334	2639	0.69	0.75	0.59	0.71	0.67	0.67	0.62	0.55	0.70	0.55	44494	Heceta Is.
1105	2	5099	5071	0.96	1.00	0.93	0.97	0.97	0.98	0.96	0.60	0.88	0.60	104370	Dall Is
1106	65	388	388	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.65	0.98	0.65	7386	Long Is
1107	40	5804	5703	0.90	0.98	0.82	0.91	0.90	0.91	0.86	0.66	0.84	0.66	145775	POW
1108	16	3430	3420	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	85446	POW
1209	6	3311	3311	0.95	1.00	0.91	0.96	0.95	0.95	0.92	0.68	0.86	0.68	82253	POW
1210	20	2242	2242	0.80	1.00	0.74	0.83	0.86	0.86	0.76	0.55	0.76	0.68	85884	POW
1211	51	1833	1768	0.78	0.95	0.74	0.82	0.84	0.84	0.76	0.69	0.80	0.68	41720	POW
1212	24	1077	1073	0.87	1.00	0.87	0.90	0.93	0.93	0.88	0.77	0.84	0.74	37424	POW
1213	15	788	781	0.83	1.00	0.83	0.88	0.91	0.91	0.85	0.77	0.86	0.78	30003	POW
1214	91	1652	1405	0.75	0.96	0.65	0.81	0.79	0.84	0.76	0.62	0.76	0.62	74713	POW
1315	172	3006	2076	0.75	0.92	0.72	0.77	0.82	0.83	0.76	0.68	0.76	0.68	59798	POW
1316	72	740	739	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	39688	POW
1317	75	1651	992	0.84	0.98	0.73	0.87	0.84	0.89	0.84	0.67	0.81	0.66	61565	POW
1318	323	1276	1213	0.68	0.96	0.64	0.71	0.79	0.80	0.69	0.65	0.69	0.63	58023	POW
1319	302	2975	2364	0.78	0.94	0.65	0.76	0.80	0.84	0.78	0.58	0.74	0.58	103242	POW
1323	126	1677	1654	0.83	0.98	0.81	0.87	0.89	0.90	0.84	0.75	0.85	0.74	38713	POW
1332	65	2306	2104	0.79	0.96	0.74	0.82	0.84	0.87	0.80	0.69	0.81	0.66	65521	POW

WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Proportion of Deer Habitat Capability Remaining at 2095 Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9	Total Acres [1]	Vicinity
1420	121	1301	790	0.73	0.81	0.68	0.75	0.75	0.77	0.73	0.65	0.72	0.65	42738	POW
1421	242	3010	2442	0.76	0.89	0.65	0.76	0.76	0.84	0.80	0.52	0.69	0.58	90410	POW
1422	361	4701	3617	0.66	0.71	0.63	0.68	0.69	0.70	0.66	0.54	0.66	0.61	121272	POW
1524	2	649	649	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	11208	Warren
1525	42	3196	2003	0.75	0.85	0.66	0.80	0.76	0.80	0.77	0.60	0.77	0.60	41106	Kosciusko Is.
1526	56	2443	2328	0.94	0.97	0.92	0.95	0.95	0.95	0.94	0.91	0.94	0.91	66865	POW
1527	37	1632	1383	0.71	0.83	0.68	0.74	0.75	0.76	0.72	0.59	0.68	0.59	39344	POW
1528	43	322	247	0.93	1.00	0.73	0.92	0.88	0.97	0.94	0.72	0.94	0.74	24548	POW
1529	180	2572	2051	0.71	0.86	0.68	0.76	0.76	0.78	0.73	0.62	0.73	0.64	69126	POW
1530	161	2035	1427	0.80	0.88	0.75	0.82	0.81	0.83	0.80	0.70	0.79	0.71	59857	POW
1531	35	2898	2262	0.64	0.77	0.64	0.70	0.71	0.71	0.66	0.53	0.66	0.53	34289	POW
1601	1	1266	1263	0.69	1.00	0.65	0.75	0.80	0.80	0.67	0.59	0.68	0.58	43464	Farragut Bay
1602	5	820	810	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.58	0.99	1.00	139435	Farragut Bay
1603	3	648	607	0.94	0.99	0.79	0.94	0.88	0.88	0.81	0.66	0.88	0.71	78659	Thomas Bay
1605	53	944	767	0.72	0.96	0.72	0.74	0.82	0.82	0.72	0.66	0.73	0.65	149092	Thomas Bay
1706	21	287	287	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	99140	LeConte Bay
1707	3	940	940	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	79643	Stikine River
1708	0	864	864	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	240891	Stikine River
1810	2	660	660	0.61	1.00	0.53	0.67	0.75	0.75	0.58	0.47	0.54	0.52	55392	Back Channel
1811	1	696	688	0.87	1.00	0.78	0.88	0.88	0.88	0.80	0.56	0.81	0.62	92705	Back Channel
1812	4	857	852	0.95	1.00	0.94	0.96	0.97	0.97	0.95	0.68	0.81	0.87	99444	Bradfield
1813	0	401	288	0.92	1.03	0.91	0.93	0.97	0.97	0.92	0.81	0.91	0.91	237510	Bradfield
1814	0	402	397	0.88	1.00	0.88	0.90	0.93	0.93	0.89	0.73	0.80	0.85	69427	Bradfield
1815	0	366	337	0.98	1.00	0.98	0.99	0.99	0.99	0.98	0.92	0.93	1.00	43795	Cleveland
1816	5	646	597	0.79	0.97	0.76	0.81	0.86	0.86	0.78	0.68	0.79	0.68	36333	Cleveland
1817	22	1363	1363	0.92	1.00	0.63	0.93	0.79	0.91	0.85	0.57	0.91	0.55	64140	Cleveland
1901	14	3493	3275	0.74	0.98	0.68	0.79	0.82	0.82	0.71	0.56	0.75	0.58	132832	Etolin Is
1902	1	305	283	0.82	0.96	0.82	0.86	0.89	0.89	0.85	0.51	0.74	0.51	9554	Cleveland
1903	34	2676	2419	0.72	0.95	0.67	0.77	0.79	0.79	0.68	0.57	0.71	0.61	119083	Wragell Is.
1904	63	909	607	0.65	0.92	0.65	0.74	0.79	0.79	0.70	0.53	0.70	0.44	23113	Woronkofski
1905	74	3094	258[illegible]	0.69	0.91	0.62	0.71	0.74	0.74	0.63	0.59	0.69	0.59	117584	Za[illegible]bo Is.
1906	23	942	8[illegible]3	0.75	0.78	0.75	0.76	0.77	0.77	0.76	0.50	0.70	0.49	11376	Shruby Is.
1910	38	3222	31[illegible]8	0.96	1.00	0.96	0.97	0.98	0.98	0.96	0.94	0.96	0.94	102222	Etolin Is.
2007	195	3103	2534	0.69	0.92	0.67	0.71	0.77	0.79	0.70	0.61	0.69	0.61	113403	Mitkof Is
2008	3	347	344	0.66	1.00	0.66	0.72	0.82	0.82	0.70	0.60	0.72	0.57	10636	Woewodski
2202	8	140	140	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.61	0.74	0.61	49374	Lynn Canal
2305	5	248	248	0.96	1.00	0.63	0.96	0.80	0.80	0.67	0.53	0.96	0.53	102183	Lynn Canal
2306	4	158	145	0.72	1.00	0.46	0.76	0.72	0.72	0.53	0.38	0.75	0.38	58598	Cross Sound
2408	0	61	61	0.57	1.00	0.57	0.59	0.75	0.75	0.59	0.57	0.59	1.00	19213	
2409	0	168	167	0.64	1.00	0.66	0.68	0.80	0.80	0.67	0.61	0.68	1.00	17579	
2514	0	311	311	0.87	1.00	0.78	0.88	0.88	0.88	0.79	0.76	0.88	0.74	37393	Juneau
2515	0	364	364	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.91	0.97	0.99	100456	Juneau
2517	14	150	150	1.00	1.00	0.93	1.00	0.96	0.96	0.93	0.90	1.00	0.90	76336	Juneau
2620	20	77	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.57	0.89	1.00	2560	N. Shelter

WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Proportion of Deer Habitat Capability Remaining at 2095											Total Acres [1]	Vicinity
				Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9			
2621	72	163	163	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.56	0.69	1.00		3750	Shelter Is.
2722	375	815	813	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.78	0.90	1.00		29529	Douglas Is
2823	4	186	186	0.74	1.00	0.68	0.77	0.83	0.83	0.72	0.55	0.69	0.61		410930	Whiting River
2824	2		0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		295473	Tracy Arm
2825	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00		304900	Endicott
2926	7	445	438	0.61	1.00	0.61	0.65	0.78	0.78	0.63	0.50	0.63	0.50		131967	Hobart Bay
2927	2	368	367	0.64	1.00	0.58	0.69	0.76	0.76	0.60	0.51	0.65	0.48		148422	Port Houghton
3001	723	3420	2996	0.87	0.98	0.82	0.98	0.98	0.98	0.98	0.96	0.97	0.71		81361	
3002	566	1067	807	0.86	0.94	0.86	0.94	0.94	0.94	0.94	0.77	0.86	0.81		80263	
3003	341	1381	1381	0.92	0.93	0.79	0.92	0.85	0.85	0.80	0.69	0.92	[illegible]66		60222	
3104	260	3130	2809	0.72	0.88	0.69	0.81	0.81	0.81	0.77	0.79	0.81	0.[illegible]6		55451	Kruzof Is
3105	157	1949	1939	1.00	1.00	0.98	1.00	0.99	0.99	0.98	0.88	0.97	0.88		53198	Kruzof Is
3206	143	939	939	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		44395	Baranof Is
3207	129	782	782	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		100161	Baranof Is
3308	201	4150	3164	0.70	0.89	0.65	0.71	0.75	0.75	0.66	0.57	0.69	0.57		108946	Baranof Is
3309	152	1001	978	0.89	1.00	0.89	0.90	0.93	0.93	0.89	0.85	0.87	0.85		49424	Chichagof Is
3310	245	1442	1331	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		71588	Chichagof Is
3311	295	1532	1496	0.82	1.00	0.81	0.84	0.89	0.89	0.82	0.72	0.80	0.76		56224	Chichagof Is
3312	141	438	410	0.87	1.00	0.78	0.88	0.87	0.87	0.78	0.69	0.87	0.76		20654	Baranof Is
3313	131	2135	1508	0.66	0.81	0.63	0.70	0.78	0.78	0.64	0.58	0.66	0.58		74143	Baranof Is
3314	135	998	877	0.99	1.00	0.69	0.99	0.81	0.81	0.69	0.63	0.98	0.66		41827	
3315	127	1392	1284	0.90	0.97	0.72	0.91	0.83	0.83	0.73	0.59	0.90	0.69		43994	
3416	191	1690	1690	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		64812	Chichagof Is
3417	222	2644	2644	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99		137909	Chichagof Is
3418	110	1744	1744	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92		48478	Chichagof Is
3419	93	397	397	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95		64869	Chichagof Is
3420	94	471	471	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		54028	Chichagof Is
3421	86	790	790	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94		43300	
3523	169	1346	1169	0.78	0.94	0.66	0.81	0.77	0.85	0.79	0.63	0.80	0.60		49623	NE Chichagof
3524	208	211	211	0.55	1.00	0.55	0.55	0.73	0.73	0.55	0.54	0.58	0.54		15524	NE Chichagof
3525	210	2441	2034	0.63	0.92	0.58	0.68	0.74	0.76	0.64	0.53	0.67	0.57		73679	NE Chichagof
3526	191	1394	1180	0.79	0.95	0.66	0.80	0.81	0.85	0.79	0.59	0.80	0.60		41048	NE Chichagof
3551	225	1846	1618	0.69	0.94	0.58	0.72	0.74	0.79	0.70	0.54	0.71	0.52		58338	NE Chichagof
3627	71	988	813	0.74	0.92	0.66	0.76	0.77	0.77	0.67	0.64	0.75	0.64		27295	Chichagof Is
3628	31	1042	1024	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		34220	Chichagof Is
3629	161	1830	1706	0.73	0.98	0.68	0.77	0.81	0.81	0.69	0.61	0.73	0.72		98178	Chichagof Is
3630	37	473	468	0.69	1.00	0.69	0.72	0.82	0.82	0.69	0.55	0.69	0.69		70736	Chichagof Is
3731	150	1291	1235	0.97	0.97	0.83	0.97	0.90	0.90	0.86	0.69	0.97	0.63		98751	Chichagof Is
3732	27	278	278	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01		72061	Chichagof Is
3733	121	1813	1813	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		215555	Baranof
3734	120	2057	2057	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		126120	Baranof
3835	319	907	907	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.69		33033	Admiralty
3836	341	1592	1592	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.79	0.66		54569	Admiralty
3837	76	1131	1131	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		59128	Admiralty

				Proportion of Deer Habitat Capability Remaining at 2095											
WAA [2]	Average 8 year harvest	1954 Deer	1995 Deer	Pref.	alt 1	alt 2	alt 3	alt 4	alt 5	alt 6	alt 7	alt 8	alt 9	Total Acres [1]	Vicinity
3938	267	3239	3239	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	76664	Admiralty
3939	297	2976	2976	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	66131	Admiralty
3940	244	2670	2670	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	67845	Admiralty
4041	75	2110	2110	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	54823	Admiralty
4042	107	2608	2608	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	52403	Admiralty
4043	78	1854	1854	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	111609	Admiralty
4044	211	1264	1264	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	69322	Admiralty
4054	47	2222	2222	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	66454	Admiralty
4055	77	2565	2565	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	67997	Admiralty
4145	159	1288	1288	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	65100	Admiralty
4146	158	907	907	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0[illegible]	65443	Admiralty
4147	194	1007	1007	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	44194	Admiralty
4148	162	1686	1686	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	36766	Admiralty
4149	141	1388	1388	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	36573	Admiralty
4150	228	953	953	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	22790	Admiralty
4222	170	2065	2021	0.84	0.99	0.80	0.85	0.88	0.88	0.80	0.79	0.84	0.79	89755	
4252	206	477	477	0.78	1.00	0.65	0.80	0.79	0.79	0.65	0.63	0.78	0.63	21869	
4253	123	1191	1042	0.78	0.95	0.67	0.79	0.80	0.80	0.69	0.70	0.87	0.57	46862	
4256	66	781	781	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	18837	Pleasant Is
5012	14	5687	4736	0.65	0.83	0.63	0.69	0.76	0.76	0.66	0.51	0.65	0.50	147820	Kuiu Is
5013	0	2289	2192	0.81	0.99	0.81	0.84	0.89	0.89	0.82	0.46	0.67	0.76	63271	Kuiu Is
5014	1	2278	2214	0.66	1.00	0.66	0.73	0.80	0.80	0.67	0.57	0.66	0.57	40093	Kuiu Is
5015	0	1191	1191	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	19084	Coronation
5016	0	3162	3127	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	69278	Kuiu Is
5017	0	6627	6535	0.85	1.00	0.85	0.89	0.92	0.92	0.87	0.80	0.87	0.81	124105	Kuiu Is
5018	3	1637	1559	0.83	0.98	0.82	0.84	0.89	0.89	0.82	0.54	0.75	0.82	49217	Kuiu Is
5130	11	2606	2576	0.80	1.00	0.77	0.80	0.87	0.88	0.80	0.67	0.80	0.78	92637	Kupreanof
5131	25	1247	1133	0.86	0.92	0.84	0.86	0.90	0.91	0.86	0.59	0.83	0.85	70472	Kupreanof
5132	56	1088	856	0.70	0.76	0.70	0.72	0.79	0.79	0.71	0.64	0.71	0.63	38610	Kupreanof
5133	21	1507	1483	0.72	1.00	0.67	0.72	0.81	0.83	0.72	0.60	0.70	0.61	107769	Kupreanof
5134	45	3280	3005	0.82	0.96	0.81	0.83	0.88	0.88	0.82	0.78	0.80	0.78	102411	Kupreanof
5135	0	805	804	0.82	1.00	0.77	0.85	0.86	0.89	0.82	0.76	0.82	0.76	55323	Kupreanof
5136	10	1084	944	0.61	0.85	0.61	0.66	0.77	0.77	0.63	0.58	0.63	0.57	59816	Kupreanof
5137	0	535	516	0.98	1.00	0.98	0.98	0.99	0.99	0.98	0.98	0.98	1.00	49570	Kupreanof
5138	47	1659	1507	0.66	0.95	0.61	0.69	0.75	0.78	0.67	0.55	0.65	0.55	60884	Kupreanof
Total	14892	260941	240912	0.86	0.96	0.83	0.88	0.89	0.90	0.86	0.76	0.85	0.78	12966235	

[1] all National Forest lands, including lakes, rock, ice, and high elevation alpine.

[2] The following WAAs have been omited due to low deer densites: 718, 820, 824, 825, 826, 1604, 1809, 2410, 2411, 2412, 2413, 2516, 2518, 2519, 2824, 2825, 4302-4607

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

Direct Employment and Income

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

Total Employment and Income

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

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

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

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

Table 3-110

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

Direct Employment and Income

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

Total Employment and Income

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

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

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

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

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

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

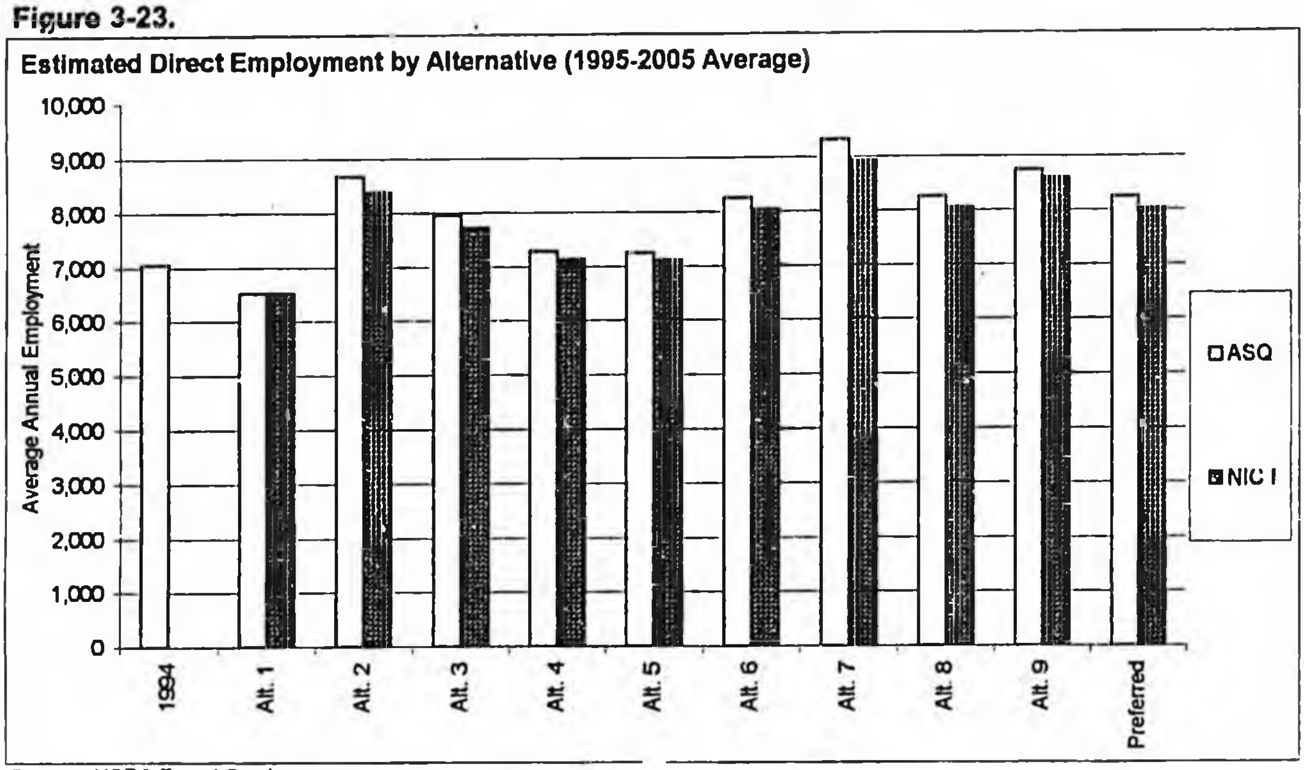
Source: USDA Forest Service. See text for explanations.

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

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

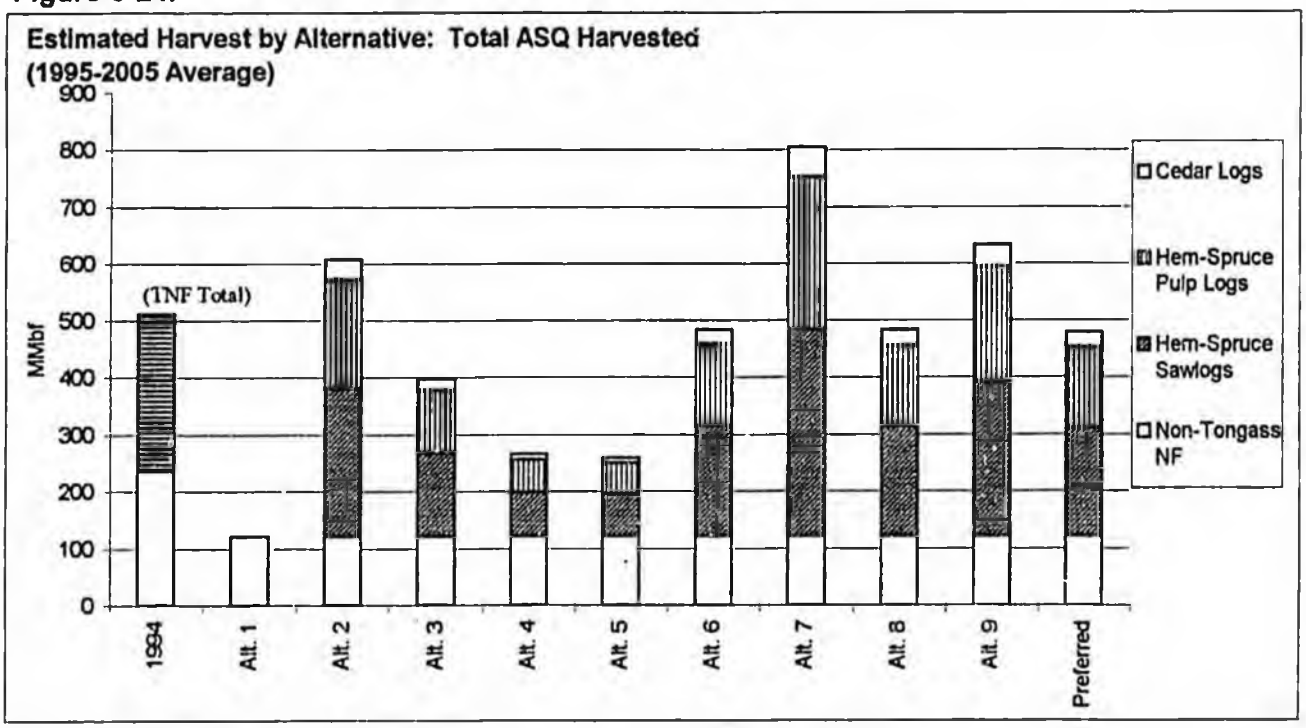
Source: USDA Forest Service. See text for explanations.

Figure 3-23.



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

Figure 3-24.



Source: USDA Forest Service.
See text for explanations.

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

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

Source: USDA Forest Service. See text for explanations.

Figure 3-25

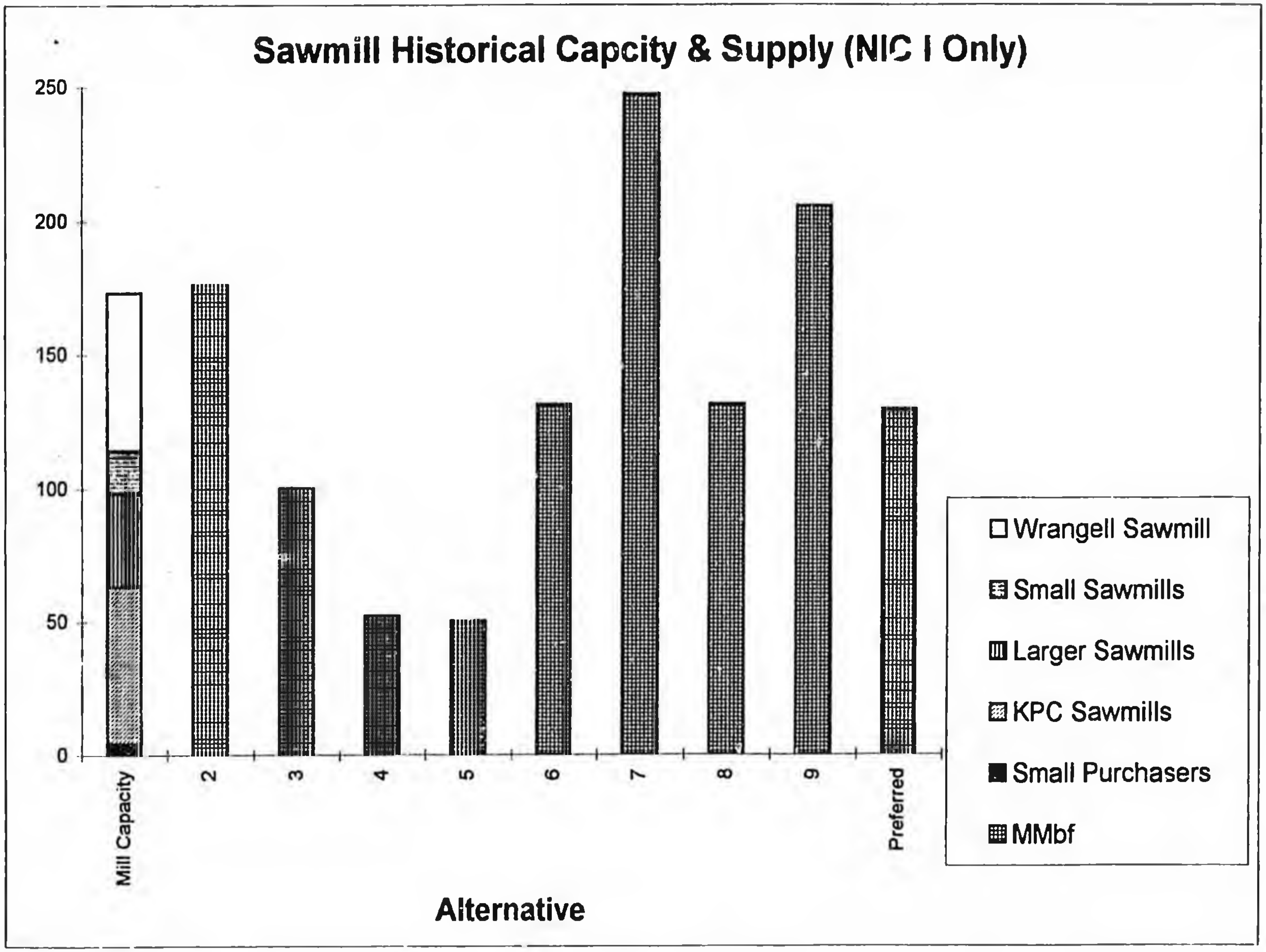

Sawmill Historical Capcity & Supply (NIC I Only)
250
200
150
100
50
0
Mill Capacity
2
3
4
5
6
7
8
9
Preferred
Alternative
Wrangell Sawmill
Small Sawmills
Larger Sawmills
KPC Sawmills
Small Purchasers
MMbf

Figure 3-26

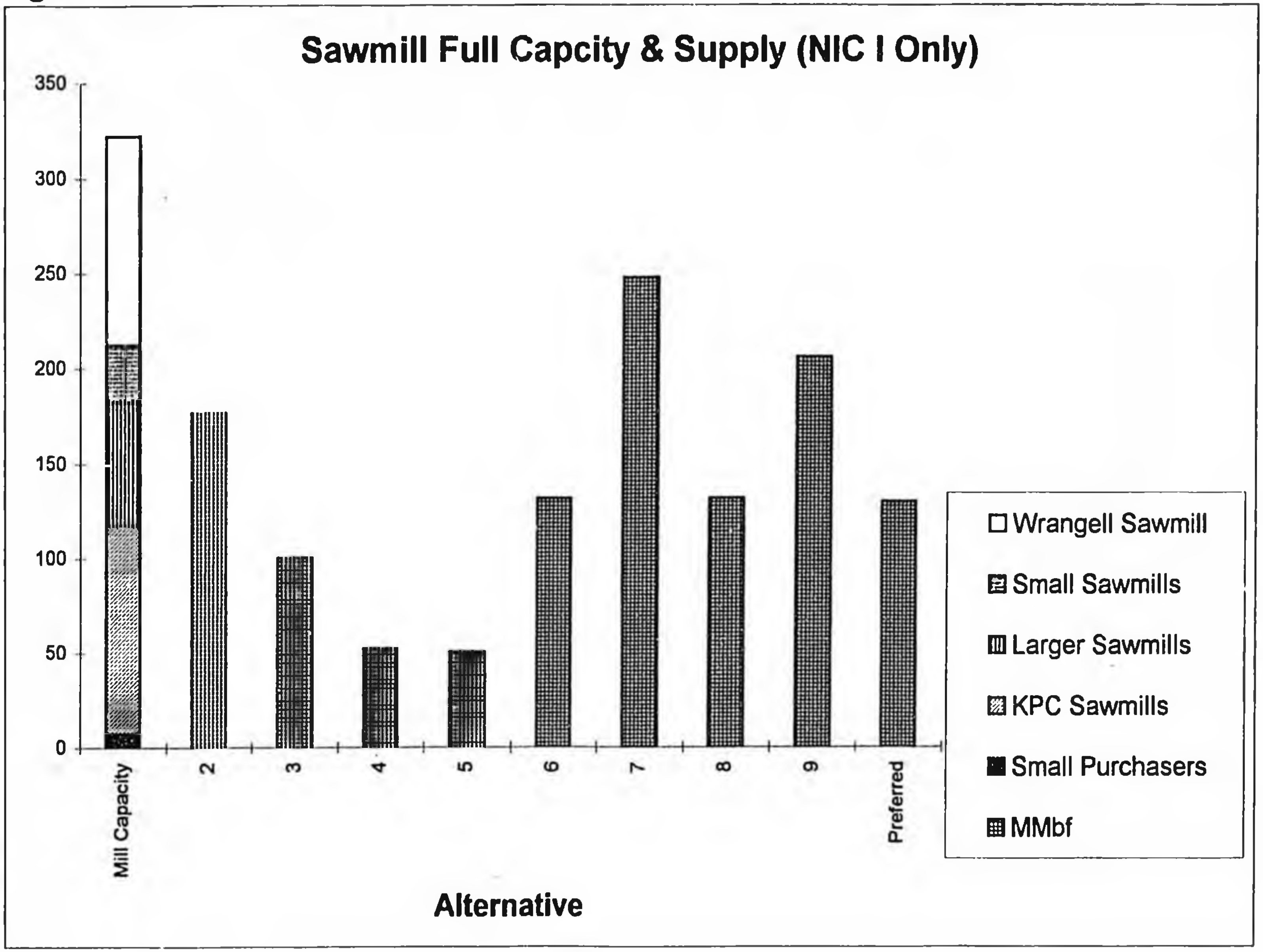
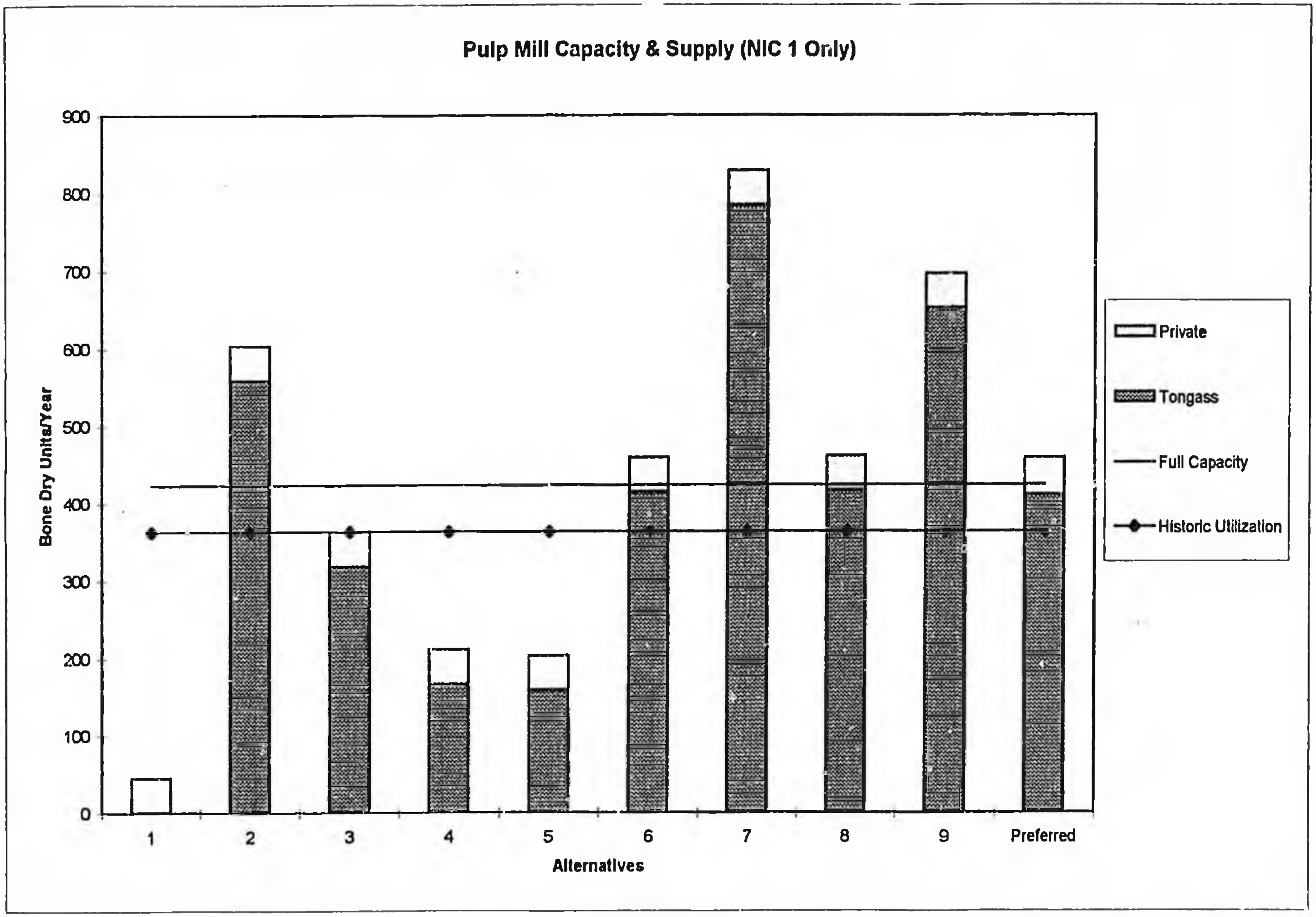

Sawmill Full Capcity & Supply (NIC I Only)
350
300
250
200
150
100
50
0
Mill Capacity
2
3
4
5
6
7
8
9
Preferred
Alternative
Wrangell Sawmill
Small Sawmills
Larger Sawmills
KPC Sawmills
Small Purchasers
MMbf

Figure 3-27



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

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

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

Source: USDA Forest Service. See text for explanations.

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

Supply (1,000 RVDs)

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

Demand (1,000 RVDs)

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

Projected Consumption (1,000 RVDs) in year 2000

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

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

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

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

Source: USDA Forest Service. See text for explanations.

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

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

Source: USDA Forest Service. See text for explanations.

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

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

Source: USDA Forest Service. See text for explanations.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Hyder Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
1003	1	142	2639	1823	1970	1565	1865	1771	1771	1638	1439	1859	1439
1422	1	343	3617	2380	2556	2291	2447	2501	2535	2403	1940	2381	2210
Total	2	485	6256	4203	4526	3856	4312	4272	4306	4041	3379	4240	3649

	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
% Change in Habitat Capability From 1995:	-32.8	-27.7	-38.4	-31.1	-31.7	-31.2	-35.4	-46.0	-32.2	-41.7
Hyder Harvest % of 2095 Capability:	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05
Total Harvest % of 2095 Capability:	11.5	10.7	12.6	11.2	11.4	11.3	12.0	14.4	11.4	13.3

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

WAA*	Average Deer Harvest From 1987-1994 Juneau Residents	All Hunters	1995 Deer Habitat Capability	Deer Habitat Capability by Alternative at 2095 Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3835	307	319	907	907	907	907	907	907	907	907	907	907	630
3836	301	341	1592	1592	1592	1592	1592	1592	1592	1592	1153	1254	1052
4150	226	228	953	953	953	953	953	953	953	953	953	953	953
2722	195	375	815	813	815	795	815	815	815	815	636	734	813
4148	169	162	1686	1685	1685	1685	1685	1685	1685	1685	1685	1685	1685
4149	164	141	1388	1388	1388	1388	1388	1388	1388	1388	1388	1388	1388
3526	163	191	1394	931	1394	777	1394	1394	1394	1394	693	940	711
4147	155	[illegible]	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007
4145	151	159	1288	1288	1288	1288	1288	1288	1288	1288	1288	1288	1288
3629	121	161	1830	1241	1673	1162	1309	1379	1379	1183	1040	1251	1232
3938	114	267	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239
3525	113	210	2441	1285	2441	1186	2441	2441	2441	2441	1080	1369	1168
4146	104	158	907	908	908	908	908	908	908	908	908	908	908
3417	100	222	2644	2643	2643	2643	2643	2643	2643	2643	2643	2643	2624
4044	88	211	1264	1264	1264	1264	1264	1264	1264	1264	1264	1264	1264
3551	88	225	1846	1112	1520	942	1164	1190.6	1284.8	1128	877	1142	848
4222	81	170	2065	1702	1998	1608	1714	1768.8	1768.8	1616	1599	1706	1599
3420	68	94	471	472	472	472	472	472	472	472	472	472	472
2621	64	72	163	163	163	163	163	163	163	163	91	113	163
Total	2772	3900	27900	24593	27350	23979	26346	26497	26592	26086	22923	24263	23044
% Change in Habitat Capability From 1995:				-11.9	-2.0	-14.1	-5.6	-5.0	-4.7	-6.5	-17.8	-13.0	-17.4
Juneau Harvest % of 2095 Capability:				11.3	10.1	11.6	10.5	10.5	10.4	10.6	12.1	11.4	12.0
Total Harvest % of 2095 Capability:				15.9	14.3	16.3	14.8	14.7	14.7	15.0	17.0	16.1	16.9

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

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

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA*	Kake Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3940	92	244	2670	2669	2669	2669	2669	2669	2669	2569	2669	2669	2669
3939	46	297	2976	2975	2975	2975	2975	2975	2975	2975	2975	2975	2975
3938	18	267	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239	3239
Total	156	808	8885	8883	8883	8883	8883	8883	8883	8883	8883	8883	8883
% Change in Habitat Capability From 1995:				0	0	0	0	0	0	0	0	0	0
Kake Harvest % of 2095 Capability:				1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Total Harvest % of 2095 Capability:				9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

	Average Deer Harvest From 1987-1994		1995 Deer	Deer Habitat Capability by Alternative at 2095									
WAA	Pelican Residents	All Hunters	Habitat Capability	Preferred	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9
3419	57	81	397	397	397	397	397	397	397	397	397	397	376
3418	44	107	1744	1744	1744	1744	1744	1744	1744	1744	1744	1744	1611
3417	30	222	2644	2643	2643	2643	2643	2643	2643	2643	2643	2643	2624
Total	131	410	4785	4784	4784	4784	4784	4784	4784	4784	4784	4784	4611
% Change in Habitat Capability From 1995:				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.6
Pelican Harvest % of 2095 Capability:				2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8
Total Harvest % of 2095 Capability:				8.6	8.6	9.6	8.6	8.6	8.6	8.6	8.6	8.6	8.9

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A.D.N.
2-23-96

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

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

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

MIKE DOOGAN

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

File Code: 1920

Date: April 5, 1996

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

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

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

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

Background

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

As part of the public involvement process associated with these two proposals for revising TLMP, the Forest Service held numerous public meetings in communities throughout Southeast Alaska, in Anchorage, Seattle, and Washington D.C., and received over 10,000 public comments. All of this input was analyzed and considered in the development of a final environmental impact statement (FEIS), which was scheduled for release in early 1993. As the FEIS was being prepared in 1992, additional information became available regarding several of the issues involved in the revision. Accordingly, the Regional Forester, as the deciding official, withheld release of the FEIS and requested additional analysis on these issues.

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

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

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

1. Incorporate a habitat management strategy for wildlife viability.

2. Strengthen the riparian management direction.

3. Protect karst and cave resources.

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

5. Protect special and unique areas.

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

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

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

9. Be implementable.

Our Preferred Alternative

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

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

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

--an average timber stand rotation of 100 years;

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

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

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

--a beach fringe of 500 feet;

--an estuary fringe of 1,000 feet;

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

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

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

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

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

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

Rationale for Our Preferred Alternative

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

Wildlife Viability

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

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

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

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

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

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

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

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

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

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

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

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

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

Riparian Management

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

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

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

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

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

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

Karst and Cave Resources

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

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

Resource-Supply and Socioeconomic Issues

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

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

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

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

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

It is worth noting that ASQ figures constitute a ceiling, not a floor, for timber harvest activities. History also suggests that ASQ estimates do not guarantee achievable timber program levels, due to congressional budget constraints and several factors that are difficult to estimate accurately until project field reconnaissance is completed. Therefore, even though adjustments have been made to account for such "falldown" factors, the actual annual sale program may be lower than the maximum number shown in the ASQ figures. Under current economic and technological conditions 297 MMBF is the projected sale quantity.

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

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

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

Protecting Special and Unique Areas

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

Before addressing how our preferred alternative meets this criterion, it is worth remembering that the Alaska National Interest Lands Conservation Act (ANILCA) of 1980 designated 14 wildernesses on the Tongass, totalling some 5.4 million acres. In addition, the Tongass Timber Reform Act of 1990 designated 5 new wildernesses on the Tongass, and added to an existing wilderness, for a total of over 296,000 acres. TTRA also prohibited logging and limited road construction in an additional 12 "Land Use Designation II" areas totalling over 722,000 acres. As a result of these congressional designations, about 6.4 million acres, or over 38 percent of the forest, is in a protected status that is not subject to reallocation in the Forest Plan. Many of the Forest's special or unique areas are permanently protected within these designations.

Beyond the existing congressional designations, our preferred alternative protects:

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

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

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

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

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

Addressing Input Provided on Previous Proposals

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

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

Compliance with all Applicable Law

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

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

Maintaining Options to Respond to New Information

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

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

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

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

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

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

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

Feasibility

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

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

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

Effects of Our Preferred Alternative

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

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

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

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

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

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

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

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

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

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

Conclusion

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

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

--improves riparian protection over current practices;

--increases protection for karst and cave resources;

--maintains options to respond to new information;

--meets the requirements of all applicable laws;

--can be readily implemented; and

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

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

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

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

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

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

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

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

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

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

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

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

--Public participation in the forest planning process.

--Habitat protection measures based on science.

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

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

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

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

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

ABIGAIL R. KIMBELL Forest Supervisor Stikine Area Tongass National Forest	GARY A. MORRISON Forest Supervisor Chatham Area Tongass National Forest	BRADLEY E. POWELL Forest Supervisor Ketchikan Area Tongass National Forest

☆ U.S. GOVERNMENT PRINTING OFFICE: 1996 - 790-124 / 21044 REGION NO. 10

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

Good Morning Mister Chairman:

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

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

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

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

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

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

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

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

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

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

Thank you.

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

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

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February 1996

EXECUTIVE SUMMARY

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

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

Federal Policies Could Close Idaho Sawmills

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

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

KEY FINDINGS

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

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

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

The Economic Impact of Mill Closures

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

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

Other Possible Futures

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

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

Can Tourism Replace Lost Timber Income?

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

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

Changing Timber Policies Affect Local Public Finance

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

Sawmill Closures Could Affect the Lewiston Pulpmill

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

Impact Information Empowers Decision Makers

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

Who Will Live in Idaho's Rural Communities?

We conclude that National Forest policy greatly influences the answer.

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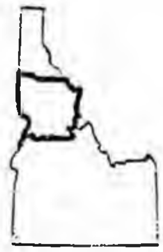
INTRODUCTION

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

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

FIGURE 1 COMMUNITIES OF NORTHCENTRAL IDAHO



Lessons from Northeastern Oregon

In 1993 we examined the economic effects of similar timber policy changes in three counties of northeastern Oregon (McKetta, 1994). We predicted that within four years these changes would close five of eleven primary wood products mills. Our predictions proved to be conservative: six mills closed in the first year. We predicted

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

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

that some rural, timber-dependent communities would lose over half or more of all jobs. The overall loss of almost 2,000 timber and timber-linked jobs is still working its way through that economy. While unemployment payments and other public assistance are easing the economic adjustment, the long-run outlook for many Oregon resource communities remains poor.

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

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

The Idaho Legislature Funds an Economic Impact Study

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

Our study required two types of

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

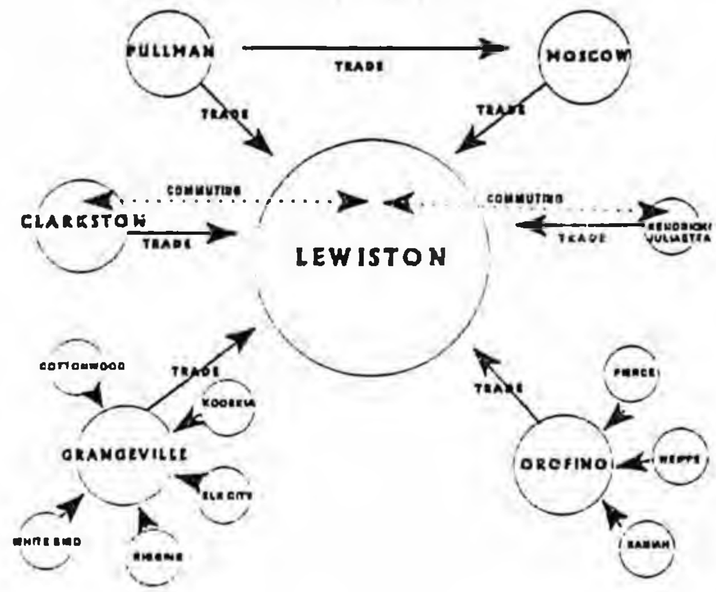
economic analyses. A *timber analysis* reviewed the structure of the region's timber market, including public and private forest ownerships, log prices, log flows to specific sawmills, the economic vitality of mills, and

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

other variables linking public timber policy to local sawmill activity. The second, our *impact analysis,* assessed the character of the local regional economy, profiled the industries and economic base of each community, and established the pattern of regional intercommunity trade.

Our techniques can estimate the overall job, income, and fiscal effects from changes in any particular sector such as sawmills, tourism, quality of life migration, agriculture, or mining. Technical details can

FIGURE 2 TRADE HIERARCHY FOR NORTHCENTRAL IDAHO



be found in McKetta (1995), Robison (1995a), and Robison and Peterson (1996). A complete listing of community impacts can be found in Robison et al.(1996).

We Focus on Communities

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

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

TABLE 1 1994 ECONOMIC PROFILE OF RIGGINS

Community Income Account

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

Earnings and Employment by Industry

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

TABLE 2 1994 ECONOMIC PROFILE OF PIERCE

Community Income Account

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

Earnings and Employment by Industry

INDUSTRY	EARNINGS ($1,000)	%	EMPLOY	%
Ag	$12	0.1%	4	0.6%
Construction	$163	0.9%	13	2.2%
Manufacturing	$222	1.2%	10	1.8%
Wood / Paper	$14,788	81.0%	372	64.1%
Transportation	$337	1.8%	15	2.6%
Trade	$582	3.2%	43	7.5%
Finance	$209	1.1%	16	2.8%
Motels/Dining	$196	1.1%	25	4.3%
Consumer Services	$48	0.3%	4	0.7%
Business Services	$2	0.0%	0	0.0%
Social Services	$343	1.9%	23	3.9%
Local Govt	$73	0.4%	3	0.6%
State Govt	$844	4.6%	39	6.8%
Fed Govt	$450	2.5%	12	2.1%
TOTAL	**$18,266**	**100.0%**	**580**	**100.0%**

The Northcentral Region

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

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

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

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

FIGURE 3 1994 ECONOMIC PROFILE OF RIGGINS

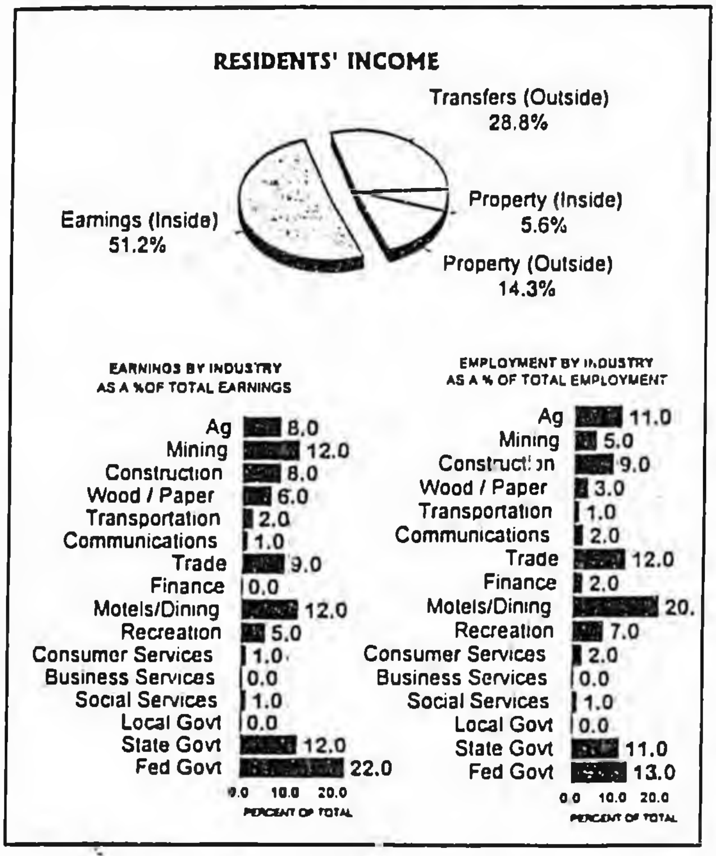
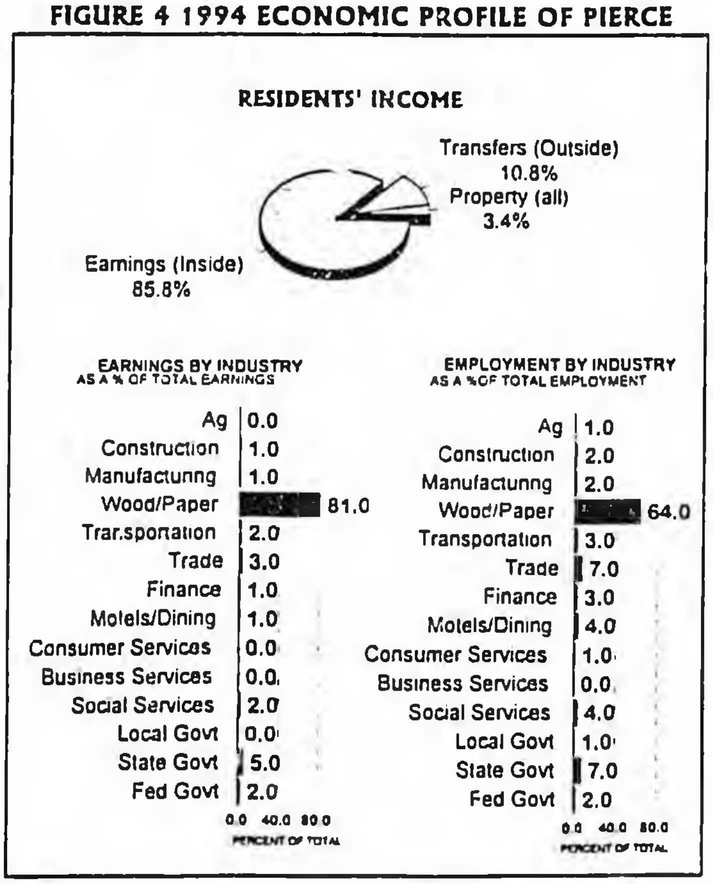


FIGURE 4 1994 ECONOMIC PROFILE OF PIERCE



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

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

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

THE REGION'S ECONOMIC BASE

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

FIGURE 5

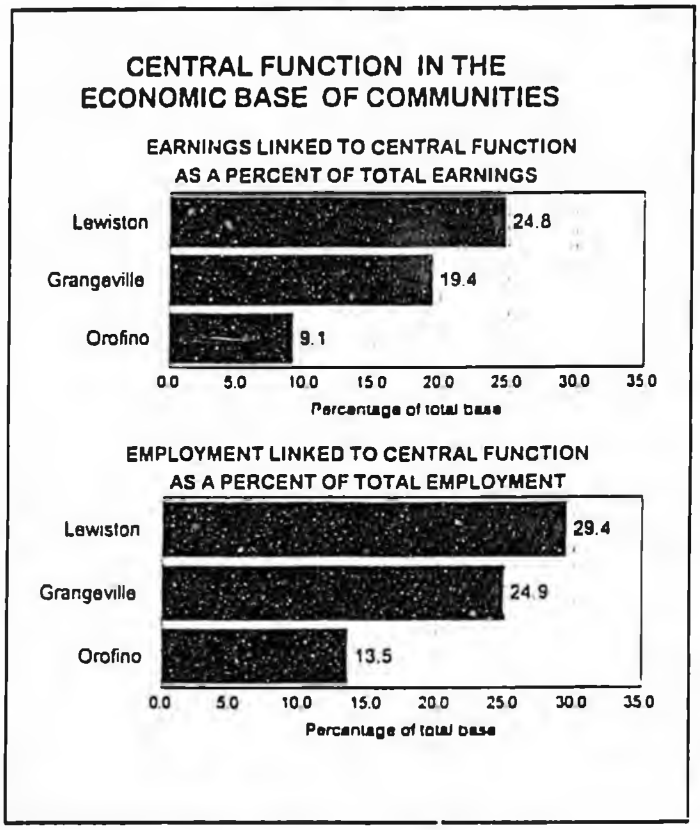
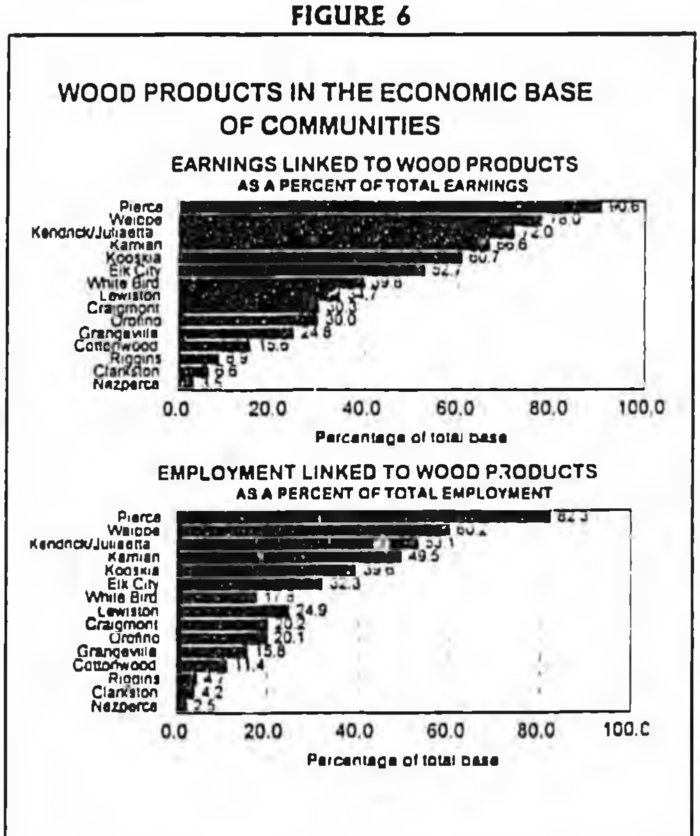


FIGURE 6



Trade Centers

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

Wood Products

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

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

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