# CHAPTER 4. CONSULTATION AND COORDINATION

The Forest Service has provided notification in the *Federal Register* and opportunity for public comment for promulgation of the Roadless Rule. In addition to Administrative Procedures Act (APA) requirements, the Agency chose to evaluate and disclose the environmental effects of the proposed rulemaking through an EIS prepared in compliance with the National Environmental Policy Act (NEPA). The implementing regulations for NEPA also provide opportunity for public comment after publication of a Notice of Intent in the *Federal Register* and again after publication and distribution of a DEIS. The Agency combined the rulemaking of APA and NEPA processes by publishing the proposed rule at the same time the DEIS was published and distributed.

Public involvement for the Roadless Rule began on October 19, 1999, when the Forest Service published in the *Federal Register* a Notice of Intent to prepare a proposed rule and an environmental impact statement that would provide direction for the future management of inventoried roadless and other unroaded areas. Publication of the Notice of Intent initiated a 60-day scoping period to identify relevant public issues and concerns. The scoping period included more than 180 listening sessions throughout the nation that drew more than 16,000 participants. More than 360,000 public responses were collected through these meetings, and by letter, electronic mail, and telefax. These comments were analyzed to help develop the Roadless Rule and DEIS. (*Roadless Area Conservation Proposed Rule and DEIS, Forest Service, May 2000*).

A website, (**roadless.fs.fed.us**), was launched in November 1999 to share information about the proposal. The website included a copy of the Notice of Intent, a set of preliminary questions and answers about the proposal, copies of news releases, public meeting schedules, and contact numbers for information from specific regional offices and national forests. Later, the website information was expanded to display profiles of representative inventoried roadless areas from around the country, a full set of State and national forest maps of inventoried roadless areas, a summary of the public comments received during scoping, specialist reports, other supporting information used in developing the DEIS, and direct links to news articles, other pertinent Forest Service and USDA sites, and other sites discussing the Roadless Rule.

To further broaden involvement, members of the National Roadless Team and regional coordinators provided information to a wide array of interest groups including: wildlife, hunting, fishing, travel and tourism, recreation, State and local governments, transportation, professional societies and academic interests, conservation education, racial and cultural minorities, natural resource interests (for example: fire, forestry, mining, ecology, and water), and disability access groups (groups that focus on recreational accessibility of public lands for people with disabilities).

Consultation with American Indian and Alaska Native Tribes began during scoping and continued throughout development of the Roadless Rule. Forest Service line officers made contact with leadership from potentially impacted American Indian or Alaska Native Tribes having proximity to, or interest in, their administrative unit. Most of these contacts were initiated through scoping letters distributed to the tribes, followed by face-to-face meetings between Tribal leadership, members, resource professionals, and other interested parties and Forest Supervisors, District Rangers, and Tribal liaisons. Additional meetings were held during the release of the DEIS to further explain the alternatives analyzed, answer questions, and receive comments from the Tribes.<sup>1</sup>

Throughout development of the roadless environmental analysis, the Agency has responded to continued interest and scrutiny from members of Congress, State governors, and other elected officials. In addition, the Forest Service testified at seven oversight committee hearings, State-level field hearings, and other hearings that dealt indirectly with roadless issues. The Roadless Team conducted regular briefings and updates for key members of Congressional committees and others with interest and oversight for natural resource issues. At the regional and forest level, Forest Service officials met with governors, State agency officials, County officials, and a variety of interest groups to hear their concerns about the proposal and to share information. The Agency estimates that it received more than 11,000 letters addressed to the Chief and his staff asking specific questions about the proposal, including more than 500 letters from members of Congress, other government entities, or letters from citizens relayed through a Congressional office. The Roadless Team has also processed more than 60 requests from citizens for documents and information under the Freedom of Information Act and information requests from congressional oversight committees.

The Roadless Team fielded hundreds of telephone inquiries from national and regional newspaper, radio, and television reporters; concerned Forest Service employees; and a wide variety of public interests. During development of the DEIS, the team briefed Forest Service leaders and employees and developed a network of roadless coordinators at the regional- and national-forest level to provide feedback to the Roadless Team, help improve internal understanding of the proposal, and provide informed contact points for the public.

Some questions and concerns raised by the public and employees during and after scoping focused on a perceived lack of information about what the proposal might affect. Some citizens also expressed a strong need to "speak their mind" about the proposal. Accordingly, public information and involvement for release of the DEIS was designed to provide the maximum information and access in a variety of formats, along with meetings designed to take verbal comments from those who wished to speak.

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<sup>&</sup>lt;sup>1</sup> A separate document entitled "Roadless Area Conservation Rulemaking: Forest Service Consultation With American Indian and Alaska Native Tribes" describes the consultation process in detail and is available upon request.

In early spring, the Agency provided information about how to order copies of the Proposed Rule and DEIS through national and local news media outlets; the project's web site; letters to major libraries, Federal and State resource agencies; congressional, State, and local officials; tribal leaders; and Forest Service employees.

The Roadless Team also conducted several weeks of discussions with a representative internal group of Forest Service field line and staff employees to answer their questions on the proposal and to seek advice on effective information sharing and explanation of the proposal to the broad array of interests across the country. Responding to employee concerns about the proposal, the team also included representatives of the employee union, the National Federation of Forest Employees, on the advisory group. These advisors helped design materials and meeting formats for explaining and commenting on the proposed rule. They also briefed their peers around the country so that Forest Service employees at the local level could answer questions from local citizens about the impacts of the proposal on their interests. The aim was to produce informed and effective public comment on the DEIS.

Release of the DEIS and proposed rule was announced May 9, 2000, initiating a public comment period that ended July 17, 2000. The DEIS and proposed rule, the accompanying maps and database, and the Summary of Public Comment were posted on the web site (**roadless.fs.fed.us**), where it could be downloaded in whole or in part. The documents were sent to every Forest Service office, key State and local natural resources offices, and public library systems. Citizens who requested copies were provided, at their option, the Summary or the full two-volume set in compact disk or hard copy format. More than 50,000 copies of the Summary and 43,000 copies of the two-volume DEIS were distributed; including 10,500 two-volume sets sent to municipal libraries across the country.

The Roadless Team also staffed an internal hotline and external toll-free telephone line with meeting schedule information, document-ordering information, and voicemail to record public questions, which were answered by a member of the Roadless Team. Over 130 messages were fielded and responded to between May 11 and June 12, the first month after the release of the DEIS; the number of calls dropped off to about six telephone inquiries per week throughout the early part of July.

The Forest Service addressed public requests for information and desires to be heard through a two-step public meeting process. In late May and June, about 230 public information meetings and briefings were held at every regional office and national forest or grassland with roadless acreage. Documents and explanatory materials, questions and answers, a user guide summarizing the proposal and instructions for submitting comments, a PowerPoint summary, posters, and maps, were available at every meeting. Forest Service officials were available to discuss expected effects of the various alternatives on local areas. The material and a full schedule of national meetings were also posted on the (**roadless.fs.fed.us**) web site.

In late June and early July, Forest Service units hosted another set of meetings to hear, and record for the official record, verbal comments from interested citizens. More than 200 meetings were held. Some units held daylong and double sessions to ensure that all who wanted to speak were heard. Additional sessions were scheduled at public request. For example, a meeting was held in Hawaii where there are no National Forest System lands, but where citizens expressed interest in roadless area issues in the continental United States. Court reporters transcribed comments for the official record. Comments were also collected through letters, telefaxes, electronic mail, and reports and videotapes. Opportunity to comment was also available through a link on the (**roadless.fs.fed.us**) web site.

All comments, no matter their origin or format, were sent to the Content Analysis Enterprise Team (CAET) for compilation, coding, and archive purposes. Responses began to arrive as early as May 10, 2000. The final day of comment, July 17, brought the largest number of responses, including several hundred thousand postcards and telefaxes. These comments are summarized in the final CAET report (Content Analysis Enterprise Team 2000b).

More than 23,000 people attended public meetings, and more than 1.2 million chose to respond by postcards, form letters, original letters and notes, testimony at meetings, electronic mail messages, and telefaxes. In terms of volume, the roadless proposal is the largest public involvement project in the history of the Department of Agriculture or the Forest Service.

## **Preparers and Contributors**

Under the overall leadership of the project directors, four primary teams prepared this document. The Public Involvement Team coordinated the scoping effort, other public involvement activities, content analysis of the comments, and responses to correspondence. The Data Team collected and managed the extensive and varied information required for this effort. Using information assembled from the other teams, the EIS and Rule Team developed the proposed rule text and alternatives for the DEIS, conducted necessary analyses, and documented the findings in the FEIS. The Interagency Team served as a steering committee, providing review, edits, advice, and oversight to the project. Their close involvement early and often in the process facilitated and expedited the formal review and clearance process.

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## Distribution of the Final Environmental Impact Statement\_

This FEIS has been distributed to individuals who submitted substantive comments on the DEIS and to those who specifically requested a copy of the entire set of documents. Two versions of these documents are available:

- A 43-page summary;
- A 1,766-page, four volume set that also includes a summary, appendices, a set of maps, Agency responses to public comments on the DEIS, and copies of letters from Federal agencies, federally-recognized Tribes, State and local governments, and elected officials.

The above are available in hardcopy, compact disk, and at the Roadless Area Conservation Project Web Site (**roadless.fs.fed.us**). The final rule and Record of Decision will be published in the *Federal Register* no sooner than 30 days after the Notice of Availability for the FEIS is published in the Federal Register.

In addition, copies of the FEIS have been sent to the following Federal agencies, federally recognized tribes, State and local governments, and organizations representing a wide range of views regarding roadless area management.

#### **Advisory Council On Historic Preservation**

#### Agriculture, U.S. Department of

Animal And Plant Health Inspection Service Policy And Planning Division, Office of Civil Rights Rural Utilities Service Natural Resources Conservation Service National Agricultural Library

#### **Commerce, U.S. Department of (DOC)**

National Oceanic And Atmospheric Administration
National Marine Fisheries Service
Habitat Conservationists Division
Northeast Region
Southeast Region
Northwest Region
Protected Species Division, Southwest Region

Protected Resources Management Division, Alaska Region

#### **Council on Environmental Quality**

#### Defense, U.S. Department of

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North Atlantic Division
Northwestern Division
Great Lakes And Ohio Division
Pacific Ocean Division
South Atlantic Division
South Pacific Division
Southwestern Division

Office of Chief Of Navy Operations, Environmental Protection Division

Naval Oceanography Division, U.S. Naval Observatory

#### Energy, U.S. Department of

Office of Environmental Compliance

#### **Environmental Protection Agency**

Office of Federal Activities, EIS Filling Section

**EIS Review Coordinators:** 

Region I Region VI
Region II Region VII
Region III Region VIII
Region IV Region IX
Region V Region X

#### **Federal Energy Regulatory Commission**

#### Housing & Urban Development, U.S. Department of

**Environmental Officers:** 

Boston, MA Fort Worth, TX
New York, NY Kansas City, MO
Philadelphia, PA Denver, CO
Chicago, IL Seattle, WA

#### Interior, U.S. Department of the

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Bureau Of Land Management

National BLM Office Montana/Dakota State Office

Alaska State Office
Arizona State Office
California St

Colorado State Office Utah State Office
Eastern States Office Wyoming State Office

Idaho State Office

National Park Service

Alaska Area Region Northeast Region

Midwest Region National Capital Region

Intermountain Region Southeast Region

Pacific West Region

#### **Interstate Commerce Commission**

#### **Northwest Power Planning Council**

#### **Ohio River Basins Commission**

#### **Susquehanna River Basins Commission**

#### **Tennessee Valley Authority**

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Eastern Region Southwest Region
Great Lakes Region Western-Pacific Region

New England Region Alaska Region Northwest Mountain Region Central Region

Southern Region

Federal Highway Administration

Regional Administrator

Midwestern Region

Southern Region

**Eastern Region** 

Western Region

Federal Railroad Administration

Office of Transportation and Regulatory Affairs

Research and Special Program Administration

U.S. Coast Guard, Environmental Impact Branch

Congressional delegations

State governors

State agencies:

Lands

**Forestry** 

**Transportation** 

Wildlife management

Federally recognized tribes

County and municipal libraries (approximately 10,500 copies)

Forest Service offices

Individuals that provided substantive comments on the DEIS or specifically requested a copy of the FEIS

A complete list of all recipients of the FEIS is maintained in the project record and is available upon request.

### **APPENDIX A**

**Inventoried Roadless Area Acreage Summarized by State, Region, and Forest** 

					Inventoried	Roadless Areas a prescription	Illocated to a
State <sup>1</sup>		Total area of National Forest System land <sup>2</sup>	Total area of National Forest System land in Designated Areas <sup>3</sup>	Total area of Inventoried Roadless Areas within National Forest System land <sup>4</sup>	that does not allow road construction and reconstruction		that allows road construction and reconstruction
(1,	,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Alabama	33,432	665	47	13	13	0	0
Alaska	393,747	22,083	8,605	14,779	8,479	1,638	4,661
Arizona	72,964	11,255	2,105	1,174	415	61	699
Arkansas	34,036	2,586	153	95	22	0	73
California	101,676	20,698	5,674	4,416	1,727	163	2,527
Colorado	66,624	14,509	3,368	4,433	925	11	3,498
Connecticut*	3,548	0	0	0	0	0	0
Delaware**	1,534	0	0	0	0	0	0
District of Columbia**	39	0	0	0	0	0	0
Florida	38,392	1,153	86	50	20	6	25
Georgia	37,745	865	162	63	38	0	25
Hawaii*	4,134	0	0	0	0	0	0
Idaho	53,487	20,458	4,818	9,322	2,285	1,371	5,666
Illinois	36,060	293	34	11	4	0	6
Indiana	23,158	196	13	8	0	0	8
lowa**	36,017	0	0	0	0	0	0
Kansas	52,660	108	0	0	0	0	0
Kentucky	25,863	800	125	3	0	0	3
Louisiana	31,776	604	16	7	2	0	5
Maine	21,594	53	11	6	1	0	5
Maryland**	7,870	0	0	0	0	0	0
Massachusetts**	5,914	0	0	0	0	0	0
Michigan	37,448	2,858	214	16	0	0	16
Minnesota	54,014	2,838	815	62	0	0	62
Mississippi	30,903	1,159	8	3	0	0	3
Missouri	44,614	1,493	72	25	0	0	25
Montana	94,109	16,893	4,124	6,397	1,729	824	3,844
Nebraska	49,523	352	16	0	0	0	0
Nevada	70,763	5,833	1,173	3,186	18	2	3,166
New Hampshire	5,941	728	103	235	121	0	114
New Jersey**	5,258	0	0	0	0	0	0
New Mexico	77,823	9,327	1,617	1,597	1,101	66	430

				Categories o	f NFS Lands		
					Inventoried	Roadless Areas a prescription	allocated to a
State	1	Total area of National Forest System land <sup>2</sup>	Total area of National Forest System land in Designated Areas <sup>3</sup>	Total area of Inventoried Roadless Areas within National Forest System land <sup>4</sup>	that does not allow road construction and reconstruction		that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
New York	32,056	16	0	0	0	0	0
North Carolina	33,710	1,244	144	172	16	15	142
North Dakota	45,251	1,106	0	266	0	0	266
Ohio	26,451	230	0	0	0	0	0
Oklahoma	44,738	397	94	13	0	0	13
Oregon	62,140	15,658	2,965	1,965	797	0	1,168
Pennsylvania	28,806	513	42	25	24	0	1
Commonwealth of Puerto Rico	2,245	28	2	24	6	10	7
Rhode Island**	788	0	0	0	0	0	0
South Carolina	19,961	613	23	8	3	1	4
South Dakota	49,357	2,012	35	80	0	0	80
Tennessee	26,973	698	130	85	39	0	46
Texas	171,057	755	39	4	0	0	4
Utah	54,339	8,179	894	4,013	446	0	3,567
Vermont	6,154	376	82	25	16	0	10
Virgin Islands*	109	0	0	0	0	0	0
Virginia	27,089	1,660	200	394	273	12	109
Washington	45,208	9,214	3,360	2,015	1,284	15	716
West Virginia	15,508	1,033	138	202	14	0	188
Wisconsin	35,933	1,523	49	69	0	0	69
Wyoming	62,604	9,238	3,364	3,257	154	17	3,085
TOTAL ACRES	2,343,144	192,300	44,919	58,518	19,970	4,212	34,336

<sup>\*</sup> These states have less than 500 acres of National Forest System land area.

- 3 Designated areas include national wilderness, national primitive areas, national scenic research areas, national scenic areas, national wild and scenic rivers, national recreation areas, national game refuge & wildlife preserves, national monuments, national volcanic monuments, national historic areas, research natural areas, wilderness study areas, and other Congressionally designated areas. These designated areas include 6,015,000 acres of Inventoried Roadless Areas.
- 4 Inventoried Roadless Areas are based on forest plans, forest plan revisions in progress where the agency has established an inventory, or other assessments that are completed or adopted by the agency. RARE II information is used if a forest does not have a more recent inventory based on RARE II.

<sup>\*\*</sup> These states have no National Forest System lands

<sup>1</sup> Acreages from Government Accounting Office Land Ownership Report to Congressional Requesters, March 1996

<sup>2</sup> USDA Forest Service Land Areas Report September 1999, plus an additional 254,000 acres for Land Between the Lakes National Recreation Area and Exxon Valdez Oil Spill Acquisition. Acreages for National Forest System land and do not include private inholdings.

				Inventoried	Roadless Areas a prescription	located to a
					that does not allow road	
Region	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Region 1*	25,157	5,935	9,005	2,310	1,149	5,546
Region 2*	22,091	5,133	6,183	992	28	5,163
Region 3	20,708	3,722	2,771	1,516	127	1,128
Region 4	31,914	6,787	15,960	2,236	1,047	12,676
Region 5	20,146	5,446	4,200	1,740	164	2,295
Region 6	24,950	6,488	4,002	2,085	15	1,902
Region 8*	13,226	1,232	954	445	44	466
Region 9	12,026	1,570	664	166	0	497
Region 10**	22,083	8,605	14,779	8,479	1,638	4,661
TOTAL ACRES	192,300	44,919	58,518	19,970	4,212	34,336

Region 1				Inventoried	Roadless Areas a	llocated to a
Forest Name	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	that does not allow road construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Beaverhead - Deerlodge	3,364	377	1,831	2	178	1,651
Bitterroot	1,581	862	406	223	76	106
Clearwater	1,810	311	989	243	198	547
Custer	1,187	337	145	42	14	89
Dakota Prairie Grasslands	1,261	0	280	0	0	280
Flathead	2,355	1,122	479	2	93	383
Gallatin	1,807	898	705	552	28	124
Helena	975	117	445	77	34	334
Idaho Panhandle	2,475	51	823	187	138	498
Kootenai	2,279	138	638	265	117	257
Lewis & Clark	1,862	562	1,004	410	56	538
Lolo	2,080	177	758	179	216	363
Nez Perce	2,121	982	502	127	0	375
Other NFS lands*	0	0	0	0	0	0
TOTAL ACRES	25,157	5,935	9,005	2,310	1,149	5,546

				Inventoried	Roadless Areas al prescription	located to a
Forest Name	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	that does not allow road construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Arapaho – Roosevelt	1,587	379	391	167	9	216
Bighorn	1,108	194	621	34	0	587
Black Hills	1,247	35	14	1	0	13
Grand Mesa, Uncompahgre, Gunnison	2,957	632	1,127	89	0	1,038
Medicine Bow – Routt	2,905	354	822	29	0	792
Nebraska NGs	1,064	16	60		0	60
Pike - San Isabel	2,772	427	688	103	2	582
Rio Grande	1,859	442	530	438	0	93
San Juan	1,878	486	604	61	0	543
Shoshone	2,437	1,419	687	30	17	640
White River	2,276	748	640	40	0	600
Other NFS lands*	0	0	0	0	0	0
TOTAL ACRES	22,091	5,133	6,183	992	28	5,163

				Inventoried	Roadless Areas al	located to a
Forest Name	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	that does not allow road construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Apache - Sitgreaves	1,987	204	322	37	0	285
Carson	1,391	131	105	57	44	4
Cibola	1,892	189	246	160	0	86
Coconino	1,848	183	50	0	0	50
Coronado	1,787	401	483	421	61	0
Gila	3,353	852	734	685	0	49
Kaibab	1,559	634	53	0	0	53
Lincoln	1,104	103	179	1	20	158
Prescott	1,239	103	140	0	0	140
Santa Fe	1,570	342	289	154	2	133
Tonto	2,874	580	170	0	0	170
Other NFS lands	103	0	0	0	0	0
TOTAL ACRES	20,708	3,722	2,771	1,516	127	1,128

Region 4	•	1	1			
				Inventoried	Roadless Areas a	llocated to a
					prescription that does not	
					allow road	
					construction and	
				that does not	reconstruction, and	
	Total area of			allow road	the forest plan	that allows road
Forest Name	National Forest	Total area of	Total Inventoried	construction and	recommends as	construction and
Forest Name	System land 1	Designated Areas <sup>2</sup>	Roadless Area 3	reconstruction	wilderness	reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Ashley	1,382	482	796	249	0	546
Boise	2,288	73	1,109	300	179	630
Bridger - Teton	3,437	1,411	1,431	0	0	1,431
Caribou	1,085	6	750	5	30	714
Dixie	1,889	87	776	3	0	773
Fishlake	1,461	4	717	4	0	713
Humboldt - Toiyabe	6,323	1,380	3,384	0	0	3,384
Manti - La Sal	1,347	49	601	63	0	537
Payette	2,302	783	905	437	206	261
Salmon - Challis	4,308	1,243	2,301	329	199	1,773
Sawtooth	2,090	747	1,228	329	263	635
Targhee	1,820	147	837	388	169	280
Uinta	804	58	528	0	0	528
Wasatch - Cache	1,322	315	598	128	0	471
Other NFS lands	56	0	0	0	0	0
TOTAL ACRES	31,914	6,787	15,960	2,236	1,047	12,676

Region 5	1			Inventoried	Roadless Areas al	located to a
					prescription	
Forest Name	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	that does not allow road construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Angeles	664	99	155	76	0	79
Cleveland	434	77	88	71	0	17
Eldorado	578	104	82	16	13	53
Inyo	1,977	769	837	305	108	424
Klamath	1,726	445	271	180	0	90
Lake Tahoe Basin	181	25	46	41	1	4
Lassen	1,171	99	168	62	20	86
Los Padres	1,763	815	636	172	0	464
Mendocino	888	145	154	66	0	88
Modoc	1,656	71	201	56	0	145
Plumas	1,198	61	65	56	0	9
San Bernardino	663	133	172	53	0	120
Sequoia	1,094	591	346	123	0	223
Shasta - Trinity	2,082	712	323	130	0	194
Sierra	1,336	635	171	86	0	86
Six Rivers	991	398	199	110	0	89
Stanislaus	898	229	139	92	23	24
Tahoe	836	38	147	46	0	101
Other NFS lands	11	0	0	0	0	0
TOTAL ACRES	20,146	5,446	4,200	1,740	164	2,295

				Inventoried	Roadless Areas a prescription	llocated to a
Forest Name	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	that does not allow road construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Colville	1,103	33	182	4	0	178
Deschutes	1,603	317	136	58	0	79
Fremont	1,202	36	87	25	0	61
Gifford Pinchot	1,400	330	213	151	0	62
Malheur	1,465	91	182	62	0	120
Mt. Baker - Snoqualimie	1,747	887	415	336	0	79
Mt. Hood	1,067	370	118	87	0	31
Ochoco,Crooked River NG	963	46	61	32	0	29
Okanogan	1,702	724	427	276	0	152
Olympic	634	89	86	65	0	21
Rogue River	628	108	82	30	0	51
Siskiyou	1,094	241	287	179	0	108
Siuslaw	633	63	52	34	0	18
Umatilla	1,406	306	282	153	0	129
Umpqua	983	117	110	75	0	35
Wallowa - Whitman	2,394	1,025	515	5	0	510
Wenatchee	2,198	1,175	579	403	15	161
Willamette	1,680	431	158	86	0	72
Winema	1,045	98	32	23	0	8
Other NFS lands	1	0	0	0	0	0
TOTAL ACRES	24,950	6,488	4,002	2,085	15	1,902

Region 8				Inventoried	Roadless Areas a prescription	llocated to a
Forest Name	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	that does not allow road construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Alabama	665	47	13	13	0	0
Caribbean	28	2	24	6	10	7
Chattahoochee - Oconee	866	162	63	38	0	25
Cherokee	635	67	85	39	0	46
Daniel Boone	693	19	3	0	0	3
Florida	1,152	86	50	20	6	25
Francis Marion - Sumpter	613	23	8	3	1	4
George Washington	1,065	42	261	219	12	30
Jefferson	720	160	153	67	0	86
Kisatchie	604	16	7	2	0	5
Land Between the Lakes	170	170	0	0	0	0
Mississippi	1,159	8	3	0	0	3
North Carolina	1,244	144	172	16	15	142
Ouachita	1,776	159	35	0	0	35
Ozark - St. Francis	1,161	88	73	22	0	51
Texas	676	39	4	0	0	4
Other NFS lands*	0	0	0	0	0	0
TOTAL ACRES	13,226	1,232	954	445	44	466

Region 9				Inventoried	Roadless Areas a	llocated to a
					prescription	
				that does not	that does not allow road construction and reconstruction, and	
Forest Name	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	allow road	the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Allegheny	513	42	25	24	0	1
Chequamegon - Nicolet	1,522	49	69	0	0	69
Chippewa	666	2	0	0	0	0
Green Mountain	391	82	25	16	0	10
Hiawatha	895	83	8	0	0	8
Hoosier	196	13	8	0	0	8
Huron - Manistee	974	22	4	0	0	4
Mark Twain	1,493	72	25	0	0	25
Midewin TGP	15	0	0	0	0	0
Monongahela	909	136	181	0	0	181
Ottawa	990	109	4	0	0	4
Shawnee	278	34	11	4	0	6
Superior	2,171	813	62	0	0	62
Wayne	230	0	0	0	0	0
White Mountain	777	114	241	122	0	119
Other NFS lands	6	0	0	0	0	0
TOTAL ACRES	12,026	1,570	664	166		497

				Inventoried	Roadless Areas a prescription	llocated to a
ongass Other NFS lands**	Total area of National Forest System land <sup>1</sup>	Total area of Designated Areas <sup>2</sup>	Total Inventoried Roadless Area <sup>3</sup>	that does not allow road construction and reconstruction	that does not allow road construction and reconstruction, and the forest plan recommends as wilderness	that allows road construction and reconstruction
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Chugach	5,492	1,973	5,439	1,058	1,638	2,743
Tongass	16,591	6,632	9,340	7,422	0	1,918
Other NFS lands**	0	0	0	0	0	0
TOTAL ACRES	22,083	8,605	14,779	8,479	1,638	4,661

<sup>\*</sup> This region has less than 500 acres of Land Utilization Projects, Research Experimental Areas and other NFS lands.

<sup>\*\*</sup> This region has no Land Utilization Projects, Research Experimental Areas or other NFS lands.

<sup>1</sup> USDA Forest Service Land Areas Report September 1999, plus an additional 254,000 acres for Land Between the Lakes National Recreation Area and Exxon Valdez Oil Spill Acquisition. Acreages for National Forest System land and do not include private inholdings.

<sup>2</sup> Designated areas include national wilderness, national primitive areas, national scenic research areas, national scenic areas, national wild and scenic rivers, national recreation areas, national game refuge and wildlife preserves, national monuments, national volcanic monuments, national historic areas, research natural areas, wilderness study areas and other Congressionally designated areas. These designated areas include 6,015,000 acres of Inventoried Roadless Areas.

<sup>3</sup> Inventoried Roadless Areas are based on forest plans, forest plan revisions in progress where the agency has established an inventory, or other assessments that are completed or adopted by the agency. RARE II information is used if a forest does not have a more recent inventory based on RARE II.

				nds Potentially ( ruction and Rec		
Alabama       33,432         Alaska       393,747         Arizona       72,964         Arkansas       34,036         California       101,676         Colorado       66,624         Connecticut*       3,548         Delaware**       1,534         District of Columbia**       39         Florida       38,392         Georgia       37,745         Hawaii*       4,134         Idaho       53,487         Illinois       36,060         Indiana       23,158         Iowa**       36,017         Kansas       52,660         Kentucky       25,863		Total area of National Forest System land <sup>2</sup>	Total area of National Forest System land in Wilderness	Total area of Inventoried Roadless Areas within National Forest System lands <sup>3</sup>	Total area of National Forest System land that may be open to road construction and reconstruction depending on prescriptions in resource management plans	Percent of National Forest System land that may be open to road construction and reconstruction depending on prescriptions in resource management plans
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(%)
Alabama		665	42	13	610	91.8
Alaska	393,747	22,083	5,747	14,779	1,557	7.1
Arizona	72,964	11,255	1,328	1,174	8,753	77.8
Arkansas	34,036	2,586	116	95	2,375	91.8
California	101,676	20,698	4,423	4,416	11,859	57.3
Colorado	66,624	14,509	3,136	4,433	6,940	47.8
	3,548	0	0	0	0	0
	•	0	0	0	0	0
		0	0	0	0	0
	38,392	1,153	75	50	1,027	89.1
	37,745	865	118	63	683	79.0
		0	0	0	0	0
		20,458	3,965	9,322	7,171	35.1
Illinois	36,060	293	28	11	254	86.8
Indiana	23,158	196	13	8	175	89.3
lowa**	36,017	0	0	0	0	0
Kansas	52,660	108	0	0	0	0
Kentucky	25,863	800	17	3	780	97.5
Louisiana	31,776	604	9	7	588	97.4
Maine	21,594	53	11	6	36	67.4
Maryland**	7,870	0	0	0	0	0
Massachusetts**	5,914	0	0	0	0	0
Michigan	37,448	2,858	91	16	2,751	96.3
Minnesota	54,014	2,838	810	62	1,965	69.3
Mississippi	30,903	1,159	6	3	1,150	99.2
Missouri	44,614	1,493	64	25	1,403	94.0
Montana	94,109	16,893	3,373	6,397	7,123	42.2
Nebraska	49,523	352	8	0	344	97.8
Nevada	70,763	5,833	790	3,186	1,856	31.8

		NFS Lands Potentially Open to Road Construction and Reconstruction											
State <sup>1</sup>		Total area of National Forest System land <sup>2</sup>	Total area of National Forest System land in Wilderness	Total area of Inventoried Roadless Areas within National Forest System lands <sup>3</sup>	Total area of National Forest System land that may be open to road construction and reconstruction depending on prescriptions in resource management plans	Percent of National Forest System land that may be open to road construction and reconstruction depending on prescriptions in resource management plans							
Na Hannahina	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(%)							
New Hampshire New Jersey**	5,941 5,258	728 0	101 0	235 0	393 0	54.0 0							
New Mexico	77,823	9,327	1,381	1,597	6,349	68.1							
New York	32,056	16	0	0	16	100.0							
North Carolina	33,710	1,244	103	172	969	77.9							
North Dakota	45,251	1,106	0	266	840	75.9							
Ohio	26,451	230	0	0	230	100.0							
Oklahoma	44,738	397	16	13	368	92.6							
Oregon	62,140	15,658	2,059	1,965	11,634	74.3							
Pennsylvania	28,806	513	9	25	479	93.4							
Puerto Rico	2,245	28	0	24	4	14.7							
Rhode Island**	788	0	0	0	0	0							
South Carolina	19,961	613	16	8	589	96.1							
South Dakota	49,357	2,012	10	80	1,923	95.6							
Tennessee	26,973	698	67	85	546	78.3							
Texas	171,057	755	39	4	712	94.3							
Utah	54,339	8,179	771	4,013	3,394	41.5							
Vermont	6,154	376	59	25	292	77.6							
Virgin Islands*	109	0	0	0	0	0							
Virginia	27,089	1,660	88	394	1,179	71.0							
Washington	45,208	9,214	2,605	2,015	4,594	49.9							
West Virginia	15,508	1,033	81	202	750	72.6							
Wisconsin	35,933	1,523	45	69	1,408	92.5							
Wyoming	62,604	9,238	3,069	3,257	2,912	31.5							
Total	2,343,144	192,300	34,690	58,518	99,093	51.5							

<sup>\*</sup> These states have less than 500 acres of National Forest System land area.

\*\* These states have no National Forest System lands.

1 Acreages from Government Accounting Office Land Ownership Report to Congressional Requesters, March 1996.

2 USDA Forest Service Land Areas Report September 1999, plus additional 254,000 acres for Land Between the Lakes National Recreation Area and Exxon Valdez Oil Spill Acquisition. Acreages for National Forest System land and do not include private inholdings.

3 Inventoried Roadless Areas are based on forest plans, forest plan revisions in progress where the agency has established an inventory. <sup>3</sup> Inventoried Roadless Areas are based on forest plans, forest plan revisions in progress where the agency has established an inventory, or other assessments that are completed or adopted by the agency. RARE II information is used if a forest does not have a more recent inventory based on RARE II.

## **APPENDIX B**

State-by-State Summaries of Key Information for the Preferred Alternative

Potentially Affected Areas		Coffman Cove, Craig, Hoonah, Ketchikan, Klawock, Metlakatla, Petersburg, Thorne Bay, Wrangell,	None identified	None identified	Burney, Burnt Ranch-Willow Creek, Happy Camp, Hayfork, Weaverville- Douglas City, Weed-Mt. Shasta McCloud, Yreka	Olathe, CO					None identified.		Ashton, Bonner's Ferry, Cambridge, Cascade, Clark Fork, Council, Driggs, Elk City, Emmett, Grangeville, Hope, Horseshoe Bend, Montour, Moyie Springs, New Meadows, Oldtown, Plnehurst, Plurmmer, Princeton, Priest River, Ovid, Salmon, Sandpoint, St. Anthony, St. Maries, Sweet, Tetonia, Victor, White Bird, Kamiah, Kooskia, Orofino, Pierce, Weippe
Reduction in No. of Jobs Directly Related to Timber Harvest		383	F	17	24	16	0	0	0	0	7	0	73
Percent of Average Annual Historic Harvest (FY 96-99)	0	61	₹	o	ν	9	0	0	0	0	7	0	4
Estimated Reduction in Annual Harvest from Inventoried Roadless Areas (MMBF)	0	76.6	0.1	2.3	3.3	2.8	0	0	0	0	1.0	0	2'6
Percent of NFS land that is Inventoried Roadless Area	1.9	6.99	10.4	3.7	21.3	30.6	0.0	0	0	4.4	7.3	0	45.6
Total Area of Inventoried Roadless Areas within National Forest System Land <sup>b</sup> (thousand acres)	13	14,779	1,174	96	4,416	4,433	0	0	0	20	63	0	9,322
Total Area of National Forest System Land <sup>®</sup> (thousand acres)	999	22,083	11,255	2,586	20,698	14,509	٥	0	0	1,153	865	0	20,458
Region	R8	R10	R3	R8	R4, R5, R6	R2	R9			R8	R8	R5	R1, R4
State	Alabama	Alaska	Arizona	Arkansas	California <sup>e</sup>	Colorado	Connecticut <sup>d</sup>	Delaware <sup>e</sup>	District of Columbia <sup>e</sup>	Florida	Georgia	Hawaii <sup>d</sup>	ldaho <sup>©</sup>

n in Jobs to to rr Potentially Affected Areas.	0	0	ū	0	0.	0	0	0	0	0	Grand Marais, Two Harbors, Isabella, Tofte	2 None Identified	0	g Townsend, Thompson Falls	0	0	2 None Identified	0.	2 None Identified	0	1 None Identified	0	0	0
Percent of Reduction in Average No. of Jobs Annual Directly Historic Related to Harvest Timber (FY 96-99) Harvest	0	.0	0	0	0	0	0	0	0	0	3	. ∠	0	¥	0	0	V	0	7	0	, ×	0	0	c
Estimated Reduction in Annual Harvest from Ave Roadless His Areas Har	0	0	0	0	0	0	0	0	0	0	3.3	6,3	0.	1.0	0	0	0.2	0	0.2	0	0,1	0	0	c
Percent of NFS land H that is throwentoried Roadless Area	3.6	4.3	0	0	0.4	1.2	11.3	0	0	9.0	2.2	0.5	1.7	37.9	0	54.6	32.2		17.1	0.	13.9	24.1	0	2.4
Total Area of Inventoried Roadless Areas within National Forest System Land <sup>®</sup> (thousand acres)	11	80	0	0	3	7	9	0	0	16	62	3	52	6,397	0	3,186	235		1,597	0	172	266	0	6
Total Area of A National Forest System Land <sup>a</sup> (thousand acres)	293	196	0	108	800	604	53	0	0	2,858	2,838	1,159	1,493	16,893	352	5,833	728		9,327	16	1,244	1,106	230	307
Region	R9	R9		R2	R8	R8	R9			R9	R9	R8	R9	R1	R2	R4, R5	R9		R3	R9	R8	R1	R9	R3 R8
State	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland <sup>e</sup>	Massachusetts	Michigan	Minnesota	Mississippi	Missouri	Montana	Nebraska	Nevada	New Hampshire	New Jersey <sup>®</sup>	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma

n Potentially Affected Areas	Brookings, Elgin, Glendale, Gold Beach, Powers						None Identified	The second secon	Escalante, Gunnison, LaPointe, Kamas, Heber City, Fairview, Beaver, Bicknell, Lyman, Sigurd, Old La Sal, Panguitch, Vernal, Wellington	None Identified		None Identified	Clarkston, Newport, Omak, Oroville, Pateros, CleElum, Twisp, Winthrop	Marlinton, Richwood, Webster Springs	None identified	Cody, Saratoga, Sheridan	
Reduction In No. of Jobs Directly Related to Timber Harvest	58	0	0	0	0	0	+	0	59	0	0	82	15	80	18	16	730
Percent of Average Annual Historic Harvest (FY 96-99)	Į.	0	0	0	0	0	>	0	18	0	0	+		7.	2	6	
Estimated Reduction in Annual Harvest from Inventoried Roadless Areas (MMBF)	6,4	0	0	0	0	0	1,0	0	11,2	0	0	0.4	1.7	2.2	2.3	2.9	126.3
Percent of NFS land that is Inventoried Roadless Area	12.5	4.8	85.3		1.2	4.0	12.2	0.5	49.1	6.7	0	23.7	21.9	19.5	4.5	35,3	31
Total Area of Inventoried Roadiess Areas within National Forest System Land® (thousand acres)	1,965	25	24	0	8	80	85	4	4,013	25	0	394	2,015	202	69	3,257	58,518
Total Area of National Forest System Land <sup>a</sup> (thousand acres)	15,658	513	28	0	613	2,012	869	755	8,179	376	0	1,660	9,214	1,033	1,523	9,238	192,300
Region	85, R6	R9	R8		R8	R1, R2	R8	R8	R4	R9	R8	R8	R1, R6	R8, R9	R9	R2, R4	
State	Oregon	Pennsylvania	Puerto Rico	Rhode Island <sup>e</sup>	South Carolina	South Dakota <sup>5</sup>	Tennessee	Texas	Utah	Vermont	Virgin Islands <sup>d</sup>	Virginia	Washington	West Virginia	Wisconsin	Wyoming	Total

USDA Forest Service Land Areas Report September 1999, plus additional 254,000 acres for Land Between the Lakes National Recreation Area and Exxon Valdez Oil Spill Acquisition. Acreages are for National Forest System land and do not include private inholdings.

Inventoried Roadless Areas are based on forest plans, forest plan revisions in progress where the agency has established an inventory, or other assessments that are completed or adopted by the agency. RARE II information is used if a forest does not have a more recent inventory based on RARE II.

Due to national forest boundaries that overlap several States, projected timber harvest volumes and reduction in jobs may contain minor discrepancies.

<sup>d</sup> These States have fewer than 500 acres of National Forest System land.
These States have no National Forest System lands.

## **APPENDIX C**

**Summary of Threatened, Endangered, and Proposed Species** 

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat	Species Scientific Name		Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
X		Ambystoma cingulatum	Flatwoods Salamander	Amphibian	Т	8
Х		Ambystoma tigrinum stebbinsi	Sonoran Tiger Salamander	Amphibian	E	3
		Bufo houstonensis	Houston Toad	Amphibian	E	None
Х	Proposed	Bufo microscaphus californicus	Arroyo Southwestern Toad	Amphibian	E	5
Х		Plethoden nettingi	Cheat Mountain Salamander	Amphibian	Т	9
Х	Proposed	Rana aurora draytonii	California Red-legged Frog	Amphibian	Т	5
Х		Rana chiricahuensis		Amphibian	PT	3
Х		Rana mucosa	Mountain Yellow-legged Frog	Amphibian	PE	5
Х		Accipiter striatus venator	Puerto Rican Sharp- Shinned Hawk	Bird	E	8
Х		Amazona vittata	Puerto Rican Parrot	Bird	E	8
Х		Aphelocoma coerulescens	Florida Scrub Jay	Bird	Т	8
Х	Yes	Brachyramphus marmoratus marmoratus	Marbled Murrelet	Bird	Т	5, 6
Х		Branta canadensis leucopareia	Aleutian Canada Goose	Bird	Т	5, 6
Х		Buteo platypterus brunnescens	Puerto Rican Broad- winged Hawk	Bird	E	8
Х	Yes	Charadrius alexandrinus nivosus	Western Snowy Plover	Bird	Т	5, 6
Х		Charadrius melodus	Piping Plover	Bird	Т	1, 2, 8, 9
Х		Charadrius montanus	Mountain Plover	Bird	PT	1, 2, 3, 4
Х		Colinus virginianus ridgwayi	Masked Bobwhite Quail	Bird	E	3
		Corvus leucognphalus	White-necked Crow	Bird	Е	None
		Dendroica kirtlandii	Kirtland's Warbler	Bird	Е	None
Х	Yes		Southwestern Willow Flycatcher	Bird	E	2, 3, 4, 5
		Falco femoralis septentrionalis	Northern Aplomado Falcon	Bird	E	None
х	Yes	Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	Bird	E	3
Х		Grus americana	Whooping Crane	Bird	Е	1, 2, 3, 4
		Grus canadensis pulla	Mississippi Sandhill Crane	Bird	Е	None

	Species has	area(s). This list is current a				Forest
Species likely to have habitat within and/or affected by inventoried roadless area(s)	affected by	Species Scientific Name	Common Name	Species Group	Federal Status	Service Region(s) where
Х		Gymnogyps californianus	California Condor	Bird	E	3, 5
Х		Haliaeetus leucocephalus	Bald Eagle	Bird	Т	1, 2, 3, 4, 5, 6, 8, 9
Х		Mycteria americana	Wood Stork	Bird	Е	8
Х		Pelecanus occidentalis	Brown pelican	Bird	Е	3, 5, 6
Х		Picoides borealis	Red-cockaded Woodpecker	Bird	Е	8
Х		Polioptila californica californica	Coastal California Gnatchatcher	Bird	Т	5
		Rallus longirosstris yumanensis	Yuma Clapper Rail	Bird	Е	None
х		Sterna antillarum	Least Tern	Bird	Е	1, 2, 3, 8
		Sterna antillarum browni	California Least Tern	Bird	Е	None
Х	Yes	Strix occidentalis caurina	Northern Spotted Owl	Bird	Т	5, 6
Х	Proposed	Strix occidentalis lucida	Mexican Spotted Owl	Bird	Т	2, 3, 4
х		Vermivora bachmanii	Bachman's Warbler	Bird	E	8
		Vireo atricapillus	Black-capped Vireo	Bird	Е	None
Х		Vireo bellii pusillus	Least Bell's Vireo	Bird	E	5
		Acipenser brevirostrum	Shortnose Sturgeon	Fish	Е	None
		Acipenser oxyrhyncus desotoi	Gulf Sturgeon	Fish	Т	None
		Acipenser transmontanus	White Sturgeon	Fish	Е	None
		Amblyopsis rosae	Ozark Cavefish	Fish	Т	None
		Catostomus microps	Modoc sucker	Fish	Е	None
х		Catostomus santaannae	Santa Ana Sucker	Fish	Т	5
		Catostomus warnerensis	Warner Sucker	Fish	Т	None
х	Proposed	Chamistes brevirostris	Shortnose sucker	Fish	Е	5, 6
		Chasmistes liorus	June Sucker	Fish	Е	None
Х		Cyprinella caerulea	Blue Shiner	Fish	Т	8
		Cyprinella formosa	Beautiful Shiner	Fish	Т	None
		Cyprinella formosa mearnsi	Yaqui Shiner	Fish	Т	None
		Cyprinella monacha	Spotfin Chub	Fish	Т	None
		Cyprinodon macularis	Desert Pupfish	Fish	Е	None
Х	Proposed	Deltistes luxatus	Lost River Sucker	Fish	Е	5

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by inventoried roadless area(s)in one or more Forest Service Regions	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Erimystax cahni	Slender Chub	Fish	Т	None
		Etheostoma etowahae	Etowah Darter	Fish	Е	None
		Etheostoma percnurum	Duskytail Darter	Fish	Е	None
		Etheostoma scotti	Cherokee darter	Fish	Т	None
		Eucyclogobius newberryi	Tidewater Goby	Fish	Е	None
		Gambusia nobilis	Pecos Gambusia	Fish	Е	None
Х	Proposed	Gasterosteus aculeatus williamsoni	Unarmored Threespine Stickleback	Fish	Е	5
		Gila bicolor mohavensis	Mohave Chub	Fish	Е	None
X		Gila bicolor snyderi	Owens Tui Chub	Fish	Е	5
X		Gila cypha	Humpback Chub	Fish	Е	2, 3, 4
X	Yes	Gila Ditaenia	Sonora Chub	Fish	Т	3
Х		Gila elegans	Bonytail Chub	Fish	Е	2, 3, 4
		Gila nigrescens	Chihuahua Chub	Fish	Т	None
X		Gila purpurea	Yaqui Chub	Fish	Е	3
		Gila robusta seminuda	Virgin River Chub	Fish	E	None
Х		Hybognathus amarus	Rio Grande Silveryminnow	Fish	E	3
Х		Hypomesus transpacificus	Delta Smelt	Fish	Т	5
		Ictalurus pricei	Yaqui Catfish	Fish	Т	3
Х	Yes	Lepidomeda vittata	Little Colorado Spinedace	Fish	Т	3
X	Yes	Meda fulgida	Spikedace	Fish	Т	3
		Notropis albizonatus	Palezone Shiner	Fish	Е	None
		Notropis cahabae	Cahaba Shiner	Fish	Е	None
		Notropis girardi	Arkansas River Shiner	Fish	Т	None
		Notropis mekistocholas	Cape Fear Shiner	Fish	Е	None
		Notropis simus pecosensis	Pecos Bluntnose Shiner	Fish	Т	None
		Notropis topeka	Topeka Shiner	Fish	Е	None
		Noturus baileyi	Smoky Madtom	Fish	Е	None
		Noturus flavipinnis	Yellowfin Madtom	Fish	Т	None
Х		Oncorhynchus apache	Apache (Arizona) Trout	Fish	Т	3

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by	Species Scientific Name		Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
x		Oncorhynchus clarki clarki (Southwestern WA/Columbia River ESU)	Coastal Cutthroat Trout	Fish	PT	6
Х		Oncorhynchus clarki henshawi	Lahontan Cutthroat Trout	Fish	Т	5
Х		Oncorhynchus clarki seleniris	Paiute Cutthroat Trout	Fish	Т	4, 5
X		Oncorhynchus clarki stomias	Greenback Cutthroat Trout	Fish	Т	2
Х		Oncorhynchus gilae gilae	Gila Trout	Fish	Е	3
		Oncorhynchus keta (Columbia River ESU)		Fish	Т	None
Х	Yes	Oncorhynchus keta (Hood Canal Summer-run ESU)	Chum Salmon	Fish	Т	6
Х	Yes	Oncorhynchus kisutch (OR Coast ESU)	Coho Salmon	Fish	Т	6
х	Yes	Oncorhynchus kisutch (Southern OR/Northern CA Coasts ESU)	Coho Salmon	Fish	Т	5, 6
Х		Oncorhynchus mykiss (CA Central Valley ESU)	Steelhead	Fish	Т	5
х	Yes	Oncorhynchus mykiss (Lower Columbia River ESU)	Steelhead	Fish	Т	6
Х	Yes	Oncorhynchus mykiss (Middle Columbia River ESU)	Steelhead	Fish	Т	6
X		Oncorhynchus mykiss (Northern CA ESU)	Steelhead	Fish	Т	5
х	Yes	Oncorhynchus mykiss (Snake River Basin ESU)	Steelhead	Fish	Т	1, 4, 6
Х		Oncorhynchus mykiss (South-Central CA Coast ESU)	Steelhead	Fish	Т	5
X	Yes	Oncorhynchus mykiss (Southern CA ESU)	Steelhead	Fish	Е	5
х	Yes	Oncorhynchus mykiss (Upper Columbia River ESU)	Steelhead	Fish	E	6
Х	Yes	Oncorhynchus mykiss (Upper Willamette ESU)	Steelhead	Fish	Т	6
		Oncorhynchus mykiss whitei	Little Kern Golden Trout	Fish	Т	None
х	Yes	Oncorhynchus nerka (Snake River ESU)	Sockeye Salmon	Fish	E	1, 4, 6, 10
х	Proposed	Oncorhynchus tshawytscha (CA Coastal ESU)	Chinook Salmon	Fish	Т	5

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by inventoried roadless area(s)in one or more Forest Service Regions	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
х		Oncorhynchus tshawytscha (Central Valley Spring-run ESU)	Chinook Salmon	Fish	Т	5
Х	Yes	Oncorhynchus tshawytscha (Lower Columbia River ESU)	Chinook Salmon	Fish	Т	6
Х	Yes	Oncorhynchus tshawytscha (Puget Sound ESU)	Chinook Salmon	Fish	Т	6
Х		Oncorhynchus tshawytscha (Sacramento River Winter-run ESU)	Chinook Salmon	Fish	Е	5
х	Yes	Oncorhynchus tshawytscha (Snake River Fall-run ESU)	Chinook Salmon	Fish	Т	1, 4, 6, 10
х	Yes	Oncorhynchus tshawytscha (Snake River Spring/Summer-run ESU)	Chinook Salmon	Fish	Т	1, 4, 6, 10
х	Yes	Oncorhynchus tshawytscha (Upper Columbia River Spring- run ESU)	Chinook Salmon	Fish	E	6
х	Yes	Oncorhynchus tshawytscha (Upper Willamette River ESU)	Chinook Salmon	Fish	Т	6
		Oregonichthys crameri	Oregon Chub	Fish	Е	None
		Percina antesella	Amber Darter	Fish	Е	None
		Percina aurolineata	Goldline Darter	Fish	Т	None
		Percina jenkinsi	Conasauga Logperch	Fish	Е	None
Х		Percina pantherina	Leopard Darter	Fish	Т	8
		Percina rex	Roanoke Logperch	Fish	Е	None
		Percina tanasi	Snail Darter	Fish	Т	None
		Phoxinus cumberlandensis	Blackside Dace	Fish	Т	None
х		Plagopterus argentissimus	Woundfin	Fish	Е	3
Х		Poeciliopsis occidentalis	Gila Topminnow	Fish	Е	3
Х		Pogonichthys macrolepidotus	Sacramento Splittail	Fish	Т	5
Х		Ptychocheilus lucius	Colorado (=squawfish) Pikeminnow	Fish	E	2, 3, 4
Х		Rhinichthys osculus thermalis	Kendall Warm Springs Dace	Fish	E	4
Х		Salvelinus confluentus	Bull Trout	Fish	Т	1, 4, 6

Species likely to have habitat within and/or affected by inventoried roadless area(s)	affected by	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
Х		Scaphirhynchus albus	Pallid Sturgeon	Fish	Е	2, 8
х	Yes	Tiaroga cobitis	Loach Minnow	Fish	Т	3
х	Yes	Xyrauchen texanus	Razorback Sucker	Fish	Е	2, 3, 4
		Alasmidonta atropurpurea	Cumberland Elktoe	Invertebrate	Е	None
		Alasmidonta heterodon	Dwarf Wedge Mussel	Invertebrate	Е	None
		Alasmidonta raveneliana	Appalachian Elktoe	Invertebrate	Е	None
		Amblema neislerii	Fat Three-Ridge Mussel	Invertebrate	Е	None
		Arkansia wheeleri	Pocketbook	Invertebrate	Е	None
х		Boloria acrocnema	Uncompahgre Fritillary Butterfly	Invertebrate	E	2
Х		Branchinecta conservatio	Conservancy Fairy Shrimp	Invertebrate	E	5
Х		Branchinecta Iongiantenna	Longhorn Fairy Shrimp	Invertebrate	E	5
Х		Branchinecta lynchi	, ,	Invertebrate	Т	5
		Brychius hungerfordi	Hungerford's Crawling Water Beetle	Invertebrate	Е	None
Х		Cyprogenia stegaria	Fanshell	Invertebrate	E	8, 9
х		Desmocerus californicus dimorphus	Valley Elderberry Longhorn Beetle	Invertebrate	Т	5
		Dromus dromas	Dromedary Pearlymussel	Invertebrate	Е	None
		Elliptoideus sloatianus	Purple Bankclimber Mussel	Invertebrate	Т	None
		Epioblasma brevidens	Cumberlandian Combshell	Invertebrate	E	None
		Epioblasma capsaeformis	Oyster Mussel	Invertebrate	E	None
Х		Epioblasma florentina curtisii	Curtis' Pearly Mussel	Invertebrate	Е	8
		Epioblasma florentina florentina	Yellow-Blossom Pearlymussel	Invertebrate	E	None
		Epioblasma florentina walkeri	Tan Riffleshell	Invertebrate	Е	None
		Epioblasma metastriata	Upland Combshell	Invertebrate	Е	None
		Epioblasma obliquata obliquata	Purple Cat's Paw Pearlymussel	Invertebrate	E	None
		Epioblasma othcaloogensis		Invertebrate	E	None
		Epioblasma torulosa gubernaculum	Green-blossom Pearlymussel	Invertebrate	E	None
Х		Epioblasma torulosa rangiana	Northern Riffleshell	Invertebrate	Е	8, 9

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by inventoried roadless area(s)in one or more Forest Service Regions	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Epioblasma torulosa torulosa	Tubercled-blossom Pearlymussel	Invertebrate	E	None
		Euphilotes enoptes smithi	Smith's Blue Butterfly	Invertebrate	Е	None
Х		Euphydryas editha quino	Quino Checkerspot Butterfly	Invertebrate	Е	5
		Euproserpinus euterpe	Kern Primrose Sphinx Moth	Invertebrate	Т	None
		Fusconaia cor (= edgariana)	Shiny Pigtoe	Invertebrate	Е	None
		Fusconaia cuneolus	Fine-rayed pigtoe	Invertebrate	Е	None
		Hemistena lata	Cracking Pearlymussel	Invertebrate	Е	None
Х		Hesperia leonardus montana	Pawnee Montane Skipper	Invertebrate	Т	2
Х		Lampsilis abrupta	Pink Mucket Pearlymussel	Invertebrate	E	8, 9
		Lampsilis altilis	Fine-lined Pocketbook	Invertebrate	Т	None
		Lampsilis perovalis	Orange-Nacre Mucket	Invertebrate	Т	None
		Lampsilis powelli	Arkansas Fatmucket	Invertebrate	Т	None
		Lasmigona decorata	Carolina Heel Splitter	Invertebrate	E	None
		Lemiox rimosus (= Conradilla caelata)	Birdwing Pearlymussel	Invertebrate	Е	None
		Lepidurus packardi	Vernal Pool Tadpole Shrimp	Invertebrate	E	None
		'	Scaleshell Mussel	Invertebrate	PE	None
		Lycaeides melissa samuelis	Karner Blue Butterfly	Invertebrate	Е	None
		Margaritifera hembeli	Louisiana Pearlshell Mussel	Invertebrate	Т	None
		Medionidus acutissimus	Alabama Moccasinshell	Invertebrate	Т	None
		Medionidus parvulus	Coosa Moccasinshell	Invertebrate	E	None
Х		Mesodon clarki nantahala	*	Invertebrate	Т	8
		Mesodon magazinensis	Magazine Mountain Shagreen	Invertebrate	Т	None
Х		Microhexura montivaga	Spruce-fir Moss Spider	Invertebrate	Е	8
Х		Nicrophorus americanus	American Burying Beetle	Invertebrate	Е	2, 8, 9
		Obovaria retusa	Ring Pink Mussel	Invertebrate	Е	None
Х		Pacifastacus fortis	Shasta Crayfish	Invertebrate	Е	5
Х		Pegias fabula	Little-wing Pearlymussel	Invertebrate	Е	8
		Plethobasus cicatricosus	White Wartyback	Invertebrate	Е	None

Species likely to have habitat within and/or affected by inventoried roadless area(s)	affected by	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Plethobasus cooperianus	Orangefoot Pimpleback	Invertebrate	Е	None
Х		Pleurobema clava	Clubshell	Invertebrate	Ε	8, 9
Х		Pleurobema collina	James Spinymussel	Invertebrate	Е	8
		Pleurobema decisum	Southern Clubshell	Invertebrate	Е	None
		Pleurobema furvum	Dark Clubshell	Invertebrate	Е	None
		Pleurobema georgianum	Southern Pigtoe Mussel	Invertebrate	Е	None
		Pleurobema perovatum	Ovate clubshell	Invertebrate	Е	None
		Pleurobema plenum	Rough Pigtoe	Invertebrate	Ε	None
		Ptychobranchus greeni	Triangular Kidneyshell	Invertebrate	Е	None
		Pyrgulopsis neomexicana	Soccoro Springsnail	Invertebrate	Е	None
		Pyrgus ruralis lagunae	Laguna Mountains Skipper	Invertebrate	Е	None
		Quadrula cylindrica strigillata	Rough Rabbitsfoot	Invertebrate	Е	None
		Quadrula intermedia	Cumberland Monkeyface	Invertebrate	Е	None
		Quadrula sparsa	Appalachian Monkeyface	Invertebrate	Е	None
		Somatochlora hineana	Hine's Emerald Dragonfly	Invertebrate	Е	None
Х	Yes	Speyeria zerene hippolyta	Oregon Silverspot Butterfly	Invertebrate	Т	6
х		Taylorconcha serpenticola	Bliss Rapids Snail	Invertebrate	Т	6
		Thermosphaeroma thermophilus	Soccoro Isopod	Invertebrate	Е	None
Х		Tryonia alamosae	Alamosa Springsnail	Invertebrate	Е	3
		Tulotoma magnifica	Tulotoma Snail	Invertebrate	Е	None
		Valvata utahensis	Utah Valvata Snail	Invertebrate	Ε	None
			Purple Bean Mussel	Invertebrate	Е	None
		IVIIINėa tranalie	Cumberland Bean Pearlymussel	Invertebrate	Е	None
		Antilogopro amariagno		Mammal	E	None
Х	Yes	Canis lupus	Gray Wolf	Mammal	XN	1, 2, 3, 4, 6, 9
Х			Red Wolf	Mammal	XN	8
х		ingens	Ozark Big-eared Bat	Mammal	E	8
Х		Corynorhinus townsendii virginianus	Virginia Big-eared Bat	Mammal	E	8, 9

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by inventoried roadless area(s)in one or more Forest Service Regions	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
Х		Cynomys parvidens	Utah Prairie Dog	Mammal	T	4
Х		Dipodomys ingens	Giant Kangaroo Rat	Mammal	E	5
Х		Dipodomys merriami parvus	San Bernardino Kangaroo Rat	Mammal	E	5
		Dipodomys nitratoides exilis	Fresno Kangaroo Rat	Mammal	E	None
		Dipodomys nitratoides nitratoides	Tipton Kangaroo Rat	Mammal	Е	None
		Dipodomys stephensi	Stephen's Kangaroo Rat	Mammal	Е	None
		Enhydra lutris nereis	Southern Sea Otter	Mammal	Т	None
Х	Yes	Eumetopias jubatus	Steller's Sea Lion	Mammal	Т	5, 10
Х		Glaucomys sabrinus coloratus	Squirrei	Mammal	Е	8
Х		Glaucomys sabrinus fuscus	Virginia Northern Flying Squirrel	Mammal	E	8, 9
Х		Herpailurus yagouaroundi tolteca	Jaguarundi	Mammal	Е	3
Х		Leopardus pardalis	Ocelot	Mammal	Е	3
Х		Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	Mammal	Е	3
X		Leptonycteris nivalis	Mexican Long-nosed Bat	Mammal	Е	3
Х		Lynx canadensis	Canada Lynx	Mammal	Т	1, 2, 4, 6, 9
		0 /	Humpback Whale	Mammal	Е	None
Х		Microtus mexicanus hualpaiensis	Hualapai Mexican Vole	Mammal	Е	3
X		Mustela nigripes	Black-footed Ferret	Mammal	Е	1, 2, 3
Х		Myotis grisescens	Gray Bat	Mammal	Е	8, 9
Х		Myotis sodalis	Indiana Bat	Mammal	Е	8, 9
Х		Ovis cariaderisis	(Peninsular)	Mammal	E	5
Х		Ovis canadensis californiana	Sierra Nevada Bighorn Sheep	Mammal	E	5
Х		Panthera onca	Jaguar	Mammal	Е	3
		Puma concolor coryi	Florida Panther	Mammal	Е	None
Х		Puma concolor cougar	Eastern Cougar	Mammal	Е	8, 9
Х		Rangifer tarandus caribou		Mammal	Е	1, 6
		Spermophilus brunneus brunneus	Squirrei	Mammal	Т	None
Х	Yes		Mount Graham Red Squirrel	Mammal	Е	3

Species likely to have habitat within and/or affected by inventoried roadless area(s)	affected by	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
			Florida Manatee	Mammal	Е	None
Х		Ursus americanus Iuteolus	Louisiana Black Bear	Mammal	Т	5
Х		Ursus arctos	Grizzly Bear	Mammal	Т	1, 4, 6
х		Vulpes macrotis mutica	San Joaquin Kit Fox	Mammal	Е	5
Х		Zapus hudsonius preblei	Prebles' Meadow Jumping Mouse	Mammal	Т	2
		Acanthomintha ilicifolia	San Diego Thorn-mint	Plant	Т	None
Х		Aeschynomene virginica	Sensitive Joint-vetch	Plant	Т	8
Х		Agave arizonica	Arizona Agave	Plant	Е	3
		Allium munzii	Munz's Onion	Plant	Е	None
		Amphianthus pusillus	Little Amphianthus	Plant	Т	None
		Amsonia kearneyana	Kearney's Blue Star	Plant	Е	None
		Apios priceana	Price's Potatoe-bean	Plant	Т	None
Х		Arabis mcdonaldiana	McDonald's Rock-cress	Plant	Е	5, 6
Х		Arabis serotina	Shale Barren Rock-cress	Plant	Е	8, 9
		Arenaria cumberlandensis	Cumberland Sandwort	Plant	Е	None
Х		Arenaria paludicola	Marsh Sandwort	Plant	Е	5
Х			Bear Valley Sandwort	Plant	Т	5
Х		l	Sacramento Prickly- poppy	Plant	E	3
Х		Asclepias meadii	Mead's Milkweed	Plant	Т	9
			Welsh's Milkweed	Plant	Т	None
Х		Asplenium scolopendrium var. americanum	Hart's Tongue Fern	Plant	Т	9
Х		Astragalus albens	Cushenbury Milk-vetch	Plant	Е	5
		Astragalus applegatei	Applegate's Milk-vetch	Plant	Е	None
		Astragalus brauntonii	Braunton's Milk-vetch	Plant	Е	None
		Astragalus desereticus	Desert Milkvetch	Plant	Т	None
		•	Mancos Milk-vetch	Plant	Е	None
		Astragalus lentiginosus var. coachellae	Coachella Milk-vetch	Plant	Е	None
Х	Yes		Heliotrope Milk-vetch	Plant	Т	4
		Astragalus tricarinatus	Triplerib Milk-vetch	Plant	Е	None

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by inventoried roadless area(s)in one or more Forest Service Regions	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Astragulus cremnophylax var. cremnophylax	Sentry Milk-vetch	Plant	E	None
		Baccharis vanessae	Encinitas Baccharis	Plant	Т	None
Х		Berberis nevinii	Nevin's Barberry	Plant	Е	5
		Betula uber	Virginia Round-leaf Birch	Plant	Т	None
х		Bonamia grandiflora	Florida Bonamia	Plant	Т	8
х		Brodiaea filifolia	Thread-leaved Brodiaea	Plant	Т	5
х		Callicarpa ampla	Capa Rosa	Plant	Е	8
х		Calyptridium pulchellum	Mariposa Pussypaws	Plant	Т	5
		Carex specuicola	Navaho Sedge	Plant	Т	None
х		Castilleja cinerea	Ashgray Paintbrush	Plant	Т	5
х		Caulanthus californicus	California Jewelflower	Plant	Е	5
		Ceanothus ophiochilus	Vail Lake Ceanothus	Plant	Т	None
		Chlorogalum purpureum var. reductum	Purple Amole	Plant	Т	None
		Cirsium Ioncholepis	La Graciaosa Thistle	Plant	Е	None
Х		Cirsium pitcheri	Pitcher's Thistle	Plant	Т	9
Х		Cirsium vinaceum	Sacramento Mountain Thistle	Plant	Т	3
х		Clarkia springvillensis	Springville Fairyfan	Plant	Т	5
Х		Conradina glabra	Apalachicola Rosemary	Plant	Е	8
		Conradina verticillata	Cumberland Rosemary	Plant	Т	None
		Coryphantha (=Escobaria) robbinsorum	Cochise Pincushion Cactus	Plant	Т	None
Х		Coryphantha scheeri var. robustispina	Pima Pineapple Cactus	Plant	E	3
		ieei	Lee Pincushion Cactus	Plant	Т	None
		Coryphantha sneedi var. sneedi	Sneed Pincushion Cactus	Plant	E	None
		Cycladenia humilis var. jonesii	,	Plant	Т	None
Х		Dodecahema leptoceras	Spineflower	Plant	Е	5
Х		Dudleya cymosa ssp. ovatifolia	Dudieya	Plant	Т	5
X		Echinacea laevigata	Smooth Purple Coneflower	Plant	Е	8

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by			Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Echinocactus horizonthaeonius var. nicholii	Nichol's Turk Head Cactus	Plant	Е	None
Х		Echinocereus fendleri var. kuenzleri	Kuenzler Hedgehog Cactus	Plant	E	3
Х		Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	Plant	Е	3
Х		Eremalche parryi ssp. kernensis	Kern Mallow	Plant	E	5
Х		Eriastrum densifolium spp. sanctorum	Giant Woolstar	Plant	Е	5
Х		Eriastrum hooveri	Hoover's Eriastrum	Plant	Т	5
Х		Erigeron maguirei	Maguire Daisy	Plant	Т	4
Х		Erigeron parishii	Parish's Fleabane	Plant	Т	5
Х		Erigeron rhizomatus	Zuni Fleabane	Plant	Т	3
		Erigonium gypsophilum	Gypsum Wild Buckwheat	Plant	Т	None
Х		Eriogonum kennedyi var. austromontanum	Southern Mountain Buckwheat	Plant	Т	5
Х		Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	Plant	Т	8
Х		Eriogonum ovalifolium ssp. vineum	Cushenbury Buckwheat	Plant	E	5
Х		Eugenia haematocarpa	Uvillo	Plant	Е	8
Х		Eutrema penlandii	Penland Alpine Fen Mustard	Plant	Т	2
		Fremontodendron mexicanum	Mexican Flannelbush	Plant	E	None
Х		Fritillaria gentneri	Gentner's fritillary	Plant	E	6
х		Gaura neomexicana coloradoensis	Colorado Butterfly Plant	Plant	PT	2
Х		Geocarpon minimum	Geocarpon	Plant	Т	8
Х		Geum radiatum	Spreading Avens	Plant	E	8
Х		Gymnoderma lineare	Rock Gnome Lichen	Plant	Е	8
		Hackelia venusta	Showy Stickweed	Plant	PE	None
Х		Harperocallis flava	Harper's Beauty	Plant	Е	8
		Hedeoma todsenii	Todsen's Pennyroyal	Plant	Е	None
х		Hedyotis purpurea var. montana	Roan Mountain Bluet	Plant	E	8
		Helenium virginicum	Virginia Sneezeweed	Plant	Т	None

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by inventoried roadless area(s)in one or more Forest Service Regions	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
x		Helianthus eggertii	Eggert's Sunflower	Plant	Т	8
		Helianthus schweinitzii	Schweinitz's Sunflower	Plant	E	None
х		Helonias bullata	Swamp Pink	Plant	Т	8
		Hexastylis naniflora	Dwarf-flowered Heartleaf	Plant	Т	None
х		Howellia aquatilis	Water Howellia	Plant	Т	1, 6
Х		Hudsonia montana	Mountain Golden Heather	Plant	Т	8
Х		Hymenoxys herbacea	Lakeside Daisy	Plant	Т	9
Х		Ilex sintenisii	Cuero de Sapo	Plant	Е	8
		Iliamna corei	Peter's Mountain-mallow	Plant	Е	None
		Ipomopsis sancti spiritus	Holy Ghost Ipomopsis	Plant	E	None
х		Iris lacustris	Dwarf Lake Iris	Plant	Т	9
		Isoetes louisianensis	Louisiana Quillwort	Plant	E	None
		Isoetes melanospora	Black Spored Quillwort	Plant	E	None
		Isoetes tegetiformans	Mat-forming Quillwort	Plant	Е	None
Х		Isotria medeoloides	Small Whorled Pogonia	Plant	Т	8, 9
		Lembertia congdonii	San Joaquin Wooly- Threads	Plant	E	None
Х		•	Babyfoot Orchid	Plant	Е	8
Х		Lesquerella kingii ssp. bernardina	San Bernardino Mountains Bladderpod	Plant	E	5
		Lesquerella pallida	White Bladderpod	Plant	E	None
Х			Heller's Blazing Star	Plant	Т	8
Х		Lilaeopsis schaffneriana spp. recurva	Huaachuca Water Umbel	Plant	E	3
Х		Lilium occidental	Western Lily	Plant	Е	6
Х			Pondberry	Plant	Е	8
Х		Lupinus sulphureus ssp. kincaidii	Kincaid's Lupine	Plant	PT	6
Х		Lysimachia asperulifolia	Rough-leaf Loosestrife	Plant	E	8
Х		Macbridea alba	White Bird-in-a-nest	Plant	Т	8
Х		Mirabilis macfarlanei	Macfarlane's Four- O'Clock	Plant	Т	1, 4, 6
		Optunia treleasei	Bakersfield Cactus	Plant	Е	None
Х		Orcuttia tenuis	Slender Orcutt Grass	Plant	Т	5

Species has						
Species likely to have habitat within and/or affected by inventoried roadless area(s)	designated critical habitat within and/or affected by	Species Scientific Name	Common Name	Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Oxypolis canbyi	Canby's Dropwort	Plant	Е	None
Х		Oxytheca parishii var. goodmaniana	Cushenbury Oxytheca	Plant	Е	5
х		Oxytropis campestris var. chartacea	Fassett's Locoweed	Plant	Т	9
		Pediocactus bradyi	Brady Pincushion Cactus	Plant	Е	None
Х		Pediocactus despainii	Winkler Cactus	Plant	Т	4
		Pediocactus knowltonii	Knowlton Cactus	Plant	Е	None
Х		Penstemon haydenii	Blowout Penstemon	Plant	Е	2
Х		Phacelia argillacea	Clay Phacelia	Plant	Е	4
		Phlox nivalis var. texensis	Texas Trailing Phlox	Plant	Е	None
Х		Pinguicula ionantha	Godfrey's Butterwort	Plant	Т	8
		Pityopsis ruthii	Ruth's Golden-aster	Plant	Е	None
Х		Platantnera praeciara	Western Prairie Fringed Orchid	Plant	Т	1, 2
Х		Pleodendrum macranthum	Chupacallos	Plant	Е	3
Х		Ploygala lewtonii	Lewton's Polygala	Plant	Е	8
Х		Poa atropurpurea	San Bernardino Bluegrass	Plant	Е	5
Х	Yes	Potentilla robbinsiana	Robbins' Cinquefoil	Plant	E	9
Х		Primula maguirei	Maguire Primrose	Plant	Т	4
		Pseudobahia peirsonii	San Joaquin Adobe Sunburst	Plant	Т	None
		Ptilimnium nodosum	Harperella	Plant	Е	None
Х		Purshia subintegra	Arizona Cliffrose	Plant	Е	3
		Rhus michauxii	Michaux's Sumac	Plant	Е	None
		Ribes echinellum	Miccosukee Gooseberry	Plant	Т	None
		Rorippa gambellii	Gambel's Watercress	Plant	Е	None
		Sagittaria fasciculata	Bunched Arrowhead	Plant	Е	None
Х		Sarracenia oreophila	Green Pitcher Plant	Plant	E	8
		Sarracenia rubra ssp. jonesii	Mountain Sweet Pitcher Plant	Plant	E	None
Х		Schwalbea americana	American Chaffseed	Plant	Е	8
		Scirpus ancistrochaetus	Northeastern Bulrush	Plant	Е	None
Х		Sclerocactus glaucus	Unita Basin Hookless Cactus	Plant	Т	2

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat	Species Scientific Name		Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Sclerocactus mesae verdae	Mesa Verde Cactus	Plant	Т	None
Х		Scutellaria floridana	Florida Skullcap	Plant	Т	8
		Scutellaria montana	Large Flowered Skullcap	Plant	Е	None
Х	Yes	Senecio franciscanus	San Francisco Peaks groundsel	Plant	Т	3
		Senecio layneae	Layne's Butterweed	Plant	Т	None
		Sidalcea nelsoniana		Plant	Т	None
Х		Sidalcea oregana calva	Wenatchee Checker Mallow	Plant	E	6
Х		Sidalcea pedata	Bird-footed Checkerbloom	Plant	Е	5
Х		Silene spaldingii	Spalding's Catchfly	Plant	PT	1, 4, 6
		Sisyrinchium dichotomum	White Irisette	Plant	Е	None
Х		Solidago albopilosa	White-Haired Goldenrod	Plant	Т	8
Х		Solidago houghtonii	Houghton's Goldenrod	Plant	Т	9
Х		Solidago spithamaea	Blue Ridge Goldenrod	Plant	Т	8
Х		Spiraea virginiana	Virginia Spiraea	Plant	Т	8, 9
		Spiranthes delitescens	Canelo Hills Ladies Tresses	Plant	Е	None
Х		Spiranthes diluvialis	Ute Ladies'-tresses	Plant	Т	1, 2, 4, 6
		Spiranthes parksii	Navasota Ladies'-tresses	Plant	Е	None
Х		Styrax portoricensis	Palo de Jazmin	Plant	E	8
Х		Taraxacum californicum	California Dandelion	Plant	E	5
Х		Ternstroemia luquillensis	Palo Colorado	Plant	Е	8
Х		Ternstroemia subsessilis	Unknown Common Name	Plant	Е	8
х		Thelypodium stenopetalum		Plant	E	5
		Thelypteris pilosa var. alabamensis	Alabama Streak-Sorus Fern	Plant	Т	None
Х		Thlaspi californicum	Kneeland Prairie Pennycress	Plant	PE	5
Х		Townsendia aprica	Last Chance Townsendia	Plant	Т	4
Х		Trifolium stoloniferum	Running Buffalo Clover	Plant	Е	8, 9
		Trillium persistens	Persistent Trillium	Plant	Е	None
		Trillium reliquum	Relict Trillium	Plant	Е	None
		Tuctoria greenei	Greene's Tuctoria	Plant	Е	None
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			

Species likely to have habitat within and/or affected by inventoried roadless area(s)	Species has designated critical habitat within and/or affected by inventoried roadless area(s)in one or more Forest Service Regions	Species Scientific Name		Species Group	Federal Status	Forest Service Region(s) where species is likely to be impacted by inventoried roadless area(s)
		Xyris tennesseensis	Tennessee Yellow-eyed Grass	Plant	E	None
		, ,	Bog Turtle	Reptile	Т	None
х	Yes		New Mexico Ridgenose Rattlesnake	Reptile	Т	3
х		Drymarchon corais couperi	Eastern Indigo Snake	Reptile	Т	8
х		Epicrates inornatus	Puerto Rican Boa	Reptile	E	8
		Gambelia silus	Blunt-nosed Leopard Lizard	Reptile	Е	None
х	Yes	Gopherus agassizii	Desert Tortoise (Sonoran pop.)	Reptile	Т	3, 4
		Gopherus polyphemus	Gopher Tortoise	Reptile	Т	None
		Graptemys flavimaculata	Yellow-blotched Sawback Trutle	Reptile	Т	None
Х	·	Neoseps reynoldsi	Sand Skink	Reptile	Т	8
х		Nerodia erythrogaster neglecta	Copperbelly Water Snake	Reptile	Т	9
		Sternotherus depressus	Flattened Musk Turtle	Reptile	Т	None
		Thamnophis gigas	Giant Garter Snake	Reptile	Т	None

## **APPENDIX D**

**Civil Rights Impact Analysis Population Distribution Maps** 

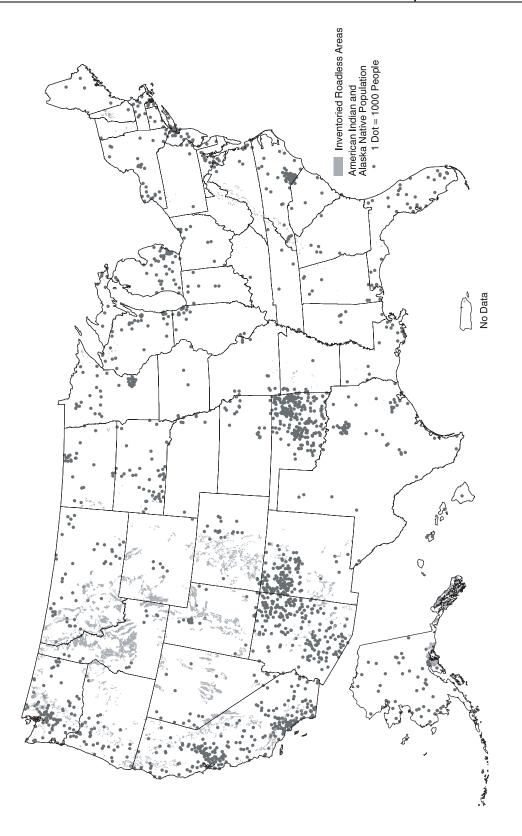


Figure D-1. American Indian population distribution in relation to inventoried roadless areas, 1990. (Vasievich 2000)

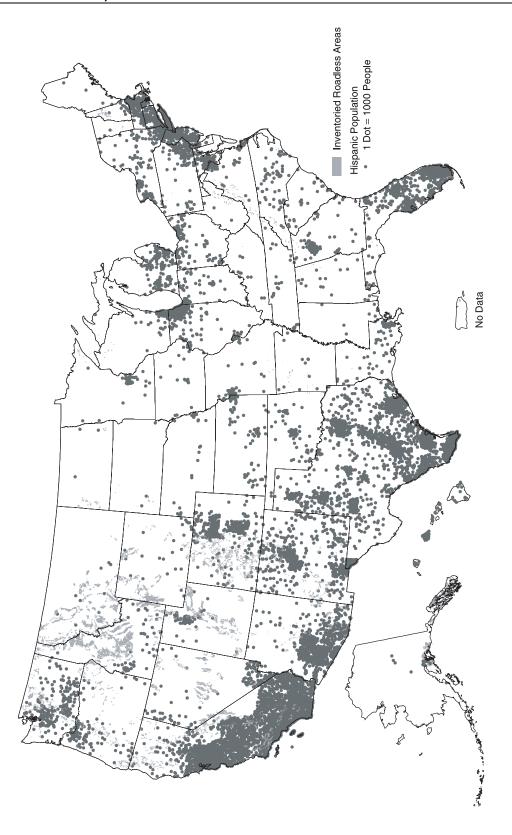


Figure D-2. Hispanic population distribution in relation to inventoried roadless areas, 1990. (*Vasievich 2000*)

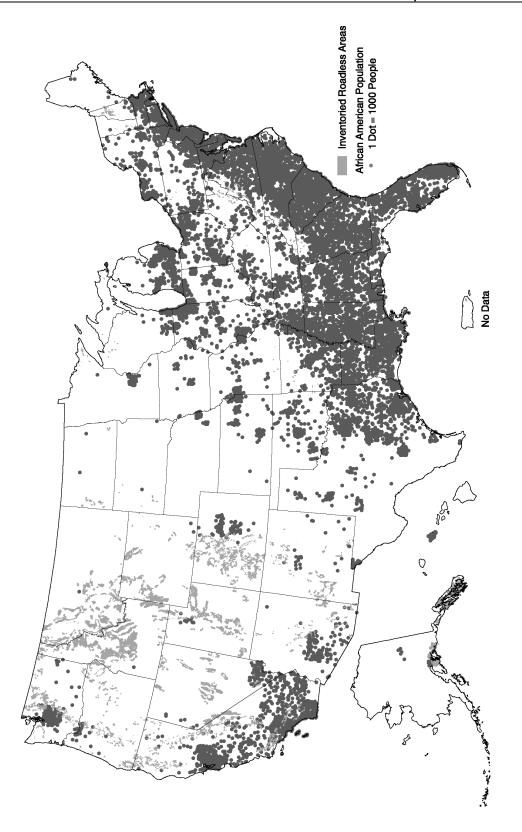


Figure D-3. African American population distribution in relation to inventoried roadless areas, 1990. (*Vasievich 2000*)

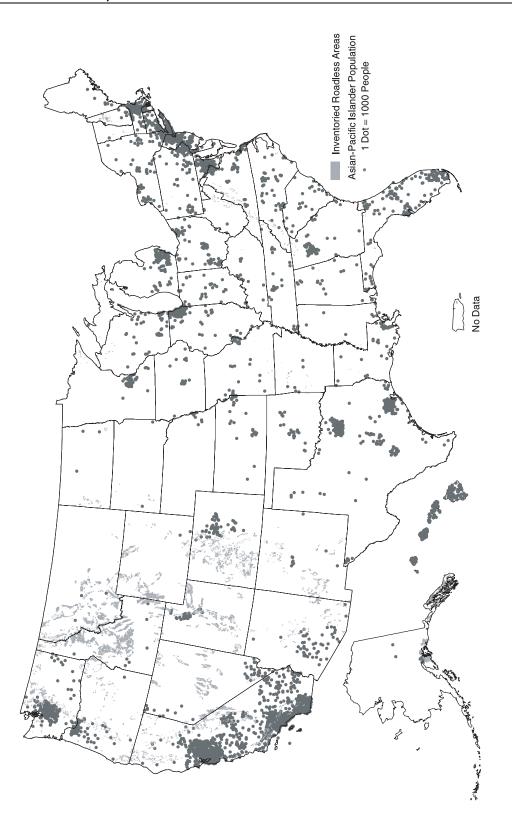


Figure D-4. Asian and Pacific Islander population distribution in relation to inventoried roadless areas, 1990. (Vasievich 2000)

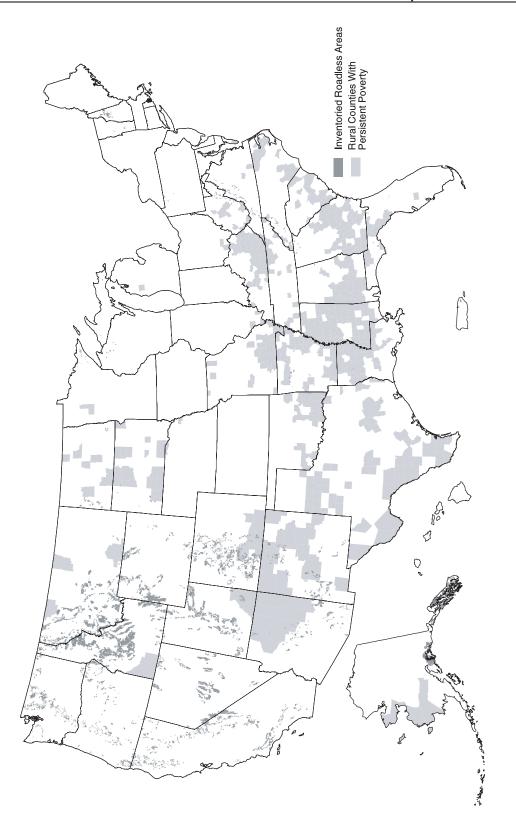


Figure D-5. Rural counties with persistent poverty in relation to inventoried roadless areas, 1990. (Vasievich 2000)

### **APPENDIX E**

Tongass National Forest
Land and Resource Management Plan
Prescriptions in
Tongass Selected Areas Alternative

# Chapter 3 Management Prescriptions<sup>1</sup>

#### Introduction

Chapters 2, 3 and 4 of the Forest Plan present the direction for managing the Tongass National Forest. The components and priority of this direction are explained in Chapter 1. This chapter includes the complete management prescription for each of the 19 Land Use Designations used in the Forest Plan. The areas allocated to each Land Use Designation are shown on the Forest Plan map (and also the Alternative I I map in the FEIS map packet).

To use this management prescription section, first find the area of the Forest you are interested in on the map. The map legend shows the name and corresponding color of each Land Use Designation. Then locate the management prescription for that designation (they have the same name) in the table of contents of this Plan.

Each management prescription has the following components:

- 1. Goals, objectives and desired condition.
- A table which refers, by resource, to the Forest-wide Standards & Guidelines that apply.
  The Forest-wide Standards & Guidelines are included in Chapter 4. If a reference is not
  made in this table to a specific Forest-wide Standard & Guideline, then that Standard &
  Guideline is not applicable.
- 3. The specific direction, called Land Use Designation Standards & Guidelines. The Land Use Designation Standards & Guidelines are grouped by resource, following the order established for the Forest-wide Standards & Guidelines. Resource codes are the same for both sets of standards and guidelines. Some resources are not included in the Land Use Designation Standards & Guidelines; in that case, resource direction entirely defaults to the table as described above (#2).

#### **Land Use Designation Acreage**

The following table shows the number of acres allocated to each of the 19 land use designations (LUDs). However, in some cases, more than one LUD can be applied to the same area (such as a Special Interest Area within Wilderness) therefore, totaling the acres will exceed the total National Forest acreage. For LUDs that allow timber harvest (e.g., Timber production), many of the acres are unsuitable for commercial timber production. Table A-1 in Appendix A shows the actual number of suitable acres on the Forest.

\* In this table, the total area within each LUD is included. However, in some cases, more than one Land Use Designation can be applied to the same area (such as a Special Interest Area within Wilderness). Therefore, totaling the acres of the LUDs will exceed the total National Forest acreage. No acreage has been calculated for the Transportation and Utility Systems LUD. Land Use Designation Allocations,\*

<sup>&</sup>lt;sup>1</sup> This appendix reprints the goals, objectives, desired conditions, standards, and guidelines for the 4 management prescriptions (land use designations) incorporated in Tongass Selected Areas Alternative. Refer to *USDA*, *Forest Service*. *1997c. Land and Resource Management Plan, Tongass National Forest. Alaska Region*, for the entire set of management prescriptions.

Land Use Designation	Acres Allocated
Wilderness	2,622,913
Wilderness National Monument	3,098,820
Nonwilderness National Monument	163,654
Research Natural Area	59,545
Special Interest Area	297,173
Remote Recreation	2,129,169
Enacted Municipal Watershed	45,776
Old-growth Habitat	1,131,059
Semi-remote Recreation	2,941,350
LUD 11	719,000
Wild River	129,650
Scenic River	36,460
Recreational River	36,470
Experimental Forest	17,260
Scenic Viewshed	496,613
Modified Landscape	622,387
Timber production	2,580,821
Minerals	166,21 <u>5</u>

#### **Special Designations or Classifications**

The following listing shows, by name, the areas of the Forest identified as Congressionally designated Wilderness and LUD II's; Wild, Scenic and Recreational Rivers (recommended); Research Natural Areas; Special Interest Areas; and Experimental Forests.

#### Congressionally designated Wilderness and LUD II's

Wilderness established December 2, 1980 by ANILCA

Kootznoowoo Wilderness (Admiralty Island Nat. Monument)

Coronation Island Wilderness

**Endicott River Wilderness** 

Maurelle Islands Wilderness

Misty Fiords National Monument Wilderness

Petersburg Creek-Duncan Salt Chuck Wilderness

Russell Fiord Wilderness

South Baranof Wilderness

South Prince of Wales Wilderness

Stikine-LeConte Wilderness

Tebenkof Bay Wilderness

Tracy Arm-Fords Terror Wilderness

Warren Island Wilderness

West Chichagof-Yakobi Wilderness

#### Wilderness established November 28, 1990 by TTRA

Chuck River Wilderness

Karta Wilderness

Kuiu Wilderness

Pleasant-Lemesurier-inian Islands Wilderness

South Etolin Wilderness

Young Lake Addition to Kootznoowoo Wilderness

#### LUD II's established November 28, 1990 by TTRA

Anan Creek

Berners Bay

Kadashan

Lisianski River/Upper Hoonah Sound

Mt. Calder/Mt. Holbrook

Naha

Nutkwa

Outside Islands

Point Adolphus/Mud Bay

Salmon Bay

Trap Bay

Yakutat Forelands

#### Wild, Scenic and Recreational Rivers

The following rivers or river segments, as described in Appendix E of the FEIS for Alternative I 1, including the segment classifications, will be recommended to Congress for inclusion in the National Wild and Scenic Rivers System:

Aaron, Oerns and Berg Creeks

Anan Creek

Blind River

Blue River

Chickamin River

Essowah Lakes and Streams

Fall Dog Creek

Farragut River

Gilkey River

Glacial River

Gokachin, Mirror, Fish, and Low Creeks

Harding River

Hasselborg River

Kadake Creek

Kadashan River

Kah Sheets Creek and Lake

Katzehin River

Kegan Lake and Streams

King Salmon River

Kutlaku Creek and Lake

LeConte Glacier

Lisianski River

Niblack Lakes and Streams

Naha River

Orchard Creek and Lake

Petersburg Creek

Salmon Bay Lake and Stream

Santa Anna Creek and Lake Helen

Sarkar Lakes

Thorne River and Hatchery Creek

Virginia Lake and Creek

Wolverine Creek and McDonald Lake

#### **Research Natural Areas**

The following will continue to be managed as established Research Natural Areas:

Cape Fanshaw Research Natural Area

Dog Island Research Natural Area

Limestone Inlet Research Natural Area

Old Tom Creek Research Natural Area

Red River Research Natural Area

The existing Pack Creek Research Natural Area is recommended to the Chief, Forest Service for declassification as a Research Natural Area.

The following areas, as described in Appendix D of the FEIS, will be recommended to the Chief, Forest Service for classification as Research Natural Areas, after confirmation in the Establishment Report of the site's suitability for designation:

Kadin Island

Marten River

Rio Roberts

Robinson Lake

**Tonalite Creek** 

Warm Pass

West Gambier Bay

#### **Special Interest Areas**

The following areas will continue under a Special Interest Area classification:

Admiralty Lakes Recreation Area

Hubbard Glacier Geological Area

Mendenhall Glacier Recreation Area

New Eddystone Rock Geological Area

Tracy Arm-Fords Terror Scenic Area

Walker Cove-Rudyerd Bay Scenic Area

Ward Lake Recreation Area

The following areas, as described in Appendix F of the FEIS, are classified as Special Interest Areas and designated as named below:

Arena Cove/Cape Felix Geological Area

Bailey Bay Hot Springs Recreation Area

Blind Slough Scenic and Zoological Area

Blue River Lava Flow Geological Area

Clear River Zoological Area

Duke Island Zoological Area

Falls Creek Windthrow Botanical Area

Fish Creek Hot Springs Recreation Area

Karst Areas Geological Area

Keku Islets Geological and Scenic Area

Mount Edgecumbe Geological Area

North Hamilton River Redcedar Cultural and Botanical Area

Patterson Glacier Geological and Botanical Area

Pike Lakes Recreation Area

Soda Springs Geological Area

Ward Lake Recreation Area (expansion)

The Pack Creek Research Natural Area, upon declassification as a Research Natural Area by the Chief, Forest Service, will be designated the Pack Creek Zoological Area.

#### **Experimental Forests**

The following will continue to be managed as Experimental Forests:

Maybeso Experimental Forest

Young Bay Experimental Forest

#### REMOTE RECREATION

#### Land Use Designation RM

#### Goals

To provide extensive, unmodified natural settings for primitive types of recreation and tourism

To provide opportunities for independence, closeness to nature, and self-reliance in environments offering a high degree of challenge and risk.

To minimize the effects of human uses, including subsistence use, so that there is no permanent or long-lasting evidence.

#### **Objectives**

Manage recreation and tourism use and activities to meet the levels of social encounters, onsite developments, methods of access, and visitor impacts indicated for the Primitive Recreation Opportunity Spectrum class.

Provide trails and primitive facilities that are in harmony with the natural environment and that promote primitive recreation experiences.

Apply the Retention Visual Quality Objective.

Fish enhancement projects may occur. Design wildlife habitat improvements to emulate natural conditions and appearance.

#### **Desired Condition**

Areas in the Remote Recreation Land Use Designation are characterized by extensive, unmodified natural environments. Ecological processes and natural conditions are not noticeably affected by past or current human uses or activities. Users have the opportunity to experience independence, closeness to nature, solitude and remoteness, and may pursue activities requiring self-reliance in an environment that offers a high degree of challenge and risk. Interactions between users are infrequent. Motorized access is limited to traditional means: boats, aircraft and snowmachines. Facilities and structures are minimal, and rustic in appearance.

#### Apply the following Land Use Designation Standards & Guidelines:

#### FACILITIES Facilities Improvements: FAC2

A. Design and locate administrative and non-recreation structures to reduce adverse effects on recreation and tourism opportunities.

#### FIRE Fire Suppression: FIRE12

Suppression Action

A. Suppress wildfires using the suppression option identified in the Southeast Alaska/Prince William Sound Fire Management Plan. An Escaped Fire Situation Analysis (EFSA) of expected fire behavior, time of year, and locations with respect to private land and adjacent Land Use Designations may lead to a lower strategy. If an EFSA discloses no adverse effects and it is more cost-efficient, the lower strategy will be used.

## Remote Recreation Land Use Designation Apply the following Forest-wide Standards & Guidelines located in Chapter 4:

Resource	Section	Sub-Sections	Page
Air	AIR	All	4-3
Beach And Estuary Fringe	BEACH1	All	4-4
	BEACH2	I,II(A-G,K,L)	
Facilities	FAC	All	4-6
Fire	FIRE	All	4-7
Fish	FISH	All	4-8
Forest health	HEALTH	All	4-13
Heritage Resources	HER	All	4-14
Karst And Cave Resources	KARST, CAVE	All	4-18
Lands	LAND	All	4-21
Minerals And Geology	MG	All	4-33
Recreation And Tourism	REC	All	4-35
Riparian	RIP1	All	4-53
	RIP2	I-II(A-E,G)	
Rural Community Assistance	RUR	All	4-74
Scenery	VIS1	All	4-75
	VIS11	I,II(A,E)	
	VIS12	I(A,B,D),II	
Soil And Water	S&W1111, 1112,2	All	4-83
	S&W112	I(A:1-4,6-7), II, III	
Subsistence	SUB	All	4-86
Threatened, Endangered,	TE&S	All	4-88
Sensitive			
Timber	TIM111-1,140	All	4-94
	TIM114	VIII(D)	
Trails	TRAI	AÌI	4-102
Transportation	TRAN	None	4-104
Wetlands	WET	All	4-111
Wildlife	WILD112	I-VIII; IX(A:1-8;11,B); X;	4-112
		XI(A:1); XII,- XIII; XIV;	
		XVI(A:I); XVII	
	WILD22	l(A:I,B)	
	WILD23	`All ´	

FIRE Fire Suppression: FIRE12 (cont.)

Suppression Action

B. Emphasize suppression tactics which result in the least possible disturbance or evidence of human presence.

- 1. Keep use of mechanized equipment to a minimum.
- 2. Suppression tactics will avoid human/bear conflicts and existing policy will be emphasized to leave no trash or any other kinds of bear attractants in the area.
- 3. Rehabilitation of all campsites, suppression lines, and other evidence of human presence will occur as soon as it is safe, but within one year after the fire occurs.

## **Fuel Improvements: FIRE2**

## Prescribed fire

- A. As a general management practice, do not use managementignited prescribed fire. Should it become necessary to consider the use of management-ignited prescribed fire, FSM 2324 provides direction.
- B. As a general management practice, do not use prescribed natural fire. Should it become necessary to consider the use of prescribed natural fire, the Forest Plan must be amended to analyze, justify, and approve prescribed natural fire programs. (Consult FSM 5142.)

# FISH Fish Habitat Planning: FISH112

#### Fish Enhancement

A. Evaluate fish habitat improvement during project planning by considering: 1) effects resulting from the introduction of species not indigenous to the watershed; 2) the appropriateness of structures both in type and scale to the Primitive Recreation Opportunity Spectrum (ROS) setting; and 3) the need to provide well-distributed fisheries that support sport and commercial fisheries, subsistence, and community stability.

## Fish Habitat Improvement: FISH22

- A. Design development to minimize impact on the primitive setting.
- B. Construction techniques should be compatible with the primitive recreation setting.
- C. Evidence of necessary land-disturbing activities for construction should not be visible to the casual observer after 5 years.

# FOREST HEALTH Forest Health Management: HEALTHI

A. Implement insect and disease management practices to maintain forest health in this and adjacent Land Use Designations.

#### Forest Insect and Disease Survey and Inventory: HEALTH2

A. Survey and inventory visible outbreaks annually.

## **HERITAGE Heritage Resource Activities: HER**

#### Enhancement

- A. Heritage Resources are available for recreational, scenic, scientific, educational, conservation, and historic uses.
  - 1. Interpretive information concerning Heritage Resources located inside this Land Use Designation should be in the form of exhibits and publications located outside the Land Use Designation.
  - Heritage Resources are available for scientific studies that are consistent with the primitive settings and activities, and heritage resource management objectives for the specific site.

## Inventory/Evatuation

- A. Develop priorities and schedule management activities Heritage Resources are available for recreational, scenic, scientific, educational, conservation, and historic uses.
  - 1. Identify, classify, and evaluate known Heritage Resources.
  - 2. Identify heritage properties to be nominated to the National Register of Historic Places.

- 3. Identify heritage properties that require stabilization or other protective measures.
- Identify opportunities for interpretation of Heritage Resources for public education and enjoyment.

## **KARST AND CAVES**

## **Cave Management Program: CAVE**

- A. Identify opportunities for interpretation of caves for public education and enjoyment. Interpretation will generally occur outside this Land Use Designation.
- B. Manage caves as Class I (Sensitive) or Class 3 (Undeveloped) as described in the Karst and Cave Resources Forest-wide Standards & Guidelines.

#### **LANDS**

## Special Use Administration (Non-Recreation): LAND122

- A. Permit only those new activities which are compatible with the Land Use Designation.
  - Permit temporary structures and major fisheries improvement projects (such as hatcheries) only if they are widely dispersed.
  - 2. Permitted activities and structures should not be visually evident from a Visual Priority Route or Use Area (see Appendix F).
- B. This Land Use Designation represents a Transportation and Utility System (TUS) "Avoidance Area." Transportation and utility sites and corridors may be located within this Land Use Designation only after an analysis of potential TUS corridors has been completed and no feasible alternatives exist outside this Land Use Designation.

# MINERALS AND GEOLOGY

# Minerals and Geology Administration: MG12

Forest Lands Open to Mineral entry

- A. Forest lands within this Land Use Designation are open to mineral
- B. exploration and development. Mineral activities will be compatible with objectives of this Land Use Designation to the extent feasible.
- C. Assure prospectors and claimants their right of ingress and egress granted under the General Mining Law of 1872, ANILCA, and National Forest Service Minerals Regulations 36 CFR 228.
- D. Permit reasonable access to mining claims in accordance with the provisions of an approved Plan of operations.

# Plan of operations

- A. Work with claimants to develop a Plan of operations that adequately mitigates adverse impacts to Land Use Designation objectives. Include mitigation measures that are compatible with the scale of proposed development and commensurate with potential resource impacts.
- B. Apply Transportation Forest-wide Standards & Guidelines to the location and construction of mining roads and facilities.
- C. Manage mineral exploration and development activities to be compatible with the emphasis of the Remote Recreation Land Use Designation. Apply the following management practices to reduce resource impacts.

- Manage mineral activities to maintain the present and continued productivity of anadromous fish and other foodfish habitat to the maximum extent feasible. (Consult ANILCA, Section 505 (a).)
- 2. Take maximum advantage of topographic and vegetative screening when locating drill rigs and pumps, roads, rock quarries, structures, and marine transfer facilities.
- 3. Discourage use of motorized surface vehicles, except as provided in ANILCA, Section 1110(b), which assures adequate and feasible access for economic and other purposes.
- Locate material sites and marine transfer facilities outside this Land Use Designation if reasonable alternatives exist.
- 5. Ensure that vegetation removed from the project area is hauled away, buried, burned, or scattered.
- Minimize the scale of spoil/disposal areas to the surrounding landscape as seen from sensitive view points.
- 7. Approve use of colors that simulate those found in the characteristic landscape. Avoid use of reflective materials in project facilities.
- 8. Approve reclamation plans in which minerals activities leave a natural-appearing condition.
- 9. Ensure that landform modifications simulate naturallyoccurring forms.
- 10. Ensure that disturbed areas are revegetated in accordance with project plans.

# RECREATION AND TOURISM

## **Recreation Use Administration: REC122**

Recreation Management and Operations

- A. Manage for Frimitive recreation settings, recognizing other Recreation Opportunity Settings (ROS) may be present due to authorized activities, existing use patterns, and activities in adjacent Land Use Designations. Strive to minimize these changes from the Primitive ROS objective.
- B. Manage recreation and tourism use to meet the levels of social encounters, on-site development, and visitor impacts indicated by the ROS charts in the Recreation and Tourism Forest-wide & Guidelines.

#### Recreation Special Uses

- A. Major developments are generally not consistent with the objectives of this Land Use Designation. Development proposals require scrutiny of the magnitude and scope for Land Use Designation conformance. Refer to the Recreation and Tourism Forest-wide Standards & Guidelines.
- B. Minor developments may be compatible with the Land Use Designation objectives depending on the scope, purpose, and magnitude of the proposal. Proposals will be evaluated on a case-by-case basis. Refer to the Recreation and Tourism Forestwide Standards & Guidelines.

## **SCENERY**

## **Scenery Operations: VIS1**

 Provide a visual condition in which activities are not visually evident to the casual observer.

- 1. Apply Forest-wide Standards & Guidelines for the Retention Visual Quality Objective.
- Exceptions for small areas of non-conforming developments, such as recreation sites, may be considered on a case-bycase basis (see the Recreation and Tourism Standards & Guidelines in this prescription).

#### **SOIL AND WATER**

## Watershed Resource Improvements: S&W2

- A. Watersheds will be managed in a natural condition.
- B. Use indigenous plants and materials to protect or improve the quality and/or quantity of the water resource or to stabilize soils.

#### **TIMBER**

## **Timber Resource Planning: TIM12**

- A. Forested land is classified as unsuitable for timber production.
- B. Taking of personal use wood will be limited to beach logs which can be removed from coastlines without roads or use of vehicles on uplands. The cutting down of trees in navigable rivers (sweepers) and removal of trees from the banks must be compatible with the management direction for fish habitat.

#### **TRANSPORTATION**

## **Transportation Operations: TRAN1**

- A. New roads are not permitted except to access valid mining claims (or as excepted under Lands).
- Existing roads in this Land Use Designation are closed to motorized uses subject to ANILCA provisions.
- C. Use of snowmachines, motorboats, and aircraft is permitted.

### **WILDLIFE**

## Wildlife Habitat Planning: WILD112

- A. Wildlife habitats are generally subject to ecological changes only.
- B. Indigenous species are maintained.
- C. Habitat improvement projects are acceptable if designed to emulate natural conditions and appearance.

## **OLD-GROWTH HABITAT**

# Land Use Designation OG

## Goals

Maintain areas of old-growth forests and their associated natural ecological processes to provide habitat for old-growth associated resources.

Manage early seral conifer stands to achieve old-growth forest characteristic structure and composition based upon site capability. Use *old growth definitions as outlined in Ecological Definitions for Old-growth Forest Types in Southeast Alaska (RI 0-TP-28).* 

#### **Objectives**

Provide old-growth forest habitats, in combination with other Land Use Designations, to maintain viable populations of native and desired non-native fish and wildlife species and subspecies that may be closely associated with old-growth forests.

Contribute to the habitat capability of fish and wildlife resources to support sustainable human subsistence and recreational uses.

Maintain components of flora and fauna biodiversity and ecological processes associated with old- growth forests.

Allow existing natural or previously-harvested early seral conifer stands to evolve naturally to old-growth forest habitats, or apply silvicultural treatments to accelerate forest succession to achieve old-growth forest structural features. Consider practices such as thinning, release and weeding, pruning, and fertilization to promote accelerated development of old-growth characteristics.

To the extent feasible, limit roads, facilities, and permitted uses to those compatible with old-growth forest habitat management objectives.

## **Desired Condition**

All forested areas within this Land Use Designation have attained old-growth forest characteristics. A diversity of old-growth habitat types and associated species and subspecies and ecological processes are represented.

# Old-growth Habitat Land Use Designation Apply the following Forest-wide Standards & Guidelines located in Chapter 4:

Resource	Section	Sub-Sections	Page
Air	AIR	All	4-3
Beach And Estuary Fringe	BEACH	All	4-4
Facilities	FAC	All	4-6
Fire	FIRE	All	4-7
Fish	FISH	All	4-8
Forest Health	HEALTH	All	4-13
Heritage Resources	HER	All	4-14
Karst And Cave Resources	KARST,CAVE	All	4-18
Lands	LAND	All	4-21
Minerals And Geology	MG	All	4-33
Recreation And Tourism	REC	All	4-35
Riparian	RIP1	All	4-53
	RIP2	I,II(A-E,G,H)	
Rural Community Assistance	RUR	All	4-74
Scenery	VIS1,12	All	4-75
	VIS11	I,II(A,E)	
Soil And Water	S&W1111, 1112,2	All	4-83
	S&W112	I(A:1-4,6-7),II,III	
Subsistence	SUB	All	4-86
Threatened, Endangered,	TE&S	All	4-88
Sensitive			
Timber	TIM111,111-	All	4-94
	1,130,140		
	TIM114	VIII	
Trails	TRAI	All	4-102
Transportation	TRAN	All	4-104
Wetlands	WET	All	4-111
Wildlife	WILD112	I-VIII;	4-112
		IX(A: 1 -8,11, B); X-XVIII	
	WILD 22,23	All	

## Apply the following Land Use Designation Standards & Guidelines:

## FACILITIES Facilities Improvements: FAC2

A. Allow administrative and recreational facilities when compatible with Land Use Designation objectives.

# FIRE Fire Suppression: FIRE12

Suppression Action

- A. Suppress wildfires using the suppression option identified in the Southeast Alaska/Prince William Sound Fire Management Plan. An Escaped Fire Situation Analysis (EFSA) of expected fire behavior, time of year, and locations with respect to private land and adjacent land use areas, may lead to a lower strategy. If an EFSA discloses no adverse effects and it is more cost-efficient, the lower strategy will be used.
- B. Suppression tactics are limited only by the standards for this Land Use Designation, such as soil and watershed concerns.

## **Fuel Improvements: FIRE2**

Prescribed fire

- A. Allow management-ignited prescribed fire where its use maintains old- growth characteristics.
- B. Do not use prescribed natural fire.

# FISH Fish Habitat Planning: FISHI 12

A. Emphasize the protection and restoration of fish habitat, fish production and aquatic biodiversity. Enhancement projects that may change the natural distribution of fish species within a watershed are consistent with Land Use Designation objectives.

## FOREST HEALTH Forest Health: HEALTHI

A. Insect and disease management measures consistent with this Land Use Designation may be implemented to protect the old-growth forest component and adjacent resources.

## Forest Insect and Disease Survey and Inventory: HEALTH2

A. Survey and inventory visible outbreaks.

## HERITAGE Heritage Resource Activities: HER

Inventory/Evaluation

- A. Develop priorities and schedule management activities to implement heritage resource inventory, evaluation, protection, and interpretation.
  - 1. Identify, classify, and evaluate known Heritage Resources.
  - 2. Identify heritage properties to be nominated to the National Register of Historic Places.
  - 3. Identify heritage properties that require stabilization or other protective measures.
  - 4. Identify opportunities for interpretation of Heritage Resources for public education and enjoyment.

#### 

A. Identify opportunities for interpretation of caves for public education and enjoyment. Interpretation may occur inside or outside of this Land Use Designation.

## E-14

#### **LANDS**

## Special Use Administration (Non-Recreation): LAND122

- A. Permit only improvements (such as tent platforms, fish weirs, minor waterlines, minor powerlines, etc.) which are compatible with Land Use Designation objectives.
- B. This Land Use Designation represents a Transportation and Utility Systems (TUS) "Avoidance Area." Transportation and utility sites or corridors may be located within this Land Use Designation only after an analysis of potential TUS corridor opportunities has been completed and no feasible alternatives exist outside this Land Use Designation.

# MINERALS AND GEOLOGY

## Minerals and Geology Administration: MG12

Forest Lands Open to Mineral entry

- A. Forest lands within this Land Use Designation are open to mineral entry.
- B. Assure prospectors and claimants their right of ingress and egress granted under the General Mining Law of 1872, ANILCA, and National Forest Service Mining Regulations 36 CFR 228.
- C. Permit reasonable access to mining claims in accordance with the provisions of an approved Plan of operations.

### Plan of operations

- A. Work with claimants to develop a Plan of operations that minimizes, monitors, and mitigates adverse impacts to Land Use Designation objectives. Monitoring plans should specifically assess impacts to threatened, endangered or sensitive species or other significant fish and wildlife resources. Include mitigation measures that are compatible with the scale of proposed development and commensurate with potential resource impacts.
- B. Apply Transportation Forest-wide Standards & Guidelines to the location and construction of mining roads and facilities.
- C. Manage mineral exploration and development activities to be compatible with Land Use Designation objectives. Apply the following management practices to avoid or reduce impacts.
- Manage mineral activities to maintain the present habitat capability and continued productivity of anadromous fish and other foodfish habitat to the maximum extent feasible. (Consult ANILCA, Section 505 (a).)
- 2. Take advantage of topographic and vegetative screening when locating drill rigs and pumps, roads, rock quarries, structures, and marine transfer facilities.
- 3. Locate material sites and marine transfer facilities outside this Land Use Designation if reasonable alternatives exist.
- 4. Minimize the scale of spoil/disposal areas in relation to the surrounding landscape as seen from sensitive viewpoints to leave a naturally-appearing condition.
- 5. Ensure that disturbed areas are revegetated in accordance with project plans, emphasizing the use of native vegetation and local genetic plant stocks.
- Apply timing restrictions to minerals activities as needed to prevent or minimize disturbance to fish and wildlife during critical life stages (e.g., spawning, molting, nesting, or broodrearing).

# RECREATION AND TOURISM

#### Recreation Use Administration: REC122

Recreation Management and Operations

- A. Manage recreation and tourism use to meet Land Use Designation objectives for fish and wildlife resources and habitat.
  - Design and locate recreation-related structures to be compatible with habitat needs of old-growth associated species.
  - Manage Off-Highway Vehicle use to prevent degradation of habitat or adverse disturbance to fish and wildlife populations.
- B. Generally provide for semi-primitive ROS settings, recognizing that more developed settings may be present due to authorized activities, existing use patterns, and activities in adjacent Land Use Designations.

## Recreation Special Uses

A. Minor recreation and tourism developments may be compatible with the Land Use Designation objectives depending on the scope, purpose, and magnitude of the proposal. Proposals will be evaluated on a case-by-case basis. Refer to the Recreation and Tourism Forest-wide Standards & Guidelines.

#### **SCENERY**

## **Scenery Operations: VIS1**

- A. Apply Forest-wide Standards & Guidelines for the Retention Visual Quality Objective. Design activities to not be visually evident to the casual observer.
- B. Exceptions for small areas of non-conforming developments, such as recreational developments, transportation developments, Log Transfer Facilities, and mining development, may be considered on a case-by-case basis. Use designs and materials that are compatible with forms, colors, and textures found in the characteristic landscape.

#### **SOIL AND WATER**

#### Watershed Resource Improvements: S&W2

A. Undertake watershed improvements only where deteriorated soil and hydrologic conditions create a threat to the goals and objectives for which the old-growth habitat is managed. Rehabilitation or stabilization projects will seek to enable the area to retain its natural appearance.

#### **TIMBER**

#### **Timber Resource Planning: TIM112**

- A. Forest land is classified as unsuitable for timber production.
- B. Beach log salvage is compatible with this Land Use Designation.
- C. Personal use wood harvest is allowed within locally determined areas if determined to be consistent with Land Use Designation objectives. Salvage of bridge stringer logs is permitted.

## **Timber Sale Preparation: TIM114**

A. Salvage of dead or down material is permitted, but is limited to roadside windfall and hazard trees immediately adjacent to existing permanent roads and catastrophic windthrow events or large insect or disease outbreaks (generally, exceeding 100 acres). Limited standing undamaged timber(up to 20% of total salvage) may be removed only for safety reasons or for feasibility of salvage operations. Salvage sales must be

compatible with Land Use Designation objectives as determined through the environmental analysis process. Stands once salvaged will be managed to achieve old- growth habitat characteristics. During the environmental analysis, consider the scale of the affected area salvaged. If reserve design criteria are no longer met, adjust reserve locations to better meet reserve size, spacing and composition criteria if lands are available (see Wildiife Planning, section B below, and Appendix K).

## **TRANSPORTATION**

## **Transportation Operations: TRANI**

- A. New road construction is generally inconsistent with Old-growth Habitat Land Use Designation objectives, but new roads may be constructed if no feasible alternative is available.
  - Perform integrated logging system and transportation analysis (including Access and Travel management planning) to determine if other feasible routes avoiding this Land Use Designation exist during the project environmental analysis process. If no feasible alternative routes exist, locate, design, and construct roads in a manner which minimizes adverse impact to fish and wildlife resources to the extent feasible, and will be compatible with Land Use Designation objectives. Keep clearing widths to the minimum feasible. Consider enforcement costs of road closures in the integrated logging system and transportation analysis.
  - 2. If reserve design criteria are no longer met, adjust reserve locations to meet reserve size, spacing and composition criteria if lands are available (see Wildlife Planning, section B below, and Appendix K).
  - 3. For timber salvage, use logging systems that do not require additional permanent road construction.
- B. Manage existing roads to meet Land Use Designation objectives.
  - In Old-growth Habitat Land Use Designations with existing roads, develop or update Road management objectives to meet Land Use Designation objectives (see Wildlife (brown bear and wolf) and Transportation Forest-wide Standards & Guidelines). Use of existing roads may continue pending the development or update of Road management objectives (see Appendix L).
  - Road management objectives may include temporary or permanent road closures and may be specific to individual road specification types (e.g., keep mainlines open, close arterial and spur).
  - 3. Road maintenance and reconstruction may be permitted if consistent with road management objectives.
- C. Sites for Log Transfer Facilities may be considered in this Land Use Designation. If no other feasible alternative sites exist, locate, design, construct, and manage these facilities in a manner which will be compatible with Land Use Designation objectives.

## **WILDLIFE**

## Wildlife Habitat Planning: WILD122

- A. Maintain contiguous blocks of old-growth forest habitat in a forest-wide system of old-growth reserves to support viable
- B. A system of large, medium and small old-growth habitat reserves has been identified and mapped in the forest plan as part of a forest-wide old-growth habitat reserve strategy. The mapped

large and medium reserves generally achieve reserve strategy objectives, and few major modifications are anticipated. The small mapped reserves have received differing levels of ground-truthing and integration of site-specific information in their design. During project. level environmental analysis, for projects areas that include or are adjacent to mapped old-growth habitat reserves, the size, spacing and habitat composition of mapped reserves may be further evaluated. (See Appendix K for mapping criteria.)

- Adjust reserves not meeting the minimum criteria to meet or exceed the minimum criteria.
- Reserve location, composition, and size may otherwise also be adjusted. Alternative reserves must provide comparable achievement of the Old- growth Habitat Land Use Designation Goals and Objectives. Determination as to comparability must consider the criteria listed in Appendix K.
- Adjustments to individual reserves described in 1. and 2. above are not expected to require a significant plan amendment. Adjustments Forest- wide shall be monitored yearly to assess whether a significant plan amendment is warranted on the basis of cumulative changes.
- C. Allow previously harvested or natural early seral stands to develop into old- growth habitats, or provide young-growth management to accelerate attainment of old-growth characteristics. (See WILD22, below).

## Wildlife Habitat Restoration: WILD22

A. Manage early seral forest stands for purposes of wildlife habitat development. Allow techniques such as thinning, pruning, and planting to accelerate development of advanced seral stand structure including maintenance of shrub and forb understory.

## **SEMI-REMOTE RECREATION**

## Land Use Designation SM

#### Goals

To provide predominantly natural or natural-appearing settings for semi-primitive types of recreation and tourism and for occasional enclaves of concentrated recreation and tourism facilities.

To provide opportunities for a moderate degree of independence, closeness to nature, and self-reliance in environments requiring challenging motorized or non-motorized forms of transportation.

#### **Objectives**

Manage recreation and tourism use and activities to meet the levels of social encounters, onsite developments, methods of access, and visitor impacts indicated for the Semi-primitive Recreation Opportunity Spectrum classes. Enclaves of concentrated recreation and tourism developments within the Land Use Designation or management activities in adjacent Land Use Designations may cause the ROS setting to become Rural.

Determine on a case-by-case basis whether roads, trails, and other areas should be closed to motorized recreation activities. If so, incorporate into Off-Highway Vehicle (OHV) plans. If not, the use of boats, aircraft, and snowmachines for traditional activities is allowed.

Permit small-scale, rustic recreation and tourism facilities, and occasional enclaves of concentrated recreation and tourism facilities.

Apply the Partial retention Visual Quality Objective to any developments, facilities, or structures.

Fish enhancement and wildlife habitat improvement may occur.

## **Desired Condition**

Areas in the Serni-remote Recreation Land Use Designation are characterized by generally unmodified natural environments. Ecological processes and natural conditions are only minimally affected by past or current human uses or activities. Users have the opportunity to experience a moderate degree of independence, closeness to nature, solitude and remoteness, with some areas offering motorized opportunities and others non-motorized opportunities (except for the traditional uses of boats, aircraft, and snowmachines). Interactions between users are infrequent. Facilities and structures may be minimal or occasionally may be larger in scale, but will be rustic in appearance, or in harmony with the natural setting.

Semi-remote Recreation Land Use Designation Apply the following Forest-wide Standards & Guidelines located in Chapter 4:

Standards & Guidelines located in Chapter 4:					
Resource	Section	Sub-Sections	Page		
Air	AIR	All	4-3		
Beach And Estuary Fringe	BEACH1	All	4-4		
	BEACH2	I,II(A-G,K,L)			
Facilities	FAC	All	4-6		
Fire	FIRE	All	4-7		
Fish	FISH	All	4-8		
Forest Health	HEALTH	All	4-13		
Heritage Resources	HER	All	4-14		
Karst And Cave Resources	KARST,CAVE	All	4-18		
Lands	LAND	All	4-21		
Minerals And Geology	MG	All	4-33		
Recreation And Tourism	REC	All	4-35		
Riparian	RIP	All	4-53		
·	RIP2	I,II(A-E,G,H)			
Rural Community Assistance	RUR	All	4-74		
Scenery	VIS1,12	All	4-75		
•	VIS11	I,II(A-B,E)			
Soil And Water	S&W1111, 1112,2	All	4-83		
	S&W112	I(A:1-4,6-7),II,III			
Subsistence	SUB	All	4-86		
Threatened, Endangered,	TE&S	All	4-88		
Sensitive					
Timber	TIM111,111-	All	4-94		
	1,130,140				
	TIM114	VIII			
Trails	TRAI	All	4-102		
Transportation	TRAN111, 122,	All	4-104		
	212, 22, 23				
	TRAN214	I(A,B,D-F);II-IV			
Wetlands	WET	All	4-111		
Wildlife	WILD112	I-VIII; IX(A: 1 -8,11,B); X-XV	4-112		
	WILD 22	I(A:1;B)			
	WILD 23	All			

## Apply the following Land Use Designation Standards & Guidelines-.

## FACILITIES Facilities Improvements: FAC2

 Design and locate administrative and non-recreation structures to reduce adverse effects on recreation and tourism opportunities.

## FIRE Fire Suppression: FIRE12

Suppression Action

- A. Suppress wildfires using the suppression option identified in the Southeast Alaska/Prince William Sound Fire Management Plan. An Escaped Fire Situation Analysis (EFSA) of expected fire behavior, time of year, and locations with respect to private land and adjacent Land Use Designations, may lead to a lower strategy. If an EFSA discloses no adverse effects and it is more cost-efficient, the lower strategy will be used.
- B. Emphasize suppression tactics which result in the least possible disturbance or evidence of human presence.
  - Suppression tactics will avoid human/bear conflicts and existing policy will be emphasized to leave no trash or any other kinds of bear attractants in the area.
  - Rehabilitation of all campsites, suppression lines, and other evidence of human presence will occur as soon as it is safe, but within one year after the fire occurs.
  - 3. Mechanized fireline construction will avoid important wildlife habitat areas such as meadows, bogs, and riparian areas.

## **Fuel Improvements: FIRE2**

Prescribed fire

- A. Management ignitions, although they are not presently used in this Land Use Designation, may be used as an acceptable means of fuels management and wildlife habitat improvement so long as its use is compatible with Land Use Designation objectives.
- B. As a general management practice, do not use prescribed natural fire. Should it become necessary to consider the use of prescribed natural fire, the Forest Plan must be amended to analyze, justify, and approve prescribed natural fire programs. (Consult FSM 5142.)

## FOREST HEALTH Forest Health Management: HEALTHI

A. Insect and disease management measures consistent with Land Use Designation objectives may be implemented to protect recreation and tourism opportunities, and adjacent resources.

## Forest Insect and Disease Survey and Inventory: HEALTH2

A. Survey and inventory visible outbreaks.

## HERITAGE Heritage Resource Activities: HER

Enhancement

- A. Heritage Resources are available for recreational, scenic, scientific, educational, conservation, and historic uses.
  - 1. Provide interpretive information concerning Heritage Resources located within this Land Use Designation to

- users in the form of exhibits and publications located outside of this Land Use Designation.
- Heritage Resources are available for scientific studies that are consistent with the semi-primitive settings and activities, and heritage resource management objectives for the specific site.

# InventorylEvaluation

- A. Develop priorities and schedule management activities to implement heritage resource inventory, evaluation, protection, and interpretation.
  - Identify, classify, and evaluate known Heritage Resources.
  - 2. Identify heritage properties to be nominated to the National Register of Historic Places.
  - 3. Identify heritage properties that require stabilization or other protective measures.
  - 4. Identify opportunities for interpretation of Heritage Resources for public education and enjoyment.

#### 

A. Identify opportunities for interpretation of caves for public education and enjoyment. Interpretation may occur inside or outside of this Land Use Designation.

## LANDS Special Use Administration (Non-Recreation): LAND122

- A. Permit only facilities and uses consistent with Semi-remote Recreation Land Use Designation objectives.
- B. This Land Use Designation represents a Transportation and Utility System (TUS) "Window" and provides opportunities for the future designation and location of Transportation and Utility sites.

# MINERALS AND GEOLOGY

# Minerals and Geology Administration: MG2

Forest Lands Open to Mineral entry

- A. Forest lands within this Land Use Designation are open to mineral exploration and development.
- B. Assure prospectors and claimants their right of ingress and egress granted under the General Mining Law of 1872, ANILCA, and National Forest Service Mining Regulations 36 CFR 228. B.
- C. Permit reasonable access to mining claims in accordance with the provisions of an approved Plan of operations.

#### Plan of operations

- A. Encourage use of state-of-the-art techniques for developing minerals to reduce impacts to the extent feasible.
- B. Apply appropriate Transportation Forest-wide Standards & Guidelines to the location and construction of mining roads and facilities.
- C. Manage mineral exploration and development activities to be compatible with the emphasis of this Land Use Designation. Apply the following management practices to reduce resource impacts.
  - 1. Manage mineral activities to maintain the present and continued productivity of anadromous fish and other foodfish

- habitat to the maximum extent feasible. (Consult ANILCA, Sec. 505 (a).)
- 2. When locating drill rigs and pumps, roads, rock quarries, structures, and marine transfer facilities, take maximum advantage of topographic and vegetative screening.
- Ensure that vegetation removed from the project area is hauled away, buried, burned, or scattered when such vegetation is located adjacent to Visual Priority Travel Routes and Use Areas.
- 4. Minimize the scale of spoil/disposal areas in relation to the surrounding landscape as seen from Visual Friority Travel Routes and Use Areas.
- Approve use of colors that simulate those found in the characteristic landscape. Avoid the use of reflective materials in project facilities.
- 6. Approve reclamation plans in which minerals activities leave a natural-appearing condition.
- Ensure that landform modifications simulate naturallyoccurring forms.
- 8. Ensure that disturbed areas are revegetated in accordance with project plans.

# RECREATION AND TOURISM

## **Recreation Use Administration: REC122**

Recreation Management and Operations

- A. Generally, manage for Semi-primitive Recreation Opportunity Spectrum (ROS) settings. Enclaves of concentrated recreation and tourism developments within the Land Use Designation or management activities in adjacent Land Use Designations may cause the ROS setting to become Roaded Natural, Roaded Modified, or Rural.
- B. Determine on a case-by-case basis whether roads, trails, and other areas should be closed to motorized recreation activities; incorporate determinations in Off-Highway Vehicle (OHV) Plans.
  - Manage roads for Traffic Service Level D except when level C roads provide access to or through the Land Use Designation. Occasional enclaves of concentrated recreation and tourism developments could warrant higher service levels in those areas.
- C. Where roads, trails, and other areas are closed to motorized recreation activities or vehicles, provide Semi-primitive Nonmotorized recreation opportunities.
  - 1. Permit use of snowmachines, motorboats, and aircraft for traditional activities.
- D. Permit small scale, rustic recreation and tourism facilities such as recreation cabins, shelters, docks, and enclaves of concentrated recreation and tourism development.
  - 1. During all construction activity:
    - Minimize site modification.
    - Minimize vegetation clearing adjacent to the site.
    - Use colors found in the natural environment.

## Recreation Special Uses

 A. Designation. Refer to the Recreation and Tourism Forest-wide Standards & Guidelines.

#### **SCENERY**

## **Scenery Operations: VIS1**

- A. Design resource activities to remain visually subordinate to the characteristic landscape. Activities may repeat form, line, color or texture common to the landscape. New form, line, color, or texture will be subordinate to the characteristic landscape.
  - 1. Apply Forest-wide Standards & Guidelines for the Partial retention Visual Quality Objective.
  - 2. There may be cases where facilities associated with a concentrated recreation or tourism development may not feasibly meet the Partial retention objective. After analysis of the proposal and public involvement, the NEPA decision document for this project should determine the specific Visual Quality Objective for the development. The environmental analysis shall also prescribe design guidelines necessary to meet this visual objective. During the project's design phase, the Forest Service shall be closely involved in the review of design work as it evolves.
  - 3. Design visitor facilities to blend, to the extent feasible, with the natural setting.
- B. Rehabilitation techniques may be used to restore disturbed landscapes to be compatible with the semi-primitive setting.

#### **TIMBER**

# **Timber Resource Planning: TIM112**

- A. Forested land is classified as unsuitable for timber production.
- B. The following types of uses may be authorized when they meet Land Use Designation objectives.
  - Removal or use of trees for improvement of recreation and tourism opportunities, such as clearing for vistas, campsites, or trails.
  - 2. Removal, or use of trees cut as a part of some other authorized use within this Land Use Designation. For example, clearing for a fish ladder or road.
  - 3. Trees may be cut for use in construction and maintenance of authorized structures when it is not feasible to obtain the necessary material from outside this Land Use Designation.
- C. Personal use wood harvest from beach log salvage is fully compatible with this,Land Use Designation. Personal use wood cutting is allowed based on local determination.

## **Timber Sale Preparation: TIM114**

A. Salvage will be limited to dead and/or down material resulting from events such as windthrow and insect or disease mortality. Limited standing green timber may be harvested during salvage operations for safety and operational considerations.

### **TRANSPORTATION**

# **Transportation Operations: TRAN1**

- A. Where Semi-primitive Motorized recreation opportunities are emphasized, existing low standard roads are generally managed for use by high clearance or Off-Highway Vehicles, snowmobiles or motorcycles subject to an approved Off-Highway Vehicle Management Plan. Generally, new roads are not constructed in this area, except to link existing roads or provide access to adjacent Land Use Designations.
  - 1. Limit the design standards of Forest Development Roads to those commensurate with the intended use.
  - 2. Maintain as necessary to provide passage of planned traffic.

- 3. Locate and design new roads to consider semi-primitive recreation opportunities in this Land Use Designation.
- B. Where Semi-primitive Non-motorized recreation opportunities are emphasized, provide foot or cross-country ski trails. Roads and trails may be closed or seasonally restricted. Close or obliterate existing roads except for transportation system links.

## LAND USE DESIGNATION II

## **Land Use Designation L2**

#### Introduction

Twelve areas were permanently allocated to L2 special management in the Tongass Timber Reform Act. These areas are: Yakutat Forelands, Berners Say, Anan Creek, Kadashan, Lisianski River/Upper Hoonah Sound, Mt. Calder/Mt., Holbrook, Nutkwa, Outside Islands, Trap Bay, Point Adolphus/Mud Say, Naha, and Salmon Say. Specific management criteria for Land Use Designation 11 areas are defined in the Tongass Land Management Plan, completed March 1979, and amended Winter 1985-1986 (pp. 8-9).

## Goals

To manage the 12 areas designated in perpetuity as Land Use Designation 11 (LUD 11) by the Tongass Timber Reform Act according to the direction for LUD 11 areas in the 1979 Tongass Land Management Plan, as amended.

To manage these areas in a roadiess state to retain their wildland character.

#### **Objectives**

Manage recreation and tourism use and activities to meet the levels of social encounters, onsite developments, methods of access, and visitor impacts indicated by the Primitive and Semi-primitive Recreation Opportunity Spectrum classes. Apply the LUD 11 direction from the 1979 Tongass Land Management Plan which is summarized as follows:

- prohibit commercial timber harvest. Permit salvage logging only to prevent significant damage to other resources. Allow personal use of wood for cabin logs, fuelwood, float logs, trolling poles, etc.
- permit water and power developments if designed to be compatible with the primitive characteristics of the area
- permit roads only for access to authorized uses, for transportation needs identified by the state or for vital linkages (See the Standards & Guidelines in this prescription)
- allow mineral development
- permit boats, aircraft, and snowmachines, unless such uses become excessive
- permit fish and wildlife habitat improvements. Design structures to minimize the effects to recreation resources
- permit primitive recreational facilities
- major concentrated recreational facilities will generally be excluded

Salvage logging, personal use of wood, water and power development, fish and wildlife habitat improvement, and research facilities will be designed to be compatible with the primitive characteristics of the area.

## **Desired Condition**

Areas in this Land Use Designation are characterized by extensive, generally unmodified natural environments, and retain their wildiand character. Ecological processes and natural

conditions are only minimally affected by past or current human uses or activities. Users have the opportunity to experience a high-to-moderate degree of independence, closeness to nature, solitude and remoteness and may pursue activities requiring self-reliance, challenge, and risk. Interactions between users are infrequent. Recreational facilities and structures are primitive.

Land Use Designation II
Apply the following Forest-wide Standards & Guidelines located in Chapter 4:

Resource	Section	Sub-Sections	Page
Air	AIR	All	4-3
Beach And Estuary Fringe	BEACH1	All	4-4
	BEACH2	I,II(A-G,K,L)	
Facilities	FAC	All	4-6
Fire	FIRE	All	4-7
Fish	FISH	All	4-8
Forest Health	HEALTH	All	4-13
Heritage Resources	HER	All	4-14
Karst And Cave Resources	KARST,CAVE	All	4-18
Lands	LAND	All	4-21
Minerals And Geology	MG	All	4-33
Recreation And Tourism	REC	All	4-35
Riparian	RIP1	All	4-53
·	RIP2	I,II(A-E,G,H)	
Rural Community Assistance	RUR	All	4-74
Scenery	VIS1,12	All	4-75
	VIS11	I,II(A-B,E)	
Soil And Water	S&W1111, 1112,2	All	4-83
	S&W112	I(A:1-4,6-7),II,III	
Subsistence	SUB	All	4-86
Threatened, Endangered,	TE&S	All	4-88
Sensitive			
Timber	TIM111,111-	All	4-94
	1,130,140		
	TIM114	VIII	
Trails	TRAI	All	4-102
Transportation	TRAN111, 122,	All	4-104
	212, 22, 23		
	TRAN214	I(A,B,D-F);II-V	
Wetlands	WET	All	4-111
Wildlife	WILD112	I-VIII; IX(A: 1 -8,11,B);	4-112
		X-XVIII	
	WILD 22	I(A:1;B)	
	WILD 23	All	

## Apply the following Land Use Designation Standards & Guidelines:

FACILITIES Administrative Facilities: FAC2

A. Permanent administrative facilities may be constructed in a manner which blends with the natural character of the area.

# FIRE Fire Suppression: FIRE12

Suppression Action

A. Suppress wildfires using the suppression option identified in the Southeast Alaska/Prince William Sound Fire Management Plan.

- An Escaped Fire Situation Analysis (EFSA) of expected fire behavior, time of year, and locations with respect to private land and adjacent land use areas, may lead to a lower strategy. If an EFSA discloses no adverse effects and it is more cost-efficient, the lower strategy will be used.
- B. Emphasize suppression tactics which result in the least possible disturbance or evidence of human presence.
  - Suppression tactics will avoid human/bear conflicts and existing policy will be emphasized to leave no trash or any other kinds of bear attractants in the area.
  - 2. Rehabilitation of all campsites, suppression lines, and other evidence of human presence will occur as soon as it is safe, and no longer than one year after the fire occurs.

## **Fuel Improvements: FIRE2**

Prescribed fire

- A. Allow management-ignited prescribed fire for fuels management, insect and disease protection, and wildlife habitat improvement.
- B. As a general management practice, do not use prescribed natural fire, although natural ignitions may be used to perpetuate natural ecological processes. Should it become necessary to consider the use of prescribed natural fire, the Forest Plan must be amended to analyze, justify, and approve prescribed natural fire programs. (Consult FSM 5142.)

## FISH Fish Habitat Planning: FISH112

Fish Enhancement

A. Improvements such as fishways, fish hatcheries, or aquaculture sites may be built. Appropriate landscape management techniques will be applied in the design and construction of such improvements to reduce impacts on recreational resources and scenery.

## FOREST HEALTH Forest Health Management: HEALTHI

A. Insect and disease management measures consistent with this Land Use Designation may be implemented to protect these and adjacent resources.

## Forest Insect and Disease Survey and Inventory: HEALTH2

A. Survey and inventory visible outbreaks.

# **HERITAGE Heritage Resource Activities: HER**

Enhancement

- A. Heritage Resources are available for recreational, scenic, scientific, educational, conservation, and historic uses.
  - Heritage Resources are available for scientific studies that are consistent with the primitive settings and activities, and heritage resource management objectives for the specific site.

## Inventory/Evaluation

- A. Develop priorities and schedule management activities to implement heritage resource inventory, evaluation, protection, and interpretation.
  - 1. Identify, classify, and evaluate known Heritage Resources.

- 2. Identify heritage properties to be nominated to the National Register of Historic Places.
- Identify heritage properties that require stabilization or other protective measures.
- 4. Identify opportunities for interpretation of Heritage Resources for public education and enjoyment.

# KARST AND CAVES Cave Management Program: CAVE

A. Identify opportunities for interpretation of eaves for public education and enjoyment. Interpretation may occur inside or outside of this Land Use Designation.

## LANDS Special Use Administration (Non-Recreation): LAND122

- A. Water and power developments are permitted if they can be designed to retain the overall primitive characteristics of the allocated area.
- B. Except as authorized by the Tongass Timber Reform Act (TTRA), permit only those activities which are consistent with the wildiand character of the area.
- C. This Land Use Designation represents a Transportation and Utility System (TUS) "Avoidance Area." Transportation and utility sites or corridors may be located within this Land Use Designation only after an analysis of potential TUS corridors has been completed and no feasible alternatives exist outside this Land Use Designation.

# MINERAL AND GEOLOGY

# Minerals and Geology Administration: MG12

Forest Lands Open to Mineral entry

- A. Forest lands within this Land Use Designation are open to mineral exploration and development.
- B. Assure prospectors and claimants their right of ingress and egress granted under the General Mining Law of 1872, ANILCA, and National Forest Service Mining Regulations 36 CFR 228.
- C. Permit reasonable access to mining exploration and development in accordance with the provisions of an approved Plan of operations.

## Plan of operations

- A. Encourage use of state-of-the-art techniques for developing minerals to reduce impacts to the extent feasible. Include mitigation measures that are compatible with the scale of proposed development and commensurate with potential resource impacts.
- B. Apply appropriate Transportation Forest-wide Standards & Guidelines to the location and construction of mining roads.
- C. Manage mineral exploration and development activities to be compatible with the emphasis on maintaining the wildiand character of the LUD 11 Land Use Designation. Apply the following management practices to reduce resource impacts.
  - Manage mineral activities to maintain the present and continued productivity of anadromous fish and other foodfish habitat to the maximum extent feasible. (Consult ANILCA, Section 505 (a).)
  - 2. Manage mineral activities to maintain the present and continued productivity of wildlife habitat to the extent feasible.

- 3. Take maximum advantage of topographic and vegetative screening when locating drill rigs and pumps, roads, rock quarries, structures, and marine transfer facilities.
- Discourage use of motorized surface vehicles, except as provided for in ANILCA, Section 1 1 10(b), which assures adequate and feasible access for economic and other purposes.
- 5. Locate material sites and marine transfer facilities outside this Land Use Designation, if reasonable alternatives exist.
- 6. Ensure that vegetation removed from the project area is hauled away, buried, burned or scattered when located adjacent to Visual Priority Travel Routes and Use Areas.
- Minimize the scale of spoil/disposal areas in relation to the surrounding landscape as seen from sensitive viewpoints.
- 8. Approve use of colors that simulate those found in the characteristic landscape. Avoid use of reflective materials in project facilities.
- 9. Approve reclamation plans in which minerals activities leave a natural-appearing condition.
- Ensure that landform modifications simulate naturallyoccurring forms.
- 11. Ensure that disturbed areas are revegetated in accordance with project plans.

# RECREATION AND TOURISM

# Recreation Use Administration: REC122 Recreation Management and Operations

- A. Generally provide for semi-primitive ROS settings, recognizing that more developed settings may be present due to authorized activities, existing use patterns, and activities in adjacent Land Use Designations.
  - Primitive recreation facilities, such as recreation cabins, boat docks, moorings and trails may be constructed and maintained.
- B. Major concentrated recreation facilities, such as development scale IV and V (those heavily-modified or with a high degree of site modification) will generally be excluded.
- C. If a transportation link is constructed through this Land Use Designation, recreation facilities needed to serve the traveling public, to reduce impacts of recreation use to adjacent wildlands, or to provide interpretation, may be constructed in proximity to the transportation link.

## Recreation Special Uses

- A. Major developments are generally not consistent with the objectives of the Land Use Designation. Development proposals require scrutiny of the magnitude and scope for Land Use Designation conformance. Refer to the Recreation and Tourism Forest-wide Standards & Guidelines.
- B. Minor developments may be compatible with the Land Use Designation objectives depending on the scope, purpose, and magnitude of the proposal. Each proposal will be evaluated on a case-by-case basis. Refer to the Recreation and Tourism Forestwide Standards & Guidelines.

#### **SCENERY**

## **Scenery Operations: VIS1**

- A. Landscapes are managed to retain a natural-appearing visual condition, where activities are not visually evident to the casual observer.
  - 1. Apply Forest-wide Standards & Guidelines for the Retention Visual Quality Objective.
  - 2. Some authorized activities and improvements may not meet the Retention Visual Quality Objective, based on project analysis. However, seek to mitigate visual impacts through location, siting, design, material, and coloring of structures.

#### **TIMBER**

## **Timber Resource Planning:- TIM112**

- A. Forested land is classified as unsuitable for timber production. Commercial timber harvesting is not permitted.
- B. Timber can be salvaged only to prevent significant damage to other resources. Examples are removal of windfall in an important fish stream or control of epidemic insect infestations.
- C. Personal use of wood is allowed for cabin logs, fuel wood, float logs, trolling poles, and other similar uses.

#### **TRANSPORTATION**

## **Transportation Operations: TRAN1**

- A. Existing roads are generally closed to highway vehicular use. Any proposed roads will use the following guidelines.
  - 1. Allow vital Forest transportation system linkages including roads and transfer facilities. Vital Forest transportation system linkages refer to necessary additions to the permanent road network. Such linkages may be built through LUD 11 areas when either: 1) no other feasible routes exist to access adjacent Land Use Designations, or 2) when it can be demonstrated that the routing through the LUD 11 area is clearly environmentally preferable and site-specific mitigation measures can be designed to minimize the impact of the road on the surrounding LUD 11 area. A clear need to build such linkages must be demonstrated through a comparative analysis of feasible transportation alternatives through the NERA process and must be approved by the Forest Supervisor, in consultation with the other Tongass Forest Supervisors.
  - Roads, other than vital transportation linkages, will not be built except to serve authorized activities such as mining, power and water developments, aquaculture developments, or transportation needs determined by the State of Alaska (also the Transportation and Utility Systems Land Use Designation).

## **WILDLIFE**

## Wildlife Habitat Planning: WILD112

A. Wildlife habitats will generally evolve in natural successional stages. Habitat improvement is permitted.

# GLOSSARY1

**Active management** – Management approach in which humans actively manipulate ecosystems through timber harvesting and thinning to improve forest health and to reduce fire hazard.

**Allowable sale quantity** (**ASQ**) – The quantity of timber that may be sold from an area covered by a land management plan during a period specified by the plan, usually expressed as the average annual allowable sale quantity.

Ambient population density – The population distribution based on the likely location of people over a 24-hour period for typical days, weeks, and seasons. Rather than describing population as a static reference point, ambient population attempts to capture the location of people as they move in and out of areas. For example, during the day, it is expected that more people would be away from their homes at other locations; in the evening, the opposite would be expected. Ambient population density provides models for such changes.

**Arterial roads** – Classified roads that provide service to large land areas; arterial roads are usually developed and operated for long-term land and resource management purposes and constant service.

**Backcountry** – A generic term that refers to areas that are relatively unmodified and usually accessible only by foot, horse, watercraft, or Off Highway Vehicle (OHV).

**Basal area** – The cross-sectional area of all stems of a species or all stems in a stand measured at breast height (4.5 ft. or 1.37 m. above the ground) and expressed per unit area of land (e.g., 25 sq. ft. per acre).

**Best management practices (BMPs)** – A practice or usually a combination of practices that are determined by a State or a designated planning agency to be the most effective and practicable means (including technological, economic, and institutional considerations) of controlling point and nonpoint source pollutants at levels compatible with environmental quality goals.

**Biological diversity** (biodiversity) – The variety and abundance of species, their genetic composition, their communities, and the ecosystems and landscapes of which they are a part. As used in this document, biodiversity refers to native biological diversity; therefore, increases in species diversity resulting from the introduction of nonnative species would not constitute an increase in biodiversity.

**Biological stronghold** – An area that supports all major life-history forms of a species that were historically found within that area, with stable or increasing population numbers at levels not substantially diminished from their historical size or density.

**Cable logging** – The transport of logs from the stump to a landing and stationary yarder using winch-driven cables to which the logs are attached.

Carrying capacity – A measure used to signify the optimum use that the area can accommodate without having unacceptable degradation of resources or undesirable social interaction, in accordance with specified standards usually found in the land and resource management plan.

Class I air quality areas – National Forest System Wilderness areas, national parks, or national wildlife refuges greater than 5,000 acres in size, designated prior to the establishment of the Clean Air Act Amendments of 1977. Class I areas can also include lands designated by Tribes or States. These areas serve as benchmarks for monitoring changes in air quality over adjacent lands.

G-1

Source documents for these definitions include – proposed Road Policy, proposed Planning Regulations, Interim Roads Rule Environmental Assessment, and Recreation Opportunity Spectrum Planning Guide.

Classified roads – Roads wholly or partially within or adjacent to National Forest System lands that are determined to be needed for motor vehicle access, such as State roads, County roads, privately owned roads, National Forest System roads, and roads authorized by the Forest Service that are intended for long-term use.

**Clearcutting** – Cutting essentially all trees in a given area, which produces a fully exposed microclimate for the development of a new age class. Regeneration can be from natural seeding, direct seeding, planted seedlings, or advance reproduction. See even-aged management.

**Cohesive strategy** – A Forest Service strategic document, formally titled *Protecting People and Sustaining Resources in Fire-adapted Ecosystems: A Cohesive Strategy*, that outlines how fire managers throughout the National Forest System are to prioritize their fire hazard reduction efforts. This strategy concentrates on short fire return interval forests (Fire Regimes 1 and 2).

**Collector roads** – Classified roads serving smaller land areas than arterial roads; collector roads collect traffic from local roads and usually connect to forest arterial roads or State and County highways. They are operated for either constant or intermittent service depending on land use and resource management objectives.

**Commercial timber harvest** – The removal of merchantable trees, portions of trees, and timber products from the National Forest System lands.

**Commodity-purpose timber sale** (**commodity purpose timber harvest**) – A component of the Forest Service timber sale program that includes timber sales made primarily to supply timber in response to society's demand for wood.

**Community** – (a) A group of species of plants and/or animals living and interacting at a particular time and place. (b) A group of people residing in the same place and under the same government; spatially defined places such as towns.

**Composition** – The numbers and kinds of plants and animals in an area.

**Condition Class 1–Low risk from uncharacteristic wildfire effects** – Fire regimes within this class are within the historical range of variability for fire frequency and intensity.

Condition Class 2–Moderate risk from uncharacteristic wildfire effects – Fire regimes are beginning to be altered since one or more wildfires have been suppressed allowing for forests to become noticeably denser especially with younger sapling trees.

Condition Class 3–High risk from uncharacteristic wildfire effects – The fire regimes in this condition class are significantly altered, having missed many natural fires. Forests that were once open and park-like are now densely stocked.

**Connectivity** – The arrangement of habitats that allows organisms and ecological processes to move across the landscape; patches of similar habitats are either close together or linked by corridors of appropriate vegetation. The opposite of fragmentation.

**Contiguous** – Used in a geographic sense, the term applies to situations where areas of land physically touch and share substantial common boundaries or have a common border of considerable length. The term is not intended to include 'point-to-point' touching or 'cornering', or instances where only small portions of land areas touch. It is not intended to encompass or encourage creative mapping exercises that result in irregular shapes, such as narrow corridors and 'gerrymandered' roadless areas.

**Coppice method** – Regeneration method in which all trees in the previous stand are cut, and the majority of regeneration is from sprouts and root suckers.

**Criteria air pollutants** – A group of common air pollutants (such as carbon monoxide, particulate matter, or ozone) regulated by the Environmental Protection Agency (EPA) on the basis of criteria (information on health and/or environmental effects of pollution). Criteria air pollutants are widely distributed across the country.

**Crown fire** – A fire burning into and through the crowns of a forest or shrubland.

**Decommissioning** – Demolition, dismantling, removal, obliteration, or disposal of a deteriorated or otherwise unneeded asset or component, including necessary cleanup work. This action eliminates the deferred maintenance needs for the fixed asset. Portions of an asset or component may remain if they do not cause problems or require maintenance.

**Developed recreation** – Activities that are consistent with the settings and experiences identified with the Roaded Natural (RN), Rural (R), and Urban (U) classes of the Recreation Opportunity Spectrum. These activities are usually associated with an area that has been improved or developed for recreation, such as campgrounds and picnic areas, scenic overlooks and interpretive sites, or visitor centers and resorts.

**Dispersed recreation** – Activities usually associated with backcountry and trails and are consistent with the settings and experiences identified with Primitive (P), Semi-Primitive Non-Motorized (SPNM), and Semi-Primitive Motorized (SPM) classes of the Recreation Opportunity Spectrum. Examples of these activities include hiking, snowmobiling, mountain biking, wilderness use, backpacking, horseback riding, and OHV use.

**Disturbance** – A natural or human event that causes a change in the existing condition of an ecological system.

**Domestic water sources** – Watersheds containing National Forest System lands that provide surface waters to facilities that treat and distribute water for domestic purposes. These purposes include normal household uses such as drinking, food preparation, bathing, washing clothes and dishes, watering lawns and gardens, and similar uses.

**Dynamic equilibrium** – A natural state of stream stability when channel features persist over time within a range of conditions. Dynamic equilibrium uses a series of self-correcting mechanisms that allow the ecosystem to control external stresses or disturbances, thereby maintaining a self-sustaining condition. For example, a stream is able to consistently transport its sediment load, both in size and type, associated with local deposition and scour.

**Ecological sustainability** – The maintenance or restoration of the composition, structure, and processes of ecosystems over time and space. This includes the diversity of plant and animal communities, and the productive capacity of ecological systems and species diversity, ecosystem diversity, disturbance processes, soil productivity, water quality and quantity, and air quality.

**Ecosystem** – An arrangement of organisms defined by the interactions and processes that occur between them. Ecosystems are often defined by their composition, function, and structure.

**Ecosystem health** – The degree to which ecological factors and their interactions are reasonably complete and functioning for continued resilience, productivity, and renewal of the ecosystem.

**Edge effect** – The influence of two communities on populations in their adjoining boundary zone or ecotone, affecting the composition and density of the populations in these bordering areas.

**Endangered species** – A plant or animal species listed under the Endangered Species act that is in danger of extinction throughout all or a significant portion of its range.

**Endemic species** – Plants or animals that occur naturally in a certain region and whose distribution is relatively limited to a particular locality. Endemism is the occurrence of endemic species in an area.

**Essentially roaded** – Areas of National Forest System land where classified and temporary roads now exist.

Essentially unroaded – A combination National Forest System Wilderness and inventoried roadless areas.

**Exception** – A specific circumstance where prohibited activity would be allowed within an inventoried roadless area that is otherwise subject to the prohibitions in the alternatives.

**Exemption** – A geographic area that is not subject to the prohibitions in the alternatives.

**Existing mineral lease** – A mineral lease that has been issued by the Department of the Interior and has not expired, terminated, or been relinquished.

**Even-aged (silvicultural) management** – The methods used to regenerate and maintain a stand with a single age class.

Fine fuels – Small needles, sticks, branches of trees (generally less than 3 inches in diameter).

**Fire-adapted ecosystem** – An arrangement of populations that have made long-term genetic changes in response to the presence of fire in the environment.

Fire frequency – How often fires occur within a given time period in a specified area.

**Fire hazard** – The overall potential for wildfire in a vegetated ecosystem, often expressed as a condition of fuels on the ground and the probability of ignition. To reduce the fire hazard in an area, managers must deal primarily with the fine fuels on the surface of the forest floor and with the smaller diameter trees growing in the understory of a forest that provide a ladder to the larger, dominant overstory trees.

**Fire intensity** – The rate at which fuel is consumed and heat is generated.

**Fire-intolerant** – Vegetation with characteristics that make it more susceptible to damage from fire, such as thin bark, shallow root systems, or a low-branching habit.

**Fire regime** – The fire pattern across the landscape, characterized by occurrence, interval, and relative intensity. Fire regimes result from a unique combination of climate and vegetation and exist on a continuum from short-interval, low-intensity fires to long-interval, high-intensity fires.

Fire return interval – The average number of years between successive fires in a designated area.

**Fire severity** – Denotes the scale at which vegetation and a site are altered or disrupted by fire, from low to high. It is a combination of the degree of fire effects on vegetation and on soil properties.

**Fire suppression** – The practice of controlling forest and rangeland fires in a safe, economical, and expedient fashion while meeting the natural resource objectives outlined in each national forest's or grassland's land management plan.

**Fire-tolerant** – Vegetation with characteristics that increase its resistance to fire, such as thick bark and high-branching habits.

**Forest health** – The perceived condition of a forest derived from concerns about such factors as its age, structure, composition, function, vigor, presence of unusual levels of insects or disease, and resilience to disturbance. Individual and cultural viewpoints, land management objectives, spatial and temporal scales, the relative health of the stands that make up the forest, and the appearance of the forest at a point which influences the perception and interpretation of forest health.

**Forest road or trail** – Any road or trail wholly or partly within, or adjacent to, and serving the National Forest System and which is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources.

**Forward** – To haul a log from stump to collection point by a forwarder.

**Forwarder** – A self-propelled machine, usually self-loading, that transports logs by carrying them completely off the ground.

**Fragmentation** (habitat) – The break-up of a large land area (such as a forest) into smaller patches isolated by areas converted to a different land type. The opposite of connectivity.

**Fuel management** – The practice of evaluating, planning, and executing the treatment of wildland fuel to control flammability and reduce the resistance to control.

**Fuels** – Living and dead parts of trees and shrubs, organic material and surface material that can readily burn in a wildfire.

**Fuels treatment** – The rearrangement or disposal of fuels to reduce fire hazard or to accomplish other resource management objectives.

**Gateway communities** – Communities that are economically and socially interdependent on the associated public lands. Proximity to these lands contributes to the quality of life and sense of place for residents and visitors.

**Ground-based logging** – The dragging or carrying of trees or logs for the stump to the landing using various types of self-propelled machines (e.g., tractors, skidders, forwarders).

**Group selection** – An uneven-aged cutting method in which small groups of trees, usually no more than two acres in size, are removed to meet a predetermined goal of size distribution and tree species in the remaining stand.

**Historic range of variability** – The fluctuations of composition, structure, and function within stable ecosystems over time.

**IMPLAN** (**Impact Analysis for Planning**) – The input-output model used by the USDA Forest Service to estimate economic effects by tracing the interrelationships between producers and consumers in an economy as measured by jobs and income

**Inholding** – A parcel of land in other ownership (State, private, other Federal agency) surrounded by National Forest System land.

**Initial attack** – This term applies to an aggressive suppression action consistent with firefighter and public safety and with protecting various resource values.

**Inventoried roadless area** – Undeveloped areas typically exceeding 5,000 acres that met the minimum criteria for wilderness consideration under the Wilderness Act and that were inventoried during the Forest Service's Roadless Area Review and Evaluation (RARE II) process, subsequent assessments, or forest planning. These areas are identified in a set of inventoried roadless area maps, contained in *Forest Service Roadless Area Conservation, Final Environmental Impact Statement, Volume 2*, dated November 2000, which are held at the National headquarters office of the Forest Service.

**Land use allocation** – Site-specific management direction applied to National Forest System lands.

**Landscape** – An area of interacting and interconnected patterns of habitats (ecosystems) that are repeated because of the geology, landform, soil, climate, biota, and human influences throughout the area. A landscape is composed of watersheds and smaller ecosystems.

**Landscape characteristics** – The distribution and representation of ecoregions and elevational classes; the size of relatively large and intact habitat areas, and their adjacency to protected habitats; the effects of lands with protected or conservation status on landscape fragmentation; and the relationship between landscape and disturbance patterns.

**Local roads** – Classified roads that connect terminal activities (e.g., trail head, log landing, camping site) to collector and arterial roads. They are constructed to meet the access requirements of a specific resource activity rather than for travel efficiency. When not in use for the activity for which they were constructed, local roads may be used for other purposes. They are often closed to restrict motor use. The construction standards for these roads are determined by the requirements necessary for the specific resource activity.

**Major watershed** (sub-basins) – Fourth-level Hydrologic Unit Codes (HUCs), as defined by the U. S. Geologic Survey. Formerly known as 'cataloging units'.

**Manageable size** – Geographic areas that the local official determines are of a shape and position within the landscape for reasonable achievement of the long-term conservation of roadless characteristics. For example, many long narrow strips or 'stringers' between two highly developed areas would usually not be considered manageable.

**Management direction** – A statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them.

**Management prescription** – Management practices and intensity (frequency and duration) selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

**Map unit** – The individual parcels defined in the geographic information system (GIS) database. For reporting purposes, forests often group several map units into a single named inventoried roadless area.

**Mechanical pre-treatment** – Preparing a forest or shrubland for prescribed burning by using machinery such as bulldozers and rubber tire skidders to create a fuel bed where a prescribed fire can be ignited without undue risk of the fire escaping or killing the dominant trees on the site.

**Mechanical transport** – Any device for moving people or material in or over land, water, or air, having moving parts, that provides a mechanical advantage to the user, and that is powered by a living or nonliving power source. This includes, but is not limited to, sailboats, hang gliders, parachutes, bicycles, game carriers, carts, and wagons. It does not include wheelchairs when used as necessary medical appliances. It also does not include skis, snowshoes, rafts, canoes, sleds, travois, or similar primitive devices without moving parts.

**Median** – A value in an ordered set of quantities below and above which falls an equal number of quantities.

**Mineral reserve** – An estimate within specified accuracy limits of the valuable metal or mineral content of known deposits that may be produced under current economic conditions and with present technology.

**Mineral resource** – A concentration of naturally occurring solid, liquid, or gaseous material in or on the earth's crust in such form and amount that economic extraction of a commodity from the concentration is currently or potentially feasible.

**Motorized equipment** – Machines that use a motor, engine, or other nonliving power sources. This includes, but is not limited to, chain saws, aircraft, snowmobiles, generators, motorboats, and motor vehicles. It does not include small battery or gas powered hand carried devices such as shavers, wristwatches, flashlights, cameras, stoves, or other similar small equipment.

**Mosaic** – A pattern of vegetation in which two or more kinds of communities are interspersed in patches, such as clumps of shrubs with grassland between.

**National Forest System road** – A classified forest road under the jurisdiction of the Forest Service. The term 'National Forest System road' is synonymous with the term 'Forest development road', as used in 23 U.S.C. 205.

**Natural amenities** – Attributes that enhance a location as a place to live which are physical as opposed to social or economic.

**Non-attainment areas** – Geographic areas in which the level of a *criteria air pollutant* is higher than the level allowed by the federal standards. A single geographic area may have acceptable levels of one criterion air pollutant but unacceptable levels of one or more other criteria air pollutants; thus, an area can be both attainment and non-attainment at the same time.

**Nonnative invasive species** – Plant species that are introduced into an area in which they did not evolve, and in which they usually have few or no natural enemies to limit their reproduction and spread. These species can cause environmental harm by significantly changing ecosystem composition, structure, or processes, and can cause economic harm or harm to human health.

**Noxious weeds** – Plant species designated as noxious weeds by the Secretary of Agriculture or by the responsible State official. These species are generally aggressive, difficult to manage, poisonous, toxic, parasitic, a carrier or host of serious insects or disease, and are nonnative, new, or uncommon to the United States.

**Old-growth forest** – *Old single story forest* – single canopy layer consisting of large or old trees. Understory trees are often absent, or present in randomly spaced patches. It generally consists of widely spaced, shade-intolerant species, such as ponderosa pine and western larch, and high frequency fire regimes. *Old multi-story forest* - a forest stand with moderate to high canopy closure—a multi-leveled and multi-species canopy dominated by large overstory trees; high incidence of large trees, some with broken tops and other indications of old and decaying wood; numerous large snags; and heavy accumulations of wood, including large logs on the ground.

**Partial cutting** – Removal of part of a stand of trees for purposes other than regenerating a new age class. Partial cutting is not a regeneration method.

Passive (natural) management – Management approach in which human intervention in an ecosystem is minimal, with natural processes such as fire and insect and disease infestations allowed to play out their 'natural' role. For fire management, this would mean allowing some lightning fires to burn or allowing only prescribed fires with burning prescriptions that mimicked the natural fire regime in size, intensity, and frequency.

**Pre-commercial thinning** – The removal of trees not for immediate financial return but to reduce stocking,to concentrate growth on the more desirable trees, or to accomplish some other resource objective such as fuel reduction.

**Prescribed burning** – The fire management technique of purposely igniting a fire in a vegetated ecosystem to restore forest health and to reduce fire hazard.

**Prescription** – A written statement defining goals and objectives and the actions or treatments needed to attain the goals and objectives. Prescriptions are written for discrete portions of National Forest System lands. A prescription can be resource specific (such as for prescribed fire or silviculture) or, in the case of management prescriptions, broad to attain multiple use goals and objectives.

**Primitive (P)** – A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area that is essentially an unmodified natural environment of large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.

**Proposed Species** – Any species that is proposed by the Fish and Wildlife Service or the National Marine Fisheries Service to be listed as threatened or endangered under the Endangered Species Act.

**Public road** – Any road or street under the jurisdiction of and maintained by a public authority and open to public travel.

**RARE II roadless area (Roadless Area Review and Evaluation)** – Roadless areas on National Forest System lands that were inventoried by the Forest Service in 1979.

**Refugia** – Areas that have not been exposed to great environmental changes and disturbances undergone by the region as a whole. In this FEIS, refugia include inventoried roadless areas that are relatively free from human-caused disruptions and disturbances when compared to roaded areas; refugia provide conditions suitable for survival of species that may be declining elsewhere.

**Regeneration method** – A cutting procedure that results in a new age class of trees. Methods include clearcutting, seed tree, shelterwood, selection, and coppice.

**Replacement value** – For subsistence, the amount of money that would have to be spent to buy food substitutes.

**Resistance to control** – The difficulty of suppressing a wildland fire primarily determined by the fire's rate of spread (how fast it moves) and its intensity (how hot it will get).

**Responsible line officer** – A Forest Service employee with authority to select or carry out a specific planning action.

**Responsible official** – The Forest Service line officer with the authority and responsibility to make decisions regarding the protection and management of inventoried roadless areas and other unroaded areas pursuant to [Subpart B-Protection of Roadless Areas].

**Risk from uncharacteristic wildfire effects** – The risk that once a fire starts and gets large it will damage the ecosystem or human communities.

**Road** – A motor vehicle travelway over 50 inches wide, except those designated and managed as a trail. A road may be classified, unclassified, or temporary.

**Road analysis** – An integrated ecological, social, and economic science-based approach to transportation planning that addresses existing and future road management options.

**Road-based recreation** – Activities that are normally associated with classified roads and are consistent with the settings and experiences identified with Semi-Primitive Motorized (SPM), Roaded Natural (RN), Rural (R), and Urban (U) classes of the Recreation Opportunity Spectrum. Examples of these activities include car camping and picnicking, gathering berries and firewood, driving for pleasure, wildlife viewing, and OHV use.

**Road construction** – Activities that result in the addition of road miles to the forest transportation system.

**Road maintenance** – The ongoing upkeep of a road necessary to retain or restore the road to the approved road management objective.

**Road obliteration** – A form of road decommissioning that re-contours and restores natural slopes.

**Road reconstruction** – Activities that result in road realignment or road improvement, as defined below:

- **Road improvement** Activities that result in an increase of an existing road's traffic service level, expand its capacity, or change its original design function.
- **Road realignment** Activities that result in a new location for an existing road or portions of an existing road, including treatment of the old roadway.

**Roaded Natural (RN)** – A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area that has predominantly natural-appearing environments with moderate evidences of the sights and sounds of humans. Such evidences are usually in harmony with the natural environment. Interaction between users may be low to moderate, but evidence of other users is prevalent. Resource modification and practices are evident but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and facilities design.

**Roadless areas** – For the purposes of this EIS, a generic term that includes inventoried roadless area and unroaded areas.

Roadless characteristics – Roadless area characteristics include the following:

- Soil, water, and air
- Sources of public drinking water
- Diversity of plant and animal communities
- Habitat for threatened, endangered, proposed, candidate, and sensitive species, and for those species dependent on large, undisturbed areas of land
- Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized classes of recreation opportunites
- Reference landscapes
- Landscape character and scenic integrity
- Traditional cultural properties and sacred sites
- Other locally identified unique characteristics

**Rural** (**R**) – A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area with a substantially modified natural environment. Sights and sounds of humans are readily evident, and the interaction between users is moderate to high. A considerable number of facilities are designed for use by large numbers of people. Facilities for intensified motorized use and parking are available.

**Salvage** – An intermediate cutting made to remove trees that are dead or in imminent danger of being killed by injurious agents.

**Sanitation** – An intermediate cutting made to remove dead, damaged or susceptible trees to prevent the spread of pests or pathogens.

**Scenarios** – Predictions of future events and outcomes based on techniques of decision science. Scenarios are often expressed as 'risk profiles'—charts or tables that display the probability of an outcome occurring and its consequences.

**Scheduled timber harvest** – The quantity of timber planned for sale during a specified time period from the area of suitable land covered by a land management plan. Scheduled timber harvest accomplishes the allowable sale quantity.

**Sediment (sedimentation)** – Solid materials, both mineral and organic, in suspension or transported by water, gravity, ice, or air; may be moved and deposited away from their original position and eventually will settle to the bottom.

**Seed tree cutting** – The cutting of all trees except for a small number of widely dispersed trees retained for seed production and to produce a new age class in a fully exposed microenvironment. Seed trees may or may not be removed after regeneration becomes established.

**Selective cutting** – A cutting method that removes only a portion of trees in a stand.

**Semi-Primitive Motorized (SPM)** – A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area that has a predominantly natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.

**Semi-Primitive Non-Motorized (SPNM)** – A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area that has a predominantly natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but they are subtle. Motorized use is not permitted.

**Sense of place** – The aesthetic, nostalgic, or spiritual effects of physical locations on humans based on personal, use-oriented or attachment-oriented relationships between individuals and those locations. The meaning, values, and feelings that people associate with physical locations because of their experiences there.

Sensitive species – Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density, or by significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

**Service contract** – A contract normally used by the government to carry out land management activities such as tree planting, site stabilization, thinning of forest stands where the trees to be cut have no commercial value, and similar activities.

**Shelterwood cutting** – The removal of most trees, leaving those needed for sufficient shade to produce a new age class in a moderated microenvironment. Removal of the shelter trees may or may not occur after regeneration becomes established.

**Single-tree selection** – Individual trees of all size classes are removed, as uniformly as possible, throughout the stand to promote the growth of remaining trees and to provide space for regeneration.

**Skid road (skid trail)** – An access cut through the woods for skidding.

Skidder - A self-propelled machine (cable, clam-bunk, or grapple) used for dragging trees or logs.

**Species richness** – A measure of biological diversity referring to the number of species in an area.

**Stand** – A distinguishable, contiguous group of similar plants or trees that are uniform in age-class distribution, composition, and structure, and are growing on a site of uniform quality.

**Stewardship** – Administration of land and associated resources in a manner that enables them to be passed on to future generations in a healthy condition.

**Stewardship-purpose timber sales or harvest** – A component of the Forest Service timber sale program that includes timber sales made primarily to help achieve desired ecological conditions or to attain some non-timber resource objective requiring manipulation of the existing vegetation.

Structure - The sizes, shapes, and/or ages of the plants and animals in an area.

**Subsistence** – The customary and traditional uses of wild renewable resources for personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for making and selling handicraft articles out of the nonedible byproducts of fish and wildlife resources; for barter or sharing for personal or family consumption; and for customary trade.

**Succession** – A predictable process of changes in structure and composition of plant and animal communities over time. Conditions of the prior plant communities or successional stage create conditions that are favorable for the establishment of the next stage. The different stages of succession are often referred to as seral stages.

**Temporary roads** – Roads authorized by contract, permit, lease, or emergency operation, not intended to be a part of the forest transportation system and not necessary for long-term resource management.

**Thinning** – (a) The cutting down and/or removing of trees from a forest to lessen the chance of a ground fire becoming a crown fire; a method of preparing an area so that a prescribed fire can be more easily controlled. Thinning influences the available amount of fuel and fuel arrangement, and it can indirectly affect fuel moisture content and surface wind speeds. (b) A culture treatment made to reduce stand density of trees primarily to improve growth, enhance forest health, or recover potential mortality.

**Threatened species** – Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range and which the appropriate Secretary has designated as a threatened species.

**Timberland (commercial forest land)** – Land suitable for producing timber crops and not withdrawn from timber production by statute or administrative regulation. The typical minimum level of productivity is 20 cubic feet per acre per year.

**Timber harvest** – The volume of trees with commercial value that are cut and removed from the forest. Most of this volume was sold in prior fiscal years, as the contract life of most timber sales is 2 to 3 years. Volume harvest in a given year can be more or less than volume offered or volume sold, depending on market conditions (which can cause purchasers to adjust their harvest schedule), volume of timber sold in the previous few years, and other unforeseen situations such as severe fire seasons that limit operating time because of fire danger.

**Timber offered** – The volume of timber advertised for sale. The volume offered depends on forest estimates of capability (with allowable sale quantity as a ceiling), budget constraints, and success in completing stages of the timber sale preparation process.

**Timber sale** – A contractual process of selling timber to a purchaser and implementing a series of harvesting requirements for how, when, and what type of trees will be removed.

**Timber sold** – The timber volume sold and under contract with a purchaser. Volume sold in a given year is usually less than volume offered because some sales offered receive no bids and are not sold.

**Total Maximum Daily Load (TMDL)** – A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

**Trail** – A pathway for travel by foot, stock, or trail vehicles.

**Uncharacteristic wildfire (wildland fire) effects** – An increase in wildfire size, severity, and resistance to control, and the associated impacts to people and property.

**Unclassified roads** – Roads on National Forest System lands that are not needed for, and not managed as part of, the forest transportation system, such as unplanned roads, abondoned travelways, off-road vehicle tracks which have not been designated and managed as a trail, and those roads no longer under permit or authorization.

**Uneven-aged (silvicultural) management** – Methods used to regenerate and maintain a multi-aged structure by removing some trees in all size classes, either singly, in small groups, or in strips.

**Unroaded area** – Any area, without the presence of a classified road, of a size and configuration sufficient to protect the inherent characteristics associated with its roadless condition. Unroaded areas do not overlap with inventoried roadless areas.

**Unscheduled timber harvest** – Any harvest of timber that was not included in the calculation of the allowable sale quantity.

**Urban** (U) – A definition used in the Recreation Opportunity Spectrum (ROS) to characterize a substantially urbanized environment, although the background may have natural appearing elements. Affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor vehicle use and parking are available. Regimentation and controls are obvious and numerous.

**Urban area** – As defined by the Census Bureau for the 1990 census, an area comprising all territory, population, and housing units in urbanized areas, or places of 2,500 or more persons outside of urbanized areas. An urbanized area comprises one or more places ('central place') and the adjacent densely settled surrounding territory ('urban fringe') that together have a minimum of 50,000 persons.

**Viability** – The ability of a population of a plant or animal species to persist for some specified time into the future. Viable populations are populations that are regarded as having the estimated numbers and distribution of reproductive individuals to ensure that its continued existence is well distributed in a given area.

**Volume sold** – The amount of timber actually purchased, which is usually less than offered volume because some sales are judged as economically marginal by prospective purchasers, and they receive no bids.

**Volume harvested** – The actual volume removed from the forest in a given year, which may be higher or lower than volume sold depending on market conditions. Most harvest volume was actually sold 1 to 3 years earlier.

**Wilderness** – A designated area defined in the Wilderness Act of 1964 in the following way: A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which – (a) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (b) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (c) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (d) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Wildfire - An unwanted wildland fire.

Wildland – Land other than that dedicated for other uses such as agriculture, urban, mining, or parks.

**Wildland fire** – A lightning- or human-caused fire that is either being suppressed or, if lightning-caused, allowed to burn (see Wildland Fire Used for Resource Benefit). Often used synonymously with 'wildfire' or 'forest fire'.

**Wildland fire use** – The management of naturally ignited wildland fires to accomplish specific pre-stated resource management objectives in pre-defined geographic areas.

**Wildland Fire Used for Resource Benefit (WFURB)** – A lightning-caused wildland fire that is allowed to burn because it meets the resource objectives outlined in the Land Management Plan and the site-specific prescriptive elements outlined in a Fire Management Plan.

**Wildland-urban interface** – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Because of their location, these structures are extremely vulnerable to fire should an ignition occur in the surrounding area.

**Yarder** – A machine for cable logging consisting of a system of power-operated winches and a tower used to haul logs from a stump to a landing.

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