Vegetation (Nov 1988). The Forest will also comply with state and local regulations and guidelines directed at preventing and controlling air pollution.

FIRE MANAGEMENT

The fire management program supports accomplishment of many of the land and resource objectives. A high level of cost-effective fire protection will be employed to protect resource values and investments. An appropriate suppression response of confine, contain, or control will be made on all wildfires commensurate with the objectives and standards and guidelines identified for each management area. Wildfire suppression, use of fire and fuel treatments will require coordination with resource managers in order for all programs to be successfully accomplished. Within the scope of the Forest Plan, a fire management plan will be developed to provide additional program detail and direction.

The National Fire Management Analysis System (NFMAS) will be used to monitor the protection programs that were developed on the basis of the fire-related needs of planned land and resource management objectives. The system will provide a consistent method for evaluating and comparing the effectiveness and efficiency of the fire management program. Efficiency will be measured using an economic criterion based on the total cost of the fire program, plus the net change in the value of planned resource outputs on the protection areas as a result of wildfire (cost and net value change).

Fire will be allowed to more fully play its natural role in the ecology of the Forest. Fire management in wilderness will be directed by the appropriate wilderness activity plans (includes fire management), which have been incorporated into the Forest Plan by reference. Natural fire occurring in wilderness will be treated as a prescribed fire until declared a wildfire. All human-caused fires occurring in wilderness require an appropriate suppression response.

Prescribed fire will be used as a management tool to reduce fire hazards created by management activities and naturally occurring fuels, to prepare sites for reforestation and to maintain and improve other resources such as range and wildlife. Prescribed burning will be the principal program and technique used for winter range habitat maintenance, for forage enhancement and to assist in keeping big game animals on the Forest during the winter.

FOREST-WIDE STANDARDS AND GUIDELINES AND MANAGEMENT AREAS

Introduction

The Forest-wide Standards and Guidelines and management areas have been developed according to Regional direction. Each document has been prepared for the purposes of:

1. Identifying direction for activities on the Umatilla National Forest.
2. Identifying management actions to resolve the issues, concerns, and opportunities (ICO's).

Forest-wide Standards and Guidelines are applicable to all areas of the Forest unless specifically stated in the management areas. Forest-wide Standards and Guidelines include management requirements (MR's) and other important direction. The management areas are designed to apply to specifically identified land areas. Both Forest-wide Standards and Guidelines and management areas contain goal statements reflecting the expected results for a Forest resource, activity, or land area. Each provides direction emphasis from the USDA Forest Service manuals, handbooks, and the Regional Guide. Each responds to Forest ICOs, appropriate laws including applicable state and local laws, regulations, existing direction, land capabilities, and professional judgment.

FOREST-WIDE STANDARDS AND GUIDELINES

RECREATION

Goal

MANAGE FOR A BROAD SPECTRUM OF RECREATION OPPORTUNITIES AND EXPERIENCES ON THE FOREST.

General

1. Use the Recreation Opportunity Spectrum (ROS) to inventory the array of recreation opportunities on the Forest and to guide management of the physical, social, and managerial settings.
2. Encourage public participation in recreation management and in the decisionmaking process for projects, programs, or policies affecting recreation opportunities.
3. In all management activities, incorporate recreation considerations to enhance the quality of opportunities and positively affect use.
4. Provide Forest recreationists with freedom of choice in selecting sites, areas, routes, and activities to meet their recreation needs.
5. Emphasize "leave no trace' techniques in all portions of the Forest to reduce management costs and minimize resource impacts.
6. Increase revenues from recreation use where cost-effective. Fees should be competitive, based on market values and the principle that those who benefit directly pay for the activity or facility. Where possible, receipts should be used to benefit the area where the fees were collected.
7. Risk management will include reasonable efforts to provide inspections of lands and facilities, warnings on the safe use of areas/facilities and inherent dangers, management of medical emergencies, training and supervision of personnel, accident and injury reporting, documentation, and sharing of information.
8. Develop a Forest Recreation Opportunity Guide (ROG) containing the kinds and locations of the Forest recreational opportunities. Highlight a wide variety of opportunities (locations and activities) to disperse use; e g., roadless, old growth, wildlife areas, historic sites, unique ecological areas, scenic routes, facilities for the disabled, motorized, rivers, streams, and other special places. Include basic management policies and regulations that govern the area. Update as needed to keep information current.
9. Maintain and update the Recreation Information Management (RIM) System to provide data for recreation planning and management per manual and handbook direction.
10. Maintain recreation as an important component of access management. Acquire the access needed to provide Forest recreation opportunities, in compliance with laws and regulations. Retain or acquire public access to all areas of the Forest utilizing easement, prescriptive rights, land acquisition, and land exchange procedures.
11. Priority will be placed on preventing conflicts among users by good communications and providing information to affected people. Indirect management actions (i.e., design, education, information, etc.) will be preferred over direct actions (i.e., restrictions, enforcement, etc.). Generally, recreation conflicts will be resolved in order of priority: (1) Public safety, (2) wise use of resources, (3) retention of or increased wide spectrum of opportunities, (4) prevention or filling of recreation opportunity voids, and (5) relation to the surrounding environment.

12. Make the first impression of the Forest a good one. Put priority on 'curb appeal' at Forest entrances, administrative sites, major Forest roads, recreation developments and other high use places.
13. A positive approach should be used when stating rules and regulations (signs, brochures, etc.). Regulation of outdoor recreation should be minimized; ensure that those adopted are effective, useful, and justified. Regulations should contribute to enjoyable experiences in the long run, rather than be for the convenience of administrators.

Customers

1. Customer satisfaction will receive attention equal to that given to good land stewardship.
2. Emphasize customer service by:
    a. developing knowledge and understanding of customer needs, wants, and preferences. Monitor changes in customer preferences to respond with appropriate services;
    b. developing, implementing, and administering programs and services that provide a variety of ways to satisfy customer needs and wants;
    c. increasing Forest employee awareness and responsiveness to needs and wants of customers; and
    d. strengthening outreach programs about Forest information and recreation opportunities to underserved communities, minorities, and publics.

Recreation Service: Partnerships

1. Seek new partnerships with outdoor recreation user groups and other recreation providers (for-profit, non-profit entities and public agencies) and strengthen existing ones to enhance recreation resources, services, and facilities. Explore expansion of partnerships with aging, handicapped, minority, youth organizations, and CTUIR.
2. Cooperate with the private sector to increase recreation opportunities adjacent to resorts and recreational facilities. Public service concessionaires (outfitters, ski areas, campground operators, etc.) will be encouraged to be partners with the Forest Service in developing and providing recreation opportunities. Managers will recognize the necessity of developing arid maintaining partnerships in the public interest.
3. Utilize all types of methods to improve partnerships. Leverage available Forest Service dollars by attracting outside funding and support from potential partners whenever possible.
4. Develop and utilize a communications network with recreation providers to share recreation information within the Forest Service and with partners.
5. Where Forest Service Manual and 'Umatilla National Forest Outfitter-Guide Application Evaluation Procedure' criteria are met, outfitter and guide operations may be authorized and permitted.
6. Priority will be given to facilities and operations providing services beneficial to the interpretation of natural resources and national forest management.

Dispersed Recreation

1. Provide for a spectrum of recreational activities such as hunting, fishing, gathering forest products, viewing scenery, camping, hiking, floating, and so forth.

2. Provide a range of physical (remoteness, size of area, evidence of humans), social (encounters), and managerial (restrictions, information services) settings for recreation.

3. a. Inventory, evaluate, and manage dispersed occupancy sites and other special places. Project planning will provide for the protection of established occupancy spots (especially hunter camps) and other special places. Sites will be rendered unusable only when not in public demand or a higher priority use for other resources is timely, clearly needed, and where other sites to satisfy the recreation need are made available.

   b. Manage the occupancy sites and adjacent area to at least partial retention visual quality level.

4. a. Incorporate an integrated ecosystems approach, the special appeal of the Blue Mountains, Scenic Byways and Corridors Management (roads, trails, and rivers) into Forest recreation planning and management. Coordinate with adjacent landowners to achieve a continuity of management along corridors and areas.

   b. Identify the potential of any proposed activity to change Recreation Opportunity Spectrum (ROS) classes in all project environmental analyses.

5. Manage public use as necessary to provide safety, sanitation, and appropriate resource setting, while minimizing regimentation. When necessary to place restrictions on use, reasons should be explained and displayed in offices, literature, and at the point of restriction.

6. Provide specialized or modernize dispersed facilities, or site modification needed to maintain or enhance the variety of dispersed recreation opportunities, prevent pollution from human waste, provide safety (including fire), or reduce undesired resource effects.

7. Encourage people not requiring or desiring a wilderness setting to use nonwilderness National Forest System lands for their recreation needs.

8. Location and design standards for, and construction of, new or reconstructed roads and trails will accommodate user developed occupancy spots at locations and quantities appropriate to the planned ROS experience level.

9. Operate and maintain the Forest road system to provide dispersed recreation opportunities in concert with management area emphasis and direction.

10. Limit motorized vehicles to roads, trails, and areas which are designated for use in the Umatilla National Forest Motorized Access and Travel Management Plan. Temporary exceptions are authorized for those conducting official duties including firefighting, organized rescues, duties by special use permit or contract, and others listed in the Forest Motorized Access and Management Plan or having the district ranger's authorization.

Recreation Sites

1. Developed facilities will be administered and maintained to provide visitor safely and sanitation, protect facility and site resources, and provide for visitor recreation needs and convenience.

2. Developed facilities will be kept in a safe and sanitary condition or closed or removed. Minimum standard is Condition Class #2 (RIM Facility and Condition Standards, FSH 2309.11, Section 192-21) (USDA Forest Service [n.d.]a).

3. Plan, budget, and implement a systematic renovation and replacement of existing recreation facilities. Where practical, older facilities should be redesigned and adapted to allow access by people with physical disabilities. Provide specialized facilities needed to meet developed recreation demand.

4. The minimum level of management for any developed site will be Development Scale 2 (FSM 2310).
5. Appropriate recreation facilities will be considered for all lakes, water impoundments, and other water oriented opportunities.
6. New recreation sites and facilities may be constructed in response to identified demand for additional facilities or specific needs for customer satisfaction, or to fill recreation opportunity voids. An environmental analysis will be used to confirm the need for new sites and facilities.
7. Access roads to developed sites should be operated and managed to permit passenger car traffic.

Interpretation

Provide interpretation, information, and environmental education with focus on prehistory, history, ecological principals, and multiple use to enhance recreation experiences, promote understanding of people living in harmony with nature, increase understanding of Forest Service management, and help visitors avoid practices that may result in undesirable resource effects.

INTERPRETIVE GUIDELINES

ROS Class	Appropriate Interpretive Methods
P	Interpretation through self-discovery, possibly augmented by books or guides with no site facilities.
SPNM	Interpretation through self-discovery, augmented by books, guides, and maps, but no site facilities.
SPM	Interpretation through simple onsite facilities such as signs or numbered posts, mounted on native-like rustic materials, or printed or other portable media.
RM	Interpretation through very limited onsite facilities, maps, brochures, guides, and other portable media.
RN	Interpretation through signs and other structures such as overlooks, decks, boardwalks, etc. Native-like materials with some refinement in design. Printed and other portable media as well as limited interpretation from Forest Staff.
R	Interpretation through complex facilities and structures using quite refined materials, a variety of interpretive media, some staff contacts in contact stations, guided walks, and amphitheatre programs.

Visual Resource Management

1. The Forest will follow direction given in the Forest Service Visual Management System. The minimum visual quality objective is maximum modification (MR).
2. Design roads, trails, and vegetative manipulation to be consistent with adapted visual quality objectives indicated by the management prescription.
3. Created openings will be shaped and blended, to the extent practicable, with the natural terrain (MR).
4. Areas not meeting their assigned visual quality objectives will be rehabilitated.

Off-highway Vehicle Use

1. Ensure that off-highway vehicle (OHV) use is managed to protect other resources, promote safety of users, and minimize conflicts with other uses (Executive Order EO 11644, as amended by EO 11989). Use OHV prohibitions only where needed to minimize disturbance of wildlife, provide a range of recreation opportunities, or to protect the soil and water resources.
2. Continue and expand programs and agreements with Oregon and Washington for snow, OHV, and ATV trails and facilities.

3. Encourage OHV use to remain on designated routes by using route location, design, and public information programs. Routes should be planned to integrate on-road and off-road travel and disperse use across broad areas
4. If necessary to eliminate OHV use, insofar as possible, provide a substitute area for the OHV opportunity eliminated.
5. In riparian areas, trails for motorized use will be managed to protect water quality and fish and wildlife habitat. Existing motorized use trails should be relocated outside the floodplain or 'hardened' where practical. OHV use will be limited to designated routes.
6. Emphasize permitted activities rather than prohibited ones in signing and information to minimize recreation use conflicts.
7. Review the Forest motorized access and travel management plans annually and revise as necessary (usually biennially).
8. Public information describing the areas and routes where motorized use is permitted, prohibited, or restricted; explaining the conditions of use: and providing reasons for such closures will be provided on a travel map. The map will be reviewed annually and revised as necessary (usually biennially).

Trails

1. Provide and manage the Forest trail system as a recreation resource that complements land management objectives.
2. Provide and manage a trail system to offer the full range of opportunities and difficulty levels: Primitive, mechanized, all-season, barrier-free, short and extended, interpretive, historical, and more. Provide for trail difficulty levels appropriate to recreation opportunity objectives.
3. Annually update the Forest Trail Management Plan to identify the current mix of development, management, and maintenance.
4. Construct, reconstruct, relocate, maintain, and manage trails and associated trailheads to standards appropriate for serving the intended type and level of use and to provide opportunities for satisfying recreation experiences, while minimally affecting soil, water, and vegetative resources, and requiring minimal maintenance.
5. Priority for new trails or trail relocation will be to provide route loops, fill opportunity voids, or resolve user or resource conflicts.
6. Trails located in resource development areas must be included in the implementation strategy analysis and project environmental analysis. Any decision to abandon the trail must be clearly documented. To the extent possible, trails should be protected during project activities. If not practical to preserve an existing trail, the trail should be relocated temporarily or permanently.
7. Trail maintenance activities will be determined by trail type, difficulty level, the appropriate trail guide (FSH 2309.18), and the amount and type of use.
8. Coordinate access road design and maintenance levels with desired objectives for the served trail system.

TRAIL MANAGEMENT GUIDELINES

	Difficulty Level		
General Guidelines	Easy	More Difficult	Most Difficult
Overall Objectives	Make trail convenient, and safe, and protect resources.		

	Difficulty Level		
General Guidelines	Easy	More Difficult	Most Difficult
Safety Considerations	Correct hazards so that inexperienced customers may use trail without danger	Notify customer of unusual or unexpected hazards. Correct hazards which are not easily dealt with by an experienced person.	Notify customer of unusual or unexpected hazards. Correct situation if notification is impractical.
Maintenance Frequency	Annual or more frequent as needed	Every two years, or as needed to protect resource.	Every two to five years or as needed to protect resource and retain investment.
Alignment	Uniform and consistent horizontal and vertical alignment	Alignment usually follows contour of the land, but is designed to prevent soil erosion.	Allow trailbed to meander so long as gullying, excessive soil movement or water siltation does not occur.
Tread Maintenance	Provide even, safe surface.	Provide safe surface and prevent resource damage.	Prevent resource damage.
Drainage Maintenance	Prevent erosion and soft trailbed	Prevent soil movement.	Prevent water siltation.
TRAILWAY MAINTENANCE			
Logging Out	Provide clear passage	Keep traffic on trailbed.	Prevent resource damage.
Brush Cutting	Provide convenient, clear passage.	Retain identity of trail.	Prevent eye injury.
Structures	Maintain for appearance and safety.	Maintain to protect investment and for safety.	Maintain for safety; remove if unsafe.
Signs	Maintain attractive appearance and current design. Provide frequent reassurance.	Maintain to be functional and natural appearing. Provide direction necessary for novice map reader.	Maintain to be functional with a weathered look. Provide minimal direction and reassurance.

CULTURAL RESOURCES

Goal

PROVIDE FOR THE PROTECTION AND PRESERVATION OF CULTURAL RESOURCE VALUES THROUGH A PROGRAM WHICH INTEGRATES INVENTORY, EVALUATION, PROTECTION, AND ENHANCEMENT.

Inventory

1. A professionally supervised Cultural Resource Inventory Program will be conducted in compliance with applicable Federal historic preservation legislation and regulation (National Historic Preservation Act as amended (MR)).

    a. All projects including surface-disturbing projects will be managed to comply with 36 CFR 800 and FSM 2360. All requirements for consultation with the respective State Historic Preservation Offices (SHPOs) before, during, and after a project will be followed. The area of a project's potential environmental impact will be surveyed for cultural resources and areas of Native American religious use. Native American groups will be consulted as appropriate.

b. Parts of the forest without anticipated projects but with likelihood that cultural resources exist will be inventoried in conjunction with annual update training for cultural resource technicians. Highest priority areas for survey include those that. (a) Are relatively unknown due to a lack of surveys in or near the area; and/or (b) are important to understanding the historic or prehistoric occupations of the forest; and/or (c) are expected to have high site densities.

2. Update the Forest Cultural Resources Management Overview as needed. At a minimum, the Overview will be reviewed annually.
3. The Forest Cultural Resource Inventory Plan will be updated, as needed, to reflect advances or changes in the data base, management objectives, legislation, and Regional or Forest research designs. Review of the inventory plan will be accomplished annually.
4. Results of project level cultural resource inventories, or the intent to carry out such inventories, will be documented through environmental analysis for the project (MR).

Evaluation

1. Identified cultural resource properties will be evaluated by a professional cultural resources specialist using the significance criteria of the National Register of Historic Places (NRHP) (36 CFR 60.4) and the guidelines provided by the Lithic-dominated Sites Programmatic Memorandum of Agreement (USDA Forest Service 1983b) and other standard National and Regional criteria (MR). Sites which will be affected during a project will be evaluated before the project proceeds. A schedule will be developed to evaluate all other sites.
    a. In consultation with the SHPOs from Washington and Oregon, identified sites will be evaluated for eligibility for the NRHP. Sites considered eligible will be assigned a priority for nomination to the NRHP.
    b. The NRHP criteria are contained in 36 CFR 60.4. Nominations will be coordinated with the planning activities of the respective SHPOs. Priorities for nomination will be based on a consideration of the SHPO plans and the overall cultural resources program.

Protection

1. The Forest will develop management plans for the various classes of prehistoric and historic resource properties found on the Forest (MR)
    a. All properties identified as eligible for the NRHP will be evaluated in terms of present land allocation for any possible conflict, and site-specific management plans will be developed in consultation with the respective SHPOs (MR).
    b. Management plans shall be prepared for historical properties eligible for the NRHP unless previous data collection has fully documented the characteristics that qualify the site for the NRHP and those under Granger-Thye permit (FSM 5/83 R-6 SUPP 61-2361.21) (MR).
2. Until proper evaluation occurs, all known cultural resource properties will be protected as though they were eligible for the NRHP (MR). Measures for the protection of known cultural resources from vandalism, natural destruction, and project impacts will include patrols and regular site visitation, data recovery plans, site treatment plans, physical protection, signing, integrated resource management programs, public education, area and site closures and, where necessary, electronic site monitoring.
3. Sites listed in or nominated to the NRHP will be inspected periodically, unless previous data recovery has fully documented the characteristics that qualify the site for the NRHP.

All other sites, except those which have been formally determined ineligible for the NRHP, will be inspected on an as needed or opportunity basis. Sites susceptible to rapid deterioration and/or human disturbance will be inspected most frequently.

4. Confidentiality of cultural resource site locations will be maintained (36 CFR 296.18) (MR).
5. To avoid damage to cultural resources, coordination requirements with fire management suppression activities will also be used during fire suppression and rehabilitation activities

Enhancement

1. Cultural resources interpretive opportunities onsite will be pursued as opportunities arise. Other interpretive opportunities which will be pursued as high priority are:
    a. cultural resources displays in the Supervisor's Office and in district offices;
    b. trails and interpretive signs at less frequently visited sites;
    c. interpretive signs along viewsheds and special interest areas;
    d. preparation of popular literature, brochures, and films regarding the Forest cultural resources;
    e. presentation of popular talks regarding the Forest's cultural resources; and
    f. professional cultural resource interpretation for presentation at meetings and/or dissemination through professional publications.
2. The Forest shall foster active programs of research through permits to, and cooperative agreements with, qualified institutions, organizations, and individuals, and by identifying opportunities for research (MR).
3. Management of cultural resources will be coordinated with other agencies including the respective State Historic Preservation Offices and the Advisory Council on Historic Preservation. Management of American Indian traditional religious sites will be coordinated with the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Confederated Tribes of the Warm Springs Indian Reservation of Oregon.

WILDLIFE HABITAT

Goal

MAINTAIN OR DEVELOP EFFECTIVE LEVELS OF WELL-DISTRIBUTED WILDLIFE HABITAT THROUGHOUT THE FOREST TO MAINTAIN VIABLE POPULATIONS OF ALL EXISTING NATIVE AND DESIRED NON-NATIVE VERTEBRATE SPECIES.

Old Growth

1. Maintain (or develop where presently unavailable) old growth tree habitat distributed throughout the Forest in units within suitable and/or capable habitat for the pileated woodpecker, pine marten, and northern three-toed woodpecker as the Forest indicator species as follows (MR):
    a. Pileated woodpecker- maintain coniferous forest habitat units 300 contiguous acres in size in seral stages V or VI as reproduction areas (may be 50-acre minimum sized units no greater than one-quarter mile apart to total 300 acres) distributed throughout the Forest so that generally each 12,000 to 13,000 acre area of capable habitat contains at least one suitable habitat area. Capable

habitat units may be utilized where no suitable habitat is available. An additional 300 acres of feeding habitat in close proximity to habitat units will be provided.

b. Pine marten-maintain coniferous forest habitat units of 160 contiguous acres in size in seral stages V or VI with a crown closure of at least 50 percent distributed throughout the forest in suitable habitats so that there is at least one habitat area every 4,000 to 5,000 acres of capable habitat.

c. Northern three-toed woodpecker-maintain coniferous forest habitat units 75 acres in size in seral stages V or VI distributed throughout the Forest suitable habitats so that there is a least one habitat area for every 2,000 to 2,500 acres of capable habitat.

2. Maintain sufficient amounts of old growth forest stands to provide habitat for all wildlife species that may be dependent on, or make heavy use of, this habitat type including. Northern goshawk, great gray owl, Cooper's and sharp-shinned hawks, Townsends warbler, Hammond's flycatcher, Vaux's swift, white-headed woodpecker, brown creeper, and others.

3. A thorough, field verifiable inventory of existing old growth stands will be conducted and tracked through time during the plan implementation.

4. Boundaries or locations of old growth units may be adjusted or moved when the following conditions are met:

   a. Proposals are based or documented on the general examinations,

   b. unit size criteria, distribution of units and number of acres will be maintained,

   c. old growth characteristics or quality will be maintained, and

   d. changes will be made through the amendment process (see Forest Plan Chapter 5).

Dead and Down Tree Habitat

1. Within all designated old growth forest habitat units, maintain no less than the following minimum average number of hard snags (MR):

   a. Pileated woodpecker-two hard snags per acre, at least 12 inches dbh, within the 300-acre reproductive area (45 of these snags will be at least 20 inches dbh). Maintain an average of two hard snags per acre, at least 10 inches dbh, on an additional 300 acres in close proximity for feeding habitat.

   b. Pine marten-maintain an average of two hard snags per acre, at least 12 inches dbh (24 of these will be at least 20 inches dbh). Also maintain an average of six down logs per acre, at least 12 inches dbh and 20 feet long.

   c. Northern three-toed woodpecker-maintain an average of two hard snags per acre, at least 10 inches dbh within the 75-acre reproductive area (45 of these snags will be at least 12 inches dbh).

2. Unless specified in management area direction, as a minimum, provide the required numbers and sizes of hard snags throughout the Forest to maintain primary cavity excavators at 40 percent of their potential population throughout their present range. Use procedures outlined in “Wildlife Habitats in Managed Forests-The Blue Mountains of Oregon and Washington” (Thomas and others 1979) to determine the number and sizes to be provided. Snags will be distributed so that an appropriate number of dead and down tree habitats (preferably in ‘clumps’ of live and dead trees) is left for each logical harvest size unit (or no larger than 40-acre units). Provisions will also be made for future or replacement dead and down tree habitat.

3. In addition, all standing, soft snags will be left during timber harvest operations, unless they are determined to be safely hazards.

Nongame Wildlife Habitat

1. Nest and roost sites used by raptors will be protected from all management activities and human disturbance around the nest site until nesting and fledging are completed. Levels of protection will vary by the requirements of the raptor species involved, and will be evaluated by the District wildlife biologist and protection measures implemented on the ground. The nest and associated roost tree(s) will also be marked as "Wildlife trees" and protected from all management activities.
2. Large dead and down woody materials at least 16 feet or more in length and at least 12 inches in diameter at the small end will be left at the rate of an average of two down logs per acre. The desired condition is to have uncharred logs; as many uncharred logs as practical should be retained per project area.
3. Introduction of wildlife species will be carefully coordinated with the various state wildlife agencies on a case-by-case basis through the NEPA process. The reintroduction of native species such as peregrine falcon, Rocky Mountain bighorn sheep, and beaver will be encouraged.
4. Cliffs, talus, and caves are recognized as relatively unique habitats of the Forest and all potentially disturbing or altering management activities will be carefully evaluated on the ground during the planning process to insure their protection and proper management.
5. Seeps, springs, bogs, wallows, and other wet areas, generally under 10 acres, are inherently unique and will be evaluated on a project level basis for their value as wildlife habitat and to provide appropriate levels of protection.

Riparian Areas

Riparian areas will be managed to retain dead and down tree habitat to maintain 100 percent of the potential population level for cavity users and will emphasize retention of satisfactory cover.

Big Game

1. Big game habitat effectiveness models will be used in project planning to provide the quality, quantity, and distribution of cover and forage needed to reach management objectives for each planning area. Forage, cover, and road densities are factors that will be considered and monitored on each subwatershed and/or management area identified within the Forest.
2. Forest stands managed for satisfactory cover will be 40 feet or more in height with a canopy closure of at least 70 percent and generally no less than 600 feet wide. The desired cover condition will generally appear as a multi-layered stand capable of obscuring 90 percent of a standing elk at a distance of 200 feet or less. Stands managed for marginal cover will be no less than 10 feet in height with a canopy closure of at least 40 percent and also capable of hiding 90 percent of a standing elk at a distance of 200 feet.
3. Forest stands designed and managed to maintain or enhance elk use should provide cover of 600 feet to 1,800 feet in width. Exceptions may be made by wildlife biologists based upon an on-the-ground assessment of the value of the stand(s) for elk.
4. In evaluating habitat effectiveness for big game (elk and deer) species, roads considered as 'open' to vehicular access are those that receive, on average, more than four trips per month. Timing of use will be measured on a monthly basis.

5. Provide available forage to meet the requirements of desired populations of Rocky Mountain elk, mule and white-tailed deer, and bighorn sheep.
6. For big game evaluations, timber harvest units will be considered as forage areas until the new stands qualify as marginal cover.
7. Key big game use areas and habitats such as migrational corridors, calving/fawning areas, and wallows will be considered in the design and implementation of projects to retain or protect their important characteristics.
8. District access management plans will include provisions that will assist the states in meeting management objectives for bull/buck escapement.

Big Game Winter Range

1. Where available, maintain no less than 10 percent of each identified winter range as satisfactory cover.
2. On designated big game winter ranges, Forest management activities will be restricted during the big game winter use period of December 1 through March 30 or April 15 (as specified for individual winter ranges) to meet big game management objectives

Wildlife Programs

1. Emphasize partnerships in managing and enhancing the Forest wildlife resources. Utilize all types of available opportunities and methods in strengthening existing and developing new partnerships to attract funding and support for wildlife programs and resources.
2. Strengthen the Recreation Outreach Program related to fish and wildlife resources.
3. Survey user and other publics' (customers') concerns and preferences related to wildlife management on the Forest and develop programs and services or adjust management to provide a variety of ways to meet their needs and wants.

RIPARIAN/FISH HABITAT

Goal

PROVIDE AND MAINTAIN A DIVERSE, WELL-DISTRIBUTED PATTERN OF FISH HABITATS TO ASSIST IN DOUBLING ANADROMOUS RUNS IN THE COLUMBIA RIVER BASIN (BY THE YEAR 2000) IN COOPERATION WITH STATES AND OTHER AGENCIES. THE GOAL APPLIES TO ALL AREAS DOMINATED BY RIPARIAN VEGETATION INCLUDING AREAS CONTAINING ANADROMOUS AND RESIDENT FISH HABITAT, PERENNIAL AND INTERMITTENT STREAM COURSES, WETLANDS, AND FLOODPLAINS

General

1. Maintain or restore biological, chemical, and physical qualities of Forest fish habitats (PL 92-500, as amended by PL 95-217, the Clean Water Act of 1977) (U.S. Laws, Statutes, etc. 1977) (MR). (See Forest-wide Standards and Guidelines for Protection of Water Quality Under 'Water Resources.')
2. Steelhead and rainbow trout are used as indicator species for anadromous and resident fish. Provide habitat to maintain steelhead and rainbow by meeting Best Management Practices and Clean Water Act standards (MR) and implementing fish habitat enhancement projects.
3. Areas in which fish habitat or water quality are being adversely impacted will be given high priority for treatment to correct the impacting activity or mitigate or rehabilitate the effects of the impact

4. Meet the direction and processes for management of wetlands and floodplains in accordance with EO 11990 and EO 11998 and FSM 2527 (MR).
5. Seeps, springs, bogs, and other wet areas, generally under 10 acres, are inherently unique and will be evaluated on a project level basis for their wildlife and other values and will be given appropriate levels of protection. Where needed, employ mitigation measures to protect unique vegetation, wildlife, and water related characteristics.
6. Exchange of riparian areas will only be undertaken to improve overall national forest riparian management. Acquiring private inholdings within riparian areas is a high priority.

Best Management Practices (BMP's)

Implement Best Management Practices (BMPs) to meet water quality standards (Clean Water Act of 1977, FSM 2500) (ibid.) and protect streams and adjacent areas to maintain aquatic resources. Refer to the water portion of the Forest-wide Standards and Guidelines and FEIS Appendix E for water quality Best Management Practices.

Class IV Streams

1. Management activities will not deteriorate water quality below existing established water quality goals for downstream Class I and II streams; water quality changes in Class IV may involve some temperature and turbidity increases.
2. BMPs for Class IV stream areas will be concerned primarily with preventing soil and debris movement, including slumps, earth slides, etc., from migrating downstream into higher class streams during periods of runoff.
    a. Woody vegetation and ground cover adjacent to stream channels will be managed to provide a continuous supply of inchannel large woody material to the stream system in order to maintain or enhance streambank stability and to filter sediment generated on adjacent slopes.
    b. Felling, skidding, and road construction across the stream should be avoided. When streams cannot be reasonably avoided, activities should be conducted at times when streams are dry and at locations where streambank and stream channel disturbances are minimized. Skid trail crossings of intermittent stream channels will be predesignated.
    c. Roads and trails shall be located, constructed, and maintained so that the streambank and stream channel receive as little disturbance as possible.
    d. Human-caused woody debris, less than 6 inches in diameter and 4 feet or more in length, that gets into the stream channel shall be carefully removed unless otherwise justified by environmental analysis.
    e. Grazing will be conducted under principles of livestock management systems which will protect soil, vegetation, and water quality.
    f. Within riparian areas, ground-disturbing activities will be limited to the degree necessary to maintain and protect water quality and fish habitat.
3. Assess the potential for improving stream and riparian conditions, and where opportunities exist, improve intermittent streams to perennial flows.
4. Manage roads and trails to protect riparian wildlife values, fish habitat, and water quality. Water quality and/or fish habitat problems caused by roads will be corrected.
5. Discourage cutting of dead and down material for fuelwood within riparian area.

Class III Streams

Class III streams are perennial and care must be taken during all seasons to protect downstream values.

The following practices are in addition to those needed for Class IV streams:

1. In order to prevent damage to streambanks and riparian habitat and to keep undesirable levels of slash out of the stream, avoid felling timber across stream channels.
2. Logging equipment shall not operate in the channel proper. All logs shall be fully suspended over the stream or crossed on temporary structures.
3. Within the riparian areas, limit mineral soil exposure by ground-disturbing activities to 10 percent of the project area.
4. For Class III (and I and II) stream reaches on the Forest which exceed desired maximum stream temperatures, as identified in state water quality standards, management activities within the contributing watershed shall not reduce stream surface shade below ecological potential (except at required crossings). Where ecological potential has not been determined for a reach, assumed ecological potential shall be 80 percent stream surface shade.

   For Class I, II, and III stream reaches which do not exceed desired maximum temperatures, management activities within the contributing watershed shall not reduce stream surface shading more than 20 percent below ecological potential in upstream reaches. Where ecological potential has not been determined for a reach, assumed ecological potential shall be 80 percent stream surface shade.
5. Smolt habitat capability will be increased by improved summer and winter rearing habitat associated with greater amounts of inchannel large wood. Trees within one tree height of the stream channel will be managed to-provide for a continuous supply of naturally occurring large woody material for future instream fish and riparian habitat in adjacent and downstream reaches. Upland areas and lands adjacent to Class IV streams may also be managed to provide large wood when these areas are determined to be critical to the provision of inputs of future large wood to downstream fish-bearing reaches. Inchannel large woody material objectives will be established during the environmental analysis process for projects affecting present or future levels of inchannel large woody material.

Permitted construction activities proposed for instream locations are reviewed by state fish and wildlife agencies and approved on a case by case basis dependent on fish species present at the time of the proposed activity. Permitted activities such as instream bridge or Culvert construction will normally be limited to the following timeframe:

River System	Start	Finish
North Fork John Day River	July 15	August 15
Umatilla River (steelhead habitat)	July 1	October 15
Umatilla River (spring Chinook habitat)	July 1	August 15
Meacham Creek	July 1	August 15
Walla Walla River	July 1	November 15
Snake River		
Tucannon River	July 15	August 31
Asotin Cr.	July 15	August 31
Remainder of Snake R. System	July 15	September 30

6. Riparian forage utilization standards and the range goal found in the Range section are the principal management tools used in achieving desired vegetation conditions.

   Intensive range management, including superior grazing systems, will be practiced to protect and improve riparian vegetation and anadromous fish and wildlife habitats. Range management techniques that control livestock distribution and timing of use will be used to meet riparian goals. Periods of extended rest may be utilized in some situations where necessary to allow re-establishment of desired shrub communities. Grazing systems utilizing riparian pastures may be required to maintain water quality and protect riparian vegetation. Improvements should be located to encourage livestock use away from the riparian areas. Riparian corridor fencing should be considered on a very limited basis for special applications.

   Within 8 years of revision of allotment management plans (AMP's), recovery of hardwood and shrub vegetation will be at least 75 percent of the expected achievement based on riparian classification and inventory.

Class I and II Streams

Management activities will not degrade water quality, fish, or aquatic resources below the water quality goals except for temporary change due to permitted activities (FSM 2526). The following practices are in addition to guidelines for Class III and IV streams and BMPs (not necessarily all inclusive):

1. Allow for the passage of both adult and juvenile fish in the design and construction of bridges, dams, and culverts.
2. Human-caused existing, stable, natural woody debris shall be removed (usually by hand) only in cases where fish migration is blocked, water quality is impaired, erosion is occurring as a result of the debris, or access for recreation purposes is hampered. Existing natural woody debris will not be removed in wilderness.
3. Streambanks should have 80 percent or more of their total lineal distance in a stable condition.
4. Increases in water temperature will seldom be allowed in Class I streams. Exceptions (within state standards) must be based on analysis indicating full maintenance or enhancement of existing beneficial uses of the water and be approved through an environmental assessment. Water temperature increases in Class II streams will be limited to the quantitative criteria in state water quality standards.

Fish Programs

1. Emphasize partnerships in managing and enhancing the Forest fish resources. Utilize all types of available opportunities and methods in strengthening existing partnerships and developing new ones to attract funding and support for fish programs and resources.
2. Strengthen the Recreation Outreach Program related to fish and wildlife resources.
3. Survey user and other publics (customers) concerns and preferences related to fish management on the Forest and develop programs and services or adjust management to provide a variety of ways to meet their needs and wants.

RANGE

Goal

MANAGE THE FORAGE RESOURCES FOR AN UPWARD VEGETATIVE TREND IN AREAS IN LESS THAN 'FAIR' CONDITION AND AN UPWARD OR STABLE TREND FOR AREAS IN

'FAIR' OR BETTER CONDITION, WHILE PROVIDING FOR FORAGE PRODUCTIVITY AND MAKING SUITABLE RANGE AVAILABLE FOR LIVESTOCK GRAZING. INCREASE THE LEVEL OF FORAGE PRODUCTION WHERE COST EFFICIENT AND CONSISTENT WITH OTHER RESOURCE GOALS.

General

1. Protect the productivity and make suitable National Forest System lands available for grazing and browsing use in coordination with other resource uses. There is no minimum output requirement (Federal Land Policy and Management Act, Sec. 402, 36 CFR 222.1(a)) (US. Laws, Statutes, etc. 1976) (MR).
2. Suitable livestock range will be allocated by permit consistent with the management objectives for resources established by the Forest Plan.
3. Grazing allotments will be administered through the Forest Service grazing permit system, using inspections, monitoring, and permittee meetings.

Allotment Management Plans

1. Allotment management plans will be developed, revised, or maintained to implement the management direction of the Forest Plan. The planning process will involve grazing permittees, appropriate out-service agencies and interested publics. Cooperative resource management planning (CRMP), will be used for plan development where applicable. Plans will include:
    a. The objectives for managing the vegetation resource, and activities needed (and a time schedule) to meet forage objectives as defined in the Forest Plan;
    b. the grazing system to be used, season of use, class of livestock, and stocking levels;
    c. range improvements needed to achieve allotment objectives, and an economic efficiency analysis;
    d. forage production and utilization rates; and
    e. the coordination requirements to be used in conjunction with other resources.
2. Allotment management plans will include a strategy for managing riparian areas for a mix of resource uses. A measurable desired future riparian condition will be established based on existing and potential vegetative conditions. When the current riparian condition is less than that desired, objectives will include a schedule for improvement. The plans will identify management actions needed to meet riparian objectives within the specific timeframe. Measurable objectives will be set for key parameters such as stream surface shading, streambank stability, and shrub cover as described in 'Managing Riparian Ecosystems (Zones) for Fish and Wildlife in Eastern Oregon and Eastern Washington' (1979). The plans will address the monitoring needed to determine if the desired rate of improvement is occurring.
3. Plans currently not consistent with this direction will be developed or revised on a priority basis under a schedule established by the Forest Supervisor.
4. Identify allotments with riparian areas in unsatisfactory condition (see Glossary). Areas in such condition might have: (1) suitable range with forage in less than fair condition and less than stable trend, or (2) basic resource damage or other resource damage occurring.

Forage Utilization

1. Forage utilization standards will be incorporated in allotment management plans. Allotment management plans may include utilization standards which are lower or occasionally higher than listed in the following tables. Standards higher than those shown will be accepted only when they are designed to meet specific resource objectives and desired future condition for a given management area. The standards include cumulative annual use by big game and livestock.
2. Utilization for grass and grass-like species is based on the percent of plant weight removed. Utilization for shrub species is based on incidence of use, weight, and/or twig length (e.g , utilization is 50 percent if 50 out of 100 leaders are browsed).
3. Satisfactory condition is determined by allotment classification and/or forage condition. Unsatisfactory condition is anything not meeting satisfactory conditions (refer to definitions found in the Glossary).
    a. Allowable use of available forage ON RIPARIAN AREAS (MAXIMUM percent of annual utilization by big game and livestock) is:

RANGE MANAGEMENT STRATEGY

	B (Minimum)	C (Extensive)	D (Intensive)
Grass & Grass-like Species on areas in			
Satisfactory Condition	40%	45%	50%
Unsatisfactory Condition	0-30%	0-35%	0-40%
Shrub Species on areas in			
Satisfactory Condition	30%	40%	50%
Unsatisfactory Condition	0-25%	0-30%	0-35%

    b. Allowable use of available forage ON UPLAND AREAS (MAXIMUM percent of annual utilization by big game and livestock) is:

RANGE MANAGEMENT STRATEGY

	B (Minimum)	C (Extensive)	D (Intensive)
Forested Areas**			
Satisfactory Condition	40%	45%	50%
Unsatisfactory Condition	0-30%	0-35%	0-40%
Grasslands			
Satisfactory Condition	50%	55%	60%
Unsatisfactory Condition	0-30%	0-35%	0-40%
Shrublands			
Satisfactory Condition	40%	45%	50%
Unsatisfactory Condition	0-25%	0-30%	0-35%

** Applies to areas where timber has not yet been cut, or where it was cut at least 30 years ago

    c. Transitory ranges (where timber has been harvested in the last 30 years) contain increased levels of forage from elther reseeding efforts or natural seeding. The general guideline for utilization of transitory forage is:

- Utilization up to 60 percent for domestic livestock in a given area; and
- not to exceed 80 percent for big game and livestock combined.

Improvements

1. The allotment management plan will implement a cost-effective program, consistent with management objectives. Structural improvements such as fences and water developments, and nonstructural improvements such as burning, seeding, and fertilizing may be used to achieve the management goals. Range improvements will be constructed and maintained with consideration for other resource needs (e.g., wildlife, visuals). Other activities such as predator, noxious weed, and unauthorized livestock controls may be necessary.
2. Encroachment of trees on natural grasslands and meadows, recognized primarily for their forage value and habitat they provide, may be controlled.
3. Forage may be enhanced where no conflict with reforestation goals will result. Transitory range will be managed in conjunction with timber management to achieve higher forage production and the desired level of forage utilization. Forage enhancement may be used to reduce other plants' competition with tree growth.

Operating Plans

Annual operating plans will schedule livestock distribution and use patterns to prevent or resolve local resource conflicts; the allotment management plan will be implemented with specific instructions for each year's planned use.

ECOSYSTEMS & DIVERSITY

Goal

PROVIDE FOR DIVERSITY OF PLANT AND ANIMAL COMMUNITIES AND TREE SPECIES CONSISTENT WITH OVERALL MULTIPLE-USE OBJECTIVES FOR THE FOREST. MAINTAIN OR ENHANCE ECOSYSTEM FUNCTIONS TO PROVIDE FOR LONG-TERM INTEGRITY (STABILITY) AND PRODUCTIVITY OF BIOLOGICAL COMMUNITIES.

1. Maintain native and desirable introduced or historic plant and animal species.
2. Provide or develop an ecologically sound distribution and abundance of plant and animal communities and species on the stand, basin, and forest levels.
3. Provide for all seral stages of terrestrial and aquatic plant associations in a distribution and abundance that meets the goal. Early successional stages may be improved through introduced forage species in order to increase production, protect soil resources, and prevent noxious or other undesirable weed invasion.
4. Meet standard and guideline requirements including:
    a. Vertical, horizontal, and species diversity shown in Timber,
    b. old growth/mature tree, dead and down tree, and big game habitats size, characteristics, and spacial locations described in Wildlife or specific management areas:
    c. riparian vegetation and instream condition and characteristics in Riparian/Fish;
    d. vegetative condition shown in Range; and

e. habitat specifications for plants and wildlife identified in Threatened, Endangered, and Sensitive Species and Management Areas A9 and D2.

5. During project planning, site-specific management prescriptions should be developed and evaluated that meet objectives for biological diversity and ecosystem function. Project planning evaluations should consider use of minimum fragmentation approaches or clustered timber harvest design.
6. Reductions in diversity of plant and animal communities and tree species from that expected in a natural forest, or from that similar to the existing diversity in the planning area, may be prescribed to meet overall multiple-use objectives.
7. The introduction of plants will be assessed and controlled to meet management objectives and to prevent any native species (or plant community) from becoming 'endangered or threatened.'
8. Plant community ecology is sensitive to management changes. The communities will be monitored for diversity relative to successional stages and type conversions.
9. Identify, inventory, and provide for local, traditional Native American food and cultural plants.

TIMBER

Goal

PROVIDE FOR PRODUCTION OF WOOD FIBER CONSISTENT WITH VARIOUS RESOURCE OBJECTIVES, ENVIRONMENTAL CONSTRAINTS, AND CONSIDERING COST EFFICIENCY.

Commercial Forest Lands

Regulated timber harvest will be allowed only on lands classified as tentatively suitable (see Umatilla National Forest Stage 1 Analysis) (USDA Forest Service 1983a) (MR). Also, see Resource Map of Land Tentatively Suitable for Timber Production.

All acres designated as tentatively suitable forest land are capable of being adequately restocked within 5 years. Lands on which regulated timber harvest will be applied will be determined through the Forest planning process and designated as suitable.

Nondeclining Even Flow

1. For base sale schedules, the planned sale for any decade will be equal to or greater than the planned sale and harvest for the preceding decade of the planning period, provided that the planned sale is not greater than the long-term sustained-yield capacity consistent with the management objectives of the alternative (36 CFR 219.1 2(d)(1). Departures will be evaluated when any of the following conditions are indicated:
    a. None of the alternatives considered provides a sale schedule that achieves the assigned goals of the RPA program as provided in 219 4(b);
    b. high mortality losses from any cause can be significantly reduced or prevented, or forest age-class distribution can be improved, thereby facilitating future sustained-yield management; and/or
    c. implementation of the corresponding base sale schedule would cause a substantial adverse impact upon a community in the economic area in which the forest is located (36 CFR 219.16(a)(2)(1)) (MR).

Harvest Level Determinations

The management intensities and utilization standards used in determining harvest levels will be consistent with the current Regional Plan (36 CFR 219.16(4(2)(1).

Silvicultural Systems Selection

1. Selection of the appropriate silvicultural system will be guided by criteria (a-g) and the land management emphasis. Criteria (a) through (g) are identified in the Regional Guide for the Pacific Northwest Region* (USDA Forest Service 1984) and 36 CFR 219.27(b)** and were subsequently combined to eliminate duplication of content and procedure.

    a. Selected method must produce a volume of marketable trees that meet utilization standards and are designated for harvest (Regional Guide*: criterion 1)

    b. Selected method must use available and acceptable logging methods (Regional Guide*. criterion 2; 36 CFR**: criterion 4).

    c. Selected method must be capable of meeting special management and multiple-use objectives (Regional Guide*: criteria 3 and 6; 36 CFR**: criteria 1 and 6).

    d. Selected method must permit control of vegetation to establish desired species composition, density, and rates of growth (Regional Guide*: criterion 4, 36 CFR**: criteria 4 and 6).

    e. Selected method must promote a stand structure and species composition which minimize risks from insects, disease, and wildfire (Regional Guide*: criterion 5).

    f. Selected method must assure that lands can be adequately restocked (36 CFR**: criterion 2).

    g. Selected method must be practical and economical in terms of transportation, harvesting, preparation, and administration of timber sales (36 CFR**: criterion 7).

    h. In addition, no harvest cutting method was selected primarily because it resulted in the greatest dollar return or provided the highest output of timber; and no method was selected which permanently reduced site productivity, or could not assure conservation of the water and soil resources (36 CFR: criteria 3 and 5).

Use of Clearcutting

The National Forest Management Act of 1976, section 6(g)(3)(f)(i), states that clearcutting is to be used only where it is found to be the optimum method. Further direction is contained in the Regional Guide for the Pacific Northwest Region, 36 CFR 219.36, and Forest Service Manual 2471.1. Where even-aged management is appropriate and desired to meet management and resource objectives, clearcutting will be analyzed against both shelterwood and seed tree methods. Determination of the optimum silvicultural method will consider stand condition and structure, insect and disease problems, silvics of the tree species concerned, plant community, logging method feasibility and probability of success, site characteristics, regeneration difficulty, economics, and other factors all in the context of meeting the resource objectives for that management area portrayed in the Forest Plan.

Management Intensities

1. Management intensities will vary with site productivity, timber species, other resource management objectives, and timing of implementation. Each of the following timber management practices is eligible and may be used singularly or in a combination to determine the appropriate management intensity.

    a. Site preparation - chemical, mechanical, biological, manual, animal, and prescribed fire.

b. Tree improvement (genetics) including selected trees and protective measures such as implanting, genetic stock, evaluation plantations, seed production areas, and seed orchard sites.

c. Reforestation by planting, seeding, or natural means.

d. Growing-stock protection from animals, insects, and diseases.

e. Release and weeding - chemical, mechanical, biological, manual, animal, and prescribed fire.

f. Precommercial thinning.

g. Fertilization

h. Pruning

i. Commercial thinning.

j. Sanitation harvest.

k. Salvage harvest.

l. Final harvest - including even-aged management practices of shelterwoods, seed tree units and clearcuts, and uneven-aged practices of individual tree and group selection.

Road Management

Operate and maintain the Forest road system to meet management area emphasis and direction.

Utilization Standards

The following standards shall apply on the Forest for determination of the regulated harvest:

Working Group	Minimum DBH (in.)	Minimum Top DIB (in.)
First Decade		
North Associated	9	6
South Associated	9	6
Ponderosa pine	9	6
Lodgepole pine	7	4
Commercial thinning	7	4
Future Decades		
All Species	7	4

Culmination of Mean Annual Increment

Minimum rotation lengths will be based upon the length of time required to achieve volume production equivalent to at least 95 percent of culmination of mean annual increment. Exceptions are permitted for the use of sound silvicultural practices, for salvage or sanitation harvesting, or for the removal of a particular species of trees after considering the multiple objectives of the area (MR).

Silvicultural Prescriptions

1. Silvicultural prescriptions will be prepared for all activities proposing management of forest vegetation to meet resource objectives. Stand diagnoses will be prepared for alternatives in environmental assessments. Unit prescriptions will be prepared for the

selected alternative and will be recorded in project environmental assessments or analysis files and in stand data records.

2. All prescriptions will be prepared or approved by a certified silviculturist.
3. Elements required in a silvicultural prescription are documented in FSM 2478 and the Silvicultural Examination and Prescription Handbook (FSH 2409.26d). The Silvicultural Prescription Handbook will be used as the guide for all even-aged management prescriptions. Guides to the practice of uneven-aged management appear in the Forest-wide Standards and Guidelines. No standardized format will be required, but all requirements must be addressed in the prescription or through project environmental analysis.
4. Silvicultural prescriptions must address the following:
    a. Designation of number and sizes of snags, green wildlife trees, and downed logs that will meet the habitat requirements for cavity dependent species;
    b. protection, maintenance, and enhancement of hardwood vegetation found in activity areas;
    c. an analysis of the options of shelterwood, natural regeneration, and uneven-aged management as part of the selection of a regeneration harvest method;
    d. an optimum and minimum stocking level where regeneration harvests are applied;
    e. integrated pest management in both the long and short term (pests include insects, diseases, animals, and vegetation); and
    f. the use of prescribed fire as a silvicultural tool in support of returning fire to its natural role in the ecosystem.
5. Stand examinations and/or other data gathering processes will be used to verify or develop silvicultural prescriptions. Data gathering processes will be designed to provide the appropriate detail and accuracy commensurate with the complexity of the silvicultural and resource decisions at hand.

Reforestation

1. The optimum stocking level should be based on the objective of maximum cubic foot volume production, unless other resource objectives are identified and documented during the project planning process. The minimum stocking level should be based on the total number, distribution, and condition of trees needed to carry out the least intensive silvicultural strategy identified in the Forest Plan, or as specified in Regional stocking level curves (FSH 2409.26d) or site specific local curves including mortality predicted at 20 percent over the length of the rotation. A site-specific analysis documented in the silvicultural prescription may justify a change in management intensity or predicted mortality level.
2. When trees are cut to achieve timber production objectives, the cutting shall be planned and implemented to assure and expect adequate restocking of lands within 5 years after final harvest. Research technology, knowledge, and experience shall be the bases for determining whether regeneration practices can be expected to result in adequate restocking. Adequate restocking means that the harvest area will contain the minimum number, size, distribution, and species composition of regeneration. Five years after final harvest means: 5 years after clearcutting, 5 years after final overstory removal in shelterwood cutting, 5 years after the seed tree removal cut in seed tree cutting, or 5 years after selection cutting (36 CFR 219.27(c)(3).
3. Minimum stocking for this planning period will be as follows.

Ponderosa pine working group	100 trees per acre
North Associated	200 trees per acre
South Associated	150 trees per acre
Lodgepole pine	100 trees per acre

The above numbers apply to a plantation at the time of certification, normally the third growing season after planting. In stands prescribed for natural regeneration, certification will occur after the final harvest and postsale activities are completed, and the trees have experienced one additional growing season. In addition, there should be no evidence of significant imminent mortality that would reduce stocking below these levels by more than 20 percent between the time certified and the time the trees reach 4.5 feet in height. Stocking should also be of desirable species capable of being managed to meet management area objectives.

4. As a minimum, planted seedlings will meet SIA seed certification standards. Whenever possible, seedlings will meet SB certification standards. Genetically improved stock will often be interplanted in areas reforested by natural regeneration to increase both species and inter-species diversity. When planting in areas experiencing disease problems such as root rots or dwarf mistletoes, disease resistant species will be favored.
5. The decision to replant, interplant, or apply additional site preparation to naturally regenerate harvested areas which are stocked (above the minimum stocking level but below the optimum stocking level), should be based on a site-specific economic analysis. The economic analysis should weigh the additional costs of replanting, interplanting, or applying supplemental site preparation against the discounted benefit of the additional volume contributed from trees added in the retreatment. Retreatment should not be prescribed with a benefit host ratio of less than 1.0 unless warranted by other management objectives identified and documented in the project planning process.
6. In regeneration units, site preparation (if any) should be completed within 2 years of harvest. Planting (if any) shall occur within 1 year of site preparation. Exceptions can occur, but only to meet resource objectives or because of extenuating circumstances.
7. Regeneration examinations should be made in accordance with FSM 2472.4, including as a minimum, examinations after the first and third growing seasons. Certification of regeneration units must be made based on a site-specific determination; regeneration units must meet minimum stocking guidelines prior to certification as successfully reforested. Staked tree surveys will be conducted on major tree species, nursery lots, and management practices. Measurements will be made the first, third, and fifth seasons after planting in order to monitor seedling survival and growth, to evaluate the effectiveness of management practices, and to gather data for the development of future managed yield tables.

Precommercial Thinning

1. Precommercial thinning is recommended when:
   a. It is consistent with management objectives:
   b. Overstocking will reduce future yields below planned levels;
   c. The expected return from increased future timber production and value exceeds the cost of the thinning: or
   d. Stocking level control is necessary to protect the stand from losses due to insects and diseases.

2. Stands with an average DBH over 6 inches should not normally be precommercially thinned unless not thinning the stand would incur significant losses from insects, diseases, or stagnation.
3. Precommercial thinning requires at least minimum stocking in trees capable of responding to release. Trees should have a minimum of 30 percent live crown ratio and be sufficiently free of disease or damage to make a merchantable product.

Management of Advanced Regeneration

1. Advanced regeneration is defined as conifers of less than merchantable or marketable size which are established in areas proposed for silvicultural activities. Advanced regeneration should be retained and managed as future crop trees if these trees are of desirable species and acceptable condition.
    a. Trees of acceptable condition will generally have the following characteristics:
        1) A minimum live crown ratio of 40 percent, except in the case of true firs, where the minimum crown ratio is 50 percent;
        2) a reasonable probability of remaining undamaged following management activity, fuels treatment, and site preparation;
        3) they must be free of major diseases; be predicted to maintain a minimum of 10 inches of leader growth annually within a 20-year period; and have a reasonable expectation that they will remain disease free until rotation age; and
        4) a reasonable expectation must exist that the trees will increase in height and diameter growth when given increased growing space.
    b. Timber harvest and post-harvest activities (fuels treatment and site preparation) should be tailored to protect advanced regeneration from damage as much as is practical. Where more than 20 percent of the prescribed minimum stocking level can be met through the retention of advanced regeneration, the appropriate timber sale and service contract provisions should be used to insure protection of desirable advanced regeneration.

Natural Regeneration

1. Natural regeneration should be the preferred alternative where economic stand, and site conditions are appropriate and where natural regeneration does not conflict with other resource objectives identified and documented during the project planning process. Species diversity and preference should be important considerations. Natural regeneration prescriptions should identify optimum and minimum stocking level, specified regeneration time period, and first time success, as well as meet standards and guidelines for species preference and species diversity.
2. Appropriate stand and site conditions for natural regeneration include:
    a. Seed trees should display acceptable genetic characteristics including growth, bole form, and branching habit;
    c. past cone production should be in evidence to the extent necessary to meet minimum stocking levels within the specified time period;
    d. there should be a sufficient number of seed trees that can be retained on-site in an acceptable condition following management activities;
    e. there should be no diseased seed trees unless they can be removed or girdled before regeneration reaches a height of 2 feet, or within 10 years after the seed cut; and

f. site preparation should be accomplished while protecting the residual seed trees and advanced regeneration.

3. Lands harvested must be expected to be adequately stocked with natural regeneration or fill-in planting to minimum acceptable stocking levels within 5 years after final harvest.
4. Natural regeneration should be prescribed where the minimum stocking levels will be met during the specified time period with a first time success of 80 percent or greater.
5. Fuels treatment and site preparation should generally be carried out following the regeneration cut so that no fuels treatment is needed following the final removal harvest.

Species Preference

1. In determining which conifer species to favor during the development of silvicultural prescriptions, consideration should be given to the following objectives: (1) Long-term stand health, vigor, and productivity specifically related to insect and disease impacts; (2) economic efficiency based on the costs and values associated with timber management; and (3) the biological diversity needs for wildlife species, visual quality, or other resource needs in accordance with the standards and guidelines for diversity.
    a. Consideration should be given to the growth and yield effects of predicted insects and diseases associated with the preference given to an individual species over another. Preference should generally be given to the healthiest and fastest growing trees where there is reasonable assurance they will continue to meet these objectives until rotation age. Favor should be shown to a species or a mix of species predicted to produce the highest net value over time while meeting needs for diversity and long-term ecological health.
    b. The economic analysis should consider the costs associated with establishing and protecting an individual species, the current market values for those species, current and projected rates of growth, and projected harvest sizes and log grades produced from the management area under consideration.
    c. In the North and South Associated Working Groups, strong consideration should be given to maintenance of stands dominated by early successional species including ponderosa pine, Douglas-fir, western white pine, and western larch since, in these forest types, the potential for insect and disease depredation is high if latter successional species are managed. Economic analysis should clearly recognize the potential for future damage. Management activities should maintain desirable advanced or natural regeneration of lodgepole pine or climax species (including true firs) in future stand composition in order to promote species diversity.
    d. In the Ponderosa Pine Working Group, silvicultural prescriptions will feature ponderosa pine while other associated species will be maintained at low levels to provide for ecological diversity needs.
    e. In the Lodgepole Pine Working Group, plant communities are found in which lodgepole pine is either climatically climax, or successional to sub-alpine fir and Engelmann spruce. Western larch is often a major component depending on the specific site. Management activities should work with the ecological forces at hand and accept a major stocking of lodgepole pine. Whenever possible, diversity should be enhanced by promoting stocking of western larch and Engelmann spruce.

Diversity

Management activities should be tailored to provide the horizontal, vertical, and vegetative species diversity necessary for the maintenance of wildlife species, aesthetics, and recreational objectives as established in the Plan.

Horizontal Diversity (harvest unit size)

1. Even-aged management strategies can have a positive effect on the development of large-scale horizontal diversity. In intermediate or mixed-age stands greater than 40 acres in size, harvest activities such as overstory removal, precommercial thinning, and commercial thinning should be prescribed in unit sizes and tree spacings that complement the eventual development of horizontal diversity. The needs for long term stand health and vigor achievable through stand density control should take precedence over the short term need for horizontal diversity.
2. Strong consideration should also be given to the staggered regeneration of large even-aged areas. Some stands may be regenerated prior to the culmination of mean annual increment while others may be regenerated later to create horizontal diversity in the long run. This will be especially important in the Lodgepole Pine Working Group, given the historic patterns of beetle infestation and wildfires creating large blocks of even-aged, often single species stands.
3. The Forest will conform to the Regional guidelines on created forest openings. Forest openings created by even-aged silviculture should not exceed 40 acres. Exceptions are permitted in the following cases:
    a. When natural catastrophic situations such as fires, windstorms, or insect or disease attacks occur;
    b. on an individual case by case basis after a 60-day public notice and review by the Regional Forester; and
    c. when any one of the criteria in the Regional Plan is met but not exceeded by more than 50 percent without review by the Regional Forester or 60-day public notice.
4. A harvested area will no longer be considered a created opening for timber management when the prescribed crop tree stocking is above minimum acceptable levels and trees are at or above 4 ½ feet in height and free to grow (MR). Where other resource management considerations are limiting, such as wildlife habitat and visual requirements, a created opening will no longer be considered an opening when the vegetation in it meets the management objective.
5. Created openings will be separated by blocks of land or areas generally not classed as created openings. The blocks of land between created openings shall vary in size, contain one or more logical logging units, and be large enough, and of a stand structure to meet resource requirements of the Forest Plan (MR).
6. Openings to be created contiguous to natural openings, should receive attention during the analysis and prescription for treatment. The decision to create openings contiguous to natural openings shall be supported by prescriptions specific to individual natural openings, or to a group of natural openings where their importance is diminished by more frequent occurrence. The created openings should generally not exceed one-third the size and/or be contiguous to no more than one-third the edge of a natural opening where the natural opening exceeds 30 acres in size. Limitations for created openings contiguous to natural openings less than 30 acres in size will be subject to the Interdisciplinary decision making process and review of land management objectives.

Vertical Diversity

1. Vertical structural diversity can best be maintained with uneven-aged management or small even-aged harvest units. Application of a mix of both even and uneven-aged management strategies is desirable to provide benefits from horizontal and vertical diversity.
2. Within forest types where both even and uneven-aged prescriptions are appropriate, each silvicultural strategy should be represented on no less than 10 percent of the area harvested in an allocation zone.

Species Diversity

1. In regeneration units where single species management is not dictated by plant community composition, at least two and preferably more tree species will be managed together over time. Preference may be given to a single species, but as a minimum, 20 percent of the stocking should be made up of other species.
2. Reforestation of 'noncommercial' tree species (hardwoods and conifers such as Pacific yew, Western juniper, etc.), should be considered in meeting management area objectives.
3. Special and unique ecological communities such as aspen and other hardwood stands, seeps, springs, bogs, and other riparian areas should receive special attention and protection from potentially damaging management activities. Silvicultural prescriptions will specifically address measures to protect, maintain, and enhance aspen and other hardwood clones, clumps, and stands.

Uneven-aged Silvicultural Systems

1. Uneven-aged management can be applied using either individual tree or group selection silvicultural systems. The decision to apply either system should be based on actual stand and site conditions. Silvicultural systems described here for uneven-aged management are described in further detail by David M. Smith in *The Practice of Silviculture*, 7th edition, published in 1962.
2. Individual tree selection should be applied where forest stands contain a variety of size classes, usually three or more, which are evenly distributed on nearly every acre throughout the stand and contain preferred species without significant disease problems.
3. Individual tree selection is perhaps most applicable in mature and multi-storied pure ponderosa pine stands in the ponderosa pine community types, and in Douglas-fir climax communities in stands that are free of Douglas-fir dwarf-mistletoe.
4. Group selection should be applied where forest stands are irregular, contain a mosaic of small even-aged groups, where control over species is important, or where significant disease problems are present. Even-aged groups may be as small as one quarter acre and contain two or three mature trees or may be as large as 3 acres. Even-aged groups are usually 2 acres or less in size. From an ecological viewpoint, maximum group size is reached when climatic conditions within the even-aged group are no longer modified by the adjacent stand. Activities will vary within each small even-aged group depending on the size, age, and density of the trees. In group selections, each small group opening will be tended similarly to an even-aged managed opening. When fully managed, a stand mosaic of several size classes interspersed with each other in small-sized groupings will occur with each occupying approximately the same percentage of the stand.
5. The application of uneven-aged management by group selection will be objective oriented and will depend on the number of age classes desired, the percent of land desired in each class, and the desired interval between harvest entries.

6. Uneven-aged management can also be applied in the Associated and Lodgepole Working Groups but with more difficulty, and it would most often be accomplished using group selection methods. Due to serious problems commonly found with shade tolerant species, uneven-aged management practices should strive to ensure stand dominance by more seral disease free species such as ponderosa pine, western larch, lodgepole pine, and western white pine. Dominance in these community types is established when stocking by early successional species can be maintained at or above 50 percent of the minimum stocking level established in the silvicultural prescription on 80 percent of the treated acres.
7. Uneven-aged management will generally be applied on slopes of less than 30 percent. Uneven-aged management will generally not be applied where cable or skyline yarding systems are prescribed due to the costs of such operations and the difficulty of protecting residual growing stock.
8. Uneven-aged management can be applied where the total area impacted by detrimental soil compaction, erosion, or displacement can be restricted to less than 20 percent of the stand.
9. Uneven-aged management is particularly appropriate adjacent to streamside management units and other riparian areas, in visual zones, in areas with recreational emphasis, in creating vertical diversity for wildlife, in protecting the integrity of special areas such as elk wallows or springs or other microsites, or anytime where maintenance of forest cover is an important objective.
10. The silvicultural prescription should be designed to move the stand structure toward an uneven-aged diameter class distribution through an orderly sequence of harvest activities occurring during the next 20 to 100 years. Stand simulation models such as 'Prognosis' should be used as the primary tool to evaluate the optimum levels of growing stock and diameter distributions which best meet management objectives.
11. Timber harvest and post sale activities will normally be planned on a 20-year entry cycle. Other entry cycles may be appropriate to meet resource objectives, or to better create the desired stand structure. Stands should not be harvested at times other than the prescribed entry cycle times except to salvage fire killed trees, or when bark beetle related mortality has occurred at epidemic levels, when extensive mortality has been caused by other catastrophic events, or in case stand performance has fallen below acceptable levels and the stand has become high risk for bark beetles.
12. Each silvicultural prescription should specify stand management criteria including the appropriate “Q” value or relationship between numbers of trees of different diameter classes, the appropriate residual basal area, and the upper diameter limit or rotational size for trees to be harvested. These stand management criteria will vary depending on site quality and management emphasis.
13. All post sale activities necessary for the entry cycle, including fuels treatment, site preparation, planting, precommercial thinning, and conifer release should occur no later than 5 years following the harvest entry. Site preparation will be prescribed so as to favor the preferred species. To ensure dominance by desired species, planting may be necessary. When natural regeneration is desirable, leave trees can be left in the small groups if appropriate. Each small group opening will then be tended similarly to an even-aged managed opening.
14. Extreme care must be exercised in applying uneven-aged management practices to stands infected with dwarf-mistletoes, bole rots, or root rots. In some cases these pests may preclude the prudent use of this prescription. In other situations, nonhost species can be favored to minimize the impacts from the pest agents.

WATER

Goals

MANAGE NATIONAL FOREST RESOURCES TO PROTECT ALL EXISTING BENEFICIAL USES OF WATER AND TO MEET OR EXCEED ALL APPLICABLE STATE AND FEDERAL WATER QUALITY STANDARDS. WITHIN THE FOREST CAPABILITY, MAINTAIN OR ENHANCE WATER QUANTITY, QUAUPI, AND TIMING OF STREAMFLOWS TO MEET NEEDS OF DOWNSTREAM USERS AND OTHER RESOURCES. MAINTAIN INTEGRITY AND EQUILIBRIUM OF ALLSTREAM SYSTEMS, RIPARIAN AREAS, AND WETLANDS ON THE FOREST. MANAGE DESIGNATED MUNICIPAL SUPPLY WATERSHEDS TO PROVJDE WATER WHICH, WITH TREATMENT, WILL RESULT IN A SATISFACTORY AND SAFE SUPPLY.

General

1. Meet (MR) or exceed state requirements in accordance with the Clean Water Act for protection of waters of the State of Oregon (Oregon Administrative Rules, Chapter 340-41), and the State of Washington (Washington Administrative Code, Chapters 173-201 and 202), through planning, application, and monitoring of Best Management Practices (BMP's) in conformance with the Clean Water Act, regulations, and Federal guidance.
2. For all lands within national forest boundaries (including private lands), no more than 30 percent of the forest land within a subwatershed will have timber stand age classes of 0-10 years except where analysis documented in an environmental assessment indicates that watershed condition would not be impaired.
3. In (sub)watersheds where project scoping identifies an issue or concern regarding the cumulative effects of activities on water quality, quantity, or stream channels, a cumulative effects analysis will be performed. The analysis will include land in all ownerships in the (sub)watershed. Activities on national forest lands in the (sub)watersheds should be dispersed over time and space to the extent practicable, and at least to the extent necessary to meet MR's. On intermingled ownerships, coordinate scheduling efforts to the extent practicable.
4. Meet the direction and processes for management of wetlands and floodplains in accordance with EO 11990 and EO 11998 and FSM 2527 (MR).

Protection of Water Quality

1. In cooperation with the States of Oregon and Washington, the Forest will use the following process:
    a. Select and design BMP's based on site-specific conditions, technical, economic, and institutional feasibility, and the water quality standards for potentially impacted waters.
    b. Implement and enforce BMP's.
    c. Monitor to ensure that practices are correctly applied as designed. Monitor to determine the effectiveness of practices in meeting design expectations and in attaining water quality standards
    d. Evaluate monitoring results and mitigate where necessary to minimize impacts from activities where BMP's do not perform as expected.
    e. Adjust BMP design standards and application when monitoring shows that beneficial uses are not being protected and water quality standards are not being achieved to the desired level. Evaluate the appropriateness of water quality criteria for

reasonably assuring protection of beneficial uses. Consider recommending adjustment of water quality standards.

2. Use the existing process agreements to implement state water quality management plans on lands administered by the Forest as described in Memorandum of Understanding between:

    b. The Oregon Department of Environmental Quality and U. S. Department of Agriculture, Forest Service (2/12/79 and 12/7/82), and “Attachments A and B” referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest Lands in the Pacific Northwest 12/78 and Best Management Practices for Range and Grazing Activities on Federal Lands, respectively).

    c. The Washington Department of Ecology and U.S. Department of Agriculture Forest Service (7/79), and 'Attachment A' referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest Lands in the Pacific Northwest 12/78).

    For a more complete explanation of the above, refer to Appendix E in the FEIS, 'Best Management Practices'. Individual, general Best Management Practices are described in *General Water Quality Best Management Practices*, Pacific Northwest Region, 11/88, which provides guidance but is not a direction document. A description is included of the process, limitations, and use of the BMP's.

3. Evaluations of both the ability to implement BMP's and their estimated effectiveness will be made at the project level. Projects may include general BMP's, site-specific BMP's or combinations of both.

4. Management activities will not degrade water quality, fish, or aquatic resources below the water quality goals except in temporary change due to permitted activities (FSM 2526). See Riparian/Fish Forest-wide Standards and Guidelines and Best Management Practices (BMP’s).

5. Provide for the treatment of sewage and other point sources of pollution discharged into streams and waters (MR).

Watershed Improvements

1. Inventory potential watershed rehabilitation sites that are identified during project Scoping. Treat backlog of watershed rehabilitation needs by the year 2010.

2. Areas in which fish habitat or water quality are being adversely impacted will be given high priority for treatment to mitigate or rehabilitate the effects of the impact or correct the impacting activity.

3. Watershed improvements will be designed, constructed, and maintained to conform with the resource objectives and goals of the management area.

5) Rehabilitate abandoned mineral exploration and development sites to meet water quality and management area goals and resource objectives.

Water Rights/Use Management

1. Secure water rights to support resource management and activities. Where diversions, point of use, and water transmission facilities are located on National Forest System lands, special use permits shall be conditioned to achieve resource objectives and management area goals.

2. Minimum instream flows needed to achieve mandated national forest management objectives shall be protected. Needed instream flows will be calculated on a case-by-case basis through critical analyses (via NEPA) of proposed water uses, diversions,

transmission facilities applications, and renewal of permits. Protection of instream flow needs may be achieved through filing protests with states where applications are made that adversely affect national forest resources, asserting claims for this water under Federal or state laws where applicable, making recommendations to FERC for provision of instream flows, coordinating with state water resource planning agencies to identify instream flows on national forest land as protected uses, or reaching formal agreements over use. Purchase of water rights, conservation pools, and impoundments are other means of achieving objectives.

3. For water withdrawal projects which could effect downstream flows, consideration shall be given in the NEPA process to minimum instream flow needs as identified by state water resource planning agencies and local tribal agencies. Coordinate these activities with the Fish and Wildlife Service as provided for in FSM 2610.1-4.

Wilderness

The full natural streamflows within Congressionally designated wilderness will be protected except for that amount of water claimed under valid water rights existing at the time of designation.

Coordination

Provide assistance to other agencies and states in snow surveys, water inventories, and flood forecasting.

SOIL

Goal

MANAGE NATIONAL FOREST LANDS TO MAINTAIN OR ENHANCE SOIL AND LAND PRODUCTIVITY (FSM 2520.2, 6/87).

Soil Productivity

1. Plan and conduct land management activities so that reductions of soil productivity potential caused by detrimental compaction, displacement, puddling, and severe burning are minimized.
2. Nutrient capital on forest and rangelands is to be maintained at acceptable levels (MR). Maintain a minimum of 80 percent of an activity area in a condition of acceptable productivity potential. Examples of an activity area are: A timber sale cutting unit, a grazing allotment pasture, a site preparation or slash disposal project or similar area. Acceptable productivity potential is defined as a less than 20 percent increase in soil bulk density in volcanic-ash derived soils, and a less than 15 percent increase in soil bulk density in other Forest soils; soil displacement of less than 50 percent of the topsoil or humus enriched A1 and/or AC horizons from an area of 100 sq. ft or more which is at least 5 feet in width; molding of soil in vehicle tracks and rutting to a 6-inch depth or more; or as severely burned soils that have the top layer of mineral soil significantly changed in color (usually to red), and the next one-half inch blackened from organic matter charring (FSM 2520.3, Supplement 50, 6/87)(MR)).
3. Plan and conduct land management activities (FSM 2520.3, Supplement 50,6/87 (MR)) so that soil loss from surface erosion and mass wasting, caused by said activities, will not result in an unacceptable reduction in soil productivity or in water quality (MR). Maintain minimum percent effective ground cover after cessation of any soil-disturbing activity as follows:

Erosion Hazard Class	Minimum % Effective Ground Cover	
	1st Year	2nd Year
Low (Very Slight)	20 – 30	30 – 40
Medium (Moderate)	30 – 45	40 – 60
High (Severe)	45 – 60	60 – 75
Very High (Very Severe)	60 –75	75 –90

4. Management activities shall be designed and implemented to retain sufficient ground vegetation and organic matter to maintain long-term soil and site productivity.
5. Active slump and landslide areas will generally be considered to be unavailable for road construction. Areas with known landslide potential and lake sediments will require special transportation planning, design, layout, preconstruction, construction, and maintenance techniques.

Floodplains/Wetlands

Meet direction and processes for management of floodplains and wetlands (MR). Address the presence of, and potential impacts to any floodplains/wetlands within the project area in project environmental assessments.

Best Management Practices

1 Along all perennial streams, adjacent floodplains, and riparian areas take actions to prevent soil movement, including slumps, earth slides, and other debris and material from moving downstream into higher class streams.

2 In floodplains, riparian areas, and aquatic habitats, ground-disturbing activities are limited to the degree necessary to minimize erosion and sedimentation.

Inventory

Inventory the Forest soil resources according to available standards to predict and assess responses to activities.

Soil Improvements

Plan and accomplish rehabilitation projects to meet soil and water objectives and standards.

Coordination

Assist other agencies and states in collection of soil resource data,

MINERALS AND ENERGY

Goal

PROVIDE FOR EXPLORATION, DEVELOPMENT, AND PRODUCTION OF A VARIETY OF MINERALS ON THE FOREST CONSISTENT WITH VARIOUS RESOURCE OBJECTIVES, ENVIRONMENTAL CONSTRAINTS, AND CONSIDERING COST EFFICIENCY.

Energy (Gas, Oil, Coal, and Geothermal)

1. Mineral leases, permits, and licenses will be managed according to FSM 2820 and 36 CFR 228.
2. All lease applications submitted by the Bureau of Land Management will be reviewed in a timely fashion and necessary stipulations to protect surface resources will be required. Recommendations for operating plans for energy minerals requiring mitigation measures to protect surface resources will be provided when requested by the USDI Bureau of Land Management (BLM).
3. Post-leasing activity will involve the review and joint approval by the Forest Service and BLM of detailed operating plans concerning activities in a site-specific area.

Non-Energy Minerals

1. Mineral exploration and mineral removal are permitted throughout the Forest except in withdrawn areas.
2. Under the mining laws, claimants are entitled to access to their mining claims. Access for exploration and development of locatable mineral resources will be analyzed in response to a proposed operating plan. A decision on approval of reasonable access will be made as a result of appropriate environmental analysis.
3. When claimants propose mining activities which involve disturbance of the surface resources, a notice of intent and/or a proposed plan of operation must be submitted. The proposal will be processed in a timely manner in accordance with 36 CFR 228.
4. During development of operating plans or plan modifications. Reasonable alternative mitigation measures and/or operating requirements will be developed to define the appropriate stipulations needed to protect other resources while still meeting the objectives of the mineral operator. The test for operating plan requirements is 'reasonableness.'
5. Reclamation standards will be developed using an interdisciplinary process to insure land restoration to a productive condition to the extent reasonable and practicable. When reasonable, opportunities to enhance other resources will be considered. Concurrent reclamation will be stressed. Reclamation bonds will be based on actual reclamation costs.
6. Claims on which application for patent have been made will be examined and conclusion of validity will be presented to the BLM for final action.

Withdrawals

Withdrawal of lands from appropriation or entry under the mining or mineral leasing laws will be in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA) (US. Laws, Statutes, etc. 1976). Review of existing withdrawals will be made by 1991 to determine whether, and for how long, the continuation of the existing withdrawal would be consistent with the statutory objectives of the programs for which the lands were dedicated.

Common Materials Minerals

Use of currently developed common mineral (sand, gravel, and rock) material sources will be given priority over undeveloped sources. Exceptions will be made when existing sources are unable to economically supply the quality and quantity of material needed, or when conflicts with other resource uses are found to be unacceptable.

LAND ADJUSTMENTS

Goal

PROVIDE AN OPTIMUM PATTERN OF LANDOWNERSHIP WITHIN THE UMATILLA NATIONAL FOREST CONSIDERING RESOURCE GOALS AND EFFICIENCY OF MANAGING THE FOREST.

Land Classification Groups

1. Modifications will be made to the national forest landownership pattern to accomplish the objectives of this Forest Land and Resource Management Plan. Opportunities for improving the pattern will come through land exchanges, purchases, donations, and transfers with other agencies. Acreages within each group are summarized in the Forest Plan.

   The public and private lands in and surrounding the Forest have been classified and prioritized to indicate the optimum landownership pattern. A detailed map of land ownership adjustments is available for review at the Forest Supervisor's Office. All lands have been placed in one of the following groups:

Group I

a. Group I includes lands of which Congress has either directly or indirectly instructed the Forest Service to retain existing Federal ownership, and those remaining non-Federal lands the Forest Service has been directed to acquire for a designated purpose. Acquisition of less than fee title will be considered if direction and land management objectives can be met.

Group II

b. The basic criterion for Group II lands is special management to meet a particular public need or purpose. Such lands include special interest areas and areas allocated to recreation, range, fish and wildlife, visual, watershed (including riparian), soils, and timber values. Landownership direction is to retain national forest ownership and acquire private lands as the opportunity or need occurs. Acquisition of less than fee title will be considered if direction and land management objectives can be met.

Group III

c. Group III encompasses lands where management direction emphasizes commodity production. These lands will be available for land adjustment and usually will include most of the land considered in exchange projects. Areas of mixed private and Federal ownership are included with the objective of rearranging ownership patterns to benefit commodity production goals for both ownerships. Included are some isolated parcels that can be managed best by the Forest Service or other public agency. The assumption for lands in this group is that they will be managed to provide similar types of outputs whether in private or public ownership. Normally, solid national forest ownership will not be available for land exchange.

Group IV

d. Lands include small isolated tracts of national forest, costly to administer and without special resource features. The landownership direction is to generally make these lands available for exchange for private lands in Groups I, II, or III.

Group V

e. These are lands which need more intensive study and planning before landownership decisions can be made. Land acquisition and disposal decisions will be deferred until the needed studies have been completed.

Land Adjustment Priorities

1. Priorities for lands which should be considered for acquisition to meet essential national forest management needs are:

   Priority 1 - Group I lands
   Priorlty 2 - Group II lands
   Priority 3 - Group III lands

2. Priorities of national forest lands available for exchange are:

   Priority 1 - Group IV lands
   Priority 2 - Group III lands

LAND USES

Goal

PROVIDE FOR THE USE AND OCCUPANCY OF THE FOREST BY PRIVATE INDIVIDUALS OR FEDERAL, STATE, AND LOCAL GOVERNMENTS WHEN SUCH USE IS CONSISTENT WITH FOREST MANAGEMENT OBJECTIVES, IS IN THE PUBLIC INTEREST, AND CANNOT BE REASONABLY SERVED BY DEVELOPMENT ON PRIVATE LAND.

General

1. Special use evaluation, permit issuance, fees, and administration will be in accordance with FSM 2700 and 36 CFR 251.
2. In considering special use applications, the needs of the general public will be given priority over the applicant.
3. Land to be used will be suitable for the proposed use and kept as small as is consistent with the intended purpose. National forest land will not be made available for private development when suitable private land is available to support needs.
4. Provisions will be made to protect land and resources of the national forest. The Forest Service will approve location of all developments, designs, and plans for construction of facilities.
5. New permits will be selected through a competitive process if there is a competitive interest. If additional recreation services or facilities are determined to be needed and should be provided by the private sector, the Forest will explore the opportunity of doing this by expanding existing permits or by issuing permits for a new service or facility.

Right-of-way Grants and Acquisition

1. Grant needed easements to state and local governments for existing and relocated roads and highways. Follow 36 CFR 212.8, 9, 10 and 11 in granting access across lands and easements administered by the Forest Service.
2. Acquire road and trail right-of-way across non-national forest land to implement and support land and resource management activities. Coordinate with intermingled and adjacent landowners and state and local government in developing roads, road systems, or trails that serve the needs of all parties.

Landlines

Survey and mark boundaries to accomplish the following priorities: (1) Protect present corners or references when the possibility of disturbance exists, (2) resolve or prevent encroachments, (3) assist Forest users in identifying public lands, and (4) help assure full utilization of National Forest resources.

Communications Sites

1. Applicants for communications sites and facilities will be directed toward use of sites in the following order:
    a. Utilization of residual capacity of existing approved sites.
    b. Utilization of capable new sites determined through and following an environmental analysis. Site plans will normally be prepared prior to installing facilities.

Recreation Residences

1. Authorization for noncommercial recreation residences will continue in existing tracts through year 2003 (unless canceled for breach). Prior to December 31,1993, an analysis (following the NEPA process) of recreation residence continuance will be conducted for all tracts. Nonrenewal will only be considered if the clear weight of the evidence is on the side of the need for a higher public purpose or use.
2. No additional recreation residence tracts will be created.
3. Vacant lots within established tracts may be developed or used as 'in lieu' sites for nonrenewed permit holders as long they are managed or developed according to contemporary national policy.

Utility and Transportation Corridors

1. When applications for rights-of-way for utilities and highways are received, the Forest first priority will be to utilize residual capacity within, or contiguous to existing corridors. The corridors will be planned and located to minimize ground and air disturbance.
2. Additional corridors which may be needed for major utilities or highways will be designated through an interagency environmental analysis, following the procedures set forth in the Regional Guide.
3. New corridors will not be allowed in: Exclusion Areas: Wilderness (B1) and wild sectors of Wild and Scenic Rivers (A7)
4. New corridors may be allowed in avoidance areas only if management area standards and guidelines are met fully. Avoidance areas include: Scenic Areas (A8), Research Natural Areas (D2), scenic and recreation sectors of Wild and Scenic Rivers (A7), Unroaded Areas (A1, A2), Viewsheds (A3), Roaded Natural Areas (A5), Recreation sites (A6), Special Interest Areas (AS) with others to be named by subsequent environmental analyses.

Other Uses

1. Applications for licenses or grants associated with dams and reservoirs may be recommended for approval if they are consistent with management goals and objectives.
2. The Walla Walla Municipal Watershed agreement may be modified as a result of the management direction for the watershed. Other formal or informal agreements may be entered into if needed

TRANSPORTATION SYSTEM

Goal

PROVIDE AND MANAGE A SAFE AND ECONOMICAL ROAD AND TRAIL SYSTEM AND FACILITIES NEEDED TO ACCOMPLISH THE LAND AND RESOURCE MANAGEMENT AND PROTECTION OBJECTIVES ON THE UMATILLA NATIONAL FOREST.

Planning

1. The Forest Transportation System will be planned to serve long-term multiple resource needs using area plans that integrate resource, timber, and transportation requirements. The system will be the minimum necessary to provide access for the activities authorized under Management Area direction. Documentation of the planned system will be found in area or project transportation plans.
2. Annually update the Forest Road Management Plan and Forest Trail Management Plan to evaluate the mix of development, traffic management, and maintenance. As part of the Road Management Plan, prepare and maintain Road Management Objectives (RMOs) for all proposed and existing system roads. Maintain the Forest Transportation Information System (TIS) and the Trails Inventory.

Roads Construction

Roads will be designed, constructed, and reconstructed according to standards appropriate to planned uses and activities, safety, economics, and impacts on lands and resources using criteria in FSM 7700 and 7720.

Operations and Maintenance

1. Road access will be adequate to accomplish commercial, resource, and protection management activities. Operate and maintain all roads according to management area emphasis and direction, maintenance levels established in updated RMOs, and standards defined in FSM 7700, 7732, and FSH 7709.15.
2. During commercial activities, public access may be discouraged or prohibited.
3. Traffic management may be used to control access due to road structural limitations, safety considerations, road standards, or limitations imposed by resource management.
4. Coordinate with county, state, and other Federal agencies on road and traffic management.
5. Prepare and update Forest Sign Plan and accomplish signing according to direction established in the plan.

Cost Share

1. Where appropriate, the Forest will enter into new, and continue existing, cost share agreements.
2. The Forest Cost Share program will be managed according to principles established in FSM 5467 and the deeds.

Road Closures

1. Obliterate all roads not in the Forest Development System or authorized by permit, lease, or easement. Obliterated roads will be revegetated to provide stabilization and to return the area to its intended use. Short term (temporary) roads will be obliterated.
2. Road closures will be based on the following criteria (in accordance with FSM 7730):
    a. Need to protect the facility;

b. need to protect soil and water;

c. expected need or use;

d. safety of expected users:

e. need to protect critical cultural values,

f. need to maintain or improve habitat for wildlife,

g. need to provide planned recreation experience opportunities, and

h. cost of maintenance.

3. Close long-term intermittent roads to motorized use at the termination of sale or post sale activities as appropriate. Maintain these roads at Level I until needed for reentry (FSM 7705).

4. Commercial, public, and administrative traffic may be granted motorized access over designated closed roads by permit only. Permitted use must be based on an analyses of need, benefit, and cost and may be issued individually or under a blanket authorization as in a project EA or contract. In authorizing use, consideration will be given to the management area and road objectives, and the reason and timing of the closure as stated in the Road Management Objective (RMO). Limited single use permits will be rare; if a road is authorized for use, generally it will be open for all uses.

Trails

See Recreation.

FACILITIES

Goal

PROVIDE AND MANAGE ADMINISTRATIVE FACILITIES SUFFICIENT TO ACCOMPLISH LAND AND RESOURCE MANAGEMENT OBJECTIVES OF THE FOREST.

1. Buildings, utility systems, and related facilities will be planned, developed, operated, and maintained for safe use, support of the Forest resource programs, and cost effectiveness.

2. The construction of new buildings and/or related facilities or additions to existing facilities will comply with the approved site development plan.

3. Prepare Forest Facilities Master Plan and individual administrative site development plans for all forest administrative sites. Long-term development and maintenance costs will be considered in facilities planning.

4. Management and maintenance of facilities should be guided by the following priorities for expenditure of funds:

a. Emergencies.

b. public and employee safety and health,

c. handicapped access,

d. immediate management needs,

e. maintenance of present condition/prevention of deterioration,

f. energy conservation, and

g. comfort and appearance.

FIRE AND FUELS

Goal

PROVIDE AND EXECUTE A FIRE PROTECTION AND FIRE USE PROGRAM THAT IS COST EFFICIENT AND RESPONSIVE TO LAND AND RESOURCE MANAGEMENT GOALS AND OBJECTIVES.

Wildfire Response

1. Wildfires that threaten life, property, public safety, improvements, or investments will receive aggressive suppression action using an appropriate suppression strategy.
2. All wildfires will require a timely suppression response with appropriate forces and strategy of either one, or a combination of the alternatives of confinement, containment, or control. Inform public about philosophy of fire management policy.
3. For moderate to high intensity wildfire (flame length over 2 ft.) emphasis should be on the appropriate response (strategy) by management areas as follows:

Management Areas		Suppression Response Emphasis
A6	A3	Control
A9	A8	Control
D2	A7	Control
F1	C1	Control
F2	C2	Control
F3		Control
A1		Control & Contain
A2		Control & Contain
A10/E2/C4/E1 (Plantation first 40 years)		Control & Contain
C5		Control & Contain
C6		Control & Contain
C7		Control & Contain
A4		Control & Contain
A5		Control & Contain
F4		Control & Contain
F5		Control & Contain
C3 (timber)/C8/C3A		All Strategies
A10/E2/C4/E1 (All others)		All Strategies
C3 (grass)		All Strategies
D1		All Strategies
B1		All Strategies

4. In most cases when wildfires do not threaten to exceed the acceptable sizes and intensities of the management area, the lowest cost suppression option is appropriate.
5. Wildfires that escape initial action and threaten to exceed established limits will require that an “escaped fire situation analysis” be prepared. This analysis weighs the cost of suppression against the potential change in resources. Suppression actions should be appropriate for the values threatened.

6. If more than 5 percent of a subwatershed (outside wilderness) has sustained high intensity burns during the preceding 3 years, or visibly accelerated erosion is occurring within a subwatershed due to past burns, emphasize a control strategy on all wildfire in the remainder of the subwatershed to minimize further damage.

Presuppression

1. Utilize the National Fire Management Analysis System to determine the most cost-efficient fire protection organization. As conditions change and better information is developed, the fire organization will be reevaluated with this system.
2. Cost-effective plans for the prevention of human-caused fires will be aimed at specific risks to be determined by ongoing monitoring of current and recent fire reports.
3. The mix of aerial and ground detection activities will be reviewed periodically to maintain the most cost-efficient combination.
4. Provide equipment and training for USDA Forest Service employees outside of the fire management organization to assist in initial attack.

Fuels Management

1. Levels and methods of fuels treatment will be guided by the protection and resource objectives of the management area. Emphasis will be on intensive utilization of wood residues using a marketing strategy to reduce fuel loadings.
2. Prescribed fire will be utilized to meet management objectives and maintain fuel profiles in all ecosystems. Normally, prescribed burning will be a planned ignition. However, unplanned ignitions may be used as prescribed fires if (a) a prescribed fire plan has been prepared and approved, and (b) the fire is burning within prescription.
3. Burning plans will be prepared in advance of ignition and approved by the appropriate line officer for each prescribed fire. A prescribed fire exceeding both prescription and line holding capabilities will be declared a wildfire and appropriate suppression action taken.
4. Emphasize maintenance of air quality when planning prescribed fire use. Practical means of smoke management (reduction, avoidance, and scheduling) will be employed. All burning will be planned and conducted in accordance with state smoke management plans.

AIR QUALITY

Goal

MAINTAIN AIR QUALITY AT A LEVEL ADEQUATE FOR PROTECTION AND USE OF NATIONAL FOREST RESOURCES AND MEET OR EXCEED APPLICABLE FEDERAL AND STATE STANDARDS AND REGULATIONS.

1. The Forest will demonstrate reasonable progress in reducing total emissions from prescribed burning under the Prevention of Significant Deterioration (PSD) program.
2 All prescribed burning will be in accordance with state smoke management plans.
3 Available predictive methods and models and cost efficient technologies will be used to minimize impacts of prescribed burning on smoke sensitive and Class I areas.
4. Smoke management mitigating measures, listed in the Pacific Northwest Regional Guide FEIS (USDA Forest Service 19&4), and Managing Competing and Unwanted Vegetation

FEIS (USDA Forest Service 1988) will be used to reduce emissions from prescribed burning.

5. The Forest will cooperate with the states on possible redesignation of areas to Class I.

PEST MANAGEMENT

Goal

PROTECT FOREST AND RANGE RESOURCES FROM UNACCEPTABLE LOSSES DUE TO DESTRUCTIVE FOREST PESTS.

1. Integrated pest management (IPM), prevention, and suppression strategies will be utilized to manage pests within the constraints of laws and regulations and to meet Forest-wide management objectives. Methods may include management practices (cultural or silvicultural); biological, mechanical, manual, prescribed fire, or chemical treatments; or regulatory measures.
2. All pest management suppression project proposals will be analyzed through the NEPA process to select an appropriate suppression response.
3. Where practical, noxious weeds and invader plants will be controlled to prevent threats to adjacent agricultural lands or to prevent unacceptable loss of forest and range productivity.
4. Plans for control of competing and unwanted vegetation including noxious weeds will be in keeping with *Managing Competing and Unwanted Vegetation (FHS) USDA, Forest Service, 1988*. The five-step process, composed of site analysis, strategy selection, project design, action, and monitoring, will be used in managing competing and unwanted vegetation for site specific projects and will be documented in an environmental analysis.
5. Individual project plans will specify licensing approval and public notification requirements for pesticide use on a case-by-case basis.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES

Goal

MAINTAIN OR IMPROVE HABITATS FOR ALLTHREATENED OR ENDANGERED PLANT AND ANIMAL SPECIES ON THE FOREST, AND MANAGE HABITATS FOR ALL SENSITIVE SPECIES TO PREVENT THEIR BECOMING THREATENED OR ENDANGERED.

1. Legal and biological requirements for the conservation of endangered, threatened and sensitive plants and animals will be met. All proposed projects that involve significant ground disturbance or have the potential to alter habitat of endangered, threatened or sensitive plant and animal species will be evaluated to determine if any of these species are present (FSM 2670 Threatened, Endangered and Sensitive Plants and Animals).
2. Where endangered or threatened species are present, the required biological assessment process will be carried out according to the requirements of the Endangered Species Act (Public Law 93-205); consultation requirements with USDl Fish and Wildlife Service and state agencies will be met. Before the project can be carried out, protection or mitigation requirements shall be specified (36 CFR 219.27(a)(8)). Habitat for existing federally classified threatened and endangered species will be managed and monitored to achieve objectives of recovery plans.
3. When sensitive species are present, a biological evaluation will be prepared. There must be no impacts to sensitive species without an analysis of the significance of adverse effects on its population, habitat, and on the viability of the species as a whole. For sensitive plant species, it may be helpful to consult with local knowledgeable and interested botanical authorities. Habitat for sensitive plants and animals will be managed to ensure that the species do not become threatened or endangered through Forest Service actions. Species management guides will be prepared over the next 5

years and will be used as strategies for ensuring that sensitive species do not become threatened or endangered or result in a loss of species viability.

4. For endangered, threatened and sensitive species, determine and monitor the status of populations and habitats and the strategies implemented for protection. Maintain and update lists of threatened, endangered, and sensitive plants and animals periodically as new information is collected. Submit pertinent forest information to the Regional Office for updating Regional Forester's Sensitive Species lists, and to the appropriate agencies for inclusion in state-wide data bases.
5. The Forest and ranger districts will keep records and inventories of essential and critical habitats and their distribution. Inventories will include careful monitoring of the species and their habitats.
6. Collection of T/E/S plant species will only be allowed under permit. The issuance of permits must be preceded by the same degree of assessment required for other projects.
7. Maintain contacts with Federal, state, and other agencies, groups, and individuals concerned with the management of T/E/S species (USDA Forest Service 1981). The Oregon Department of Fish and Wildlife and the Washington Department of Wildlife will be consulted for technical information in development of species management guides and in determinations of viable population levels of sensitive species. Other contacts regarding sensitive species information will be with the Nature Conservancy's Oregon Natural Heritage Data Base and the Washington Natural Heritage Program in order to maintain or periodically update the Forest T/E/S species list and assist in achieving state goals for conservation of endemic species.

Bald Eagle Habitat (Threatened Species)

1. Bald eagles and their habitat will be protected and managed in accordance with the latest available management guidelines and the Pacific States Bald Eagle Recovery Plan. The target recovery goal is two nesting pairs along the Grande Ronde River and one pair along the Walla Walla River. Occupied bald eagle habitat will be monitored to determine the effectiveness of planned action and recovery efforts.
2. Informal consultation will be initiated with the USDI Fish and Wildlife Service to discuss the question of 'effect' when a project involving site disturbance is within one mile of a bald eagle nest (FSM 2670 Bald Eagle Management and Consultation; Worthington 1980).
3. Within 2 years of Forest Plan implementation, a management plan should be prepared for known nest sites and potential bald eagle habitat on the National Forests. Consult the Bald Eagle Recovery Plan (Brown 1985), the Bald Eagle Management Guidelines for Oregon and Washington (USDI Fish and Wildlife Service 1981) and FSM 2670 for specific management guidelines.
4. Prior to development of the management plan, interim requirements for management of bald eagle habitat will include completion of a nest site management plan which includes the following standards

   a. Nesting Sites

   - Bald eagle nest sites will be protected, including existing and yet-to-be-discovered active and inactive nests sites. Manage each area under the territory zone concept (Brown 1985).
   - Primary zone. Not less than 330 ft. from the nest, with actual size and shape of zone adjusted to include all the area near the nest tree that is actually utilized.

Zone size can vary, reflecting local topography, potential for blowdown, and location of important habitat components. No timber harvesting is permitted in the primary zone unless designed to enhance stand characteristics for the benefit of nesting eagles. Human activities in the primary zone will be controlled year-round to insure that the site remains suitable as nesting habitat.

- Secondary zone. The secondary zone extends from 330 ft. out to a minimum of 660 ft. from the nest; the zone minimizes disturbance and protects the primary zone. Zones need not be circular, but will reflect local physiographic conditions and the tolerance of the nesting pair to disturbance factors (Brown 1985). The width of the zone could be considerably wider, depending on the degree to which vegetation or topography screens the nest from potential disturbance. The zone will contain important roosting sites, perching sites, and alternate nest sites. Timber may be harvested in the secondary zone, provided eagle habitat requirements take precedence. Human activity in the secondary zone will be controlled only during the period when the birds are present, normally between January 1 and August 31.

b. Feeding and Roosting Sites

- Regularly used feeding and roost sites shall be protected. Human activities will be controlled if they adversely affect the eagles use of a feeding area. Only Forest practices that maintain the suitability of the area for eagle roosting will be used The area encompassed will have at least a 330-foot radius, and possibly up to one-fourth mile. Wildfires in the area will be controlled.

c. Maintenance of Potential Nesting Habitat

- Forest land within 1 mile of foraging habitat is potential bald eagle nesting habitat. Habitat provided at potential nest sites must be in mature or old-growth forest and possess characteristics outlined in Brown (1985).

Gray Wolf (Endangered Species)

Investigate and evaluate all reports of gray wolf sightings on the Forest, in cooperation with the Washington Department of Wildlife, Oregon Department of Fish and Wildlife and the USDI Fish and Wildlife Service. If resident wolves are discovered, initiate appropriate actions in consultation with the USDI Fish and Wildlife Service, ODFW, and WDW to insure the protection of the animals. Implement recovery objectives should a plan be completed.

Peregrine Falcon Habitat (Endangered Species)

1. Peregrine falcons are not known to nest on the Forest. Habitat for nesting and feeding, however, does exist. Sufficient existing nesting and feeding habitat will be protected to meet the objectives of the Pacific Coast Recovery Plan for the American Peregrine Falcon (USDI Fish and Wildlife Service 1982). Any nest found will be protected; associated habitat (such as feeding areas) will also be protected, and enhanced if necessary.
2. Within 3 years after implementation of the Forest Plan, an inventory should be completed which catalogues habitat suitable for peregrine falcon. Within 1 year after finishing the inventory, the Forest should complete habitat management or nest site management plans for peregrine falcons.

COMMUNITY DEVELOPMENT AND HUMAN RESOURCES

Goal

PROMOTE HUMAN RESOURCES, CIVIL RIGHTS, AND COMMUNITY DEVELOPMENT WITHIN THE ZONE OF INFLUENCE OF THE UMATILLA NATIONAL FOREST.

1. The Forest will maintain and implement an affirmative action plan in its hiring, supervisory, and contracting procedures.
2. The Forest will actively pursue the employment of the handicapped and ensure that the needs of the handicapped are considered in the design of Forest facilities.
3. The Forest will conduct compliance reviews as required by Title VI of the Civil Rights Act of 1964, within standards established by the Forest Service.
4. The Forest will be managed to minimize physical, social, and administrative barriers to its use.
5. Special efforts will be made to inform the general public, including minorities and the underprivileged, about Forest programs.
6. The ceded land rights and privileges of the Walla Walla, Cayuse, Umatilla, Nez Perce, and Warm Springs Indian Tribes, under the treaties of 1855 (U.S. Laws, Statutes, etc. 1855a, 1855b, 1855c), will be appropriately provided for in Forest activities.
7. The Forest managers will ensure Native Americans access, use, and possession of sacred objects, and their freedom to worship through ceremonial and traditional rights as specified in the American Indian Religious Freedom Act (P.L 95341) (U.S. Laws, Statutes, etc. 1978b). Management of these areas will be coordinated with the leaders of the Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes of the Warm Springs Indian Reservation of Oregon as appropriate.
8. Resource planning and development activities will be coordinated with plans and programs of each of the tribes.
9. The Forest will participate in human resource programs that support community and economic development.
10. The Forest will coordinate with local, state, and Federal planning and development agencies. The Forest will support local economic development strategies that enhance community and economic development. Emphasis will be on defining complementary roles and implementing programs that best serve the public.
11. The Forest will promote or assist in promoting developmental, tourism, and recreational activities that help build strong, diversified rural economies and improve the quality of life in rural communities.
12. Increase public awareness of, involvement in, and support for Forest resource management objectives and programs.
13. The Forest will provide courteous and responsive public service in all management activities.

GENERAL PROCEDURES

Goal

MEET IDENTIFIED LAND, RESOURCE, AND SUPPORT ACTIVITY GOALS.

1. Activities affecting Forest system lands and resources will be analyzed, and results documented through the Environmental Analysis (NEPA) and associated planning procedures.
2. Identify, design, and achieve a high level of multiple-use coordination in all resource management activities
3. Economic efficiency will be a consideration in Forest and project level planning and development.
4. The appropriate setting for each Management Area is determined by the area goals, desired conditions, and suitability of the area to achieving these conditions. When an allowable project would result in conditions that do not meet the setting criteria, address the need for changing the designated setting as part of the environmental assessment process. Evaluation includes factors such as activity extent, duration of impact, season of operation, sight or sound impacts, and feasibility of rehabilitation.
5. The concept of time limited management areas or 'sunset' strategy may be used. Specific areas of application and potential changes are identified in the individual management Areas C4 and C8 (in the Forest Plan). Timber harvest and management may be used in designated areas: projects will be tested and evaluated in meeting objectives and public concerns; and area(s) converted to predetermined allocations depending on (acceptability of) results. The NEPA process and public involvement will be used to design, implement, monitor and evaluate the projects. Adjustments in management area allocations apply to areas being tested or designated in individual management area direction.
6. Management of Forest system lands, resources, and activities will be coordinated with appropriate local, state, and Federal agencies, private landowners, Native American tribes, and interest and user groups.