

# List of Preparers

# 5



Measuring tree diameters

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# CHAPTER 5 - LIST OF PREPARERS

This section lists the members of the Forest Management Team, the Interdisciplinary Team and Planning Staff, and others responsible for preparing the Environmental Impact Statement (EIS) and significant background documents

## MANAGEMENT TEAM

The Forest Supervisor assisted by the Forest Management Team had overall responsibility for the planning process

ROBERT W ANDREWS

District Ranger, Eagle Lake District (Since April 1989)

TERRY McDONALD

Public Affairs Specialist (Former)

LEONARD ATENCIO

Forest Supervisor (Since May 1991)

THOMAS C MOWER

Distnct Ranger, Eagle Lake District (Until January 1989)

KAREN BARNETTE

District Ranger, Hat Creek District (Until 1989)

THOMAS MYALL

Fire, Lands, and Minerals Staff Director (September 1983 to February 1985)

SIDNEY BEAN

Administrative Officer (Since July 1984)

ELIZABETH L NORTON

Planning Staff Director (Since March 1989)

J PHILIP CARLSON

District Ranger, Hat Creek (Former)

DAVID REIDER

Public Affairs Officer (Since June 1988)

D KEITH CRUMMER

District Ranger, Almanor Ranger Distnct (Since 1986)

DEBORAH ROMBERGER

Distnct Ranger, Hat Creek District (Since April 1990)

DIANE HENDERSON

Associate Deputy Forest Supervisor (Since July 1990)

RUBEN SULLIVAN

Timber Staff Director (Until March 1985)

RICHARD A HENRY

Forest Supervisor (Until June 1990)

WILLIAM SWANSON

District Ranger, Almanor District (Until November 1985), Fire, Lands, and Minerals Staff Director (Until June 1989)

WILLIAM HOLLAND

Timber Staff Director (Until August 1991)

DAVID M JAY

Forest Supervisor (Until October 1984)

RICHARD TATMAN (Until April 1991)

Engmeering Staff Director

MARLIN JOHNSON

Planning Staff Director (Until February 1986), Timber Staff Director (Former)

DONALD M WINSLOW

Resources Staff Director (Until April 1985)

DAVID JONES

Resources Staff Director (Since June 1985), includes Planning (February 1986 to February 1989)

## INTERDISCIPLINARY (I.D.) TEAM & STAFF

The Forest Interdisciplinary Team and planning staff performed the day-to-day work in the planning process. This list shows their qualifications (education, experience, and professional disciplines) and their areas of responsibility in the planning process leading to the Forest Plan and FEIS.

NANCY BESTER  
Operations Research  
Analyst

B S Natural Resources, M S Forest Planning  
Two years research assistant testing social psychological variables in recreation demand models. One year staff, land management planning national training program sponsored by Eisenhower Consortium. Five years as Forest Service operations research analyst and data base administrator.

Staff member responsible for data base, FORPLAN model, and other analytical tools used in effects analysis until 1986. (Has left the Forest Service)

KENNETH S. BLONSKI  
Assistant Forest Planner

B A Social Science, M Criminology, M S Forest and Wood Science. Five years hotshot crew foreman in fire suppression, 4 years fuels officer in fuels management, 1 year assistant tire staff in fire planning, 2 years assistant forest planner, producing Plan and DEIS.

I D Team coordinator, representative for various resources including tire and fuels, wild and scenic rivers, RNA's, special interest areas, and national natural landmarks (until May 1985). Responsible for Plan and DEIS development and scheduling. (Has left the Forest)

MICHAEL CONDON  
Assistant Forest Planner/  
Economist

B S Business Administration. Two years graduate study in finance and economics. Two years lecturer, Department of Finance, California State University at Chico. One year economic research for banking firm. Ten years forestry technician, fire suppression and fuels management, and fire planning. Five years as Forest economist. (Has left the Forest)

I D Team representative for economics. Conducted fire management analysis process. I D Team representative for fire management (after May 1985). Planning Team leader since January 1986. (Has left the Forest)

BETH CORBIN  
Forest Botanist

B S Botany, M S Botany/Plant Ecology. Forest Service experience as fuels technician and forestry technician. Forest Botanist since February 1989. Consultant to I D team for Sensitive plants, Research Natural Areas, botanical Special Interest Areas, air quality and vegetative diversity since January 1988.

**BARBARA DITMAN**  
Environmental Coordinator

**B A German** Eleven years forestry technician in timber sale preparation and administration, **4** years business management, **1 1/2** years wildlife biologist, **2 1/2** years LMP/NEPA Coordinator

Land Management Planning staff since December **1989**  
Assisted with final edits on FEIS and Plan.

**KEN ESTES**  
Forest Silviculturist

**B S Forest Management** Three years as Distnct timber management assistant, **4 1/2** years Assistant District Ranger, **3** years project leader of herbicide study, 20 years as Forest silviculturist

**I D** Team representative for timber and pest management until January **1989** Responsible for timber inventory, timber analysis, suitability cneria, etc (Has retired )

**RICARDO GONZALEZ**  
Envlronmental Coordina-  
tor, Range Conservationist

**B S Range and Forest Management** Graduate work in coordinated resource management planning

One-half year Distnct forester, **2** years Distnct range conservationist, 2 years District range and wildlife officer, **3** years Forest range and wildlife officer, 2 years Distnct resource officer, **3** years Forest environmental coordinator and range conservationist

**I D** Team representative for range and further planning areas (October **1983** to March **1986**), and coordinator for soils, cultural, water, and npanan resources (after May **1985**) (Has left the Forest )

**MARGARET GORSKI**  
Landscape Architect

**B S Forest Resources, M L A Landscape Architecture**  
Four years park ranger, National Park Service, **3** years Forest Service landscape architect

**I D** Team representative for visual resources, recreation, wilderness (March **1984** to January **1985**) (Has left the Forest )

**RICHARD HARRIS**  
Civil Engmeer

**B S Civil Engmeering** Five years as engineering technician, **3** years as project engmeer on Districts, **6** years as Forest special projects engineer

**I D** Team representative for facilities (roads, trails, corridors, structures), energy, and air quality until **1983** Responsible for inventories and analysis for these resources Produced data base reports (Has left the Forest )

JAMES R. HORNER  
Landscape Architect

**A.B.** Environmental Design. Four years assistant Forest landscape architect for Forest Service and National Park Service, 8 years Forest landscape architect.

**I D.** Team representative for visual resources, recreation and special areas (wilderness, RARE II further planning areas, wild & scenic rivers) (until March 1984). Responsible for inventories and analysis for these resources. (Has left the Forest Service)

PHILIP S. HORNING  
Landscape Architect

**B.S.** Landscape Architecture. Four years Peace Corps experience as landscape architect. Five years assistant Forest landscape architect, 3 years Forest landscape architect, 2 1/2 years landscape officer (Australia)

**I D.** Team representative for visual resources, recreation, and wilderness (1985 to 1987). (Has left the Forest.)

MARLIN JOHNSON  
Planning Staff Director

**B.S.** Forestry. Two years Peace Corps experience in forestry, 11 years experience in Forest Service timber management and planning, and 6 years as Forest planner.

Overall staff and coordination responsibility for land management planning from October 1981 to March 1986. Forest Management Team member. Responsible for planning process, including Plan and DEIS. (Has left the Forest)

JAMES JOHNSTON  
Forest Archaeologist

**B.A.** and **M.A.** Anthropology. Sixteen years as an Archaeologist with the Forest Service. Thirteen years as Forest Archaeologist, Lassen National Forest

**I D.** Team representative for cultural resources and social environment.

DAVID JONES  
Resources / Planning  
Staff Director

**B.S.** Wildlife Conservation. Eight years District Ranger, 17 years Forest Resource Staff Director on two Forests

Overall staff and coordination responsibility for land management planning from February 1986 to March 1989. Forest Management Team member. (Has retired)

GEORGE F. KLIEWER  
Soil Scientist

**B.S.** Farm Management. Twenty-five years experience as Forest soil scientist, including 20 years with the Forest Service

Responsible for soils and water in the planning process between DEIS and FEIS (since February 1986)

GERALD "SKIP" KOWALSKI B S and MS Wildlife Biology Nine years as Forest wildlife biologist in Colorado and 6 years as Forest wildlife biologist in California

ID Team representative for range (until 1983), and wildlife, fisheries, and Sensitive plants (until February 1988) Coordinator of Planning Step 3, Inventory and Data Collection, responsible for range, wildlife, fishenes, and rare plant inventory and analysis (Has left the Forest )

MELANIE MCFARLAND  
Fishenes Biologist

B S Fisheries Various seasonal fisheries experience with private organizations consultants and the California Department of Fish and Game Three years fisheries biologist with the U S Fish and Wildlife Service Three years fishenes biologist with the Forest Service ID Team representative for fishenes (since 1989) Responsible for fish habitat inventories, assessment and analysis.

ROSS MICKEY  
Operations Forester

B S Timber Management Six years experience in timber sale planning, one year as assistant resource officer, two years as Research Analyst operations research analyst and data base administrator

From 1987-1989, LMP staff member responsible for data base, FORPLAN modeling, and other analytical applications ID Team member for timber after January 1989 (Has left the Forest Service )

ELIZABETH L. NORTON  
Planning Staff Director

B A Spanish/Anthropology MS Forest Management Four years sale preparation forester, six years recreation specialist, three years land management planner

Overall responsibility for land management planning since March 1989 Responsible for coordinating final edits on FEIS and Plan

LEANA RANDALL

Ten years computer consultant experience Five and one half years desktop publishing experience

Member of Planning Staff Responsible for word processing and final document formatting

JIM SAAKE  
Lands and Minerals Officer

B.A Political Science Nine years as realty specialist including responsibility for ngbts-of way, special uses, lands status, land adjustments, minerals, and FERC project applications

I,D Team representative for lands, minerals, and geology Coordinator of Planning Step 4, Analysis of the Management Situation (Has left the Forest Service )

DANIEL H SCHLENDER  
Landscape Architect

B S Landscape Architecture Two years landscape architect in Utah, 7 1/2 years landscape architect with Forest Service in Wisconsin, 1 year landscape architect on Lassen

I D Team representative for recreation, visual quality (1987 to 1989) (Has left the Forest )

KATHY SEABERG  
Computer Assistant

Undergraduate studies in computer science Two years as forestry technician in fuels management, two years as clerk/typist, two years as a computer assistant

Member of I D Team and planning staff Responsible for public comments database, public comments chapter of FEIS Also responsible for the LMP database (Has left the Forest )

MICHAEL SIEG  
Assistant Forest Planner,  
Planning

B S Recreation Management, M S Resource Economics/ Resources Two years graduate research in multiple resource forest economic modeling, 2 years Regional economist for BLM, 2 1/2 years assistant Forest planner and Forest economist

I D Team coordinator, representative for RNA's, economic and social analysis (until February 1984) Responsible for Plan and DEIS development (Has left the Forest ) .

TOM W SIMONSON  
Forest Silvicultunist

B S Forest Resources Management Three years tree improvement forester, 2 years reforestation and timber stand improvement forester, 6 years District Silviculturist, 3 years District Timber Management Officer, and 3 years Forest Silvicultunist

I D Team representative for timber and silviculture since January 1990

GARY B SMITH  
Range Conservationist/  
Wildlife Biologist

B S wildlife Management One year range conservationist with BLM, 16 years range conservationist/wildlife biologist with the Forest Service

I D Team representative for range and wildlife (since October 1988)

CURTIS SPALDING  
LMP/Environmental  
Coordination Specialist

B A Geology One year administrative assistant, 3 years silvicultural and timber inventory specialist, 1/2 year minerals specialist, 4 years planning technician, 3 years LMP/environmental coordination specialist

Content coordinator for proposed Plan and DEIS Responsible for documentation, maps, photographs, production Land management planning staff I D Team representative (since May 1985) for RNA's, national natural landmarks, special interest areas, wild and scenic rivers, since March 1986, for wilderness and further planning areas. (Has left the Forest )

**NORMAE STAAF**  
Landscape Architect/  
Assistant Recreation Staff  
Officer

**B S** Landscape Architecture Four years Forest Service Landscape Architect on two forests. Two years Bureau of Land Management Landscape Architect and Recreation Planner

**I D** Team representatwe for recreation and visual quality since 1989

**DICK TATMAN**  
Forest Engineer

**B S** Civil Engineering Ten years facilities engineering Four years assistant Forest engineer, planning Ten years Regional planning engineer, facilities planning. Nine years Forest engineer responsible for all engineering on Forest.

Forest Management Team Member **I D** Team member responsible for facilities planning. (Has retired )

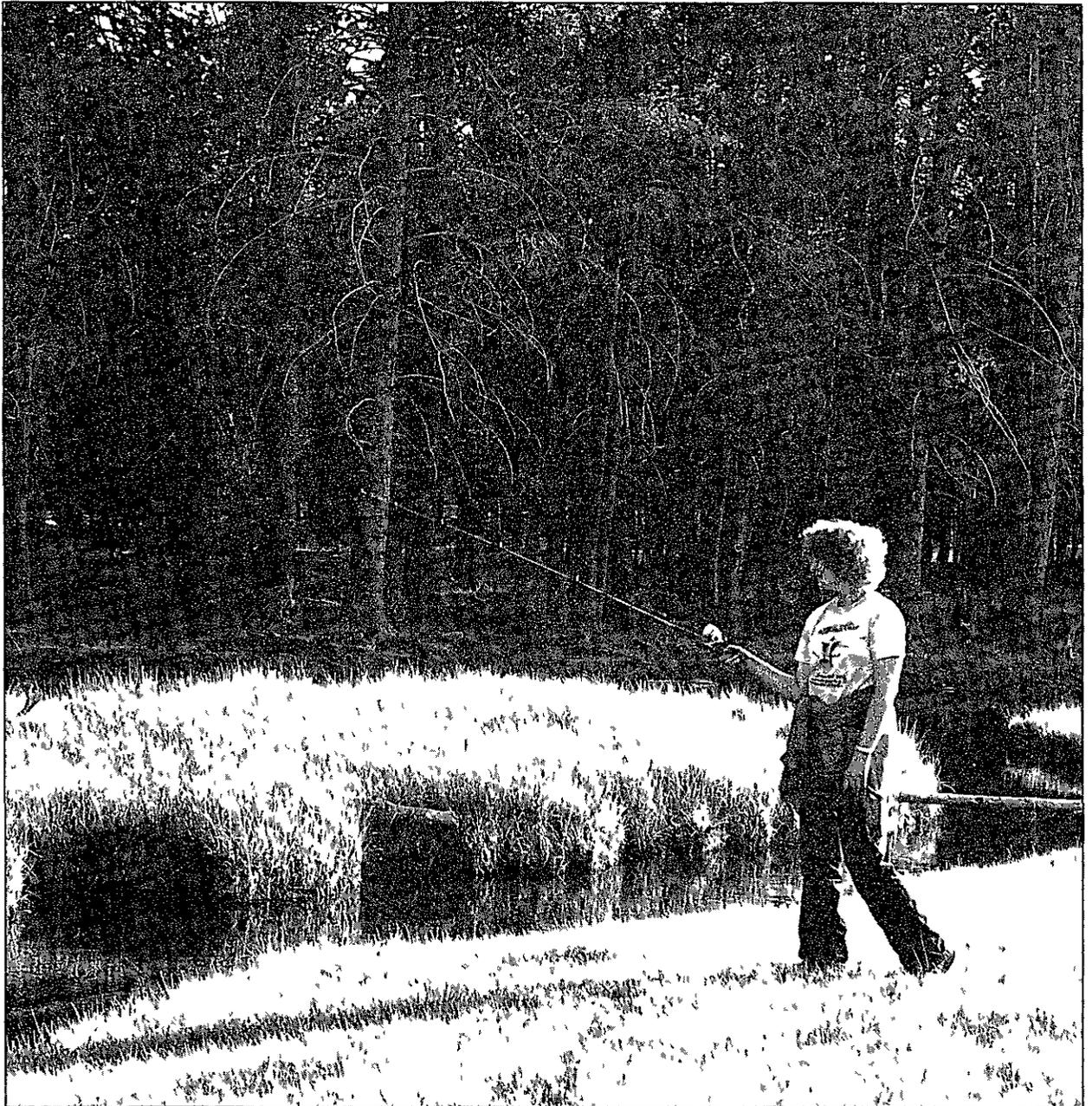
**L STEPHEN YOUNG**  
Forest Hydrologist

**B.S** Forest Management, **M.S.** Watershed Management One and one-half years sale preparation forester, **2 1/2** years zone hydrologist, **8 1/2** years Forest hydrologmt, **4 1/2** years Distnct Resource Officer.

**I D.** Team representative for geology, soils and water (until October 1983) Responsible **for** watershed inventories, and water yield and cumulative watershed effects analysis, later, consultant to **I D** Team Produced computer graphics

# Document Recipients

# 6



**Creek fishing adjacent to a lodgepole pine stand**

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# CHAPTER 6 - DOCUMENT RECIPIENTS

Copies of the Final Environmental Impact Statement and Plan have been sent to the following elected officials, Federal, State and Local Agencies, and organizations. In addition, the documents have been sent to numerous individuals who have requested copies. A complete title of the final mailing list is available for review at the Supervisor's Office, Lassen National Forest

## ELECTED OFFICIALS

- U S Senator Alan Cranston
- U S Senator John Seymour
- U S Congressman Wally Herger
- U S Congressman John Doolittle
- State Senator Tim Leslie
- State Senator Jim Neilson
- State Assemblyman Stan Statham
- State Assemblyman Chris Chandler

## FEDERAL GOVERNMENT

- Advisor on Environmental Quality, Washington, DC
- Agricultural Stabilization and Conservation Committee, Susanville, Red Bluff, Fall River Mills, CA
- Animal & Plant Health Inspection, Washington, DC
- Army Corps of Engineers, (COE) Washington, DC
- Bureau of Indian Affairs, Sacramento, CA
- Bureau of Land Management, USDI Susanville, Sacramento, Redding, CA
- Department of Commerce, National Oceanic and Atmospheric Admin, Washington, DC
- Departmental Environmental Office, U S Department of Health & Human Services, Washington, DC
- Deputy Assistant Secretary of Defense, Washington, DC
- Deputy General Counsel, Equal Employment Opportunity Commission, Washington, DC

- Energy and Environment, Interstate Commerce Comm, Washington, DC
- Environmental and Safety, (SAF/MIQ) Washington, DC
- Environmental Compliance, Dept of Energy, Washington, DC
- Environment and Energy, U S Dept of Housing & Urban Development, Washington, DC
- Environmental Officer, Reg Adm, San Francisco, CA
- Environmental Project Review, USDI Washington, DC
- Environmental Protection Agency, San Francisco, CA, Washington, DC
- Environmental Review, Office of Washington, DC
- Farm Home Administration, Susanville, Red Bluff, CA
- Federal Aviation Administration, Western Region, Regional Director, Hawthorne, CA
- Federal Energy Regulation Commission, San Francisco, CA
- Federal Highway Admin - Region 9, San Francisco, CA
- Fish and Wildlife Service, USDI, Sacramento, CA
- Forest Service, USDA
  - W O -LMP Environmental Coordinator Washington, DC
  - Region 5 - R O -Planning and Budgeting Department, San Francisco, CA
  - Region 6 - R O - Planning Department, Portland, OR
- General Services Admin, Environmental Staff, Washington, DC
- Lassen Volcanic National Park, USDI, Mineral, CA
- Modoc National Forest, USDA, Alturas, CA
- National Marine Fisheries Service, Washington, DC
- National Park Service, Western Region, USDI, San Francisco, CA

- NOAA Ecology and Conservation Div , Washington, DC
- Plumas National Forest, USDA, Quincy, CA
- Policy Evaluation and Research, U S Dept of Labor, Washington, DC
- Shasta-Trinity National Forest, USDA, Redding, CA
- Rural Electrification Admin (REA), Washington, DC
- Soil Conservation Service, Fresno, Susanville, Fall River Mills, CA, Washington, DC
- U S Department of Transportation, Washington, DC
- U S Air Force, Environmental & Safety, Washington, DC
- U S Navy, Environmental Protection Division, Washington, DC
- USDA Equal Opportunity, Washington, DC
- Water Resources Council, San Francisco, CA
- U S Geological Survey, Menlo Park, CA

## **STATE GOVERNMENT**

- California Department, of Fish & Game, Sacramento, Redding, Susanville, CA
- California Department of Forestry, Sacramento, Susanville, Redding, Oroville, CA
- California Dept of Transportation, Sacramento, Susanville, CA
- California State Clearinghouse, Sacramento, CA
- California State Resources Agency, Sacramento, CA
- Central Valley Regional Water Quality Control Board, Sacramento, CA
- Lahontan Regional Water Quality Control Board, South Lake Tahoe, CA
- McArthur-Burney State Park, Burney, CA

## **LOCAL GOVERNMENT**

### **County Boards of Supervisors**

- Butte County Board of Supervisors
- Lassen County Board of Supervisors
- Modoc County Board of Supervisors

- Plumas County Board of Supervisors
- Shasta County Board of Supervisors
- Siskiyou County Board of Supervisors
- Tehama County Board of Supervisors

### **County Planning Departments**

- Butte County Planning Department
- Lassen County Planning Department
- Modoc County Planning Department
- Shasta County Planning Department
- Siskiyou County Planning Department
- Tehama County Planning Department

### **Libraries**

- Butte County, Red Bluff
- California State Library, (Government Documents)
- Chico State University Library
- Lassen College Library
- Lassen County, Susanville
- Modoc County, Alturas
- Nevada State Library
- Plumas County, Chester, Quincy
- Shasta County, Burney, Fall River Mills
- Tehama County, Oroville, Red Bluff
- University of California, Forest Library
- University of Nevada, Reno

### **County School Boards**

- Butte County Schools
- Lassen County Schools
- Modoc County Schools
- Plumas County Schools
- Shasta County Schools
- Siskiyou County Schools
- Tehama County Schools

### **Superintendent of Schools**

- Butte County Schools
- Lassen County Schools
- Modoc County Schools
- Plumas County Schools
- Shasta County Schools
- Siskiyou County Schools
- Tehama County Schools
- Big Valley - Fall River School District
- Burney School District
- Susanville School District

## County Public Works Department

- Butte County Public Works
- Lassen County Public Works
- Modoc County Public Works
- Plumas County Public Works
- Shasta County Public Works
- Siskiyou County Public Works
- Tehama County Public Works

## Cities

- Burney, California
- Chester, California
- Chico, California
- Fall River Mills, California
- Greenville, California
- Red Bluff, California
- Redding, California
- Susanville, California
- Westwood, California

## CHAMBERS OF COMMERCE

- Burney Chamber of Commerce
- Chester Chamber of Commerce
- Chico Chamber of Commerce
- Fall River Mills Chamber of Commerce
- Greenville Chamber of Commerce
- Lassen County Chamber of Commerce
- Plumas County Chamber of Commerce
- Red Bluff Chamber of Commerce
- Redding Chamber of Commerce
- Westwood Chamber of Commerce

## ORGANIZATIONS

- Altacal Audubon Society, Chico, CA
- Audubon Society, Western Regional Office, Sacramento, CA
- Beaty and Associates, Redding, CA
- Bucks Lake Permittees & Retired Teachers, Durham, CA
- Butte Environmental Council, Chico, CA
- Butte Meadows Hillsliders, Chico, CA
- C H E C , Eugene, OR
- Cal Poly, San Luis Obispo, CA
- California Association of 4 Wheel Drive Clubs, Sacramento, CA
- California Forestry Association, West Sacramento, San Francisco, CA
- California Native Plant Society, Mt Lassen Chapter, Chico, CA

- California-Nevada Snowmobile Club, Rancho Cordova, CA
- California Sportfishing Protection Alliance, Quincy, CA
- California Trout, Inc , San Francisco, CA
- California Wilderness Coalition, Davis, CA
- Cattlemen's Association, Lassen County and Big Valley, CA
- Citizens Utilities Company of CA, Redding, CA
- Collins Pine Company, Chester, CA
- Committee to Save Mineral Basin, Mineral, CA
- Coordinated Resources Management and Planning, Susanville, CA
- Crane Mills, Corning, CA
- Erickson Lumber Company, Marysville, CA
- FARE, Quincy, CA
- Feather River College, Quincy, CA
- Forest Landowners of California, San Francisco, CA
- Forest Ranch Community Association, Forest Ranch, CA
- Friends of the River, Sacramento, San Francisco, CA
- Friends of Plumas Wilderness, Quincy, CA
- Fruit Growers Supply Company, Burney, CA
- Helicopter Logging, Fort Jones, CA
- Ishi Fish and Game Club, Paynes Creek, CA
- Lake Almanor Audubon Society, Westwood, CA
- Lands of America, Las Vegas, NV
- Lassen County American Indian Organization, Susanville, CA
- Lassen County Times, Susanville, CA
- Lassen/Plumas Snowmobile Club, Chester, CA
- Louisiana Pacific, Red Bluff, CA
- National Audubon Society, Sacramento, CA
- Nature Conservancy, San Francisco, CA
- Northeast Californians for Wilderness, Susanville, CA
- Northstate Wilderness Comm , Chico, CA
- Off-Highway Motor Vehicle Recreation, Sacramento, CA
- Oregon State University, Forest Management, Corvallis, OR

- Pacific Gas & Electric, Chico, CA
- Pit River Tribal Council, Burney, CA
- Placer Conservation Task Force, Auburn, CA
- Power Engineers, Hailey, ID
- Roseburg Forest Products, Anderson, CA
- Sierra Club Legal Defense Fund, Oakland, San Francisco, CA
- Sierra Club, Mother Lode Chapter, Sacramento, CA
- Sierra Club, Yahi Group, Chico, CA
- Sierra Club Regional Office, Oakland, CA
- Sierra Pacific, Susanville, CA
- Silver Lake Homeowners Association, San Francisco, CA
- Susanville Forest Products, Susanville, CA
- Susanville Indian Ranchena, Susanville, CA
- Tehama Fly Fishers, Red Bluff, CA
- Trust for Public Lands, San Francisco, CA
- U C Davis, Dept of Zoology, Davis, CA
- Ultra Power, Burney, CA
- Volcano Riders Snowmobile Club, Mineral, CA
- Western Wood Products Assoc , Portland, OR
- Wilderness Society, San Francisco, CA
- Wirth Environmental, San Diego, CA
- 4 X 4 Club, Oroville, CA

# FEIS Appendices

# 7



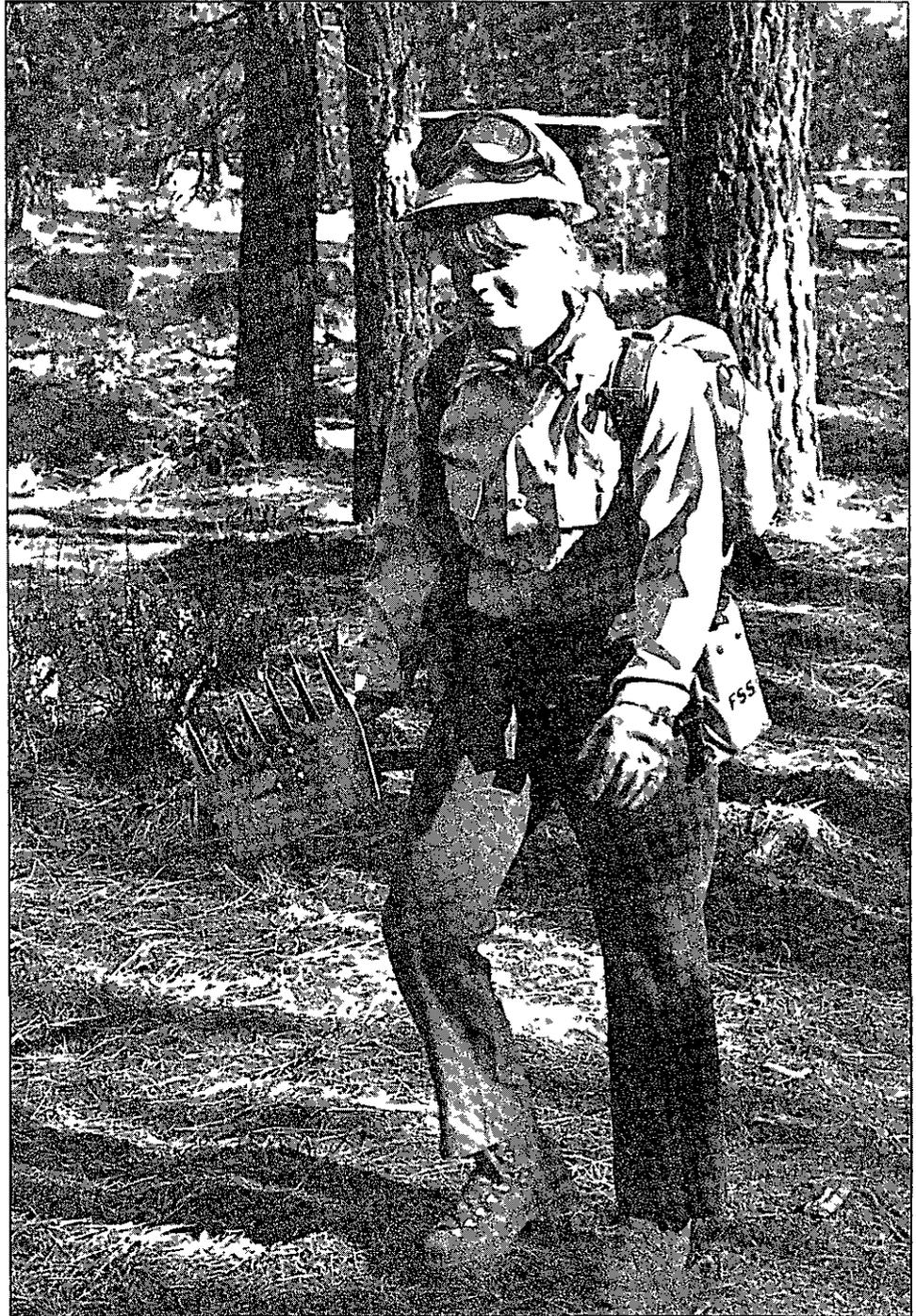
Early day foresters

# CHAPTER 7 - FEIS APPENDICES

The following appendices are in a separate book accompanying this FEIS.

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# Glossary 8



Prescribed burning

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# CHAPTER 8 - GLOSSARY

## 1. ABBREVIATIONS

Abbreviations and acronyms used in this document are listed below. Those with an asterisk (\*) after them are further defined in the Glossary section.

4(e)	Federal Power Act section	HCA	Habitat Conservation Area*
ASQ	Allowable Sale Quantity*	HCM	Habitat Capability Model*
AMS	Analysis of the Management Situation-	HMA	Habitat Management Area*
AUM	Animal Unit Month*	IPM	Integrated Pest Management*
BLM	Bureau of Land Management	ISC	Interagency Spotted Owl Committee
BMP's	Best Management Practices*	K-V	Knutsen - Vandenberg Act
BSS	Base Sale Schedule*	LTSYC	Long-term Sustained Yield Capacity*
CDF	California Department of Forestry	MBF	Thousand Board Feet*
CEQ	Council on Environmental Quality*	MCF	Thousand Cubic Feet*
CFR	Code of Federal Regulations	MIR's	Minimum Implementation Requirements*
CMAI	Culmination of Mean Annual Increment*	MIS	Management Indicator Species*
CRMP	Coordinated Resource Management Planning*	MMBF	Million Board Feet*
DBH	Diameter at Breast Height*	MMCF	Million Cubic Feet*
DEIS	Draft Environmental Impact Statement*	MMR's	Minimum Management Requirements*
EA	Environmental Assessment*	NEPA	National Environmental Policy Act*
EFFALT	Effective Alteration"	NFMA	National Forest Management Act <sup>†</sup>
EIC	Ending Inventory Constraint*	NNL	National Natural Landmark*
EIS	Environmental Impact Statement*	NTU	Nephelometric Turbidity Units (see Turbidity in glossary)
EPA	Environmental Protection Agency	ODT	Oven-Dry Tons*
FEIS	Final Environmental Impact Statement	OHV	Off-highway Vehicle*
FERC	Federal Energy Regulatory Commission	ORV	Off-road Vehicle*
FSH	Forest Service Handbook	PAOT	Persons-at-one-time*
FSM	Forest Service Manual	PCT	Pacific Crest Trail
FY	Fiscal Year	PNV	Present Net Value*
GMA	Goshawk Management Area <sup>†</sup>	RARE II	Roadless Area Review and Evaluation*
		RBF	Range Betterment Fund*
		RIM	Recreation Information Management*
		RNA	Research Natural Area*
		ROS	Recreation Opportunity Spectrum*
		RPA	Forest and Rangeland Renewable Resources Planning Act*
		RVD	Recreation Visitor Day*
		Rx	Prescription*

SIA	Special Interest Area*
SMZ	Streamside Management Zone*
SOHA	Spotted Owl Habitat Area*
SPM	Semi-Primitive Motorized*
SPNM	Semi-Primitive Non-Motorized*
T&E	Threatened and Endangered Species*
TOC	Threshold of Concern*
TSI	Timber Stand Improvement*
TSP	Total Suspended Particulates*
USC	United States Code*
VAC	Visual Absorption Capability*
VIS	Visitor Information Service
VQO	Visual Quality Objectives*
WFHR	Wildlife and Fish Habitat Relationship*
WFUD	Wildlife and Fish User Day*

## 2. GLOSSARY

This glossary gives definitions of technical terms used in the FEIS and Forest Plan. A definition followed by (N) is a national-level Forest Service definition. A definition followed by (L) is a Lassen National Forest definition. The other definitions are standard for the Pacific Southwest Region.

### 4(e)

Section 4(e) of the Federal Power Act states that a report must be included in the license issued by the Federal Energy Regulatory Commission (FERC) which contains

- 1) license conditions provided by the Forest Service,
- 2) recommendations concerning project consistency with National Forest purposes; and
- 3) a decision as to whether or not to issue a special-use authorization.

## A

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### acre-foot

The amount of water or sediment that would cover one acre to a depth of one foot (43,560 cubic feet, 326,000 gallons)

### activity

A work process that is conducted to produce, enhance, or maintain an output or to achieve an administrative and/or environmental quality objective.

### activity fuels

Fuels that have been directly generated or altered by management activity.

### activity outputs

The quantifiable goods or services resulting from any management actions taken on the Forest.

### actual use

Pertaining to livestock grazing, actual use is the number of head of livestock in a given area multiplied by the length of time they are there. Generally it is expressed in animal months or animal unit months.

### administrative cost

Costs of required general administration which are prorated over fixed, variable, and investment costs.

### administrative unit

All the National Forest system lands for which one Forest Supervisor has responsibility.

### administratively-designated areas

Areas designated by the Secretary of Agriculture, the Chief of the Forest Service, or the Regional Forester because they merit special attention and management, such as scenic or geological areas.

### adopted visual quality objective

The minimum level of visual quality to which the landscape will actually be managed (see Visual Quality Objective) (L).

### affected environment

The physical, biological, social, and economic environment within which human activity is proposed.

### age class

One of the intervals, usually 10 to 20 years, into which the age range of vegetation is divided for classification or use.

**aggregate sources**

Areas where mineral materials (rock, sand, gravel, etc.) can be extracted (L)

**all water**

The total surface water yielded from National Forest lands in a year (or decade). Also referred to as allwater (L)

**allocation**

The assignment of sets of management practices to particular land areas to achieve the goals and objectives of the alternative

**allotment**

See range allotment

**allowable sale quantity (ASQ)**

The maximum quantity of timber that may be sold from land suitable for timber production for a time period, usually expressed on an average annual basis

**alternative**

In Forest planning, a given combination of resource uses and a mix of management practices that achieve a desired management direction, goal, or emphasis

**amenity (amenity value)**

Typically used in land management planning to describe those resources for which market values (or proxy values) are not or cannot be established. See also nonmarket outputs

**anadromous fish**

Fish that spend a portion of their lives in saltwater and migrate to fresh water to spawn. Salmon, steelhead, and shad are examples

**analysis areas**

**An** aggregation of capability areas with sufficiently similar physical, biological, and administrative conditions such that they would probably respond in a like manner to management activities. See also capability areas

**analysis of the management situation (AMS)**

A step in Forest planning in which the Forest's ability to supply goods and services in response to society's demand for those goods and services

is determined. (Also the corresponding documents in the Planning Records.)

**animal unit month (AUM)**

The amount of forage required to support a mature cow for one month. (For land management planning purposes, Region 5 uses 1,000 pounds of air dried forage per cow per month)

**apparent naturalness**

The degree to which each further planning area reflects levels of environmental modification

**apparent range condition and trend**

An appraisal of the current rangeland productivity level as it relates to the rangeland productivity potential and the elements affecting the potential

**aquatic ecosystem**

The stream channel, lake, or estuary bed, water, biotic communities, and the habitat features that occur therein (N)

**area of influence**

A delineated geographic area within which the present or proposed actions of a forest unit exert an important influence on residents and visitors

**arterial road**

See road

**aspect**

The compass direction that the slope of a land surface faces

**assessment**

The Renewable Resource Assessment required by the RPA (L)

**assigned value**

A monetary value that represents the price consumers would be willing to pay for Forest outputs, whether or not such prices are actually paid to the Federal Government by consumers. In Forest planning, the term "assigned value" refers to both market and nonmarket outputs because it is National policy to provide most Forest outputs at either no charge or at a price less than what consumers would be willing to pay

**available lands**

Those portions of the Forest not statutorily or administratively excluded from use for timber harvest (L)

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**B****backcountry**

An undeveloped area where dispersed, off-highway recreation such as hiking and trail bike riding may occur. Generally describes semi-primitive motorized and semi-primitive non-motorized recreation opportunities.

**background**

The view beginning 3-5 miles from the observer and as far into the distance as the eye can detect the presence of objects.

**background level (background, natural background level)**

The ever-present environmental conditions or effects above which a phenomenon must manifest itself in order to be detected.

**backlog**

Work to be done by the Forest Service, such as reforestation, timber stand improvement, slash disposal and land line location, which needs to be completed.

**basal area**

The cross-sectional area of a stand of trees measured at 4.5 feet above the ground, expressed in square feet per acre.

**base sale schedule (BSS)**

A timber sale schedule formulated on the basis that the quantity of timber planned for sale and harvest for any future decade is equal to or greater than the planned sale and harvest for the preceding decade of the planning period. This planned sale and harvest for any decade is not greater than the long-term sustained yield capacity.

**base timber harvest schedule**

See base sale schedule.

**benchmark**

An analysis of the supply potential of a particular resource, or of a set of resources subject to specific management objectives or constraints. Benchmarks define the limits within which alternatives can be formulated.

**benefit**

The total value of an output or other outcome.

**benefit-cost analysis**

An analytical approach to making choices on the basis of receiving the greatest benefit for a given cost or producing the required level of benefits at the lowest cost. Also referred to as cost effectiveness analysis when the benefits cannot be quantified in terms of dollars.

**benefit-cost ratio**

Measure of economic efficiency, computed by dividing total benefits by total costs. Usually both benefits and costs are discounted to the present. See also discounting.

**best management practices (BMP's)**

EPA and State-approved management practices which are designed to protect, maintain, and/or improve water quality by preventative rather than corrective means.

**biodiversity**

See diversity.

**biological control**

A method to control insect populations or tree diseases through the use of applied biology.

**biological growth potential**

The average net growth attainable in fully stocked natural forest land.

**biomass**

Generally speaking, the total mass (e.g., weight, volume) of living matter in a biological system. In FORPLAN analysis and FEIS tables, biomass is the volume of material four inches or greater in diameter, including cull logs, that is left after timber harvest. This excludes material smaller than four inches in diameter, precommercial thinning, and the material estimated to be usable as firewood (L).

**blowdown**

A tree knocked down by wind or, sometimes, snow load (L)

**board foot (BF)**

The amount of wood contained in an unfinished board one inch thick, 12 inches long, and 12 inches wide

**botanical special interest area**

An area which has been designated by the Forest Service as containing specimens of plants, plant groups, and plant communities which are significant because of form, color, occurrences, habitat, location, life history, arrangement, ecology, environment, rarity, and/or other features (L)

**broadcast burning**

A technique of applying fire to target fuels which ignites all burnable materials over the entire unit being treated

**browse**

Leaf and twig growth of shrubs, woody vines, and trees available for animal consumption, act of consuming browse

**burning prescription**

Written direction stipulating fire environment conditions, techniques, and administrative constraints necessary to achieve specified resource management objectives by use of fire on a given area of land.

**C**

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**canopy**

The cover of leaves and branches collectively formed by the crowns of adjacent trees in a stand or forest

**capable lands**

Those portions of the Forest that have an inherent ability to produce timber (L)

**capability**

The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of manage-

ment intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as the application of management practices, such as silviculture or protection from fire, insects, and disease

**capability areas**

The smallest unit of land or water used in Forest planning. They are discrete and recognizable units classified primarily according to physical (soil), administrative, and biological factors. All land within a capability area is homogeneous in ability to produce resource outputs and in production limitations

**carrying capacity**

The number of organisms of a given species and quality that can survive in, and not cause deterioration of, an ecosystem through the least favorable environmental conditions that occur within a given interval of time.

**chain**

As used in surveying, a unit of length equal to 66 feet (L)

**Class I Area**

An area designated for the most stringent degree of protection from future degradation of air quality. The 1977 Clean Air Act designates as mandatory Class I areas each national park over 6,000 acres and each national wilderness area over 5,000 acres, from among those designated prior to the Act

**clearcutting**

Harvesting of all merchantable size trees on an area for the purpose of creating a new stand. The area harvested may have younger-aged trees remaining which will aid in the growth and development of the new stand

**climax**

The culminating stage in plant succession for a given site where the vegetation has reached a highly stable condition. See also succession

**closed canopy**

A condition that exists when the crowns of the trees in a stand cover greater than 70 percent or more of the potential open space

**closest forces concept**

The principle in fire management which states that regardless of agency jurisdiction, those firefighters who can get to the fire first will initiate suppression actions (L)

**codominant**

One main crown class of trees with their tops in the upper canopy but lower than the dominant trees Also see dominant.

**cold trailing**

A method of controlling a partly dead fire edge by carefully inspecting and feeling with the hand to detect any fire, digging out every live spot, and trenching any live edge (L)

**cold water fishery**

Stream and lake waters that support predominantly cold water species of game fishes These species have maximum, water temperature tolerances of about 70 degrees Fahrenheit. Salmon, trout, grayling, and northern pike are examples (L)

**collector road**

See road

**commercial forest lands**

Lands capable of producing merchantable timber See tentatively suitable (L)

**commercial species**

Tree species suitable for industrial wood products

**commercial thinning**

See thinning

**commodity**

A resource product with commercial value

**commodity wildlife**

Those animal species that are harvested and are valued for their meat or pelt, harvest species In this Plan, black-tailed and mule deer, black bear, band-tailed pigeon, and northern gray squirrel are examples of harvest or commodity wildlife species This list is non-inclusive (L)

**community stability**

The capacity of a community to absorb and/or cope with change without major hardships to groups or institutions within the community

**compartment, timber**

A division of forest land defined by natural and man-made features, usually between 3,000 and 15,000 acres in size, and used to facilitate timber planning (L)

**confine (confine a fire)**

To restrict a fire within determined boundaries established either prior to the fire, during the fire, or in an escaped fire situation analysis (L)

**conifer**

Tree that bears cones and in most cases has needle or scale-like leaves, such as pine, spruce, hemlock, or fir

**constraints**

Limitations, actions which cannot be taken or which must be taken When used in linear programming, a constraint is a number expressing either an exact, upper, or lower limit that must be achieved (L)

**consumer surplus**

The difference between the amount actually paid by consumers for a good or service and the amount each individual would be willing to pay

**consumptive use**

Use of a resource that at least temporarily reduces the supply

**contain (contain a fire)**

To surround a fire, and any spot fires with a control line, as needed, which can reasonably be expected to check the fire's spread under prevailing conditions The control line may consist of constructed fireline, natural barriers, or wet lines (L)

**control (control a fire)**

To complete a line around a fire, any spot fires therefrom, and any interior islands to be saved, burn out any unburned area adjacent to the fire side of the control lines, and cool down all hot spots that are immediate threats to the control line, until the lines can reasonably be expected to hold under foreseeable conditions (L)

**coordinated resource management planning (CRMP)**

A resource planning process with an approach of solving resource problems on a local level through direct communication among all interested individuals, groups, and agencies (L)

**cord**

A stack of wood measuring four feet high, four feet deep, and eight feet long. In wood volume, two cords roughly equal 1 MBF.

**corridor**

A linear strip of land identified for specific present or future management purposes. Also, a linear strip of specific habitat types or vegetative communities identified to allow wildlife to move between other areas of suitable habitat.

**cost**

The price paid or what is given up in order to acquire, produce, accomplish, or maintain anything.

**cost, administrative**

Costs of required general administration which are prorated over fixed, variable, and investment costs. (L)

**cost, economic**

See economic cost.

**cost effective**

For the least cost, achieving a specified level of outputs under given conditions.

**cost effective analysis**

A benefit-cost analysis process utilized to identify the alternative which meets particular objectives at the least cost. When using cost effectiveness analysis there is no need to quantify the benefits of the alternatives, they should be the same for all alternatives. (L)

**cost efficiency**

The usefulness of specified inputs (costs) to produce specified outputs (benefits). In measuring cost efficiency, some outputs, including environmental, economic, or social impacts, are not assigned monetary values but are achieved at specified levels in the least cost manner. Cost efficiency is usually measured using present net

value, although use of benefit-cost ratios and rates-of-return may be appropriate. (N)

**cost efficient**

Achieving a specified level of outputs while maximizing present net value subject to constraints. (L)

**cost, fixed**

A cost committed for the planning period. In Forest planning, the total cost of the minimum level benchmark. (L)

**cost, opportunity**

The value of a resource's foregone net benefits in its most economically efficient alternative use. (L)

**costs**

The negative (adverse) effects. Cost may be monetary, social, physical, or environmental. (L)

**cost, variable**

A cost that varies with the level of controlled outputs in the time horizon covered by the planning period or decisions being considered. Variable costs include investment, operational, and variable general administration. (L)

**Council on Environmental Quality (CEQ)**

An advisory council to the President established by the National Environmental Policy Act of 1969. It reviews federal programs for their effect on the environment, conducts environmental studies, and advises the President on environmental matters.

**cover**

Vegetation used by wildlife for protection from predators and weather conditions, or cover while giving birth to or protecting young.

*Escape cover* Vegetation used for flight and protection from predators. (L)

*Hiding cover* Geographic or vegetative features that furnish enough screening to conceal wildlife. For deer, optimum hiding cover is capable of hiding 90 percent of a standing deer from human view at a distance equal to or less than 200 feet.

**Thermal cover** Vegetation, usually shrubs or small trees, that provides moderate temperatures relative to ambient conditions. This may mean cool, shady areas in warm seasons or warmer, less windy places during cold periods.

**cover/forage area ratio**

The ratio, in percent, of the amount of area in forage condition to the area in cover condition, the criteria by which potential deer use of an area is judged.

**Cretaceous**

That period in geologic time beginning 138 million years ago and ending 63 million years ago (L)

**crown**

The upper part of a tree carrying the main branch system and foliage

**crown closure**

Percent of canopy closure (L)

**cubic foot (CF)**

Unit of volume (of wood) equal to a cube 12 inches on all sides

**cubic foot per second (cfs)**

Unit measure of streamflow or discharge, equivalent to 449 gallons per minute or about 2 acre-feet per day

**cull**

Refers to logs or trees too rotten or defective to be economically harvested for sawtimber (L)

**culmination of mean annual increment (CMAI)**

The point where the average annual growth of a stand of timber no longer increases. (In Forest planning, based on a cubic foot measure)

**cultural resources**

The tangible and intangible aspects of cultural systems, living and dead, that are valued by a given culture or contain information about the culture. Cultural resources include, but are not limited to, sites, structures, buildings, districts, and objects associated with or representative of people, cultures, and human activities and events

**cumulative watershed impacts**

Net effects of projects. All impacts on beneficial uses of water and soil located outside of primary land use sites. They are the additive or synergistic effects of multiple actions within a watershed. Cumulative effects occur as a result of more than one action and the changes may either enhance or degrade water quality

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**D**

**decadal**

Pertaining to a decade, or a ten-year period. (L)

**decadence**

Refers to decaying or declining tree stands

**decision space**

The limits within which Forest planning alternatives occur. The outer limits are defined by benchmarks in Forest planning

**demand**

The amount of an output that users are willing to take at a specified price, time period, and condition of sale (N)

**demand analysis**

A study of the factors affecting the quantity and price of a good or service that would be used or purchased by consumers if made available

**demand schedule**

The relationship between price and quantity demanded. The demand schedule expresses how much of the good or service would be bought or consumed at various prices at a particular point in time

**departure**

A level of timber production that allows the planned sale and harvest to drop in a future decade (as opposed to non-declining yield). See also non-declining yield

**dependent communities**

Communities whose social, economic, or political life would become discernibly different in important respects if outputs from the National Forest were significantly altered

**dependent species**

A species for which a habitat element (e.g., snags, vegetative type) is deemed essential for the species to occur regularly or to reproduce

**designated**

In reference to wildlife, specifically refers to lands identified as displaying the proper habitat attributes necessary for and capable of helping to support a viable population of a given species. Key designated areas include important winter range, fawning areas, transition range, and roost sites, nesting and foraging areas. (L)

**design capacity**

The maximum theoretical amount of use a developed recreation site was built to accommodate (L)

**design standard**

Approved design and construction specifications for engineered projects including roads, water systems, and recreation facilities (L)

**detection**

Actions taken to discover, locate, and report wildland fires (L)

**developed recreation site**

Distinctly defined area where facilities are provided for concentrated public use, e.g., campgrounds, picnic areas, boating sites, and ski areas

**development level**

One of four levels of campground development ranging from 1 (minimal site modification) to 4 (site heavily modified). See Plan Appendix K (L)

**diameter breast high (DBH)**

The diameter of a tree measured 4 feet 6 inches from the ground

**discount rate**

The interest rate which is used to reduce costs and benefits occurring in the future to their value in the present. The higher the discount rate, the lower the present value of future benefits and costs. See discounting and present value

**discounted benefit**

The present value of future benefits

**discounted cost**

The present value of future costs

**discounting**

An adjustment made to costs and benefits to compensate for the fact that dollars received or spent in the future have a lower value today than dollars in the present. For example, it would be preferable to receive \$100 this year rather than in one year from now because it could be invested at 4 percent simple interest and be worth \$104 in one year. Thus, given the choice between receiving benefits worth \$100 today or benefits worth \$100 one year from today, one would choose to receive it today. Discounting reduces future costs and benefits to reflect the decreased future value and enables comparisons to be made of benefits and costs occurring at different points in time

**dispersed recreation**

Outdoor recreation that occurs outside planned and maintained recreational facilities, e.g., scenic driving, hunting, backpacking, and camping in undeveloped areas (L)

**distance zone**

One of three categories used in the Visual Management System to divide a view into near and far components. The three categories are (1) foreground, (2) middleground, and (3) background. See individual entries

**diversity (biodiversity)**

The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan

**dominant**

One main crown class of trees with their tops in the uppermost layers of the canopy

**downward sloping demand**

A price-quantity demand schedule based on the assumption that the quantity offered affects the price received (L)

**draft environmental impact statement (DEIS)**

The statement of environmental effects required for major Federal actions under Section 102 of the National Environmental Policy Act (NEPA) and released to the public and other agencies for comment and review. (L)

**E**

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**EFFALT**

The Effective Alteration (EFFALT) approach is a means of quantifying the degree of visibly detectable alteration of the landscape caused by even-aged timber management. The EFFALT index is a means to compare the overall visual impact of each alternative.

**early forest successional stage**

The plant and animal community that develops immediately following the removal or destruction of the vegetation in an area.

**economic cost (in dollars)**

Total fixed and variable costs for inputs, including costs incurred by other public and private parties, opportunity costs, and cost savings.

**economic efficiency**

A measure of how efficiently inputs are used to achieve outputs when all costs and benefits can be identified and valued. Usually measured by present net value or benefit-cost ratios.

**economic efficiency analysis**

A comparison of the values of resource inputs (costs) required for a possible course of action with the values of resource outputs (benefits) resulting from such action. In this analysis, incremental market and nonmarket benefits are compared with investment and physical resource inputs. (L)

**economic ranch unit**

A ranch operated as a business with a primary objective of livestock production. (L)

**ecosystem**

The operating biological system formed by the interaction of a group of organisms and their environment. (L)

**ecotone**

The transitional zone where two habitats or plant communities intergrade. (L)

**edge**

The area where plant communities meet or where successional stages or vegetative conditions within plant communities abut. See also ecotone.

**edge contrast**

A qualitative measure of the difference in structure of two adjacent vegetated areas; for example, "low," "medium," or "high edge contrast."

**effect (impact), economic**

The change, positive or negative, in economic conditions, including the distribution and stability of employment and income in affected local, regional, and national economies, which directly or indirectly result from an activity, project, or program. (N)

**effect (impact), physical, biological**

The change, positive or negative, in the physical or biological conditions which directly or indirectly results from an activity, project, or program. (N)

**effect (impact), social**

The change, positive or negative, in social and cultural conditions which directly or indirectly result from an activity, project or program. (N)

**electronic sites**

Areas designated for the operation of equipment which transmits and receives radio signals, excluding television aenals and antennas.

**encumbrance**

See title claim.

**endangered species**

Any species listed as such in the Federal Register which is in danger of extinction throughout all or a significant portion of its range.

**endemic organism**

Species whose natural occurrence is confined to a certain region. (L)

**ending inventory constraint (EIC)**

Constraint to insure that the total timber volume left at the end of the planning horizon will equal or exceed the volume that would occur in a managed Forest

**environmental analysis**

An analysis of alternative actions and their predictable short- and long-term environmental effects, which include physical, biological, economic, social, and environmental design factors and their interactions. The environmental analysis is documented in an environmental assessment (EA) or environmental impact statement (EIS) (L)

**environmental assessment (EA)**

A concise public document required by the regulations implementing the National Environmental Policy Act which briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact

**environmental documents**

A set of concise documents to include, as applicable, the environmental assessment, environmental impact statement, finding of no significant impact, or notice of intent (L)

**environmental impact statement (EIS)**

A statement of the environmental effects which would be expected to result from proposed alternative management actions

**Eocene**

That period in geological time beginning 60 million years ago and ending 40 million years ago (L)

**ephemeral stream**

A stream which flows only from storm runoff or seasonal snowmelt and receives no contribution to flow from ground water

**equivalent road acres**

Equivalent Road Acres (ERA) is a method of categorizing the amount of soil compaction resulting from land management activities in terms of a common base—a compacted road surface. Roads are assigned an ERA value of 1.00 and all other disturbed areas are assigned ERA values

that are less than or equal to one. The values are generally less than one as most other management activities do not cause 100 percent of the ground surface to become exposed or compacted

**erosion**

The detachment and movement of soil from the land surface by wind, water, or gravity

**erosion, gully**

The removal of soil by the formation of relatively large channels or gullies cut into the soil by concentrated surface water runoff (L)

**erosion, surface**

Erosion which removes materials from the surface of the land, as distinguished from gully or channel erosion. The two main types of surface erosion are sheet erosion and rill erosion (L)

**even-aged management**

Management of forest stands that results in trees of essentially the same age growing together. Cutting methods producing even-aged stands are clearcut, shelterwood, and seed tree

**even-aged stand**

A forest stand composed of trees having no or relatively small differences in age

**even-flow**

Maintaining a relatively constant supply of timber from decade to decade

**existing visual condition (EVC)**

The degree of visual alteration which currently exists on the landscape (L)

**experimental forest**

An outdoor laboratory set aside for purposes of research and development of forest management techniques (L)

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**F**

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**facilities**

Capital improvements on National Forest land including roads, trails, railroads, airfields, utility transmission lines, buildings, water and sewer systems, dams, bridges, etc. (L)

**fee ownership**

Ownership of property that has no limitation, qualification, or condition affecting it. The maximum ownership possible in real estate under the system of property rights founded on English common law.

**fee site**

A Forest Service recreation area in which users must pay a fee.

**final cut**

Generally, removal of the last trees left in a stand, specifically, removal of the last seed bearers or shelter trees after regeneration is established under a shelterwood system.

**firebreak**

A wide strip of land from which fuels have been removed down to mineral soil. Used to stop or check fires and to provide access for firefighting.

**fire intensity levels**

A measurement of fire intensity by flame length. Fire, Intensity, Flame.

<u>Level (FIL)</u>	<u>Length (FL)(feet)</u>	
1 Low	0-2	
2 Moderate	2-4	
3 High	4-6	
4 High	6-8	
5 Extreme	8-12	
6 Extreme	12+	(L)

**fireline**

An area around a fire perimeter in which fuel has been removed, by hand or machine, to check fire advance. (L)

**fire management analysis zone (FMAZ)**

The geographically delineated areas into which the planning unit is divided for purposes of the Level II analysis. The delineator is based upon common fire management direction and fire behavior characteristics. (L)

**fire management effectiveness index (FMEI)**

A means of assessing the effectiveness of fire management. The formula used is: the total fire suppression costs and presuppression costs (less fuels management costs) plus resource damages divided by the number of acres protected. (L)

**fire prevention**

Actions taken to reduce the number of wildfires caused by humans. (L)

**fire spread**

A measure of the forward advance of a fire per unit time, expressed in chains/hour. (L)

**fish habitat**

The aquatic environment and the immediately surrounding terrestrial environment that, combined, afford the necessary physical and biological support systems required by fish species during various life history stages. (L)

**fish, viable habitat and populations**

Habitat having a suitability rating of "medium" or higher is considered capable of maintaining viable populations. A viable population is defined as one which does not fall below approximately 35 percent of existing potential population levels. (L)

**forage**

All browse and nonwoody plants used as a food source by livestock or wildlife.

**forb**

A palatable, broad-leaved, flowering herb whose stem, above ground, does not become woody and persistent.

**foreground**

The portions of a view between the observer and up to 1/4 or 1/2 mile distant.

**Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA).**

See RPA.

**forest cover type**

A classification of forest land referring to a group of timber stands of similar development and species composition. Examples in California include the Douglas-fir, mixed conifer, and the true fir types.

**forest highway**

A Forest road under the jurisdiction of and maintained by a public authority and open to public travel.

**forest reserve fund (FRF)**

Refers to funds contributed by the Forest, from its annual receipts, to the counties in which the forest is situated. As used in this document, the term "Forest Reserve Fund payments" can be considered to be interchangeable with "Twenty-Five Percent Fund payments" or "Receipts Act payments". The level of reimbursement was established by the Twenty-Five Percent Fund Act of May 23, 1908 (Ch. 192, 35 Stat. 251, as amended, 16 U.S.C. 500, 16 U.S.C. 553, 31 U.S.C. 534).

**forested land**

Land at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for non-forest use.

**FORPLAN**

A linear programming model used for developing and analyzing forest planning alternatives. Also see linear programming and Appendix B.

**fuelbreak**

A wide strip of land, strategically placed for fighting anticipated fires, where hazardous fuels have been replaced with less burnable fuels. They divide fire-prone areas into smaller parcels for easier fire control and provide access for fire fighting.

**fuel load (or loading)**

The quantity of fuel per acre in a given area, expressed in tons per acre. Unless otherwise noted, this refers only to material which is dead and down on the forest floor. (L)

**fuel model**

A simulated fuel complex for which all the descriptions required by the mathematical fire spread model have been specified. (L)

**fuel treatment**

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

**fuels**

Any material capable of sustaining or carrying a forest fire, usually natural material both live and dead.

**fuels management**

The practice of planning and executing manipulation or reduction of fuels to obtain conditions which permit protection forces to meet fire suppression objectives. (L)

**fuelwood**

Wood cut into short lengths for burning.

**full service**

Management of recreation facilities which provides for vegetative management, full maintenance of facilities, appropriate toilet cleaning and garbage pick up, and information and interpretive services for the recreation user.

**full timber management**

A management practice that includes the full range of silvicultural practices with the objective of a high level of timber production and with rotation ages at or near minimum. Yield is based on even-aged silviculture. See modified timber management, limited timber management, Forest Plan Appendix E, Management Practices for more complete explanation. (L)

**G****gabion**

A wire basket, filled with rocks, normally tied with other gabions to form walls, dams, or abutments. (L)

**geologic resource inventory (GRI)**

The systematic examination, description, classification, and mapping of geologic aspects of the Forest. (L)

**geologic hazard**

Hazardous situation or area dealing with earth processes and material, i.e., landslide, seismic, or volcanic hazards. (L)

**geological order**

The degree of geologic mapping and information provided by a geologic inventory. Order 1 is the most detailed for intensive management, and order 4 the most general for broad planning.

**geothermal**

Refers to the natural heat of the earth retained in subsurface rock or fluids (L)

**goal**

As used in the Forest Service, a concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms, and may not have a specific date for completion. Goal statements form the principal basis from which objectives are developed.

**goods and services**

The various outputs, including on-site uses, produced from forest and rangeland resources.

**goshawk management area (GMA)**

A defined management area containing a minimum of 50 acres of habitat which provides suitable conditions for goshawk nesting activities.

**grazing**

Consumption of forage by domestic livestock. (L)

**grazing permittee**

An individual who has been granted written permission (a grazing permit) to graze livestock for a specific period on a range allotment.

**groundwater**

Subsurface water in the part of the ground that is wholly saturated.

**group selection**

The cutting method in which trees are removed periodically in small groups resulting in openings that do not exceed an acre or two in size; results in an uneven-aged stand.

**guideline**

An indication or outline of policy or conduct that is not a mandatory requirement (as opposed to a standard, which is mandatory).

**H**

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**habitat**

The environmental conditions of a specific place that is occupied by an organism, a population, or a community.

**habitat, late successional stage**

Habitat that supports older aged vegetation (L)

**habitat capability model**

Hypothesis of species-habitat relationships. These models are based on literature and professional judgement.

**habitat conservation area (HCA)**

A contiguous block of habitat to be managed and conserved for northern spotted owl management.

**habitat management area (HMA)**

An area of land managed as habitat for the conservation of a particular species (L)

**hard snag**

A dead tree that has not started to rot on the exterior surface (L)

**harvest species**

Species of animals that are hunted or fished for human consumption.

**herbicide**

A substance used to inhibit or destroy plant growth.

**heliport**

An area used by helicopters for landing and takeoff. Generally has supporting facilities and is accessible by road or boat.

**helispot**

Any designated landing spot for helicopters. It is distinguished from a heliport by lack of supporting facilities.

**I**

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**impact counties**

Those counties particularly affected by Forest Service employment and resource activities. The Lassen National Forest's impact counties are Butte, Lassen, Plumas, Shasta, and Tehama (L)

**implementation plans**

Short range plans implementing the Forest Plan management direction (L)

**indicator species**

See Management Indicator Species

**indirect effect (secondary effect)**

A condition caused by an action or inaction through intermediary causal agents. An effect for which the causal linkages to the action or inaction are not readily apparent. Contrasts with direct effect (L)

**inputs**

Land, labor, and capital required to produce outputs. Inputs are generally represented by activity costs

**input-output analysis**

An empirical approach to general equilibrium analysis which is production oriented. It examines the relationships in a local, Regional, National, or international economy between inputs to the productive process and the outputs which result. It is widely used to estimate the direct, indirect, and induced effects on key economic variables such as income and employment (inputs to the productive process) resulting from change in final demand (L)

**instream flow**

The volume of surface water in a stream system passing a given point at a given time

**integrated pest management (IPM)**

A process wherein pests, their impacts, and their management are considered an integral part of resource management and decision-making. Selection of strategies to regulate forest pests in which all aspects of a pest-host system involves study and weighting. The information considered in selecting appropriate strategies includes the impact of the unregulated pest population on various resource values, alternative regulatory tactics and strategies, and benefit/cost estimates for these alternative strategies. Regulatory strategies are based on sound silvicultural practices and ecology of the pest-host system and consist of a combination of tactics such as timber stand improvement plus selective use of pesticides. A basic principle in the choice of strategy is that it be ecologically compatible or acceptable

**integrated resource management**

A management strategy which emphasizes no resource element to the exclusion or violation of the minimum legal standards of others (N)

**interdisciplinary team**

A group of individuals with different training who solve a problem or perform a task through frequent interactions so that disciplines can combine to provide new solutions.

**intermediate harvest**

Any removal of trees from a stand between the time of its formation and the regeneration cut. Most commonly used intermediate cuttings are thinning and salvage

**intermittent stream**

A stream or portion of a stream that, in general, flows during wet seasons and is dry during dry seasons. The groundwater table lies above the bed of the stream during the wet season, but drops below the bed during the dry season. (L)

**interpretive services**

Activities and displays that interpret the natural and social history of the National Forest environment for the visiting public and inform them about National Forest goals, programs, and services

**intervisable turnouts**

Providing turnouts (or passing zones) along single lane roads often enough so that a driver can see on-coming traffic from one turnout to another (L)

**intolerant**

As applied to a tree species, relatively unable to compete under conditions of low light and/or high root competition. Ponderosa pines are intolerant (L)

**irretrievable commitments**

Applies to losses of production or use of renewable natural resources for a period of time. For example, timber production from an area is irretrievably lost during the time an area is used for skiing. If the use is changed, timber production can be resumed. The production lost is irretrievable, but the action is not irreversible

**irreversible commitments**

Decisions causing changes which cannot be reversed. Once used, the resource cannot be reinstated, nor can opportunities be recovered. Applies to nonrenewable resources such as minerals and cultural resources.

**issue**

As used in the Lassen National Forest planning process, the issues include public issues and management concerns (L)

**issues, concerns, and opportunities (ICO's)**

Refers to the public issues, management concerns and opportunities identified in the Forest planning process.

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**K****K-V funds**

Funds set aside from timber sale receipts to finance reforestation, wildlife habitat, and other improvements in the timber sale area.

**Kuchler vegetation types**

Broad vegetation types of California (L)

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**L****Land and Water Conservation Act**

Provides funds for and authorizes Federal assistance to the states in planning, acquisition, and development of needed land and water areas and facilities, provides funds for the Federal acquisition and development of outdoor recreation resources.

**land disturbance index**

An estimate of the "equivalent roaded acres" created by each alternative's prescription set (L)

**land disturbance index ratio (LDIR)**

A unitless index number used to compare the Forest-wide land disturbance created by alternatives, relative to the current situation. The LDIR of the current (CUR) alternative is 10 (L)

**land exchange**

The conveyance of non-Federal land or interests to the United States in exchange for National Forest land or interests in land (L)

**landform**

A natural landscape that exists as a result of wind, water, or geologic activity, e.g. a plain, plateau, basin, mountain, etc.

**land line location**

To locate, survey, mark, and post the boundaries of National Forest lands.

**landownership adjustment**

The transfer of the ownership of lands by land exchange, land purchase, donations, or other methods.

**land status**

The ownership status of lands within the National Forest boundaries.

**leasable minerals**

Minerals that are developed (i.e., explored, mined, extracted, etc.) by a permit or lease, in contrast to minerals development through claims staking. Congress has specified the following as leasable minerals: coal, oil, gas, potassium, sodium, phosphate, oil shale, native asphalt, solid and semisolid bitumen and bituminous rock, geothermal resources, deposits of sulfur in Louisiana and New Mexico; and all minerals, including hardrock, on acquired land. See also locatable mineral and mineral materials.

**lifestyle**

The characteristic way people live, indicated by consumption patterns, work, leisure, expressed values, and other behavior.

**limited service**

Management of recreation facilities which provides for minimal maintenance at reduced costs.

**limited timber management**

A management practice that involves only harvest of dead trees and high-risk sanitation. Used on rocky forest land and eastside pine with naturally sparse to poor stocking (see full timber management, modified timber management, Forest Plan Appendix E, Management Practices) (L)

**limits of acceptable change (LAC)**

The amount of human-caused change to biological or social components that can be tolerated without loss of wilderness character. The LAC concept is used in wilderness planning. (L)

**linear programming**

A mathematical method used to determine the most effective allocation of limited resources between competing demands when both the objective (e.g. profit or cost) and the restrictions on its attainment are expressible as a system of linear equalities or inequalities (e.g.  $y = a + bx$ )

**local road**

See road

**locatable minerals**

Generally refers to hardrock minerals on public domain lands that are mined and processed to recover valuable metals, such as gold and copper, chemical grade limestone, and asbestos. May include any solid, natural inorganic substance occurring in the crust of the earth except for mineral materials and leasable minerals. Those locatable minerals found on lands with acquired land status are considered leasable. Generally developed through a claims location and patent process. See also leasable mineral and mineral materials

**long-term effects**

Those outcomes that will be significant beyond the RPA planning horizon of 50 years

**long-term sustained yield capacity (LTSYC)**

The highest uniform wood yield from lands being managed for timber production that may be sustained in perpetuity under a specified management intensity consistent with multiple-use objectives. (N)

**M****thousand board feet (MBF)**

A measure of wood volume equal to 1 foot x 1 inch x 1,000 feet

**thousand cubic feet (MCF)**

A measure of wood volume equal to 1 foot x 1 foot x 1,000 feet

**million board feet (MMBF)**

A measure of wood volume equal to 1 foot x 1 inch x 1,000,000 feet

**million cubic feet (MMCF)**

A measure of wood volume equal to 1 foot x 1 foot x 1,000,000 feet

**management area**

A contiguous area of land used in planning, usually consisting of differing analysis areas, to which one or more prescriptions are applied. Management areas do not vary between alternatives, however, the prescriptions applied to them vary

**management area standards and guidelines**

Management direction in narrative form in the Forest Plan specific to each management area.

**management concern**

An issue, problem, or a condition which constrains the range of management practices identified by the Forest Service in the planning process. (N)

**management direction**

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

**management emphasis**

The multiple use values to be featured or enhanced. (L)

**management indicator species (MIS)**

A plant or animal whose presence in a certain situation or location is a fairly certain sign or symptom that particular environmental conditions are also present

**management intensity**

The management practice, or combination of management practices and their associated costs, designed to obtain different levels of goods and services

**management practice**

A specific action, measure, or treatment

**management prescription**

Management practices and intensity selected and scheduled for application on a specific area to attain multiple-use benefits and other goals and objectives

**market**

The processes of exchanging a good or service for money or for other goods or services according to a customary procedure. A market need not be an established institution located at a specific place (L)

**market area**

The area from which a market draws or to which it distributes its goods or services, and for which the same general prices and price influences prevail. (L)

**market outputs**

Outputs normally exchanged in markets as evidenced by transactions: timber, range, developed recreation, minerals, and commercial utilized fish

**mass movement**

Downslope movement of a portion of the land's surface, i.e., a single landslide or the gradual downhill movement of the whole mass of loose earth material on a slope face

**mast**

Nuts, acorns, and similar products of hardwood species, which are consumed by animals

**maximum modification**

See visual quality objectives.

**mean annual increment**

The average yearly growth of a tree, calculated by dividing the volume of the tree by its age

**merchantable timber**

Timber of saleable quality usually defined as a minimum of 6" diameter on the small end and at least 10 feet long

**middleground (middle distance)**

The space between the foreground and the background in a picture or landscape. The area located from 1/4 - 1/2 to 3-5 miles from the viewer

**migration corridor**

A belt, band, or stringer of vegetation that provides completely or partially suitable habitat which animals follow during migrations

**migration route**

A travel route used routinely by wildlife in their seasonal movement from one habitat to another

**mineral**

An inorganic substance occurring naturally with characteristics and economic uses that bring it within the purview of the mineral laws; a substance that may be obtained under applicable laws from public lands by purchase, lease, or preemptive entry (L)

**mineral development**

The preparation of a proven deposit for mining

**mineral entry**

Filing a claim to hold or purchase public land in order to claim the rights to minerals it contains.

**mineral entry withdrawal**

See mineral withdrawal

**mineral materials**

Minerals occurring in high volume, low-unit-value deposits which don't have a distinct or special economic value over similar materials and are therefore usually sold rather than leased or claim staked. Examples are sand, gravel, stone, and clay. (L)

**mineral withdrawal**

The withholding of an area of federal land from mineral entry or development in order to reserve the area for a particular public purpose or program

**minimum implementation requirements (MIR's)**

Ensures that alternatives are minimally acceptable and implementable on the ground. Generally, the requirements are within agency control, but there is little discretionary control at the Forest level. (L)

**minimum management requirements (MMR's)**

Those requirements taken from 36 CFR 219 27 and generally outside Forest Service authority to change MMR's cover suitable lands, Threatened and Endangered species, viable wildlife populations, diversity, riparian areas, and soil and water protection

**mission**

A major, continuing national area of concern or responsibility of the Forest Service that is directed by legislation, order, or regulation. The Forest Service mission represents the basic reason for the existence of the Forest Service as a Federal agency and characterizes the agency's role in solving broad, national problems. (N)

**mitigation**

Actions to avoid, minimize, reduce, eliminate, or rectify the adverse impacts of a management practice.

**modification**

See visual quality objectives

**modified timber management**

A management practice that can use a full range of silvicultural practices, but uses long rotation ages and can include single-tree selection or group selection. Yield is based on even-aged or uneven-aged silvicultural systems. See full timber management, limited timber management, Forest Plan Appendix E, Management Practices for more complete explanation (L)

**monitoring and evaluation**

The evaluation on a sample basis of Forest Plan management practices to determine how well objectives have been met, as well as the effects of those management practices on the land and environment (L)

**mortality**

Dead or dying trees resulting from forest fire, insects, diseases, or climatic factors

**motorized recreation**

Recreation using motorized equipment (motorcycling, driving for pleasure, off-highway vehicle travel, etc.) (L)

**multiple use**

The management of all the various renewable surface resources of the National Forests so that they are utilized in the combination that will best meet the needs of the American people

**municipal watershed**

The watershed from which the runoff is used for drinking purposes in a city.

**N****National Environmental Policy Act (NEPA)**

A 1970 Act of Congress which is our basic national charter for protection of the environment

**National Forest Land and Resource Management Plan (Forest Plan)**

A plan developed to meet the requirements of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, that guides all natural resource management activities and establishes management standards and guidelines for the National Forest System lands of a given National Forest. (L)

**National Forest Management Act (NFMA)**

The 1976 Act of Congress that amended the Forest and Rangeland Renewable Resources Planning Act to require and direct, among other things, the preparation of Forest Plans (L)

**National Forest System**

The National Forest System consists of units of Federally owned forest, range, and related lands throughout the United States and its territories, united into a nationally significant system dedicated to the long-term benefit for present and future generations. The National Forest System includes all National Forest lands, the National Grasslands and land utilization projects and other lands, waters, or interests therein which are administered by the Forest Service or are designated for administration through the Forest Service as a part of the system (L)

**national natural landmark (NNL)**

A site or area that possesses exceptional values or qualities which illustrate or interpret the natural heritage of the nation (L)

**National Register of Historic Places**

A listing maintained by the National Park Service of areas which have been designated as historically significant. The Register includes places of local and State significance, as well as those of value to the Nation in general.

**National Wild and Scenic River System**

Rivers with outstanding remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values designated by Congress under the Wild and Scenic Rivers Act for preservation of their free-flowing condition.

**National Wilderness Preservation System**

All lands covered by the Wilderness Act and subsequent wilderness designations, irrespective of the department or agency having jurisdiction.

**Nationwide River Inventory (NRI)**

The 1979 study by the USDI, Heritage Conservation and Recreation Service, to identify candidate free-flowing rivers for the Wild and Scenic River System. See Appendix E (L)

**natural barrier**

A natural feature that will slow or stop the spread of a fire. Examples include barren areas, bodies of water, and green meadows (L)

**natural opening**

A break in the forest canopy, the existence of an area of essentially bare soil, grasses, forbs, or shrubs in an area dominated by trees.

**net public benefits**

The overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not. Net public benefits are measured by both qualitative and quantitative criteria rather than a single measure or index.

**network**

See spotted owl network.

**no action alternative**

The alternative which continues current management direction.

**nonconsumptive species**

Wildlife species not used as food for human consumption, but normally observed, studied, photographed, etc. (as opposed to harvest or consumptive species).

**nondeclining flow or yield**

Timber scheduled for harvest so that any given decade's production does not fall below the previous decade's production.

**nonmarket outputs**

Forest outputs not normally exchanged in markets. In the Forest Service, the following resource outputs are classified as nonmarket outputs: dispersed recreation, wildlife and fish user days, and water. Although not normally exchanged in markets, the Forest Service assigns proxy values for analysis purposes.

**nonmotorized recreation**

Recreation without the use of motorized vehicles. Participation is accomplished by foot, ski, snowshoe, or horseback travel (L)

**nonstructural range improvements**

Vegetative management practices (type conversions, noxious weed control, seeding, etc.) that are carried out to increase forage production and enhance or protect the other resources.

**O****objective**

A concise, time-specific statement of measurable planned results that respond to pre-established goals. An objective forms the basis for further planning to define the precise steps to be taken and resources to be used in achieving identified goals (N)

**objective function**

A term used in linear programming referring to the item to be maximized (or minimized) in the problem's solution, e.g., maximize PNV, maximize timber.

**objective road maintenance**

See road maintenance system

**off-highway vehicle (OHV)**

Any motorized vehicle designed for or capable of cross-country travel on or immediately overland, water, snow, ice, marsh, swampland, or other natural terrain. It includes, but is not limited to, four-wheel drive or low-pressure-tire vehicles, motorcycles and related two-wheel vehicles, amphibious machines, ground-effect or air-cushion vehicles, and any other means of transportation deriving power from any source other than muscle or wind (L)

**off-road vehicle (ORV)**

Same as off-highway vehicle

**old growth**

A stand in the late stage of succession which shows signs of decadence, including large, old trees, snags and downed logs. Although tree age, size, height, or density varies by timber type, trees are usually 2.4 DBH or larger and 150 years or older (L)

**old growth retention areas**

Areas of late successional stage stands designated to meet the five percent seral stage requirement for vegetative diversity (L)

**opening**

An area of land from which timber has been harvested (generally using even-aged management). In Region 5 the maximum size of openings is 60 acres for the Douglas-fir type and 40 acres for all other forest types. An opening is no longer considered an opening when a specified number of trees per acre within a specific forest type and site class have reached 4.5 feet in height

**opportunity**

A proposal that is considered in developing alternative activities, projects or programs where an option exists to invest profitably to improve or maintain a present condition (N)

**opportunity cost**

The value of the benefits foregone when a management alternative is chosen

**output**

A good, service, or on-site use produced from forest and rangeland resources

**output, induced**

A good, service, or on-site use which is incidental to the objectives of the resource element. An example may be improved wildlife habitat acres as an induced output of the timber harvest administration activity which produces a primary output of board feet of timber (N)

**output, market**

A good, service, or on-site use that can be purchased at a price (N)

**output, nonmarket**

A good, service, or on-site use not normally exchanged in a market (N)

**outsloped roads**

The surface of the road is shaped so that the uphill side of the road is higher than the downhill side - thus draining water across the road and not allowing it to run down the road (L)

**oven-dry tons (OVT)**

A measurement of biomass, with a standard moisture content of 10 percent, totalling 2,000 pounds (L)

**overmature timber**

Trees that have attained full development, particularly in height, and are declining in vigor, health, and soundness

**overstory**

That portion of the trees in a forest which forms the upper or uppermost layer.

**P**

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**partial retention**

See visual quality objectives

**particulates**

Small particles suspended in the air and generally considered pollutants

**patented mining claim**

When patented, a mining claim becomes private property and is land over which the United States has no property rights except as may be reserved in the patent. After a mining claim is patented, the owner does not have to comply with requirements of the General Mining Law or implementing regulations (L)

**perennial stream**

Streams that flow throughout the year and from source to mouth

**persons-at-one-time (PAOT)**

A term used to measure recreation capacity which means the number of people that can use a facility or area at one time

**phreatophyte**

A plant that depends on abundant water; its roots reach the water table or flowing water (L)

**pinery**

An isolated stand of ponderosa pines separated geographically and genetically from other pine stands

**planned ignition**

A prescribed fire whose exact date and location are specified by Forest personnel prior to its occurrence (L)

**planning area**

The area of the National Forest System covered by a Regional or Forest plan

**planning horizon**

The overall time period considered in the planning process that spans all activities covered in the analysis or plan and all future conditions and effects of proposed actions which would influence the planning decisions. In Region 5, the planning horizon is 160 years

**planning period**

One decade. The time interval within the planning horizon that is used to show incremental changes in yields, costs, effects, and benefits (N)

**planning records**

A system that documents data collections, analysis, interdisciplinary team decisions, and activi-

ties that result from the process of developing a Forest Plan, revision, or significant amendment

**plantation**

A stand of trees resulting from planting or artificially seeding an area

**poles**

Commercial conifers 5 to 9 inches and hardwoods 5 to 11 inches in diameter at 4.5 feet height (L)

**policy**

A guiding principle upon which is based a specific decision or set of decisions (N)

**practice**

See management practice

**precommercial thinning**

See thinning.

**preferred alternative**

The alternative recommended for implementation as the Forest Plan

**prescribed burning**

The intentional application of fire to wildland fuels under predetermined conditions which allow the fire to be confined to a specific area and at the same time to produce the amount of heat and consumption of fuel required to achieve planned objectives, e.g. slash disposal, wildlife habitat management (L)

**prescription (Rx)**

The set of management practices applied to a specific area to attain specific objectives. Region 5 distinguishes between FORPLAN Rx's and management Rx's. FORPLAN Rx's are sets of "pure" activities without spatial allocation and standards and guidelines. Management Rx's are written as a result of allocating FORPLAN solutions to management areas and imposing standards and guidelines. See also Management Areas

**present net value (PNV)**

The difference between the value of discounted benefits derived from all outputs to which monetary values or established market prices are assigned, and the total discounted costs of managing the planning area

**present value**

The value which results when benefits or costs expected to occur in the future are discounted  
See also discounting

**preservation**

See visual quality objectives

**presuppression**

The planning and preparatory work done before a fire occurs to insure effective fire suppression action. Includes 1) recruiting and training fire forces, 2) planning and organizing attack methods, 3) procuring and maintaining fire equipment; and 4) maintaining structural improvements necessary for the fire program.

**primitive**

See Recreation Opportunity Spectrum, Primitive

**production function**

A quantitative description of the relationship between inputs and outputs in a production process (L)

**program**

The Renewable Resource Program required by the RPA (L)

**project**

A work schedule prescribed for a project area to accomplish management prescriptions, investment, maintenance, or protection (L)

**project planning**

Involves a series of activities that begins with need identification and ends with project implementation. See Forest Plan Appendix P (L)

**proper use**

The amount of livestock determined for a specific area to meet management objectives. Includes forage utilization, trampling effects, trailing, impacts to water, etc. Is specified in allotment management plans

**proxy value**

A value assigned to a good or service for evaluation purposes when the good or service is not bought or sold and an established monetary price does not exist

**public**

The people of an area, state, or nation that can be grouped together by a commonality of interests, values, beliefs, or lifestyles (L)

**public involvement**

A Forest Service process designed to broaden the information base upon which agency decisions are made by (1) informing the public about Forest Service activities, plans, and decisions, and (2) encouraging public understanding about and participation in the planning processes which lead to final decision making (N)

**public issue**

A subject or question of widespread public interest relating to management of the National Forest System (N)

**public participation activities**

Meetings, conferences, seminars, workshops, tours, written comments, survey questionnaires, and similar activities designed or held to obtain comments from the general public and specific publics about National Forest System land management planning (L)

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**R****RPA**

The Forest and Rangeland Renewable Resources Planning Act of 1974. Also refers to the national assessment and recommended program developed to fulfill the requirements of the Act. The most recent recommended program was in 1990. See also Renewable Resources Assessment and Renewable Resources Program (L)

**RPA program**

The recommended direction for long-range management of renewable resources of National Forest system lands. This direction serves as the basis for the regional targets assigned to the forests. The development of this direction is required by the Forest and Rangeland Renewable Resources Planning Act (L)

**range**

*primary* - includes areas which are readily accessible, have available water, and can be overused before livestock significantly graze other areas.

secondary - areas less preferred by livestock which will ordinarily not be grazed significantly until the primary range has been overused

*suitable* - land that is or can be made accessible to livestock, that produces forage or has inherent forage producing capabilities, and that can be grazed on a sustained yield basis under given management goals

*transitory* - land temporarily suitable for grazing, but transient over time and/or location. For example, grass may cover an area for a period before being replaced by growth not suitable for forage

*unsuitable* - area that should not be grazed by livestock because of unstable soils, steep topography, or inherent low potential for forage production

### **range allotment (allotment)**

An area designated for grazing a prescribed number and kind of livestock

### **range betterment fund (RBF)**

Mechanism established through the 1976 Federal Land Policy and Management Act to provide 50 percent of the grazing fees collected for improving range conditions which benefit livestock, wildlife, and watershed conditions (L)

### **range condition**

The current productivity of a range relative to what that range is naturally capable of producing, usually expressed as Capability, or unsatisfactory - producing below capability (L)

### **range condition class**

One of a series of arbitrary categories used to classify range Condition, usually expressed as excellent, good, fair, poor, or very poor (L)

### **range condition trend**

The direction of change in range condition and usually expressed as upward (improving), static (remaining unchanged), or downward (deteriorating) (L)

### **range management strategies**

*Strategy A* - No livestock

*Strategy B* - Some livestock. The affected areas are not managed specifically for forage production, but for controlling the permitted livestock within the allotment

*Strategy C* - Extensive livestock management. Uniform utilization of livestock forage distribution is allowed in coordination with other identified resources. Some fencing and waterhole development

*Strategy D* - Intensive livestock management. Revegetation and necessary improvements for increased forage production and utilization are emphasized (L)

### **range permittee**

See grazing permittee

### **ranger district**

Administrative subdivision of the Forest, supervised by a District Ranger who reports to the Forest Supervisor (L)

### **raptor**

A bird of prey, e.g., eagle, hawk, owl

### **RARE II (Roadless Area Review and Evaluation II)**

The assessment of roadless and undeveloped land areas within the National Forests of 38 states as potential wilderness areas, as required by the Wilderness Act. This refers to the second such assessment which was documented in the National Forest system's final environmental impact statement of the Roadless Area Review and Evaluation, January 1979 (L)

### **rate-of-return**

Rate of interest at which the net discounted benefits equal the net discounted costs (Internal rate-of-return is a similar measure appropriate to private firms)

### **real dollar value**

A monetary value which compensates for inflation

### **receipts act payments**

Refer to Forest Reserve Fund

**receipt shares**

The portion of receipts derived from Forest Service resource management that is distributed to State and county governments, such as the Forest Service 25 percent fund payments

**recovery goal**

Population level assigned to a specific area that if achieved would contribute fully to removing the species from a threatened or endangered classification (L)

**recovery species**

Federally listed threatened or endangered wildlife and fish species for which an objective has been set to raise the population to a viable level

**recreational river area**

As used in the Wild and Scenic Rivers Act, those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. (L)

**Recreation Resource Information System (RRIS)**

The Forest Service system for recording recreation facility condition and use.

**Recreation Opportunity Spectrum (ROS)**

A means of classifying and managing recreation opportunities based on physical setting, social setting, and managerial setting. The six different ROS classes briefly described are

- a Primitive - **An** area 3 miles or more from roads and trails with motorized use, generally 5,000 acres or more in an essentially unmodified natural environment
- b. *Semi-Primitive-Non-Motorized* - An area 1/2 mile from roads and trails with motorized use, generally 2,500 to 5,000 acres with only subtle modifications to an otherwise natural setting
- c Semi-Primitive-Motorized - Same as semi-primitive non-motorized, but with motorized use of roads and trails, including OHV touring, snowmobile, hiking, cross-country skiing, etc

- d Roded Natural - An area 1/2 mile or less from roads, resource modifications range from evident to strongly dominant
- e Rural - The setting is substantially modified with structures or other cultural modifications
- f Urban - The setting is strongly dominated by structures, highways, and streets. Does not occur on the Forest

**Recreation Visitor Day (RVD)**

Twelve (12) hours of recreation use in any combination of persons and hours, i.e., one person for 12 hours, 3 persons for 4 hours, etc

**reforestation**

Reestablishing a crop of trees on forest land by natural or artificial methods

**reforestation backlog**

Suitable timber land which is currently not stocked with commercial tree species. Lands occupied mainly with hardwoods, brush, or grasses scheduled for conversion to commercial conifers through reforestation

**regeneration**

Reestablishing a crop of trees on forest land by natural or artificial methods

**regeneration harvest**

“Regeneration harvest” applies generally to the logging of stands at rotation age or greater, and of stands below rotation age which cannot economically be held any longer because of poor stocking, health, thrift, quality or composition (L)

**regulated condition**

That condition in which the Forest has reached a state of full management. All age classes are represented and managed to produce a sustained yield at its optimum point within the constraints of other resource objectives. As the Forest approaches a fully managed condition, it is referred to as more regulated. (L) Also see Appendix O of this FEIS

**regulated harvest**

The scheduled removal of timber (or a portion of an animal population) to achieve a specific future condition. (L)

**release**

Freeing a tree or group of trees from immediate competition by eliminating growth that is over-topping or closely surrounding them

**renewable resources assessment**

An appraisal of the Nation's renewable resources that recognizes their vital importance and the necessity for long-term planning and associated program development. The Assessment meets the requirements of Section 3 of the Resources Planning Act and includes analyses of present and anticipated uses, demands, and supplies of the renewable resources; a description of Forest Service programs and responsibilities, and a discussion of policy considerations, laws, and regulations (N)

**renewable resources program**

The program for management and administration of the National Forest System, for Research, for Cooperative State and Private Forest Service programs, and for conduct of other Forest Service activities developed in accordance with the Forest and Rangeland Renewable Resources Planning Act (N)

**research natural area (RNA)**

An area established by the Chief of the Forest Service to preserve natural ecosystems for purposes of non-manipulative scientific research, educational activities, baseline reference areas, gene pool preservation, etc. (L)

**residue, forest**

Woody debris left after logging, pruning, thinning, or brush cutting (L)

**resistance to control**

A measure of the relative difficulty encountered in constructing and holding a fireline. Factors that are considered include type and amount of fuel, slope, and soil conditions (L)

**responsible line officer**

The Forest Service employee who has the authority to select and/or carry out a specific planning action (N)

**retention**

See visual quality objectives

**right-of-way**

An accurately located land area within which a user may conduct operations approved or granted by the landowner. May also refer to a permit, easement, lease, license, or Memorandum of Understanding (MOU) used to authorize the land use

**right-of-way acquisition**

Acquiring rights-of-way for Forest Service use of lands owned by others.

**right-of-way grant**

Rights-of-way granted to others to use National Forest land in the manner specified

**riparian area**

Geographically locatable area with distinct resource values and characteristics. Consists of the aquatic and riparian ecosystems (N)

**riparian dependent resources**

Those natural resources directly dependent on the riparian area for their existence, including water, fish, certain wildlife species, riparian-related aesthetics, and riparian-related vegetation

**riparian ecosystem**

A transition between the aquatic ecosystem and the adjacent terrestrial ecosystem; identified by soil characteristics or distinctive vegetation communities that require free or unbound water (N)

**risk cutting**

Cutting to remove trees that are likely to die before the next periodic cut (L)

**RNA candidate**

An area which is being evaluated for designation as a Research Natural Area (L)

**road**

Transportation route for motorized vehicles wider than 40 inches. The three types of National Forest roads are arterial, collector, and local

- a *Forest arterial road* - Serves large areas and usually connects with public highways or other Forest arterial roads to form an integrated network of primary

travel routes Usually paved or chip sealed Travel speed 15-55mph Developed and operated for long-term management purposes and constant service.

- b **Forest collector road** - Serves smaller areas than arterial roads Collects traffic from Forest local roads and/or terminal facilities and is usually connected to a Forest arterial or public highway Typically has an aggregate, aggregate and oil, or chip seal surface Travel speed. 10-35 mph Road length 5-15 miles. Operated for constant or intermittent service depending on management objectives for the area
- c **Forest local road** - Connects terminal facilities with Forest collector, arterial roads, or public highways. Road may or may not have an aggregate surface Travel speed 1-15 mph Road length less than 5 miles. Developed and operated for long- or short-term service and may be closed (L)

### **roaded natural**

See Recreation Opportunity Spectrum, Roded Natural

### **roadless area**

As defined by the Roadless Area Review, an area of undeveloped Federal land within which there are no improved roads or roads maintained for use by motorized vehicles, generally 5,000 acres or larger unless adjacent to an existing Wilderness

### **Roadless Area Review and Evaluation (RARE) II**

The assessment of "primitive" areas within the National Forests as potential wilderness areas as required by the National Wilderness Act This refers to the second such assessment which was documented in the final environmental impact statement of the Roadless Area Review and Evaluation, January 1979

### **road maintenance system**

A system consisting of five maintenance intensity levels which are assigned according to the road's long-range needs (Objective Maintenance Level) or short-term needs and uses (Opera-

tional Maintenance Level, which varies with use and current organizational constraints and capabilities such as funding) The maintenance intensity levels are defined in Appendix J (L)

### **ROS**

See Recreation Opportunity Spectrum

### **rotation**

The length of time between the formation or regeneration of a tree stand and its final cutting

### **rural**

See Recreation opportunity Spectrum, Rural

## **S**

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### **saleable minerals**

See mineral materials

### **sale schedule**

The quantity of timber planned for sale by time period from an area of suitable land covered by a Forest Plan The first period, usually a decade, of the selected sale schedule provides the allowable sale quantity Future periods are shown to establish that long-term sustained yield will be achieved and maintained A list of sales to be sold by particular year (L)

### **salvage harvest**

Harvesting primarily to utilize dead and downed material and scattered trees that will not be merchantable if left in the stand until the next scheduled harvest (L)

### **sanitation harvest**

The removal of dead, diseased, insect infested, damaged, or susceptible trees essentially to prevent the spread of pests or pathogens and so promote utilization of timber and forest hygiene (L)

### **sawlog**

A log meeting minimum standards of diameter, length, and merchantability

### **sawtimber**

Trees that will yield logs suitable in size and quality for producing lumber These trees are at least 11 inches in diameter at breast height

**scenic byways**

A program intended to showcase the outstanding natural features of the National Forests by the designation of state highways, county roads, and forest development roads as scenic byways

**scenic easement**

The acquired right to control the use of private land (including the airspace above such land) within the authorized boundaries of a component of the Wild and Scenic Rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic, or recreational river area. This does not apply to any regular use exercised prior to acquisition of the easement (L)

**scenic river area**

In Wild and Scenic Rivers Act usage those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads (L)

**scoping process**

Process used to identify issues and concerns which are within Forest Service authority to resolve. See also Appendix A

**Scribner Board Foot Rule**

A formula used to measure the board foot content of a log, developed using a diagram of the lumber that can be produced, including saw kerf, at the small end of the log. It assumes 1 inch boards and a 1/4 inch saw kerf, makes a liberal allowance for slabs, and disregards taper (L)

**sedimentation**

The deposition or accumulation of eroded material (L)

**seed tree cutting**

Harvesting all trees except for a small number of seed bearers left singly or in small groups, usually 8 to 10 per acre. An even-aged stand results

**seedlings, saplings**

Live trees of commercial species approximately 0 to 5" in diameter at breast height (L)

**seismic hazard**

Potential hazard due to earthquake activity (L)

**selection cutting**

See group selection and single tree selection

**semi-primitive motorized (SPM)**

See Recreation Opportunity Spectrum, Semi-Primitive Motorized

**semi-primitive non-motorized (SPNM)**

See Recreation Opportunity Spectrum, Semi-Primitive Non-Motorized

**sensitive species**

Those plant and animal species identified by the Regional Forester for which population viability is a concern

**sensitive watershed lands**

Those areas where proximity to water or soil erodibility magnify the possible adverse effects of management activities on water quality. Such lands include stream corridors, inner valley gorge areas, old landslides, lands steeper than 80 percent slopes, floodplains, lakeshore riparian areas, and lakes (L)

**sensitivity analysis**

A determination of the consequences of varying the level of one or several factors while holding other factors constant (N)

**sensitivity level**

A particular degree or measure of viewer interest in the scenic qualities of the landscape (N)

**sensitivity level 1**

Lands viewed from primary roads, trails, waterways and other use areas of national significance which at least 1/4 of the visitors use for recreational purposes including driving for pleasure, camping, fishing, hiking, biking and horseback riding. These include wilderness trails, National Park roads and trails, designated scenic highways and campgrounds. Also included are travelways and use areas of local significance which at least 3/4 of visitors use for recreational purposes

**sensitivity level 2**

Lands viewed from primary roads, trails, waterways and other use areas which less than 1/4 of the visitors use for recreational purposes. Also included are secondary travelways and use areas which 1/4 to 3/4 of the visitors use for recreational purposes

**sensitivity level 3**

Lands viewed from secondary roads, trails, waterways and use areas which less than 1/4 of the visitors use for recreational purposes.

**seral**

Pertaining to a biotic community which is a developmental, transitory stage in ecologic succession. Synonymous with “successional” (L)

**shelterwood harvest**

Even-aged silvicultural system in which (in order to provide a source of seed and/or protection for regeneration) the old crop is removed in two or more successive “shelterwood cuttings”, the first of which is ordinarily the seed tree cutting and the last is the final cutting (L)

**short-term effects**

Those effects which will usually occur within the next 20 years (L)

**silviculture**

Generally, the science and art of cultivating forest tree crops

**silvicultural system**

The entire process by which forest stands are tended, harvested, and replaced. It includes all cultural practices performed during the life of the stand such as regeneration cutting, fertilization, thinning, improvement cutting, and use of genetically improved sources of tree seeds and seedlings to obtain multiple resource benefits. Silvicultural systems are classified as even or uneven-aged

**single tree selection cutting**

The cutting method in which individual trees are removed to provide a stand with trees of different sizes and age classes on the same site. This method results in an uneven-aged stand

**site index**

A numerical evaluation of the quality of land for plant productivity, especially used in forest land where it is determined by the rate of growth in height on one or more of the tree species

**site preparation**

The preparation of an area for regeneration. It involves the removal of slash and/or competing vegetation and usually the exposure of bare mineral soil

**size class**

For purposes of Forest planning, size class refers to the three intervals of tree stem diameter used for classification of timber.

*seedling/sapling* - less than five-inch diameter

*pole timber* - five to eleven-inch diameter

*sawtimber* - greater than eleven-inch diameter

**slash**

The residue left on the ground after timber cutting, or after storms, fire, etc. It includes unutilized logs, uprooted stumps, broken stems, branches, twigs, leaves, bark, and chips

**smoke load**

The total amount of smoke in an airshed (L)

**smolt**

A juvenile anadromous fish at the age when migration from natural streams to ocean takes place (L)

**snag**

A standing dead tree, or live tree with a substantial portion of the exterior surface dead (L)

**social category**

People with a common social characteristic such as age, nationality, occupation, hobby, interest, or educational level

**social group**

People who cooperate to pursue common interests and/or attain mutual goals

**social impact**

Changes in social or cultural conditions that directly or indirectly result from a Forest Service program, project, or activity

**social impact analysis**

The social component of the environmental analysis process, a systematic effort to determine how present programs or proposed actions affect the human environment

**social organization**

The structure of a society described in terms of roles, relationships, norms, institutions, and/or community cohesiveness and stability

**social value**

A shared standard of preference or desirability, such as wealth, beauty, good health, honesty, or privacy

**social variable**

A social or cultural element such as population size, employment, opinion on an issue, crime rates, satisfaction with community life or recreation-use patterns, that can be evaluated at different times or places to show the effects of a Forest Service action

**soft snag**

A standing dead tree from which the leaves or needles and many of the branches may have fallen and which has started to rot externally (L)

**soil horizons**

Layers of the soil, each of which has comparatively uniform characteristics different from adjacent layers

**soil order**

The degree of soil mapping and information provided by a soil survey. Order 1 is the most detailed for intensive management, and order 5 the most general for broad planning

**soil productivity**

The natural capacity of a soil to produce a specified plant or sequence of plants under a specified system of management

**soil resource inventory (SRI)**

The systematic examination, description, classification, and mapping of soil

**special interest area (SIA)**

An area managed to make recreation opportunities available for the understanding of the earth and its geological, historical, archaeological, botanical, and memorable features

**special use permit**

A permit authorizing the occupancy and use of National Forest land in the manner specified

**spotted owl habitat area (SOHA)**

A defined management area of 1,650 acres including a contiguous 300 acre nesting core, a contiguous 300 acre alternate core, 400 addi-

tional acres, and 650 replacement acres. Where possible, these areas contain large blocks of contiguous old growth habitat or potential habitat.

**spotted owl network**

A collection of spotted owl habitat areas that are distributed throughout areas of potential habitat and within the range of the spotted owl to allow for dispersal and genetic interchange. SOHA's are generally in groups of 3 with spacing between the groups being 6-12 miles. Single SOHA's are located not more than 6 miles from the next closest SOHA.

**spotted owl subspecies**

Northern spotted owl (*Strix occidentalis caurina*)  
The present range of this subspecies is from southwestern British Columbia, western Washington, western Oregon, and northern California south to San Francisco Bay. Those areas north of Highway 299 and west of Highway 139 are considered in the range of the northern spotted owl. Currently Federally listed as Threatened.

California spotted owl (*Strix occidentalis occidentalis*)  
The present range of this subspecies is the Sierra Nevada and the Coast Range of California south of San Francisco Bay. In general, those areas south of Highway 299 are considered in the range of the California spotted owl. This subspecies is classified as Sensitive in the Pacific Southwest Region.

**stand**

A community of trees or other vegetation which is sufficiently uniform in composition, constitution, age, spatial arrangement, or condition to be distinguishable from adjacent communities and to thus form a management entity

**stand maintenance**

Small openings (less than 1/4 acre in size) which are created as a result of intermediate harvests (sanitation, salvage, commercial thinning). Seed from surrounding trees is relied upon to regenerate these small openings. Artificial regeneration (tree planting) is not planned (L)

**standard**

A principle requiring a specific level of attainment, a rule that requires mandatory compliance (L)

**standard component**

In the previous timber management plan (1975), the land suitable for full timber management (L)

**stocked/nonstocked**

Land with 10 percent or more of conifer crown closure is “stocked” Less than 10 percent is “nonstocked” (L)

**stocking level**

The degree to which land is occupied by trees, (measured by basal area and/or number of trees by size and spacing)

**strategic/critical minerals**

Minerals that are necessary for industry and national defense and have been identified by Congress for stockpiling

**stream class**

Category indicating the relative importance of a stream or stream segment, based on resource values and beneficial uses The four classes are:

- Class I* Highly Significant
- Class II* Significant
- Class III* Moderately Significant
- Class IV* Minor Significance (L)

See Appendix R of the Plan

**stream corridor**

The lands along developed stream channels that have a significant influence on instream water quality and fisheries Composed of an aquatic zone (inchannel area), riparian zone (adjacent), and terrestrial zone (area of major influence) (L)

**stream order**

Location of a stream segment relative to its headwaters

*First Order* - An original stream with no other streams entering that segment.

*Second Order* - A stream segment created when two first order streams come together

*Third Order* - A stream segment created when two second order streams come together

Higher orders are similarly described (L)

**stream reach**

A portion of a stream that is relatively homogeneous based on geomorphology, stream flow, geology and sinuosity

**stream type**

A relative measure of stream development, considering meandering, slope, channel-gorge cross section, stream width-depth ratio, and degree of entrenchment or containment A type “A” stream tends to flow down a steeper gradient and meanders very little, within limiting slopes (well confined), while a type “C” stream meanders widely over a nearly-flat, wide valley bottom (L)

**streamsides**

The riparian ecosystem associated with streams

**streamside management zone (SMZ)**

An administratively designated zone designed to call attention to the need for special management practices to maintain and/or improve watershed resources SMZ's may include floodplains and wetlands, riparian areas, innergorges, perennial streams, and intermittent streams (L)

**structural range improvements**

Those range improvements constructed and maintained (fences, cattleguards, water developments, etc ) to facilitate the management of the range resource

**stubble height**

The height of vegetation remaining on a grass after it is grazed by a herbivore. Measured from the surface of undisturbed soil

**stumpage**

Timber as it stands uncut

**subculture**

A distinctive pattern of beliefs, values, norms, and customs shared by a portion of the population, often because of a common ethnic heritage, occupation, or religious or ideological orientation

**succession**

A process of biotic community development that involves change in species, structure, and community processes over time. “Successional” is synonymous with “seral” (L)

**suitable lands**

Acres of land selected for management of timber production on a regulated basis which have been identified as tentatively suitable. Thus, it is land which meets criteria a through e of the tentatively suitable definition and which is to be managed for timber production. (See "tentatively suitable lands")

**suitability**

The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices. (N)

**supply**

A schedule of the quantity of a product or forest output that will be produced at various prices. (L)

**suppression**

Actions taken to extinguish or confine a fire.

**suppression difficulty index (SDI)**

A matrix applied to fuels in harvest areas to determine fuel treatment needs. It takes into account fuelbed, slope, and fire intensity. (L)

**sustained yield**

See long-term sustained yield.

**sustained-yield of products and services**

The achievement and maintenance in perpetuity of a high level of annual or regular periodic output of the various renewable resources of the National Forest System without impairment of the productivity of the land. (N)

**symbiotic**

Type of association whereby two dissimilar organisms live together, in some cases for mutual benefit. (L)

**T****target**

A statement used to express planned results to be reached within a stated time period.

**tentatively suitable lands**

Tentatively suitable lands are defined as those

- a presently forested currently producing, or capable of producing crops of industrial wood
- b not withdrawn from timber production by Congress, the Secretary of Agriculture, or the Chief of the Forest Service
- c for which technology and knowledge exist and are available to insure timber production without irreversible damage to soils, productivity, or watershed conditions
- d where there is reasonable assurance that adequate restocking can be attained within 5 years after final harvest
- e where adequate information is available to project responses to timber management activities

**terrestrial area**

The outer portion of the riparian corridor, which buffers upland impacts on the stream and riparian corridor. (L)

**territory**

An area within a habitat that is occupied by an individual or group and is defended against other individuals or groups of the same species. As used in this plan, the habitat necessary to support a breeding pair of a particular species. (L)

**thinning**

Cutting timber to improve the quality and growth of the trees that remain. In commercial thinning, merchantable timber, i.e. timber of salable quality, is cut. In precommercial thinning, non-merchantable trees are cut.

**threshold of concern (TOC)**

That level of watershed disturbance which, if exceeded, could create adverse watershed or water quality effects, in spite of application of Best Management Practices and other routine mitigation measures. Activities near the TOC create increased risks for adverse water quality effects and a possible need for additional analysis or extraordinary mitigations, including re-

scheduling of projects. Watershed disturbance is expressed as the common factor "equivalent roaded acres" (ERA's). Watershed disturbance level is expressed as the percent of watershed or subbasin area in equivalent roaded acres (i.e., watershed area divided by watershed disturbance X 100). The TOC is set by watershed specialists and land managers, after considering individual watershed characteristics, including vulnerability to disturbance and potentially affected in-stream and downstream beneficial uses of water. (Reference Chapter 20, R-5 FSH 2509.2.2)

### **threatened species**

Any species which is likely to become an endangered species within the foreseeable future and which has been designated in the Federal Register as a threatened species.

### **threshold level**

The minimum concentration or amount of a given substance or condition necessary to produce a measurable physiological or psychological effect. (L)

### **tiering**

Refers to the practice of covering general matters in broader environmental impact statements which are subsequently incorporated by reference into narrower environmental impact statements or environmental analyses, allowing them to concentrate solely on the issues relevant to a specific project.

### **timber harvest schedule**

The quantity of timber planned for sale and harvest, by time period, from the area of land covered by the Forest plan.

### **timber production**

The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs and bolts for industrial or consumer use. Does not include fuelwood.

### **Timber Stand Improvement (TSI)**

The use of noncommercial thinning, cleaning, weeding, and intermediate cuttings to eliminate or suppress less desirable vegetation and improve composition, condition, structure, or growth of a stand.

### **title claim (encumbrance)**

Claim of ownership of National Forest land by others.

### **tolerant**

As applied to a tree species: relatively successful in competing under conditions of low light and/or high root competition. White firs are tolerant. (L)

### **total suspended particulates (TSP)**

A measure (usually in tons) of particles released from activities such as burns or power generation which affect air quality. (L)

### **trade-off**

The impact on an output or cost caused by changing another output or cost.

### **transitional habitat (or range)**

Area that is occupied by and important to big game (deer and antelope) during their migration between summer and winter habitat. (L)

### **transitory range**

Early successional stage vegetation with grass, forbs, and young shrubs that can be utilized by livestock and wildlife until the vegetation matures into later successional stages. Transitory range is transient over both time and location. (L)

### **transportation network**

In U.S. Forest Service usage, the transportation network includes all existing and planned roads, trails, bridges, airfields, and other transport facilities wholly or partly within or adjacent to and serving the planning area. (L)

### **travel routes (primary, secondary)**

Areas of cover commonly used by animals moving from one location to another. Also see corridor.

### **true fir**

Any conifer of the genus *Abies*, characterized by its pyramidal habit of growth. (L)

### **turbidity**

A quantitative measure of water's clarity; the capability of materials suspended in water to scatter light. Measured by photometric instruments in Nephelometric Turbidity Units (NTU's).

Highly turbid water is often called “muddy”, although all manner of suspended particles can contribute to turbidity

### **twenty-five percent fund**

Refer to Forest Reserve Fund

### **type conversion**

The conversion of one type of vegetation cover to another, e.g., forested to nonforested, one tree species to another

## **U**

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### **United States Code (USC)**

Codified body of statutes/laws passed by Congress; includes criminal codes and administrative laws.

### **unavailable land**

Forested land that is capable, but not available for timber harvest because it has been withdrawn or identified to be withdrawn from timber utilization. (L)

### **understory**

Low-growing vegetation (herbaceous, brush, or trees) growing under a stand of trees or larger vegetation. Also, that portion of trees in a forest stand below the overstory.

### **uneven-aged management**

Management of forest stands which results in trees of several or many ages growing together. Cutting methods producing uneven-aged stands are single-tree and group selection.

### **unplanned ignition**

A fire started at random by either natural or human causes, or a deliberate incendiary fire.

### **unsuitable lands**

Refers to land which is not suited for timber production according to the following criteria defined in NFMA Regulations, 36 CFR 219.14

- a is not at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for non-forest use

- b there is not reasonable assurance that such lands can be adequately restocked within 5 years after final harvest

- c technology is not available to insure timber production from the land without irreversible resource damage to soils productivity or watersheds

- d land has been withdrawn from timber production by Congress, the Secretary of Agriculture, or the Chief of the Forest Service

### **use water**

The surface water yielded from National Forest lands during the use season March 15 - November 15, per year (or decade) Also referred to as usewater. (L)

### **utilization**

Pertaining to livestock grazing, the amount of forage consumed by livestock. Generally expressed as a percent of forage consumed by weight.

### **utilization standards**

The minimum size of tree that may be cut as sawtimber or roundwood.

## **V**

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### **vacated**

Used when discussing Spotted Owl Habitat Areas (SOHA) Vacate means to cease to manage an area of land formerly designated as a SOHA for the primary purpose of providing habitat for spotted owls.

### **value, market**

The unit price of an output normally exchanged in a market after at least one stage of production, expressed in terms of what people are willing to pay as evidenced by market transactions (L)

### **value, nonmarket**

The unit price of a nonmarket output not normally exchanged in a market at any stage before consumption, and thus must be imputed from other economic information (L)

**variety class**

A classification system with three visual landscape categories.

- 1 Distinctive (*Variety Class A*)—Unusual and/or outstanding landscape variety that stands out from the common features in the landscape
- 2 Common (*Variety Class B*)—Prevalent, usual, or widespread landscape variety; also refers to ordinary or undistinguished visual variety
- 3 Minimal (*Variety Class C*)—Little or no visual variety in the landscape, monotonous or below average compared to the common features in the landscape

**vegetational seral stage**

A stage or recognizable condition of a plant community which occurs during its development from bare ground to climax. (L)

**vegetative management**

Activities designed to manipulate vegetative cover for multiple use purposes. (L)

**vegetative pattern**

A vegetative arrangement of parts, elements, or details that suggests a design or somewhat orderly distribution (L)

**vernal pool**

Small, temporary pond that forms with winter rains and drains (or evaporates) completely by spring or summer. Within vernal pools a unique flora develops, with species and genera that occur nowhere else (L)

**vertical diversity**

The distribution and abundance of plant species and biomass from the ground level up

**viable populations**

Populations of reproductive plants or animals of sufficient numbers and distribution to assure perpetuation of the species

**viewshed**

The landscape seen or potentially seen from all or a logical part of a travel route, use area, or water body

**visual absorption capability (VAC)**

The ability of the landscape to withstand management manipulation without significantly affecting its visual character. Rated as high, moderate, and low

**visual quality index**

A numerical rating of scenic quality that reflects both the condition of the landscape and the acreage of land in each of the six condition levels ranging from Type I which appears to be untouched by human activities to Type VI where changes in the landscape appear to be drastic disturbances and are in glaring contrast to the natural appearance

**visual quality objectives (VQO)**

A set of measurable maximum levels of future alteration of a characteristic landscape. These levels are.

1. *Preservation*—Ecological change only
2. *Retention*—Human activities are not evident to the casual Forest visitor.
3. *Partial Retention*—Human activity may be evident, but must remain subordinate to the characteristic landscape
4. *Modification*—Human activity may dominate the characteristic landscape, but must, at the same time, follow naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground
5. *Maximum Modification*—Human activity may dominate the characteristic landscape but should appear as a natural occurrence when viewed as background

**visual resource**

The composition of basic terrain, geologic features, water features, vegetative patterns, and land that typifies a land unit and influences the visual appeal the unit may have for visitors (L)

**visual sensitivity levels**

Sensitivity levels are based on the relative levels of use and public concern of travel routes, use areas, and water bodies from which the landscape can be seen (L)

**volatilization**

The passing off of organic fuel materials in the form of vapor. (L)

**volcanic hazard**

The potential for unsafe conditions or danger due to volcanic activity. (L)

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**W**

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**warm water fishery**

Stream and lake waters which support fish with a maximum summer water temperature tolerance of about 80 degrees Fahrenheit. Bluegills, perch, and largemouth bass are examples.

**water influence zone**

Areas oriented to outdoor water recreation

**water rights**

The legal right to use water.

**water yield increase**

The additional amount of water yielded by a watershed due to an increase in precipitation, a change in snowmelt schedule, and/or a decrease in evapotranspiration (L)

**watershed**

The entire area that contributes water to a drainage system or stream.

**watershed conditions**

Good Condition - A watershed where the resources are in balance: self-sustaining. Poor Condition - A watershed where the resources are out of equilibrium; it is deteriorating or has deteriorated (L)

**watershed order (first, second, third, fourth, or fifth)**

Location of a watershed relative to its tributaries, corresponding to stream order. See "stream order" for categories. (L)

**water yield**

The total amount of water coming from an area of land, commonly a watershed, over a given period of time

**wetlands**

An area at least periodically wet or flooded, where water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface, e.g., bogs and marshes.

**wild and scenic river**

Under the 1968 Wild and Scenic Rivers Act, a river set aside to preserve its natural environment and water quality

**wild river area**

Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, within watershed or shoreline essentially primitive and waters unpolluted (L)

**wilderness**

Briefly, under the Wilderness Act of 1964, wilderness:

- is undeveloped Federal land without permanent improvements or human habitation; is protected and managed so as to preserve its natural conditions,
- has outstanding opportunities for solitude or primitive recreation,
- has at least 5,000 acres or is of sufficient size to make practical its preservation in natural condition; and may contain features of scientific, educational, scenic, or historical value, as well as ecologic and geologic interest.

**wildfire**

An unplanned fire requiring suppression action.

**Wildlife and Fish Habitat Relationships (WHR, FHR)**

A system for organizing information about wildlife and fish species, their habitats, and relationships between them which is used in land and resource management planning to set standards and guidelines, evaluate species and habitat diversity, identify special habitat needs, etc. (L)

**wildlife and fish user day (WFUD)**

Twelve hours of recreation use oriented to wildlife and fish

**wildlife cover**

Screening, usually vegetation, used by animals for protection. Types of wildlife cover are (1) escape cover, (2) travel cover, (3) thermal cover, and (4) hiding cover (L)

**wildlife habitat diversity**

The distribution and abundance of different plant communities and age classes of these communities within a specific area (L)

**withdrawal**

Withholding an area of Federal land from settlement, sale, location, or entry under some or all of the general land laws (including the mining laws) to reserve the area for the purpose of limiting activities under these laws in order to maintain other public values

in the area, or reserving the area for a particular public purpose or program

**X**

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**xeric**

Habitats characterized by dry conditions rather than mesic (moderate) or hydric (wet) conditions (L)

**Y**

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**yield table**

A tabular statement of timber volumes expected to be produced under a specified set of conditions



# Chapter 9 - Index

This index gives page numbers for major topics covered in this EIS. Words in capital letters are acronyms, chapters, or the 26 major resources that constitute chapter subsections.

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Forest Service booth at the Lassen County Children's Fair

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# CHAPTER 10- PUBLIC COMMENTS

Chapter 10 is in a separate **book** accompanying this FEIS

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